

### **Mid-Atlantic Fishery Management Council**

800 North State Street, Suite 201, Dover, DE 19901-3910 Phone: 302-674-2331 | Toll Free: 877-446-2362 | FAX: 302-674-5399 | www.mafmc.org Richard B. Robins, Jr., Chairman | Lee G. Anderson, Vice Chairman Christopher M. Moore, Ph.D., Executive Director

# **MEMORANDUM**

**DATE**: 25 November 2015

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

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

**SUBJECT:** Report of the November 2015 Webinar of the MAFMC SSC

On 24 November 2015 the SSC met via webinar to address terms of reference concerning Spiny Dogfish that related to a motion passed by the Council at its last meeting:

Move that the Council request that the SSC, with guidance from the NEFSC, determine the OFL and the ABC for 2016 using a 3-yr average of mature female biomass for 2015, 2013, and 2012/2011 combined and any other options that the SSC/Center consider appropriate.

The final agenda for the webinar is attached (Attachment 1). A total of 15 SSC members were in attendance, which constituted a quorum (Attachment 2). Also in attendance were representatives from the Council, Council staff, NMFS Regional Office, state agencies, the fishing industry, and the general public.

Dr. Paul Rago, Northeast Fisheries Science Center, provided a background document (Rago 2015) for the webinar that served to guide the SSC's discussion of the terms of reference. He also walked the SSC through the document via a PowerPoint presentation during the webinar. The SSC received this document on Monday, November 23<sup>rd</sup>, which did not provide much time for review. As noted in the response to the second term of reference, the SSC wants to spend more time on an in-depth review of the approach proposed by Dr. Rago for estimating female spawning stock biomass prior to setting specifications for the 2017 fishing year.

The SSC's consensus responses to the Council's two terms of reference are as follows:

1. Estimate the 2015 spiny dogfish stock biomass using the existing approach, a three-year average of 2015, 2013, and 2012/2011 combined, and a Kalman filter approach.

The female spiny dogfish stock biomass was calculated by three approaches, as detailed in Rago (2015). The SSC accepts the following estimates:

Approach	2015 Female Stock Biomass Estimate (mt)			
Approach	Median	10 %ile	90 %ile	
Current method	128 002	76,580	201,227	
(3-yr moving average)	138,903			
Council proposed				
method	189,705	92,430	286,980	
(5-yr average using 4	189,703			
yrs of data)				
Kalman filter	167,983	100,682	235,283	

2. Based on an evaluation of the performance of the approaches, provide 2016-2018 ABC/OFL recommendations that represent the best scientific information available.

The SSC accepts the Kalman filter as the best available approach to overcome the data gap resulting from the incomplete 2014 survey. The SSC reached this conclusion because the Kalman filter provided an objective foundation for analyzing time series data, did not demonstrate a substantial retrospective pattern, and provided more stable estimates of survey abundance and hence catch advice.

The SSC recommends a three-year specification of ABC. The SSC used the 2016 OFL value of **29,218 mt** from the Rago report (Table 14 in Rago 2015). By using an assumed lognormally distribution of OFL with a CV of 100% for a typical life history, the following ABCs were developed:

Method -	ABC (mt)			
	2016	2017	2018	
Kalman filter	23,617	23,045	22,635	

However, the SSC notes that it expects, at a minimum, to evaluate the statistical properties of the Kalman filter, as applied to the spiny dogfish stock, at a meeting before reviewing its specifications for the 2017 fishing year. The SSC requests support from the Council to provide participation of NEFSC center staff in this evaluation.

### Reference Cited

Rago, P. 2015. Evaluation of Alternative Smoothing Options for Spiny Dogfish Abundance Estimates. *Draft Working Paper for Pre-dissemination Peer Review Only*. Northeast Fisheries Science Center. 28pp.

http://www.mafmc.org/s/Evaluation-of-Alternative-Smoothing-Options-for-Spiny-Dogfish-Abundance-Estimates.pdf

cc: SSC Members, Lee Anderson, Chris Moore, Rich Seagraves, Jason Didden, Paul Rago

Attachment 1

## Mid-Atlantic Fishery Management Council Scientific and Statistical Committee Webinar November 24, 2015 Final Agenda

1. Introductory Comments (Boreman/Robins/Seagraves)

Purpose of Webinar Motion by Council Terms of Reference (TORs)

- 2. Presentation by NEFSC (Rago)
- 3. Supplementary Comments by MAFMC Staff and SSC Lead (Didden/Jiao)
- 4. Public Comments (only if related to TORs)
- 5. TOR Deliberations by SSC (Jiao)
- 6. Adjourn

## MAFMC Scientific and Statistical Committee 24 November Webinar Attendance

### <u>Name</u>

Members in Attendance:

John Boreman (SSC Chairman) Tom Miller (SSC Vice-Chair)

Dave Secor
Doug Lipton
David Tomberlin
Mark Holliday
Doug Vaughan
Sarah Gaichas
Sunny Jardine
Bonnie McCay
Olaf Jensen
Ed Houde
Yan Jiao
Mike Frisk

### Others in attendance:

Wendy Gabriel

Rich Seagraves
Jason Didden
Kiley Dancy
Paul Rago
Richard Robins
Lee Anderson
Chris Batsavage
Rob O'Reilly
Jeff Kaelin
Greg DiDomenico

Dave Borden
Eric Schneider
Greg Hinks
Tobey Curtis
Jason McNamee
John Whiteside
Nichola Meserve
David Pierce

Katie Mae Laumann

Matt C (?) Holly White Fiona Hogan Ashton Harp Angel Willey

#### **Affiliation**

NC State University

University of Maryland - CBL University of Maryland - CBL

NMFS

NMFS Office of Science and Technology

NMFS (Retired) NMFS (Retired)

NMFS Northeast Fisheries Science Center

University of Delaware Rutgers University Rutgers University

University of Maryland – CBL

VA Tech

Stony Brook University

NMFS Northeast Fisheries Science Center

MAFMC staff MAFMC staff MAFMC staff

NMFS Northeast Fisheries Science Center

MAFMC Chairman MAFMC Vice Chairman MAFMC member MAFMC member MAFMC member