

SUMMARY OF THE STANDING AND SPECIAL MACKEREL
SCIENTIFIC AND STATISTICAL COMMITTEE

RADISSON HOTEL
NEW ORLEANS, LOUISIANA

DECEMBER 11-12, 2008

ATTENDEES:

Standing SSC Members:

Dr. Walter Keithly, Chair.
Dr. Luiz Barbieri
Harry Blanchet
Dr. Benjamin Blount
Dr. George Guillen
Dr. Will Patterson
Dr. Joseph Powers
Dr. Joachmin Singelmann
Dr. Steven Szedlmayer
Jim Wilkins

Special Mackerel SSC Members:

Jason Adriance
Doug Devries

Council:

Michael Ray

Staff:

Dr. Rick Leard
Charlotte Schiaffo
Dr. Carrie Simmons

Others:

Daminica Bailey, LDFW
Myron Fischer, Mackerel AP
Claudia Friess, Ocean Conservancy
Jill Jensen, NMFS
Wiley Horton, Mackerel AP
Julie Neer, SEDAR
Mike Nugent, Mackerel AP
Mauricio Ortiz, SEFSC
Edward Presley, Mackerel AP
Gene Proulx, Mackerel AP
Gary Rouse, NOAA
Bill Teehan, GMFMC
Donald Waters, Mackerel AP
Bob Zales, Mackerel AP

I. Adoption of Agenda

The agenda was adopted as written.

II. Approval of Minutes

The minutes from the August 2006 meeting in Tampa, Florida, were approved as written.

III. SEDAR 16

a. Presentation of Stock Assessment Results

Dr. Mauricio Ortiz gave a PowerPoint presentation on the U.S. King Mackerel Stock Assessment Evaluations: Gulf of Mexico and Atlantic. He first gave an overview of where the stock was located and how many were thought to be in the “mixing zone,” the area where stock from the Gulf and the Atlantic were thought to mingle, and gave various scenarios for managing a stock that was in the jurisdiction of two Councils, the Gulf of Mexico Fishery Management Council (GMFMC) and the South Atlantic Fishery Management Council (SAFMC).

He then explained data that showed the fecundity, stock composition, and the sex ratio of the three stocks; those of the Gulf, the Atlantic, and in the mixing zone. He reviewed the mortality of releases from the recreational fisheries and noted there were no significant discards reported from commercial fisheries.

He then summarized the findings from the latest SEDAR meetings:

- Assessment was consistent with 2003 SEDAR 5 assessment
- SS3 runs gave support to 50%-50% mixing zone hypothesis
- Biomass was above minimum stock size threshold(MSST)
- Fishing mortality below maximum fishing mortality threshold (MFMT)
- Indices had conflicting trends (*fishery dependent vs. fishery independent*), weighting very influential

He also noted that there was little cooperation between Mexico and the U.S. on shared data for king mackerel in the western Gulf, and that this was an issue that needed to eventually be addressed. He stated that the Gulf of Mexico stock definition also depended on interaction with Mexico fisheries, especially considering the importance of Mexican catches of king mackerel.

He then summarized the main recommendations from the SEDAR meeting:

- Objective procedures for estimating stock recruitment steepness value
- Research on accuracy of indices of abundance
- Improved stock-wide fishery independent indices
- If mixing model was to continue (SS3), research programs were required that monitored stock mixing: tagging, otolith analyses, genetics, etc.
- Update size and age maturity estimates and increase fecundity sampling

Concern was expressed that recruitment in the Western Gulf was being automatically carried over into the Eastern Gulf and the Atlantic, even though there was not enough data to determine the volume of the fish in the Western Gulf.

Dr. Ortiz reiterated that there was much interaction between western and eastern stock in the Gulf, and that the dynamics of this could not be ignored in any analyses, adding that there was 20 years of research from which to draw data. He noted that indices of recruits from Texas were being used for the whole Gulf. He explained that the curves were different for the Gulf and the Atlantic, noting that the average age for the Gulf stock was 2 ½ years while for the Atlantic it was three years. He added that these results

had been split to show growth curves in the mixing zone, since there were missing scenarios in that zone, such as age and stock composition

Dr. Leard then explained that the South Atlantic Fishery Management Council (SAFMC) had met the previous week and did not review any stock assessments, noting that the last action taken by them had been in 2005, when both Councils had announced their desires to split the fishery management plan (FMP) for mackerel into two FMPs, and to have the dividing line at either the Dade/Monroe county line or between the councils' jurisdictional boundary.

He was not sure if an amendment would be proposed to accomplish the splitting, noting that the GMFMC might address the issue at its January 2009 meeting and the SAFMC at its March meeting. He noted that annual catch limit (ACL) and accountability measure (AM) requirements under MSRA were currently on schedule. He added that since the stock was not in an overfished status or undergoing overfishing there would probably not be a mandate to have the FMP by 2010, thus the Council would be able to move forward on a generic amendment to cover most stocks that were neither overfished or subject to overfishing. He was unsure whether the Councils would dictate a separate plan for mackerel since it was a joint amendment, adding that a SEDAR update was not scheduled to be done until at least 2012 or 2013, so for the present, the Council had to go with the current data.

Some members posited that what happened in other fisheries could happen in the mackerel fishery, noting that the red snapper season used to be six months, and was now 60 days, and the red grouper seasonal closure had been increased by a month.

b. Discussion of Analyses and Findings

It was noted that a current estimate of stock status was dependent on relatively strong recent recruitment, noting that if the trend continued that was fine, but it could not be counted on to continue indefinitely.

Mr. Blanchet commented that using those estimates for projections of ABC or commenting to the Council on stock status, harvest rate, etc. was not a good idea without putting in caveats about, monitoring of recruitment, harvest rate, catch, and age. He added that maintaining tracking was also paramount so the stock did not become overfished, and commented that since the fishery-dependent data was not yet available to show that the fish had shown up in the fishery. He had concerns over how the SSC could make viable recommendations. He noted that it was difficult to take data from the Gulf and apply it to a stock that was mainly in south Florida

Several members asked what the SSC was being asked to review, what types of comments the Council wanted, and if the SSC was supposed to make recommendations of OFL and ABC based on the assessment presented.

Dr. Leard explained that the decisions had been laid out for F_{MSY} and F_{OY} , under the three scenarios that had been presented, noting that one current scenario was the 100% Gulf mixing.

He noted that the Gulf and Atlantic Councils had asked for specific guidelines in the terms of reference (TOR) for deciding on a line either at the jurisdictional boundary, or the Monroe/Dade County line, adding that the deterministic runs from the stock assessment showed very low probabilities of overfishing.

He added that when it was determined that the stock synthesis model could not be done; the councils went back to looking at the allotments, which the first year were 40/60, then the next year 60/40.

The Councils then decided to base the two boundaries suggested in the TOR based on a 50/50 assumption. He reiterated that some determination about ABC, OFL, and ACL levels, based on the information the SSC had was what the Council wanted. He added that a number of the Councils had a problem with the annual catch target (ACT) concept, and more would be known when the final guidelines were published.

It was stated that based on the biology of the species that a 50/50 split, or any arbitrary political boundary did not make sense because the fish moved regardless of where any line was drawn. The SSC was urged to strongly emphasize this in any recommendations to the Council, and suggested that instead of an arbitrary boundary, that it be noted the SSC was basing its recommendation of 50/50 on the biology of the species.

It was pointed out that one problem with the data was that two separate years of sampling showed two different results, and that the 50% figure was an average of those two. A suggestion was made that it needed to be noted in any recommendation to the Council that there would be some interannual variations which created many management challenges.

A discussion then ensued about the best way to make recommendations to the Council. One member suggested that the Gulf SSC should consider how other SSC's conducted their meetings, i.e., putting together a consensus paper instead of making motions and voting. It was noted that the MSRA required minutes to be taken and that consensus papers did not show the entire nuance that went into voting on matters, and they diluted the recommendations made to the Council.

The following motion was then made:

The SSC moves that the SEDAR report and associated documents presented on King Mackerel be accepted as the best available science.

Motion passed unanimously.

Some members noted that there should be collaborative efforts among the various SSC's, since rules were interpreted differently.

c. Recommendations of OFL, ABC, ACL and Any Other Recommendations to Council

Dr. Leard noted that OFL, ABC, ACL, and ACT were all decided by the Council, adding that many SSC's did not like the term "ACT" since it was not specified in the MSA. He added that the National Standard 1 guideline might be changed, and changes to National Standard 2 were being discussed.

It was noted that ABC was maintained as an acronym in all documents, although the terminology had changed, i.e., the "A" changed from meaning "allowed" to "acceptable." One member pointed out that ACT was used as a buffer to manage target below ACL.

Dr. Leard interjected that ACL was set at the OY level by the Council, but that it was not done on a regular basis, adding that OFL and ABC were of scientific determination, while ACT and ACL were policy decisions.

Dr. Jones presented an algorithm that showed consistent definitions for OFL, ABC, and ACL.

Some members voiced concerns over how to deal with year classes, noting that just because recruitment was at certain levels did not mean they would stay there. Concern was expressed that having AMs kick in at ACL might restrain the SSC from setting ABC.

Other members noted that king mackerel was a more data rich species than many others under the Council purview, and thus it should be easier to set ABC and OFL.

The following two motions were then made:

The SSC moves that the Gulf of Mexico king mackerel interim OFL limit be based on $F_{30\% SPR}$, and the annual projections of yield shown in table 2.4.2 in Annex 2, the recommended interim ABC be based on $85\%F_{30\%SPR}$ in the same table.
Motion passed unanimously.

The SSC moves that a structured framework needs to be established through which scientific uncertainty is estimated in some fashion such that the relationship between OFL and ABC for a given stock can be set. Establishing such a framework should include considerable input from the Gulf Council with regard to risk levels the Council is willing to accept, and because setting of ABC will constrain where the Council sets ACL for a given stock. Both the setting of ABC and ACL should be done in the context of achieving the management target, OY, as defined by the MSRA.
Motion passed unanimously.

IV. Role and Responsibilities of the SSC under MSRA

a. Review of MSRA Language, NMFS Guidance Documents, and National SSC Reports

Dr. Patterson pointed out that the SSC role was to evaluate data on the best available science and to recommend OFL and ABC based on National Standard 1. He added that recommendations should also be based on the probability of achieving the target.

Dr. Leard noted that Congress had set OY as the target so as not to jeopardize a stock's ability to produce MSY. He also proposed that the three southeastern SSC's, the GMFMC, SAFMC, and the Caribbean Fishery Management Council (CFMC) should interact more since so many species intersected in all three regions.

Other members noted that data poor species needed to be assessed more frequently than the current 5-year average, and that SSCs in other regions were more actively involved in the stock assessment process. The concern was expressed as to whether ABC was reduced from the OFL was based on scientific uncertainty.

Some members suggested that an SSC member should be present as a participant in the SEDAR process and not just as an observer. Several suggestions were made, including having an SSC member as the Chair for update workshops, and having at least two SSC members as participants in assessment and review workshops. Concerns about funding and time limitations were expressed by some members.

Dr. Julie Neer explained to the SSC how the SEDAR process was currently structured with SSC input. She stated that the data workshops would want representation from the SSC from someone familiar with the data being discussed, that currently the SSC role in review workshops was on an observer basis, and

that the role in assessment workshops was in the middle of those two. She noted that the Council appointed people to those workshops, so it was up to them to determine how much input SSC members would have. She added that if the Council appointed extra people as participants, the funding would have to come from the Council, not SEDAR.

The following motion was then made:

The SSC recommends that at least two Gulf Council SSC members be appointed as members of the GOM Review Panel Workshops for all fish stocks being assessed through the SEDAR process. Motion passed unanimously.

b. Discussion of 5-Year Research Plan

Dr. Leard reminded the SSC that they had wanted to review the 5-Year Research Plan at each meeting; however he suggested that it would be better to review the plan once a year instead, since several reviews were not the intent of the Council. He proposed that the SSC meet with Dr. Bonnie Ponwith from the SEFSC to determine the best time to do such a review once the upcoming budget appropriation was approved. By consensus, further discussion was postponed until a future meeting.

c. Discussion and Recommendations to Council

Some members emphasized the importance of the Council giving weight to SSC recommendations, and noted that the Gulf Council was unique in eliminating federal scientists from the Standing SSC. It was pointed out that scientists from academia were very prevalent in the Gulf SSC, and this caused more absence at meetings because of time restraints. They urged the Council to change this imbalance and ensure that there was more availability from other kinds of experts, especially since there was a mandate from the MSRA for more SSC input.

There being no further business, the meeting was adjourned at 1:15 p.m.