

**COASTAL RECREATIONAL FISHING LICENSE**  
**SEMI-ANNUAL PERFORMANCE REPORT**

Recipient: Patricia D. McClellan-Green

Grant Award #:

Grant Title: Spawning characteristics and reproductive capacity of blueback herring stocks in the Albemarle Sound, North Carolina

Grant Award Period: 01-01-10 to 12-31-11

Performance Reporting Period: 01-01-10 to 03-19-10

Project Costs: YR01 = \$44,665      YR02 = \$46,844

*Expenditures for the Period:*

<u>Category</u>	<u>Expenditures</u>
Personnel	0
Fringe	0
Travel	0
Equipment	NA
Supplies	0
Construction	NA
Contractual	NA
Other	0
Total Direct	
Indirect	
TOTAL	

*Total Cumulative Expenditures:* 0

*Total Remaining Balance:* \$44,665

Description of Work:

The objectives of this two-year study are to assess the reproductive capacity of the different age classes of river herring and determine their ability to contribute to and help grow the stock populations in North Carolina. This study will be carried out concurrently with other scientists conducting stock assessments of river herring in western Albemarle Sound (Pratt et al., see attached). Our specific objectives are to: 1) Determine the spawning status and gonad development of each age class (i.e. the spawning fraction); 2) Estimate the potential fecundity by determining the ratio of mature to immature oocytes and spermatocytes in the gonads of each age class and; 3) Correlate river herring physiological breeding parameters with spawning status and gonad development.

Project Status/Work Accomplished:

This project was initiated on January 1, 2010. I have assembled the materials for the collection of herring and established the protocols for each step. Blueback herring are just now (mid-March 2010) beginning to enter the Albemarle Sound (Chowan River) area. Sample collections will begin on March 24, 2010 and continue weekly for the next 7-8 weeks or throughout the blueback herring run. Twenty to twenty-five herring will be sampled per week.

Deviations:

Two changes have been made to the project. First, the mechanism for collection of blueback herring samples was altered. This project, as it was originally described, was suppose to utilize herring samples collected by Dr. Jeff Buckel and his research group. Unfortunately, Dr. Buckel was unable to continue his study and terminated his collections of herring. To remedy this problem and acquire the necessary blueback herring samples, I contacted Kathy Rawls of the NC Division of Marine Fisheries regarding their stock assessment program.

*Additional Guidance:*

*If your scope of work is broken into discrete jobs/tasks, please use the Job/Task titles as subheading under which to report accomplishments.*