## 2008 Saltwater Recreational Fisheries License Report

## Introduction

The South Carolina Recreational Fisheries License Program, since its inception in July 1992, has provided significant benefits to the state. Allocated funds continue to support programs, activities, and resource management functions that are of great value to the protection, maintenance, enhancement, and enjoyment of healthy and diverse marine recreational fisheries, associated fish stocks,



and marine habitats. The original Marine Recreational Fishing Stamp program was modified in 2002 to give South Carolina resident and out-of-state anglers a variety of license options from which to choose. The modification has allowed for revenues to double, which provides additional support for activities important to state saltwater recreational anglers.

Since the inception of the license, as of May 31,2008, approximately 1,547,780 individual saltwater stamps/licenses have been sold to marine recreational anglers over the course of the program's existence. Since July 2007, 132,324 individual saltwater recreational licenses of all available types have been purchased, resulting in the generation of approximately \$1.4 million in total revenue, the vast majority of which by law must be used to benefit saltwater recreational fisheries for the state. The following are highlights of the activities, projects, and programs carried out by the Marine Resources Division that received support from the Saltwater Recreational Fisheries License Program over this past fiscal year.

## FY 2008 Highlights

Artificial Reefs – Fifteen artificial reef construction projects will be complete by the end of this fiscal year on permitted reef sites along the coast. These projects will include the addition of 1 tug boat, 3 deck barges, over 2000 pieces of concrete culvert, 42 NYC subway cars, and ex-U.S. army armored personnel carriers. Routine monitoring and assessment of numerous reefs were conducted throughout the year, and 9 missing reef buoys were replaced on estuarine and offshore reefs. A second printing of the SC artificial reef guide was done. An economic impact survey of SC artificial reef users was also completed which revealed that approximately 203,400 fishing trips were made to SC artificial reefs during the 2006 calendar year generating over 83 million dollars in total sales for the SC coastal economy during that year and generating nearly 1000 jobs in supporting industries. Additionally, a new project to evaluate the placement of existing artificial reefs off South Carolina in regards to oceanographic features and spawning of reef fishes was initiated and will continue in FY2009. The overall goal of this project is to collect information on both artificial and natural reefs located at similar depths in order to help improve the current network of artificial reefs to take advantage of reef fish spawning and recruitment patterns to enhance reef productivity. - \$264.6K

Marine Fish - SCDNR's Marine Gamefish Tagging Program continues to promote responsible angling ethics and conservation through the support of license-generated funds. Last year, 225 trained volunteer anglers tagged 1,985 fish. Information was received from 219 recaptured fish. The top species tagged and released were red drum and sheepshead. One recapture of note was a sailfish originally tagged off of Charleston in July 2005 that was recaptured in May 2007 off the coast of Cuba.

Another important component in SCDNR's effort to maintain high quality fishing opportunities is our effort to monitor recreationally important species. Staff collect size, age, and reproductive information from a variety of species. Information is collected using gear designed to catch and record data in a standardized, repeatable fashion using long-lines to catch large adult red drum offshore, trammel nets to catch smaller juvenile red and black drum, flounder, sheepshead, and seatrout inshore, and electro-shocking in estuarine waters farther upstream. SCDNR fisheries biologists also visit fishing tournaments and manage fish drop-off freezers in several locations where participating anglers can donate specimens for scientific study. Over the past year, staff collected samples from about 200 fish from fishing tournaments. Recreational anglers donated 231 additional fish through the drop-off freezer

program, and 333 tag returns were reported for red drum alone. Additionally, a new effort to provide and prepare sheepshead samples to DHEC for mercury analysis is under way.

Another useful and popular program, supported through saltwater recreational fisheries license funds, is SCDNR's red drum stocking research program. Adult wild red drum maintained in the lab during the year are conditioned to spawn by incrementally changing the day length and temperature similar to what they would experience in the wild. When conditions are right, red drum will volitionally spawn in the tanks and fertilized eggs can be collected. Larvae that are produced must then be carefully maintained in ponds. All animals produced at the Waddell Mariculture Center have a unique genotype or "genetic fingerprint" so that they can later be distinguished from their wild cohorts. When the fish held in ponds grow to approximately 1-2 inches in length they are harvested and transported to stocking sites along the coast. During FY2007, over 2.5 million red drum were released as part of a license funded project. Specifically, 2,477,692 small juvenile fish were released in the Winyah Bay, Colleton River, North Edisto, and Little rivers; 64,972 (3-4-inch fish) additional fish were released in Winyah and Little River in spring 2008. Our cutting edge genetic techniques use non-lethal sampling allowing fish to be released by the angler after removing a small tissue sample. In a spirit of true conservation, this allows anglers to participate in our program while releasing fish to be caught on another day. This project has expanded its cooperating angler program, which now includes 589 anglers who have produced 2,300 genetic samples.

An effort to assess the bycatch in the commercial channel net and shad gill net fisheries began this year to determine the potential impact these fisheries may have on recreationally important finfish species. Additionally a Marine Recreational Fisheries survey analysis was funded in order to better understand and track the attitudes, perceptions, and preferences of South Carolina marine recreational anglers by analyzing information collected by recent phone and mail surveys of recreational anglers. - \$457.4K

Oysters - Over 36,900 bushels of shell were planted on 6 public shellfish grounds during FY2008. Nineteen shell recycling sites, located throughout the coastal zone, continue to serve as collection points for donated shell, allowing the public to participate in oyster reef restoration and enhancement in recreational harvesting areas. A record 15,363 bushels of oyster shells were recycled in FY2008. SCDNR biologists are evaluating new ways to enhance and restore local shellfish beds. Researchers are testing different methods of placing shell on banks, covering some of the shell with materials to reduce erosion and are using volunteers to build and monitor oyster reefs in different areas and under different conditions. Additionally, license money has helped researchers expand their statewide assessment of oyster recruitment. Shellfish maps are available to the public free of charge by writing: Recreational Shellfish Maps, Shellfish Management Program, SCDNR, P.O. Box 12559, Charleston, SC 29442-2559, by calling 843-953-9854, or from the SCDNR Web site www. dnr.sc.gov/marine/shellfish/regs.html. - \$290K

Education, Information, Outreach - The saltwater license Website (saltwaterfishing.sc.gov) continues to provide the public with updated information on rules and regulations and saltwater fishing related news. The Website averages more than 75,000 hits per month. The Coastal Informational Distribution System (CIDS) continues to distribute educational publications to numerous tackle shops, fishing piers, and marinas along the coast. The Carolina Coastal Discovery (CCD) Marine Education Program continues to provide vessel and land based education activities operating out of the Marine Resources Center in Charleston, DNR facilities in the Ashepoo-Combahee-Edisto (ACE) Basin, and in Georgetown County, reaching about 2,000 students and adults with education programs during FY2008. The CCD Program's education initiatives included marine animal dissections, a shorebird and waterfowl program, barrier island activities, catch and release angling programs, and a volunteer Monofilament Recycling Program. Additionally, CCD participated in a Public Event Series to help reflect ongoing research and management projects of the SCDNR, including highlighting various license-funded projects. CCD Program information and application forms are now available online at www.dnr.sc.gov/ccd/- \$157K