A note on the use of flat-topped selectivity curves in SEDAR 25

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A Note on the Use of Flat-topped Selectivity Curves in SEDAR 25

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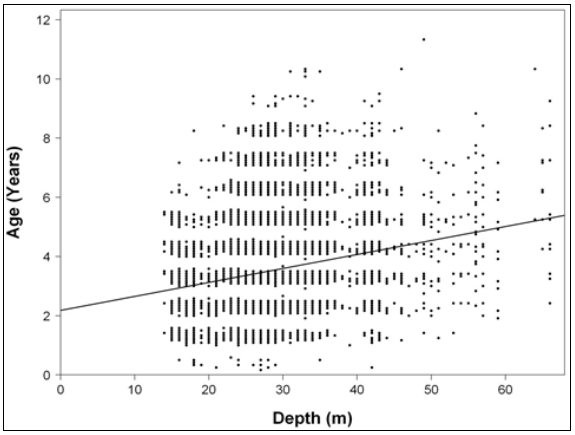
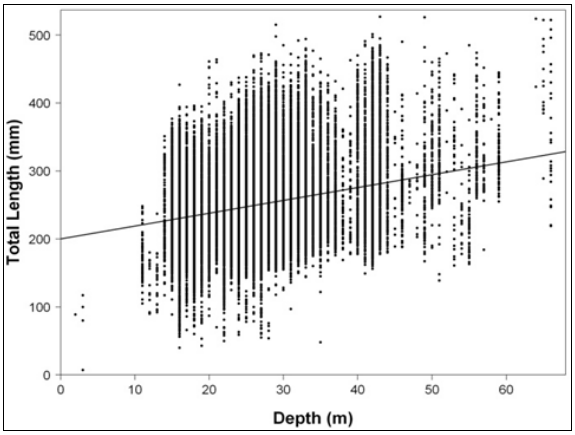
Abstract. The selectivity curves for all fleets in SEDAR 25 are assumed to be flat topped after age 6 (Table 3.5) based on length data from commercial black sea bass pots. However, fishery independent data from MARMAP from the Data Workshop, which was ignored by the Assessment Workshop, show a relation to exist between length and age and depth. These data should be incorporated in the model and the selectivity's redone.

Introduction: SEDAR 25 suffers from the usual paucity of data common to all the SEDAR assessments. However, for this assessment the MARMAP Fishery Independent chevron trap data has been brought up to date and the age samples redone to correct the biases that cause the rejection by SEDAR 2 and Update. The MARMAP data set is available and as the only fishery independent data set is likely to avoid many of the problems to which fishery dependent.

The Data: The Data Workshop noted[i] an increase in average size and age as depth increases. It provided two figures in support.





Conclusion: These data show that larger and older fish tend to occur in the deeper water, which suggests dome shaped selectivity for the older fish is likely for most of the fleets. This would be true for fleets that for logistic and safety reasons fish closer to the shore, and would include much of the private recreation fleet and the head boat fleet. The Review Panel might well wish to consider the likely effect of a change in selectivity on the assessment.

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

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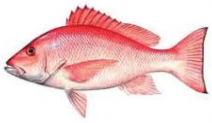

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