## FY 2015 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, 2015, **2,964,343** individual saltwater stamps/licenses have been sold to marine recreational anglers over the course of the program's existence. From July 2014 through June 2015, 230,813 individual recreational fishermen held a saltwater recreational license and this, along with charter and pier license sales, generated **\$2.69 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 (\$405.5K)** – Nine <u>artificial reef construction</u> projects were completed this fiscal year on 9 permitted reef sites encompassing locations off each coastal county. These projects included the addition of 338 concrete boxes, culverts, pipes, cylinders and cones, 36 armored personnel carriers from the SC National Guard, and six steel structures. Routine monitoring and assessment of reefs were conducted throughout the year, and 4 missing reef buoys were replaced on reef sites.

Marine Fish (\$840.3K) - 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 922 sets of trammel nets and captured 11,480 fish, with 4,837 fin clip samples being taken for genetic identification. The electrofishing program collected 15,349 specimens (most being release live) along with 1,603 tissue samples. The longline survey, designed to survey large red drum and sharks, made 360 sets, and captured 2,224 fish representing 27 species. The freezer and the tournament projects collected 346 fish racks representing seven species. Staff tagged 1,538 fish and 628 recaptures were reported by SCDNR biologists and anglers.

Samples from 80 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 48,050 fish specimens representing 64 species. The five most numerous species were star drum, Atlantic Croaker, spot, bay anchovy, 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 FY2015, 4,204 interviews were conducted by staff throughout the coastal waters of the state. During the last calendar year, 518 charter boats provided monthly reports and indicated that the five most commonly taken species were black sea bass, red drum, spotted seatrout, sharpnose shark, and Spanish mackerel.

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 2015, 672,000 small red drum, 299,035 spotted seatrout, and 37,054 striped bass were released as part of a license-funded project. Specifically, 166,071 red drum fingerlings were released in the ACE Basin, 285,724 in Winyah Bay, and 220,205 in Chechessee River. Spotted seatrout stockings were 210,396 in Charleston Harbor and 88,639 in Ashley River. A total of 37,054 two and one half inch striped bass were released into the Ashley River. An additional 356 large, tagged striped bass were released in the Wando River, with 62 being recaptured once and five recaptured twice. 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 FY2015, 4,618 red drum, spotted seatrout, striped bass, cobia and red snapper samples were processed by the DNR genetics lab.

**Oysters (\$299.9K)** - Approximately 32,825 bushels of shell were planted on 5 public and state shellfish grounds in Charleston and Beaufort counties during FY2015. Planting in Georgetown County will occur in August 2015. 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 <u>shell recycling sites</u>, 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 28,547 bushels of oyster shells were recycled in FY2015. 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 <u>state shellfish grounds</u> or <u>public shellfish</u> <u>grounds</u>.

**Shrimp and Crabs (\$183K) -** DNR staff used trawls to collect 132 samples throughout the state to monitor the status of shrimp and blue crab resources. Numbers of white shrimp were, on average, higher in the fall of 2014 as compared to the fall of the three previous years (2011-2013), and the white shrimp spawning stock in spring of 2015 was also higher than in previous years. Brown shrimp catches in the spring of 2015 were also higher than 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. While summer 2015 samples showed low numbers, there were indications that the availability of blue crabs during fall should improve. Information collected in this program available on SCDNR website (http://www.dnr.sc.gov/marine/species/index.html).

Education, Information, Outreach (\$120K) - Approximately 271,000 public information documents were distributed free of charge to 121 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 79 vessel and 275 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 5,500 students, teachers, and adults with education programs during FY2015, 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 (\$550K)** – 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 also help purchase or maintain laboratory equipment, fish holding tanks and ponds, sampling boats and vehicles. The <u>FY 2015 Saltwater Recreational Fishing License</u> <u>Report</u> above is provided in Adobe® Acrobat® (PDF) format. Adobe® Reader® is required to open these files and is available as a <u>free download</u> from the Adobe® Web site.