FY2009 Saltwater Recreational Fishing License Report

Introduction

The South Carolina Recreational Fishing 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 April 30, 2009, approximately 1,674,820 individual saltwater stamps/licenses have been sold to marine recreational anglers over the course of the program's existence. Since July 2008, 124,193 individual saltwater recreational licenses of all available types have been purchased, resulting in the generation of approximately $1.32 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 Fishing License Program over this past fiscal year.

FY 2009 Highlights

Artificial Reefs – Twelve artificial reef construction projects were completed this fiscal year on 9 permitted reef sites along the coast. These projects included the addition of 3 deck barges, 71 concrete pilings, 44 NYC subway cars, and 26 armored personnel carriers. Routine monitoring and assessment of numerous reefs were conducted throughout the year, and 4 missing reef buoys were replaced on offshore reef sites. A second edition of the SC artificial reef guide was completed and is being distributed upon request. Additionally, a project to evaluate the placement of existing artificial reefs off South Carolina in regards to oceanographic features and spawning of reef fishes continued this year. 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. - $166.9K

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, trained volunteer anglers tagged and released 744 fish. Information was received from 124 recaptured fish and 79% of those recaptured were released with the tag intact. 479 of the fish tagged (61%) and released were red drum. One recapture of note was a greater amberjack originally tagged off of Charleston, SC in July 2002 that was recaptured seven years later in May 2009 off of the Florida coast.

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 attended five fishing tournaments and collected information from 331 fish specimens comprising 10 different species. Recreational anglers donated 255 additional fish through the drop-off freezer program, and 373 total tag returns were reported for red drum, black drum, and sheepshead.

Saltwater recreational fishing license revenue also helps fund SCDNR's red drum stocking research program. Adult wild red drum maintained in the lab 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 spawn in the tanks and fertilized eggs can be collected. Larvae that are produced are then 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 the desired length, they are harvested and transported to stocking sites along the coast. During FY2009, 920,622 red drum were released as part of a license funded project. Specifically, 899,431 total fingerling red drum (1-1.5 inches) were stocked in Winyah Bay and the North Edisto River; 2,401 total advanced juveniles (3-4 inches) were stocked into Winyah Bay, Little River, and Murrells Inlet; 2,000 advanced juveniles will be released in Winyah Bay later this spring; and an additional 500 fish are being grown out to sub-adult size for release in Winyah Bay. Also during 2008, 1,290 total legal size sub-adult red drum were released into the Ashley River, Winyah Bay, Murrells Inlet, and Little River; and another 15,000 advanced juveniles are currently being grown out for release later this year in the ACE Basin. Genetic techniques using non-lethal sampling allow hatchery fish to be identified from their wild cohorts by having anglers remove a small tissue sample before releasing the fish. This allows scientists to determine the percent contribution stocked fish are making to the overall population in various estuarine systems. During FY2009, over 1,092 red drum samples have been processed by the genetics lab.

An effort to assess the bycatch in the commercial channel net and shad gill net fisheries continued this year to determine the potential impact these fisheries may have on recreationally important finfish species. Additionally a project collected fishery dependent data on coastal and oceanic pelagic species, including species of billfish, dolphin, tuna, and wahoo. During 2008, 868 billfish catches were reported to SCDNR of which 100% were released. - $441.1K

Oysters - Over 39,522 bushels of shell were planted on 9 public and state shellfish grounds in 4 coastal counties during FY2009. Twenty-three 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 15,445 bushels of oyster shells were recycled in FY2009. SCDNR biologists are evaluating new ways to enhance and restore local shellfish beds. Researchers are testing different substrates for shell planting, as well as developing efficient and accurate ways to assess oyster reefs including the effects shell planting and recreational harvesting have on these reefs. The SC Oyster Restoration and Enhancement program (SCORE) built oyster reefs at two sites in Charleston Harbor restoring 0.255 acres of shoreline with the help of multiple school groups and civic organizations. Additionally a Marine Recreational Fisheries survey was funded to collect information on the recreational shellfish fishery as well as the attitudes and preferences of SC saltwater recreational fishing license holders. 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*), click on "Fish," then "Marine," then "SC Public Shellfish Grounds" or "SC State Shellfish Grounds." - $322.1K

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 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 and Horry Counties, reaching about 3,500 students, teachers, and adults with education programs during FY2009. The CCD Program's education initiatives included marine animal dissections, salt march ecology, marine invertebrate taxonomy, barrier island studies, beach walks, bird and estuarine species identifications, and water quality monitoring. CCD Program information and application forms are now available online at *www.dnr.sc.gov/ccd/* - $176K