NOAA TECHNICAL MEMORANDUM

NMFS-SEFC-292

FISHING TRENDS AND CONDITIONS IN THE SOUTHEAST REGION 1990

U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southeast Fisheries Center
Miami, Florida

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ABSTRACT: This report provides first-hand information on the fishing trends and conditions that have occurred in the commercial and recreational fisheries of the southeastern United States during 1990. The information and much of the text were provided by Federal and State fishery reporting specialists that are located in major fishing ports in the region.

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PREFACE

This report provides first-hand information on the trends and conditions that have occurred in the commercial and recreational fisheries of the southeastern United States during 1990. The information and much of the text were provided by Federal and State fishery reporting specialists that are located in major fishing ports in the region. The statements on trends and conditions in this report are based on anecdotal information supplied by the reporting specialists and do not necessarily represent analyzed data. The report also includes preliminary data on the commercial and recreational fishery landings for 1990.

The Southeast Fisheries Center gratefully acknowledges the exemplary work of the fishery reporting specialists in collecting fishery statistics for conservation and management purposes. These individuals are the NMFS's liaison with rank-and-file fishermen and seafood dealers. Their willingness to work with the industry and their efforts in collecting the data necessary for a better understanding of the fishery are greatly appreciated.

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1990 FISHING TRENDS AND CONDITIONS IN THE SOUTHEAST REGION

This report contains information on conditions and developments in the fishing industries in the southeastern United States during 1990. The landings and value data in the report are preliminary and subject to change.

Southeast Regional Summary

Landings of fish and shellfish in the southeastern region of the United States in 1990 were down from 1989. The decrease from 2.0 to 1.9 billion pounds, a reduction of 8%, was due primarily to a reduction of over 134 million pounds in menhaden landings. The ex-vessel value of the total landings was also down in 1990 from $818 million to $810 million. The decrease in total value was 1%.

Louisiana led other southeast states with total landings of 1.1 billion pounds valued at $263.5 million, and with total shrimp landings of 119 million pounds worth $152.6 million. South Carolina recorded the largest percentage decrease in landings in 1990. Landings in South Carolina were down 5.5 million pounds from 1989 - a decrease of about 28% in weight, and a corresponding decrease in value of $0.9 million, or approximately 4%.

As in past years, menhaden led other species with total pounds landed of 1.22 billion pounds; shrimp led other species with a value of $454 million. The largest gains in landings among key food fish and shellfish stocks were king mackerel, up 0.5 million pounds, and stone crabs, up 0.5 million pounds.

Table 1. Change in the preliminary landings and values of fish and shellfish in the southeastern states from 1989 to 1990.

STATE	1990		CHANGE (1989 to 1990)			
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	POUNDS %	DOLLARS %
NC	176,038	$71,542	11,562	$960	7	1
SC	14,516	$24,012	(5,549)	($881)	(28)	(4)
GA	13,191	$19,761	(2,579)	($30)	(16)	(0)
FL-EC	57,982	$54,266	1,902	$803	3	2
SA REGION	261,727	$169,581	5,336	$852	2	1
FL-WC	121,958	$116,228	(19,424)	($16,167)	(14)	(12)
AL	22,669	$35,931	(2,775)	($2,362)	(11)	(6)
MS	319,585	$42,379	21,379	($1,570)	7	(4)
LA	1,061,228	$263,467	(166,713)	($686)	(14)	(0)
TX	99,191	$182,351	2,770	$12,233	3	7
GULF REGN	1,624,631	$640,356	(164,763)	($8,552)	(9)	(1)
SE REGION	1,886,358	$809,937	(159,427)	($7,700)	(8)	(1)

Note: ( ) indicate a negatives or downward value when compared with 1989.

Table 2. Change in the preliminary landings and values of fish and shellfish in the southeastern region of the United States from 1989 to 1990.

SPECIES	1990		CHANGE (1989 to 1990)			
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	POUNDS %	DOLLARS %
GROUPERS	12,223	$20,603	(2,926)	($4,985)	(19)	(19)
SNAPPERS	9,046	$13,631	(354)	($4,941)	(4)	(27)
KING MACKEREL	4,238	$4,749	474	$473	13	11
SPANISH MACKEREL	5,192	$2,346	(1,152)	($526)	(18)	(18)
MENHADEN	1,219,846	$56,564	(134,492)	$2,314	(10)	4
SHARKS	12,508	$6,032	(2,603)	($1,259)	(17)	(17)
SWORDFISH	4,120	$13,886	(1,016)	($4,783)	(20)	(26)
TUNA	9,369	$20,881	(4,728)	($7,056)	(34)	(25)
OYSTERS	11,410	$38,338	(4,628)	($5,994)	(29)	(14)
SHRIMP	277,914	$453,981	15,843	$26,407	6	6
SPINY LOBSTER	5,746	$15,631	(728)	($3,102)	(11)	(17)
STONE CRABS	5,818	$17,817	462	$5,271	9	42

Note: Landings of fish, lobster and shrimp in live weight; oysters in meat weight.

Table 3. Change in the preliminary landings and value of shrimp in the southeastern region from 1989 to 1990.

STATE	1990		CHANGE (1989 to 1990)			
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PERCENT CHANGE POUNDS	PERCENT CHANGE DOLLARS
NC	7,219	$14,583	195	$2,374	3	19
SC	4,919	$12,201	(3,252)	($675)	(40)	(5)
GA	6,671	$16,415	(915)	$180	(12)	1
FL-EC	9,644	$12,173	(1,278)	($68)	(12)	(1)
S.A. REGION	28,453	$55,372	(5,250)	$1,811	(16)	3
FL-WC	13,182	$25,122	(3,026)	($8,003)	(19)	(24)
AL	14,979	$30,968	(1,741)	($2,976)	(10)	(9)
MS	15,245	$21,620	(439)	($6,924)	(3)	(24)
LA	119,154	$152,554	18,355	$24,720	18	19
TX	86,901	$168,345	7,944	$17,779	10	12
GULF REGION	249,461	$398,609	21,093	$24,596	9	7
SE REGION	277,914	$453,981	15,843	$26,407	6	6

Note: Shrimp landings in heads-on weight.

NORTH CAROLINA

Total Landings:

Landings for North Carolina in 1990 totaled 176 million pounds. This was up 7% from 1989. This was only the second time since 1981 that total landings increased. Average ex-vessel prices were up 1% for the year.

Edible Fish:

Total edible fish landings were almost identical to 1989. Average ex-vessel prices were down 3.6%. Landings increased for bluefish, king mackerel, shark, Spanish mackerel, swordfish, Atlantic mackerel, striped bass, and cobia. Landings decreased for flounder, gray seatrout, croaker and spotted seatrout. The largest decrease in edible fish landings was reported by the ocean trawl fleet, which were down 33%, followed by shrimp trawls, down 21%, and gill nets, down 18%. Landings increased for crab trawls, 55%; long hauls, 29%; fish traps, 45%; and trolling lines, 49%.

Industrial Fish:

Total industrial fish landings were up 15%. Average ex-vessel prices were down 10%. Menhaden accounted for almost the total increase in industrial fish landings. During the past several years a large market has developed in this state for menhaden to be used for bait. In 1990 the demand increased further due to the limits North Carolina placed on the landings of "trash fish."

Crabs:

Landings of hard blue crabs increased 11% over 1989. Average ex-vessel prices were unchanged. This year's landings of 39 million pounds were the highest since 1982.

Clams:

Landings of hard clams increased 8% over 1989. Average ex-vessel prices were down 20%. The large price decrease was the result of a drop in market demand, mild weather in the New England states that allowed their fishermen to work during most of the winter. Larger landings of "chowder" clams also contributed to the lower value of the clam harvest.

Scallops:

Bay scallop landings were down 7% and average ex-vessel prices were down 20%. Calico scallop landings were up 15%. The average ex-vessel price was unchanged. Sea scallop landings increased 15%. The average ex-vessel price was down 4%.

Shrimp:

Shrimp landings were down 12% for the year. Average ex-vessel prices were up 2%. The pink shrimp crop was almost totally destroyed by an exceptionally cold two weeks during December 1989 and the pink shrimp catch for 1990 was down 56%. The total shrimp catch consisted of 70% brown shrimp, 19% pink shrimp, 10% white shrimp and 1% rock shrimp.

Oysters:

Oyster landings were down 40% for the year. Average ex-vessel prices were up 22%. The decrease was in part due to disease in the oyster population as well as exceptionally heavy harvesting in 1987 and 1988.

SOUTH CAROLINA

Preliminary commercial landings of fish and shellfish in South Carolina for 1990 were 14.5 million pounds, down 28% from the 20.1 million pounds landed during 1989. Significant decreases were noted in the shrimp, crab, oyster and shad fisheries.

Shrimp:

Landings of shrimp were down 40% from those of 1989. A severe winter blizzard in late December 1989 killed an estimated 95% of the overwintering white shrimp spawning stock. White shrimp usually make up two-thirds of the shrimp landings in South Carolina.

Crabs:

Landings of hard blue crabs were down 19% from 1989. At least half of the processors in the state acquired all of their crabs from out-of-state sources.

Clams and Oysters:

Residual damage from hurricane "Hugo" in 1989 kept 40% of the state shellfish beds closed for half of the year. Landings of clams were up about 4% from those of 1989 but still far below the 1988 landings. Oyster landings, however, were 30% below those of 1989.

Fish:

Production of fish was 18% below that of 1989. Decreases were noted in all fisheries, but major declines were in the shad fishery (down 35%) and the shark fishery (down

58%).

GEORGIA

General:

The year started with a freeze which negatively affected the shellfisheries. Total seafood landings were down about 16% from 1989, but total value was only slightly lower ($19.8 million in revenue to Georgia's economy).

Shrimp:

Due to the Christmas 1989 freeze and snow fall, the white shrimp roe season was closed from January through May 1990, but the fall harvest (2.96 million pounds) of white shrimp was so large that the total landings of white shrimp were only 0.4 million pounds below 1989's landings. When the other shrimp species' landings are included, the total for 1990 was less than 150,000 pounds below the twenty-year average.

Bait shrimp landings ranked seventh in weight among all Georgia's seafood 1990 landings but third in dollar value.

Crabs:

Hard blue crab landings in 1990 were the lowest since 1969, and lower than 1989 by 2 million pounds. This reduction is thought to be related to the effects of the drought of 1988 and 1989 on those year classes.

Peeler crab and stone crab productions were lower by over 60% from 1989.

Fish:

Landings of offshore demersal fish, including reef fishes, more than doubled from 1989, partly due to wreckfish landings of 107,000 pounds. Pelagic fish landings increased from 15,000 pounds in 1989 to 178,000 pounds in 1990, due in part to a large increase in shark longliners' activity.

Clams, Oysters, Whelks:

Clam landings were at a five year low, while oysters climbed to the highest volume since 1978. Whelk landings continued to increase, perhaps due to their use as a substitute for queen conch, the harvest of which was recently prohibited in the Florida Keys. Georgia's landings of whelk are the highest in the U.S.

Other Fisheries:

Shad landings were reduced by over 30% (drought related). Incidental catches of medium to large flounder were lower, and were believed to be related to the use of TEDs in shrimp nets.

FLORIDA

NASSAU - BREVARD COUNTIES

Shrimp:

The 1990 white and brown shrimp seasons produced about 1.4 million pounds of shrimp(heads-off weight). There was a slight increase in the number of trips (240 more trips were made - an increase of 6.8%). Production was the same as in 1989.

Rock shrimp fishermen had another excellent year and landed approximately 4.8 million pounds(heads-off weight). The number of trips increased by 24%. The Gulf shrimpers came East in greater numbers this year, and a few more dealers participated in the fishery. Rock shrimp landings in northern Florida decreased, because the vessels unloaded at the more accessible Cape. The Gulf fleet worked on small rock shrimp earlier in the year; this caused some hardship to the East Coast fleet. Landings of the East Coast fleet decreased 89% for the month of December compared to the previous year.

A few vessels continued catching royal red shrimp about 60 miles off the Cape in 200 fathoms. Landings increased 94% to 87,800 pounds.

Fish:

Once again more vessels entered the wreckfish fishery. On April 16 a 2-million-pound quota for 1990 was set, and the season officially ended August 3. Landings in this area totalled 1.88 million pounds - up 79% from 1989. The highliner of the area consistently had trips over 20,000 pounds, and the majority of the fleet averaged under 10,000 pound trips.

The grouper/snapper hook and liners landed a diversified catch. Local king mackerel vessels had an extended season and were excited about the apparent recovery of the stock. Tilefish longliners reported that their fishery was stable. A few wreckfishers converted to tilefish fishing during their off season. Shark landings decreased approximately 58%. Three of the four counties experienced decreases varying between 57% and 92%. Duval County's shark landings increased 96%. Two shark driftnetters worked off north Florida for about five months .

Scallops:

Two processors operated in January, and calico scallop landings increased slightly. Unfortunately this did not last, and both dealers were closed by May. The processors remained closed until November. Production began again, although it never attained a steady rate.

INDIAN RIVER - PALM BEACH COUNTIES

Fish:

Atlantic-group king mackerel landings dropped about 33% from 1989. Hook and line landings, effort, and morale got a boost with this year's driftnet ban, but not enough to offset the loss of driftnet landings. Gulf-group king mackerel landings contributed a larger percentage of total king mackerel landings this year. Hook and line fishermen reported exceptional fishing from November to the January 1990 closure. Florida's daily trip limits of 1,000 pounds slowed things down a little, but good early winter weather and an abundance of fish had the market glutted in December. Ex-vessel price followed its normal course in relationship to supply and demand and ranged from $2.50 to under $1.00/lb.

After listening to testimony from major mackerel dealers and area fishermen, the state of Florida developed a plan to slow down and spread out Spanish mackerel gillnet landings this year. Progressively smaller daily trip limits were imposed on schedule, and backup enforcement, resulting in some arrests, discouraged major violations. Although most roller rigs continued to fish until the Federal closure, and transferred larger-than-legal catches at sea, small gillnet boats accounted for a greater percentage of mackerel landings. The season lasted about a month longer than it has in the past several years. The majority of the December and January landings were caught in the EEZ again this year. Ex-vessel prices for bulk production averaged $0.30/lb, the same as last year.

Public and private testimony showed an increasing dissatisfaction with present mackerel quota management. Of most concern is the fact that annual quotas tend to compress fishing seasons and maximize effort, while decreasing market potential. Popular suggestions include: more gear restrictions, landing limits, and some form of limited entry for Federal permits. Some dealers are quick to point out that compressed mackerel seasons and lengthy closures make little economic sense.

This year was not a particularly memorable one for the roller rigs. Following the approval of Amendment 3 to the Coastal Migratory Pelagics FMP, several boats were sold and moved from this area. Many others remained idle all summer, and several were converted to longline fisheries. A few boats decided to try summer shark driftnetting from the Cape to Jacksonville. They had good catch rates for sharks, but were reportly blamed for increased fish strandings of bycatch species such as tarpon.

Small gillnet boats had a poor summer with spot and croaker, which never showed up in large numbers. Increasing differences between small gillnet boat operators and roller rigs intensified in the fall, with the appearance of some new power-assisted pompano gillnet gear. Pompano landings increased substantially in November, but a glutted market drove ex-vessel prices to new lows at around $2.00/lb. Roe mullet landings were limited by new state regulations and a slow season. Ex-vessel prices stayed considerably lower than last year.

Swordfish landings dropped from 1989, due mostly to a change in swordfish dealers and fewer transient boats fishing in the Ft. Pierce area. Yellowfin tuna landings dropped considerably, due to increased enforcement of the Lacey Act and less U.S. fishing in Bahamian waters. Tilefish landings changed little from the previous year, and few new boats entered the fishery.

Reef fish species showed an overall decline in landings, with the exception of mutton snapper. Amberjack landings and effort were consistent with those of the past several years. Bait species represented a higher percentage of total fish landings this year, due primarily to increased summer purse seine effort and landings.

Shellfish:

Hard clam production was similar to 1989. Several mariculture operations successfully raised and harvested clams on a limited scale. Low harvest rates and ex-vessel prices made clamming a less attractive alternative for commercial fishermen. Spiny lobster and blue crab landings increased slightly over 1989.

BROWARD COUNTY

Swordfish:

The most significant change in this area since 1989 was the emigration of some 5-10% of the pelagic longline fleet to Hawaiian waters. This trend can be found from North Carolina to the Caribbean. Overall production was about 4% lower than last year. The spring production was down due to import competition from Chile and Hawaii, which drove the price so low that some fishermen did not fish. Local production in the summer and early fall was up about 11% from 1989, but these seasonal landings amount to only slightly more than a third of winter and spring landings because most boats travel north during the summer.

A new lightstick was developed which allows much deeper fishing. The old cyalume stick is good to only about 400 feet before it implodes. The new stick has been tested to 5,000 feet. Some initial success with the new light stick was reported, but final results

remain to be seen.

Tuna:

Tuna production was down 42% from 1989 because fishermen concentrated on swordfish. The attempt to minimize the bycatch is the result of import competition forcing prices down. Some directed fishing for yellowfin tuna occurred in the summer.

Shark:

A directed fishery for sharks has developed over the past three years in response to a burgeoning demand for cheaper fish. This demand created a price increase, which fishermen responded to in 1990 by catching 59% more shark than in 1989. No new boats joined the directed fishery, but many swordfish boats kept sharks, whereas before they were discarded. Shark production occurred mostly in summer and early fall.

Coastal Pelagics:

Dolphin, wahoo, and king mackerel production increased. Catches were mostly by rod and reel gear.

Reef Fish:

Grouper production was down 52% in 1990. Snapper was down about 17%, although the fall run of mutton snapper was good. One trap boat left the fishery in 1990. Trap fishermen awaited a decision from NMFS on whether to ban trap usage.

Lobster:

Spiny lobster production was up 32% from 1989. Fishermen reported that they were pulling their traps more often and some fished more traps in response to upcoming trap limits. Some fishermen who also trap fish expended more effort on lobster.

DADE AND UPPER MONROE COUNTIES

Lobster:

Spiny lobster production was down by roughly 8% from 1989. Considering 1989 production was down 11% from 1988, the trend is distressing. Prices took off at the beginning of the season to a high of $4.00/lb but quickly stabilized at $2.50 to $2.75 for the remainder of the year.

Crabs:

Stone crab production was up as much as 20% in both Dade and upper Monroe Counties. Even though total production was less than 50,000 pounds, it was welcome news to local stone crabbers.

Imports:

U.S. imports of edible and non-edible fishery products recorded through the Port of Miami for 1990 totaled 78 million pounds, an average of 6.5 million pounds/month, down 4% from last year. Total value of imports fell as a result, from $ 412.3 to $ 383.3 million. However, this trend does not reflect 1990 totals for the United States as a whole, where imports are expected to increase.
Major shrimp exporters to Miami were Ecuador, Venezuela, and Guatemala. Major fish exporters were Costa Rica, Ecuador, Peru, and Chile. Predominant species included swordfish, salmon, tuna, mahi-mahi (dolphin), and snapper.

Fish:

Fish production had some strange anomalies when looking at landings of individual species; reported snapper landings were up 25%, yet grouper landings were 50% lower than in 1989. Jack crevalle, mullet, amberjack, and shark landings were all up between 31% and 81%. The fish trap issue will have an immediate effect on the snapper/grouper complex, because it is the main gear of choice for the area.

MONROE COUNTY

Weather:

January through March 1990 was much warmer than expected. Several fishermen said this condition upset the seasonal movements of stone crabs, spiny lobster, and coastal pelagics and caused reduced catches. For most of February and March strong (15-20 kt) SE winds blew almost continuously. This greatly limited effort in many fisheries. The resulting rough seas often "tore up" shoal water biological communities, deposited masses of rotting "seaweed" on shorelines, and created unusually turbid waters for several weeks thereafter. By mid-summer winds had calmed and temperatures risen to record highs. For much of this time the Keys (and South Florida) were critically short of rainfall. On October 9 Tropical Storm Marco hit the Keys. Fishing was curtailed for almost a week. Although the first cold front of the season arrived October 25, it was unseasonably hot through the end of the year.

Environment and Marine Ecology:

The fishery trends of 1990 may have been influenced by the longstanding Everglades

drought and the severe freeze of Christmas 1989. Those events prompted applications for low-interest "disaster" loans by Keys shrimpers in mid 1990, of which only a very few were granted. The year was also notable for events which had no discernable cause, such as the widespread reports of coral deaths, noxious algal blooms, and outbreaks of coral bleaching. Of special concern was the unprecedented accumulation of large amounts of the benthic brown alga Dictyota in many reef tract and patch reef areas.

Perhaps the most contested "environmental" issue in the Keys in 1990 was the establishment of the Florida Keys National Marine Sanctuary. At hearings early in the year commercial fishermen and divers were vocal in their opposition to a plan that they believed might eventually put them out of business. Congress approved the measure at the end of October. A "companion" proposal by the State of Florida to create a Florida Keys Marine Reserve fared poorly. It proposed a wide range of "user fees," but the original bill was killed in December as a result of almost total public opposition.

Shrimp:

For most of 1990 reported shrimp catch rates on the Tortugas Grounds were far below normal. The exceptions to this were July, August, September, and December, when the each of the thirty previous years. Catches were so low that the "Alabama fleet", which normally fished through May, left the grounds by late April. Although portions of the shrimp sanctuary were opened in the spring, they yielded very little.

The lack of shrimp was not the only problem confronting fishermen. They experienced increases in fuel costs at both the start and end of the year. Although there was a broad upward trend in ex-vessel shrimp prices throughout 1990, it did not offset the higher costs.

Coastal Pelagics:

The start of 1990 was marked by high catches of king mackerel until the quota was filled on January 8. The 12 strike netters landed a total of 422,000 pounds of king mackerel in only five days of fishing. The handline fleet from mid-December to the closure in January 1990 landed almost 180,000 pounds. Although there was wide variation in fish size, king mackerel of 55-65 cm were particularly numerous. The handliners ventured out in force again on April 1 to go for "Atlantic stock" king mackerel, but a front hit and forced the fleet in until the fish had moved on. Although some king mackerel had returned to this area by late November, only a few boats fished until the end of December. Some fishermen reported that this was because state landing limits (1,500 lbs/trip) and low prices (only $0.70/lb) made it unprofitable to make the long run "west" to the king mackerel schools.

The Spanish mackerel fishery was hampered by low ex-vessel prices, adverse weather, and the depredations of sharks. It wasn't until late January that the first large catches

(almost 500,000 pounds in one week) were taken. Due to bad weather, the netters were unable to fish for almost three weeks. They landed about 100,000 pounds more in mid-February, and then the fish moved on. Thus, a large portion of the mackerel quota was never filled. When the "Spanish" finally returned to the Keys in late autumn, low prices kept the fishermen from going after them through the remainder of the year.

Lobster:

Early in 1990 Keys fishermen attended a series of workshops on State proposals for limiting entry and effort (traps) in the spiny lobster fishery. These measures, the new Federal Fishery Permit rule, and new restrictions on treating traps with oil-based preservatives received mixed reviews by fishermen. A more serious blow, however, was the poor season experienced by fishermen in the upper and middle Keys. For most of the "peak" months these fishermen caught only half what they expected. Such losses were all the more serious because of increased fuel costs and the fact that many fishermen had taken out loans to build more traps, so (as they erroneously thought) they could be "grandfathered" into the State's trap certificate program with more traps than they normally fished. One benefit of poor catches was that ex-vessel prices increased greatly. When the season opened, lobsters were bringing $2.80/lb in Key West and $3.00 in Marathon. By September the prices had gone up one dollar in Key West and almost twice that in Marathon, and they stayed there. That, in turn, seemed to cause an outbreak of trap robbing. Although fishermen "up the Keys" had to suffer through the season, those at Key West did very well. This was especially so for the handful of boats working in deep water 70 miles west of Tortugas. It was not unusual for them to come back from a 1-2 week trip with up to 5,000 pounds of lobster. Many of these animals were exceptionally large.

Crabs:

The stone crab fishery was virtually the same as in 1989. When the season started, ex-vessel prices in Marathon were $7.25/lb (jumbos), $6.25 (large), and $4.25 (medium). Within a month, high production and lower demand caused a market glut. Prices for all sizes dropped by a dollar and stayed that way until the end of the year.

Fish:

In terms of landings, the fisheries for reef fish were about the same as in the past few years. Although many fishermen reported declines in the abundance of most grouper species, the mobility of the "bandit" and bottom longline fleets makes this hard to gauge. The handline fishery for snappers was a better indicator, as it is based locally. In that fishery, most sources reported an upswing in catches of yellowtail snapper and a noticeable reduction in mutton snapper. Indeed, yellowtail were caught in such great numbers in May that the price dropped to $1.50/lb and increased a little in autumn.

It was in the area of regulation that the most pronounced changes in the fishery occurred. Early in 1990 Amendment 1 to the Gulf Reef Fish Plan came on line. Soon after, new Florida rules on reef fish also became effective. The net result of both actions was to limit commercial landings by local "bucket fishermen", snapper stab netters, and, in some cases, bottom longliners. Harvest of jewfish was effectively banned. Thus, fish dealers experienced new difficulties in obtaining supplies of reef fish and turned to increased imports of reef fish from Latin America. The outlook for the "business as usual" future of the fishery for reef fish was further clouded by proposals for the establishment of extensive "zero harvest" marine fishery reserves in the Keys.

Recreational Fisheries:

Beyond the enactment of the "Florida fishing license" in January, perhaps the most notable trend in recreational fisheries during 1990 was the increased acceptance of a "catch and release" mentality across a wider spectrum of anglers. The year was characterized by exceptionally good catches of dolphin (not just in summer) and of king mackerel (especially in the Gulf off Key West). Most of the marlin tournaments generally reported poor catch rates. Inshore fishermen reported good runs of tarpon, permit, and redfish. However, a source of friction was the increased presence of jet ski "hotdoggers" on some fishing flats.

COLLIER TO PINELLAS/HILLSBOROUGH COUNTIES

Weather:

The year was marked by an unusually warm winter and an extension of the drought of the last few years. Two weak tropical storms affected the area, but produced very little damage or rain.

Shrimp:

It was still another trying year for the shrimp industry, landings hit a new low of 1.6 million pounds (heads-off) for the area. As a result, more vessels were offered up for sale, and the number of vessels actively fishing in the area declined even further (there were 20% fewer trips compared to 1989, which was already down from several years ago). The Tortugas fishery was declared a disaster by the state, which put much of the blame on the drought. Although many shrimpers, who spent up to $800 on accounting fees, filed their applications for disaster loans, very few loans were granted. The area's offshore fleet declined to zero during the summer for the first time on record, and all vessels were forced to gamble on the trip to Texas to survive. The only bright spot in the year was an increase in catches at year's end.

As the year went on and in the face of enforcement crackdowns, shrimpers resigned

themselves to using TEDs (although with much protest). Shrimpers were upset with new reef fish regulations barring them from supplementing their trips by hook-and-lining reef fish, increased demand for bycatch excluders, and a proposal to close the entire Gulf to shrimping for 3 months of each year due to alleged red snapper bycatches (mainly elsewhere).

Prices were generally upward, especially on 16/20 to 36/40 tails, and increased up to 30% from January to year's end.

Fish:

Reef fish fishermen also faced new regulations during the year, such as a 20" size minimum on 5 species of shallow-water grouper (red, Nassau, yellowfin, black, and gag), a ban on longlining out to 20 fathoms, and quotas. Fishermen wrestled all year with the estimated closure (quota-fill) date for "shallow-water" groupers of October 1, which ended up delayed until November 8. Most did not turn to "deep-water" groupers after that, but simply did repairs and waited until the reopening on January 1. Longliners complained that the new rule over-concentrated longlining just outside the 20-fathom line. Fish trappers to the south had some trouble with the 20" size limit and many quit fishing. Some stayed with trapping instead of either hook-and-lining, which they perceived as inefficient, or longlining, which involved long runs to get beyond 20 fathoms. In fact, some longliners switched to traps, leaving most longlining to the more northern Florida counties. Prices on groupers roller-coasted all year again, and reaching an all-time high of $3.10/lb (for scamp), due to fluctuations in imports, supply and demand, and changing regulations. The new 20" size limit eliminated sorting or grading at most dealers; all groupers were simply categorized "large."

Both roe mullet seasons were "fair." Prices were high at the first of the year, up to $1.70/lb, and the season lasted until the end of February. The 1990-91 season prices were down, mostly in the $1.20 range.

Spotted seatrout prices were as high as $1.40/lb, due to low landings, since recent regulations abolished red drum fishing and part-time fishermen. Spanish mackerel and pompano landings were fairly strong in spring and fall; a few king mackerel were landed near year's end. Spanish mackerel prices were volatile and ranged from $0.80 to $0.30/lb. The Spanish sardine season was a failure again, and was over by early June. A few vessels longlined for shark, mainly in the northern counties, including one or two that converted from swordfishing. Shark fins continued to be landed in relatively small amounts by shrimpers, reef fish and shark fishermen, and others. Swordfish landings picked up early in the year, then fell off as the surface longliners continued to work other areas.

Crabs:

The 1989-90 season for stone crabs ended up "fair" overall. Landings and claw size were down early in the year, and prices were as high as $7.50/lb for large claws. The 1990-91 season started off strong in October, but the high landings here and elsewhere quickly flooded the market and dropped prices.
It was another poor to fair year for blue crabs, with catches down much of the year in most areas. A "war" with bay shrimpers in Charlotte Harbor impeded effort even when catches there were up.

Lobster:

A new permit to tail and land spiny lobsters was required of shrimpers, the main source of spiny lobster in all but Collier county, and most complied with few problems. There was a small increase in the number of lobster trappers in Collier county this year, due mainly to the new reef fish regulations which caused a few fish trappers to convert to lobstering. On the whole, lobster trappers remained few and far between in the area again this year.

Sportfishing:

More reports were received of rebounding red drum and snook populations. The large reef fish recreational fishery was strongly affected by the new fishing regulations, which included numerous size and bag limits. Tarpon tournaments became increasingly catch-and-release oriented; kid-glove treatment of the fish became the norm.

GULF AND FRANKLIN COUNTIES

Shrimp:

According to dealers and shrimpers, 1990 was one of the worst years in recent memory. Activity earl in the year centered on the court battles over TEDs. As landings began to increase in March, severe weather caused runoff into the bay and muddy water hampered bay shrimping for most of the spring. The scarcity of shrimp in the area forced many large gulf boats to other ports, primarily Texas. These poor conditions, combined with rumors of a possible summer closure due to the red snapper bycatch situation, really had dealers and shrimpers worried. Many of the smaller bay shrimpers turned to oystering and crabbing. When the 70-plus count white shrimp began to show up in late summer, landings and activity increased. Offshore boats that worked to the west did well, but those that fished local offshore waters did not fare as well. Activity slowed to a crawl in last winter due to the holidays and rough weather. Those factors, along with the disappearance of the 70-plus count white shrimp, brought the year to an end.

Oysters:

The year started with the same upswing that ended 1989. Except for severe weather that caused two long closures, harvest during the first three months was the best in years. Many dealers agreed that this was the best winter bar season since the hurricane of 1985. Landings continued to rise throughout the spring, but some bad media publicity caused a decrease in market demand. Demand, otherwise, increased along with the temperature. The summer bar opening in July was fantastic; landings were higher than in previous summers. However, oystermen were unable to fight off the summer heat, landings and activity slowed and dealers found themselves scrambling for oysters. The much anticipated winter bar opening in October was not encouraging, since oysters were too small to harvest. The remainder of the year was tough. A cheaper Texas oyster began to flood the market, and caused many dealers to "cut off" their tongers, because they could not compete. Many dealers were forced to supply their customers with the Texas oyster. The year showed a sharp price decline from $21-$24/60-pound bag, to $18-$20, and finally dropping to $16. The year was full of controversy. The local successful aquaculture project proposed to move to a larger site, but their proposal was denied by the county. Other issues included battles over personal "leases," "dermocystosis," and the death of the bay system. The year-end problems pitted tongers and dealers against one another. Rumors of a strike were tossed around, but it did not materialize.

Crabs:

Overall it was a poor year for the blue crab fishery. Severe weather in February and March caused a large amount of river runoff to enter the bay. This mud essentially shut down crabbing for nearly five weeks. Landings of both hard and soft crabs peaked in May and June, due to the increased effort provided by shrimpers. The midsummer heat brought a drop in the landings and the disappearance of soft-shell crabs. Hard crab landings stabilized at low levels the remainder of the year. Soft-shells reappeared along with the cool fall weather.

Fish:

Net fishing effort and landings remained fairly consistent with its usual peak in October. The peak was due to the roe mullet season and large Spanish mackerel landings. Compared to 1989, landings of these species were up 140,000 and 50,000 lbs, respectively. The low point came in December, when the roe mullet season ended, because of some rough weather and the holidays. Throughout the year, purse seiners concentrated on catching "trash" for pet food. In the early fall an unusually large amount of crevalle jack was landed and resulted in an increase of 500,000 pounds over 1989. By late fall ladyfish and menhaden began to show up. The ladyfish run was over by early winter, and menhaden and Spanish sardines dominated the late year catches. Spanish mackerel were landed in early fall, and spotted seatrout were caught through the winter months. Net fishing was down nearly 6 million pounds overall. As in most cases, a drop in one species leads to an increase in another:(cigarfish-down, little tunny-up; bluefish-down, blue runner-up; seatrout-down; flounder and pompano-up). However,

when landings of one species are down 4 million pounds, as was the case with menhaden, it is hard to find a replacement.

Line fishing effort and landings remained stable and consisted mainly of red grouper, gag and amberjack. The threat of the shallow water grouper closure caused a surge in landings in late September and most of October, as boats worked extremely hard. In late October and early November boats switched target species and concentrated on king mackerel, scup, vermilion snapper, triggerfish, and amberjack. Landings of these fish increased when the closure went into effect and caused a subsequent increase in landings over 1989 in all but amberjack. Longliners from South Florida moved into the area and unloaded some tilefish, but left for better fishing off Mississippi. Due to the decrease in landings, one local dealer began to import fish from Mexico. Overall, grouper landings were slightly lower, primarily because of the closure. Although amberjack were third in total landings for 1990, behind red grouper and gag, landings for them were 70,000 pounds lower compared to 1989. King mackerel landings increased 5,000 pounds.

BAY - ESCAMBIA COUNTIES

Fish:

The net fisheries remained strong in 1990. Nine purse seiners worked this area, an increase from seven in 1989. The season began when Spanish mackerel and bluefish showed up in large concentrations in late March, as usual. Most of the regional quota was filled by mid-April, as in 1989, and the boats subsequently operated on trip limits. Sardines, ladyfish, blue runners and cigarfish showed up in late April and early May. The ex-vessel price was higher for all species of baitfish in 1990. Landings remained high throughout the summer, except in the hottest part of August. In September, landings of crevalle jack and ladyfish increased dramatically and remained high through October. Preliminary data show landings in 1990 were up 100% for blue runner, 85% for crevalle jack, 24% for ladyfish but only slightly for Spanish sardines. Cigarfish showed a 65% decrease. Roe mullet fishing was only fair, but the prices were higher than in 1989. Overall, mullet landings were down slightly.

Thirteen surface longliners unloaded tuna and other oceanic species in this area in 1990, compared with 48 in 1989. Tuna landings were higher compared to 1989, partially because tuna were fished in this region for at least part of the year and the boats actually unloaded here. The average weight of tuna in 1990 was 80 pounds compared to 72.8 pounds in 1989, based on data from catches made across the gulf. The average catch of yellowfin tuna per trip was 3,888 pounds in 1990 compared to 3,495 pounds in 1989. The most noteworthy occurrence in the 1990 surface longline fishery was the abnormally large catches of dolphin in June and July off Bay-Escambia counties. Usually dolphin are a minor bycatch. In 1990, some boats returned with 15,000 pounds of dolphin (20-

pound average) and 6,000 pounds of tuna per trip.

Reef fish fishing in 1990 began with most of the longliners fishing for yellowedge grouper, as they did in 1989. As the year progressed, the trips produced fewer fish, and several boats switched to fishing for red grouper and gag or for sharks. There were 37 grouper longliners fishing here in 1990 compared with 53 in 1989. Grouper landings declined somewhat in 1990 compared to 1989. Some boats did not meet the new permitting requirements and were forced out of the fishery. Almost all fishing stopped when the quota was filled in early November.

Even though there were fewer boats, because of permitting requirements, in the snapper (vermilion and red) handline fishery, landings remained constant for both species compared to 1989. Notable was the increase in both sport and commercial snapper catches for the first time in many years. The amberjack fishery was impacted by the new size limit regulations in 1990. Landings were approximately 25% of earlier years. Fishermen historically have never caught many large amberjack here, and the 36-inch minimum size forced most of them to fish for other species. Enforcement was a big problem for both sport and commercial fishermen because of the difficulty in identifying the different species.

Due to increased regulations, poor grouper fishing, and overall economic factors (shorter distance from shore, less expensive bait and less effort required), several grouper longliners switched to shark fishing in 1990. There were only six shark longliners in 1989 compared to 16 in 1990. Shark landings in this area were up accordingly. The ex-vessel prices of bullet mackerel throughout the year reflected the gulf market as a whole; they ranged from $0.30 to $0.60/lb.

ALABAMA

Shrimp:

Alabama shrimp landings decreased 10% from 1989 and 13% from the last 5 years' average. Inshore waters opened during June; poor catches were made in Mobile Bay and only slightly better catches were made in Mississippi Sound. Apparently there was just too much freshwater runoff in the spring for a good brown shrimp season. Fall white shrimp catches in inshore waters were profitable for a vast majority of the fleet. Although catches were only 1 to 2 boxes per night, the crop was 10/15s (heads-on count) at $3.15/lb to the boat. Alabama vessels that fished the Louisiana brown shrimp season reported mostly poor results. Initial catches from west of the Mississippi River were large, but the catch of 71/80 shrimp at $0.75/lb resulted in a lot of hard work for a small profit. Alabama vessels that fished local and Louisiana offshore waters reported mostly average catches. A larger than usual number of local vessels fished the Texas season with good results. Vessels that fished the pink shrimp season in Florida reported

mostly poor trips.

The brown shrimp season opened with prices for heads-on count shrimp slightly higher than in 1989. Midsummer prices for small and medium shrimp were equal to those of 1989 and prices for large shrimp were less than a year ago. Prices for all counts moved up sharply during the fall in response to rising fuel prices. TED regulations remained in effect; there was resentment and boasts of noncompliance within the shrimping community.

Oysters:

Although the 1990 oyster production was 84,000 pounds of meats, an increase from the 11,000 pounds in 1989, it was still well below the historical average. Forty-four percent of the harvest came from private reefs, which have expanded rapidly with increased seeding efforts. The 1990 oyster season was limited to November and December due to small sizes and lack of shell stock. Landings were limited to 4 sacks per day per fisherman. Initial prices were $0.35/lb for sacks, but these later declined and leveled out at $0.25.

Crabs:

Blue crab production was 3.3 million pounds, a decline of 19% from 1989. Lower total landings were a result of poor catches during the normally high volume summer months. Spring catches were at seasonally normal levels and fall catches were higher than normal. Ex-vessel prices averaged $0.38/lb, $0.04/lb less than the previous year. Alabama picking plants traditionally rely on out-of-state crabs for about 80% of their production capacity. Louisiana is the leading supplier of crabs, followed by Mississippi and various other states.

Fish:

Fish landings were 4.3 million pounds, a decline of 7%. Mullet replaced shark for the lead in volume with 1.6 million pounds, an increase of 83%. Roe mullet fishing expanded at a frantic pace in the fall. Due to the fishing methods used by some netters, there was growing support to have this fishery closed. Shark fishery catches were 1.44 million pounds, a decline of 20% over 1989. Shark fishing activity out of Bayou La Batre decreased as a result of fishing vessels moving to Florida and North Carolina during the winter and summer months. Bullet mackerel prices were steady at $0.60/lb. Trash fish (crab and shark bait) landings accounted for 328,000 pounds, about the same as in 1989. Landings of species taken incidental to shrimp trawling (flounder, white seatrout, groundfish, mullet, etc.) continued a gradual decline. Sheepshead, taken primarily during the spring spawning run, totaled 340,000 pounds, a substantial decline of 61%. However, the availability of a market determines the catch of this fishery. Yellowfin tuna and butterfish trips fell to zero in 1990.

Miscellaneous:

Fishing boat construction in Bayou La Batre increased slightly; all construction was for export.

Fuel prices fluctuated from a high of a $1.10 per gallon during the spring and fall, to a low of $0.70 per gallon during the summer months.

A few new shrimp vessels entered the fishery in 1990; however, the overall number of shrimp craft operating during the year declined by 3%.

MISSISSIPPI

Summary:

Total Gulf landings of 319.6 million pounds valued at $42.4 million represented a 7% increase in volume but a 4% decrease in value compared to 1989. The higher volume was attributed to an 8% increase in menhaden landings, and the lower value reflected the continued lower price structures for shrimp and menhaden established in 1989.

Shrimp:

Landings of 15.2 million pounds (heads-on weight) were nearly the same as in 1989, but the value of $21.6 million was 24% lower. Most of the decline in value was due to a greater percentage of the catch being smaller sized shrimp of lower value. The general price structure was about the same as in 1989. The Mississippi Bureau of Marine Resources opened inside waters to shrimping June 6; disappointing catches were reported. Brown shrimp made up 82% of the total landings; most were landed during the summer season of mid-May through August. White shrimp comprised 17% of the landings; their value of $6.7 million represented 26% of the value of Alabama shrimp landings. The balance of the shrimp landings was mostly local pink shrimp (called "hoppers") with a few rock shrimp, royal red shrimp, and seabobs.

Oysters:

Oyster landings of only 148,000 pounds of meats valued at $403,000 were reported, as the depressed oyster industry struggled through another disappointing year. Catches from local reefs increased, because oysters that had been moved the previous year were harvested in Eastern Mississippi Sound. Due to market conditions, fall oysters were lower in value than in previous years; this caused an 11% decrease in value compared to 1989.

Crabs:

Total landings of blue crabs were down 40% from the previous year; only 390,000 pounds valued at $169,000 were reported. Processing plants were down to only four and operations were mostly limited to local markets.

Fish:

Total landings increased due mostly to an 8% increase in the menhaden catch compared to 1989. Industrial fish landings for pet food also increased significantly.

Food fish landings increased 22% compared to 1989; this was due mostly to increased mullet catches and trawler landings. Trawler-caught food fish catches were higher than in 1989; flounder, king whiting, sheepshead, and white seatrout accounted for most of the increase.

Small purse seiners had increased landings. Catches of blue runners were nearly triple those in 1989. Catches of mullet during the roe season were also good. Mullet landings for the year were 217% greater than in 1989; most of the catch was made during the roe season. Demand for roe was good, and fishermen were paid according to the yield of yellow roe. The demand for white roe was nil.

Longline landings were sharply reduced. Shark comprised most of the catch, and tuna catches were near zero.

Snapper vessels landed 6% fewer red snapper, but the landings of amberjack were double those of 1989. Vermilion snapper, or "B-liner," catches were 40% greater than in 1989.

Sportfishing:

Gulf fishing for reef fishes took place throughout the year; red snapper was the main catch. Summer catches of cobia and king mackerel were average, and some spring catches of Spanish mackerel were very good. White and spotted seatrout and flounder were the main species landed by estuary fishermen. Red drum catches were much lower, due in part to closure of the redfish season in state waters part of the year. Federal waters remained closed to red drum fishing.

Miscellaneous:

Fishing vessel construction increased. Most new shrimp vessel hulls were made of wood. Practically all vessels were home-built by individuals, most by Vietnamese fishermen. A couple of large steel-hulled refrigerated vessels were built by local shipyards for use in Alaska fisheries.

LOUISIANA

SUMMARY:

Total Louisiana 1990 landings were 14% below 1989. Shrimp landings were up 18%, but landings of most other species declined. The hard freeze of December 1989 adversely affected inshore fisheries.

Shrimp:

Shrimp seasons were opened and closed in the usual manner during 1990. The increase in landings was probably due to good weather and an increase in effort. Prices were similar to 1989. However, shrimp sizes seemed smaller. The TED issue was quiet, and vessel owners kept a low profile on their usage.

The Gulf of Mexico Fishery Management Council hearings on the proposed ban of shrimping in the Gulf to protect the red snapper population were heavily attended. The large crowds objected to the proposed closure, and Congress extended any action on shrimping to the year 2007, if red snapper populations remain unchanged.

Menhaden:

The decline in menhaden landings was attributed to higher water temperatures and a decline in available stocks. The December freeze also may have had some effect.

Oysters:

Landings decreased over 30% from 1989. Again, the December 1989 freeze killed many oysters, especially in shallow areas. Pollution problems and bad publicity from people getting sick eating contaminated oysters reduced demand.

A lawsuit against the State claimed the State's method of leasing oyster bottoms to fishermen was unconstitutional. It also stated that procedures should call for public bids instead of allowing leases to be renewed at $2.00 per acre on a first-come-first-served basis(the present procedure). An oyster industry strike force was initiated to formulate legislation concerning issues such as sanitation, leasing methods, mandatory inspection, and fishermen's rights.

Fish:

Offshore catches of shark and yellowfin tuna declined. Inshore, the hard freeze of December 1989 killed many fish, which contributed to the decline in spotted seatrout and

black drum landings. The State set quotas on black drum and prohibited spotter planes for black drum.

Crabs:

Reported landings of hard blue crabs increased 4% from 1989. Although fishermen reported lower catches because of the freeze, the new data collection procedures that were instituted by the Louisiana Department of Wildlife and Fisheries(LDWF) and that are described below may have increased reporting on this fishery. A blue crab task force was formed by the LDWF to oversee this fishery.

Miscellaneous:

Louisiana legislation was passed requiring licensed dealers to report all seafood purchases to the LDWF. In 1990 the National Marine Fisheries Service (NMFS) continued to collect shrimp landings in Louisiana. The LDWF collected all "other than shrimp" landings. Collection went well with this new venture; however, the first year was not without some problems. Because of the various methods by which menhaden landings were reported, and because NMFS continued to collect menhaden data from the plants, NMFS menhaden landings data were used this year. Data on landings of other fish species have not been compared in detail with the previous year's data. However, spot checks were made and correspondence looked good. The LDWF monitors all dealers for compliance and has followed-up on non-reporting dealers. Other problems have been worked out and a better year of data collection is expected in 1991.

The following are trends by major Louisiana areas:

Terrebonne Parish:

Shrimp:

In 1990 shrimp production increased 1.5 million pounds over 1989; the total number of trips increased 3,800 from 1989. The increase in shrimp production and effort was possibly due to the lack of hurricanes and a mild winter. Shrimp sizes remained small most of year. Prices were steady on both heads-on and heads-off shrimp for most of the year, largely due to competition with imports.

The TED controversy died down some, and most vessel owners kept a low profile on TED usage. High fuel prices from August through December 1990 were due to the war in the Persian Gulf.

The biggest controversy in 1990 was the proposed ban on shrimping in the Gulf of Mexico from May to August 1991. Several hundred people from Terrebonne and Lafourche Parishes attended the public hearing in New Orleans to protest the closure.

Crabs:

Blue crab production for 1990 was 246 thousand pounds higher than in 1989. Prices ranged from $0.40 to $0.65/lb. Average yield was 12 pounds of meat per 100 pounds of crab.

Oysters:

Oyster production for 1990 was slightly above that for 1989. Some private beds remained closed because of pollution problems. Publicity about oysters making people sick hurt this fishery; this caused the oyster market to be down all year. Prices ranged from $18.00 to $30.00 per sack. Average yield was 4-1/2 to 5 pints per sack.

Fish:

Trammel and gill net fisherman had a slow year. Catches were down due to restrictions and quotas on most species.

Longline landings of tuna were up and shark landings were down. Quotas were in effect on different species.

Lafourche & Grand Isle Parishes:

Shrimp:

Total shrimp landings for 1990 were higher than in 1989. Heads-on shrimp landings increased by 25%, and heads-off shrimp landings decreased by about 9%. Effort increased by about 11%. The increase in effort was directly related to the good fishing weather most of the year (no hurricanes) and the increased fishing days allowed by the State in its offshore state waters beginning in April 1990. May 1990 was a record month for any month of May ever. Local shrimpers expoused several theories for the increase in landings for 1990. The closure of beach areas to fishing from mid-January to mid-April 1990 may have allowed more small shrimp to enter the estuaries from the Gulf. Another theory is that predation was lower, because many shrimp-eating fish were killed by the December 1989 freeze. Still another theory is that the landings just followed a normal cycle. It may be possible to pick out the specific cause in 1991 since the 1990 winter was very mild and the state left its gulf waters open to fishing in early 1991.

Shrimp prices were about the same as in 1989, and prices fluctuated little throughout the year.

In addition to the continuing TED saga, shrimp fishermen were faced with the red snapper bycatch issue.

Crabs:

Landings of blue crabs were down in 1990; there was a corresponding decrease in effort. Prices were down most of the year. The high ex-vessel prices normally paid in the winter months were not present in 1990. A new crab trawl used by some fishermen in Terrebonne Parish was controversial.

Oysters:

Landings and effort were about the same as last year. Prices were somewhat lower. The problem of polluted oyster beds and reports of people getting sick from eating contaminated oysters reduced demand. A number of people have leased local lakes for oyster beds and have thus prevented shrimp trawlers from fishing in some lakes and bays that had been traditionally fished for shrimp for many years.

Fish:

Fish landings for 1990 were a little lower than in 1989. Both offshore and inshore landings declined. Prices fluctuated widely for different species at different times of the year.

Offshore:

Fair landings of snapper and grouper were reported. Longline landings of tuna, swordfish, and amberjack declined in 1990 after a steady 3-year rise. Offshore longline effort decreased, since a few vessels were sold and some shrimpers who had converted to longlining for the winter decided to give it up. King mackerel landings were good, and many Grand Isle shrimp trawlers got in on the action.

Inshore:

Landings from inshore waters were down from last year. Spotted seatrout and black drum were not as abundant as last year, probably due to the freeze at the end of 1989. Mullet landings equaled those of 1989 but lasted a shorter time. Prices were about the same.

Ice:

Prices for ice remained steady.

Fuel:

Prices were fairly low at $0.60/gal and steady until August 3. Prices then went up to $1.15/gal due to the middle east crises and remained there until year-end.

Weather:

Weather during the year was rather mild. Late winter and spring weather were conducive to good shrimp growth and no major storms occurred. The winter was mild through the end of the year.

St. Mary and Vermilion Parishes:

Shrimp:

1990 shrimp production was nearly 5% lower in St. Mary Parish, almost 23.5% higher in Iberia Parish, and almost 30.5% higher in Vermilion Parish. Although landings were higher in the Vermilion Bay area, most of the trips were made to the east of the Atchafalaya River during the brown shrimp season and to the west of Vermilion Bay during the white shrimp season. Low production in the Bay was attributed to extremely low salinities. Prices remained stable through most of the year.

TED "mania" subsided; most trawlers submitted to the regulations, including the new inshore regulations. Other concerns of fishermen were the FEDS (Fish Excluder Devices) to protect red snapper and a proposed, gulf-wide three-month closure of the brown shrimp season from May through July. Shrimpers expressed their opposition at a hearing held in Lafayette, Louisiana.

Fish:

Fish production was down, and prices were up on saltwater species. Freshwater species production and prices remained stable.

Spotted seatrout landings were down, due partially to the 1989 freeze and to decreased effort. Gill netters concentrated on black drum instead of seatrout because of higher prices, supply, and demand.

New commercial black drum regulations mandated a 3.25 million pound quota for drum 16 to 27 inches in length, and a 300,000 fish quota for fish over 27 inches. Commercial fishermen must obtain a permit to land black drum over 27 inches. A bag limit of 5 black drum 16 to 27 inches, and only one black drum over 27 inches is allowed by sports fishermen.

Both the black drum and seatrout seasons opened September 1 and remain open until quotas are met. The 1989/90 seatrout closed on May 6, 1990. This was the first year for a quota for black drum and the season remained open through December, since the quota had not been met at year-end.

Public hearings on new proposed Gulf reef fish regulations were met with anger, shock, and strong opposition by local fishermen. Two reef fish dealers saying they were discouraged by strict new regulations, low production, and loss of fishermen, shut down operations in St. Mary and Vermilion Parishes.

Gill netters, frustrated by numerous schools of red drum in Vermilion Bay, had to re-locate nets frequently to avoid netting the "depleted" resource.

Sports fishermen had no problem landing the 5-fish red drum bag limit.

Crabs:

Contrary to 1989, blue crab landings were up 20% to 30%, but, due to a glut on the east coast, local prices plummeted and ranged from $0.19 to $0.43/lb.

Soft-shell crab processors also suffered from low market demand and low prices which ranged from $8.00 to $14.00 per dozen.

Processed hard crabs yielded 11% to 13%, and peeled, cooked meats retailed locally at $5.00 to $8.00/lb.

Oysters:

Oyster fishermen faced another disastrous year because of freeze damage to beds, extremely low salinity in Vermilion Bay, and prolonged high tides. Production was poor, prices were between $8.00 and $26.00 per sack, and yields ranged from 3.5 to 7.5 pints per sack.

A special "oyster lift" operation to move stressed oysters from Vermilion Bay to areas of higher salinity around Southwest Pass was unsuccessful, according to Louisiana Wildlife and Fisheries Department officials.

Crawfish:

Live crawfish production and prices remained high most of the season. Prices ranged from $0.30/lb to $1.10/lb. Processed crawfish tails retailed locally for $4.39 to $7.00/lb yield was up to a high of 17%.

Menhaden:

Landings were down due to high water temperatures and murky, choppy seas. The bait fishing season opened April 1, and industrial fishing started April 16. The season closed to industrial fishing October 12 and to bait fishing December 1, although bait fishing

ended on its own the second week of November.

Weather:

Conditions were usual during 1990. High water temperatures and fair weather contributed to increased fishing effort and rapid marine life growth.

Miscellaneous:

In St. Mary Parish, an old, well established family seafood company, Sea Shrimp, Inc. of Patterson, La., merged with Bay Ice and Seafood of Morgan City, La., in which Bay Ice gained controlling interest. A new shrimp dock was opened by Freshwater City Seafood in Vermilion Parish, contrary to the general trend. The deep water channel from the Gulf to the port of Iberia was proposed, but rejected, as the result of much controversy.

Jefferson and Plaquemines Parishes:

Shrimp:

Shrimp landings in Upper Jefferson and Plaquemines Parishes declined between 3% and 8% in 1990. The TED issue is still a "sore spot" in the shrimp industry; some shrimpers continued to decline interviews. Recreational shrimpers were limited to 100 pounds (heads-on) shrimp/boat/day.

Crabs:

Production of blue crabs decreased slightly; straight-dump ex-vessel prices decreased $0.05/lb. Some dealers that bought culled crabs lowered ex-vessel prices $0.05 to $0.10/lb. The seasonal transition from crab to shrimp fishing took place as usual.

Oysters:

Weather was a factor in the decline of the oyster industry in 1990. Slightly below average salinities and on/off cold fronts and rainfall lowered oyster growth. Some areas were closed due to pollution. Ex-vessel prices at the beginning of 1990 were $18 to $20 per sack, but by year end they had risen to $22 to $29 per sack.

Oyster poachers continued to be a problem in 1990, and some local oystermen became involved in a lawsuit against the State of Louisiana over oyster lease procedures.

Fish:

Fair to moderate catches of yellowfin tuna, swordfish, and sharks were made by the longline fleet in the lower Plaquemines area; ex-vessel prices increased slightly in 1990. Offshore trollers in the king mackerel fishery experienced fair to moderate catches, but ex-vessel prices on king mackerel decreased slightly in 1990.

The two Empire LA menhaden plants in Plaquemines Parish had fair landings of menhaden.

Fuel:

Compared to 1989, gasoline prices increased $0.10 to $0.15/gallon and diesel prices increased $0.10 to $0.25, probably due to the middle east crises in Kuwait.

Ice:

The price of ice increased $0.25/300-pound block.

Miscellaneous:

Other factors that affected the fisheries were possible regulations for mandatory seafood inspection, foreign imports, wetlands legislation, and increased citations, mainly TEDs, for fishery violations.

One of the three remaining shrimp canning factories shut down in the local area, leaving only two to handle the large volume of small shrimp unloaded during 1990. As a result, some dealers trucked their shrimp to MS & AL factories for processing.

New Orleans and St. Bernard Parishes:

Shrimp:

The opening of the inshore brown shrimp season was set for Monday, May 21, and the opening of the inshore white shrimp season was set for August 20.

The brown shrimp landings for this area were up 71% from 1989. The white shrimp landings were up 64% from the 1989 landings. Brown shrimp sizes were mixed throughout the season; however, white shrimp sizes were mostly 16/20. Shrimp prices were up slightly from 1989. TEDs and fish excluder devices to protect red snapper dominated the news affecting the shrimp industry.

Crabs:

Landings of hard blue crabs were down the first part of the year due to the freeze of December 1989. Landings increased throughout the remainder of the year. Landings

from the lake areas were lower than normal. Prices remained stable.

Fish:

Mullet landings were good and higher than in 1989.

Ice:

Demand for ice was high; the price rose to $7.50/300-pound block.

Fuel:

The supply was adequate; however, fishermen complained about the higher cost of fuel. Diesel sold for $1.00/gal.

TEXAS

Preliminary data suggest that Texas landings were over 99 million pounds, a 3% increase, and value was about $182 million, a 7% increase from 1989.

Fish:

Fish landings declined in 1990. Swordfish landings and value were 138,000 pounds and $494,000, decreases of 63% and 62%, respectively, compared to 1989.

Yellowfin tuna landings decreased by about 55% to 1.4 million pounds ($3.6 million). Along the upper Texas coast more fish were landed, but the quality was lower, and the boats received mostly "boat run" prices rather than prices based on quality of each individual fish.

Even though bluefin tuna landings totalled only 32,000 pounds, this was a 23% increase over 1989; the value was $217 thousand. Prices ranged up to $17/lb, depending on the quality of the fish. The season closed February 28, 1991.

Reef fish landings continued a downward trend. Red snapper (326,000 pounds) decreased 40%; grouper (128,000 pounds) and tilefish (63,000 pounds) each declined about 60% from the previous year. Average prices declined by about $0.15/lb for red snapper (total value $612,000), but remained stable for grouper (total value $186,000) and tilefish (total value $78,000).

Shrimp:

Total shrimp landings were about 87 million pounds (heads-on weight), a 10% increase

from last year. Value increased 12% to $168 million.

Fuel prices escalated from about $0.60/gal to over $1.00/gal after Iraq invaded Kuwait in August. Shrimp prices did not follow suit; thus, profits were seriously curtailed.

New State regulations on shrimping were implemented in Texas bays. During the brown shrimp season from May 15 to July 15, commercial shrimping was permitted from 30 minutes before sunrise to 2 PM, and the daily catch was limited to 600 pounds. These regulations were strictly enforced by TPWD game wardens.

Probably due to the heavy flooding along the upper Texas Coast in May, the bay brown shrimp season was adversely affected again. Total shrimp landings in the bays were about 20 million pounds heads-on, a 43% increase over 1989. However, the lower Texas Coast experienced another major drought, and rainfall was up to 30% below normal.

The Gulf closure off Texas in June and July 1990 extended from the beach to 200 miles; this prohibited all shrimping outside the bays during the closure. Texas shrimp landings from Gulf waters increased by 8% to 71 million pounds. Most of the catches occurred off the southern Texas coast.

TEDs:

Despite protests by the industry, the TED law remained in effect. Along the Texas coast an estimated 60% of the fleet installed the device and used it properly.

Coast Guard personnel routinely boarded vessels engaged in shrimp fishing to enforce TED regulations. Much controversy surrounded allowable TED modifications, methods of measuring the openings, and procedures for violators. Many vessel captains received citations or fines for a variety of infractions.

NMFS port agents continued to encounter hostility on the docks, making it virtually impossible to obtain shrimp interviews in some areas.

OIL SPILLS:

On June 8, 1990, the supertanker M/V MEGA BORG suffered an explosion and leaked light crude oil in 20-fathom waters 57 miles southeast of Galveston. After repeated failures, fire aboard the vessel was successfully extinguished on June 16. An estimated 3 to 3.5 million gallons of Palanca Angola crude oil spilled into the Gulf and resulted in a 10-mile-long oilslick. Clean-up attempts were seriously hampered by the non-availability of oil spill clean-up equipment such as booms, skimmers, etc. Dispersants and bioremediation were used in an effort to clean up the damage. The impact on aquatic resources is unknown at this time.

In the afternoon on July 28, 1990, the Tanker Vessel SHNOUSSA collided with three barges in Galveston Bay. An estimated 500,000 gallons of fairly heavy crude oil were spilled into the bay. Clean-up operations were hampered, since most of the oil was in areas too shallow for the skimmers. Effective August 1, the Texas Department of Public Health closed Galveston Bay to all fishing. It remained closed for several days. The impact on aquatic life is unknown at this time.

Financial:

The year 1990 was marked by a continuing trend of repossessions by lending institutions and a growing reluctance to loan money to finance fishing vessels and seafood businesses. The number of repossessed vessels increased so rapidly that some banks refused to make new loans. The fishing fleet is in poor condition due to a tight economy. As a consequence, many craft left the shrimp fishing industry. Other craft are up for sale. A number of vessels were sold and moved to the Pacific; some were sold to Central American countries. Numerous shrimp dealers either went bankrupt or just closed their doors, and others are barely hanging on.

Bycatch excluder devices (BEDs) had industry members feeling pessimistic about the future of the shrimping industry. Great alarm was also expressed over the proposed closure of the entire Gulf of Mexico. It was said that such closure could mean the end of shrimping and would negatively affect many other businesses related to the fishing industry.

Fishermen continued to be unhappy with the lack of controls on imported shrimp and their adverse effect on the local price structure.

PORT ARTHUR:

Shrimp:

Shrimp production for the area was 10.5 million pounds (heads-on weight), down 7% from 1989. Catches of small brown shrimp continued for an unusually long time in offshore waters after the season opened.

Interest in developing a fishery for mantis shrimp (Squilla empusa) for export to Japan was shown after the NMFS port agent provided a published trade lead in MARKET NEWS to some dealers. With the help of NMFS, Sea Grant personnel, and S-K Funds, there is optimism for development of a market for mantis shrimp. Currently, mantis shrimp are not harvested commercially anywhere in the United States.

Fish:

During the off-season, many shrimp vessels converted to tuna longlining until the shrimp season opened in July. Less care was taken aboard the vessels in the handling of tuna; this caused lower quality and resulted in lower tuna prices.

GALVESTON AREA

Shrimp:

Total shrimp production for the Galveston Bay area was 9.0 million pounds (heads-on weight), a 3% decrease from 1989. Gulf vessels landed 4.8 million pounds, and bay boats landed 4.2 million pounds. This was a decrease of 8% for Gulf catches, but a 2% increase for bay catches.

Galveston Bay experienced a heavy influx of freshwater due to excessive rain in East Texas during May. This caused small brown shrimp to move into the Gulf earlier than usual. The bay was closed to all fishing for several days in August due to an oil spill.

A number of vessels that usually unload in this area when the Gulf season opens moved farther south, because catches were reportedly better there.

Fish:

Total fish production for Galveston declined to 116,000 pounds, a reduction of 45%. Freshwater influx and closure of the bay during August contributed to this decrease. Galveston remains a major longline landing port.

Oysters:

Total oyster production in Galveston Bay was 2.7 million pounds, about the same as 1989. Heavy spring flooding caused low salinity in the bay and resulted in lower oyster yields for the second year in a row.

FREEPORT-PALACIOS-MATAGORDA

Shrimp:

Total shrimp production for this area was 16.2 million pounds (heads-on weight), a 20% increase from 1989. A sign of the times, a large seafood dealer in Freeport, who had been in business for many years, closed and many shrimp vessels went up for sale.

Fish:

Longline landings declined in this area; unloadings were sporadic throughout the year.

ROCKPORT-ARANSAS PASS-PORT LAVACA

Shrimp:

Total shrimp landings for the area were approximately 31 million pounds (heads-on weight), a 39% increase from 1989. This production enabled many vessels to continue operating, but basically it was a "break-even" year. Shrimpers contend that TEDs, escalating fuel prices, proposed snapper restrictions, the possibility of a shorter season, and decreasing shrimp prices made it difficult to survive.

Fish:

Longline landings were strong in 1990, until corporate policy and personnel changes moved a substantial part of the fleet to the Galveston area.

Oysters:

As in 1989, the most productive oyster reefs were in the San Antonio and Matagorda Bay systems. Numerous boats from Louisiana and Galveston came south when the oyster season opened.

BROWNSVILLE-PORT ISABEL

Shrimp:

Shrimp landings totaled 24.4 million pounds (heads-on weight), a 3% increase from 1989. Value increased 5% to $55.9 million. The size of the fleet remained steady, although some vessels sank, some were sold out of port, and some were replaced.

In the area of shrimp aquaculture, Taiwanese investors bought a 600-plus acre tract in Arroyo City and produced approximately 380,000 pounds (heads-off weight) of shrimp in 38 ponds. They also purchased the existing Laguna Madre Shrimp Farm, which produced about 158,000 pounds (heads-off weight). In addition they purchased a 3.4 acre site in the Port Isabel Navigation District, where they hope to produce 175,000 postlarvae shrimp/acre.

Fish:

Longline activity continued, mainly for swordfish and yellowfin tuna. Reef fish regulations implemented in April affected sports fishermen and headboat operators, in addition to commercial reef fishermen. All groups displayed anger and hostility over these regulations.

PUERTO RICO

The fisheries of Puerto Rico are predominately artisanal. Most fishermen concentrate their efforts on shallow water reef fish and on a variety of shellfish, mainly lobster and conch.

Landings of fish and shellfish were reported by volunteer fishermen, fish buyers, and fishing associations around the Island. These data were collected by five port agents, who visited 42 coastal municipalities and 92 fishing centers (landing areas).

Fish:

The most important fish in terms of percentage of total pounds landed for 1988, 1989, and 1990, respectively, were silk snapper (Lutjanus vivanus) (8.5%; 10.7%; 8.1%); various species of tuna (7.0%; 5.7%; 6.1%); grouper species (4.5%; 5.7%; 2.9%), principally red hind (Epinephelus guttatus); various species of grunt (4.5%; 3.4%; 5.4%), mainly white grunt (Haemulon plumieri), mackerel species (4.0%; 4.2%; 4.5%), principally Scomberomorus cavalla and Acanthocybium solanderi; lane snapper (Lutjanus synagris) (3.9%; 4.7%; 5.1%), yellowtail snapper (Ocyurus chrysurus) (3.8%; 4.0%; 4.9%) and the dolphinfish (Coryphaena hippurus) (3.4%; 3.0%; 4.5%).

Shellfish:

The most important shellfish in terms of percentage of total landed pounds for 1988, 1989 and 1990, respectively, were spiny lobster (Panulirus argus) (7.0%; 8.1%; 7.8%) and queen conch (Strombus gigas) (11.5%; 7.0%; 4.9%).

1990 REPORTED LANDINGS

1990 LANDINGS FOR THE STATE OF NORTH CAROLINAIN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Alewives	1,147	173	11	1			1,158	174	$.15
Bluefish	2,140	342	2,140	376			4,280	718	$.16
Bonito	2	(1)	2	1			4	1	$.25
Butterfish	183	64	100	27			283	91	$.32
Croaker	6,103	3,087	250	103			6,353	3,190	$.50
Fl-Blackback			1	(1)			1		$.00
Fl-Fluke	2,795	4,724	2,164	3,650			4,959	8,374	$1.68
Fl-Yellowtail			22	20			22	20	$.90
Fl-A./Gulf	1	(1)	1	1			2	1	$.50
Groupers	1	2	1,012	1,420			1,013	1,422	$1.40
Mckrl-King/Cero	46	43	994	1,216			1,040	1,259	$1.21
Mackerel-A.	2	(1)	870	86			872	86	$.09
Menhaden	71,671	1,799					71,671	1,799	$.02
Mullet-(B.&S.)	2,427	1,546	3	2			2,430	1,548	$.63
Scup Or Porgy	19	27	552	509			571	536	$.93
Sea Bass-Bk.-A.	154	135	966	1,269			1,120	1,404	$1.25
Sea Trout-Gray	3,855	1,925	2,865	1,597			6,720	3,522	$.52
Sea Trout-Spot	318	299	4	4			322	303	$.94
Sharks-Unc	33	8	1,349	755			1,382	763	$.55
Snapper-Red			36	94			36	94	$2.61
Snapper-Other			567	1,120			567	1,120	$1.97

1990 LANDINGS FOR THE STATE OF NORTH CAROLINAIN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Mackerel-Span	769	289	31	12			800	301	$.37
Striped Bass	169	212					169	212	$1.25
Swordfish			104	285			104	285	$2.74
Tilefish			163	193			163	193	$1.18
Tuna-Bluefin			1	8			1	8	$8.00
Tuna-Little	7	1	105	8			112	9	$.08
Tuna-Yellowfin			516	728			516	728	$1.41
Tuna-Unclass.			43	62			43	62	$1.44
Tuna-Bigeye			23	127			23	127	$5.52
Whiting	3	1	6	1			9	2	$.22
Fish-Marine-O.	17,973	2,711	1,419	1,045			19,392	3,756	$.19
TOTAL FISH	109,818	17,388	16,320	14,720			126,138	32,108	
Crab-Blue-Hard	38,504	11,487					38,504	11,487	$.29
Shrimps-A.	7,081	14,179	138	404			7,219	14,583	$2.02
Clam-(Meat)Hard	1,400	7,294					1,400	7,294	$5.21
Oyster-Meats-A.	317	1,150					317	1,150	$3.62
Scallop(Mts)Bay	78	158					78	158	$2.02
Scallop(Mts)Cal			385	531			385	531	$1.37
Scallop(Mts)Sea			1,165	4,036			1,165	4,036	$3.46
Shellfish-Other	188	52	644	143			832	195	$.23
TOTAL SHELLFISH	47,568	34,320	2,332	5,114			49,900	39,434	
GRAND TOTAL	157,386	51,708	18,652	19,834			176,038	71,542	

(*) VALUE LESS THAN $500

1990 LANDINGS FOR THE STATE OF SOUTH CAROLINAIN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES: FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Bluefish			1	(1)			1		$.00
Bonito			2	1			2	1	$.50
Croaker	1	1					1	1	$1.00
Fl-Fluke	17	20					17	20	$1.17
Groupers			766	1,646			766	1,646	$2.14
Mckrl-King/Cero			138	227			138	227	$1.64
Mullet-(B.&S.)	3	1					3	1	$.33
Scup Or Porgy			300	421			300	421	$1.40
Sea Bass-Bk.-A.			323	439			323	439	$1.35
Sea Trout-Gray									$.00
Sharks-Unc	46	22	123	78			169	100	$.59
Snapper-Red			62	179			62	179	$2.88
Snapper-Other			321	669			321	669	$2.08
Mackerel-Span									$.00
Swordfish			339	1,343			339	1,343	$3.96
Tilefish			182	285			182	285	$1.56
Tuna-Albacore			(2)	1				1	$.00
Tuna-Yellowfin			4	10			4	10	$2.50
Tuna-Unclass.			72	217			72	217	$3.01
Tuna-Bigeye			1	2			1	2	$2.00
Fish-Marine-O.	443	279	1,166	1,490			1,609	1,769	$1.09

1990 LANDINGS FOR THE STATE OF SOUTH CAROLINAIN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
TOTAL FISH	510	323	3,800	7,008			4,310	7,331	
Crab-Blue-Hard	4,801	2,655					4,801	2,655	$.55
Crab-Other	13	34					13	34	$2.61
Shrimps-A.	4,187	10,267	732	1,934			4,919	12,201	$2.48
Clam-(Meat)Hard	170	910					170	910	$5.35
Oyster-Meats-A.	258	857					258	857	$3.32
Squid-Loligo	2	1					2	1	$.50
Shellfish-Other	37	18	6	5			43	23	$.53
TOTAL SHELLFISH	9,468	14,742	738	1,939			10,206	16,681	
GRAND TOTAL	9,978	15,065	4,538	8,947			14,516	24,012	

(2) POUNDS LESS THAN 500

1990 LANDINGS FOR THE STATE OF GEORGIA IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Bluefish									$.00
Croaker									$.00
Groupers	8	13	117	199			125	212	$1.69
Mckrl-King/Cero	8	10	12	13			20	23	$1.15
Mullet-(B.&S.)	1	(1)					1		$.00
Scup Or Porgy	1	1	71	80			72	81	$1.12
Sea Bass-Bk.-A.	2	2	10	7			12	9	$.75
Sea Trout-Gray									$.00
Sea Trout-Spot	5	7					5	7	$1.40
Sharks-Unc			106	59			106	59	$.55
Snapper-Red	1	1	13	36			14	37	$2.64
Snapper-Other	2	4	121	233			123	237	$1.92
Mackerel-Span	1	(1)					1		$.00
Tilefish			6	7			6	7	$1.16
Tuna-Yellowfin									$.00
Tuna-Unclass.									$.00
Fish-Marine-O.	339	386	181	161			520	547	$1.05
TOTAL FISH	368	424	637	795			1,005	1,219	
Crab-Blue-Hard	4,908	1,737					4,908	1,737	$.35
Shrimps-A.	6,184	16,022	487	393			6,671	16,415	$2.46

1990 LANDINGS FOR THE STATE OF GEORGIA IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES: FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Oyster-Meats-A.	58	117					58	117	$2.01
Shellfish-Other	549	273					549	273	$.49
TOTAL SHELLFISH	11,699	18,149	487	393			12,186	18,542	
GRAND TOTAL	12,067	18,573	1,124	1,188			13,191	19,761	

(1) VALUE LESS THAN $500

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1990 LANDINGS FOR THE STATE OF FLORIDA EAST COASTIN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Bluefish	1,099	308					1,099	308	$.28
Bonito			20	5			20	5	$.25
Croaker	122	56					122	56	$.45
Fl-Fluke	255	370					255	370	$1.45
Groupers	25	41	659	1,066			684	1,107	$1.61
Mckrl-King/Cero	116	128	1,551	1,706			1,667	1,834	$1.10
Menhaden	2,684	403					2,684	403	$.15
Mullet-(B.&S.)	2,373	759					2,373	759	$.31
Scup Or Porgy	60	56	266	250			326	306	$.93
Sea Bass-Bk.-A.	10	5	52	24			62	29	$.46
Sea Trout-Gray	141	87					141	87	$.61
Sea Trout-Spot	232	255					232	255	$1.09
Sharks-Unc	872	340	872	340			1,744	680	$.38
Snapper-Red			120	312			120	312	$2.60
Snapper-Other	100	155	584	905			684	1,060	$1.54
Mackerel-Span	150	71	1,806	848			1,956	919	$.46
Swordfish			2,755	9,367			2,755	9,367	$3.40
Tilefish			675	844			675	844	$1.25
Tuna-Bluefin			20	120			20	120	$6.00
Tuna-Skipjack			1	(1)			1		$.00
Tuna-Yellowfin			165	413			165	413	$2.50

1990 LANDINGS FOR THE STATE OF FLORIDA EAST COASTIN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Tuna-Unclass.			67	74			67	74	$1.10
Tuna-Bigeye			97	223			97	223	$2.29
Fish-Marine-O.	6,935	5,102	2,947	2,634			9,882	7,736	$.78
TOTAL FISH	15,174	8,136	12,657	19,131			27,831	27,267	
Crab-Blue-Hard	5,750	2,645					5,750	2,645	$.46
Crab-Other	150	462					150	462	$3.08
Lobster-Spiny	398	1,083	100	272			498	1,355	$2.72
Shrimps-A.	2,228	6,311	7,416	5,862			9,644	12,173	$1.26
Clam-(Meat)Hard	350	2,023					350	2,023	$5.78
Oyster-Meats-A.	215	488					215	488	$2.26
Scallop(Mts)Cal			750	750			750	750	$1.00
Shellfish-Other	200	1,400	38	266			238	1,666	$7.00
TOTAL SHELLFISH	9,291	14,412	8,304	7,150			17,595	21,562	
GRAND TOTAL	24,465	22,548	20,961	26,281			45,426	48,829	

(1) VALUE LESS THAN $500

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1990 LANDINGS FOR THE STATE OF FLORIDA INLAND LAKESIN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES: FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	¢/ PR/LB
Mullet-(B.&S.)	167	152					167	152	$.91
Fish-Marine-O.	12,389	5,285					12,389	5,285	$.42
TOTAL FISH	12,556	5,437					12,556	5,437	
TOTAL SHELLFISH:									
GRAND TOTAL	12,556	5,437					12,556	5,437	

1990 LANDINGS FOR THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Alewives	1,147	173	11	1			1,158	174	$.15
Bluefish	3,239	650	2,141	376			5,380	1,026	$.19
Bonito	2	(1)	24	7			26	7	$.26
Butterfish	183	64	100	27			283	91	$.32
Croaker	6,226	3,144	250	103			6,476	3,247	$.50
Fl-Blackback			1	(1)			1		$.00
Fl-Fluke	3,067	5,114	2,164	3,650			5,231	8,764	$1.67
Fl-Yellowtail			22	20			22	20	$.90
Fl-A./Gulf	1	(1)	1	1			2	1	$.50
Groupers	34	56	2,554	4,331			2,588	4,387	$1.69
Mckrl-King/Cero	170	181	2,695	3,162			2,865	3,343	$1.16
Mackerel-A.	2	(1)	870	86			872	86	$.09
Menhaden	74,355	2,202					74,355	2,202	$.02
Mullet-(B.&S.)	4,971	2,458	3	2			4,974	2,460	$.49
Scup Or Porgy	80	84	1,189	1,260			1,269	1,344	$1.05
Sea Bass-Bk.-A.	166	142	1,351	1,739			1,517	1,881	$1.23
Sea Trout-Gray	3,996	2,012	2,865	1,597			6,861	3,609	$.52
Sea Trout-Spot	555	561	4	4			559	565	$1.01
Sharks-Unc	951	370	2,450	1,232			3,401	1,602	$.47
Snapper-Red	1	1	231	621			232	622	$2.68
Snapper-Other	102	159	1,593	2,927			1,695	3,086	$1.82

NATIONAL MARINE FISHERIES SERVICE

DATE OF RUN 5/16/91

OFFICE OF DATA AND INFORMATION MANAGEMENT

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1990 LANDINGS FOR THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Mackerel-Span	920	360	1,837	860			2,757	1,220	$.44
Striped Bass	169	212					169	212	$1.25
Swordfish			3,198	10,995			3,198	10,995	$3.43
Tilefish			1,026	1,329			1,026	1,329	$1.29
Tuna-Albacore			(2)	1				1	$.00
Tuna-Bluefin			21	128			21	128	$6.09
Tuna-Little	7	1	105	8			112	9	$.08
Tuna-Skipjack			1	(1)			1		$.00
Tuna-Yellowfin			685	1,151			685	1,151	$1.68
Tuna-Unclass.			182	353			182	353	$1.93
Tuna-Bigeye			121	352			121	352	$2.90
Whiting	3	1	6	1			9	2	$.22
Fish-Marine-O.	38,079	13,763	5,713	5,330			43,792	19,093	$.43
TOTAL FISH	138,426	31,708	33,414	41,654			171,840	73,362	
Crab-Blue-Hard	53,963	18,524					53,963	18,524	$.34
Crab-Other	163	496					163	496	$3.04
Lobster-Spiny	398	1,083	100	272			498	1,355	$2.72
Shrimps-A.	19,680	46,779	8,773	8,593			28,453	55,372	$1.94
Clam-(Meat)Hard	1,920	10,227					1,920	10,227	$5.32
Oyster-Meats-A.	848	2,612					848	2,612	$3.08

1990 LANDINGS FOR THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES: FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Scallop(Mts)Bay	78	158					78	158	$2.02
Scallop(Mts)Cal			1,135	1,281			1,135	1,281	$1.12
Scallop(Mts)Sea			1,165	4,036			1,165	4,036	$3.46
Squid-Loligo	2	1					2	1	$.50
Shellfish-Other	974	1,743	688	414			1,662	2,157	$1.29
TOTAL SHELLFISH	78,026	81,623	11,861	14,596			89,887	96,219	
GRAND TOTAL	216,452	113,331	45,275	56,250			261,727	169,581	

(1) VALUE LESS THAN $500 (2) POUNDS LESS THAN 500

1990 LANDINGS FOR THE STATE OF FLORIDA WEST COASTIN THE GULF REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Alewives	109	8					109	8	$.07
Bluefish	382	107					382	107	$.28
Bonito	298	59	128	26			426	85	$.19
Croaker	27	12					27	12	$.44
Fl-Fluke	183	273					183	273	$1.49
Groupers	180	305	8,866	15,029			9,046	15,334	$1.69
Mckrl-King/Cero	115	127	658	723			773	850	$1.09
Menhaden	8,904	890					8,904	890	$.09
Mullet-(B.&S.)	20,127	7,246					20,127	7,246	$.36
Scup Or Porgy	56	60	501	536			557	596	$1.07
Sea Bass-Bk.-A.	156	134	363	312			519	446	$.85
Sea Trout-Spot	714	950					714	950	$1.33
Sea Trout-White	99	98					99	98	$.98
Sharks-Unc	883	362	5,002	2,051			5,885	2,413	$.41
Snapper-Red			785	2,057			785	2,057	$2.62
Snapper-Other	55)	963	3,118	5,456			3,668	6,419	$1.75
Mackerel-Span	250	118	2,071	973			2,321	1,091	$.47
Swordfish			465	1,558			465	1,558	$3.35
Tilefish			299	448			299	448	$1.49
Tuna-Bluefin			7	41			7	41	$5.85
Tuna-Yellowfin			1,217	2,994			1,217	2,994	$2.46

1990 LANDINGS FOR THE STATE OF FLORIDA WEST COASTIN THE GULF REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Tuna-Unclass.			125	87			125	87	$.69
Tuna-Bigeye			16	37			16	37	$2.31
Fish-Marine-O.	25,959	5,583	6,938	2,671			32,897	8,254	$.25
TOTAL FISH	58,992	17,295	30,559	34,999			89,551	52,294	
Crab-Blue-Hard	6,429	2,957					6,429	2,957	$.45
Crab-Other	1,409	2,580	4,184	14,618			5,593	17,198	$3.07
Lobster-Spiny	1,837	4,997	3,411	9,278			5,248	14,275	$2.72
Shrimps-A.	2,478	5,054	10,704	20,068			13,182	25,122	$1.90
Clam-(Meat)Hard	15	120					15	120	$8.00
Oyster-Meats-A.	1,865	4,233					1,865	4,233	$2.26
Squid-Loligo			75	29			75	29	$.38
TOTAL SHELLFISH	14,033	19,941	18,374	43,993			32,407	63,934	
GRAND TOTAL	73,025	37,236	48,933	78,992			121,958	116,228	

1990 LANDINGS FOR THE STATE OF ALABAMA IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Bluefish	9	2					9	2	$.22
Croaker	3	1					3	1	$.33
Fl-A./Gulf	111	143	53	40			164	183	$1.11
Groupers			18	27			18	27	$1.50
Mckrl-King/Cero									$.00
Mullet-(B.&S.)	1,580	1,974					1,580	1,974	$1.24
Sea Trout-White	32	17	21	9			53	26	$.49
Sharks-Unc	12	5	1,428	798			1,440	803	$.55
Snapper-Red			51	126			51	126	$2.47
Snapper-Other			21	37			21	37	$1.76
Mackerel-Span	73	24					73	24	$.32
Swordfish			1	3			1	3	$3.00
Tilefish			7	12			7	12	$1.71
Tuna-Yellowfin									$.00
Tuna-Unclass.									$.00
Fish-Marine-O.	625	130	243	125			868	255	$.29
TOTAL FISH	2,445	2,296	1,843	1,177			4,288	3,473	
Crab-Blue-Hard	3,303	1,265					3,303	1,265	$.38
Shrimps-A.	7,780	13,680	7,199	17,288			14,979	30,968	$2.06
Oyster-Meats-A.	84	211					84	211	$2.51

1990 LANDINGS FOR THE STATE OF ALABAMA IN THE GULF REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Squid-Illex	6	2	6	1			12	3	$.25
Shellfish-Other			3	11			3	11	$3.66
TOTAL SHELLFISH:	11,173	15,158	7,208	17,300			18,381	32,458	
GRAND TOTAL	13,618	17,454	9,051	18,477			22,669	35,931	

1990 LANDINGS FOR THE STATE OF MISSISSIPPI IN THE GULF REGION

SPECIES	DISTANCE FROM U.S.SHORES: FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Bluefish	3	1	16	4			19	5	$.26
Butterfish			1,104	329			1,104	329	$.29
Croaker	26	25	3	1			29	26	$.89
Fl-A./Gulf	26	30	36	34			62	64	$1.03
Groupers			33	34			33	34	$1.03
Hake-White			1	(1)			1		$.00
Mckrl-King/Cero			1	1			1	1	$1.00
Menhaden	270,052	11,795					270,052	11,795	$.04
Mullet-(B.&S.)	801	432	3	1			804	433	$.53
Scup Or Porgy			15	15			15	15	$1.00
Sea Trout-Spot	29	44	2	2			31	46	$1.48
Sea Trout-White	4	2	41	13			45	15	$.33
Sharks-Unc	2	1	43	17			45	18	$.40
Snapper-Red			200	362			200	362	$1.81
Snapper-Other			142	250			142	250	$1.76
Mackerel-Span	13	4	21	5			34	9	$.26
Swordfish			1	2			1	2	$2.00
Tilefish			1	(1)			1		$.00
Tuna-Little			75	10			75	10	$.13
Tuna-Unclass.			1	1			1	1	$1.00
Fish-Marine-O.	365	146	30,728	6,616			31,093	6,762	$.21

1990 LANDINGS FOR THE STATE OF MISSISSIPPI IN THE GULF REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
TOTAL FISH	271,321	12,480	32,467	7,697			303,788	20,177	
Crab-Blue-Hard	383	166	7	3			390	169	$.43
Shrimps-A.	7,285	5,967	7,960	15,653			15,245	21,620	$1.41
Oyster-Meats-A.	148	403					148	403	$2.72
Squid-Illex	1	(1)	8	3			9	3	$.33
Shellfish-Other	4	7	1	(1)			5	7	$1.40
TOTAL SHELLFISH	7,821	6,543	7,976	15,659			15,797	22,202	
GRAND TOTAL	279,142	19,023	40,443	23,356			319,585	42,379	

(1) VALUE LESS THAN $500

1990 LANDINGS FOR THE STATE OF LOUISIANA IN THE GULF REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Bluefish			57	18			57	18	$.31
Bonito			6	2			6	2	$.33
Croaker	54	40					54	40	$.74
Fl-A./Gulf	156	178	20	23			176	201	$1.14
Groupers			410	635			410	635	$1.54
Mckrl-King/Cero	130	121	469	434			599	555	$.92
Menhaden	563,185	27,117	303,350	14,560			866,535	41,677	$.04
Mullet-(B.&S.)	964	592					964	592	$.61
Scup Or Porgy			178	119			178	119	$.66
Sea Trout-Spot	393	650					393	650	$1.65
Sea Trout-White	68	56	3	2			71	58	$.81
Sharks-Unc	100	69	1,602	1,101			1,702	1,170	$.68
Snapper-Red			954	2,336			954	2,336	$2.44
Snapper-Other			780	1,183			780	1,183	$1.51
Mackerel-Span	4	1	3	1			7	2	$.28
Swordfish			317	874			317	874	$2.75
Tilefish			78	106			78	106	$1.35
Tuna-Albacore			6	3			6	3	$.50
Tuna-Bluefin			216	1,655			216	1,655	$7.66
Tuna-Little			97	135			97	135	$1.39
Tuna-Skipjack			1	1			1	1	$1.00

1990 LANDINGS FOR THE STATE OF LOUISIANA IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES: FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Tuna-Yellowfin			4,822	10,771			4,822	10,771	$2.23
Tuna-Unclass.			188	233			188	233	$1.23
Tuna-Bigeye			37	103			37	103	$2.78
Fish-Marine-O.	20,201	5,317	975	1,226			21,176	6,543	$.30
TOTAL FISH	585,255	34,141	314,569	35,521			899,824	69,662	
Crab-Blue-Hard	28,062	11,199					28,062	11,199	$.39
Shrimps-A.	110,424	133,244	8,730	19,310			119,154	152,554	$1.28
Oyster-Meats-A.	7,089	26,367					7,089	26,367	$3.71
Squid-Illex	1	(1)					1		$.00
Shellfish-Other	7,098	3,685					7,098	3,685	$.51
TOTAL SHELLFISH	152,674	174,495	8,730	19,310			161,404	193,805	
GRAND TOTAL	737,929	208,636	323,299	54,831			1,061,228	263,467	

(1) VALUE LESS THAN $500

1990 LANDINGS FOR THE STATE OF TEXAS IN THE GULF REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Bluefish									$.00
Croaker	1	(1)					1		$.00
Cusk			1	1			1	1	$1.00
Fl-A./Gulf	128	165					128	165	$1.28
Groupers			128	186			128	186	$1.45
Mckrl-King/Cero									$.00
Mullet-(B.&S.)	75	18					75	18	$.24
Sea Trout-White	4	1					4	1	$.25
Sharks-Unc			35	26			35	26	$.74
Snapper-Red			326	612			326	612	$1.87
Snapper-Other			192	322			192	322	$1.67
Mackerel-Span									$.00
Swordfish			138	494			138	494	$3.57
Tilefish			63	78			63	78	$1.23
Tuna-Albacore			(2)	1				1	$.00
Tuna-Bluefin			32	217			32	217	$6.78
Tuna-Yellowfin			1,384	3,564			1,384	3,564	$2.57
Tuna-Unclass.			20	25			20	25	$1.25
Tuna-Bigeye			3	9			3	9	$3.00
Fish-Marine-O.	804	557	189	168			993	725	$.73
TOTAL FISH	1,012	741	2,511	5,703			3,523	6,444	
Crab-Blue-Hard	7,306	2,915					7,306	2,915	$.39

1990 LANDINGS FOR THE STATE OF TEXAS IN THE GULF REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Crab-Other	62	123					62	123	$1.98
Lobster-Spiny			(2)	1				1	$.00
Shrimps-A.	19,010	21,714	67,891	146,631			86,901	168,345	$1.93
Oyster-Meats-A.	1,376	4,512					1,376	4,512	$3.27
Shellfish-Other	13	6	10	5			23	11	$.47
TOTAL SHELLFISH	27,767	29,270	67,901	146,637			95,668	175,907	
GRAND TOTAL	28,779	30,011	70,412	152,340			99,191	182,351	

(1) VALUE LESS THAN $500 (2) POUNDS LESS THAN 500
THE NATIONAL MARINE FISHERIES SERVICE ESTIMATED THE DISTANCE FROM SHORE
FOR TEXAS LANDINGS DATA COLLECTED BY THE TEXAS PARKS AND WILDLIFE DEPART.

1990 LANDINGS FOR THE GULF REGION

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Alewives	109	8					109	8	$.07
Bluefish	394	110	73	22			467	132	$.28
Bonito	298	59	134	28			432	87	$.20
Butterfish			1,104	329			1,104	329	$.29
Croaker	111	78	3	1			114	79	$.69
Cusk			1	1			1	1	$1.00
Fl-Fluke	183	273					183	273	$1.49
Fl-A./Gulf	421	516	109	97			530	613	$1.15
Groupers	180	305	9,455	15,911			9,635	16,216	$1.68
Hake-White			1	(1)			1		$.00
Mckrl-King/Cero	245	248	1,128	1,158			1,373	1,406	$1.02
Menhaden	842,141	39,802	303,350	14,560			1,145,491	54,362	$.04
Mullet-(B.&S.)	23,547	10,262	3	1			23,550	10,263	$.43
Scup Or Porgy	56	60	694	670			750	730	$.97
Sea Bass-Bk.-A.	156	134	363	312			519	446	$.85
Sea Trout-Spot	1,136	1,644	2	2			1,138	1,646	$1.44
Sea Trout-White	207	174	65	24			272	198	$.72
Sharks-Unc	997	437	8,110	3,993			9,107	4,430	$.48
Snapper-Red			2,316	5,493			2,316	5,493	$2.37
Snapper-Other	550	963	4,253	7,248			4,803	8,211	$1.70
Mackerel-Span	340	147	2,095	979			2,435	1,126	$.46

SPECIES	DISTANCE FROM U.S. SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Swordfish			922	2,931			922	2,931	$3.17
Tilefish			448	644			448	644	$1.43
Tuna-Albacore			6	4			6	4	$.66
Tuna-Bluefin			255	1,913			255	1,913	$7.50
Tuna-Little			172	145			172	145	$.84
Tuna-Skipjack			1	1			1	1	$1.00
Tuna-Yellowfin			7,423	17,329			7,423	17,329	$2.33
Tuna-Unclass.			334	346			334	346	$1.03
Tuna-Bigeye			56	149			56	149	$2.66
Fish-Marine-O.	47,954	11,733	39,073	10,806			87,027	22,539	$.25
TOTAL FISH	919,025	66,953	381,949	85,097			1,300,974	152,050	
Crab-Blue-Hard	45,483	18,502	7	3			45,490	18,505	$.40
Crab-Other	1,471	2,703	4,184	14,618			5,655	17,321	$3.06
Lobster-Spiny	1,837	4,997	3,411	9,279			5,248	14,276	$2.72
Shrimps-A.	146,977	179,659	102,484	218,950			249,461	398,609	$1.59
Clam-(Meat)Hard	15	120					15	120	$8.00
Oyster-Meats-A.	10,562	35,726					10,562	35,726	$3.38
Squid-Illex	8	2	14	4			22	6	$.27
Squid-Loligo			75	29			75	29	$.38
Shellfish-Other	7,115	3,698	14	16			7,129	3,714	$.52
TOTAL SHELLFISH	213,468	245,407	110,189	242,899			323,657	488,306	
GRAND TOTAL	1,132,493	312,360	492,138	327,996			1,624,631	640,356	

(*) VALUE LESS THAN $500

1990 STATISTICAL HIGHLIGHTS
SOUTHEASTERN REGION

COMMERCIAL FISHERIES

A. Total Landings

1.9 billion pounds (round weight) valued at
810 million dollars - ex-vessel value

- Of 1.9 billion pounds
  1.5 billion pounds were fish
  0.4 billion pounds were shellfish

- Of 1.9 billion pounds
  0.7 billion pounds for food
  1.2 billion pounds for industrial purposes

B. Catch by Distance from Shore

Distance Miles	Billion pounds	%
0-3	1.3	68
3-200	0.6	32

C. Landings by Major Species

SPECIES	THOUSAND POUNDS	THOUSAND DOLLARS
GROUPERS	12,223	$ 20,603
SNAPPERS	9,046	13,631
KING MACKEREL	4,238	4,749
SPANISH MACKEREL	5,192	2,346
MENHADEN	1,219,846	56,546
SHARKS	12,508	6,032
SWORDFISH	4,120	13,886
TUNA	9,369	20,881
OYSTERS	11,410	38,338
SHRIMP	277,914	453,981
SPINY LOBSTER	5,746	15,631
STONE CRABS	5,818	17,817

Note: Landings of fish, lobster and shrimp in live weight; oysters in meat weight.

MARINE RECREATIONAL FISHERIES

U. S. CATCH	**318 million pounds**
SOUTHEAST CATCH	**142 million pounds**

MAJOR SPECIES:

- **Bluefish**
- **Tunas**
- **King Mackerel**
- **Red Drum**
- **Atlantic Croaker**
- **Porgies/Grunts**
- **Dolphin**
- **Spotted Seatrout**
- **Herrings**
- **Saltwater Catfishes**
- **Black sea bass**
- **Pinfish**
- **Mullets**

TABLE 1. PUERTO RICO LANDINGS BY SPECIES FOR 1990.

Species	Pounds	Total Value	Price per Pound
Tuna	133,622	$ 163,353	$ 1.22
Ballyhoo	30,397	34,197	1.13
Grunt	118,106	138,479	1.17
Hogfish	21,721	39,206	1.81
Croaker	548	222	0.41
Trunkfish	47,715	71,692	1.50
Dolphin	98,473	138,847	1.41
Swordfish	9,415	8,827	0.94
Squirrelfish	6,451	6,919	1.07
Mullet	21,334	21,601	1.01
Jack	30,412	33,833	1.11
Parrotfish	36,848	43,389	1.18
Marlin	5,025	5,113	1.02
Amberjack	1,075	551	0.51
Grouper	62,462	102,282	1.64
Red Hind	39,516	57,990	1.47
Nassau	2,346	3,378	1.44
Mojarra	15,455	18,739	1.21
Snapper			
Lane	113,055	187,106	1.66
Yellowtail	107,279	178,888	1.67
Silk	176,822	369,558	2.09
Mutton	25,203	44,672	1.77
Other Snapper	46,508	68,948	1.48
Triggerfish	28,542	34,464	1.21
Barracuda	7,933	9,539	1.20
Porgy	9,130	12,052	1.32
Snook	19,851	26,848	1.35
Tarpon	6,320	3,476	0.55
Goatfish	13,558	17,795	1.31
Sardine	10,103	9,320	0.92
Mackerel	97,644	154,522	1.58
Shark	40,639	50,596	1.25
Margate	827	957	1.16
Classified			
First	182,441	266,364	1.46
Second	146,783	157,058	1.07
Third	51,177	41,581	0.81
Trash	7,806	7,279	0.93
Other Fish	107,064	0	0.00
Total Fish	1,879,606	2,692,536	1.43
Queen Conch	108,075	228,849	2.12
Land Crab	1,978	10,167	5.14
Lobster	169,575	781,317	4.61
Oysters	515	1,100	2.14
Octopus	24,787	58,311	2.35
Other Shellfish	1,899	5,331	2.81
Total Shellfish	306,829	1,234,987	4.03
Total	2,186,435	5,966,235	2.73

NATIONAL MARINE FISHERIES SERVICE

DATE OF RUN 5/16/91

OFFICE OF DATA AND INFORMATION MANAGEMENT

1990 LANDINGS FOR THE UNITED STATES

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Alewives	17,203	621	27	2			17,230	623	$.03
Anchovies	1,426	312	11,763	2,411			13,189	2,723	$.20
Bluefish	7,556	1,836	6,246	1,403			13,802	3,239	$.23
Bonito	361	100	7,911	1,678			8,272	1,778	$.21
Butterfish	853	469	5,679	2,865			6,532	3,334	$.51
Cod-A.	1,749	1,150	94,110	60,168	22	11	95,881	61,329	$.63
Cod-P.	81,574	14,174	462,629	80,416			544,203	94,590	$.17
Croaker	6,466	3,285	254	105			6,720	3,390	$.50
Cusk	17	6	2,682	1,222	3	1	2,702	1,229	$.45
Fl-Blackback	1,346	1,150	13,475	15,245			14,821	16,395	$1.10
Fl-Fluke	4,421	7,622	7,550	13,456			11,971	21,078	$1.76
Fl-Yellowtail	225	222	31,444	27,827	13	11	31,682	28,060	$.88
Fl-A./Gulf	585	587	13,342	13,553	22	24	13,949	14,164	$1.01
Fl-P.-Other	353,967	60,394	75,828	19,224			429,795	79,618	$.18
Groupers	214	361	12,009	20,242			12,223	20,603	$1.68
Haddock	8	8	5,429	5,955	3	4	5,440	5,967	$1.09
Hake-Red	437	125	3,438	590			3,875	715	$.18
Hake-White	68	19	11,345	4,443	6	4	11,419	4,466	$.39
Hake-P.	3,927	229	17,305	1,000			21,232	1,229	$.05
Halibut	47,341	63,634	23,113	33,066			70,454	96,700	$1.37

1990 LANDINGS FOR THE UNITED STATES

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Herring-Sea	139,873	33,916	81,342	4,008			221,215	37,924	$.17
Jack Mackerel			8,959	535			8,959	535	$.05
Mckrl-King/Cero	419	433	3,834	4,338			4,253	4,771	$1.12
Lingcod	1,100	150	6,193	2,161			7,293	2,311	$.31
Mackerel-A.	1,354	425	21,608	3,369			22,962	3,794	$.16
Mackerel-P.	23	4	83,698	5,077			83,721	5,081	$.06
Menhaden	1,658,340	79,315	303,820	14,581			1,962,160	93,896	$.04
Mullet-(B.&S.)	28,548	12,735	6	3			28,554	12,738	$.44
Ocean Perch-A.	4	1	1,318	702			1,322	703	$.53
Ocean Perch-P.	50,309	6,451	10,663	2,043			60,972	8,494	$.13
Pollock-Alaska	473,205	40,839	2,684,201	231,801			3,157,406	272,640	$.08
Pollock	108	49	20,915	10,453	19	14	21,042	10,516	$.49
Rockfish-Other	77,799	11,068	92,668	29,464			170,467	40,532	$.23
Sablefish	7,699	5,322	82,103	53,542			89,802	58,864	$.65
Salmon-Chinook	20,471	36,952	5,282	10,276			25,753	47,228	$1.83
Salmon-Chum	70,199	34,299					70,199	34,299	$.48
Salmon-Pink	272,392	84,964					272,392	84,964	$.31
Salmon-Red	317,315	396,420					317,315	396,420	$1.24
Salmon-Silver	45,372	46,697	2,115	2,759			47,487	49,456	$1.04
Scup Or Porgy	3,258	2,197	8,194	6,480			11,452	8,677	$.75

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Sea Bass-Bk.-A.	606	759	4,279	4,553			4,885	5,312	$1.08
Sea Bass-White	48	104	75	161			123	265	$2.15
Sea Trout-Gray	6,339	3,960	3,541	1,817			9,880	5,777	$.58
Sea Trout-Spot	1,711	2,234	6	6			1,717	2,240	$1.30
Sea Trout-White	207	174	65	24			272	198	$.72
Shark-Dogfish	6,634	852	29,124	2,936			35,758	3,788	$.10
Sharks-Unc	2,179	913	12,772	7,387	63	38	15,014	8,338	$.55
Snapper-Red	139	575	2,962	7,836			3,101	8,411	$2.71
Snapper-Other	808	1,507	6,314	11,331			7,122	12,838	$1.80
Mackerel-Spa	1,805	726	3,973	1,859			5,778	2,585	$.44
Striped Bass	1,028	1,378	27	75			1,055	1,453	$1.37
Swordfish	884	1,983	11,841	36,367	1,072	2,501	13,797	40,851	$2.96
Tilefish			3,400	5,770			3,400	5,770	$1.69
Tuna-Albacore	128	183	4,220	3,566	2,983	2,570	7,331	6,319	$.86
Tuna-Bluefin	15	77	3,314	23,614	2,186	1,145	5,515	24,836	$4.50
Tuna-Little	27	3	282	153			309	156	$.50
Tuna-Skipjack	536	1,086	1,100	2,185	5,762	3,076	7,398	6,347	$.85
Tuna-Yellowfin	1,973	4,930	13,560	30,788	20,747	13,158	36,280	48,876	$1.34
Tuna-Unclass.	172	51	536	742	32	73	740	866	$1.17
Tuna-Bigeye	923	3,329	2,967	10,969	930	3,342	4,820	17,640	$3.65

1990 LANDINGS FOR THE UNITED STATES

SPECIES	DISTANCE FROM U.S. SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Whiting	1,431	430	43,069	10,851			44,500	11,281	$.25
Fish-Marine-O.	163,223	60,768	102,300	38,494	1,482	2,057	267,005	101,319	$.37
TOTAL FISH	3,888,348	1,034,563	4,472,225	887,947	35,345	28,029	8,395,918	1,950,539	
Crab-Blue-Hard	201,831	77,378	7	3			201,838	77,381	$.38
Crab-Dungeness	26,236	40,266	5,175	7,833			31,411	48,099	$1.53
Crab-King	16,959	73,419	16,958	73,416			33,917	146,835	$4.32
Crab-Snow	10,330	16,537	203,065	169,662			213,395	186,199	$.87
Crab-Other	8,214	7,384	10,641	17,939			18,855	25,323	$1.34
Lobster-Amer.	50,011	121,284	11,006	33,393			61,017	154,677	$2.53
Lobster-Spiny	2,825	9,378	4,295	13,871			7,120	23,249	$3.26
Shrimps-A.	179,089	232,939	165,892	258,298			344,981	491,237	$1.42
Clam-(Meat)Hard	9,833	41,889					9,833	41,889	$4.26
Clam-(Meat)O.Q.	256	755	46,471	15,446			46,727	16,201	$.34
Clam-(Meat)Soft	5,756	22,362					5,756	22,362	$3.88
Clam-(Meat)Surf	18,801	7,307	52,971	24,937			71,772	32,244	$.44
Clam-Uncl.	3,521	17,169	1,589	329			5,110	17,498	$3.42
Oyster-Meats-A.	29,193	93,718					29,193	93,718	$3.21
Scallop(Mts)Bay	539	3,102					539	3,102	$5.75
Scallop(Mts)Cal			1,135	1,281			1,135	1,281	$1.12

1990 LANDINGS FOR THE UNITED STATES

SPECIES	DISTANCE FROM U.S.SHORES FROM 0 TO 3 MILES THOUSAND POUNDS	FROM 0 TO 3 MILES THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	BETWEEN 3 AND 200 MILES THOUSAND DOLLARS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND POUNDS	HIGH SEAS OR OFF FOREIGN SHORES THOUSAND DOLLARS	TOTAL THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
Scallop(Mts)Sea	1,783	7,270	38,134	146,426			39,917	153,696	$3.85
Squid	23,216	1,743	14,234	1,325			37,450	3,068	$.08
Squid-Illex	9	2	24,960	6,531			24,969	6,533	$.26
Squid-Loligo	4,281	2,028	29,191	12,185			33,472	14,213	$.42
Shellfish-Other	89,113	60,441	4,983	2,652			94,096	63,093	$.67
TOTAL SHELLFISH	681,796	836,371	630,707	785,527			1,312,503	1,621,898	
GRAND TOTAL	4,570,144	1,870,934	5,102,932	1,673,474	35,345	28,029	9,708,421	3,572,437	

THE NATIONAL MARINE FISHERIES SERVICE ESTIMATED THE DISTANCE FROM SHORE FOR TEXAS LANDINGS DATA COLLECTED BY THE TEXAS PARKS AND WILDLIFE DEPART.

Statistical Highlights

Fisheries of the United States, 1990

prepared by NMFS Fisheries Statistics Division

U.S. COMMERCIAL FISHERIES

World-wide catch by U.S. Vessels (1):
11.0 billion pounds (5.0 million metric tons) round weight
Valued at $3.9 billion - exvessel value

U.S. Landings in the 50 United States (2):
9.7 billion pounds (4.4 million metric tons) round weight
Valued at $3.6 billion

Of 9.7 billion pounds:
8.4 billion pounds (3.8 million metric tons) of finfish
1.3 billion pounds (595,000 metric tons) of shellfish

Of 9.7 billion pounds:
7.3 billion pounds (3.3 million metric tons) for food
2.4 billion pounds (1.1 million metric tons) for industrial purposes
(including bait and animal food)

Total supply (landings + imports) of edible fishery products:
13.0 billion pounds (5.9 million metric tons) round weight
7.3 billion pounds (3.3 million metric tons) domestic production
5.6 billion pounds (2.5 million metric tons) imported (43 percent)

Per capita consumption: 15.5 pounds (7.0 kilograms) edible meat

FOREIGN TRADE

Imports - edible
2.9 billion pounds (1.3 million metric tons) product weight
Valued at $5.2 billion

Exports - edible
1.9 billion pounds (871,100 metric tons) product weight
Valued at $2.8 billion

CATCH IN THE EEZ

Total - 6.0 billion pounds (2.7 million metric tons)
U.S. domestic - 6.0 billion pounds (2.7 million metric tons)
Foreign countries - 20.3 million pounds (9,200 metric tons) excluding tunas.

U.S. domestic catch is 99 percent of the total

U. S. CATCH BY DISTANCE FROM SHORE (1)

Distance	Billion pounds	Million mt	Percent	Billion dollars	Percent
0-3 miles	4.5	2.1	41	1.9	48
3-200 miles	6.0	2.7	54	1.8	46
International	0.5	0.2	5	0.2	6
TOTAL	11.0	5.0	100	3.9	100

U.S. DOMESTIC LANDINGS

Rank	Volume	Percent	Value	Percent
1	AK Pollock	33	Salmon	17
2	Menhaden	20	Shrimp	14
3	Salmon	8	Crabs	14
4	Cods	7	AK Pollock	8
5	Flounders	5	Flounders	4

WORLD FISHERIES (Live weight, 1989)

Total catch 219.4 billion pounds (99.5 million metric tons)
U.S. catch 12.7 billion pounds (5.7 million metric tons)
(including weight of mollusk shells)

U.S. catch is 5.8 percent of world catch

COMMERCIAL FISHERIES CONTRIBUTION TO GNP

U.S. consumers spent an estimated $26.7 billion for fishery products. In producing and marketing these items, the commercial fishing industry contributed $16.6 billion in value added to the U.S. GNP.

MARINE RECREATIONAL FISHERIES

U.S. total fishermen	17 million
Expenditures for fishing	$7.2 billion dollars

Major species:

Sea Bass	Drums & Croakers
Porgies	Sea basses
Bluefish	Smelts
Herring	Spotted seatrout

1990 Atlantic coast catch: 317.7 million pounds (does not include Alaska, Hawaii, and Pacific)

FOOTNOTES

(1) Catch data includes all catches by U.S.-flag vessels which are landed in the continental United States and Hawaii, Puerto Rico and other foreign ports, and catches unloaded onto foreign vessels within the U.S. EEZ (i.e., joint ventures).

(2) Commercial landings by U.S. fishermen at ports in the 50 United States, excluding catches by U.S.-flag vessels which are landed in Puerto Rico and other foreign ports, and catches unloaded onto foreign vessels within the U.S. EEZ (i.e., joint ventures).

For further information contact:

Fisheries Statistics Division
National Marine Fisheries Service
1335 East West Highway Room 8313
Silver Spring, MD 20910

(301) 427 - 2328

ESTIMATED NUMBER OF COMMERCIAL FISHING VESSELS (1) AND FISHING BOATS (2) BY REGION AND STATE, 1989

REGIONS	VESSELS	BOATS	TOTAL
Northeast Fisheries:			
Connecticut	124	465	589
Delaware	40	284	324
Maine	1,671	6,389	8,060
Maryland	(3)	(3)	(3)
Massachusetts	899	5,169	6,068
New Hampshire	118	429	547
New Jersey	402	1,456	1,858
New York	504	3,865	4,369
Rhode Island	220	2,439	2,659
Virginia	(3)	(3)	(3)
South Atlantic and Gulf Fisheries:			
North Carolina	1,411	9,280	10,691
South Carolina	468	1,005	1,473
Georgia	378	491	869
Florida	5,600	2,900	8,500
Alabama	536	555	1,091
Mississippi	632	1,250	1,882
Louisiana	4,430	7,850	12,280
Texas	2,600	3,200	5,800
West Coast Fisheries:			
Washington	2,746	3,087	5,833
Oregon	1,542	1,964	3,506
Alaska	7,711	9,251	16,962
California	3,365	3,630	6,995
Hawaii	190	1,200	1,390
Great Lakes Fisheries (1977):			
New York	5	53	58
Pennsylvania	11	38	49
Ohio	31	105	136
Missouri	71	110	181
Indiana	2	35	37
Illinois	3	-	3
Wisconsin	96	164	260
Minnesota	6	81	87
Mississippi River Fisheries (1977):			
Alabama	-	172	172
Arkansas	-	2,391	2,391
Idaho	-	3	3
Illinois	-	207	207
Indiana	-	14	14
Iowa	-	489	489
Kansas	-	11	11
Kentucky	-	599	599
Louisiana	-	466	466
Minnesota	-	1,001	1,001
Mississippi	-	1,073	1,073
Missouri	-	11	11
Montana	-	180	180
Nebraska	-	5	5
Oklahoma	-	46	46
South Dakota	-	16	16
Tennesee	-	984	984
Texas	-	330	330
West Virginia	-	19	19
Wisconsin	-	596	596
Grand Total	*35,812*	*75,358*	*111,170*

(1) Vessels are documented craft greater than 5 net registered tons.
(2) Boats are craft less than 5 net registered tons.
(3) Data are not available at this time.

MARCH 28, 1990

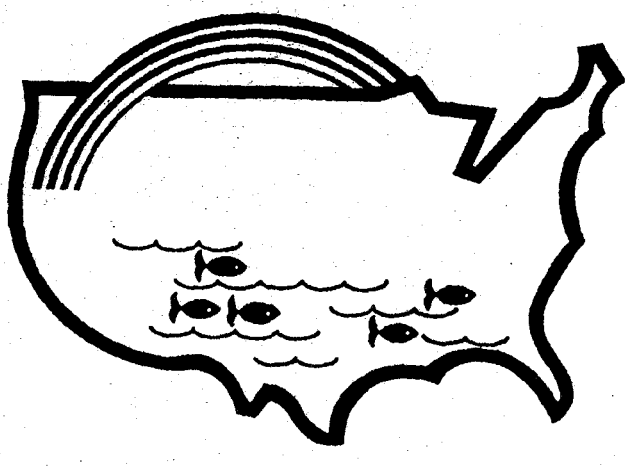
Source: National Marine Fisheries Services, Fisheries Statistics Division, F/RE1
1335 East-West Highway, Room 8313, Silver Spring, MD 20910
PHONE--Area Code 301, 427-2328

Current Fishery Statistics No. 9000

Fisheries of the United States, 1990

Supplemental

May 1991



U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

National Marine Fisheries Service

LETTER FROM THE ASSISTANT ADMINISTRATOR:

The fisheries of the United States represent a vast renewable natural resource providing the people of this nation with food, income, employment, and recreation. The U.S. has about 90,000 miles of tidal shoreline which support marine resources that are among the largest, most varied, and valuable in the world. These resources contribute significantly to the quality of American life.

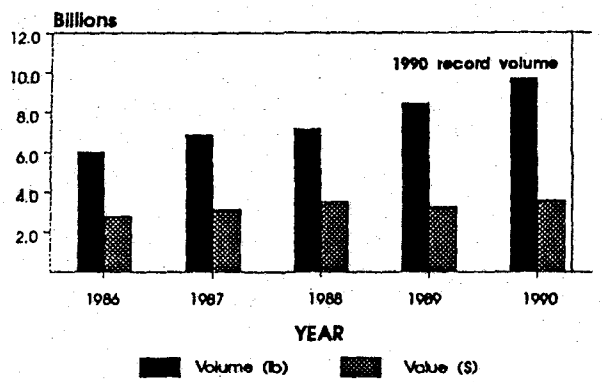
Fisheries are very important to our economy. In 1990, U.S. commercial fishermen landed 9.7 billion pounds of fish and shellfish with a dockside value of $3.6 billion, while the U.S. industry exported more than $5.6 billion in fishery products. Marine recreational fisheries annually involve some 17 million anglers who spend over $7.2 billion. As a nation we spent more than $26.7 billion on seafood purchases in 1990, and consumed an estimated 15.5 pounds of seafood per capita.

Holding stewardship over America's living marine resources is the National Oceanic and Atmospheric Administration (NOAA), an agency of the U.S. Department of Commerce. Through its National Marine Fisheries Service, NOAA protects and enhances these resources and their environment. By encouraging and assisting the U.S. fishing industry, NOAA seeks to optimize economic benefits for the nation and ensure continued opportunities for future generations.

William W. Fox, Jr.
NOAA Assistant Administrator for Fisheries

The Fisheries Statistics Division of the National Marine Fisheries Service maintains a variety of data on U.S. and world fisheries. This brochure provides a general overview of the size, scope, and world position of the U.S. fisheries, and the U.S. supply and consumption of fishery products.

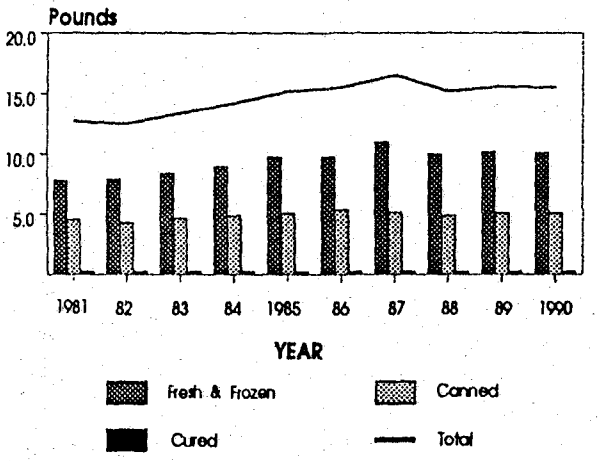
U.S. Commercial Landings



Commercial landings by U.S. fishermen in 1990 amounted to 9.7 billion pounds (4.4 million metric tons) of edible and non-edible fishery resources valued at $3.6 billion. A metric ton is equal to 2,204.6 pounds. Over 300 species are taken commercially. The "round" weights shown in the above graph and elsewhere in this brochure include the weights of whole fish, but not the shell weights of shellfish.

Per capita Consumption

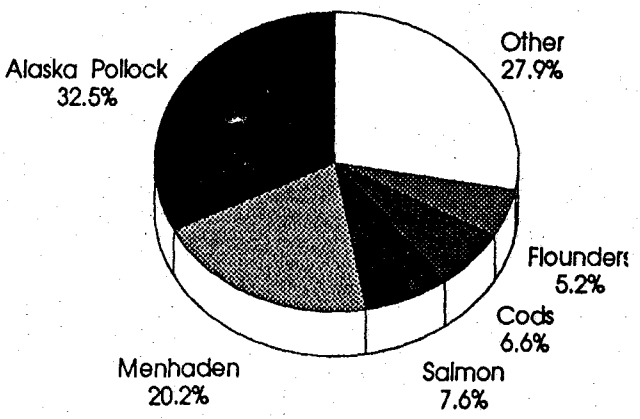
Per capita consumption of commercially caught fish and shellfish in 1990 was 15.5 pounds. Per capita consumption of fish caught by marine recreational anglers is estimated to be between three and four pounds each year. The current emphasis on the role of diet in health makes the nutritional qualities of seafood especially appreciated, since most fish and shellfish have a low-fat/high-protein content.



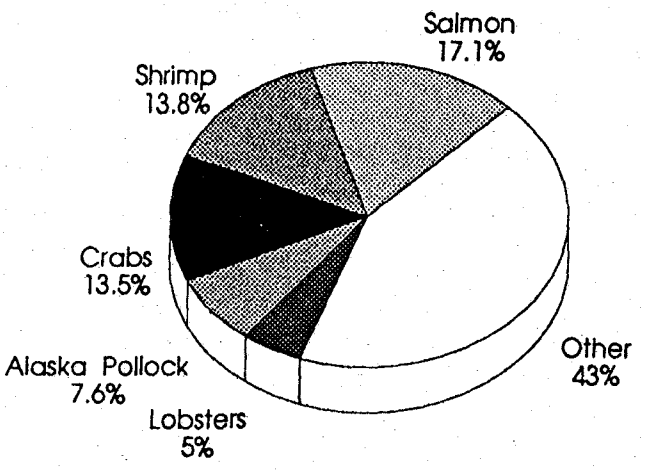
Major Commercial Species

In terms of volume, the top five species caught by commercial fishermen in 1990 were pollock, menhaden (an oily fish used primarily for industrial purposes), salmon, cods and flounders. Salmon, shrimp, crabs, pollock, and lobsters were the top five species in terms of value. Dutch Harbor-Unalaska, Alaska with landings of 509.9 million pounds (231.3 thousand metric tons), was the leading port in terms of volume. New Bedford, Massachusetts with landings valued at $160.4 million, was the leading port in terms of value.

Total Volume = 9.7 billion lb



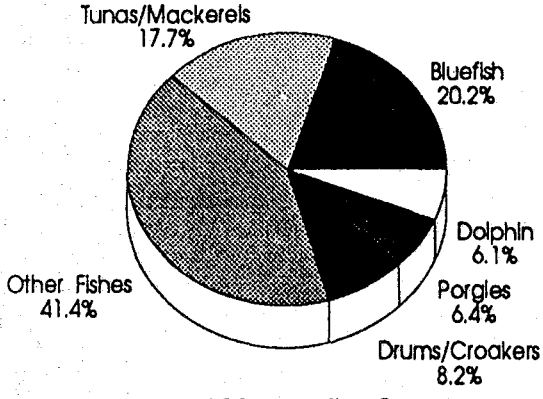
Total Value = $3.6 billion



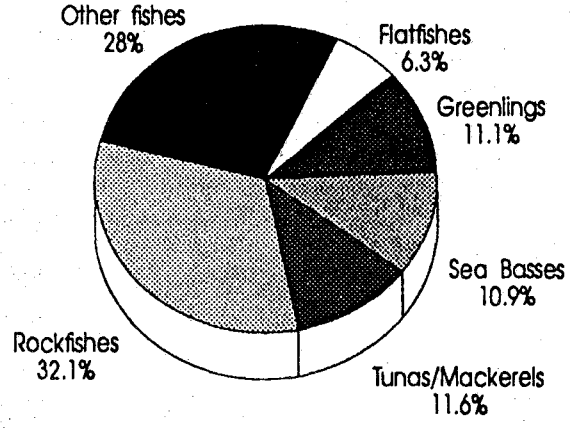
Major Recreational Species

The five species groups most commonly caught by marine recreational anglers in 1990 on the Atlantic and Gulf coasts by weight were bluefish, tunas/mackerels, drums/croakers, porgies, and dolphin. The estimated number of recreational finfish caught were 230.9 million fish. These fish weighed approximately 317.7 million pounds and were taken on an estimated 39.8 million fishing trips. Of this amount, 141.5 million lb (45 percent) were landed, the balance was released. The total catch in number on the Pacific coast for 1989, the last year data are available, was estimated to be 41.3 million fish (27.8 million pounds), exclusive of salmon, which historically has been about two percent of the total Pacific recreational catch.

1990 Atlantic & Gulf Coast Landings = 141.5 million lb

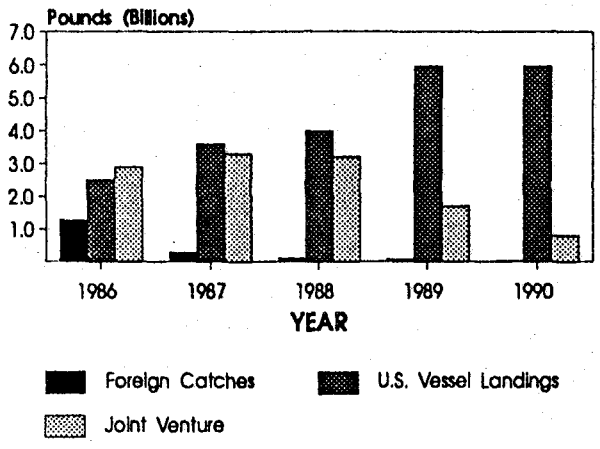


1989 Pacific Coast Landings = 27.8 million lb



Catch in the U.S. EEZ

In the interest of commercial and recreational fishermen, the Magnuson Fishery Conservation and Management Act of 1976 (MFCMA) was enacted by the Congress to provide the national focus and effort deemed necessary to protect our fishery resources from overfishing and establish a mechanism for conservation. The MFCMA established a U.S. Exclusive Economic Zone (EEZ) extending from the seaward boundaries of the territorial sea (3 nautical miles from shore in most cases) to 200 nautical miles from shore. All fishery resources within the EEZ, except highly migratory



species of tuna, are subject to management by one or more of the eight Regional Fishery Management Councils created by the MFCMA. The Councils analyze scientific data and hold frequent public meetings in the process of developing Fishery Management Plans (FMP's) for species requiring management. The FMP's are designed to provide for the optimum utilization of the resources, while giving preference to U.S. fishermen over foreign fishermen. Thirty-two FMP's were fully implemented as of December 31, 1990.

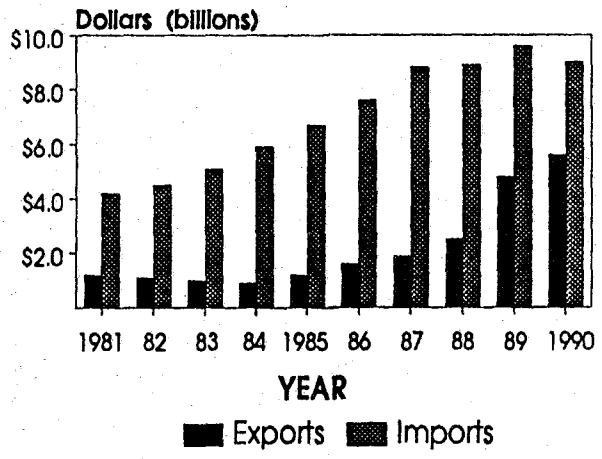
Joint Ventures

The MFCMA led to the development of "joint ventures" in 1979, wherein U.S. commercial fishermen catch and sell to foreign vessels certain species for which U.S. demand is low relative to the abundance of the species. United States

fishermen thus derive income from species which would otherwise be underutilized, and also benefit by fuel savings since the catches are transferred to foreign vessels at sea, eliminating the need to return to port to unload. Joint venture catches grew dramatically from 23.3 million pounds (10.6 thousand metric tons) worth $1.3 million in 1979 to 3.2 billion pounds (1,452.2 thousand metric tons) worth $221.1 million in 1988, but in 1990 the catch decreased to 800,600 pounds (363.1 thousand metric tons) worth $51.3 million. The U.S. harvesting and processing capabilities have expanded greatly in the last few years, decreasing the need for these joint venture arrangements.

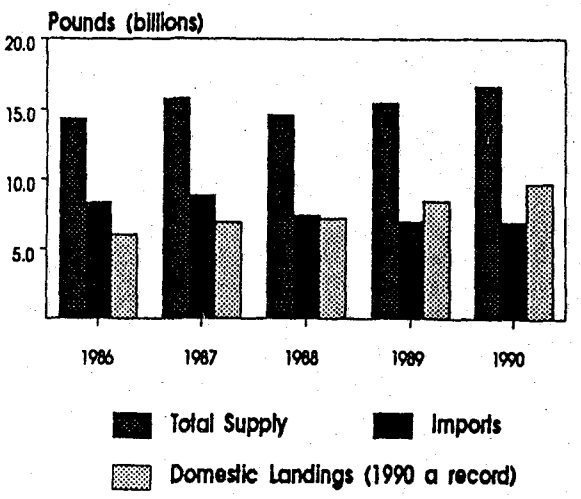
Foreign Trade

Total fishery imports in 1990 were valued at $9.0 billion (down 6 percent), while U.S. exports of fishery products were valued at $5.6 billion (up 20 percent). The U.S. has run a fishery trade deficit since 1895. Shrimp imports alone were valued at $1.7 billion in 1990. Other major items were fresh and frozen fish fillets, and frozen fish blocks used to produce fish sticks. Major export items included salmon (fresh, frozen and canned); groundfish (fresh and frozen); and blocks and slabs (fresh and frozen).



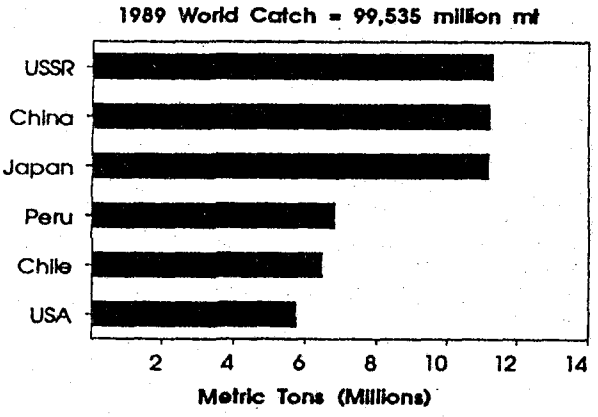
U.S. Supply of Fishery Products

Despite the generally increasing volume of U.S. commercial landings over the years, the U.S. has remained a major importer of fishery products, and 1990 imports accounted for 41.7 percent of the total U.S. supply of all fishery products.



Leading Fishing Nations

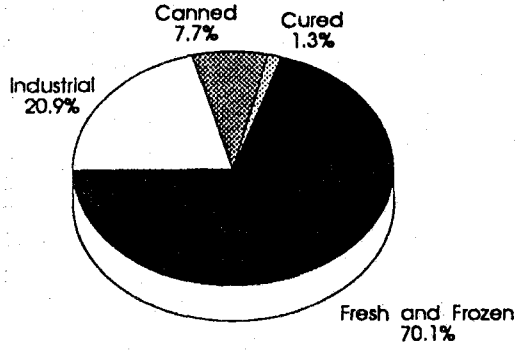
The U.S. ranked sixth among major fishing nations in 1989 world catch, the most recent year for which comparable data are available. The "live" weights referred to in the graph include shell weights, whereas weights used elsewhere in this brochure do not.



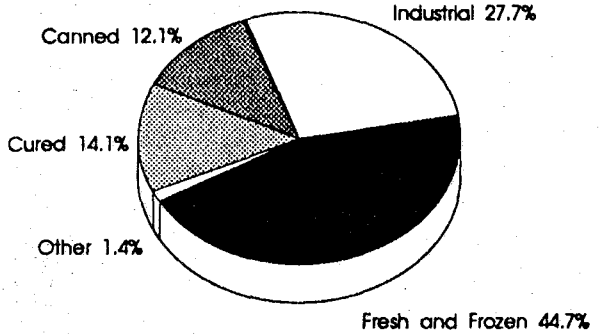
Disposition of Catch: U.S. and World

The U.S. recorded its highest percentage of catch utilized for food in 1990, setting a record (7.3 million pounds). This was due largely to the increased catch of pollock and other major species used in surimi and other analog products. Industrial (non-food) purposes showed an increase with 2.4 million pounds (up 5 percent) after declining for two years in a row. The difference in the portion of catch which is cured reflects the dietary preferences and lesser availability of refrigeration among some foreign nations.

1990 - U.S.



1989 - World



Additional Information

Contact the nearest NMFS Regional Office for more information about U.S. fisheries, including such NMFS programs as marketing, consumer services, and voluntary fishery product inspection. For more information about Regional Fishery Management Councils, contact the Council nearest you.

NMFS REGIONAL OFFICES

Northeast Region
One Blackburn Drive
Gloucester, MA 01930
(508) 281-9300

Northwest Region
7600 Sand Point Way, N.E.
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Seattle, WA 98115
(206) 526-6150

Southeast Region
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St. Petersburg, FL 33702
(813) 893-3141

Alaska Region
Federal Bldg.
P.O. Box 21668
709 West Ninth St.
Juneau, AK 99802
(907) 586-7221

Southwest Region
300 South Ferry St.
Terminal Island, CA 90731
(213) 514-6196

REGIONAL FISHERY MANAGEMENT COUNCILS

New England
Suntaug Office Park
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Saugus, MA 01906
(617) 231-0422

Caribbean
Banco de Ponce Bldg.
Suite 1108
Hato Rey, PR 00918
(809) 753-6910

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Federal Bldg.
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Dover, DE 19901
(302) 674-2331

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Anchorage, AK 99510
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South Atlantic
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Charleston, SC 29407
(803) 571-4366

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Additional copies of this publication are available from:
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U.S. MARINE RECREATIONAL FISHERIES

DATA COLLECTION. While data on commercial fisheries have been collected for many years, detailed statistical information on marine recreational fishing is also required to support a variety of fishery management and development purposes. These include the objectives of the Magnuson Fishery Conservation and Management Act, Public Law 94-265, as amended. However, the lack of a continuous or systematic collection of marine recreational fishery data had prevented the accomplishment of these goals. Therefore, NMFS began a new comprehensive Marine Recreational Fishery Statistical Survey (MRFSS) in 1979. Surveys have been conducted in the following areas and years:

Atlantic and Gulf, 1979 through 1990
Pacific, mid-1979 through 1989
Western Pacific, 1979 through 1981
Caribbean, 1979, 1981

Preliminary estimates of catch and trips from the MRFSS for the Atlantic and Gulf for 1990 are presented in the following tables. Summary graphs for 1981-1990 catch and trips are also shown. The survey is being conducted in 1991 along the Atlantic and Gulf coasts.

These surveys consist of an intercept survey of fishermen in the field and an independent telephone survey of households. Each component survey provides certain information that is combined to produce estimates of recreational catch, fishing effort and participation. Estimates are generated by subregion or state, species, mode and area of fishing. In addition, information on catch rates and fish lengths and weights is obtained.

The MRFSS is only one of several NMFS efforts to obtain data on recreational fisheries. Specialized surveys on particular fisheries or to obtain socio-economic data are also conducted by NMFS.

DATA TABLES. The MRFSS catch data show the total number of fish caught for twenty frequently caught species groups on the Atlantic and Gulf coasts. Total number caught includes those fish brought ashore in whole form which were available for identification, weighing, and measuring as well as those not available for identification. This latter category includes those fish used for bait, discarded, filleted or released alive. Each fisheries group may contain one or more species, genera, or families.

Tables show the distribution of total catch by subregion, fishing area and mode. The fishing areas are: ocean 3 miles or less from land, ocean more than 3 miles from land, and inland (sounds, river, bays). However, ocean data for the Gulf coast of Florida are reported as 10 miles or less from land and more than 10 miles from land.

The fishing modes are: shore (man-made structures and beach/bank from previous surveys), party/charter boat, and private/rental boat. However, in 1990 partyboats were not sampled by the MRFSS in the South Atlantic and Gulf subregions, so party/charter estimates include only charterboats in these areas.

The fishing trip tables indicate the estimated number of trips by coastal residents (generally residing within 25 miles of the coast), non-coastal residents of the subregion bordering saltwater, and non-residents. They also include the estimated number of trips by fishing mode.

The 1990 survey did not include Texas or the January and February period for Georgia, South Carolina and the Atlantic coast states north of North Carolina. The data presented below will be finalized in a separate MRFSS report to be published later this year.

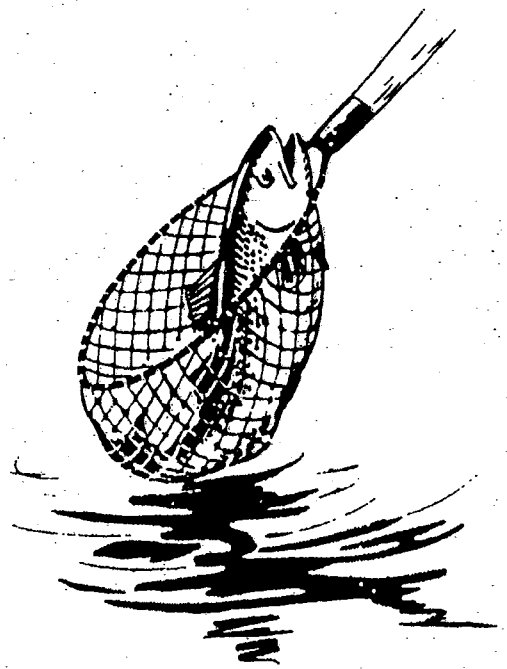
PRELIMINARY 1990 MRFSS DATA. The Atlantic and Gulf coasts marine recreational finfish catch in 1990 was an estimated 230.9 million fish. These fish weighed approximately 317.7 million pounds and were taken on an estimated 39.8 million fishing trips.

In terms of number of fish, frequently caught species in 1990 were herrings, spot, bluefish, Atlantic croaker and black sea bass. Top-ranked species in each subregion in 1990 were scup in the North Atlantic, spot in the Mid-Atlantic, bluefish in the South Atlantic, and herrings in the Gulf of Mexico. The Gulf (41 percent) and Mid-Atlantic (36 percent) subregions accounted for the highest numbers of Atlantic and Gulf coast fishes.

The inland, ocean 3 miles or less from shore, and ocean 10 miles or less from shore areas accounted for approximately 86 percent of the Atlantic and Gulf coasts catch in number. The remaining 14 percent of the catch in number was from the Exclusive Economic Zone (EEZ), the principal area of NMFS management authority. However, for some species (e.g., red snapper) over 75 percent of the catch was made in the EEZ.

Sixty-five percent of the Atlantic and Gulf coasts catch was taken in the private/rental boat mode in 1990. However, other modes were important for a particular species such as king mackerel from the charter boat mode and kingfishes from the shore mode. Overall, shore mode catches were 25 percent of the total and party/charter boat catches (excluding South Atlantic and Gulf partyboats) were 10 percent of the total.

Coastal residents accounted for 74 percent of the Atlantic and Gulf trips made in 1990. Non-residents accounted for an additional 22 percent of the trips. Total trips in the Mid-Atlantic exceeded all other subregions.



U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL ANGLERS BY SPECIES GROUP AND SUBREGION: ATLANTIC AND GULF COASTS, JANUARY 1990 - DECEMBER 1990

Species group	North Atlantic	Mid-Atlantic	South Atlantic	Gulf of Mexico	Total
	Thousands				
Herrings	298	355	1,456	16,684	18,792
Saltwater catfishes	*	*	1,471	10,114	11,585
Black sea bass	86	9,217	1,095	2,465	12,862
Bluefish	2,865	9,011	3,319	370	15,565
Red snapper	*	*	-	758	773
Scup	5,210	5,273	-	*	10,484
Pinfish	*	76	1,764	4,697	6,536
Sheepshead	*	-	722	2,935	3,658
Spotted seatrout	*	110	1,315	10,237	11,662
Weakfish	-	1,743	161	*	1,904
Sand seatrout	*	*	*	4,125	4,125
Spot	*	14,780	2,763	358	17,901
Kingfishes	-	352	1,895	634	2,882
Atlantic croaker	*	6,078	3,172	3,794	13,044
Red drum	*	-	475	2,253	2,730
Mullets	*	142	1,231	2,221	3,593
King mackerel	*	-	503	499	1,004
Summer flounder	204	7,138	1,098	*	8,440
Winter flounder	1,721	2,033	*	*	3,753
Other fishes	9,863	25,672	11,969	32,074	79,577
Total	*20,248*	*81,986*	*34,423*	*94,216*	*230,872*

Note:-- A dash (-) denotes less than thirty thousand. However the number is included in row and column totals. An asterisk (*) denotes none reported. Figures for the Gulf of Mexico do not include the recreational catch for Texas. Figures for the South Atlantic and Gulf of Mexico do not include catches for partyboats. Row and column totals may not add due to rounding.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL ANGLERS BY SPECIES GROUP AND FISHING MODE: ATLANTIC AND GULF COASTS, JANUARY 1990 - DECEMBER 1990

Species group	Shore	Charter Boats	Party/ Charter Boats	Private/ Rental Boats	Total
	Thousands				
Herrings	9,823	143	39	8,788	18,792
Saltwater catfishes	3,428	58	*	8,100	11,585
Black sea bass	1,368	308	3,360	7,826	12,862
Bluefish	5,086	67	2,005	8,408	15,565
Red snapper	67	239	*	466	773
Scup	652	*	2,095	7,738	10,484
Pinfish	2,875	51	-	3,604	6,536
Sheepshead	568	88	*	3,003	3,658
Spotted seatrout	1,097	213	-	10,351	11,662
Weakfish	45	-	287	1,572	1,904
Sand seatrout	433	-	*	3,669	4,125
Spot	3,645	-	1,433	12,824	17,901
Kingfishes	1,853	-	-	1,017	2,882
Atlantic croaker	2,210	-	108	10,722	13,044
Red drum	406	75	*	2,249	2,730
Mullets	1,868	*	*	1,725	3,593
King mackerel	182	371	-	451	1,004
Summer flounder	1,022	-	744	6,673	8,440
Winter flounder	762	*	234	2,758	3,753
Other fishes	19,478	5,567	6,685	47,848	79,577
Total	*56,868*	*7,207*	*17,008*	*149,790*	*230,872*

Note:-- A dash (-) denotes less than thirty thousand. However the number is included in row and column totals. An asterisk (*) denotes none reported. Figures for Charter Boats are for the South Atlantic and Gulf of Mexico subregions (without Texas). Figures for Party/Charter Boats are for the North and Mid- Atlantic subregions. Row and column totals may not add due to rounding.

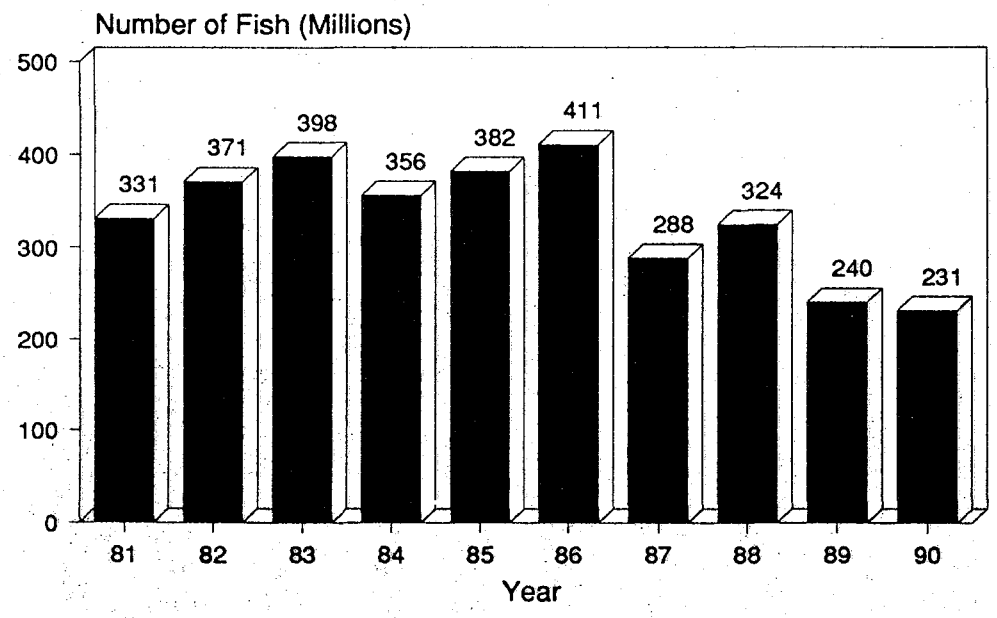
U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL ANGLERS BY SPECIES GROUP AND AREA OF FISHING: ATLANTIC AND GULF COASTS, JANUARY 1990 - DECEMBER 1990

Species group	Ocean				Inland	Total
	3 Mi or less	Over 3 Mi	10 Mi or less	Over 10 Mi		
	Thousands					
Herrings	1,221	265	2,468	99	14,740	18,792
Saltwater catfishes	2,491	487	705	43	7,859	11,585
Black sea bass	1,488	3,993	934	681	5,766	12,862
Bluefish	5,412	1,765	121	-	8,265	15,565
Red snapper	66	515	108	75	-	773
Scup	3,479	956	*	-	6,048	10,484
Pinfish	676	69	1,436	220	4,135	6,536
Sheepshead	656	95	151	-	2,752	3,658
Spotted seatrout	1,870	346	2,068	89	7,290	11,662
Weakfish	458	323	*	*	1,124	1,904
Sand seatrout	1,621	744	368	43	1,349	4,125
Spot	2,382	290	-	*	15,227	17,901
Kingfishes	1,471	46	241	-	1,110	2,882
Atlantic croaker	2,093	164	57	-	10,729	13,044
Red drum	620	118	352	34	1,606	2,730
Mullets	653	51	130	*	2,759	3,593
King mackerel	192	393	331	82	-	1,004
Summer flounder	3,278	429	*	*	4,733	8,440
Winter flounder	953	65	*	*	2,735	3,753
Other fishes	14,294	12,127	11,188	7,309	34,659	79,577
Total	*45,374*	*23,242*	*20,661*	*8,696*	*132,899*	*230,872*

Note:--"Ocean 10 mi or less" and "ocean over 10 mi" refers only to the Florida Gulf coast where state jurisdiction extends to three marine leagues, approximately ten nautical miles. The total ocean estimate is additive across the four areas. A dash (-) denotes less than thirty thousand. However the number is included in row and column totals. An asterisk (*) denotes none reported. Row and column totals may not add due to rounding.

MARINE RECREATIONAL FISHERIES CATCH ATLANTIC AND GULF COASTS, 1981 - 1990



Note: 1990 data are provisional.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL ANGLERS BY SUBREGION AND AREA OF RESIDENCE: ATLANTIC AND GULF COASTS, JANUARY 1990 - DECEMBER 1990

Subregion	Trips by coastal residents	Trips by non-coastal residents	Non-resident trips	Total
	Thousands			
North Atlantic.....	3,906	354	1,540	5,800
Mid-Atlantic.....	9,709	327	2,696	12,732
South Atlantic.....	8,101	632	2,369	11,102
Gulf of Mexico (1).....	7,634	251	2,265	10,150
Total (2).....	*29,350*	*1,564*	*8,870*	*39,784*

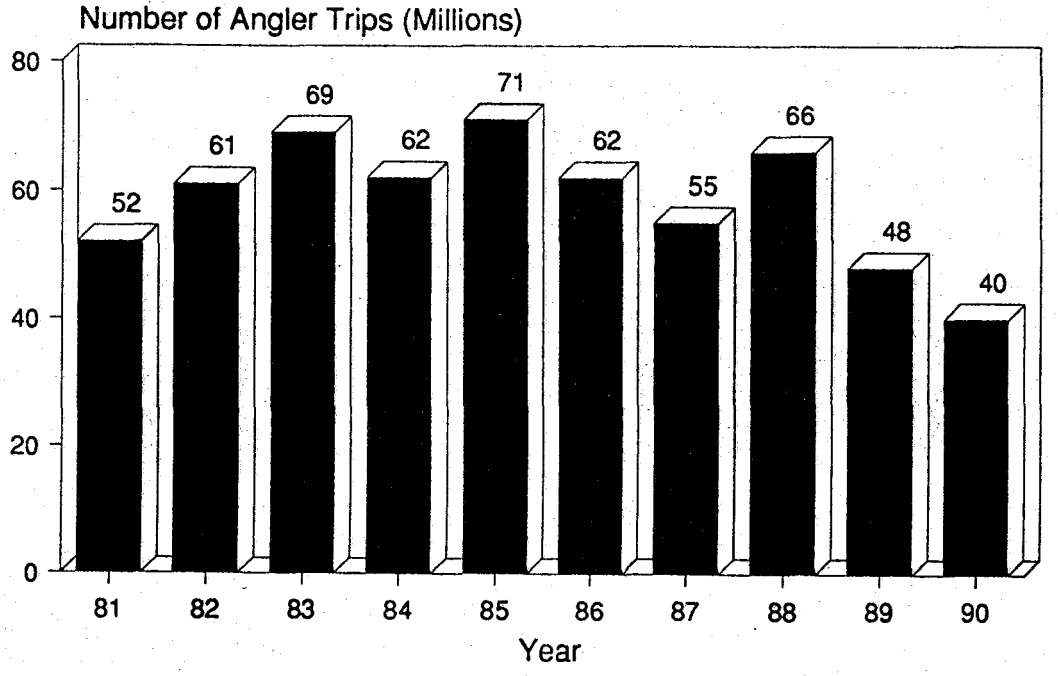
(1) Excludes estimates for Texas.
(2) Excludes January/February trips from Maine through Georgia, November/December trips from Maine and New Hampshire, and partyboat trips from the South Atlantic and Gulf of Mexico subregions.

ESTIMATED TOTAL NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL ANGLERS BY SUBREGION AND MODE OF FISHING: ATLANTIC AND GULF COASTS, JANUARY 1990 - DECEMBER 1990

Subregion	Shore	Charter Boats	Party/ Charter Boats	Private/ Rental Boats	Total
	Thousands				
North Atlantic.....	2,324	*	532	2,944	5,800
Mid-Atlantic.....	3,745	*	1,592	7,395	12,732
South Atlantic.....	5,832	482	*	4,788	11,102
Gulf of Mexico (1)	3,812	527	*	5,811	10,150
Total (2).....	*15,713*	*1,009*	*2,124*	*20,938*	*39,784*

(1) Excludes estimates for Texas.
(2) Excludes January/February trips from Maine through Georgia, November/December trips from Maine and New Hampshire, and partyboat trips from the South Atlantic and Gulf of Mexico subregions.

MARINE RECREATIONAL FISHING TRIPS ATLANTIC AND GULF COASTS, 1981 - 1990



Note: 1990 data are provisional.