

**South Atlantic Fishery Management Council
Scientific and Statistical Committee Meeting Report
March 3, 2011 10:00 a.m. – 12:00 p.m.
Conference Call**

Synopsis:

The purpose of this meeting was to discuss the report from the socio-economic panel meeting held February 14th. Additional agenda items included Snapper-Grouper Regulatory Amendment 9, and black sea bass bag limit.

1. Introduction

Agenda was approved with one addition to provide clarification of guidance the SSC provided in its November report for unassessed species in the Comprehensive ACL Amendment.

2. Socio-economic Subpanel Report

Scott Crosson presented the major findings of the socio-economic report to the full SSC. Items discussed included a review of the Gulf of Mexico Red Grouper Evaluation, Snapper-Grouper Regulatory Amendment 9, Snapper-Grouper Amendment 21, and Golden Crab Amendment 5, AP Annual Reports, and the prediction of future catches for amendment analyses. The group appointed a new chairman since Scott Crosson now works for the Southeast Science Center; John Whitehead will now hold that position. The Socio-economic subpanel (SEP) requested the SSC ask the Council to appoint additional expertise to this subpanel in the form of social scientists, and anthropologists as the current members are predominantly economists.

The SSC adopted the recommendations and advice of the SEP as provided in their report to the SSC (See attached).

3. Snapper-Grouper Regulatory Amendment 9

The SSC had discussion about the marginal cost analysis associated with the trip limits for black sea bass. Some concern was expressed as the analysis has not been written up for review. The SSC recommended that the information provided in the SEP report be added to the advice the SSC provided in its November committee report relative to Regulatory Amendment 9.

4. Black Sea Bass Bag Limit

The black sea bass bag limit analysis document was not received by the SSC until just before the beginning of the conference call. As such, the SSC did not have adequate time to provide a comprehensive review of the document, thus comments and discussion were withheld. Understanding the importance of the issue to the Council, SSC members agreed they would provide individual comments on the analysis to help inform the process; however, the Council needs to understand these comments do not represent consensus of the SSC as a whole.

Comments for the Council to consider:

Analysis does a great job of assessing the first order effects of the policy. The analysis is missing the second order effects, the angler response, but the report makes clear that it is missing. Analysis gives a good idea about the economic effects of tighter bag limits.

However, the analysis presents point estimates without recognition of their uncertainty. For example, \$31 per fish is used but there is an unspecified confidence interval around that point estimate. As a result, the confidence intervals of Consumer Surplus comparisons across the 7 and 5 bag limits (and even 3) could easily overlap, making these options statistically indistinguishable. Incorporating statistical and other uncertainties in this type of analysis would be helpful.

Less importantly (since we're ranking and not doing benefit cost analysis), the estimates are likely upper bounds on economic effects for two reasons. First, the analysis is not able to consider the behavioral response. More or less any angler response to mitigate the impacts will implies lower values. Second, not all angler trips are affected by tighter bag limits -- only those expert anglers who would catch more fish than the tighter bag limit would be affected.

Sedberry et al. (2006) indicates the peak spawning period for black sea bass is February through April, not March through May. What was the source of the spawning season data? May want to consider the effect this disparity could have on data in Table 5.

There was some discussion of increasing the minimum size during the conference call. Increasing the minimum size would result in fishermen moving to deeper water to fish, to avoid smaller fish inshore. Release mortality could be greater in deeper (120-180 ft.) than in shallower (60-80 ft.) reefs.

Is there a shore mode for black sea bass in the South Atlantic? Seems like any fish caught from shore would be under the minimum size and would have to be released anyway. Tables 7 - 8 show a reduction in Consumer Surplus for shore

fishermen under several alternatives. Would this really happen? Maybe this is just theoretical? The lack of shore-based fishermen might also enter into the environmental justice discussion, but the conclusion is not likely to change ("No environmental justice issues would be expected to arise with respect to the proposed black sea bass bag limit").

Table 1- the column headings don't match the table caption. Assumption is 'total' is the landings and 'total gw' is the ACL.

Other table captions and footnotes should be checked to ensure they clearly state what is intended.

Do the spawning season analyses take into account shifting of effort/increased trips to prior to the closure? Fishers can't necessarily predict closures based on achieving ACL so they may not schedule more trips early in the season, but with a known season/spawning closure, would they try to get in more trips early-on?

The wording in the introductory paragraphs on "per day or per trip reductions in revenue" sounds as though recreational anglers are selling their catch. The issue is how low a bag limit will result in canceled trips, not on revenue per fish (The lowest bag limit would be accompanied by the largest reduction in per day or per trip economic benefits).

Statement on page 15 about biological neutrality seems to be incorrect. For example, if the ACL is reached long before the end of the season, the impacts of bycatch discards could be greater than what would occur had the bag limit been lower through the season, especially given that the 15-fish limit was not restrictive on the vast majority of the trips (Table 9 indicates that over 75% of all trips took 5 or fewer black sea bass).

Reference list is missing from the document.

5. Other Business

Clarification of guidance provided in the Comprehensive ACL Amendment for unassessed species

After reading the previous guidance provided by the SSC at their November meeting, the SSC restated their intent with more clarity. The SSC recommends withdrawing recommendations for the 22 species that have not been addressed specifically under the current ABC control rule. For these 22 species (almaco jack, Atlantic spadefish, banded rudderfish, blue runner, blueline tilefish, cobia, cubera snapper, gray (mangrove) snapper, gray triggerfish, hogfish, jolthead porgy, knobbed porgy, lane snapper, lesser amberjack, red hind, rock hind, scamp, silk snapper, tomtate, white grunt, whitebone porgy, and yellowedge

grouper) OFL would be considered UNKNOWN, with an ABC set at the median landings of the time series from 1999 to 2008. This is an interim approach until the SSC can revisit these species and discuss any additional data that exist.

6. Adjourn

Social and Economic Panel Report to the SSC

Summary Statements for each Agenda Item:

Review of the Gulf of Mexico Red Grouper Evaluation – The SEP reviewed the Gulf of Mexico red grouper recreational economic evaluation and concluded that, while it is a competent economic analysis and a potential contribution to the policy literature, it has limitations in terms of informing allocation decisions of red grouper and other species in the South Atlantic. First, the model is focused on a single species without target species and other substitution opportunities. This would lead to upwardly biased values for recreational keep rates and, when used for allocation decisions, would lead to overly generous recreational allocations. Second, estimated recreational values are marginal values but the allocation analysis uses these as averages. It is expected that marginal values will fall with increasing catch due to the principle of diminishing returns. Using marginal values as averages would lead to overly generous recreational allocations. We conclude that this analysis provides evidence that an increase in the allocation of quota to the recreational quota would improve the allocative efficiency of fisheries management. But, the analysis should not be used to inform the Council about the magnitude of the increased recreational allocation. The SEP suggests that the SSC and Council consider more detailed allocation analyses such as Agar, Carter and Waters (Economic Framework for Fishery Allocation Decisions with an Application to the Gulf of Mexico Red Grouper, NOAA Technical Memorandum NMFS-SEFSC-576, 2008) that model the commercial sector and using marginal values for allocation analysis.

Review of Snapper Grouper Regulatory Amendment 9 (Trip Limits) – The SEP does not recommend the use of trip limits. Our primary concern with utilizing trip limits is that fishermen will increase their number of fishing trips to maintain a constant level of total revenues. The real change in the system will result from an increase in operating costs. The analysis focuses on revenue losses and we suggested that an alternative approach be used to estimate the economic impact of the trip limits. This approach would estimate average trip costs and then project those costs out as fishermen increase their trips to accommodate the trip limit restriction. We also anticipate this regulation will adversely impact the larger vessels to the advantage of the smaller vessels because the trip limit restriction is less binding for the smaller vessels. We feel this will only marginally increase the length of the season at the expense of increased physical risk and economic cost.

Snapper Grouper Catch Shares Amendment 21 - The scoping document provides a brief discussion of types of effort management programs, six major sections and a total of 29 actions that comprehensively identify the alternatives that can be considered in the design of catch share programs. The SEP has three recommendations regarding the potential development of such a program for any given fishery:

1. Develop a description of fishery participants, a portfolio of fisheries they participate in, and a production model that would allow for the evaluation of potential distributive impacts and support.
2. Identify priorities with regards to program goals and objectives that would facilitate the appropriate design of the program and allow for evaluation of the success of the program over time. For example, a ranking of the following four objectives should be discussed.
 - a. Maximize economic value given biological constraints (e.g., ACLs).
 - b. Sustain historical geographic distribution of landings to the extent possible and reasonable.
 - c. Initially allocate privileges that provide opportunities for all categories of current participants: full-time, part-time, occasional participants and new entrants.
 - d. Maintain current regulations and fisherman lifestyle to the extent possible.
3. If a catch share program is established, require data collection (e.g., share prices, quantities, trading partners, costs) to allow for an assessment of whether the program has improved the management of these public resources.

Golden Crab Catch Shares Amendment 5 - We recommend adoption of Alternative 2 under Action 1; Implement a catch share program for the golden crab fishery. With the understanding that current permit holders favor the formation of a catch-share program, the SEP agrees that such a program will facilitate the management goals to “create incentives for conservation and regulatory compliance” and provide participants with the opportunity to earn “long-run benefits from efforts to conserve and manage the golden crab resource.” Exclusive rights to shares of the allowable catch will allow permit holders the security to take least-cost methods to harvest the catch and may encourage harvest methods that maximize quality and ex-vessel revenues. The net benefits of the program will likely be increased by increased transferability of the catch shares.

Discussion of AP Annual Report – The SEP supports AP reports. The Panel also suggested variables that could be included in reports, such as weather, relative price changes, non-fishing income alternatives, price risk, fuel prices, information about market (domestic and international), product form, and others.

Predicting Future Catches for Amendment Analyses – For the purpose of improving the Council's ability to forecast effort, catch, landings, and discards, two broad categories of bio-economic models are available, structural models and time series models. Each type of model has pros and cons. Given limited time and funding resources, the SEP recommends that the council first investigate time series models, which may be developed more quickly. The council's current forecasting methods utilizing catch from prior years to forecast future catch are a crude type of time series forecasting. The SEP recommends that a more formal time series model structure be developed that would include not only effort, catch, landings, discards, and ex-vessel price and revenue data, but also data on weather (e.g., winds and storms), oceanographic (e.g., wave conditions, currents or water temps if they affect fish availability, etc.), and macro-economic variables that likely affect fishing effort (such as, e.g., gasoline prices, interest rates) or consumer demand (e.g., unemployment rates, personal income).