Comments and notes received during the data, assessment, and review for SEDAR 25

SEDAR25-RW02

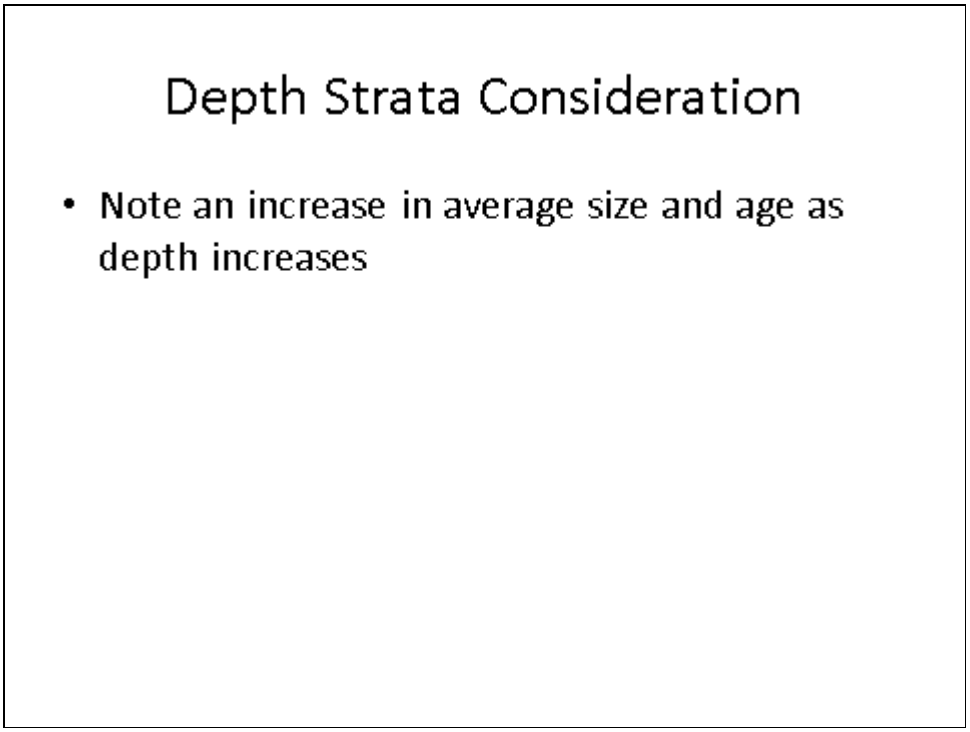
Date Submitted: 27 July 2011
Date Updated: 27 September 2011

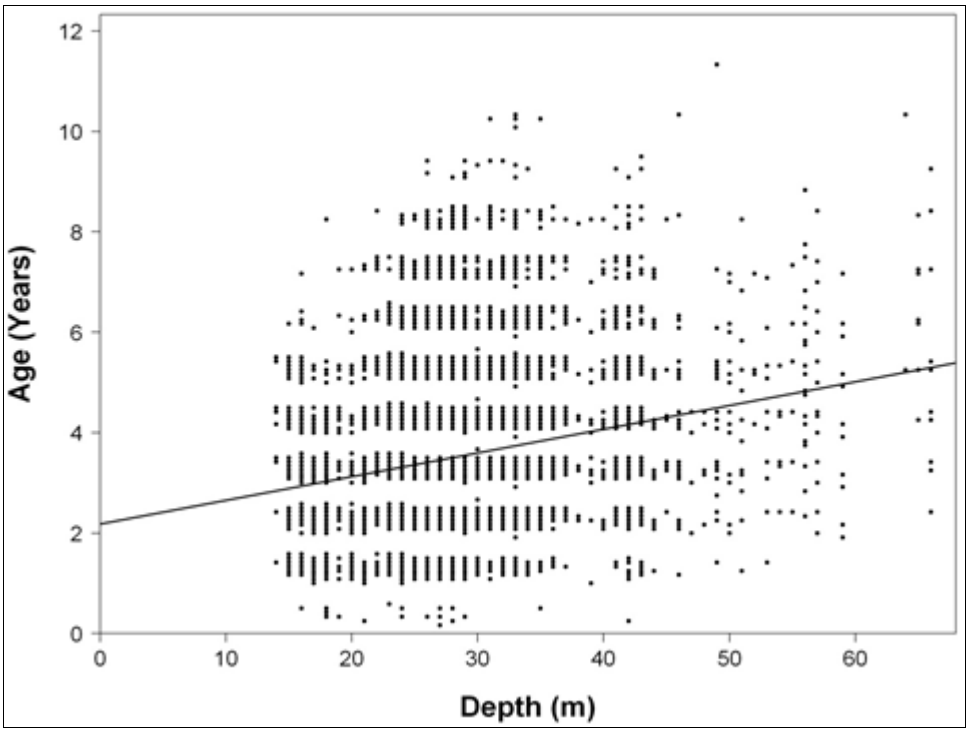
Comment on the use of the flat-topped selectivity curve.

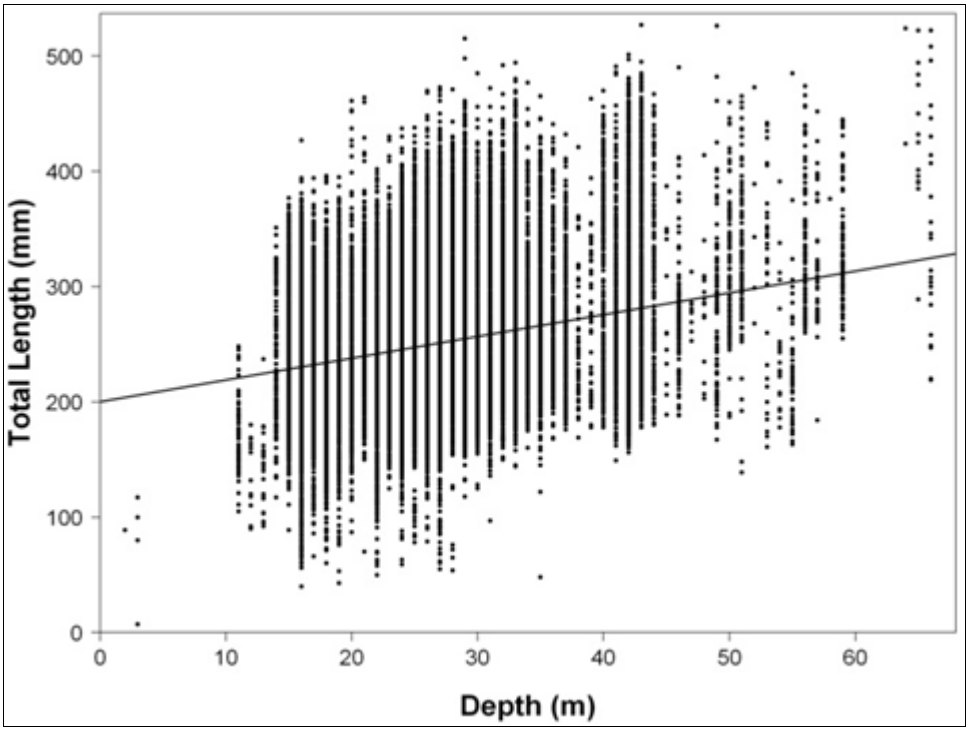
Frank Jay Hester PhD

27 July 2011

As an observer during SEDAR 25 webinar 2, July 25, 2011 I asked why selectivity for traps was considered flat-topped when the data suggested differently. The response was that the available data fail to indicate selectivity was other than flat-topped because no relation was found between the age of the fish and the depth where they were trapped. However, the Life History Working Group Report PowerPoint Presentation for Tuesday, April 24,2011, slides 39, 40 and 41 (below) suggests a positive relationship exists between increasing age and length and depth. The AW Panel needs to resolve the discrepancy, and if found to be appropriate estimate and determine the effect of a dome shaped curve.







Source: SEDAR 25 - Life History Working Group Report PowerPoint Presentation for Tuesday, April 24,2011, slides 39, 40 and 41

From Captain David Nelson to the SEDAR 25 Review Workshop Panelists.
SFA East Coast Fisheries Section

Black Sea Bass modeling Issues and Concerns

To: Review Panel/Sedar 25

In the previous sea bass assessment the steepness value was set at .62(see attached document link-pages 6-7) with sensitivities up to .8. With a vast range of territory, a life span of 11 years, and female sexual maturation (50%) at age 1, the life history of this fish would lean towards a very high steepness value. In an exploited state this could be increased even further with density dependence. At the current steepness of .49 in this assessment, overfishing is occurring. If the steepness is raised to .6 then overfishing is not occurring. With the biology of this fish showing it to be highly productive, it would seem that a steepness value of .8 would be much more appropriate for this species. For example, gag live over 20 years and do not mature until age 3 in their life cycle. They also live in a much smaller range than black sea bass, yet the steepness value for GOM gag was set at .79. (see attached document link pages 6-7). From a life cycle and habitat standpoint black sea bass would seem to have a steepness value above .8 if gag are at .79.

www.sefsc.noaa.gov%252Fsedar%252Fdownload%252FSEDAR19_DW_06_SteepnessInference.pdf%253Fid%253DDOCUMENT

I would hope that the review panel would consider the following questions:

What is the scientific basis for the steepness value for bsb chosen in Sedar 25?
What would a model run with steepness at .8 look like?
Why was the steepness of .6 changed from the previous assessment?

In the commercial landings data there is a decline in landings after 1980. However, 98% of these landings were from an area north of Charleston, South Carolina. This is less than half of the range of this stock of fish. This decline was not a true picture of the stock over its entire range.

How much weight are these commercial landings given?
If it is a very high weight, can it be adjusted lower because the landings are from such a limited range?
Does the model know that 95% of the commercial landings before 2009 are from North Carolina and therefore only represent a small percentage of the stocks range?

Thank you.

Review Issues for SEDAR 25

Prepared by

Southeastern Fisheries Association East Coast Fisheries Section

Abstract. The East Coast Fisheries Section is troubled that with SEDAR 25 we now have yet another assessment where the model is in marked disagreement with reality as we see it in the ocean. It is obvious that the model is mistaken in its estimate of stock size when the commercial quota was caught in two months and the recreational quota will close in October. Everybody from the fisherman to the Council members knows this assessment is wrong.

Our review paper proposes and examines several reasons the assessment is failed.

A. The assessment analysts chose to ignore Data Workshop (DW) recommendations many of which were follow-through recommendations made by reviewers of SEDAR 2 and SEDAR 2 Update. These recommendations called for improved sampling coverage (spatially and temporally) of landings and assessing the extent to which catches from different spatial or temporal zones or from different fishing sectors have been representatively sampled. The failure of the Assessment Workshop to consider the DW recommendations and there likely significance is a failure to fulfill the Term of Reference (TOR #1) for SEDAR 25.

B. The assessment does not provide statistical justification for pooling sampling data.

C. The selectivities need to be redone to account for area and depth effects.

D. The assessment models the South Atlantic black sea bass stock without considering the biological peculiarities of this protogynous species and how they may affect the assumptions of the Beaufort Assessment Model.

E. The measures of abundance (indices) need to be corrected for temporal and spatial effects.

Our findings conclude the assessment to be fatally flawed. It is unlikely a satisfactory fix for the assessment can be had in the time available and SEDAR 25 should be sent back and redone by an independent group [outside of the NMFS influence].