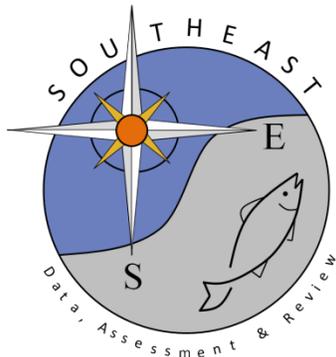


GADNR Marine Sportfish Carcass Recovery Project

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Marine Sportfish Carcass Recovery Project

Attachment 1
To the FY-2013 SFR Update

(7/1/2012 – 6/30/2013)

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Executive Summary

Starting in the fall of 1997, the Marine Sportfish Carcass Recovery Project has been in continuous operation for 17 years. Carcass donations were received from 18 active freezer locations across the coast this year. In FY2013, a total of 3,988 sportfish carcasses were processed by Georgia DNR personnel. By number, the top three sportfish species were spotted seatrout (81.2%), red drum (7.1%), and southern kingfish (whiting) (6.4%). Annual mean centerline (fork) lengths were 357.5mm (14in) for spotted seatrout, 400mm (16in) for red drum, and 287.8mm (11in) for southern kingfish (whiting).

Introduction

In the fall of 1997 the Georgia Department of Natural Resources (DNR) initiated the Marine Sportfish Carcass Recovery Project. This project takes advantage of the fishing efforts of hundreds of anglers by turning filleted fish carcasses that anglers would normally discard into a source of much needed data on Georgia's marine sportfish. The project is a true partnership of saltwater anglers, marine businesses, conservation groups, and the Coastal Resources Division (CRD). The Georgia Power Foundation has been instrumental in providing supplemental funding for this project.

The approach is simple, yet effective. Chest freezers are placed near the fish cleaning stations at selected locations along the Georgia coast. Each freezer is marked with an identifying sign and a list of target fish species. Inside the freezer is a supply of plastic bags, information cards, and pens. Cooperating anglers place the filleted carcasses, with head and tail intact, in a bag, drop in a completed angler information card, and then place the bag in the freezer.



The filleted fish carcass with the head and tail intact can provide a wealth of information to scientists studying the trends in fish populations. Each fish is identified to species, the fish length is measured, sex is determined when possible, and the otoliths (commonly called ear bones) are removed. The otoliths are then analyzed using computer-aided image analysis to determine an accurate age of the fish. This is accomplished by taking a thin section of the otolith and counting the rings like the rings on a tree.



The information provided by fish carcasses is used in a variety of analyses, all of which help biologists and managers better understand the status of Georgia's coastal fish populations. These data can be used in a descriptive manner to examine trends in the size and age structure of a population such as tracking changes in the average size of harvested spotted seatrout over time. Sometimes the data from fish carcasses are used in very sophisticated analyses such as the coastal stock assessment for Atlantic coast red drum in which length and age information collected from donated red drum carcasses are used by stock assessment scientists with the National Marine Fisheries Service.

Today, the Marine Sportfish Carcass Recovery Project provides every angler the opportunity to help determine the future of saltwater fishing in the state of Georgia. Fisheries management is a work in progress. The data provided by Georgia's saltwater anglers are priceless in helping to determine the status of important sportfish species and allow anglers to have a direct impact on the stewardship of coastal Georgia's fishery resources.

Angler Participation

A total of 1452 different anglers have participated in the Marine Sportfish Carcass Recovery Project since 1997. In FY2013, 189 anglers donated 350 bags of fish carcasses, with participation ranging from 1 to 34 bags per angler.

Total Carcasses Processed

Since 1997, a total of 50,149 carcasses have been donated by anglers and processed for information. In FY2013, Georgia DNR personnel processed a total of 3,988 sportfish carcasses.

The number of carcasses processed this year is up from last year's total of 3,169, and above the long-term annual average of 2,936 (Figure 1).

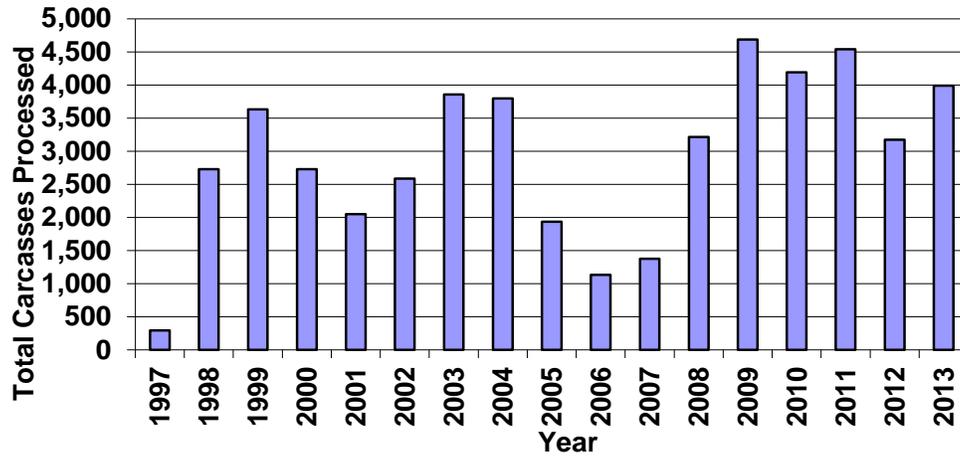


Figure 1. Annual total number of carcass donations from FY1997 through FY2013.

Carcasses from 9 different species were processed this year. By number, the top three sportfish species were spotted seatrout (81.2%), red drum (7.1%), and southern kingfish (whiting) (6.4%). Other species included sheepshead, southern flounder, black drum, red snapper, weakfish, tripletail, Atlantic croaker, and made up a combined total of 5.2% of carcasses processed this year (Figure 2).

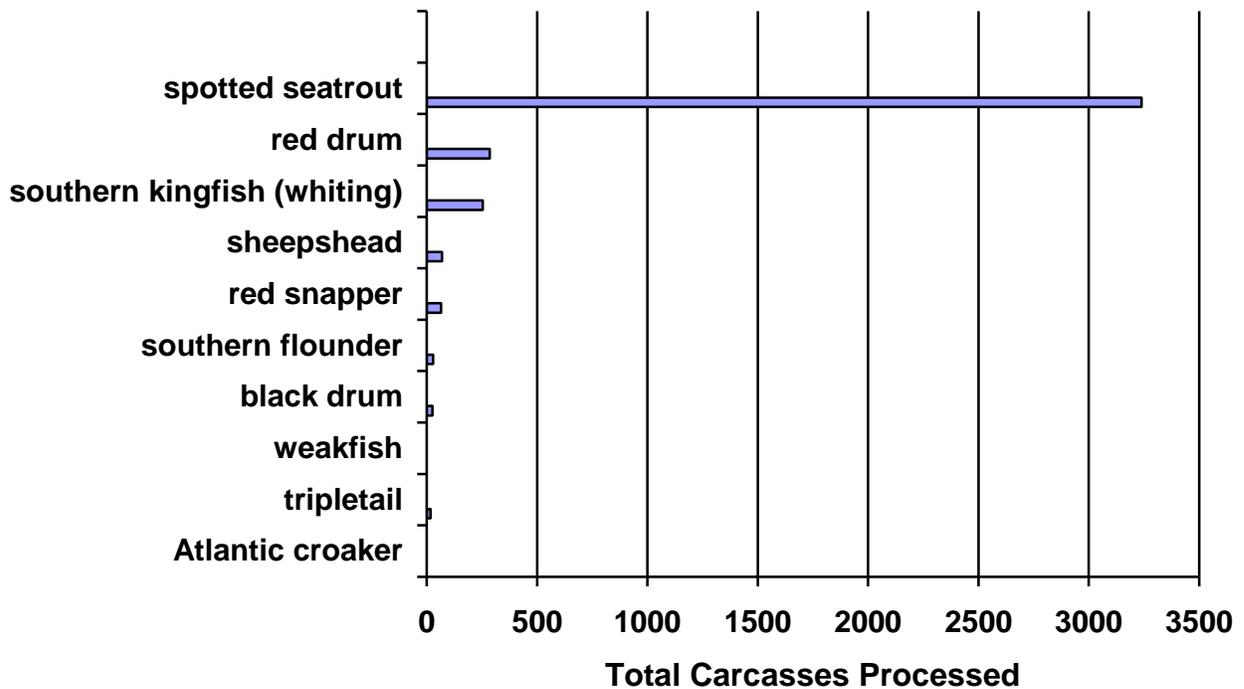


Figure 2. Total Carcasses processed by species for FY2013.

Carcasses were collected from 18 freezer locations. Two-Way Fish Camp had the highest number of donations accounting for 70.9% of the annual total (Figure 3). Cabin Bluff Lodge was next with 6.1%, followed by Bahia Blue with 4.8%. Remaining donations came from freezer locations Dover Bluff Club, Tybee Island Marina, Shellman Bluff Marina, Hogan’s Marina, Yellow Bluff, Crooked River, Landings Yacht Club, Hickory Bluff Marina, Fort McAllister Marina, GA DNR CRD, Lang’s Marina, Dover Bluff Club #2, Coffee Bluff Rescue Squad 2A, Coffee Bluff Marina, and Miss Judy’s, accounting for 18.3%, combined.

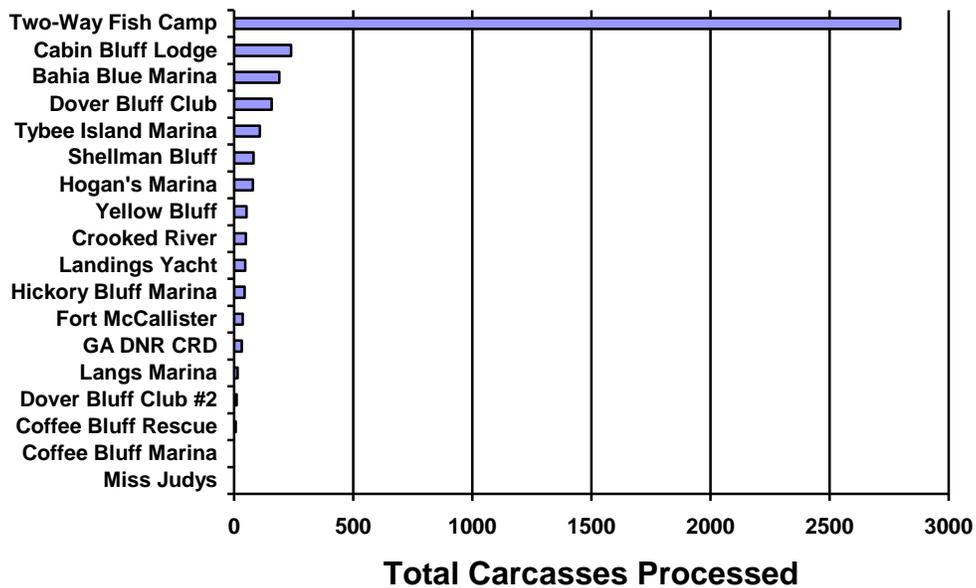


Figure 3. Total carcasses donated and processed by freezer location for FY2013.

Length Information by Species

Length information for all species is summarized in Table 1. and length frequencies are presented for selected species in Figure 4a-d. In FY2013, the smallest specimen was a spotted seatrout measuring 227mm (9in) mm. A 1213mm (47in) mm red snapper was the largest fish measured. Among the top three species, spotted seatrout ranged from 227mm (9in) to 548mm (22in) with a mean size of 357.5mm (14in) mm. For red drum, lengths ranged from 330mm (13in) to 643mm (25in) averaging 400mm (16in) mm. Finally, Southern kingfish (whiting) ranged from 230mm (9in) to 371mm (15in) with a mean of 287.8mm (11in) mm.

Table 1. Summary of length information by species for FY2013.

Species	Total Number	Avg. Length (mm CL)	Min. Length (mm CL)	Max. Length (mm CL)
spotted seatrout	3239	357.5	227	548
red drum	285	400	330	643
southern kingfish (whiting)	254	287.8	230	371
sheepshead	69	373	232	493
red snapper	65	573.9	380	1213
southern flounder	29	399.3	277	536
black drum	26	361.9	244	517
tripletail	18	563.3	411	754
weakfish	2	337.5	331	344
Atlantic croaker	1	284	284	284

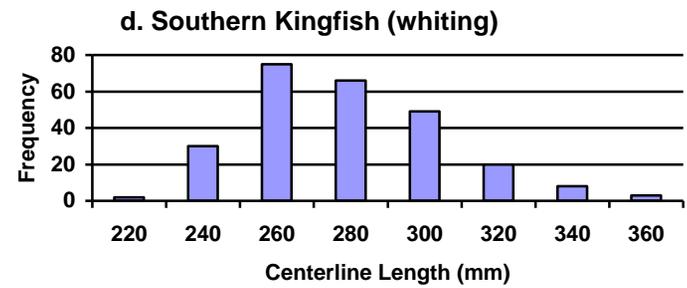
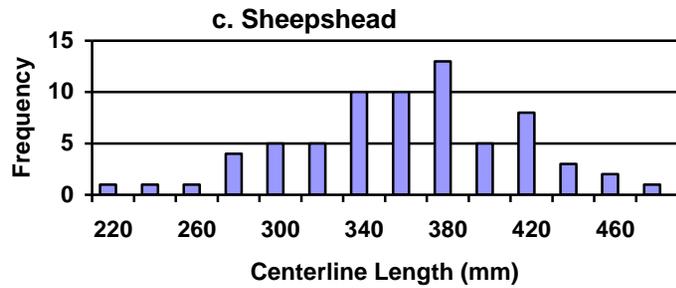
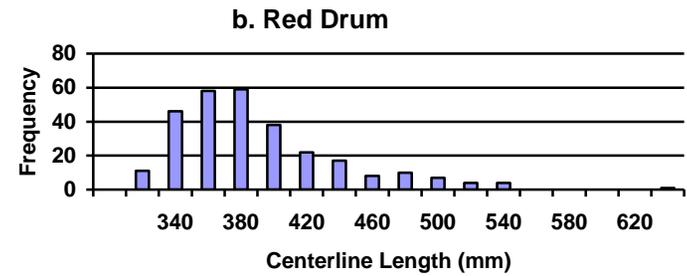
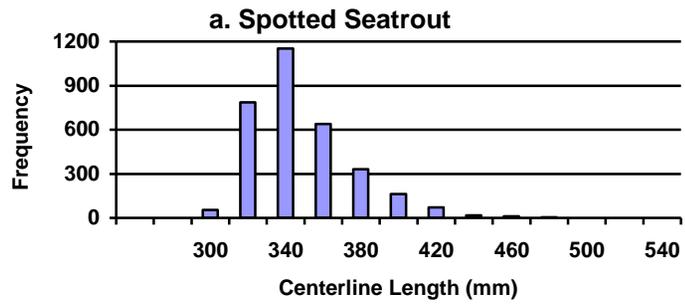


Figure 4a-d. Length frequencies (mm CL) for selected Carcass Recovery Project species: a) spotted seatrout; b) red drum; c) sheepshead; d) southern kingfish (whiting), for FY2013.

Funding & Contact Information

Annual funding for the Marine Sportfish Carcass Recovery Project is provided by Wallop-Breaux Federal Aid in Sport Fish Restoration funds and by a grant from the Georgia Power Foundation.

For more information about this project including freezer locations, target species, or angler incentives call (912) 264-7218, search our website (<http://coastalgadnr.org>), or write to the Research and Survey Program:

Research and Surveys Program
Re: Carcass Recovery Project
Georgia Department of Natural Resources
One Conservation Way, Suite 300
Brunswick, GA 31520.