

COASTAL RECREATIONAL FISHING LICENSE
ANNUAL PERFORMANCE REPORT

Recipient: M. Scott Baker Jr., North Carolina Sea Grant, University of North Carolina
Wilmington

Grant Award #:

Grant Title: Text-Messaging: A novel approach to collecting catch and effort information from
North Carolina king mackerel tournament anglers.

Grant Award Period: June 1, 2009 – November 30, 2010

Performance Reporting Period: June 1, 2009 – February 28, 2010

Project Costs: \$23,741.00

Expenditures for the Period:

<u>Category</u>	<u>Expenditures</u>
Personnel	6,911.50
Fringe	1,147.24
Travel	3,447.97
Equipment	N/A
Supplies	1,365.15
Construction	N/A
Contractual	750.00
Other	3,572.26
Total Direct	17,194.12
Indirect	<u>2,527.56</u>
TOTAL	19,721.68

Total Cumulative Expenditures: \$19,721.68

Total Remaining Balance: \$ 4,019.32

Description of Work:

(1) Evaluate a mechanism by which tournament anglers can electronically submit a catch and effort fishing report from a wireless phone. (2) Educate tournament anglers about proper catch and release methods, measuring fish at sea, and the importance of providing catch, effort and biological data crucial to stock assessments. (3) Collect biological samples (lengths, weights, otoliths, sex) from king mackerel submitted to the tournament weigh station, as well as randomly from other tournament anglers (*with catch – but would not otherwise weigh-in fish*). (4) Compare official measurements to measurements provided by tournament anglers. (5) Compare catch and effort data collected in this study to current and historical data collected by NCDMF and the participating tournaments for each event.

Project Status/Work Accomplished:

(1) *Evaluate a mechanism by which tournament anglers can electronically submit a catch and effort fishing report from a wireless phone.* **Actions taken:** Utilizing a format employed in a previous pilot study, we developed a tournament specific reporting language for SMS (text messaging) that included tournament boat number, number of anglers, hours fished, species, and lengths reported for king mackerel. A commercial SMS (text message) aggregator was used to compile messages sent from participating anglers. Cheat sheets, wallet cards, tape measures, paper surveys and other items were developed and printed for use at the tournaments. Two randomly drawn prizes were provided at each tournament. Those who submitted a text or paper post-fishing trip survey were eligible for the random \$350 or \$125 drawing, respectively.

(2) *Educate tournament anglers about proper catch and release methods, measuring fish at sea, and the importance of providing catch, effort and biological data crucial to stock assessments.* **Actions taken:** During the registration period at each of the four tournaments attended by the 4 project staff, we distributed 695 sampling kits and spoke to an estimated 1,500 to 2,000 tournament anglers about the objectives of the study and how the data contributed would be important to management of this fishery. In addition, the PI gave an overview of the project at a monthly meeting of the Raleigh Saltwater Sportfishing Club in Raleigh prior to their tournament. The project received attention by area newspapers, the scientific community (www.ScienceOnline2010.com invited demonstration/presentation) and fisheries management organizations (South Atlantic Fisheries Management Council invited presentation, September 2009; Gulf of Mexico For-Hire Electronic Reporting workshop, invited speaker, August 2009).

(3) *Collect biological samples (lengths, weights, otoliths, sex) from king mackerel submitted to the tournament weigh station, as well as randomly from other tournament anglers (with catch – but would not otherwise weigh-in fish).* **Actions taken:** We worked closely with Randy Gregory and DMF staff to coordinate sampling efforts at the four king mackerel tournaments held in 2009. Randy and DMF staff collected biological samples (lengths, weights, otoliths, sex) from king mackerel submitted to the tournament weigh station and we collected catch and effort information from the 200 or so tournament trips that anglers submitted data. Unfortunately, we were not able to collect biological samples (lengths) or verify landed catch from non-entered fish because of the strict guidelines used by the tournaments (with regard to boat entry/exit) and the logistical constraints associated with the rapid unloading of tournament fish at often crowded official unloading stations. Efforts to bring anglers back to the sampling location (weighstation) via text message invitation to undergo an exit interview were also largely unsuccessful. An effort will be made to further verify content of reports, including catch not entered into the tournament, at the two remaining events to be sampled in 2010.

(4) *Compare official measurements taken by DMF to measurements provided by tournament anglers.* **Actions taken:** Biological data from DMF at 2009 tournaments has just been received (March 2010) and will be analyzed prior to the start of 2010 data collection. Specifically, we will determine if angler reported measurements of “entered king mackerel” are significantly different than the measurements of same fish as determined by DMF staff at the weigh station.

(5) *Compare catch and effort data collected in this study to current and historical data collected by NCDMF and the participating tournaments for each event.* **Actions taken:** We plan to

analyze data available for DMF archives as well as compare voluntary data submissions to total king mackerel entries per tournament to gauge the appropriateness of our sample.

Deviations:

June 2009: We requested and received approval for a budget revision to move a total of \$1,560 from two non-personnel accounts to our supplies account.

October 2009: We requested and received approval for a no cost extension (to November 31 2010) to use remaining funds to sample 2 additional king mackerel tournaments in 2010.