## **Atlantic States Marine Fisheries Commission**

# ATLANTIC STRIPED BASS TECHNICAL COMMITTEE

April 1, 2008

## **Draft Meeting Report**

## **Call Participants**

Mike Brown (ME DMR) Cheri Patterson (NH FGD) Gary Nelson (MA DMF) Vic Crecco (CT DEP) Carol Hoffman (NY DEC) Des Kahn (DE DFW) Brandon Muffley (NJ DEP) Alexei Sharov (MD DNR) Rob O'Reilly (VMRC) Charlton Godwin (NC DMF) Peter Fricke (NMFS) Gary Shepherd (NMFS)

Wilson Laney (USFWS) Nichola Meserve (ASMFC) Pat Campfield (ASMFC) Genny Nesslage (ASMFC)

## Overview

The Technical Committee (TC) met via conference call to address three main issues: 1) committee leadership and membership, 2) a task from the Striped Bass Management Board (Board) to update the biological reference points as recommended by the peer review panel for the 2007 stock assessment, and 3) an update on the otolith collection program. Des Kahn also added a discussion on the peer review panel and Commission publications.

## **Committee Leadership and Membership**

The TC nominated and elected Brandon Muffley to be its chair. Nomination and election of a vice chair was postponed until the next TC meeting. The TC welcomed Cheri Patterson and Carol Hoffman to the TC as the new NH and NY representatives. The Board will consider these nominations for approval in May. The TC approved the nomination of Andreas Hoover (MD DNR) to the Tagging Subcommittee. As the second agency representative to the Subcommittee, the ASMFC reserves the right to reimburse only one MD DNR representative's meeting expenses, with forewarning, should it become financially necessary.

#### **Management Board Task**

After approving the 2007 stock assessment and the peer review panel report on the stock assessment, the Board tasked the TC with updating the biological reference points from Amendment 6 with outputs of the statistical catch at age (SCA) model, as recommended by the peer review panel. As requested by the FMP Coordinator, Gary S. addressed this task and forwarded a written report describing the methods and several EXCEL files of the corresponding data and analyses. The method used was exactly the same as that used for developing the Amendment 6 fishing mortality (F) and spawning stock biomass (SSB) targets and thresholds, except that it used estimates of abundance-at-age, weight-at-age, and recruitment-at-age from the SCA model, rather than the 2001 VPA. The run produced reference point estimates quite different from the current reference point estimates. In later email discussion, Gary S. noted that it was the large 2003 recruitment event that was significantly influencing the outcome.

Gary S. also provided results of another run where he used a plus group rather than extending it out to age 25 in an effort to address the ageing error associated with older fish. He also has

started working on a run that will input an alternative SSB (developed with sex ratios by age). Gary N. also provided results of an analysis to examine the effect of error in the estimates of recruitment and SSB on the estimates of Fmsy, yield, recruitment, and total biomass from the update procedure.

In looking at the reports and remembering the concerns during the original reference point calculation, the TC agreed that these estimates should be considered preliminary and that there are several aspects of the method that need further review and consideration (e.g., the 50:50 sex ratio, uncertainty in the SCA-based inputs, natural mortality, possibility of other approaches and reference point definitions).

During the call, the majority of the TC concluded that these estimates should be presented to the Board in May as *preliminary* results not for adopting, that the list of issues that need considering be presented, and that the TC recommend that the Board task the TC with addressing these issues and reporting back to the Board in August. Des did not agree with the majority to send the preliminary results to the Board and stated his plan to write a minority opinion for inclusion in the report. In email discussion following the call, additional TC members became concerned with presenting the preliminary results. The TC decided that the preliminary results would not be included in the presentation to the Board.

The TC agreed that the Stock Assessment Subcommittee (SAS) would be tasked with further review of the preliminary estimates, the approach, and the reference points. It was noted that there is money in the ASMFC budget for a meeting of the SAS in 2008. A meeting of the SAS will be scheduled for after the May Board meeting. When the Board tasks the TC with further review, the TC will forward the task to the SAS. The SAS will produce a report addressing the task for review and approval by the TC before it goes to the Board.

Brandon and Nichola were tasked with composing a memorandum for the Board with the TC report. Issues to be considered by the SAS were requested by April 8.

## Task for SAS: Issues for Consideration

- 1) Review the method in which SSB is recalculated in the Shepherd-Sissenwine approach.
  - A. Review the assumption of a 50:50 sex ratio for splitting abundance at age into abundance by sex, as recommended by the SARC.
  - B. Review the use of the maturity ogive for sexes combined for estimating mature male and female abundance.
- 2) Review the use of twenty-five age classes in the calculation of yield and SSB per recruit.
- 3) Review the assumption of natural mortality = 0.15.
  - A. Consider other age-specific natural mortality values.
  - B. Consider time varying estimates of natural mortality
- 4) Review the effect of uncertainty in the SCA-based inputs of SSB and age-1 abundance.
  - A. Review the effects of retrospective bias on the calculations of SSB and abundance
- 5) Consider the uncertainty in the terminal year estimates of F from the various peer reviewed modeling approaches and their relationship to the BRPs in determining stock status.
- 6) Review the appropriateness of the current reference point definitions. Develop criteria to evaluate reference points. Suggest appropriate alternative reference points.
- 7) Others, as determined by the Stock Assessment Subcommittee

#### **Striped Bass Otolith Collection**

Pat Campfield updated the TC on the plan for an otolith collection program for striped bass greater than 800mm. Through a conference call on 13 March 2008 with people involved in striped bass ageing, the following two-pronged approach was determined. First, ageing the backlog of otoliths will be addressed. Pat is working to inventory the otoliths currently in storage and get a cost-estimate for processing and reading them. The hope is to have these read within a year so that the data can be used in time for the next stock assessment. Inclusion of these older fish otoliths is expected to improve the ageing bias, thus an otolith collection program will be developed based on the previous recommendations of the Striped Bass Ageing Subcommittee (regions, number of otoliths, etc.) for 2009 and onward (funding permitting). The TC gave Pat several suggestions on other people he might want to talk to during this process.

#### **Other Business**

Des Kahn brought up two concerns to the TC. First, he is concerned that tagging results are being censured in ASMFC publications (i.e., the most recent striped bass species profile, the fact sheet for Commissioners). He was told that the publications included some information on the tagging program, that the TC chair had helped determine what should go in these documents, that stressing the SCA results was based on the peer reviewers comments that the SCA estimates are more appropriate for determining stock status, and that these documents are not meant to be all inclusive documents. The TC concluded that the ASMFC should strive for more even representation of the two approaches and that figures of the tagging results should be included when possible.

Second, Des was concerned that the peer reviewers for the stock assessment did not have the necessary expertise to review the tagging results and that they were biased towards the age-based approaches, ignoring the retrospective bias of the SCA model. Gary Shepherd commented on the CIE reviewer selection process and how the ASMFC requests reviewers with certain areas of expertise. When there was some concern about the selection, the reviewers' credentials were reviewed a second time by CIE and found to have the required merits. Based on what he heard at the peer review, Gary felt that the reviewers did have enough tagging experience and were capable of reviewing the method. Brandon suggested that if the reviewers failed to compare the tagging and age-based results, that it was the fault of the TC for not including a term of reference to do so. Alexei Sharov noted that the review is over, that hardly ever is everyone fully satisfied with a review, and that the TC needs to move on. Des stated his plan to put his opinion in writing for review at a future TC meeting, which no one objected to.

#### Adjourn