

## **Blueline Tilefish Working Group Report**

The Blueline Tilefish Working Group is a joint group made of selected members of the Scientific and Statistical Committees (SSCs) of the South Atlantic (SAFMC) and Mid-Atlantic (MAFMC) Fishery Management Councils. The group was created in the Fall 2017 and does not have an ending date, as its existence may be periodically needed to coordinate ABC recommendations from both the MAFMC and SAFMC SSCs for the portion of the blueline tilefish stock north of Cape Hatteras. This report is a summary of its work to date.

### **Background and Charge**

The stock status of blueline tilefish was assessed in 2017 as part of the SouthEast Data, Assessment, and Review (SEDAR) process. The results of that assessment produced separate estimates of sustainable catch for the areas north and south of Cape Hatteras. The north of Hatteras results are from a data-limited model but do not provide a method for separating the catch levels between the jurisdictions of the two Councils along the North Carolina/Virginia border. Therefore, a joint working group with members from both SSCs must work with analysts to ensure that the sum of the two regional catches do not result in overfishing of the north of Hatteras stock. The following members was initially appointed to this working group:

#### From SAFMC SSC:

Scott Crosson (SEDAR 50 Review Panel Chair and working group chair)  
George Sedberry (SSC Vice Chair)  
Robert Ahrens (SEDAR 50 Assessment Workshop panelist)

#### From MAFMC SSC

John Boreman (SSC Chair)  
Yan Jiao (SEDAR 50 Review Panelist)  
Michael Frisk

#### From NOAA

Nikolai Klibansky - Lead Analyst Atlantic Blueline Tilefish, SEFSC Beaufort  
Paul Nitschke, NEFSC Population Dynamics Branch Staff

#### Council Staff

Matt Seeley, MAFMC staff  
Brandon Muffley, MAFMC staff  
Mike Errigo, SAFMC staff  
John Carmichael, SAFMC staff

Mike Schmidte (MAFMC under contract)

### **Progress as of March 2018**

The working group has held several meetings via webinar beginning in December 2017. The following Terms of Reference were decided for the group's workload:

1. Develop a process for coordinating ABC recommendations from both SSCs for the portion of the blueline tilefish stock north of Cape Hatteras.
2. Decide on which data sets are most appropriate to use to develop ABCs for both areas. This includes both catch and biological data, specific to each area if possible.
3. Decide on the appropriate methodology or methodologies for developing ABCs based on the available data for each spatial region.
4. Propose ABC recommendations for the two SSCs.

The group reviewed the landings history from both Councils' jurisdictions to determine whether reliable indicators of stock distribution existed in the data sets. After much discussion, the group decided that landings histories were not indicative of stock distribution, primarily due to the recent and rapid rise of landings in the MAFMC jurisdiction while the fishery was largely unregulated, and to the constant shift of regulations by both Councils as they reacted to documented (SAFMC) and potential (MAFMC) overfishing in their respective jurisdictions. Landings histories exhibit wide fluctuations from year to year in both areas, and the group could not separate which were due to regulatory histories and which were due to underlying changes in the abundance and distribution of stock. This was the same conclusion reached by the Review Panel of SEDAR 50.

In the absence of reliable fishery dependent indices, the group considered the use of the fishery independent results of the SUNY-Stonybrook sampling of the MAFMC area, including the area north of Cape Hatteras under SAFMC jurisdiction (Frisk et al 2018). Group member Mike Frisk presented the initial results of this survey during webinars. The largest samples of blueline were found in the areas surrounding the Council jurisdictional boundary, which is where the fishery is largely located. Working with MAFMC contractor Mike Schmidke, the working group recommended the following:

1. Rerun the DLMTTool runs for the area of north of Cape Hatteras with some minor modifications, primarily using a shorter time series (2002-2015) to reduce the high coefficient of variation (CV). The working group agreed that the mode of the TAC distribution from the runs would be the total ABC recommendation to the SSCs. More details on the model are listed in the contractor's report.
2. Recommend that the SSCs split the ABC by weighting areas not sampled by the survey in the south and for the slight mismatch in the survey strata boundary at the VA/NC boulder. After these adjustments, stratified proportional estimates of blueline tilefish

caught north and south of the Virginia-North Carolina border result in an allocation of 56% of the north of Cape Hatteras ABC to the MAFMC and 44% to the SAFMC.