

COASTAL RECREATIONAL FISHING LICENSE
SEMI-ANNUAL PERFORMANCE REPORT

Recipient: Dr. Jeffrey A. Buckel, Dr. Joseph E. Hightower, Beth Burns

Grant Award #: Agency Reference #002226 (NC Project ID #550621)

Grant Title: Movement and Mortality of spotted seatrout in North Carolina: a combined conventional tag and telemetry approach

Grant Award Period: 09/01/09 – 08/31/12

Performance Reporting Period: 09/01/09 – 02/24/10 (**6 months**)

Project Costs:

Expenditures for the Period: 6 months

<u>Category</u>	<u>Expenditures</u>
Personnel	8,500 (Encumbered salary = 41,632)
Fringe	1,050 (Encumbered fringe = 1,524)
Travel	0
Equipment	22,000
Supplies	2,317
Construction	0
Contractual	3,038
	Tuition = 4,150
Other	Current Service (e.g., boat repair) = 865
Total Direct	41,920
Indirect	2,270
TOTAL	44,190

Total Cumulative Expenditures: 44,190

Total Remaining Balance: (299,563 – 44,190) = 255,373

Description of Work:

List the project objectives or provide a brief description of the funded activity, giving enough detail to acquaint the reader with the project.

OBJECTIVES:

- 1) To estimate seasonal and annual rates of fishing mortality for legal-size spotted seatrout (>12" or 30.5cm TL) in North Carolina estuaries.
- 2) To estimate tag-reporting rates for legal-size spotted seatrout for both the recreational and commercial fishing sectors and partition the fishing mortality rate on legal-size spotted seatrout into that imposed by the recreational and commercial fishing sectors.

- 3) To estimate monthly natural mortality rates of spotted seatrout in North Carolina tributaries during November to April time periods and determine the importance of winter kill.
- 4) To estimate movement rates and stock boundaries of spotted seatrout tagged in North Carolina.

Project Status/Work Accomplished:

For each objective, describe tasks scheduled for the reporting period and the activities undertaken to complete them. Describe the specific accomplishments, and list products (publications, web pages, data, technology, etc.) completed during the reporting period. Attach copies of the publications, as appropriate.

To address objectives 1, 2, and 4, we have tagged ~500 spotted seatrout statewide since August 2009 using internal anchor tags. Per our project proposal, we have enlisted the help of professional guides to assist with our tagging efforts. Since August, tagging of spotted seatrout has occurred in the Cape Fear River, the New River, the Neuse River, the Pamlico River, the Bay River, and the Pungo River. Tagging continues monthly although weather in Winter 2009-2010 has affected fishing conditions. Fish are tagged with both high- and low-reward tags, which continue to allow us to estimate tag-reporting rate.

To address objective 3, 38 spotted seatrout were implanted with sonic transmitters in the Pungo River and tracked weekly from 12/5/09 to present day. Tracking of these fish will continue until April or until all fish emigrate from our study system. Winter 2009-2010 has had numerous cold stun events for spotted seatrout in NC. In addition to thorough investigations of kill events in our Pungo River study system, which included numerous efforts to collect samples for the NCDMF, we have also investigated and sampled kill events in the North River.

Deviations:

If there were changes to the goals/objectives during the reporting period, please detail the circumstance and nature of change. Explain any special problems or circumstances which prevented the accomplishment of scheduled tasks. Describe actions to resolve problems encountered and provide the details of any changes made to goals and objectives of the project.

As mentioned earlier, strong winds, rain, and cold conditions have not provided comparable fishing conditions for spotted seatrout as years past. This has limited our ability to catch and tag our proposed number of individuals up to this point. However, spring is approaching and we feel confident that we will meet our tagging goal by end of this **annual** performance period. We may enlist the help of additional taggers (e.g., more professional fishing guides) if necessary to meet our target goal. However, we would like to point out that we are only **6 months** into this annual performance period and have done a considerable amount of work, especially regarding our telemetry research, over this short amount of time.

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.