

A map of the South Carolina coastline and surrounding waters, overlaid on a satellite image of the ocean. The map shows the state's boundaries with North Carolina to the north, Georgia to the west, and Florida to the south. Key coastal cities are labeled: Cape Hatteras, Cape Lookout, Wilmington, Charleston, Savannah, Brunswick, Jacksonville, St. Augustine, and Daytona Beach. A dashed line indicates the 36-degree latitude boundary. A compass rose is in the top left. The year '1999' is printed in large, bold, black letters over the central part of the map. The title 'South Carolina Marine Fisheries' is at the top, and 'Data Report 36' and 'March, 2001' are at the bottom. The background is a satellite image of the ocean with whitecaps.

South Carolina Marine Fisheries

1999

North Carolina

South Carolina

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Office of Fisheries Management

Marine Resources Division

South Carolina Department of Natural Resources

Charleston, South Carolina

Data Report 36

March, 2001

Georgia

Florida

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INTRODUCTION

This report is a summary of significant events in South Carolina's marine fisheries during 1999. Its objectives are to 1) update and describe trends in the principal fisheries and 2) provide explanatory information relevant to important developments. The discussion is somewhat subjective in interpretive content, but represents consensus views of the supervisory staff of the management programs for the various fisheries. The presentation is directed at a general audience, makes some simplifications, and is not meant to be definitive in the scientific sense.

Publication of landings data for commercial fisheries began in 1957 and was based on a monthly reporting system established by the U.S. Fish and Wildlife Service (USFWS). Distribution of information was in the form of monthly bulletins.

Forms were mailed to seafood dealers, on which they were asked to report their landings for that month. Reporting specialists compiled this information and submitted it to the USFWS office in Washington, D.C. The S.C. Division of Commercial Fisheries also provided data. The specialists issued monthly narratives describing conditions and trends, the last in December, 1979.

The current series of annual reports prepared by the Marine Resources Division (MRD) began with an issue that reviewed trends and events for 1977-1986. Individual annual reports commenced with the 1987 issue. The context is similar to that of the USFWS monthly bulletins.

Data on commercial fisheries statistics were obtained through 1) mandatory monthly dealer reports, 2) mandatory shellfish harvest reports, 3) weekly shrimp tickets submitted voluntarily by dock operators, 4) trip tickets for offshore fishing boats submitted voluntarily by fish houses, and 5) reports provided by harvesters in special permit fisheries. Commercial landings statistics applied to wild stock fisheries only.

The mariculture industry produced \$2.31 M worth of product with clams the leading contributor. Shrimp farmers continued to experience problems and their output decreased slightly from that in 1998. Minor quantities of fish comprised the remaining mariculture production.

Commercial landings data were subject to confidentiality if less than three sources provided information. Appreciable volumes were involved in some categories. If three or four dealers handled an item, but only one accounted for most of the volume, this information was also treated as confidential. Confidential data were included in the summaries of total landings.

Reliability of commercial landings data is subject to the perception of under-reporting. State law restricts the use of this information to fishery management purposes only. It has been assumed that providers, particularly in a voluntary situation, have little incentive to submit falsified records. Verification was therefore seldom attempted, except where obvious anomalies were evident.

Health concerns dictated that shellfish landings were reported in detail and closely monitored. This information is considered to be very accurate. Most of the shrimp statistics were obtained from voluntary weekly tickets and were also considered quite reliable. Landings in most other product categories were obtained primarily from monthly dealer reports. A substantial amount of the blue crab landed was distributed by individual fishermen and some under-reporting is suspected. Incidental catches of coastal fish by shrimp trawlers were usually part of the crews' compensation and a portion of the landings was therefore not handled by wholesale dealers. It is suspected that under-reporting of the overall landings occurred as a consequence.

The major source of recreational fishery data was the Marine Recreational Fishery Statistics Survey (MRFSS), conducted for the National Marine Fisheries Service (NMFS) by a private contractor. This survey applied to hook and line fishing from shore or shore-based facilities, charterboats, and private boats (headboats were not included).

The MRD continued the State Finfish Survey independently of the MRFSS. Coverage was directed at private boat fishermen fishing inland (estuarine) waters. The principal objectives were to obtain length measurements and CPUE data for important inshore sport fish such as red drum, spotted seatrout, and flounders.

State law required operators of piers, charterboats, and headboats to obtain permits and submit monthly reports of their fishing activities. Pier operators reported the numbers of anglers using their facilities each day on a monthly calendar. Charterboat captains completed logsheets for each fishing trip, listing the date, number of anglers, hours fished, and catch data.

Headboat operators were required by federal regulation to submit trip reports to the NMFS (their state obligation was met by providing copies to the MRD). Information elements were similar to those on the charterboat reports. The NMFS Beaufort Laboratory had the federal responsibility for processing these data.

No directed effort was made to monitor recreational shellfish gathering or blue crab harvest in 1999. Results of previous surveys of buyers of the marine fishing stamp indicated that rough estimates of recreational landings could be based on percentages of the commercial production. These surveys were conducted in 1994

for shellfish and 1997 for blue crab. It is rather speculative as to whether the percentages estimated from those results should be applied to the 1999 landings.

A survey of the shrimp baiting fishery has been conducted each year since 1987. Results of the 1999 survey are described in MRD Data Report Number 33. A brief summary is included with the discussion of the commercial shrimp fishery, because of the emphasis on comparative harvests.

COMMERCIAL FISHERIES

Product categories were composed as follows. Shrimp landings included whole (heads-on) weights of penaeid species (there were no rock shrimp landings). Crab landings included live weight of blue crab in various product categories (e.g. hard, soft, and peeler), live weight of horseshoe crab, and pounds of stone crab claws. Shellfish volumes were expressed as meat weights with other units (bushels of oysters and whelks, 250-count bags of clams) noted where appropriate.

Most fish landings were converted into round (whole) weights. Shark landings taken on offshore gear were categorized as "offshore" and those by inshore gear (almost entirely shrimp trawl) were designated "inshore." "Offshore fish" included wreckfish, king mackerel, oceanic pelagics (dolphin, wahoo, tunas), swordfish, and reef fish (e.g. groupers, snappers, sea bass, porgies, and tilefishes). "Coastal fish" consisted of mullet, inshore groundfishes, e.g. spot, whiting (kingfish), and flounders. Riverine fish in 1999 were exclusively American shad.

Except where noted otherwise, all value figures refer to ex-vessel value, i.e., the amount paid to the harvester. For trend analyses, these have been adjusted for inflation by weighting factors based on the annual Consumer Price Index (CPI). All figures shown are expressed in 1999 dollars.

South Carolina is not a major producer of seafood, typically ranking 20th in volume and value of overall production (including mariculture) among the coastal states. The seafood industry consists largely of harvesting with little processing to add value to the raw product. Most of the landings are shipped out of state as raw or unprocessed product.

State law requires that any seafood product offered for sale must initially be sold to a licensed wholesale dealer. In FY 1998/1999, there were 273 licensed wholesale seafood dealers, about average for recent years (Fig. 1). A description of wholesale operating characteristics is contained in the 1994 report. Processing was largely limited to initial handling, such as shrimp heading, shellfish shucking, crab picking, and fish cutting. The most recent employment figures (for 1995) are contained in MRD Data



Fig. 1. Sales of commercial licenses.

Report Number 26.

The number of commercial fishermen was unknown, but presumably was between 1,500 and 2,000. In order to legally land product, an individual had to possess either a Trawler Captain's license or a Land and Sell license. In 1997, the law was amended so that the Trawler Captain's license could only be used to sell trawl-caught product with a Land and Sell license required for all other gears. In FY 1998/1999, there were 1008 Trawler Captain licenses issued. The number of Land and Sell licenses sold was 739, continuing the general upward trend of recent years (Fig. 1).

Additional licenses were required for units of gear and/or participation in various fisheries. Since some persons obtained several of these gear licenses in addition to the Land and Sell or Trawler's Captain licenses, the totals were not additive. Crew in most fisheries were not required to have any type of license and could therefore not be documented.

Total landed weight from wild stocks was 18.221 M pounds, a 5% increase over 1998's production (Fig. 2). The increase was attributable to improved shrimp landings, which offset declines in most other categories. Fig. 3 illustrates the status of the 1999 landings volume vs the 15-year averages. The two major inshore fisheries, i.e., for shrimp and blue crab, continued to do relatively well vs historical standards.

Total landings were worth \$29.628 M (Fig. 4), compared to the 15-year average of \$30.507 M (in 1999 dollars). As in most years, shrimp was the leading value contributor, accounting for 62% of the state's total ex-vessel landings in 1999 (Fig. 5).

County landings included mariculture production. Charleston County was the leading producer with 46% (\$14.753 M) of the total landed value (Fig. 6, Table 1). The county led the state in overall production of shrimp and shellfish, accounting for most of the mariculture output in both categories. Blue crab production (all categories) was 2.370 M pounds valued at \$1.796 M. Total fish landings were 935,000 pounds worth \$1.797 M. All of the wreckfish and most of the swordfish were landed here. One of the state's largest fish packers terminated operations on April 30, although most of his suppliers appeared to relocate elsewhere within the county.

Beaufort County produced \$8.450 M. The leading contributors were shrimp (2.378 M pounds worth \$5.860 M) and blue crab (3.592 M pounds at \$2.068 M). Production and value in other categories were relatively insignificant.

Georgetown County accounted for \$6.351 M with shrimp (\$3.389 M) and fish (\$2.527 M) the major components. Horry County contributed \$840,806 in landings, mostly of offshore fish.

Table 1. Production and ex-vessel value by county (in thousands of pounds and dollars).

County	Shrimp	Blue crab	Shellfish	Off.	Fish	
					Coastal	River.
Volume						
Beaufort	2,378	3,592	105	10	35	6
Charleston	3,522	2,370	432	813	69	53
Georgetown	1,622	325	44	1,274	3	122
Horry	3	27	< 1	457	< 1	< 1
Value						
Beaufort	5,860	2,068	452	13	32	4
Charleston	8,035	1,796	3,128	1,669	60	68
Georgetown	3,389	250	184	2,381	2	143
Horry	10	18	< 1	810	1	< 1
		Total volume		Total value		
Charleston		7,362			14,753	
Beaufort		6,392			8,450	
Georgetown		3,391			6,351	
Colleton		474			1,158	
Horry		489			841	
Jasper		288			251	
Others		95			113	

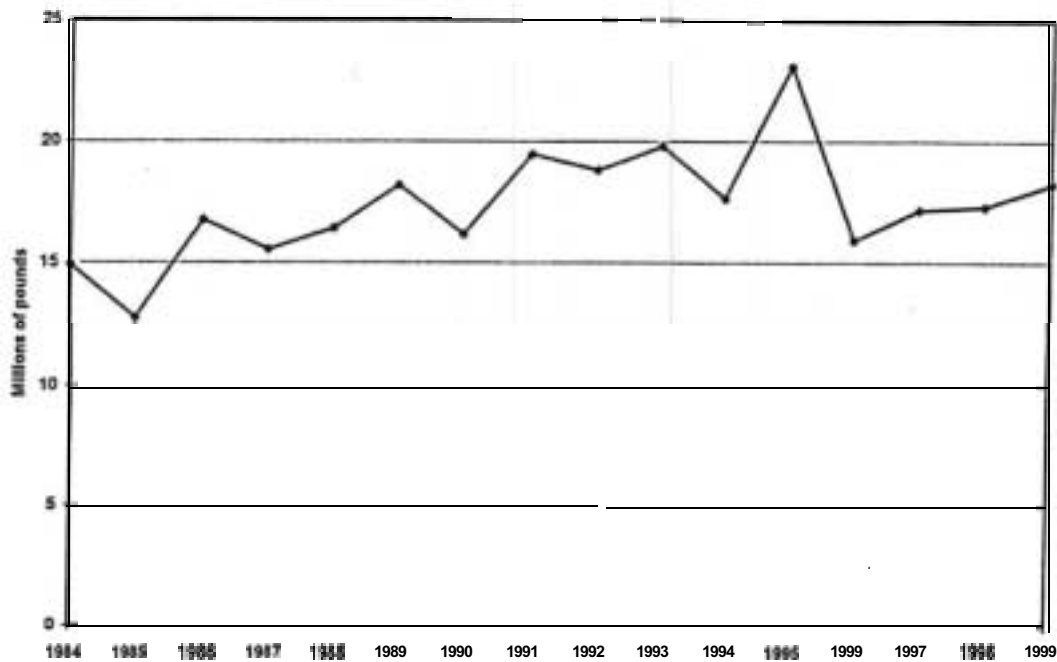


Fig. 2. Total weight of commercial marine fisheries products.

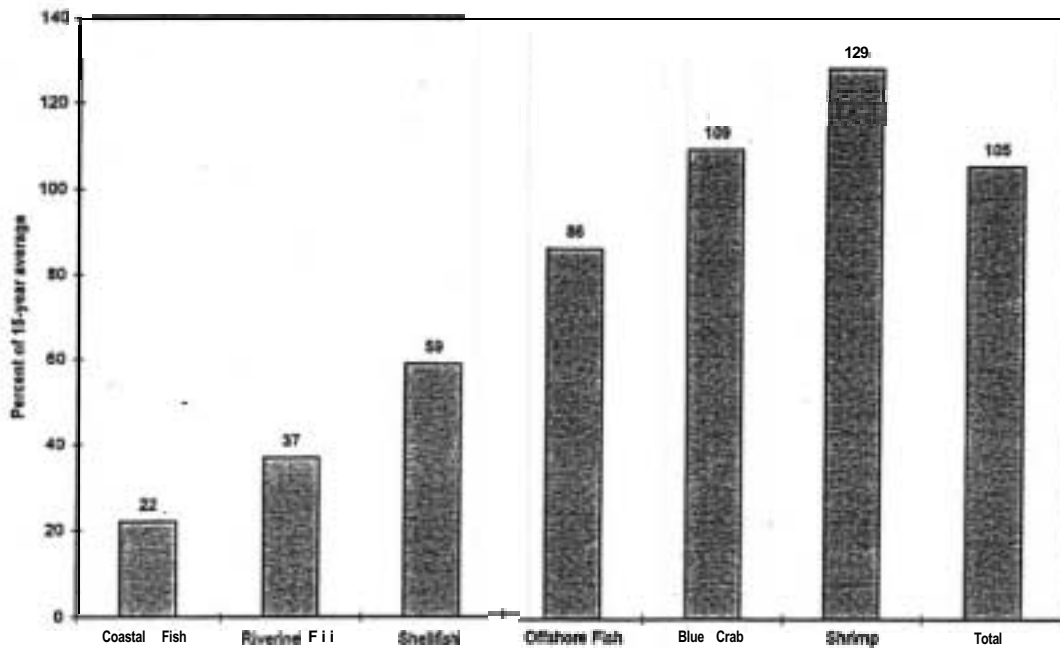


Fig. 3. Production volume compared to 15-year averages.

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