ANNUAL REPORT FY13
Habitat Assessment Funded Research
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Project Title:
Predictive modeling of habitat distribution to support expansion of fishery-independent survey efforts: laying the groundwork to reduce uncertainty in stock assessments

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Goals:
The overall objective of the project is to predict and groundtruth the occurrence and distribution of hardbottom habitat in areas of the South Atlantic (southeast US Atlantic Ocean waters) where limited to no fishery-independent sampling currently occurs, due to lack of knowledge of hardbottom habitat in those areas.

Approach:
The proposed work will be accomplished by: (1) developing a predictive model of hardbottom habitat distribution for a large portion of the South Atlantic survey area (i.e., continental shelf and shelf-edge waters off of NC and SC), and (2) validating the model by collecting and classifying multibeam sonar and split-beam fisheries acoustic data from areas containing predicted hardbottom habitat.

Work Completed:
Predictive model development commenced after transfer of funds to NOS/NCCOS/CCMA/Biogeography Branch co-PIs. The predictive model is expected to be completed by ~ June 2014, after which model validation will commence.

Applications:
The proposed work will result in an improved knowledge of South Atlantic hardbottom habitat distribution and an expanded survey universe for fishery-independent sampling, an accomplishment deemed critical by panelists in a recent review of South Atlantic fishery-independent sampling programs (Massey 2012). The expansion of the fishery-independent survey universe into currently undersampled areas will lead to more accurate and representative fishery-independent size and age distributions and indices of abundance for use in stock assessments, leading to increased accuracy and reduced uncertainty in those assessments, which are increasingly dependent on fishery-independent data.

Publications/Presentations/Webpages:
- None thus far.