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## INTRODUCTION

This report is a summary of significant events in South Carolina's marine fisheries during 2000. 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 and are equivalent to the general canvass database maintained by the federal government.

The mariculture industry produced \$2.068 M worth of product with clams being the major component. Shrimp production continued to decline and was worth \$174,000. 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 by major category.

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 those in a voluntary status, have

little incentive to falsify information. 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 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 these landings was therefore not handled by obligated providers. It is suspected that some under-reporting therefore occurred.

Several products were covered by dual systems, i.e., both harvesters and dealers were obligated to submit data. The principal example in 2000 was shad. Agreement between the two datasets was not particularly good and the figures herein were those provided by the wholesale dealers.

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 (SFS) independently of the MRFSS. Primary coverage was directed at private boat fishermen fishing on inland (estuarine) waters. The principal objectives were to obtain length measurements and catch per unit of effort (CPUE) data for important inshore species 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 number 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.

No directed effort was made to monitor recreational shellfish gathering or blue crab harvest in 2000. Results of previous surveys of buyers of the marine recreational fishing stamp indicated that rough estimates of recreational landings could be based on percentages of commercial production. These surveys were conducted in 1994 for shellfish and in 1997 for blue crab. It is speculative as to whether the percentages based on those results should be applied to contemporary landings, although they are included for comparative purposes.

A survey of the shrimp baiting fishery has been conducted each year since 1987. Results of the 2000 survey are described in MRD Data Report 35. A brief summary is included with the discussion of the commercial shrimp fishery, because of the interest in comparative harvests.

## COMMERCIAL FISHERIES

Product categories were composed as follows. Shrimp landings included whole (heads-on) weights of penaeid species (there were no reported rock shrimp landings). Crab landings included live weight of blue crab in various 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, 250-count bags of clams) noted where appropriate.

Most fish landings were converted into round (whole) weights. Shark landings taken with offshore gear were categorized as *offshore* and those by inshore gear (practically all by shrimp trawl in 2000) were designated *inshore*. *Offshore fish* included wreckfish, king mackerel, oceanic pelagics (dolphin, wahoo, and tunas), swordfish, and reef fish (e.g. groupers, snappers, sea bass, porgies, and tilefishes). *Coastal fish* consisted of mullet, inshore groundfishes, e.g. spot and kingfishes (whiting), and flounders. *Riverine fish* in 1999 and 2000 were exclusively American shad.

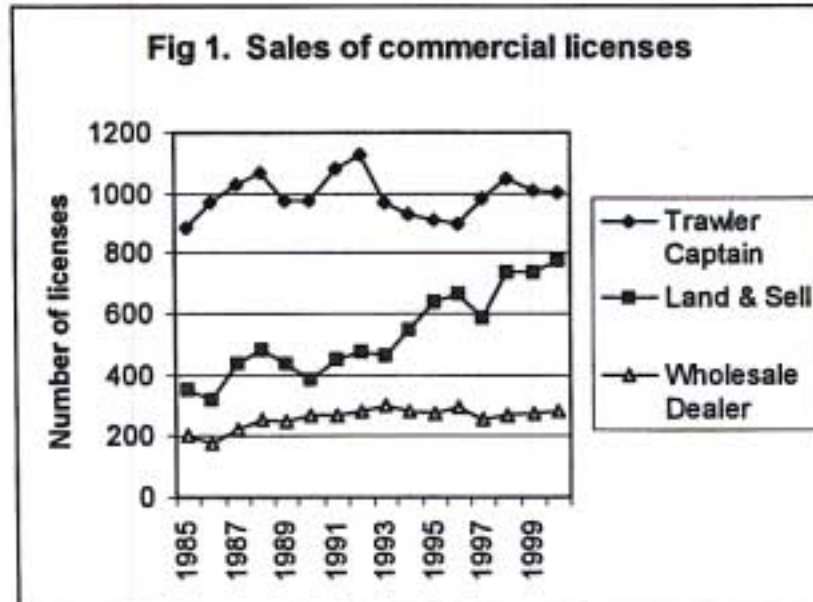
Except where noted otherwise, all value figures refer to ex-vessel value, i.e., the amount paid to the harvester. For trend analyses, these have been adjusted for inflation by weighting factors based on the annual Consumer Price Index (CPI). All figures shown are expressed in 2000 dollars.

South Carolina is not a major producer of seafood, typically ranking 20<sup>th</sup> 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 1999/2000, there were 279 licensed wholesale seafood dealers. A description of wholesale operating characteristics is contained in the 1994 report (MRD Data Report 22). Processing was largely limited to initial handling, such as shrimp heading, shellfish shucking, crab picking, and fish cutting. The most recent employment figures are for 1995 and are provided in MRD Data Report 26.

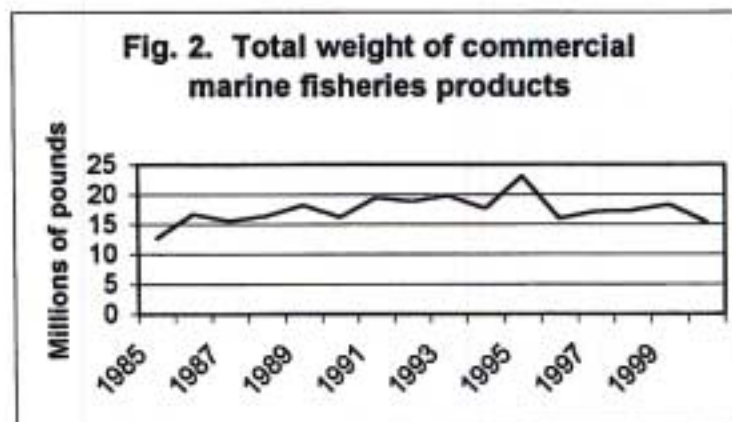
The number of commercial fishermen was unknown, but probably was between 1,500 and 2,000. In order to legally land product, an individual had to possess either a Trawler Captain's license (for trawl catches) or a Land and Sell license (for landings with

other gear). In FY 1999/2000, there were 1,004 Trawler Captain licenses and 773 Land and Sell licenses issued. The latter continued the general upward trend of recent years (Fig. 1).



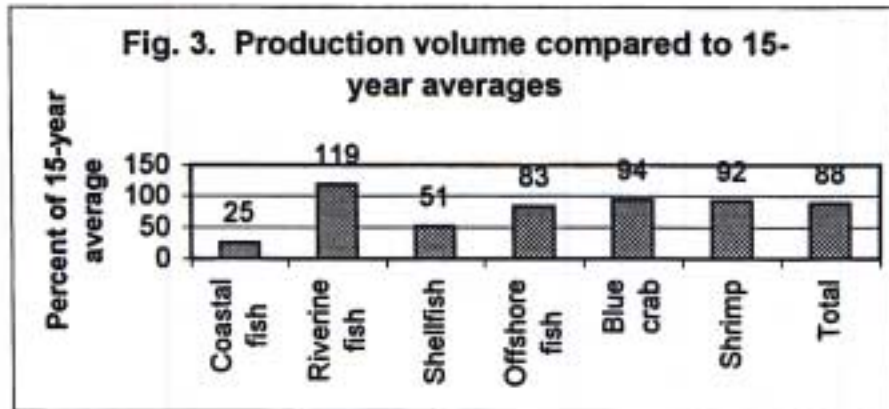
Additional licenses were required for units of gear and/or participation in various fisheries. Since some persons obtained several of these gear licenses in addition to the Land and Sell or Trawler Captain's licenses, the totals were not additive. Crew in most fisheries were not required to have any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

Total landed weight from wild stocks was 15.358 M pounds, the lowest amount in several years (Fig. 2).



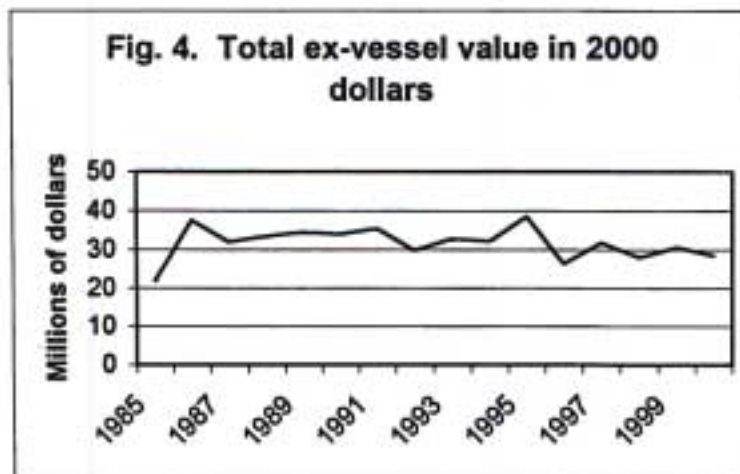


With the exception of riverine fish (American shad), volume in all major product categories was below the 15-year average (Fig. 3).



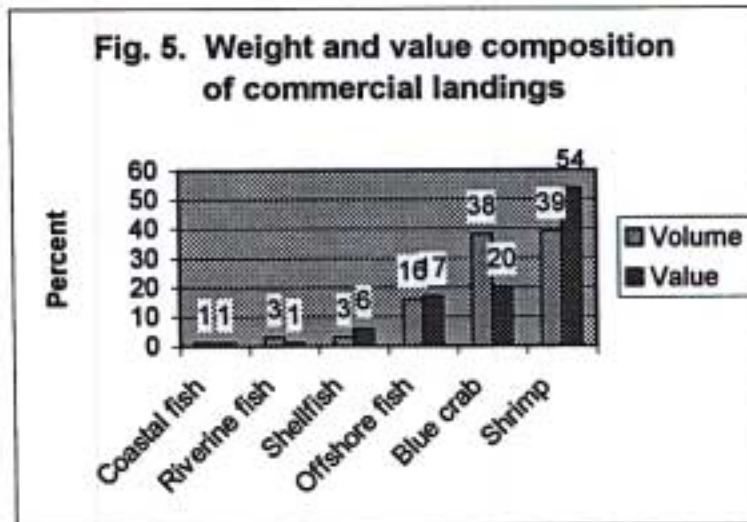
Shrimp and blue crab, the two major fisheries in state waters, continued to perform relatively well.

Total landings were worth \$28.483 M, about 8% less than the average of the previous five years. Over the last decade, there has been a slight downward trend in total landed value (Fig. 4).

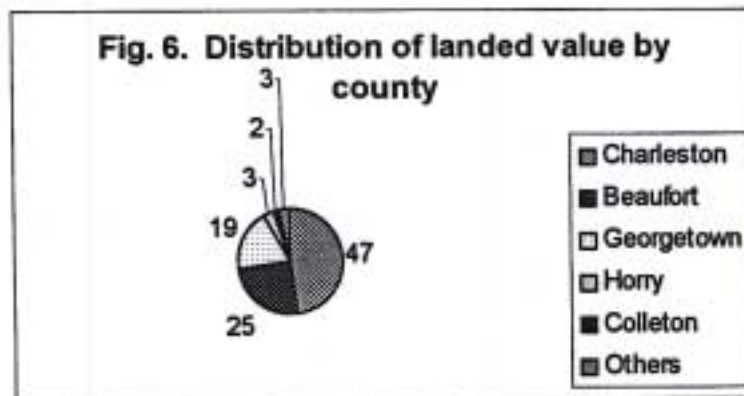


Shrimp and blue crab were the leading components in both volume and value (Fig. 5). Categorical contributions remained similar to those during the last ten years.

County landings included mariculture production (principally clams). As usual, Charleston County was the leading producer (Fig. 6, Table 1) with a landed value slightly below that in 1999. The county led in landings of shrimp, blue crab, and shellfish.



Offshore fish landings were also appreciable with all of the wreckfish and most of the swordfish landed here.



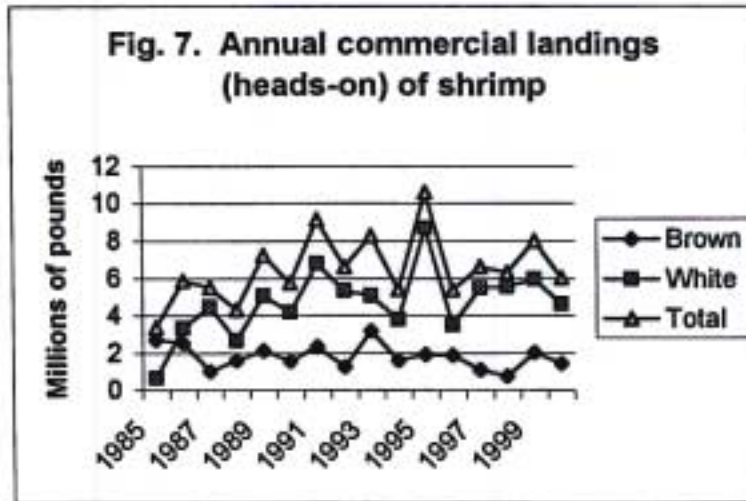
Beaufort County was the second-highest producer. The major components of the landings were blue crab and shrimp. Georgetown County was the leading producer of offshore fish and also had shrimp landings exceeding 1 M pounds. Horry County's major production consisted of offshore fish. Landings in other counties were relatively insignificant.

## SHRIMP

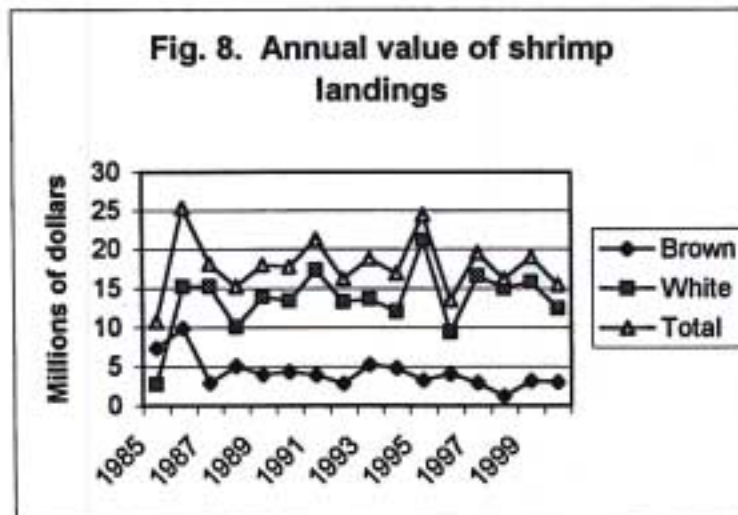
Penaeid shrimp landings were 6.046 M pounds heads-on worth \$15.482 M. Volume landings of both white and brown shrimp declined from those in 1999 (a relatively good year). The white shrimp catch was 15% below the 10-year average, while the brown shrimp harvest was 19% lower (Fig. 7).

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

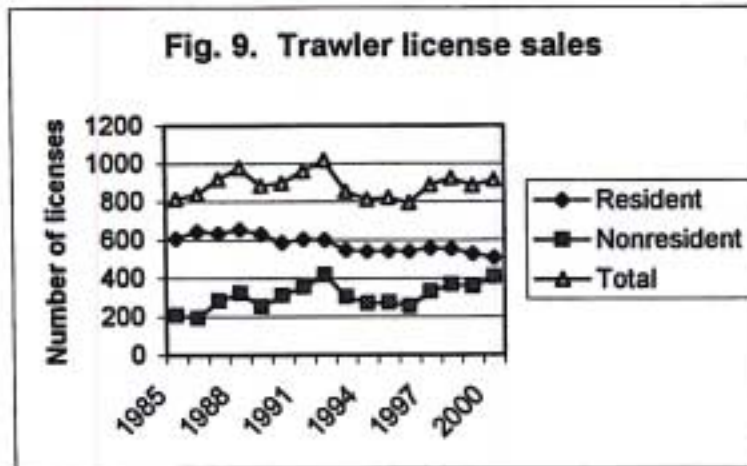
County	Shrimp	Blue crab	Shellfish	Offshore	Fish	
					Coastal	Riverine
Volume						
Beaufort	1809	2232	131	5	38	3
Charleston	2798	2329	412	780	57	318
Georgetown	1196	373	42	1201	2	163
Horry	< 1	48	< 1	457	5	1
Value						
Beaufort	5019	1976	565	8	36	2
Charleston	6944	2424	2925	1561	50	219
Georgetown	2903	392	181	2314	1	108
Horry	2	39	< 1	989	2	< 1
			Total volume	Total value		
Charleston			6941	14265		
Beaufort			4279	7642		
Georgetown			2985	5901		
Horry			512	1033		
Colleton			280	748		
Jasper			727	780		
Others			171	176		



The total landed value was 18% lower than in 1999 (Fig. 8). Most of the decline in aggregate value was attributable to white shrimp; the landed value of the brown shrimp harvest was nearly unchanged.



There has been no discernible trend in the overall number of trawler licenses issued during the last 15 years (Fig. 9). A gradual decline in resident licenses has been offset by an increase in nonresident licenses. The number of resident licenses sold in 2000 was the lowest in over 20 years, while the number of nonresident licenses was among the highest.



Trawling in state waters was closed on January 5, 2000 north of Fripp Island and on January 12 south of there. The winter was relatively mild, except for the first two weeks in February, when Charleston Harbor water temperatures reached 46 degrees F. No significant shrimp mortality was observed.

Trawling in the area between the 3-mile line and the federal line was opened on May 11 with all legal trawling areas being opened on May 24. Due to the incidence of leatherback turtles, large TED openings were required for most of May. Roe white shrimp landings were relatively good.

Drought conditions prevailed during July and may have contributed to the relatively poor brown shrimp season, as well as an outbreak of "black gill syndrome," as was seen in 1999. During late August and early September, heavy rains occurred in conjunction with two tropical storms. These rains probably flushed many white shrimp out to sea, since August trawler landings were unusually high.

The channel net and trawling season was opened in Winyah and North Santee Bays on September 13 and closed on December 15. Small shrimp prevailed.

After the large catch in August, the season became progressively worse. Catch rates generally declined and the size of the shrimp remained relatively small in many areas. Although there were no major storms, the weather appeared to be a factor. A cold front early in October dropped nighttime air temperature below 50 degrees F with November and December being the coldest on record. The trawling season was closed on January 3, 2001 in view of the virtual absence of shrimp.

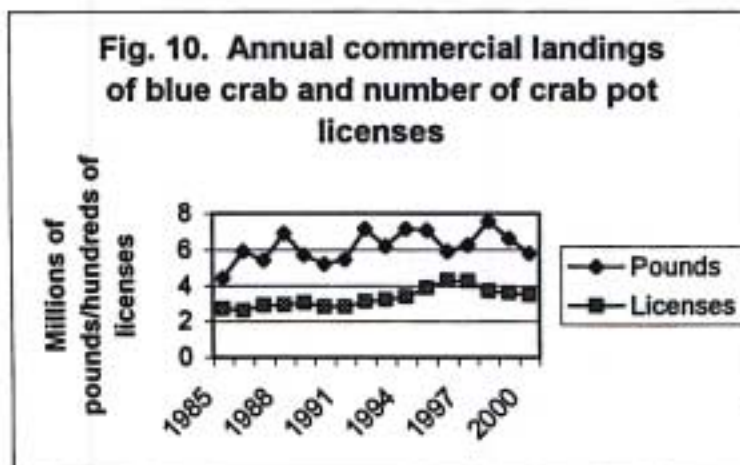
The shrimp baiters had one of their worst seasons. Total permit sales (N = 15,929) were well below the record set in 1998. Although the number of active permit holders was nearly identical to that in 1999, overall participation declined slightly and average individual effort was the lowest observed to date. The largest decline occurred

in the Beaufort area, where effort decreased 28% from that in 1999. Effort in the popular Charleston area was down 10%. Total effort (N = 61,445 trips) was the lowest since 1989 (the Hugo year).

Catch rates were the lowest observed to date with the statewide average down nearly 40% from that in the worst previous season (1996). Shrimping was uniformly poor in all areas. The overall catch (0.91 M pounds heads-on) was the lowest reported to date, less than 50% of that in 1999. The baiters' share of the total fall white shrimp harvest was 24%, the lowest since detailed records have been kept. The large outmigration of shrimp during August and early September appeared to be a major causative factor, although "black gill disease" may also have had some impact.

## CRAB

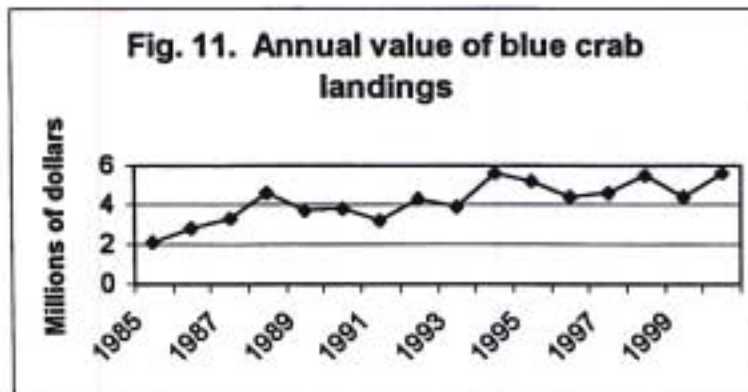
Total blue crab production was 5.815 M pounds, a relatively low catch by recent standards (Fig. 10).



In contrast, landed value set a record at \$5.649 M (Fig. 11). The unit value increased substantially to a record \$0.82/pound for potted hard crab. After rising during the first half of the 1990's, the number of crab pot licenses has progressively declined during the last five years.

Weather appeared to be a significant factor. The drought reduced the summer catch, but contributed to improved prices. Once major processor categorized the fall harvest as terrible; the cold weather during November and December probably reduced catches at a time of high market value.

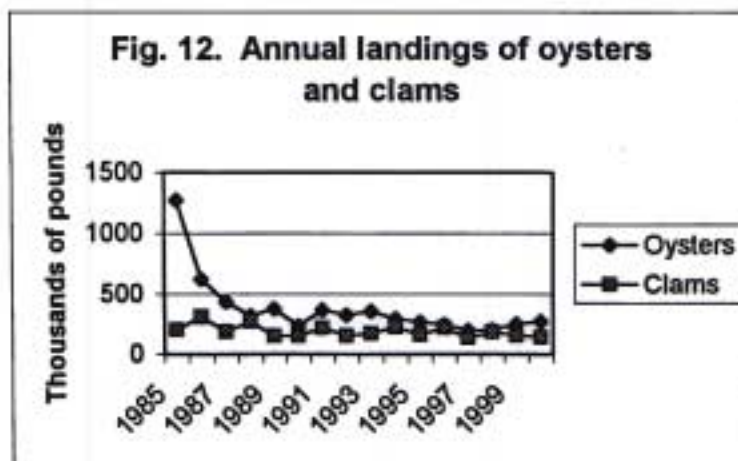
In the last few years, a fishery has developed for horseshoe crab with the animals used to provide fluids for medical purposes and later released alive. Most of the harvest is taken by hand. In 2000, landings increased to 303,000 pounds worth \$167,000.



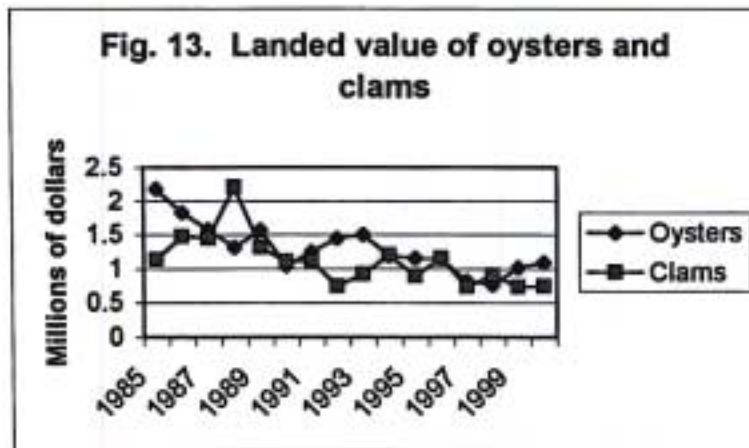
## SHELLFISH

Landings data are for calendar year 2000. The number of licensed shellfish dredges continued a long-term decline, to 4 compared to a high of 31 in 1992. Shellfish harvester licenses (N = 235) were also low by historical standards.

Oyster production was 86,062 bushels (meat weight 274,000 pounds), a slight improvement over the 1999 harvest (Fig. 12).



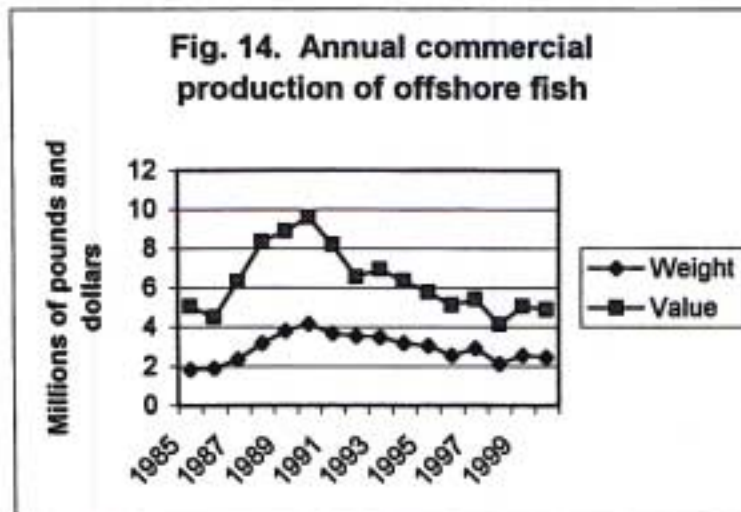
The clam harvest was 25,068 bags (250-count), equivalent to 144,000 pounds of meats, down slightly from the previous year's production. Landed value was \$1.092 M for oysters and \$749,000 for clams (Fig. 13).



Production of whelks was negligible. The Office of Fisheries Management (OFM) recommended that the directed trawl fishery for whelks remain closed in 2000, due to the low 1999 landings and prevalence of undersized whelks.

#### OFFSHORE FISH

Both production (2.446 M pounds) and landed value (\$4.888 M) were near the historic lowpoint (Fig. 14). Snappers and groupers, followed by swordfish, were the leading volume contributors. Groupers were the most valuable component with snappers next.

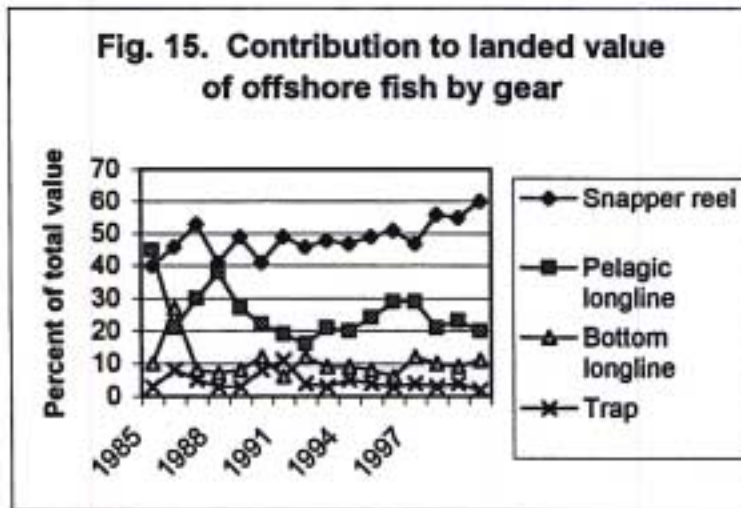


The principal gear contributor was the handline fishery. Its' two components were 1) a deepwater reel fishery for wreckfish and 2) a snapper reel fishery directed at reef species. In the following discussion, *Snapper reel* refers to the non-wreckfish segment.

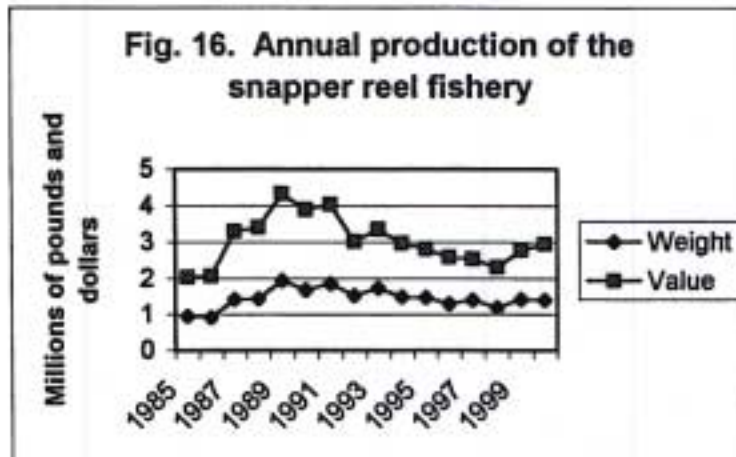


Wreckfish landings remained confidential, because of the small number of dealers and harvesters involved. The regional fishery is managed under an individual fisherman's quota system with an overall total allowable catch of 2.0 M pounds. In recent years, the total quota has not been made as participation and effort have declined. The South Carolina landings have steadily decreased since 1994 and were only 15% of the peak catch reported in 1990.

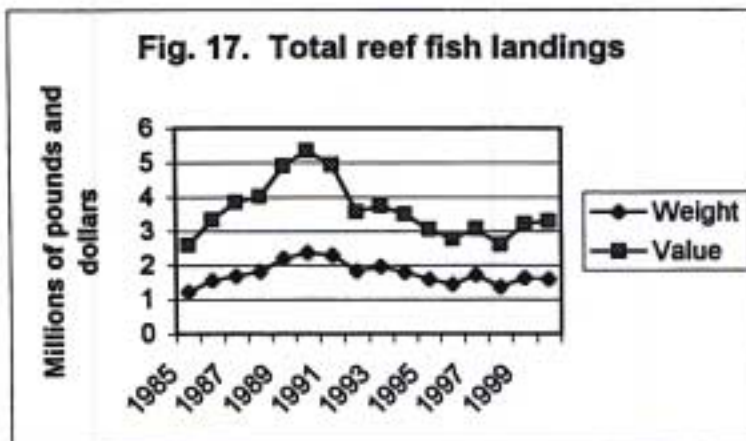
The snapper reel fishery historically has been the largest offshore fishery, accounting for roughly half of the landed value (Fig. 15).



Landings in 2000 were 1.400 M pounds valued at \$2.946 M with the volume about average for the past six years (Fig. 16). Peak production occurred in 1989 with 1.942 M pounds. Most (89%) of the 2000 landings consisted of reef fish.

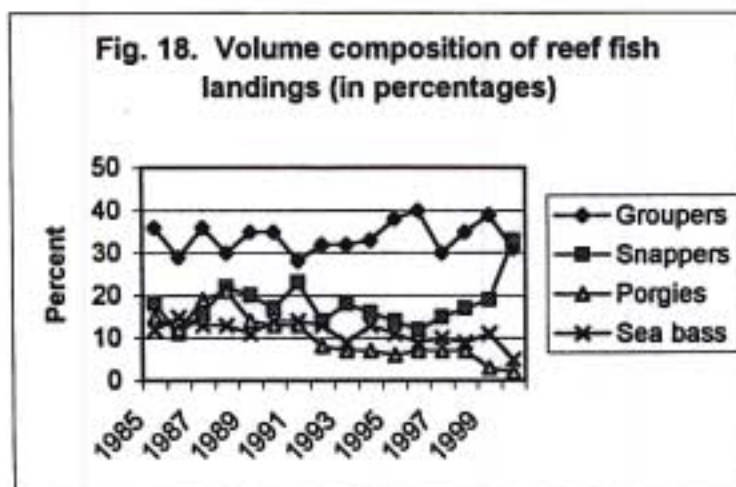


Overall reef fish landings have fluctuated in recent years with no pronounced directional trend (Fig. 17).



Total 2000 landings were 1.599 M pounds, compared to the peak of 2.812 M pounds in 1982. Peak production coincided with the height of the trawl fishery, which contributed over 500,000 pounds annually during 1980-1982 before being virtually eliminated after 1984 by stringent regulations. The 2000 landings were valued at \$3.298 M.

During 1979-1980, red porgies were the largest component of the reef fish catch with nearly 33% of the landed weight. Since then, groupers were the dominant group until 2000 (Fig. 18).



The principal species was the gag with peak landings in 1983 of 433,000 pounds, compared to the record low of 169,000 pounds in 2000. Snowy grouper was the next largest contributor until 1990, the last year of appreciable deepwater grouper landings. Snowy landings in 2000 were 71,000 pounds, compared to a peak of 291,000 pounds

caught in 1983. On October 1, the trip limit was reduced to 300 pounds (gutted) as the regional quota was approached.

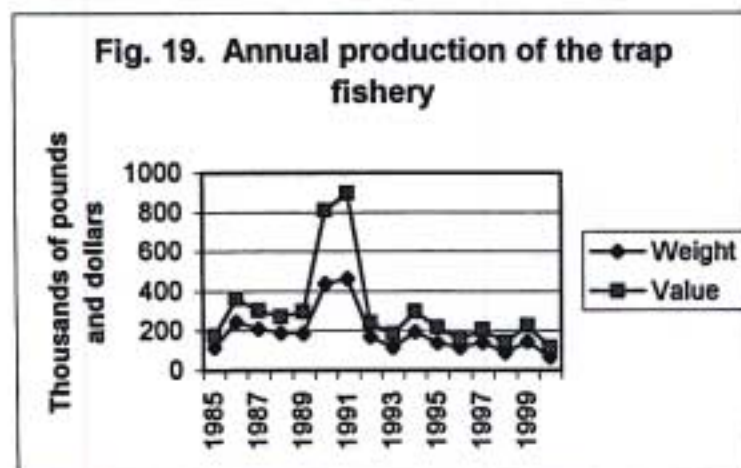
After 1990, scamp was the second-largest component of the grouper catch. Landings peaked in 1999 at 235,000 pounds, but declined to 165,000 pounds in 2000. Red grouper was a minor catch prior to 1999, but annual landings have exceeded 50,000 pounds in the last two years. Total aggregate grouper landings in 2000 were 498,000 pounds valued at \$1.326 M.

Vermilion snapper repeated as the largest single species contributor to reef fish landings with a record 506,000 pounds worth \$1.205 M. In 2000, it was also the leading species in the overall offshore fish category in both volume and value, despite being a species considered overfished by the South Atlantic Fishery Management Council). The red snapper catch (18,000 pounds) remained severely depressed in the continued absence of a strong incoming year class.

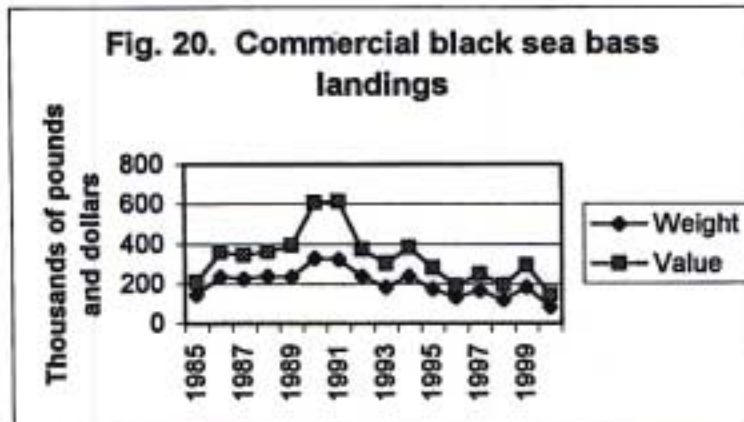
Red porgy landings continued to be severely limited by conservation measures. An emergency closure enacted in September, 1999 was replaced by a 50-pound trip limit effective August 29, 2000.

Black sea bass historically was the most important species landed by South Carolina offshore fishermen. Most of the catch was taken with traps similar to the wire crab pot. Except for a brief period in 1990-1991, when appreciable quantities of other reef species were caught using larger traps of a different configuration, black sea bass was the dominant species taken by the trap fishery. After 1991, directed trap fishing for other species was prohibited and regulations specified the use of the crab pot design.

In 2000, the trap fishery produced only 68,000 pounds worth \$116,000, its lowest landings in over 20 years (Fig. 19).

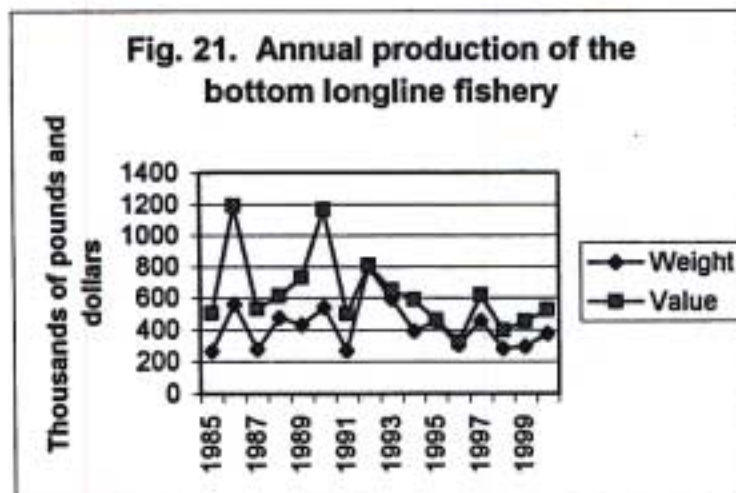


As usual, black sea bass comprised most of the catch. Overall black sea bass landings (including a minor amount caught by snapper reel) were 82,000 pounds worth \$143,000. This was the lowest catch since 1978, compared with peak landings of 624,000 pounds in 1981. In recent years, the species has been considered overfished and the annual catch has fluctuated at a relatively low level (Fig. 20).

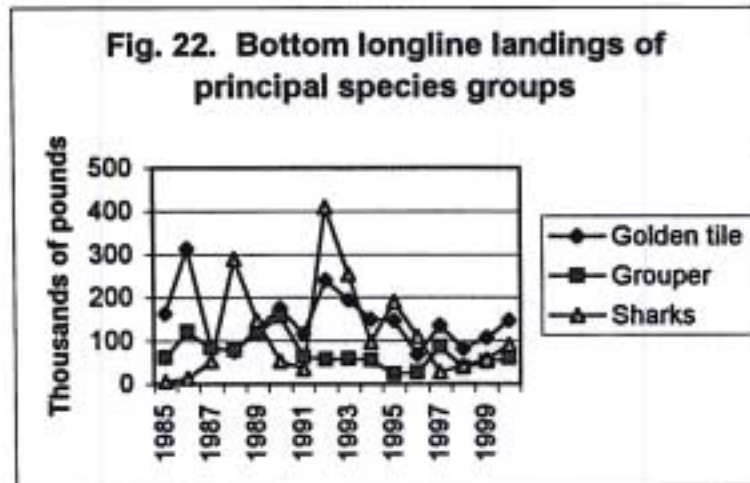


Historically, nearly all of the black sea bass catch (and trap catch) was made off the northern part of the state. During the 1981-1982 period of large black sea bass catches, about one-third (taken mainly by traps) was caught off Beaufort. There has been no appreciable offshore fishery there since then.

The other fishery that contributed significantly to reef fish landings was the bottom longline fishery. In 2000, aggregate weight (all species) landed was 374,000 pounds worth \$524,000, average for recent years (Fig. 21).

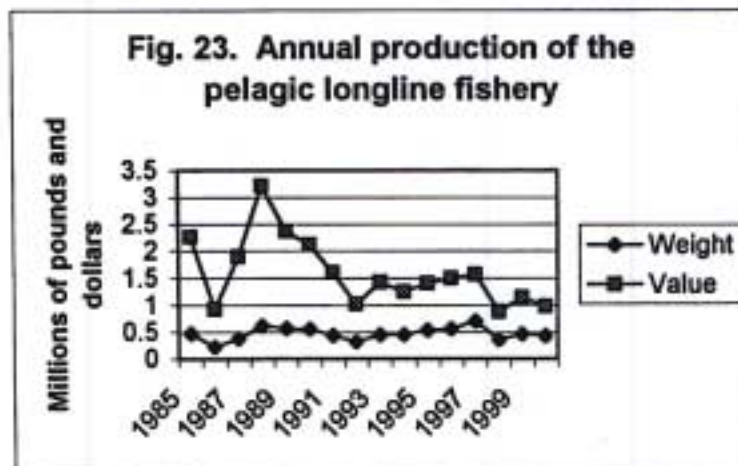


Peak production (868,000 pounds) occurred in 1983, when landings of snowy grouper and the newly-exploited golden tilefish topped out. Since then, species composition of the annual catch has varied considerably, depending on regulations and relative abundance. More recent large landings have been mainly attributable to sharks (Fig. 22).

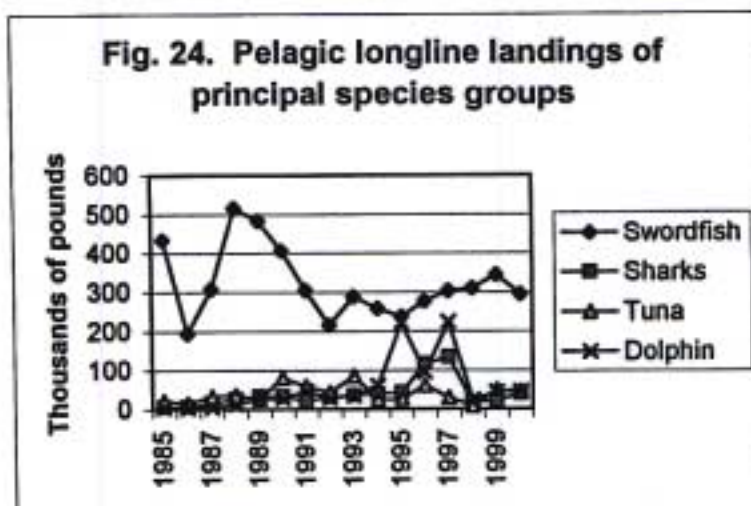


Longline landings of golden tilefish in 2000 were 147,000 pounds, the largest in five years, worth \$236,000. The shark component was 91,000 pounds valued at \$80,000. In addition to snowy grouper (59,000 pounds), the remainder of the catch consisted mostly of blackbelly rosefish (46,000 pounds) and blueline (gray) tilefish (22,000) pounds.

The other major offshore fishery was the surface or pelagic longline fishery, which targeted swordfish, but had an appreciable marketable bycatch consisting of tunas, dolphin, and sharks. Aggregate landings in 2000 were 429,000 pounds valued at \$975,000, a little below average for recent years (Fig. 23).



The principal component was swordfish at 295,000 pounds worth \$803,000 (Fig. 24).



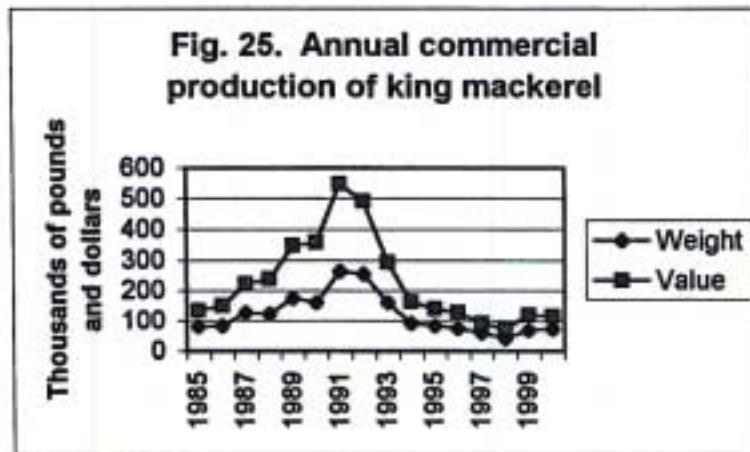
Commercial catches of oceanic pelagic species, e.g. dolphin, yellowfin tuna, and wahoo, have been contentious with offshore sportfishermen, who compete for the same species. The large catches of dolphin by pelagic longliners in 1995 and 1997 exacerbated the conflict. Legislation to limit commercial landings of dolphin was introduced in the 1999 General Assembly, but did not pass. Renewed efforts in the 2000 session succeeded. A commercial quota of 180,000 pounds and 4,500-pound trip limit went into effect in May, 2000. The total dolphin catch for the year was 66,721 pounds.

Shark landings, primarily by longliners, were subject to stringent regulations. The fishery for large coastals (the group comprising most of the offshore landings) was open only from January 1-March 30 and July 1-August 15. Total offshore shark landings were 136,000 pounds worth \$112,000.

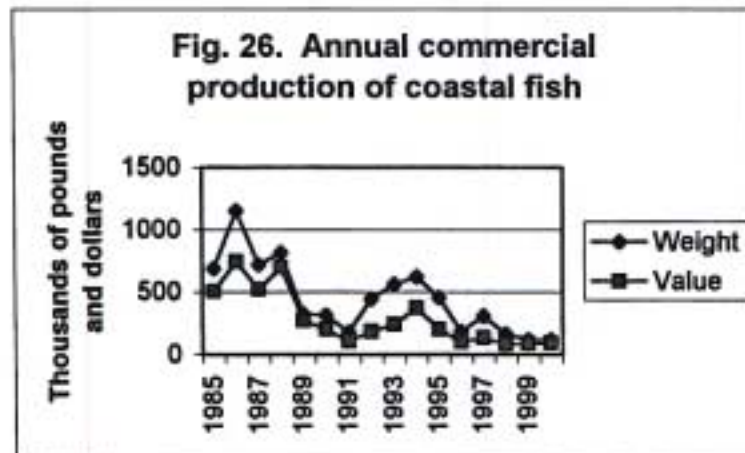
Commercial king mackerel landings included fish taken by snapper reel, commercial trollers, and charterboats licensed to sell fish commercially. The percentage of fish reported by charterboat operators on their logsheets (i.e., as recreational catch) that was sold was unknown, but presumably small. The 2000 catch (73,000 pounds worth \$115,000) was slightly greater than that in the previous year and continued the relatively flat trend since 1994 (Fig. 25).

## COASTAL AND RIVERINE FISH

The 2000 catch of coastal fish totaled 117,000 pounds valued at \$92,000, nearly the same as in 1999 and among the lowest in over 20 years (Fig. 26). Shrimp trawlers contributed 111,000 pounds. The leading species continued to be kingfish (king whiting) with 79,708 pounds, landed as an incidental catch by the trawlers. The recent



introduction of BRDs (bycatch reduction devices) in shrimp trawls, required by the regional weakfish management plan, acted in addition to TEDs (turtle excluder devices) to further reduce flounder landings. In 2000, the landed trawl catch of flounders was

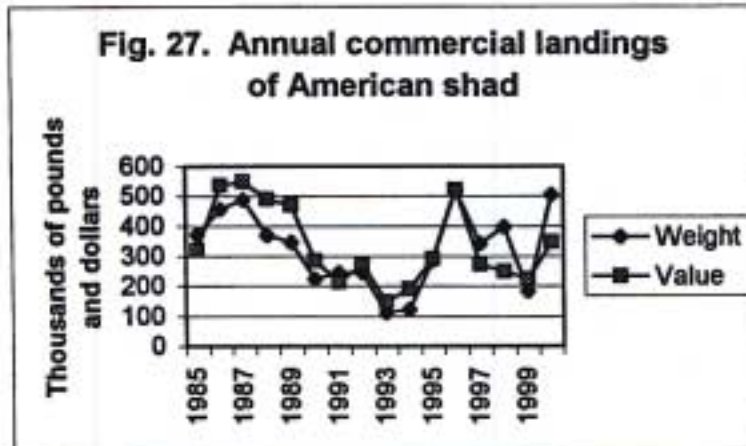


5,748 pounds, compared to routinely >20,000 pounds in the years before TEDs.

Mullet and spot, historically the largest components of the coastal fish catch, were virtually absent from the 2000 landings. The haul seine fishery along the Grand Strand was the major producer and was inactive again in 2000; the last landings of any consequence were in 1997. At one time, this fishery produced >1 M pounds of mullet and 0.5 M pounds of spot during its annual brief season.

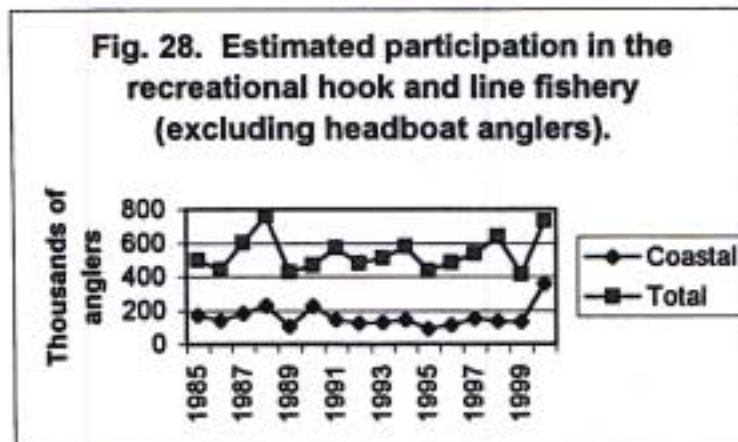
Riverine landings in 2000 consisted of American shad, including a component taken in the ocean. The ocean fishery is problematic with managers, because it intercepts fish bound for various rivers in unknown portions and therefore complicates management based on the status of individual river populations. It is being phased out over several years. Both the ocean and riverine landings increased substantially in 2000 with the total

catch slightly below the recent record level reported in 1996 (Fig. 27). Nearly all of the catch was attributable to the Santee River system.



#### RECREATIONAL FINFISH FISHERIES

Total participation (excluding headboat fishermen) was estimated by the NMFS at 733,260 fishermen, second only to the record set in 1988 (Fig. 28).



The moderate numbers of noncoastal residents ( $N = 91,978$ ) and out of state anglers ( $N = 281,521$ ) appeared to be reasonable in view of the historical range in estimates. The record number of coastal residents seemed very improbable, both in terms of historical values and a recent declining trend.

Another assessment of the trend in participation can be based on the sales of marine recreational fishing stamps (now licenses). State law requires that private boat anglers have this in order to harvest fish and/or shellfish. The following summarizes

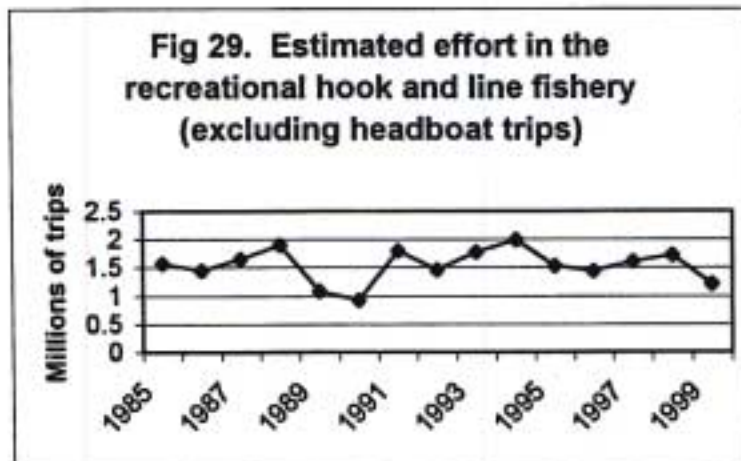


the numbers of stamps/licenses issued to fishermen and the MRFSS estimates of participation by state residents. Stamps/licenses are issued for a fiscal year (July 1 – June 30); the figures shown are for the June 30 calendar year (e.g. the 2000 number is for the period July, 1999 – June 2000).

Year	Stamps/licenses	MRFSS		Total
		Coastal	Noncoastal	
1993	80,956	131,317	77,015	208,332
1994	86,995	145,868	94,268	240,136
1995	90,009	90,935	48,624	139,559
1996	90,388	115,072	62,946	178,018
1997	87,470	152,277	72,050	224,327
1998	94,063	137,344	85,104	222,448
1999	100,351	131,641	61,271	192,912
2000	103,470	359,761	91,978	451,739

Again, there is an appreciable difference in the apparent trends shown in the datasets. The state license sales have trended gradually upward (an average increase of 3.5% per year), while the MRFSS estimates varied with no obvious trend until 2000. With the 2000 figures included, the MRFSS estimate of participation by state residents increased 117% during 1993-2000, compared to 28% for license sales. It should also be noted that there is not much of a correlation between the trends. The conclusion once again is that the MRFSS estimates for 2000 are excessive.

Total fishing effort was estimated at 1,276,865 angler-trips by the NMFS, barely exceeding the 1999 figure and among the lowest totals on record (Fig. 29).



Several changes to bag limits became effective during 2000. The state legislature passed dolphin legislation in May that set a 7-fish per person daily bag limit with 26 fish allowed per boat carrying <7 passengers. A headboat (i.e., a vessel licensed for >6 passengers) was allowed to have 50 fish per trip. On August 2, the NMFS increased the

bag limit for Spanish mackerel from 10 to 15 fish per person per day. The red porgy prohibition was modified in late August to allow one fish per person per day.

### CHARTERBOAT FISHERY

Except where otherwise noted, the following discussion is based on information reported to the MRD by charterboat operators via the mandatory trip log reporting system.

During the calendar year, permits were issued to 260 vessels, excluding those designated as headboats by the NMFS. This was the largest fleet since permitting was initiated in 1992. A total of 224 boats reported making at least one fishing trip during the year. Of these active boats, 25% fished exclusively in inland (estuarine) waters, 35% fished only in state waters (i.e., inland and/or <3 miles out in the ocean), and 29% limited their activities to the EEZ (>3 miles offshore). The remainder fished in both state and federal waters.

The total number of anglers (N = 33,407) continued to increase for the fourth consecutive year and set a new participation record. In contrast, the MRFSS estimate (N = 39,769) was the lowest to date and marked the fourth year of decline. The comparative distribution of effort in angler-trips by fishing zone was as follows:

	Inland	Ocean <3 mi.	Ocean >3 mi.
MRFSS	2,707	1,723	35,339
MRD	8,744	7,523	17,140

Operators reported 9,203 boat trips, also a new record. About 36% of these were made inland and 23% in ocean state waters (<3 miles). The remaining 41% were made in the EEZ. About 8% of the ocean trips were made to artificial reefs. Inland effort continued a steady upward trend with record highs in each seasonal quarter. The overall amount of effort over natural bottom in the ocean also reached a new high, due mainly to relatively high levels during the spring quarter.

In terms of annual effort by individual vessels, the distribution was as indicated below. These percentages were very similar to those in the two previous years.

Number of boat trips per year						
0	1-25	26-49	50-74	75-99	100-125	>125
14	49	13	8	6	4	6

As in the past five years, roughly 60% of the vessel operators reported making <26 trips per year.

Annual effort by fishing zone, method, and target group or species is summarized in Table 2. It should be recognized that a substantial amount of effort was simply targeted at “anything.” For example, much of the fishing in the EEZ consisted either of surface trolling, bottomfishing, or a combination of both. The most noteworthy trends in effort consisted of a continued increase in inland trips for red drum and spotted seatrout, relatively high effort for cobia in both 1999 and 2000, and a moderate increase in 2000 in trolling for oceanic pelagic species.

Annual catch data are summarized in Table 3 with historical comparisons provided in Table 4.

#### **Oceanic pelagics**

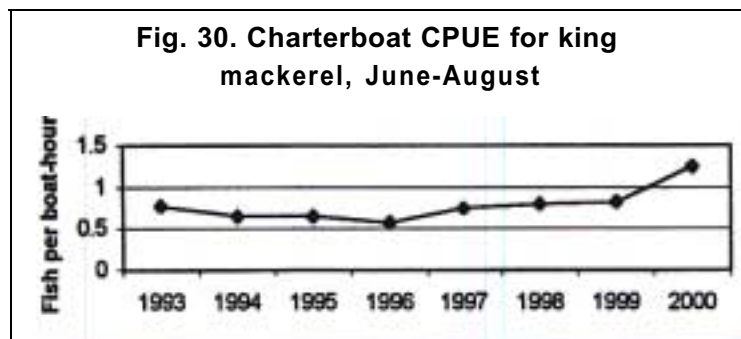
Catches of most species were lower than last year’s record levels, but relatively good by historical standards. Fishing for yellowfin tuna was particularly **good with the** highest annual CPUE since 1994. Annual CPUE for dolphin was the lowest since 1993. The new bag limit was not a factor, since this legislation became effective after the peak period of local availability.

#### **Reef fish**

Catches showed mixed trends. The catch of gag was the lowest reported to date, while the vermilion snapper catch reached a new high, as in the commercial landings. It should be noted that the charterboat mode accounted for a relatively small portion of the overall reef fish catch.

#### **Coastal pelagics**

The king mackerel catch was the largest reported to date. Fishing was unusually good during the summer with monthly CPUEs exceeding one fish per boat-hour for the first time in years (Fig. 30).



This supported the most recent regional stock assessment, which indicated an increasing population. The Spanish mackerel stock assessment was even more favorable, which supported the increased bag limit. The South Carolina fishery for Spanish mackerel was not up to the exceptional level seen in 1999 and was a little below the average for the past five years (Fig. 3 1). The cobia catch and CPUE declined after two good years. [click here to continue](#)