FY 2014 Saltwater Recreational Fishing License Report

Introduction

Since its inception in July 1992, the South Carolina Recreational Fisheries License Program has provided significant benefits to the state. Allocated funds continue to support programs, activities, and marine resource management and enforcement functions. Revenues for this program come from sales of saltwater annual, temporary, three-year, charterboat, and pier licenses. In January 2014, annual and three year licenses became valid for one year or three years from the date of purchase.

As of June 30, 2014, **2,735,445** individual saltwater stamps/licenses have been sold to marine recreational anglers over the course of the program's existence. From July 2013 through June 2014, 230,813 individual recreational fishermen held a saltwater recreational license and this, along with charter and pier license sales, generated **$2.59 million** in total revenue, the vast majority of which by law must be used to benefit saltwater recreational fisheries. The following are highlights of Marine Resources Division activities, projects, and programs that received support from the Saltwater Recreational Fisheries License Program over this past fiscal year.

FY 2014 Highlights

Artificial Reefs ($412K) – Eighteen artificial reef construction projects were completed this fiscal year on 13 permitted reef sites encompassing locations off each coastal county. These projects included the addition of 377 concrete culverts, pipes and cones, 60 armored personnel carriers from the SC National Guard, 4 large barges, and three 24- to 65-ft boats. Routine monitoring and assessment of reefs were conducted throughout the year, and 9 missing reef buoys were replaced on inshore and offshore reef sites. - $412K

Marine Fish ($1,008K) - SCDNR efforts to maintain high quality fishing opportunities include scientific surveys that monitor inshore fish populations, and angler-related programs that collect biological information on recreationally caught fish. The inshore surveys use several types of fishing gear (trammel nets, electrofishing, and long-lines) so that different habitats and life stages can be monitored (juveniles through adults). Most fish are released alive after being identified, counted, and measured, and some species are tagged so their movements can be followed. A small number of fish are kept so that samples can be taken for assessing their age and reproductive condition. SCDNR fisheries biologists also visit fishing tournaments and manage drop-off freezers, where participating anglers can donate fish carcasses for scientific study. Over the last year SCDNR Inshore fisheries biologists made 959 sets of trammel nets and captured 14,731 fish, with 6,705 fin clip samples being taken for genetic identification. The electrofishing program collected 20,912 specimens (most being release live) along with 2,950 tissue samples. The longline survey, designed to survey large red drum and sharks, made 358 sets, and captured 2,052 fish representing 34 species. The freezer and the tournament projects collected 582 fish racks representing nine species. Staff tagged 2,347 fish and 926 fish recaptures were reported by SCDNR biologists and anglers.

Samples from 82 trawl samples were taken to evaluate annual abundance of species and size classes of fish that are not typically collected by other means. This sampling yielded 26,673 fish specimens representing 56 species. The five most numerous species were star drum, Atlantic Croaker, bay anchovy, spot and weakfish.

Saltwater recreational fishing license revenue also helps SCDNR collect information from recreational fishermen through the personal field surveys and the charter boat logbook program. Fishermen are interviewed at public boat landings while the charter boat logbook program collects catch and effort data from vessels carrying fishermen on a for-hire basis. These data help determine the components of the stock that are being targeted by recreational anglers as well as recreational fishing effort and behavior. During FY2014, 3,847 interviews were conducted in which staff measured 3,479 fish comprising 61 species. During the last calendar year, 12,626 charter boat trips with an average of 3.5 anglers per trip were reported through the charter boat logbook program.

SCDNR's finfish stocking research program is also funded in part by saltwater fishing license revenues. Adult wild fish maintained in the lab are conditioned to spawn, fertilized eggs are collected and the larvae are then carefully maintained in ponds. All 'families' 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 FY 2014, 1,259,481 small red drum, 236,072 spotted seatrout, and 6,496 striped bass were released as part of a license-funded project. Specifically, 169,339 red drum fingerlings were released in the North Edisto River, 411,086 in Winyah Bay, and 679,056 in Chechessee River. Spotted seatrout stockings were 83,182 in the Wando River, 122,502 in Charleston Harbor and 30,388 in Ashley River. A total of 16,372 seven to eight-inch striped bass were released into the Ashley River. For all stocked species, genetic techniques using non-lethal sampling allows 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 FY2014, 3,539 red drum, spotted seatrout, striped bass, cobia and red snapper samples were processed by the DNR genetics lab.

Oysters ($302K) - Approximately 29,037 bushels of shell were planted on 6 public and state shellfish grounds in 3 coastal counties during FY2014. This oyster shell forms critical habitat for settlement of larval oysters. A new public shell drop off site was opened in Richland County bringing the total number to twenty-nine shell recycling sites, located throughout the coastal zone and some inland counties. These locations 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 24,552 bushels of oyster shells were recycled in FY2014. SCDNR biologists continued to update shellfish ground maps using aerial imagery collected over recent years combined with on-the-ground assessments. Imagery is available online at http://www.dnr.sc.gov/GIS/descoysterbed.html. Hard copy 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 or by calling (843) 953-9854, and pdf versions of

the maps are available at the SCDNR Web site for state shellfish grounds or public shellfish grounds.

Shrimp and Crabs ($142K) - DNR staff used trawls to collect 102 samples throughout the state to monitor the status of shrimp and blue crab resources. Numbers of both white and brown shrimp were generally poor in summer and fall, 2013. Brown shrimp catch may have been low because of mild winter temperatures that allowed small shrimp to enter the estuaries too early, making them susceptible to spring cold snaps and predation. White shrimp spring spawning stock was normal, but numbers of fall 2013 recruits were well below average. Unfavorable wind patterns and very heavy spring and summer rainfall in 2013 probably contributed to poor fall white shrimp production. Although the winter of 2013-14 was somewhat colder than average, good numbers of white shrimp survived to spawn in May and June 2014, suggesting that abundance should increase in fall 2014.

Blue crab samples were collected by trawling and DNR trapping. Comparisons with numbers taken over the past decade continued to show relatively low abundance. It is believed that low rainfall during the last decade has led to the decline in the crab population. Biologists are optimistic that increased rainfall during 2013 and 2014 will help crab stocks recover. Information collected in this program available on SCDNR website (http://www.dnr.sc.gov/marine/species/index.html).

Education, Information, Outreach ($132K) - Approximately 260,000 public information documents were distributed free of charge to 119 vendors, including rules and regulations books, tide tables, fish rulers and fish identification posters. The saltwater license website (saltwaterfishing.sc.gov) continues to provide the public with updated information on rules and regulations, saltwater fishing related news, and informational material on fish identification, fish measuring, and best angling practices. The public recreational tagging program, while still maintaining a small tagging contingent, has been successfully utilized as an outreach tool for communicating with recreational anglers and promoting resource stewardship. The Carolina Coastal Discovery (CCD) Marine Education Program provided 75 vessel and 243 land-based education programs 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 just over 5,000 students, teachers, and adults with education programs during FY2014, the CCD Program's education initiatives included marine animal dissections, salt marsh 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/

Infrastructure Support For Marine Division ($650K) – Funds were allocated to provide general infrastructure support for the marine recreational fisheries programs. These funds help support maintenance and operation of support facilities at the Marine Resources Center in Charleston, the McKenzie Field Station at Bennett's Point and the Waddell Mariculture Center in Bluffton. These funds help purchase or maintain laboratory equipment, fish holding tanks and ponds, sampling boats and vehicles. The FY 2013 Saltwater Recreational Fishing License Report above is provided in Adobe® Acrobat® (PDF) format. Adobe® Reader® is required to open these files and is available as a free download from the Adobe® Web site.