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FISHING TRENDS AND CONDITIONS IN THE SOUTHEAST REGION 1991

Kim Newlin, Editor



U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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1991**

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ABSTRACT: This report provides first-hand information on the fishing trends and conditions in the commercial and recreational fisheries of the southeastern United States during 1991. The information and 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 in the commercial and recreational fisheries of the southeastern United States during 1991. The information and 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 and do not necessarily represent analyzed data. The report also includes preliminary data on the commercial and recreational fishery landings for 1991.

The Southeast Fisheries Science 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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1991 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 1991. The landings and value data in the report are preliminary and subject to change.

Southeast Regional Summary

Commercial landings of fish and shellfish in the southeastern region of the United States in 1991 increased 85.3 million pounds from 1990. The ex-vessel value of the total landings was \$810 million.

The most valuable fishery was the shrimp fishery with 265.6 million pounds with an ex-vessel value of \$478.4 million. The most dramatic increase in value this year was the spiny lobster fishery whose value increased 76% for a total value of \$27.5 million.

The second most dramatic increase was Spanish mackerel whose landings increased 29% (to 6.7 million pounds) and whose value increased 43% (to \$3.4 million). The sharpest decline was in shark landings which were down 23% to 9.7 million pounds. Menhaden landings were down only 8% by weight but were down 39% in ex-vessel value to \$34.3 million. Mississippi recorded the largest percentage decrease in landings in 1991 (25%) and a corresponding decrease in value of \$8.1 million, or approximately 19%.

As in past years, menhaden led other species with total pounds landed of 1.13 billion pounds; shrimp led other species with a value of \$478 million. The largest percentage gains in landings among key food fish and shellfish stocks were Spanish mackerel, up 1.5 million pounds, and oysters, up 2.5 million pounds.

Louisiana led other southeast states with total landings of 1.2 billion pounds valued at \$243.6 million. However, Texas edged out Louisiana this year with the highest shrimp landings at 95.8 million pounds worth \$200 million ex-vessel value.

Recreational landings of fish in the southeastern region of the United States in 1991 were up from 1990. The increase from 142 to 157 million pounds was an increase of 10.5%. The primary species caught were herrings, spotted seatrout, Atlantic croaker, spot, bluefish, scup, summer flounder, pinfishes, saltwater catfishes, black sea bass, searobins and red drum to name a few. The Gulf led the Southeast with 107.5 million pounds kept of the 227.8 million pounds caught.

Table 1. Change in the preliminary commercial landings and values of fish and shellfish in the southeastern states from 1990 to 1991.

STATE	1991		CHANGE (1990 to 1991)			
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	POUNDS %	DOLLARS %
NC	212,609	\$66,747	36,571	(\$4,795)	21	(7)
SC	19,138	\$28,534	4,622	\$4,522	32	19
GA	15,987	\$23,719	2,796	\$3,958	21	20
FL-E	45,378	\$49,874	(12,604)	(\$4,392)	(22)	(8)
S.A. REGION	293,112	\$168,874	31,385	(\$ 707)	12	0
FL-WC	117,353	\$112,182	(4,605)	(\$4,046)	(4)	(3)
AL	21,907	\$36,697	(762)	\$766	(3)	2
MS	238,388	\$34,297	(81,197)	(\$8,082)	(25)	(19)
LA	1,192,539	\$243,600	131,311	(\$19,867)	12	(8)
TX	108,315	\$214,410	9,124	\$32,059	9	18
GULF REGION	1,678,502	\$641,186	53,871	\$830	3	0
S. E. REGION	1,971,614	\$810,060	85,256	(\$ 123)	5	0

Note: () indicates a pound, dollar or percentage decrease when compared to 1990.

Table 2. Change in the preliminary commercial landings and values of fish and shellfish species in the southeastern region of the United States from 1990 to 1991.

SPECIES	1991		CHANGE (1990 to 1991)			
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	POUNDS %	DOLLARS %
GROUPERS	10,738	\$19,824	(1,485)	(\$779)	(12)	(4)
SNAPPERS	8,977	\$16,410	(69)	\$2,779	(1)	20
KING MACKEREL	4,260	\$5,087	22	\$338	1	7
SPANISH MACKEREL	6,713	\$3,357	1,521	\$1,011	29	43
MENHADEN	1,126,844	\$34,275	(93,002)	(\$22,289)	(8)	(39)
SHARKS	9,666	\$3,974	(2,842)	(\$2,058)	(23)	(34)
SWORDFISH	3,816	\$13,560	(304)	(\$326)	(7)	(2)
TUNA	8,035	\$20,112	(1,334)	(\$769)	(14)	(4)
OYSTERS	13,942	\$37,368	2,532	(\$970)	22	(3)
SHRIMP	265,510	\$478,369	(12,404)	\$24,388	(4)	5
SPINY LOBSTER	6,345	\$27,546	599	\$11,915	10	76
STONE CRAB	6,305	\$13,622	487	(\$4,195)	8	(24)

Note: Landings of fish, lobster and shrimp in live weight; oysters in meat weight.
 () indicates a pound, dollar or percentage decrease when compared to 1990.

Table 3. Change in the preliminary commercial landings and value of shrimp in the southeastern states from 1990 to 1991.

STATE	1991		CHANGE (1990 to 1991)			
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PERCENT POUNDS	CHANGE DOLLARS
NC	10,742	\$18,588	3,523	\$4,005	49	27
SC	9,137	\$16,781	4,218	\$4,580	86	38
GA	8,555	\$20,186	1,884	\$3,771	28	23
FL-EC	8,193	\$12,150	(1,451)	(\$23)	(15)	(0)
S.A. REGION	36,627	\$67,705	8,174	\$12,333	29	22
FL-WC	11,256	\$15,674	(1,926)	(\$9,448)	(15)	(38)
AL	14,936	\$32,776	(43)	\$1,808	(0)	6
MS	11,781	\$20,505	(3,464)	(\$1,115)	(23)	(5)
LA	95,088	\$141,461	(24,066)	(\$11,093)	(20)	(7)
TX	95,822	\$200,248	8,921	\$31,903	10	19
GULF REGION	228,883	\$410,664	(20,578)	\$12,055	(8)	3
S. E. REGION	265,510	\$478,369	(12,404)	\$24,388	(4)	5

Note: Shrimp landings in heads-on weight.

() indicates a pound, dollar, or percentage decrease when compared to 1990.

NORTH CAROLINA

Total Landings:

Commercial landings for 1991 totaled 212.6 million pounds with an ex-vessel value of 66.7 million dollars. Landings were 21% higher than in 1990. Average ex-vessel prices were down 22% for the year.

Edible Fish:

Total edible fish landings were down 7%. Average ex-vessel prices also decreased 7%. Landings increased for flounder (45%), spotted sea trout (164%), dogfish (346%) and dolphin fish (47%). Decreases were reported for croaker (40%), Atlantic mackerel (83%), mullet (51%), porgy (39%), sea bass (32%), and swordfish (57%). Decreases in landings of edible fish were reported for haul seines (33%), long haul seines (38%), and runaround gill nets (59%). Increased landings were reported for fish trawls (7%) and gill nets (19%). Ocean landings were 37% higher than in 1990. Pamlico Sound landings were unchanged.

Industrial Fish:

Total industrial fish landings were 41% higher than in 1990. Menhaden landings accounted for the total increase in landings. As in 1990 the demand for bait has led to more people entering the menhaden bait fishery. Average ex-vessel prices remained unchanged.

Crabs:

Landings of blue crabs increased again in 1991 to a record high of 41.8 million pounds. Blue crab landings were 10% higher than in 1990. Average ex-vessel prices were down 10%.

Clams:

Landings were down 27% from 1990. Average ex-vessel prices were down 9%.

Scallops:

Bay scallop landings were down 27%. Average ex-vessel prices were down 8%. No calico scallops were landed in 1991 compared to the 385 thousand pounds landed in 1990. Sea scallop landings were down 40%. Sea scallop ex-vessel prices averaged 9% higher than in 1990.

Shrimp:

Shrimp landings were 37% higher than in 1990. Average ex-vessel prices were down 15%. The species composition was 62% brown shrimp, 24% pink shrimp, 13% white shrimp and 1% rock shrimp.

Oysters:

Oyster landings were down 3% for the year. Average ex-vessel prices for oysters were 9% higher than in 1990.

SOUTH CAROLINA

Preliminary commercial landings of fish and shellfish in South Carolina for 1991 were

19.1 million pounds, 13% higher than the 16.9 million pounds landed during 1990. There were significant decreases in landings of wreckfish, swordfish, reef fish, and mullet. Increases in landings were recorded for shrimp, clams and oysters, dolphin, and king mackerel.

Shrimp:

Landings of shrimp were 9.1 million pounds, 57% higher than the 5.8 million pounds landed in 1990. The extremely mild 1990-91 winter favored survival of overwintering shrimp and enhanced stock recovery from the 1989-90 winter kills.

Crabs:

Blue crab landings were 5.1 million pounds during 1991, nearly equal to the 5.2 million pounds landed during 1990, but well below the 6.4 million pounds landed during 1989. Although crabs were plentiful in 1991, good fishing for shrimp and a poor market for crabs kept crab landings stable.

Clams and Oysters:

The molluscan fisheries appeared to have fully recovered from the 1989 hurricane. Landings of clams were 42% higher than in 1990 and oysters were 51% higher than in 1990.

Fish:

Fish production was 22% below that of 1990. Landings of wreckfish were off by 49%; swordfish landings were down 80%; reef fish landings were down 31%; and haul seine landings of mullet were down 82%.

Only landings of dolphin and king mackerel increased during the year. Those landings were higher by 37% and 61%, respectively, than in 1991.

GEORGIA

General:

Heavy spring rainfall contributed to reduced landings in some fisheries and above average landings in others. Total seafood harvests were approximately 20% higher than in 1990 and value to the Georgia economy rose approximately 16%.

Shrimp:

The above average harvests of white shrimp during the fall and winter of 1990 continued throughout 1991, making this the fifth largest annual harvest since 1957. The 1991 harvests of brown and rock shrimps were below average; pink shrimp harvest was above average. Bait shrimp harvest for 1991 was 20% higher than in 1990.

Crabs:

Blue crab landings increased 18% from 1990, which was the lowest since 1976. Blame for this reduction was put on the heavy spring rains and flooding which delayed the start of the 1991 harvest. Although the total landings increased, value decreased. The decline in value was attributed to competition from imported crab meats.

Fish:

Landings of offshore demersal fish was down 14% from 1990. Wreckfish landings declined from 107,000 pounds in 1990 to 16,700 pounds in 1991. Harvest of pelagic fish in 1991 was only 25% of the 1990 harvest.

Sturgeon:

Historically the fishery for sturgeon has been important, but minor in Georgia. In 1990, 4,300 pounds were harvested, with a value of more than \$21 thousand. In 1991, only 11 adult sturgeon were netted. Concern was expressed that this historic fishery may be facing extinction, or, at the very least, a long period of recovery.

Clams, Oysters, Whelks:

All these shellfish showed an increase in harvest for 1991, but it is unclear whether this was due to an increase in natural production or to an increase in numbers of harvesters.

FLORIDA

DUVAL - BREVARD COUNTIES

Shrimp:

The white and brown shrimp seasons showed a slight increase in production over 1990. The 1.58 million pounds (heads-off weight) of shrimp landed was 16% higher than in

1990. The number of trips also increased; 488 more trips(+13%) were off-loaded than in 1990. However, only one of the four counties showed a substantial increase in landings. Duval County's landings increased 34.8%. St. John's County landings increased 4%; and the two southern counties, Volusia and Brevard, had notable decreases in landings, 38% and 21%, respectively. Duval's increased landings can be partially attributed to the fleet fishing on small (51/55 to 61/70 count) shrimp during August and September. Likewise, the decline in the southern region was a direct result of small shrimp being caught before their migration to the south.

The rock shrimp industry went "belly up" in 1991. Landings decreased radically to a paltry 1.6 million pounds of tails. After a record harvest of 5.0 million pounds in 1990, the 68% decrease came as a surprise. The number of trips declined 44% as the low catch rates deterred vessels from participating in 1991.

A few more vessels diversified into the royal red shrimp fishery. Landings increased slightly (13%) to 98,880 pounds. The vessels concentrated on the royal reds when the other shrimp seasons ended.

Fish:

Wreckfish:

Vessels participating in the 1991 wreckfish fishery were required to have permits and were allowed 10 thousand pounds per trip. The season opened April 16 and closed January 14, 1992 due to the approaching spawning season. The 2 million pound seasonal quota was not met. The east coast of Florida had 187 trips by 32 vessels. Landings for the area totalled 1,890,662 pounds (gutted weight).

Hook & line bottom fishery:

The hook and line bottom fishery remained relatively stable and catches continued to be diverse. The king mackerel season turned out to be the best in years and the fish appeared to be larger than in 1990. Fishermen had a very good December and often caught their trip quotas. The tilefish fishery remained stable with very few new vessels entering the fishery. For the most part, large tilefish dominated the catches; however, a couple of vessels worked on small tilefish. Shark landings are estimated to be about 679 thousand pounds. This is a slight (9%) decrease from 1990. Shark longliners landed at least 80% of the total catch. One of the local shark drift netters switched to

longline gear during the year after the state set a minimum 6" mesh size in state waters. Three Georgia shark drift netters worked off North and Central Florida in the summer; their landings are not included in the Florida totals.

Scallops:

The calico scallop industry operated at a low level. Production started off slowly in January and continued that way through the first week of February, with vessels bringing in between 18 and 90 gallons per trip. Ex-vessel price remained at \$27/gallon. The two operating plants closed in February and the fishery did not reopen during the remainder of the year.

INDIAN RIVER - PALM BEACH COUNTIES

Coastal Pelagics:

King mackerel landings declined for the second straight year. The commercial fishery was closed for the first three months, and catches were relatively poor in the spring and summer. Landings of Atlantic-group king mackerel were down roughly 22% from 1990. Gulf-group landings and catch rates also declined from 1990. Florida's 1000 pound trip limit in November and December resulted in shorter and fewer trips. The predominant gear was hook and line all year. No large net catches were landed.

Spanish mackerel landings increased from 1990. Florida's Spanish mackerel trip limits helped to slow the accumulation of landings at the beginning of the year, but a court ruling in August overturned the Spanish mackerel trip limit rule, which resulted in unlimited harvest for the remainder of the year. Roller rigs were fished from mid-November through the mid-December Federal closure and landed 400 thousand pounds on the last day of fishing. The majority of the production in November and December was caught in the EEZ this year. Winter ex-vessel prices remained unchanged from the past several years at about \$0.30/lb.

Cobia landings increased about 17% from 1990, despite state and Federal trip limits of two fish per person for commercial and recreational fishermen.

Net fishing:

Florida, in response to increased sea turtle strandings in this area, approved an emergency gill net rule that limited gill nets to a 600 yard maximum length for Brevard to Palm Beach Counties. The rule, which later became permanent, ultimately stopped the shark drift gill net fleet from fishing in state waters. Shark landings decreased about

34%.

Catches of inshore net species such as spot, croaker, whiting, spotted trout, mullet, and pompano all declined, due as much to the general lack of fish as to increased regulations. Fishermen and dealers reported exceptionally poor gill net landings throughout the summer. Many small boat operators were forced to look for other sources of income.

A group of roller rig vessels left for the Gulf in January to target Spanish mackerel but were unsuccessful and returned before the end of the month. Four roller rig vessels converted to longline on the off-season, targeting tilefish, swordfish, and shark. Three other vessels left the area temporarily to gill net sharks in northern Florida. The rest of the fleet remained inactive from May to October. In June a Federal court ruled against a final appeal to eliminate the king mackerel driftnet ban.

Handline / Electric Reel:

Amberjack landings declined substantially in 1991 mainly due to decreased effort. Low ex-vessel prices and a limited market decreased the number of boats and effort from that in recent years. Ex-vessel prices dropped to \$0.50/lb on cores at the peak of the season. Catch rates remained good from April to June, but fishing locations changed somewhat from 1990. Reef fish landings varied depending upon species. Grouper landings increased, but snapper, sea bass, and porgy landings dropped. Ex-vessel prices for gag and red snapper were as high as \$3.00/lb.

Longline:

Swordfish vessels and effort paralleled 1990, but landings dropped roughly 25%. Dealers and fishermen blamed size restrictions as the main cause of the decline. Some boats claimed to have discarded over 1000 pounds of undersized swordfish per trip. Tuna landings continued to drop in 1991, consistent with stepped up enforcement of the Conservation Zone surrounding the Bahamas. Tilefish landings and number of boats were similar to 1990. Shark longline vessels contributed a larger percentage of total shark landings this year, due mainly to a decrease in gill net landings.

Shellfish:

Spiny lobster landings increased 69%, due mostly to an increase in trap and dive catches. Ex-vessel prices were similar to 1990 (about \$3.60/lb). Hard clam production increased slightly, but average ex-vessel price dropped below \$0.10 each for necks. Blue crab landings increased approximately 47%, due to increased catch rates.

BROWARD COUNTY

Reef Fish:

Swordfish production was down at least 15%, partly due to the fact that 5 vessels left the local fishery for Hawaiian waters. One new dealer started operations in South Broward this year. The average swordfish price was about \$0.20/lb higher than in 1990.

Shark production remained steady overall. The shark fishery had two vessels targeting sharks full time and at least one part time. The longliners brought in more sharks as bycatch. Average price increased \$0.05/lb.

Reef fish landings increased in 1991. This year was the last for trap fishermen, who have seen their gear banned on the Florida east coast. Prices for snapper fell \$0.10/lb. Grouper prices remained steady.

Dolphin fish production jumped almost 20% higher from that in 1990. Prices on dolphin increased \$0.20/lb. King mackerel production increased slightly in 1991. Price decreased \$0.15/lb.

Lobster:

Spiny lobster production was 30% higher than in 1990. Lobster prices were \$0.35/lb higher than in 1990. The Japanese market is reportedly driving up the price.

DADE COUNTY

Fish:

Snapper landings were down about 20% whereas dolphin landings were 30% higher than in 1990. Ballyhoo landings remained constant at 200 thousand pounds. Other species landed (amberjack, mullet, grouper and miscellaneous reef fish) were all within 10% to 15% of landings in 1990. King and Spanish mackerel landings were slightly higher than in 1990.

Lobster:

Spiny lobster landings increased 40% from 377 thousand pounds in 1990 to over 600 thousand pounds in 1991. Prices were as high as \$4.00/lb but were mostly around \$3.00-\$3.50/lb. The increased landings were attributed to weather, water conditions, and

various other reasons. Some persons voiced concern over permits and trap limitations. Although lobster landings increased, stone crab landings were down almost 50%. There was no explanation for this, but Dade County traditionally is not a major stone crab producer.

Sponges:

Sponge landings declined 20%. The major sponge buyers are the European medical industry for surgical usage.

MONROE COUNTY

Weather:

At the start of 1991, the weather was far warmer, and the cold fronts much milder, than normal. In fact, it was not until February 21 that the first "strong" cold front of the year hit, which dropped temperatures to the high 50s. Then, for most of March and through mid-May, many types of fishing were limited by SE winds of 15 knots or more. It was early June before the weather settled into the typical summer pattern. During the latter half of September temperatures began to moderate. At this time, a southward migration of large schools of sardines, anchovies, and balao arrived off Key West. Later, the first cold front of the season passed on October 2. It barely lowered temperatures. Although other fronts and poor weather ensued, conditions were generally mild. Then, the first severe cold front of the season hit the Florida Keys on November 8. Yet, temperatures soon climbed into the mid-80s for most of the remainder of the year. This pattern was broken, however, by a front that brought gale force winds to the area on December 19, and which uprooted great masses of seabed vegetation.

Environment and Marine Ecology:

The fishery trends of 1991 may need to be evaluated in the light of several reports of environmental degradation in the ecosystem of South Florida and the Keys. Some researchers reported excessive nutrient loading in near-shore waters, persistent pesticide residues in soft corals, abnormally profuse growths of benthic algae (especially *Dictyota*), and die offs of corals, urchins, and seagrasses. Moreover, Federal, State, and fishermen's interests continued to be at odds over who was at fault for adverse impacts to the Everglades and what needed to be done to fix things. Although by mid-1991 most of the court actions on this had been settled, restoration had not yet begun.

In 1991 controversy continued to escalate on how to save the Keys ecosystem. Limits were enacted on tropical fish collectors, and proposals were made to ban or limit many

activities in the "back country." Scoping meetings were held by NOAA for public input into management of the new (and all encompassing) Florida Keys Marine Sanctuary, but at present most regulations are just in the planning stage.

Shrimp:

For most of 1991, and as in 1990, shrimp catch rates on the Tortugas Grounds were below normal. In general, catch rates were poor. There were no pronounced seasonal influxes of newly recruited small shrimp to the grounds. The main exception to this rather dismal condition was that the few boats here in August and September had very good catch rates of "bigger" shrimp. News of this upsurge caused trawlers from the Northern Gulf to arrive here sooner than expected, and before the "local" fleet returned from the summer season off Texas. Earlier in the year, this same Northern Gulf fleet had quit the grounds in mid-April, instead of sticking around through May as in past years.

Once again the lack of shrimp was not the only problem confronting fishermen. Operating costs continued to increase, while ex-vessel shrimp prices tended to be soft for most of the year. Many crews reported that they continued to lose shrimp as a result of towing TEDs. Although most boats seemed to be trying to comply with the law, several cases were made against shrimpers operating without TEDs or with TEDs sewn shut. In addition there were many instances of shrimpers using non-certified TEDs. Lastly, Singleton Seafood and King Shrimp Co., two long established dealers finally went out of business.

Coastal Pelagics:

The 1991 king mackerel season was over almost as soon as it began. On January 1, when by Florida law trip limits of up to 15 thousand pounds are permitted, four strike boats netted a total of 49 thousand pounds of king mackerel. The quota had been nearly filled "up the east coast," but because of unfavorable weather, only one other set was made by one boat (for 16 thousand pounds) before the fishery was shut down effective midnight, January 3. As for the handline troll fishery, only about 30 pounds of king mackerel were landed before fishing in the EEZ ceased. Perhaps owing to warm weather and rough seas, there was little fishing for king mackerel once the "South Atlantic Stock" fish began frequenting the Keys on April 1. In July, the charter boats had a good run of king mackerel, most of which were gravid. When the Gulf king mackerel returned here in December 1991, only a few boats went after them. Florida's trip limits of 1 thousand pounds, adverse weather, and the low ex-vessel price of \$0.60/lb, made long runs "West" to find king mackerel unprofitable, even though exceptionally large schools were noted by lobster fishermen.

The Spanish mackerel fishery was once again hampered by low ex-vessel prices, adverse weather, and the depredations of sharks. The first large catches of the season were made on January 4. By the end of the first week of fishing, seven boats had brought in 500 thousand pounds with an ex-vessel price of \$0.30/lb. For the next month, catches were limited by adverse sea conditions and, reportedly, the warm weather caused the fish to disperse, rather than to school together. The fleet had one last shot at Spanish mackerel on February 14 off Pavilion Key, but virtually no fish were caught. The fish tended to be small, most of them seemed to pass through the meshes, and the fish continued moving up the coast. When Spanish mackerel returned to local waters in December, several boats rigged gear for them. The first catch of 26 thousand pounds was landed by two boats on December 11. By the end of the month, over 600 thousand pounds had been landed by the 17 gillnet boats working off Key West.

During the summer of 1991 the effort for the dolphin fishery increased. Catches peaked in June, and averaged about 500 pounds per boat, at about \$1.00/lb. The bulk of catches consisted of "schoolie" dolphin.

Lobster:

In August, the 1991 season for spiny lobster got off to a hectic start. Deliveries of the plastic tags mandated by Florida law to track trap use fell behind schedule. Fishermen had to wait to the last minute for tags so they could legally deploy traps. And, as many soon learned, the tags were readily damaged by hungry lobster or other causes. At first catches throughout the Keys were very good. Larger, older lobster often made up to as much as 10% of some catches. The ex-vessel price opened at \$3.75/lb. However, from mid-September lobster catch rates began an unexpected decline throughout most of the Keys that lasted for the remainder of the season. Oddly, divers reported seeing great numbers of "short" lobsters almost everywhere. Even on the "new" grounds on the shelf 60 miles west of Tortugas catches were down by at least a third. In fact, catches there didn't pick up to normal levels until February 1992. If ex-vessel prices had not climbed to \$4.00/lb at Key West and \$5.00/lb at Marathon to offset reduced catches, many lobster fishermen said they would have been forced out of business by the poor season.

In May, Florida enacted laws that will (by 1993) begin to reduce the number of lobster traps a fisherman can use. Although many fishermen approved of this means to limit effort (and entry), others are contesting it, as they believe the plan would allow them too few traps to make a living. Such discord was not confined to commercial fishermen. In August 1991 the Florida Marine Fisheries Commission was besieged by numerous proposals to eliminate or change the special season for recreational harvest of lobster. This was done beginning in July 1992. The result was a four day recreational spiny lobster season consisting of 2 days for the Federal and 2 days for the State season.

Crabs:

In 1991 there were few if any newsworthy events in the stone crab fishery. Production tended to be high, but demand so low that the market was reportedly glutted, especially at Marathon. The prevailing ex-vessel prices per pound of cooked claws were: \$2.50 (mediums); \$4.25 (large); and \$5.50 (jumbo).

Fish:

By most accounts the directed fishery for snapper, grouper, and other reef fish experienced reduced catches and effort for most of 1991. This was less a function of decreased fish populations than of depressed ex-vessel prices, adverse weather conditions, and extended periods when (reportedly owing to hot weather) the fish "went off their feed." Also, owing to renewed interest in sponging, and the preoccupation of many fishermen to spend more time building additional lobster traps, fewer local boats targeted reef fish during the summer. For a few weeks in June there was a surge in landings of yellowtail snapper (at only \$1.25/lb), but the targeting of spawning mangrove snapper and mutton snapper turned out to be less widespread than anticipated. By autumn yellowtail snapper were being caught in good numbers by the handful of active professional hook and line fishermen, and the price recovered to \$2.25/lb.

Recreational Fisheries:

Action offshore and inshore in the Keys generally continued to be good in 1991. However, for much of the summer, many charter boats were less active than hoped for due to fewer tourists. In addition most of the big offshore tournaments encountered few marlin.

COLLIER TO PINELLAS/MANATEE COUNTIES**Weather:**

In 1991 we finally saw an end to the long-term drought of the past few years, with above-normal rainfall the first half of the year. There was also an unseasonably warm winter, and trouble with winds and rough seas throughout the spring and parts of the fall.

Shrimp:

1991 was another depressed year for the local shrimp fishery, with total landings of only 1.61 million pounds of tails (1990 landings were 1.62 million pounds, previously a

record low). Total trips were 916 in 1991 compared to 897 in 1990. Both landings and trips were far below levels prior to 1987. While the year started off with good catches, especially from south of the Tortugas lights in deeper water, catch rates fell in February and remained relatively low for most of the rest of the year. As a result, many vessels left the area by mid-June.

Shrimpers settled into using TEDs and some even claimed significant bycatch reduction. However, a controversy boiled during the first half of the year over the legality of the predominantly-used version of the Ft. Myers (Andrews) TED. Some shrimp fleet owners traveled to Washington, D.C., nets and all, to argue the TED net problem and avoid the costs of re-outfitting.

One Ft. Myers packing house dating back to 1948, closed under the pressure of tough times and a buy-out of their property by the city. A few vessels continued to work royal reds, but sold them to dealers elsewhere. Recorded bay shrimp landings were down because fewer craft fished (due to TED and other regulations), and greater direct sales that bypassed dealers.

Prices rose through April, then declined steadily all year, ending the year 18% lower than at the start of 1991.

Fish:

Mullet fishermen battled ever-increasing pressure on their long-standing fishery. New regulations included a weekend closure and closure of more inshore waters such as part of the Caloosahatchee River. Proposed regulations included a 7-day closure each month and a 500-pound daily limit except during roe season. As a result of these restrictions, some smaller, traditional fish houses closed. The 1990-91 roe season landings and prices were down from 1989-90. The 1991-92 roe season started off strongly in late fall and prices reached a high of \$1.55/lb for red mullet roe by year's end.

The grouper fishery reopened at the first of the year, but landings did not pick up until February. Landings and prices were up-and-down during the year, in response to the import-pressure, changing market. Grouper fishing continued through the end of the year, since the quota was not filled. The number of grouper vessels in 1991 declined in response to new regulations, especially those prohibiting longlining inside 20 fathoms(f). This was especially true in Collier County, where 20 f is extremely far offshore; many longliners there either switched to fish trapping, quit or moved elsewhere. Red groupers just over the size limit continued to be the majority of landings. Fishermen reported many undersized red groupers "wasted" (brought up dead); even longliners caught many under-20" red groupers outside 20 f. Fishermen suggested a reduction in size limit and

spawning season closures instead of size quotas. Red snapper fishing was closed from late summer to year's end.

There was limited targeting of Spanish mackerel during the spring and fall runs. Market problems in the fall sent prices down. Fishermen reported plenty of mackerel "out there" in late fall, but both king and Spanish mackerel remained as mostly bycatch. Swordfish landings were down compared to past years with most fishermen working the central and western Gulf instead of the Tortugas elbow. Prices on swordfish were up during the first part of the year - over \$5.00/lb even for the 25-49/lb weight category.

The Spanish sardine fishery virtually shut down due to new state regulations (area closures and a 500-pound trip limit). This increased pressure on other net fisheries such as other baitfish and mullet; the mullet market was glutted in late summer. Markets for fish weathered a mercury scare that temporarily closed the shark market, a cholera scare due to imports, and a red tide in August. TIP biological sampling coverage increased considerably due to a new state DNR sampler for Lee, Charlotte, and Collier Counties.

Crabs:

The stone crab market never really recovered from the 1990-91 opening season glut. Prices were at lows of \$2.75 to \$4.75 for medium/large claws in March 1991. The low prices caused some crabbers to quit by mid- to late-March. The 1990-91 season had mixed reviews overall; some crabbers called it the best season in 5 years due to the strong landings at the start of the season. The 1991-92 season started off in October with strong landings and a market glut, but the market recovered, and crabbers enjoyed better prices by the end of 1991. Some dealers added a third grade known as "jumbo" to remain competitive with dealers in other areas.

Blue crab landings were down, but prices reached \$0.80 to \$1.00/lb for live, hard blue crabs, during the first part of 1991. Processors bought many of their crabs from other areas, such as North Carolina. Landings improved by May, and conditions stabilized somewhat for the remainder of the year.

Lobster:

A few more vessels worked out of Collier County this year, due in part to some former summer fish trappers (stone crabbers the rest of the year) switching to lobster trapping in the summer. Most lobster landings, however, continued to be unloaded in the Keys.

PINELLAS - GULF COUNTIES

Fish:

Grouper landings for 1991 were higher than in 1990 since fishermen were allowed a 12-month fishing season compared to a 10-month season in 1990. Landings typically peaked in March and April due to spawning aggregations. In January prices were at their highest, \$2.35/lb(gag) and \$2.00/lb(red grouper) and remained stable through the lent season, but then dropped to \$2.15/lb and \$1.50/lb for gag and red grouper respectively. Catch rates for longliners which make up about 80% of the commercial fleet, declined to about 3,500 lbs/trip; fishermen attributed the decline to the 20-fathom curve ruling. Longliners expressed concern over the ruling because outside 20 fathoms there is a limited amount of workable bottom. Fishermen were glad to see no closure. Most, if not all, would support dropping the quota and having a two month spawning closure(late February to May 1), or keeping the quota and beginning the fishing year on May 1. Bandit and hook & line boats struggled with the size limit, depending on the area fished. Their average number of trips for the year increased slightly.

Aside from grouper, the other major fishery in this area was for sharks. Landings of sharks declined 53% in 1991. This decrease in landings caused NMFS to take a closer look at the fishery. A draft management plan for sharks was released in late October. A report of high mercury levels in sharks put a damper on sales, as all negative publicity does in the seafood business. Although mercury talk died down, many dealers remained concerned. Impending regulations, declining domestic catches, and success stories about shark fishing in foreign waters have caused many boats(grouper and shark) to consider moving to foreign waters. Currently eight boats originally from this area are fishing in other countries with success and more are considering the possibility.

The closure of red snapper fishing had little impact on this area as this species is mainly a bycatch for longliners.

Net fishing had its share of excitement as the Florida Marine Fisheries Commission(FMFC) proposed to close netting for the last seven days of the month during mullet roe season. In addition they proposed a 500 lb trip limit for the remainder of the year. Surprisingly, some fisherman were in support of this ruling. The ruling passed but the Organized Fisherman of Florida(OFF) challenged the ruling and won the case. Therefore, the ruling did not go into effect.

In 1991 mullet landings were down nearly 24% from 1990. Recreational fishermen and environmentalists blamed the decline on overfishing, while commercial fishermen pointed to pollution and predation. Redfish and snook are abundant in the area and netters

attributed the decline to increased numbers of these fish.

Spanish mackerel showed up in large schools during late November and December and the large landings took some pressure off roe mullet. Northern counties enjoyed a great, albeit quick, spotted seatrout season and filled their regional quota in just 2 weeks. The Nile perch (*Tilapia* spp.) fishery exploded in 1991 into a large scale operation. Landings were up by 60%. Most of these fish are taken by cast net from retention ponds, but some have been introduced to fresh water lakes. Due to the relative ease in harvesting and stable price (\$0.45/lb), many netters began to target this species. Tilapia have not yet been accepted by locals, who favor mullet. Their main market is in northern cities such as Chicago and Detroit. Purse seiners working off Sarasota and the east coast saw their catches of thread herring drop by 50%.

Shrimp:

The 1991 shrimp season produced just over 4 million lbs (heads-off weight), down 12% from 1990. Production peaked between April and June. During late June and early July nearly 85% of the larger boats headed to Texas for the opening of the Texas shrimp season. Local shrimp landings during the Texas season (July through October) were down 33%. Slow fishing in traditional Florida grounds and the success of the 1990 Texas season convinced more boats to head west. Two of the larger seafood dealers in Tampa closed and moved their operations to Texas for the season. Texas waters produced good shrimp catches early in the season and, even though catches declined, most boats stayed through October. Inshore shrimping was also slow, although Apalachicola shrimpers had good catches in March.

Dealers blamed TEDs for declining shrimp catches, instead of environmental factors or overfishing. Although the lower catches have resulted in higher prices, dealers are still concerned about competition from black tiger shrimp from Asia. Restaurants and markets are purchasing tiger shrimp instead of local shrimp. Dealers expressed the opinion that the government needs to worry about people and their families and the general economy instead of protecting wildlife. They have nothing against turtles, but when it comes to a choice between a man's livelihood and the ability to provide for his family or protecting turtles, the choice is fairly obvious to them.

Oysters:

The oyster season for 1991 was a different story for two areas. Apalachicola had a good season, but the Cedar Key and Horseshoe Beach areas did not. Landings for the Cedar Key, Horseshoe area were down 27% for 1991. Prices followed a typical supply and demand pattern and were similar to those in 1990. Apalachicola landings were nearly

33% higher than in 1990, although the 1991 season started slowly. Prices took a sharp drop from an average of \$3.50/lb of meat in 1990 to 2.35/lb in 1991, which caused a revolt among oystermen. Some oystermen formed a co-op and found out the hard way that the dealers were not price fixing and that the market was tough. Marketing of the Texas oyster harvest caused a drop in the price which began in late 1990 and continued during 1991. The Texas oyster is about half the price of the Apalachicola oyster and, for the price paid, is of comparable quality. Many fishermen worried about continued talks of damming the Apalachicola river to provide water for Atlanta and believe that this would destroy the Apalachicola seafood industry.

Crabs:

The 1991 landings of blue crabs were down nearly 47% compared with 1990. However, 1991 prices did rise to an average of \$0.50/lb. Many persons attributed the lack of crabs to heavy spring and summer rainfall.

Stone crab landings were 48% higher than in 1990, partly due to increased effort from shrimpers and oystermen. Lack of shrimp and low oyster prices attracted fishermen into the fishery who had not been involved in previous years. The increased landings did, however, drop the prices. Large claws averaged \$5.10/lb, down from \$6.00/lb, and medium claws averaged \$3.40/lb, down from \$4.35/lb. These prices were fairly steady throughout the year.

Sponges:

Landings of sponges also declined in 1991, mainly due to new harvesting laws passed by the state and the fact that some sponges were of either poor quality or unharvestable. Prices were up accordingly with some importing being done on a small scale.

Environment:

A red tide which moved into the area during the summer caused extensive damage. It not only hampered fishing effort but caused large fish kills. Commercial boats reported grouper floating on the surface far offshore. The severe drought of recent years was broken as much needed rain came during late spring. It rained almost every day from the end of May until mid-September.

Recreational:

Recreational fishing for the area was typical. The offshore waters produced the seasonal favorites: grouper, snapper, king and Spanish mackerel, barracuda, amberjack, and

cobia. Inshore waters produced snook, redfish, seatrout, and tarpon. The biggest surprise was the appearance of what was reported as the largest king mackerel run in the last 15 years. The first annual suncoast kingfish tournament held in late November produced over 6,500 fish. The winner was a 49 lb king mackerel; the king mackerel averaged 20 pounds.

BAY - ESCAMBIA COUNTIES

Fish:

Net fishing continued strong in 1991. The number of boats was about the same as in 1990. There were 9 purse seiners, several beach seiners and the usual assortment of gill netters. The year began with unsettled weather in February and March, which hampered fishing activity when Spanish mackerel and bluefish showed up in mid-March. Consequently, landings of bluefish and Spanish mackerel were down 54% and 27%, respectively, from 1990. Ladyfish, cigarfish, blue runners and Spanish sardines showed up in late April and early May. Purse seiners caught most of these species. Landings were favorable until the heat of August, then picked up again in September through early November. Preliminary data indicate landings in 1991 were up 3% for blue runners, over 100% for cigarfish, 28% for Spanish sardines and down 9% for ladyfish. Landings of jack crevalle were down 85%, but demand for them was low. Locally, mullet landings were down 26%, but the ban on weekend fishing during roe season could have contributed to this.

Twenty-eight surface longliners unloaded tuna and other oceanic species in this area in 1991 compared with 13 in 1990. Reported landings of yellowfin tuna were down by 72% from 1990, but records indicate that much of the 1990 landings caught in Florida waters were actually landed in other states. Local landings peaked in August and September when the fish were closer to this area. The data received in 1991 from local tuna buyers who bought across the gulf (representing 662 trips) showed the following: the average size of yellowfin in 1991 was 78.8 pounds compared to 80 pounds in 1990 and the average catch per trip was 3,658 pounds compared to 3,888 pounds in 1990. As in 1990, dolphin catches increased dramatically in June and July. The same three longliners targeted them as in 1990 along with a couple of bottom longliners which converted to surface gear. The average size of fish and catch per trip were roughly the same as in 1990. The price for dolphin reached \$1.35/lb due to fewer imports from Ecuador.

Grouper fishing was fairly slow in 1991. The number of bottom longliners declined from 37 to 14 in 1991. Landings were down 20% for all species combined. Due to slow fishing, some boats converted temporarily to surface fishing during the summer and

then to king mackerel fishing during the fall.

The number of boats in the handline (vermilion and red snapper) fishery remained about the same in 1991. Landings throughout the area were down only 28% for red snapper and 4% for vermilion snapper. This was due in large part to the closure of the snapper fishery in August. Of note in 1991 was the apparent increase in the percentage of one-to two-pound red snapper in the catches, which caused the ex-vessel price for that size to drop to \$1.50/lb by the end of July. After the closure, the boats switched to fishing for scup and vermilion snapper. Many boats had a hard time making expenses and dealers had to compete for fewer fish.

The number of shark boats unloading here was up slightly to 18 in 1991, but actual landings were down 74%, probably due to the mercury scare. The mercury warnings that came out in April decreased demand and price.

King mackerel landings were up substantially in 1991, partly because several boats switched over to fishing for them during the fall run, thus increasing the fishing effort.

Crab:

It was a bad year for the blue crab fishery. Landings were down 52% overall.

Oyster:

Locally 1991 was the best oyster season since the hurricanes of 1985. Landings were over three times what they were in 1990. There were more oysters, oystermen and effort than in many years.

Shrimp:

The 1991 year was another disappointing year for shrimpers. Heavy rains affected the bay shrimp crops at just the wrong times. Offshore fishing activity wasn't much more successful.

ALABAMA

Shrimp:

Shrimp landings were 1% lower than in 1990 and 5% lower than the last five years' average. Inshore waters opened during June with fair results in both Mobile Bay and

Mississippi Sound. Initial catches were 51/60 heads-on count size shrimp, smaller than the 36/40 to 41/50 counts usually taken during opening week. Growth of brown shrimp was slow throughout the brown shrimp season. For the second consecutive year, excessive spring freshwater runoff was blamed for the lower than normal local brown shrimp season. Alabama boats fishing the Mississippi and Louisiana brown shrimp season reported fair to good catches. Virtually all Alabama vessels fishing during the Texas season reported excellent trips; a few vessels topped \$100 thousand for 20 nights' effort. Local fall white shrimp production was less than expected; however, this time it was the lack of rain during the fall that was blamed. Alabama boats fishing the Florida pink shrimp season also reported less than normal catch per trip.

Tail prices were strong during the first half of the year due to problems with pond raised shrimp. Prices stabilized in August and were steady through the remainder of 1991. Heads-on prices were strong (plus \$0.20/lb) when the bulk of the catch was landed; however, prices tapered off by year's end.

Although a few new vessels joined the Alabama shrimp fleet during the year, the net result was a decline in the number of vessels shrimping out of local ports. The number of 1991 commercial shrimp trips declined 7% from 1990.

Oysters:

The 1991 oyster production was 266 thousand pounds of meats, a significant increase from the 84 thousand pounds produced in 1990, but still below historical levels. Public reefs accounted for 90% of the landings. Production from private beds lagged during 1991 due to depressed prices. Spring landings from the public reefs were steady and were limited to four sacks per catcher. Some fishing time was lost in March when the reefs were closed due to excessive rain and the season was extended in May to allow catchers additional time to harvest. Toxic cholera found in Alabama waters during July resulted in a delay of the fall oyster season until November. When the season resumed, catchers steadily took their eight sack limit per boat through the remainder of the year. Ex-vessel prices were \$0.25/lb for sack weights through the spring season and initial opening in November, but declined to \$0.13/lb by year's end. In spite of increased local production, Alabama oyster shucking plants relied on out-of-state supplies, primarily from Louisiana, to maintain production levels.

Crabs:

Blue crab production was 2.73 million pounds, a decline of 17% from 1990 and also a decline of 17% from the last five years' average. January through April catches were above average, but poor catches beginning in May and continuing to the end of the year

resulted in a low total annual production. Ex-vessel prices ranged from a low of \$0.25/lb during the summer months to a high of \$0.55/lb during February. Overall, prices declined \$0.04/lb for the year. Alabama crab processing plants continued to rely on out-of-state crabs for a majority of their production capacity. Louisiana remained the leading supplier followed by Mississippi and various other states.

Fish:

Fish landings were 3.97 million pounds, a decline of 8% from 1990. Mullet remained the leader followed by shark; however, landings of both species were less than in 1990. Mullet catches, taken primarily during the fall roe season, started later due to new legislation designed to eliminate the taking of roe when the yield is low. During the peak months catches increased, but were not large enough to equal the 1990 catches. The weighted average price for roe mullet was \$1.45/lb, the same as in 1990. Shark fishing activity from Bayou La Batre declined throughout the year until only a small portion of the original fleet remained. Vessels leaving the fleet reconverted to shrimp or tuna fishing. Trawl catches of flounder, king whiting and white trout were about the same. Sheepshead catches declined 75% due mostly to a poor market. Bait fish landings continued to increase due to Alabama crab processors supplying their out-of-state crab buyers with local bait.

Miscellaneous:

Fishing boat construction in Bayou La Batre increased slightly; with the a majority of new craft being built for export.

Diesel fuel prices were at their highest during the early spring(\$0.90/gallon), but quickly fell and remained steady at about \$0.65/gallon for the remainder of the year.

TED regulations remained in effect and overall compliance increased.

MISSISSIPPI

Summary:

Total landings were significantly lower than in 1990. This condition was caused by the closure of a local menhaden plant.

Shrimp:

Landings of 11.8 million pounds (heads-on weight) valued at \$20.5 million were 22%

lower than in 1990. The average price of shrimp was \$0.05/lb higher than in 1990. Brown shrimp comprised 75% of the landings with most of them caught during the summer "brownie" season. White shrimp made up 23% of the catch. The remaining 2% was mostly "hoppers" as local pink shrimp are called. A few rock shrimp, sea bobs, and royal red shrimp were also landed.

Oysters:

Landings of 102 thousand pounds valued at \$157 thousand were 35% less than in 1990. A decrease in value of 62% reflected the weak market conditions throughout the year caused in part by news media presentations of oyster pollution and various warnings not to eat raw oysters. The Mississippi Bureau of Marine Resources opened the fall tonging reefs early so oystermen could harvest oysters before the winter rains caused runoff water pollution. Processors met most of the local market demand by utilizing sack oysters trucked in from other states.

Crabs:

Landings of 453,745 pounds of blue crabs valued at \$160,469 were 16% greater in volume but 5% less in value compared to the 1990. Larger landings during the summer season when prices are lower accounted for the value decrease.

Fish:

Total landings were notably lower than in 1990, primarily due to decreased landings of industrial fish and menhaden. Several vessels from the one closed menhaden plant worked along with the fleet of the other operating plant. Lower demand for pet food fish was the major reason for decreased industrial fish landings.

Foodfish landings (all fishes and shellfish for human consumption) were 24% less than in 1990. Nearly all species of high volume landings were down from 1990.

Catches by small purse seiners and gill nets were much lower due mostly to smaller catches of blue runners, mullet, black drum, and Spanish mackerel.

Most mullet catches were landed during the fall roe season and demand for yellow roe was very high at fair prices. Mullet landings were about half those of 1990; 439,334 pounds valued at \$199,976 were reported.

Longline fishing was limited to only a couple of vessels catching shark and mixed fish.

Snapper vessel operations were limited by the season quota on red snapper; catches were down 33% from 1990.

Trawler catches of food fish were about average except for a sharp decrease(41%) in sheepshead from 1990.

Sportfishing:

Fishing in estuaries was along the normal seasonal patterns; spotted and white sea trout, flounder, and red fish were the main quarry. Having to release undersize fish was a new experience to many fishermen as size and catch limits were strictly enforced by state officials.

Fishing in the Gulf was mostly for reef fish with red snapper being the main catch. Summer fishing for cobia and for Spanish and king mackerel was reported good.

Miscellaneous:

Vessel construction was less than in 1990, with only one large steel-hulled vessel being produced for the Pacific Coast fishing service.

LOUISIANA

SUMMARY:

Total 1991 Louisiana fish and shellfish landings were 13% higher than in 1990. The increase from 1,070 to 1,208 million pounds was due primarily to an increase of over 143 million pounds in menhaden landings. Other species showing slight increases were blue hard crabs (up over 12 million pounds), sharks (up over 517 thousand pounds), and bluefin tuna (up 42 thousand pounds). Shrimp, oysters, yellowfin tuna, red snapper, and king mackerel showed decreases.

The ex-vessel value of the total landings was 3% less than in 1990. The decrease from \$276 million to \$268 million was due primarily to a decrease of over 24 million pounds and over \$11 million in the shrimp fishery.

Shrimp:

Shrimp seasons were opened and closed in the usual manner. Effort was down during the year, probably due a decline in available stocks that was attributed to record rainfall.

Sizes were small again this year. The TED issue was quiet this year, but not forgotten.

Menhaden:

The menhaden fishery seems to have recovered somewhat from the December 1989 freeze. Even though the menhaden landings were higher than in 1990, they were still the second lowest since 1977.

Oysters:

Landings decreased again in 1991 and were the lowest since 1980. Landings in 1990 were 6,947 thousand pounds compared to the 7,265 thousand pounds landed in 1991. Heavy rainfall and bad publicity about eating raw oysters were some of the reasons for the low production.

Fish:

Offshore, catches of sharks, yellowfin tuna, red snapper, and king mackerel declined. The declines of red snapper and king mackerel were due to closures when quotas were reached. There were increases in grouper landings, probably due to the red snapper closure, which caused fishermen to target groupers.

Inshore, landings of spotted sea trout and black drum decreased, but this was due to state closures when quotas were reached. Red drum was declared a game fish again this year by the Louisiana Department of Wildlife and Fisheries.

Crabs:

Blue crab landings were 44.5 million pounds in 1991. Prices fluctuated, increasing when landings were low, and declining when landings were high.

Miscellaneous:

Louisiana seafood dealers were required to install screening devices by February 1, 1991, to collect shellfish hulls and heads before waste water was discharged into the bayous. By 1993, all Louisiana processing plants will be required to have waste water treatment facilities installed.

Terrebonne Parish:

Shrimp:

In 1991 shrimp production was 3.5 million pounds less than in 1990. The total number of trips also declined from 1990. Seabob landings increased.

The decrease in total landings was attributed to record rainfall in 1991, which hurt production and effort, especially "inshore effort." Shrimp sizes remained small for most of the year. The 100 count/lb law was enforced during 1991, which partially accounted for shrimp production being down.

The controversy over use of TEDS died down somewhat but was replaced with the red snapper bycatch issue.

Seafood dealers complained all year about low profit levels. Shrimp ex-vessel prices stayed high all year and most dealers paid these prices instead of losing their boats to another dealer.

Crabs:

Production was good until November and then fell off sharply. Prices ranged from \$0.15/lb to \$0.75/lb, with the higher prices in effect during November and December.

The controversial rule on new crab gear was struck down by court decision.

Oysters:

Production in this fishery was steady most of the year. The market was up and down all year because of bad publicity. Prices ranged from \$14/sack to \$18/sack to the fishermen depending on demand.

Fish:

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

Longliners had a good year. Each year the number of vessels in this fishery increases. Captains had a hard time keeping up with the openings and closings of the various seasons.

Lafourche & Grand Isle Parishes:

Shrimp:

Total landings for 1991 were about 21% below 1990 with a 13% decrease in effort. Lafourche Parish experienced a 10% decline while Grand Isle realized a 29% drop. Although both saw decreases in heads-on shrimp landings, Lafourche Parish showed a 16% gain in heads-off landings, due mainly to the good shrimp catches from Texas. Some of the losses in heads-on shrimp were attributed to the heavy rains of April and May and/or the failure to close the state waters of the Gulf to fishing during the winter. The value of the landings was lower since most of the brown shrimp were in the over-70 count size. Although 1991 was viewed as a bad year, all totals with the exception of effort were close to the five-year averages. TEDs were still in the headlines all year but other issues such as bycatch continued to come to the forefront.

Crabs:

Crab landings were virtually the same in 1991 as they were in 1990. Prices were also about the same and stayed within the usual seasonal ranges throughout the year.

Oysters:

Some oyster dealers in this area reported that this was the worst year ever for the oyster business. Continued bad publicity about eating anything raw from Louisiana waters, record breaking rainfalls that reeked havoc on the salinities needed by the oysters and new state regulations concerning oyster leases, all contributed to the devastating year. 1991 saw the largest number of oyster boats tied up in the last six years.

Fish:

Landings for 1991 were below the totals for 1990. Federal and state closures for some species and poor weather both contributed to lower landings.

Offshore, tuna landings continued their drop. Less effort along with smaller fish and lower ex-vessel prices contributed to the lower landings. Mackerel fishing opened in July with good landings and prices dropping rapidly. Perhaps the biggest impact of the year was the closure of the commercial fishery for red snapper in August. Fishermen joined together to protest the closure.

Inshore, good landings of trawl caught sheepshead, flounder, and king whiting were reported. Prices were comparable to 1990. Bull black drum were landed heavily despite

the ban on spotter planes. Spotted sea trout landings improved around the middle of the year but did not last long since the state imposed quota was quickly filled.

Ice:

The price for ice stayed about the same as last year at around \$6.50/block.

Fuel:

Fuel prices were high at the beginning of the year because of the Persian Gulf war, but declined when the hostilities subsided. Diesel averaged about \$0.65/gallon for the year.

Weather:

The weather played a significant role in the 1991 landings, especially for shrimp. The year began with a record rainfall of 19.3 inches in January. The rains continued throughout most of the year with unusually heavy rains in late April and early May, which may have been crucial to the shrimp crop. The total rainfall set a new annual record. A lot of fishing days were lost due to the weather.

St. Mary and Vermilion Parishes:

Shrimp:

Production in 1991 for St. Mary, Iberia, and Vermilion Parishes was down 9 to 12%, and trips were down 8 to 10%. Prices started low early in the brown shrimp season, then climbed to a record high, and then stabilized later in the year.

There were a few feuds over prices, splitting tickets, financing of fishermen's fuel and ice, and the 100-count law.

Fish:

Saltwater fish production continued to be low and prices fluctuated with market supply and demand. Red drum were declared a game fish by the Louisiana legislature as a result of pressure from sports fishermen headed by the Gulf Coast Conservation Association(GCCA).

Gill netters discouraged by increased costs and regulations made fewer trips.

Reef fish landings were down due to new quotas set by the Gulf Council. Shark landings

decreased drastically when the fleet was tied up temporarily as a result of decreased demand, but increased later in the year as the vessels returned to work. Freshwater fish production and prices continued to be stable. Sports fishing was fair to good with most activity in freshwater lakes, Vermilion Bay, along the coast and offshore.

A serious problem arose as a result of the sugar cane farmers spraying their fields with pesticides before heavy spring rains. These pesticides drained into the local waterways and killed thousands of fish.

Crabs:

Production increased during 1991. Prices dropped to \$0.12/lb during the summer after the east coast glut caused local prices to plummet. Bait fish was \$0.21/lb. Crabbers started retailing their crabs for \$3.50/dozen. Prices increased later in the year to \$0.60/lb.

Processed hard crabs yielded 9% to 10% of picked crab meat. Retail prices were high at \$7.00 to \$8.00/lb. Soft crab production was fair to good with ex-vessel prices steady. Retail prices ranged from \$14.00 to \$18.00/dozen.

Oysters:

Production continued to be extremely low. Little or no production took place in Vermilion Bay but some production occurred in the Marsh Island area. Oyster beds have not rebounded from the 1989 freeze and the deluge of rain in the spring of 1990 and 1991. Yields ranged from 3% to 7%, and prices ranged from \$11.00/sack to \$26.00/sack.

Crawfish:

Production was lower than in previous seasons due to heavy spring flooding in the Atchafalaya Basin area which destroyed the water hyacinths, the main forage of crawfish. Prices ranged from \$0.25/lb to \$1.25/lb. Yield was 12% to 15%. The crawfish industry was shaken up when the U. S. Department of Justice began an investigation into alleged price fixing. Records from up to 80% of the affected businesses were seized by federal agents. The investigation is expected to take up to two years.

Menhaden:

Production was fair to good for both bait and industrial fishing. The season opened for bait fishing April 1 and closed December 1. Industrial fishing was from mid-April to

mid-October.

Weather:

Weather systems were relatively mild throughout the year.

Jefferson and Plaquemines Parishes:

Shrimp:

Shrimp landings for the first 6 months in upper Jefferson and Plaquemines Parishes dropped about 18% to 22% because of extremely heavy late winter and spring rains in 1991. During the fall white shrimp season (last six month period), landings increased about 6% to 9% with an average decline for the year of about 7% to 10%. Recreational shrimpers were limited to 100 pounds (heads-on) of shrimp per boat.

Crabs:

Production of hard blue crabs increased slightly. Ex-vessel prices decreased \$0.05 to \$0.10/lb.

Oysters:

The oyster production during 1991 was slightly below average because rain and polluted areas closed public and private reefs. Ex-vessel prices at the beginning of 1991 ranged from \$22 to \$26/sack, but by year end they were from \$13 to \$16/sack.

Fish:

Fair catches of sharks, swordfish and yellowfin tuna were made by the longline fleet in the lower Plaquemines area. Ex-vessel prices were slightly lower compared to 1990. Offshore trawlers in the snapper/grouper and king mackerel fishery had fair catches unloaded in Plaquemines. Ex-vessel prices on most of these species decreased slightly in 1991.

Landings of Gulf menhaden were 3% higher than in 1990. Only two plants in Empire, LA in Plaquemines Parish operated in 1991.

Fuel:

The price of gasoline was down approximately \$0.05 to \$0.15/gallon and diesel fuel

dropped about \$0.05/gallon when compared to 1990 prices.

Ice:

Sales were moderate for the spring/brown and fall/white shrimp seasons. Ex-vessel prices on 300 pound blocks ranged from \$6 to \$7/block during the year.

Miscellaneous:

Unusual heavy rainfall in the first part of 1991 set a record with an average of 100 plus inches of rainfall recorded for the year.

Only two shrimp canning plants operated in 1991 in the New Orleans area. Shrimp dealers trucked surplus shrimp to Mississippi and Alabama plants for processing.

New Orleans and St. Bernard Parishes:

Shrimp:

Total shrimp landings for this area were down about 70% to 72% from 1990. However, the fishing effort by trips was also down 24% to 43%. Brown shrimp landings accounted for 64% of the total catch with the remainder being whites. Brown and white shrimp sizes were mixed throughout the season. Shrimp prices were up slightly from 1990. TEDs and fish excluder devices to protect red snapper still dominate the news affecting the shrimp industry.

Crabs:

Landings of hard blue crabs were 77% higher than in 1990, but the total value was up only slightly since prices were lower (but stable) compared to 1990.

Soft crab production, however, was down 60%, but the total value was much higher compared to 1990.

Fish:

Fish landings remained stable with only a 6% decrease in total catch from 1990.

Ice:

Supplies of ice were adequate with the price ranging from \$1.75 to \$2.00 a basket and

then rose to \$8.00 for a 300-pound block.

Fuel:

The supply was adequate. Diesel sold for \$0.72/gallon, down significantly from the 1990 price of \$1.00/gallon.

Weather:

Rainfall in this area was very high in the beginning of the year, doubling the normal annual rainfall by mid-year. This large increase in the amount of rainfall had a negative effect on the growth rate of shrimp.

TEXAS

Preliminary data suggest that Texas landings were over 108 million pounds, a 9% increase over 1990, and the value was about \$214 million, a 17% increase from 1990.

Fish:

Fish landings declined in 1991. Swordfish landings were 172 thousand pounds (a 25% increase) and the value was \$419 thousand (a 15% decrease). The decrease in value was due to lower demand for the product.

Yellowfin tuna landings decreased 21% to 1.1 million pounds with a \$2.6 million ex-vessel value.

Bluefin tuna landings totalled only 22 thousand pounds, a 31% decrease from 1990; the value was \$219 thousand. Prices were as high as \$20.00/lb, depending on the quality of the fish.

Reef fish landings continued a downward trend. Even though red snapper landings (347 thousand pounds) increased 6%, grouper (119 thousand pounds) was down 7% and tilefish (23 thousand pounds) declined about 63% from 1990. Average prices remained stable for red snapper (total value \$653 thousand), but declined \$0.14/lb for grouper (total value \$160 thousand) and \$0.11/lb for tilefish (total value \$26 thousand).

Shrimp:

Total shrimp landings were about 96 million pounds (heads-on weight), a 5% increase

over 1990. Value increased 19% to \$200 million.

Fuel prices peaked at about \$1.05/gallon during the Gulf war, but later decreased and stabilized at \$0.65/gallon.

Total shrimp landings in the bays were about 22 million pounds, a 7% increase over 1990.

The Gulf closure off Texas in May, June and July 1991 extended from the beach to 200 miles; this prohibited all shrimping outside the bays during the closure. Texas shrimp landings from Gulf waters increased 5% to 74.3 million pounds. Most of the catches occurred off the southern Texas coast.

During November thousands of pond-raised "exotic" shrimp (Penaeus vannamei) were illegally dumped into the Arroyo Colorado waters. Shrimpers were alarmed at the introduction of potentially harmful foreign species in the Lower Laguna Madre.

Oysters:

Preliminary 1991 oyster landings totalled 2.3 million pounds of meats, a 21% increase over 1990. Oyster beds were closed periodically throughout the season due to heavy flooding.

Crabs:

Preliminary 1991 figures show a 34% decrease in blue crab landings to 5.6 million pounds.

Stone crab landings decreased to less than 100 thousand pounds, a 57% decline over 1990.

TEDs:

Despite continued protests by the shrimp industry, the TED law remained in effect.

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 because of the TED

regulations, making it virtually impossible to obtain shrimp interviews in some areas.

Financial:

The 1991 year was marked by a continuing trend of repossessions of vessels by lending institutions and a growing reluctance to loan money to finance fishing vessels and seafood businesses. The shrimping fleet is in poor condition due to a tight economy. As a consequence, many craft left the shrimp fishing industry or were put up for sale. A number of shrimp vessels were sold and moved to the Pacific or to Central American countries. Numerous shrimp dealers just closed their doors, some went bankrupt, and others are just barely hanging on.

Bycatch excluder devices (BEDs) had industry members feeling pessimistic about the future of the shrimping industry.

Fishermen continued to be unhappy with the lack of quotas on imported shrimp and their effect on the local shrimp prices.

Weather:

All along the Texas coast annual rainfall exceeded the average, ranging from 32" along the southern coast to a high of about 65" along the northern coast. Flooding occurred in many areas all along the coast with most flooding along the northern coastline.

No major storm activity affected Gulf shrimping this year.

PORT ARTHUR:

Shrimp:

Shrimp production for the area was 9.1 million pounds (heads-on weight), down 14% from 1990.

Fish:

Fish landings decreased 67% to less than 150 thousand pounds. About 100 thousand pounds of fish were caught with longlines, mainly by shrimp vessels that converted to the fishery during the off-season.

Crabs:

Blue crab landings declined 29% to just over 0.5 million pounds.

GALVESTON AREA**Shrimp:**

Total shrimp production for the Galveston area was 10.3 million pounds (heads-on weight), a 5% increase from 1990. Gulf vessels landed 7.2 million pounds, and bay boats landed 3.1 million pounds.

Galveston Bay experienced a heavy influx of freshwater during the spring of 1991. This may have caused small brown shrimp to move into the Gulf earlier than usual, contributing to the poor bay landings. A mild winter may have contributed to increased white shrimp catches in the bay.

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 increased to 1.2 million pounds, an 8% increase from 1990. Galveston remains a major longline landing port; over 700 thousand pounds of yellowfin tuna, 84 thousand pounds of swordfish and about 80 thousand pounds of red snapper were landed during 1991.

Oysters:

Total oyster production in Galveston Bay was 1.6 million pounds, a 31% increase over 1990. Heavy winter and spring flooding caused a large part of the bay reefs to be closed to oystering for most of the season, which resulted in lower than average oyster yields for the third year in a row.

Crabs:

Blue crab landings declined by 13% to 2.8 million pounds, while stone crab landings remained stable at about 10 thousand pounds.

FREEPORT-PALACIOS-MATAGORDA

Shrimp:

Total shrimp production for this area was 16.7 million pounds (heads-on weight), a 3% increase from 1990. A sign of the times, three seafood dealers in Sargent and Brazoria closed and one dealer in Palacios changed hands.

Fish:

Fish landings decreased 34% to just 151 thousand pounds. Flounder, king whiting, red and vermilion snappers were the major species landed.

Crabs:

Blue crab landings declined to less than 10 thousand pounds, compared to 1.2 million pounds in 1990.

ROCKPORT-ARANSAS PASS-PORT LAVACA

Shrimp:

Total shrimp landings for the area were approximately 32 million pounds (heads-on weight), a 3% increase from 1990. Shrimpers contend that TEDs, escalating fuel prices, snapper restrictions, and decreasing shrimp prices made it difficult to survive.

Fish:

Fish landings decreased 11% to 681 thousand pounds, this included more than 84 thousand pounds of red snapper.

Oysters:

Due to heavy flooding and frequent reef closures in the bays, oyster production dropped 22% to less than 450 thousand pounds.

BROWNSVILLE-PORT ISABEL

Shrimp:

Shrimp landings totaled 28.3 million pounds (heads-on weight), a 16% increase from

1990. The size of the fleet decreased slightly, some vessels sank, some were sold, and some were replaced.

Fish:

Longline activity continued, mainly for swordfish (38 thousand pounds), red snapper (78 thousand pounds) and yellowfin tuna (275 thousand pounds).

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 fishermen, fish buyers, and fishing associations around the Island. These data were collected by six 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 1991 were silk snapper (Lutjanus vivanus) 6.7%; yellowtail snapper (Ocyurus chrysurus) 6.0%; grouper species reported, mainly red hind (Epinephelus guttatus) 5.8%; various species of grunt, mainly white grunt (Haemulon plumieri) 5.7%; lane snapper (Lutjanus synagris) 5.6%; various species of tuna 4.6%; mackerel species (Scomberomorus cavalla and Acanthocybium solanderi) 4.3%; dolphinfish (Coryphaena hippurus) 2.8%; various species of parrotfish 2.0%; and various species of trunkfish 2.0%.

Shellfish:

The most important shellfish in terms of percentage of total landed pounds for 1991 were spiny lobster (Panulirus argus) 8.6% and conch (Strombus gigas) 4.4%.

1991 REPORTED LANDINGS

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1991 LANDINGS FOR THE STATE OF NORTH CAROLINA

IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES THOUSAND POUNDS	THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Alewives	1,575	118					1,575	118	\$.07
Bluefish	2,600	380	1,320	264			3,920	644	\$.16
Bonito	3	1	2	1			5	2	\$.40
Butterfish	190	64	29	12			219	76	\$.34
Croaker	3,333	1,474	104	45			3,437	1,519	\$.44
F1-Blackback			10	6			10	6	\$.60
F1-Fluke	5,266	6,231	2,528	3,197			7,794	9,428	\$ 1.20
F1-Yellowtail	14	10	3	1			17	11	\$.64
F1-A./Gulf	1	(1)	3	2			4	2	\$.50
Groupers			609	1,009			609	1,009	\$ 1.65
Mckr1-King/Cero	38	40	1,065	1,223			1,103	1,263	\$ 1.14
Mackerel-A.			144	15			144	15	\$.10
Menhaden	110,441	2,999	88	4			110,529	3,003	\$.02
Mullet-(B.&S.)	1,467	823					1,467	823	\$.56
Scup Or Porgy	8	4	349	304			357	308	\$.86
Sea Bass-Bk.-A.	28	32	680	1,083			708	1,115	\$ 1.57
Sea Trout-Gray	4,047	1,549	1,262	753			5,309	2,302	\$.43
Sea Trout-Spot	661	545					661	545	\$.82
Shark-Dogfish	538	49	925	74			1,463	123	\$.08
Sharks-Unc	54	9	530	178			584	187	\$.32
Snapper-Red			18	46			18	46	\$ 2.55

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1991 LANDINGS FOR THE STATE OF NORTH CAROLINA

IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES THOUSAND POUNDS	THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Snapper-Other			576	1,117			576	1,117	\$1.93
Mackerel-Span	794	284	65	25			859	309	\$.35
Striped Bass	121	174	2	2			123	176	\$1.43
Swordfish			48	169			48	169	\$3.52
Tilefish			247	282			247	282	\$1.14
Tuna-Yellowfin			396	496			396	496	\$1.25
Tuna-Unclass.	11	1	143	61			154	62	\$.40
Tuna-Bigeye			28	160			28	160	\$5.71
Whiting	2	1					2	1	\$.50
Fish-Marine-0.	13,739	2,225	1,523	1,098			15,262	3,323	\$.21
TOTAL FISH	144,931	17,013	12,697	11,627			157,628	28,640	

Crab-Blue-Hard	41,830	10,543					41,830	10,543	\$.25
Shrimps-A.	10,699	18,477	43	111			10,742	18,588	\$1.73
Clam-(Meat)Hard	984	5,219					984	5,219	\$5.30
Oyster-Meats-A.	309	1,201					309	1,201	\$3.88
Scallop(Mts)Bay	45	100					45	100	\$2.22
Scallop(Mts)Sea	31	93	604	2,231			635	2,324	\$3.65
Shellfish-Other	117	54	319	78			436	132	\$.30
TOTAL SHELLFISH:	54,015	35,687	966	2,420			54,981	38,107	

GRAND TOTAL	198,946	52,700	13,663	14,047			212,609	66,747	

(1) VALUE LESS THAN \$500

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1991 LANDINGS FOR THE STATE OF SOUTH CAROLINA

IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	
Bluefish									\$.00
Bonito			3	2			3	2	\$.66
Croaker	1	(1)					1		\$.00
Fl-Fluke	9	9	1	(1)			10	9	\$.90
Groupers			577	1,308			577	1,308	\$ 2.26
Mckrl-King/Cero			260	426			260	426	\$ 1.63
Mullet-(B.&S.)	20	6					20	6	\$.30
Scup Or Porgy			176	229			176	229	\$ 1.30
Sea Bass-Bk.-A.			316	477			316	477	\$ 1.50
Sea Trout-Gray									\$.00
Sea Trout-Spot									\$.00
Sharks-Unc	20	8	96	54			116	62	\$.53
Snapper-Red			35	106			35	106	\$ 3.02
Snapper-Other			449	909			449	909	\$ 2.02
Mackerel-Span									\$.00
Striped Bass	4	4					4	4	\$ 1.00
Swordfish			305	1,010			305	1,010	\$ 3.31
Tilfish			168	239			168	239	\$ 1.42
Tuna-Yellowfin			58	155			58	155	\$ 2.67
Tuna-Unclass.			5	9			5	9	\$ 1.80
Tuna-Bigeye			(2)	1				1	\$.00

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1991 LANDINGS FOR THE STATE OF SOUTH CAROLINA IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	POUNDS	DOLLARS	POUNDS	DOLLARS	
Fish-Marine-0.	764	1,353	1,057	1,271			1,821	2,624	\$1.44
TOTAL FISH	818	1,380	3,506	6,196			4,324	7,576	
Crab-Blue-Hard	5,077	2,342					5,077	2,342	\$.46
Shrimps-A.	8,959	16,244	178	537			9,137	16,781	\$1.83
Clam-(Meat)Hard	214	851					214	851	\$3.97
Oyster-Meats-A.	361	970					361	970	\$2.68
Scallop(Mts)Cal									\$.00
Squid-Loligo	3	1					3	1	\$.33
Shellfish-Other	18	8	4	5			22	13	\$.59
TOTAL SHELLFISH:	14,632	20,416	182	542			14,814	20,958	
GRAND TOTAL	15,450	21,796	3,688	6,738			19,138	28,534	

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

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1991 LANDINGS FOR THE STATE OF GEORGIA

IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Bluefish									\$.00
Butterfish									\$.00
Croaker									\$.00
Groupers	1	3	97	181			98	184	\$ 1.87
Mckrl-King/Cero	1	1	13	12			14	13	\$.92
Mullet-(B.&S.)									\$.00
Scup Or Porgy			38	41			38	41	\$ 1.07
Sea Bass-Bk.-A.	(2)	1	4	3			4	4	\$ 1.00
Sea Trout-Gray									\$.00
Sea Trout-Spot	7	8					7	8	\$ 1.14
Sharks-Unc	1	(1)	4	2			5	2	\$.40
Snapper-Red			10	26			10	26	\$ 2.60
Snapper-Other	1	1	102	185			103	186	\$ 1.80
Mackerel-Span									\$.00
Tilefish			69	88			69	88	\$ 1.27
Tuna-Yellowfin									\$.00
Tuna-Unclass.									\$.00
Fish-Marine-O.	308	215	101	75			409	290	\$.70
TOTAL FISH	319	229	438	613			757	842	

Crab-Blue-Hard	5,660	1,657					5,660	1,657	\$.29

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1991 LANDINGS FOR THE STATE OF GEORGIA

IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		FOREIGN SHORES		THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Crab-Other	4	2					4	2	\$.50
Shrimps-A.	8,191	19,465	364	721			8,555	20,186	\$2.35
Clam-(Meat)Hard:	64	421					64	421	\$6.57
Oyster-Meats-A.	78	154					78	154	\$1.97
Shellfish-Other:	869	457					869	457	\$.52
TOTAL SHELLFISH:	14,866	22,156	364	721			15,230	22,877	

GRAND TOTAL	15,185	22,385	802	1,334			15,987	23,719	

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

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1991 LANDINGS FOR THE STATE OF FLORIDA EAST COAST IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		PR/LB
	FROM 0 TO 3 MILES THOUSAND POUNDS	THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	
Bluefish	1,222	299					1,222	299	\$.24
Bonito			14	2			14	2	\$.14
Croaker	54	31					54	31	\$.57
F1-A./Gulf	306	423					306	423	\$ 1.38
Groupers	28	58	664	1,417			692	1,475	\$ 2.13
Mckr1-King/Cero	107	132	1,425	1,758			1,532	1,890	\$ 1.23
Menhaden	2,393	219					2,393	219	\$.09
Mullet-(B.&S.)	2,510	699					2,510	699	\$.27
Scup Or Pogy	42	50	176	213			218	263	\$ 1.20
Sea Bass-Bk.-A.	7	6	35	26			42	32	\$.76
Sea Trout-Gray	156	70					156	70	\$.44
Sea Trout-Spot	212	240					212	240	\$ 1.13
Sharks-Unc	737	387	737	387			1,474	774	\$.52
Snapper-Red			71	205			71	205	\$ 2.88
Snapper-Other	100	119	585	675			685	794	\$ 1.15
Mackere1-Span	235	110	2,704	1,452			2,939	1,562	\$.53
Swordfish			2,275	9,053			2,275	9,053	\$ 3.97
Tilefish			616	922			616	922	\$ 1.49
Tuna-Bluefin			11	110			11	110	\$ 10.00
Tuna-Yellowfin			77	188			77	188	\$ 2.44
Tuna-Unclass.			74	118			74	118	\$ 1.59

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1991 LANDINGS FOR THE STATE OF FLORIDA EAST COAST IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Tuna-Bigeye			123	364			123	364	\$2.95
Fish-Marine-O.	4,177	2,686	2,311	2,218			6,488	4,904	\$7.75
TOTAL FISH	12,286	5,529	11,898	19,108			24,184	24,637	

Crab-Blue-Hard	4,323	2,608					4,323	2,608	\$6.60
Crab-Other	82	332					82	332	\$4.04
Lobster-Spiny	672	2,664	179	708			851	3,372	\$3.96
Shrimps-A.	4,791	7,569	3,402	4,581			8,193	12,150	\$1.48
Clam-(Meat)Hard	437	2,108					437	2,108	\$4.82
Oyster-Meats-A.	151	330					151	330	\$2.18
Squid-Loligo			13	4			13	4	\$3.30
Shellfish-Other	102	450	306	944			408	1,394	\$3.41
TOTAL SHELLFISH:	10,558	16,061	3,900	6,237			14,458	22,298	

GRAND TOTAL	22,844	21,590	15,798	25,345			38,642	46,935	

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1991 LANDINGS FOR THE STATE OF FLORIDA INLAND LAKES IN THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES				THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS			
Fish-Marine-0.	6,736	2,939					6,736	2,939	\$.43
TOTAL FISH	6,736	2,939					6,736	2,939	

TOTAL SHELLFISH:									

GRAND TOTAL	6,736	2,939					6,736	2,939	

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1991 LANDINGS FOR THE STATE OF FLORIDA WEST COAST IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS					
Alewives	698	10					698	10	\$.01
Bluefish	310	81					310	81	\$.26
Bonito	425	94	267	64			692	158	\$.22
Croaker	31	17					31	17	\$.54
Fl-Fluke	180	220					180	220	\$ 1.22
Groupers	120	220	8,055	14,713			8,175	14,933	\$ 1.82
Mckrl-King/Cero	98	107	660	722			758	829	\$ 1.09
Menhaden	8,725	785					8,725	785	\$.08
Mullet-(B.&S.)	20,285	5,883					20,285	5,883	\$.29
Scup Or Porgy	35	32	495	445			530	477	\$.90
Sea Bass-Bk.-A.	90	61	360	245			450	306	\$.68
Sea Trout-Spot	861	1,154					861	1,154	\$ 1.34
Sharks-Unc	120	61	3,370	1,719			3,490	1,780	\$.51
Snapper-Red			572	1,600			572	1,600	\$ 2.79
Snapper-Other	430	800	3,531	5,577			3,961	6,377	\$ 1.60
Mackere1-Span	250	130	2,530	1,311			2,780	1,441	\$.51
Swordfish			300	1,110			300	1,110	\$ 3.70
Tiliefish			298	355			298	355	\$ 1.19
Tuna-Bluefin			4	40			4	40	\$ 10.00
Tuna-Yellowfin			520	1,435			520	1,435	\$ 2.75
Tuna-Unclass.			72	64			72	64	\$.88

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1991 LANDINGS FOR THE STATE OF FLORIDA WEST COAST IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Tuna-Bigeye			10	32			10	32	\$3.20
Fish-Marine-0.	26,325	5,923	6,614	3,091			32,939	9,014	\$2.27
TOTAL FISH	58,983	15,578	27,658	32,523			86,641	48,101	

Crab-Blue-Hard	4,620	2,495					4,620	2,495	\$0.54
Crab-Other	929	2,007	5,160	11,205			6,089	13,212	\$2.16
Lobster-Spiny	1,419	6,244	4,075	17,930			5,494	24,174	\$4.40
Shrimps-A.	2,551	3,623	8,705	12,051			11,256	15,674	\$1.39
Oyster-Meats-A.	3,250	8,515					3,250	8,515	\$2.62
Scallop(Mts)Bay	3	11					3	11	\$3.66
TOTAL SHELLFISH:	12,772	22,895	17,940	41,186			30,712	64,081	

GRAND TOTAL	71,755	38,473	45,598	73,709			117,353	112,182	

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1991 LANDINGS FOR THE STATE OF ALABAMA

IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES		HIGH SEAS OR OFF FOREIGN SHORES		THOUSAND POUNDS	TOTAL THOUSAND DOLLARS	PR/LB
	FROM 0 TO 3 MILES THOUSAND POUNDS	THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	THOUSAND DOLLARS			
Bluefish	19	5			19	5	\$.26
Croaker	22	8			22	8	\$.36
F1-A./Gulf	101	124	127	100	228	224	\$.98
Groupers			46	87	46	87	\$ 1.89
Mullet-(B.&S.)	1,202	1,133			1,202	1,133	\$.94
Sea Trout-White	43	21	25	12	68	33	\$.48
Snapper-Red			52	126	52	126	\$ 2.42
Snapper-Other			7	11	7	11	\$ 1.57
Mackerel-Span	91	30			91	30	\$.32
Tilefish			10	14	10	14	\$ 1.40
Tuna-Yellowfin			7	13	7	13	\$ 1.85
Tuna-Unclass.			2	1	2	1	\$.50
Fish-Marine-O.	1,070	153	1,143	657	2,213	810	\$.36
TOTAL FISH	2,548	1,474	1,419	1,021	3,967	2,495	
Crab-Blue-Hard	2,731	942			2,731	942	\$.34
Shrimps-A.	5,661	9,978	9,275	22,798	14,936	32,776	\$ 2.19
Oyster-Meats-A.	266	473			266	473	\$ 1.77
Squid-Illex	5	2			5	2	\$.40
Shellfish-Other			2	9	2	9	\$ 4.50
TOTAL SHELLFISH:	8,663	11,395	9,277	22,807	17,940	34,202	
GRAND TOTAL	11,211	12,869	10,696	23,828	21,907	36,697	

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1991 LANDINGS FOR THE STATE OF MISSISSIPPI

IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		PR/LB
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	
Bluefish	3	1					3	1	\$.33
Croaker			2	1			2	1	\$.50
F1-A./Gulf	41	43	44	39			85	82	\$.96
Groupers			26	26			26	26	\$ 1.00
Mckrl-King/Cero			1	1			1	1	\$ 1.00
Mullet-(B.&S.)	439	200					439	200	\$.45
Scup Or Pogy	2	1	7	7			9	8	\$.88
Sea Trout-Spot	30	50	1	1			31	51	\$ 1.64
Sea Trout-White	10	3	12	4			22	7	\$.31
Sharks-Unc	8	2	110	31			118	33	\$.27
Snapper-Red			135	246			135	246	\$ 1.82
Snapper-Other			117	211			117	211	\$ 1.80
Mackerel-Span	6	2	2	1			8	3	\$.37
Tuna-Unclass.			80	12			80	12	\$.15
Fish-Marine-0.	203,576	10,540	21,397	2,052			224,973	12,592	\$.05
TOTAL FISH	204,115	10,842	21,934	2,632			226,049	13,474	

Crab-Blue-Hard	446	156	8	4			454	160	\$.35
Shrimps-A.	5,936	8,295	5,845	12,210			11,781	20,505	\$ 1.74
Oyster-Meats-A.	102	157					102	157	\$ 1.53
Squid-Illex	2	1					2	1	\$.50
TOTAL SHELLFISH:	6,486	8,609	5,853	12,214			12,339	20,823	

GRAND TOTAL	210,601	19,451	27,787	14,846			238,388	34,297	

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1991 LANDINGS FOR THE STATE OF LOUISIANA

IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS					
Bluefish			36	9			36	9	\$.25
Bonito			2	1			2	1	\$.50
Croaker	56	47					56	47	\$.83
F1-A./Gulf	599	643	20	21			619	664	\$ 1.07
Groupers			396	642			396	642	\$ 1.62
Mcknl-King/Cero	92	103	500	561			592	664	\$ 1.12
Menhaden	653,380	19,678	351,817	10,590			1,005,197	30,268	\$.03
Mullet-(B.&S.)	2,668	1,789					2,668	1,789	\$.67
Scup Or Pogy			25	22			25	22	\$.88
Sea Trout-Spot	1,093	1,469					1,093	1,469	\$ 1.34
Sea Trout-White	108	70	20	12			128	82	\$.64
Sharks-Unc	300	126	2,062	867			2,362	993	\$.42
Snapper-Red			1,118	2,673			1,118	2,673	\$ 2.39
Snapper-Other			637	987			637	987	\$ 1.54
Mackerel-Span	18	6	18	6			36	12	\$.33
Swordfish			716	1,799			716	1,799	\$ 2.51
Tilefish			39	51			39	51	\$ 1.30
Tuna-Albacore			9	4			9	4	\$.44
Tuna-Bluefin			137	1,221			137	1,221	\$ 8.91
Tuna-Yellowfin			4,832	11,480			4,832	11,480	\$ 2.37
Tuna-Unclass.			244	126			244	126	\$.51

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1991 LANDINGS FOR THE STATE OF LOUISIANA

IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Tuna-Bigeye			68	202			68	202	\$2.97
Fish-Marine-O.	13,033	5,277	1,318	1,151			14,351	6,428	\$.44
TOTAL FISH	671,347	29,208	364,014	32,425			1,035,361	61,633	

Crab-Blue-Hard	44,478	15,578					44,478	15,578	\$.35
Shrimps-A.	72,575	91,612	22,513	49,849			95,088	141,461	\$1.48
Oyster-Meats-A.	6,909	19,210					6,909	19,210	\$2.78
Squid-Illex	2	1					2	1	\$.50
Shellfish-Other	10,701	5,717					10,701	5,717	\$.53
TOTAL SHELLFISH:	134,665	132,118	22,513	49,849			157,178	181,967	

GRAND TOTAL	806,012	161,326	386,527	82,274			1,192,539	243,600	

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1991 LANDINGS FOR THE STATE OF TEXAS

IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Bluefish									\$.00
Croaker	1	(1)					1		\$.00
Cusk									\$.00
F1-A./Gulf	199	250	5	6			204	256	\$ 1.25
Groupers			119	160			119	160	\$ 1.34
Mckr1-King/Cero:			(2)	1				1	\$.00
Mullet-(B.&S.)	79	18	7	1			86	19	\$.22
Sea Trout-White:	1	(1)					1		\$.00
Sharks-Unc			34	20			34	20	\$.58
Snapper-Red			347	653			347	653	\$ 1.88
Snapper-Other			84	137			84	137	\$ 1.63
Mackere1-Span									\$.00
Swordfish			172	419			172	419	\$ 2.43
Tilefish			23	26			23	26	\$ 1.13
Tuna-Albacore			1	2			1	2	\$ 2.00
Tuna-Bluefin			22	219			22	219	\$ 9.95
Tuna-Yellowfin			1,080	2,637			1,080	2,637	\$ 2.44
Tuna-Unclass.			19	28			19	28	\$ 1.47
Tuna-Bigeye			2	7			2	7	\$ 3.50
Fish-Marine-0.	731	503	171	141			902	644	\$.71
TOTAL FISH	1,011	771	2,086	4,457			3,097	5,228	

Crab-Blue-Hard	6,724	2,486	9	4			6,733	2,490	\$.36

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1991 LANDINGS FOR THE STATE OF TEXAS

IN THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		FOREIGN SHORES		THOUSAND	THOUSAND	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	
Crab-Other	130	76					130	76	\$.58
Shrimps-A.	22,405	26,800	73,417	173,448			95,822	200,248	\$2.08
Oyster-Meats-A.	2,516	6,358					2,516	6,358	\$2.52
Shellfish-Other	16	9	1	1			17	10	\$.58
TOTAL SHELLFISH:	31,791	35,729	73,427	173,453			105,218	209,182	

GRAND TOTAL	32,802	36,500	75,513	177,910			108,315	214,410	

(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.

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1991 LANDINGS FOR THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES THOUSAND POUNDS	THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Alewives	1,575	118					1,575	118	\$.07
Bluefish	3,822	679	1,320	264			5,142	943	\$.18
Bonito	3	1	19	5			22	6	\$.27
Butterfish	190	64	29	12			219	76	\$.34
Croaker	3,388	1,505	104	45			3,492	1,550	\$.44
F1-Blackback			10	6			10	6	\$.60
F1-Fluke	5,275	6,240	2,529	3,197			7,804	9,437	\$1.20
F1-Yellowtail	14	10	3	1			17	11	\$.64
F1-A./Gulf	307	423	3	2			310	425	\$1.37
Groupers	29	61	1,947	3,915			1,976	3,976	\$2.01
Mckrl-King/Cero	146	173	2,763	3,419			2,909	3,592	\$1.23
Mackere1-A.			144	15			144	15	\$.10
Menhaden	112,834	3,218	88	4			112,922	3,222	\$.02
Mullet-(B.&S.)	3,997	1,528					3,997	1,528	\$.38
Scup Or Porgy	50	54	739	787			789	841	\$1.06
Sea Bass-Bk.-A.	35	39	1,035	1,589			1,070	1,628	\$1.52
Sea Trout-Gray	4,203	1,619	1,262	753			5,465	2,372	\$.43
Sea Trout-Spot	880	793					880	793	\$.90
Shark-Dogfish	538	49	925	74			1,463	123	\$.08

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1991 LANDINGS FOR THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		PR/LB
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	
Sharks-Unc	812	404	1,367	621			2,179	1,025	\$.47
Snapper-Red			134	383			134	383	\$2.85
Snapper-Other	101	120	1,712	2,886			1,813	3,006	\$1.65
Mackerel-Span	1,029	394	2,769	1,477			3,798	1,871	\$.49
Striped Bass	125	178	2	2			127	180	\$1.41
Swordfish			2,628	10,232			2,628	10,232	\$3.89
Tilefish			1,100	1,531			1,100	1,531	\$1.39
Tuna-Bluefin			11	110			11	110	\$10.00
Tuna-Yellowfin			531	839			531	839	\$1.58
Tuna-Unclass.	11	1	222	188			233	189	\$.81
Tuna-Bigeye			151	525			151	525	\$3.47
Whiting	2	1					2	1	\$.50
Fish-Marine-O.	25,724	9,418	4,992	4,662			30,716	14,080	\$.45
TOTAL FISH	165,090	27,090	28,539	37,544			193,629	64,634	

Crab-Blue-Hard	56,890	17,150					56,890	17,150	\$.30
Crab-Other	86	334					86	334	\$3.88
Lobster-Spiny	672	2,664	179	708			851	3,372	\$3.96
Shrimps-A.	32,640	61,755	3,987	5,950			36,627	67,705	\$1.84
Clam-(Meat)Hard	1,699	8,599					1,699	8,599	\$5.06

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1991 LANDINGS FOR THE SOUTH ATLANTIC REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND THOUSAND		THOUSAND	THOUSAND	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	
Oyster-Meats-A.	899	2,655					899	2,655	\$2.95
Scallop(Mts)Bay	45	100					45	100	\$2.22
Scallop(Mts)Cal									\$.00
Scallop(Mts)Sea	31	93	604	2,231			635	2,324	\$3.65
Squid-Loligo	3	1	13	4			16	5	\$.31
Shellfish-Other	1,106	969	629	1,027			1,735	1,996	\$1.15
TOTAL SHELLFISH:	94,071	94,320	5,412	9,920			99,483	104,240	

GRAND TOTAL	259,161	121,410	33,951	47,464			293,112	168,874	

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1991 LANDINGS FOR THE GULF REGION

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES THOUSAND POUNDS	THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Alewives	698	10					698	10	\$.01
Bluefish	332	87	36	9			368	96	\$.26
Bonito	425	94	269	65			694	159	\$.22
Croaker	110	72	2	1			112	73	\$.65
Cusk									\$.00
F1-Fluke	180	220					180	220	\$ 1.22
F1-A./Gulf	940	1,060	196	166			1,136	1,226	\$ 1.07
Groupers	120	220	8,642	15,628			8,762	15,848	\$ 1.80
Mckrl-King/Cero	190	210	1,161	1,285			1,351	1,495	\$ 1.10
Menhaden	662,105	20,463	351,817	10,590			1,013,922	31,053	\$.03
Mullet-(B.&S.)	24,673	9,023	7	1			24,680	9,024	\$.36
Scup Or Porgy	37	33	527	474			564	507	\$.89
Sea Bass-Bk.-A.	90	61	360	245			450	306	\$.68
Sea Trout-Spot	1,984	2,673	1	1			1,985	2,674	\$ 1.34
Sea Trout-White	162	94	57	28			219	122	\$.55
Sharks-Unc	428	189	5,576	2,637			6,004	2,826	\$.47
Snapper-Red			2,224	5,298			2,224	5,298	\$ 2.38
Snapper-Other	430	800	4,376	6,923			4,806	7,723	\$ 1.60
Mackerel-Span	365	168	2,550	1,318			2,915	1,486	\$.50

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NATIONAL MARINE FISHERIES SERVICE
 FISHERIES STATISTICS DIVISION
 1991 LANDINGS FOR THE GULF REGION

PAGE 2

DATE OF RUN 6/02/92

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES THOUSAND POUNDS	THOUSAND DOLLARS	BETWEEN 3 AND 200 MILES THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Swordfish			1,188	3,328			1,188	3,328	\$2.80
Tilefish			370	446			370	446	\$1.20
Tuna-Albacore			10	6			10	6	\$.60
Tuna-Bluefin			163	1,480			163	1,480	\$9.07
Tuna-Yellowfin			6,439	15,565			6,439	15,565	\$2.41
Tuna-Unclass.			417	231			417	231	\$.55
Tuna-Bigeye			80	241			80	241	\$3.01
Fish-Marine-O.	244,735	22,396	30,643	7,092			275,378	29,488	\$.10
TOTAL FISH	938,004	57,873	417,111	73,058			1,355,115	130,931	
Crab-Blue-Hand	58,999	21,657	17	8			59,016	21,665	\$.36
Crab-Other	1,059	2,083	5,160	11,205			6,219	13,288	\$2.13
Lobster-Spiny	1,419	6,244	4,075	17,930			5,494	24,174	\$4.40
Shrimps-A.	109,128	140,308	119,755	270,356			228,883	410,664	\$1.79
Oyster-Meats-A.	13,043	34,713					13,043	34,713	\$2.66
Scallop(Mts)Bay	3	11					3	11	\$3.66
Squid-Illex	9	4					9	4	\$.44
Shellfish-Other	10,717	5,726	3	10			10,720	5,736	\$.53
TOTAL SHELLFISH:	194,377	210,746	129,010	299,509			323,387	510,255	
GRAND TOTAL	1,132,381	268,619	546,121	372,567			1,678,502	641,186	

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

**1991 STATISTICAL HIGHLIGHTS
SOUTHEASTERN REGION**

COMMERCIAL FISHERIES

A. Total Landings

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

- Of 1.97 billion pounds

1.55 billion pounds were fish

0.42 billion pounds were shellfish

- Of 1.97 billion pounds

0.84 billion pounds for food

1.13 billion pounds for industrial purposes

B. Catch by Distance from Shore

<u>Distance</u> <u>Miles</u>	<u>Billion pounds</u>	<u>%</u>
0-3	1.4	70.6
3-200	0.58	29.4

C. Landings by Major Species

<u>SPECIES</u>	<u>THOUSAND</u> <u>POUNDS</u>	<u>THOUSAND</u> <u>DOLLARS</u>
GROUPERS	10,738	\$ 19,824
SNAPPERS	8,977	16,410
KING MACKEREL	4,260	5,087
SPANISH MACKEREL	6,713	3,357
MENHADEN	1,126,844	34,275
SHARKS	9,666	3,974
SWORDFISH	3,816	13,560
TUNA	8,035	20,112
OYSTERS	13,942	37,368
SHRIMP	265,510	478,369
SPINY LOBSTER	6,345	27,546
STONE CRABS	6,305	13,622

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

MARINE RECREATIONAL FISHERIES

Atlantic & Gulf	- 358.9 million fish*
	- 141.0 million pounds**
Southeast	- 201.1 million fish*
(South Atlantic & Gulf)	- 78.9 million pounds**

MAJOR SPECIES:

Herrings
Spotted Seatrout
Atlantic Croaker
Spot
Bluefish
Scup
Summer Flounder
Pinfish
Saltwater Catfishes
Black sea bass
Searobins
Red Drum
White Grunt
Gray Snapper
White Perch
Tautog
Mulletts
Winter Flounder
King Mackerel
Groupers
Sand Seatrout
Spanish Mackerel
Striped Seabass
Yellowtail Snapper
Pinfishes
Sheepshead
Toadfishes
Grunts
Dolphin
Crevalle Jack

* Total number of fish caught

**Estimated weight of catch available for identification(Type A)

Source: Van Voorhees, D. A., J. F. Witzig, M. F. Osborn, M. C. Holliday, and R. J. Essig. 1992. Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1990-1991. Current Fisheries Statistics Number 9204, National Marine Fisheries Service, NOAA, DOC, Silver

TABLE 1. PUERTO RICO LANDINGS BY SPECIES FOR 1991.

Species	Pounds	Total Value	Price per Pound
Species	Total Pounds	Total Value	Weighted Price/lb
Tuna	112,645	\$ 96,717	\$ 0.858
Ballyhoo	36,065	37,062	1.027
Grunt	140,917	164,703	1.168
Hogfish	30,975	58,342	1.883
Croaker	84	103	1.230
Trunkfish	49,305	79,393	1.610
Dolphin	69,731	90,078	1.291
Swordfish	0	0	
Squirrelfish	9,080	10,126	1.115
Mullet	32,269	35,531	1.101
Jack	41,720	50,159	1.202
Parrotfish	68,126	65,127	0.955
Marlin	6,042	8,996	1.488
Amberjack	1,160	950	0.819
Grouper	83,022	136,288	1.641
Red Hind	55,512	80,902	1.457
Nassau	4,366	6,590	1.509
Mojarra	20,258	29,310	1.446
Snapper			
Lane	139,147	228,932	1.645
Yellowtail	148,584	265,922	1.789
Silk	167,295	374,107	2.236
Mutton	42,164	74,815	1.774
Other Snapper	56,366	101,743	1.805
Triggerfish	30,989	37,544	1.211
Barracuda	23,748	29,054	1.223
Porgy	12,955	16,734	1.291
Snook	32,723	50,548	1.544
Tarpon	6,229	3,444	0.552
Goatfish	15,740	22,011	1.398
Sardine	24,850	22,653	0.911
Mackerel	105,850	168,978	1.596
Shark	46,116	53,608	1.162
Margate	2,133	2,720	1.275
Classified			
First Class	193,743	264,446	1.364
Second Class	138,186	133,542	0.966
Third Class	63,288	65,361	1.032
Trash	7,067	2,439	0.345
Other Fish	95,873	0	0.000
Total Fish	2,114,323	3,092,899	1.462
Queen Conch	108,157	218,596	2.021
Land Crab	5,650	50,184	8.882
Lobster	211,941	949,736	4.481
Oysters	460	920	1.999
Octopus	20,028	44,352	2.214
Other Shellfish	2,459	8,448	3.435
Total Shellfish	348,695	1,354,656	3.884
Total	2,463,018	4,652,750	1.889

NATIONAL MARINE FISHERIES SERVICE

DATE OF RUN 6/02/92

FISHERIES STATISTICS DIVISION

PAGE 1

1991 LANDINGS FOR THE UNITED STATES

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS					
Alewives	14,155	383	1	(1)			14,156	383	\$.02
Anchovies	19,054	6,745	191	68			19,245	6,813	\$.35
Bluefish	7,757	1,555	5,475	1,176			13,232	2,731	\$.20
Bonito	538	143	926	254			1,464	397	\$.27
Butterfish	689	326	5,492	2,845			6,181	3,171	\$.51
Cod-A.	1,142	926	91,492	73,166	2	1	92,636	74,093	\$.79
Cod-P.	38,979	9,490	514,737	112,660			553,716	122,150	\$.22
Croaker	4,620	2,090	141	56			4,761	2,146	\$.45
Cusk	13	7	3,287	1,669			3,300	1,676	\$.50
F1-Blackback	1,215	1,133	15,204	17,462	5	5	16,424	18,600	\$ 1.13
F1-Fluke	6,901	9,196	11,289	15,303	(2)	1	18,190	24,500	\$ 1.34
F1-Yellowtail	196	179	16,926	17,575	10	10	17,132	17,764	\$ 1.03
F1-A./Gulf	1,425	1,585	21,841	19,945	9	5	23,275	21,535	\$.92
F1-P.-Other	12,040	3,810	317,894	58,580			329,934	62,390	\$.18
Groupers	149	281	10,589	19,543			10,738	19,824	\$ 1.84
Haddock	9	11	4,044	4,570			4,053	4,581	\$ 1.13
Hake-Red	118	31	3,578	792			3,696	823	\$.22
Hake-White	19	7	12,721	5,564			12,740	5,571	\$.43
Hake-P.	15,982	1,689	39,982	2,003			55,964	3,692	\$.06
Halibut	17,693	26,145	48,646	73,387			66,339	99,532	\$ 1.50

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NATIONAL MARINE FISHERIES SERVICE

DATE OF RUN 6/02/92

FISHERIES STATISTICS DIVISION

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1991 LANDINGS FOR THE UNITED STATES

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
Herring-Sea	160,291	33,358	69,917	3,813			230,208	37,171	\$.16
Jack Mackerel	3,582	233	36	2			3,618	235	\$.06
Mckrl-King/Cero	350	402	3,931	4,717			4,281	5,119	\$1.19
Lingcod	1,277	465	6,998	2,408			8,275	2,873	\$.34
Mackerel-A.	568	128	36,132	5,348			36,700	5,476	\$.14
Mackerel-P.	60,171	4,629	3,165	243			63,336	4,872	\$.07
Menhaden	1,625,062	67,096	351,998	10,598			1,977,060	77,694	\$.03
Mullet-(B.&S.)	28,708	10,568	9	1			28,717	10,569	\$.36
Ocean Perch-A.	1	(1)	1,175	543			1,176	543	\$.46
Ocean Perch-P.	25	2	29,969	6,443			29,994	6,445	\$.21
Pollock-Alaska	39,365	3,372	2,815,951	238,179			2,855,316	241,551	\$.08
Pollock	58	30	17,286	9,871			17,344	9,901	\$.57
Rockfish-Other	4,969	1,957	92,497	31,735			97,466	33,692	\$.34
Sablefish	6,614	8,050	76,996	70,116			83,610	78,166	\$.93
Salmon-Chinook	15,818	27,565	4,325	9,418			20,143	36,983	\$1.83
Salmon-Chum	76,155	24,875	27	9			76,182	24,884	\$.32
Salmon-Pink	362,728	47,041	88	14			362,816	47,055	\$.12
Salmon-Red	268,791	210,992	2	3			268,793	210,995	\$.78
Salmon-Silver	51,649	36,273	3,702	3,530			55,351	39,803	\$.71
Scup Or Porgy	4,148	2,271	11,996	6,856	1	(1)	16,145	9,127	\$.56

NATIONAL MARINE FISHERIES SERVICE

DATE OF RUN 6/02/92

FISHERIES STATISTICS DIVISION

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1991 LANDINGS FOR THE UNITED STATES

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS					
Sea Bass-Bk.-A.	296	435	3,614	4,173			3,910	4,608	\$1.17
Sea Bass-White	130	272	33	68			163	340	\$2.08
Sea Trout-Gray	6,690	3,767	1,978	1,087			8,668	4,854	\$.55
Sea Trout-Spot	2,885	3,492	1	1			2,886	3,493	\$1.21
Sea Trout-White	162	94	57	28			219	122	\$.55
Shark-Dogfish	7,917	982	26,459	2,462			34,376	3,444	\$.10
Sharks-Unc	2,140	1,228	10,410	5,879	81	47	12,631	7,154	\$.56
Snapper-Red			2,358	5,681			2,358	5,681	\$2.40
Snapper-Other	883	2,622	6,441	11,512			7,324	14,134	\$1.92
Mackerel-Span	2,047	824	5,429	2,882			7,476	3,706	\$.49
Striped Bass	717	1,126	9	12			726	1,138	\$1.56
Swordfish			14,178	41,771	3,785	8,384	17,963	50,155	\$2.79
Tilefish			4,090	6,193			4,090	6,193	\$1.51
Tuna-Albacore	16	7	2,289	1,891	2,264	1,882	4,569	3,780	\$.82
Tuna-Bluefin	1	1	1,813	16,940	51	57	1,865	16,998	\$9.11
Tuna-Skipjack	278	318	2,562	2,753	4,027	1,222	6,867	4,293	\$.62
Tuna-Yellowfin	176	481	10,489	22,937	5,354	6,124	16,019	29,542	\$1.84
Tuna-Unclass.	203	42	773	521	168	86	1,144	649	\$.56
Tuna-Bigeye			4,173	15,881	1,058	3,910	5,231	19,791	\$3.78
Whiting	1,199	472	35,267	10,724			36,466	11,196	\$.30

NATIONAL MARINE FISHERIES SERVICE

DATE OF RUN 6/02/92

FISHERIES STATISTICS DIVISION

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1991 LANDINGS FOR THE UNITED STATES

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF FOREIGN SHORES		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS					
Fish-Marine-O.	131,480	56,426	180,842	53,600	2,294	3,088	314,616	113,114	\$.35
TOTAL FISH	3,010,244	617,628	4,963,921	1,037,461	19,109	24,822	7,993,274	1,679,911	

Crab-Blue-Hard	222,043	73,290	17	8			222,060	73,298	\$.33
Crab-Dungeness	18,482	27,536	3,832	5,992			22,314	33,528	\$ 1.50
Crab-King	1,498	4,574	26,642	78,236			28,140	82,810	\$ 2.94
Crab-Snow	5,096	7,139	352,026	193,049			357,122	200,188	\$.56
Crab-Other	8,293	10,370	12,064	14,641			20,357	25,011	\$ 1.22
Lobster-Amer.	52,854	133,345	10,483	31,681			63,337	165,026	\$ 2.60
Lobster-Spiny	2,659	12,468	4,437	19,666			7,096	32,134	\$ 4.52
Shrimps-A.	148,534	205,875	171,553	306,973			320,087	512,848	\$ 1.60
Clam-(Meat)Hard	12,311	58,453					12,311	58,453	\$ 4.74
Clam-(Meat)O.O.	89	302	49,044	18,746			49,133	19,048	\$.38
Clam-(Meat)Soft	4,225	14,849					4,225	14,849	\$ 3.51
Clam-(Meat)Surf	20,721	7,598	45,498	21,584			66,219	29,182	\$.44
Clam-Unc1.	1,514	3,050	841	684			2,355	3,734	\$ 1.58
Oyster-Meats-A.	31,859	97,996					31,859	97,996	\$ 3.07
Scallop(Mts)Bay	438	2,666					438	2,666	\$ 6.08
Scallop(Mts)Cal			286	858			286	858	\$ 3.00
Scallop(Mts)Sea	1,385	6,209	37,917	152,723			39,302	158,932	\$ 4.04

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NATIONAL MARINE FISHERIES SERVICE

DATE OF RUN 6/02/92

FISHERIES STATISTICS DIVISION

PAGE 5

1991 LANDINGS FOR THE UNITED STATES

SPECIES	DISTANCE FROM U.S. SHORES				HIGH SEAS OR OFF		TOTAL		
	FROM 0 TO 3 MILES		BETWEEN 3 AND 200 MILES		FOREIGN SHORES		THOUSAND	THOUSAND	PR/LB
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	
Squid	69,241	5,644	1,259	280			70,500	5,924	\$.08
Squid-Illex	9	4	26,253	6,948			26,262	6,952	\$.26
Squid-Loligo	6,085	3,459	36,669	19,274	53	25	42,807	22,758	\$.53
Shellfish-Other	98,817	79,518	5,893	2,648			104,710	82,166	\$.78
TOTAL SHELLFISH:	706,153	754,345	784,714	873,991	53	25	1,490,920	1,628,361	
GRAND TOTAL	3,716,397	1,371,973	5,748,635	1,911,452	19,162	24,847	9,484,194	3,308,272	

(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.

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Statistical Highlights Fisheries of the United States, 1991

prepared by NMFS Fisheries Statistics Division

U.S. COMMERCIAL FISHERIES

World-wide catch by U.S. Vessels (1):

10.1 billion pounds (4.6 million metric tons) round weight
Valued at \$3.5 billion - exvessel value

U.S. Landings in the 50 United States (2):

9.5 billion pounds (4.3 million metric tons) round weight
Valued at \$3.3 billion

Of 9.5 billion pounds:

8.0 billion pounds (3.6 million metric tons) of finfish
1.5 billion pounds (676,000 metric tons) of shellfish

Of 9.5 billion pounds:

7.0 billion pounds (3.2 million metric tons) for food
2.5 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
7.0 billion pounds (3.2 million metric tons) domestic production
6.0 billion pounds (2.7 million metric tons) imported (46 percent)

Per capita consumption: 14.9 pounds (6.7 kilograms) edible meat

FOREIGN TRADE

Imports - edible

3.0 billion pounds (1.4 million metric tons) product weight
Valued at \$5.7 billion

Exports - edible

2.0 billion pounds (916,400 metric tons) product weight
Valued at \$3.0 billion

CATCH IN THE EEZ

Total - 5.8 billion pounds (2.6 million metric tons)

U.S. domestic - 5.7 billion pounds (2.6 million metric tons)

Foreign countries - 11.8 million pounds (5,300 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	3.9	1.8	38	1.4	39
3-200 miles	5.8	2.6	57	1.9	55
International	0.5	0.2	5	0.2	6
TOTAL	10.1	4.6	100	3.5	100

U.S. DOMESTIC LANDINGS

<u>Rank</u>	<u>Volume</u>	<u>Percent</u>	<u>Value</u>	<u>Percent</u>
1	AK Pollock	33	Shrimp	16
2	Menhaden	21	Crabs	13
3	Salmon	8	Salmon	11
4	Crabs	7	AK Pollock	7
5	Cods	5	Cods	6

WORLD FISHERIES (Live weight, 1990)

Total catch 214.4 billion pounds (97.2 million metric tons)

U.S. catch 12.9 billion pounds (5.9 million metric tons)
(including weight of mollusk shells)

U.S. catch is 6.0 percent of world catch

COMMERCIAL FISHERIES CONTRIBUTION TO GNP

U.S. consumers spent an estimated \$26.8 billion for fishery products.

In producing and marketing these items, the commercial fishing industry contributed \$16.5 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:

Drums & Croakers	Tunas / Mackerels
Herring	Sea basses / Groupers
Porgies	Snappers
Flounders	Grunts

1991 Atlantic coast catch: 379.5 million fish (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:

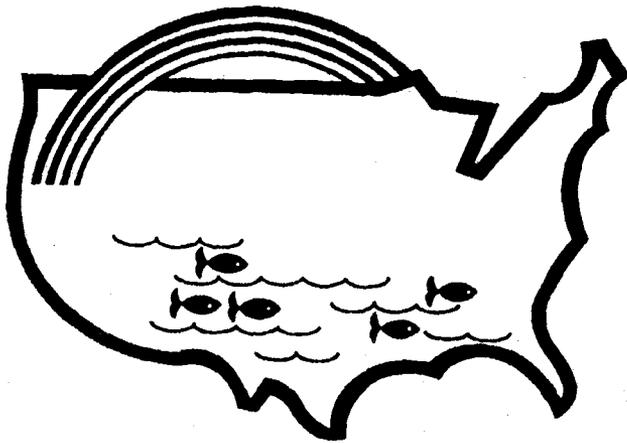
Fisheries Statistics Division
National Marine Fisheries Service
1335 East West Highway Room 8313
Silver Spring, MD 20910

(301) 713 - 2328

Fisheries of the United States, 1991

Supplemental

May 1992



**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.

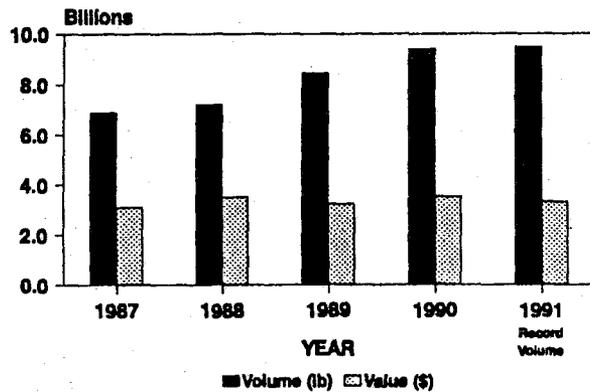
Fisheries are very important to our economy. In 1991, U.S. commercial fishermen landed 9.5 billion pounds of fish and shellfish with a dockside value of \$3.3 billion, while the U.S. industry exported more than \$6.2 billion in fishery products. Marine recreational fisheries annually involve some 17 million anglers who spend over \$7.2 billion. As a nation we spent more than \$26.8 billion on seafood purchases in 1991, and consumed an estimated 14.9 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

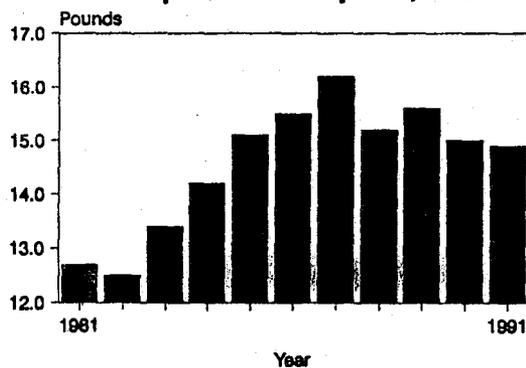


Commercial landings by U.S. fishermen in 1991 amounted to 9.5 billion pounds (4.3 million metric tons) of edible and non-edible fishery resources valued at \$3.3 billion. A metric ton is equal to 2,204.6 pounds. Over 300 species are taken commercially. The "round" weights shown in the above graph and elsewhere in this brochure include the weights of whole fish, but not the shell weights of mollusks.

Per capita Consumption

Per capita consumption of commercially caught fish and shellfish in 1991 was 14.9 pounds, just slightly less than the revised 1990 estimate of 15.0 pounds. 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.

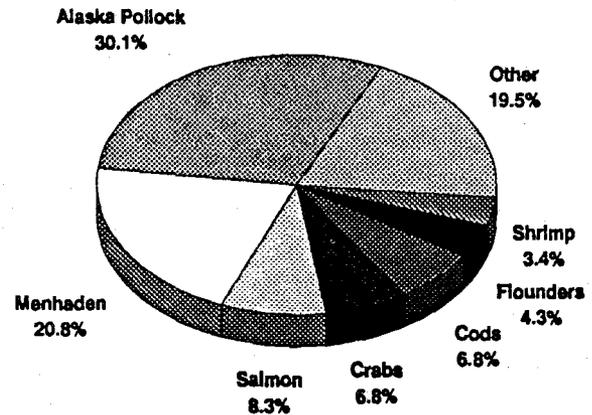
U.S. Per Capita Consumption, 1981 -1991



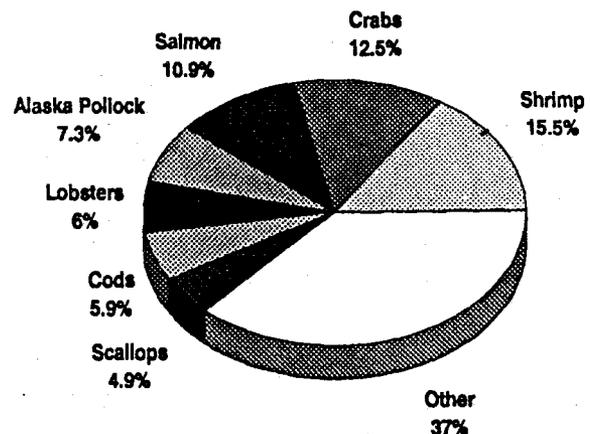
Major Commercial Species

In terms of volume, the top five species groups caught by U.S. commercial fishermen in 1991 were Alaska pollock, menhaden (an oily fish used primarily for industrial purposes), salmon, crabs and cods. Shrimp, crabs, salmon, pollock, and lobsters were the top five species in terms of value. Dutch Harbor-Unalaska, Alaska with landings of 731.7 million pounds (331.9 thousand metric tons), was the leading port in terms of volume. New Bedford, Massachusetts with landings valued at \$157.7 million, was the leading port in terms of value.

Total Volume = 9.5 billion lb



Total Value = \$3.3 billion



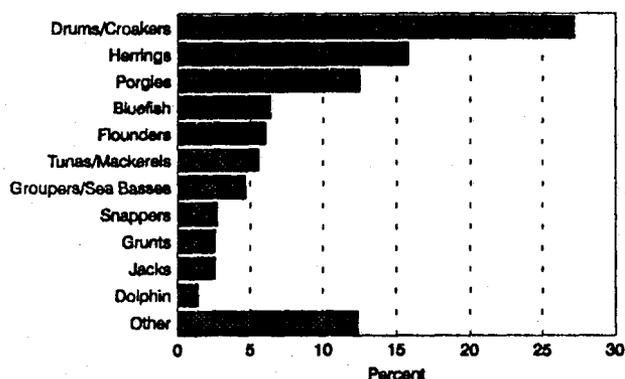
Major Recreational Species

NMFS collects data on marine angling through its Marine Recreational Fishery Statistics Survey (MRFSS) to generate estimates of overall recreational catch, effort and participation in the U.S. The MRFSS consists of an intercept survey of fishermen in the field and telephone surveys of households.

The estimated total catch of finfish on the Atlantic coast by marine anglers in 1991 was 379.5 million fish. The estimated landings (total catch less fish released alive) were 186.0 million fish (49 percent of the total) weighing 233.0 million pounds. These fish were taken on an estimated 59.1 million fishing trips. Data for the Pacific coast are only available through 1989 (a modified MRFSS will be resumed on the Pacific coast in 1992.)

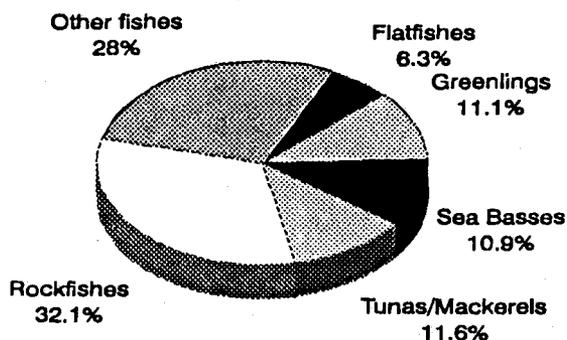
1991 Atlantic & Gulf Coast

Landings = 186.0 million fish



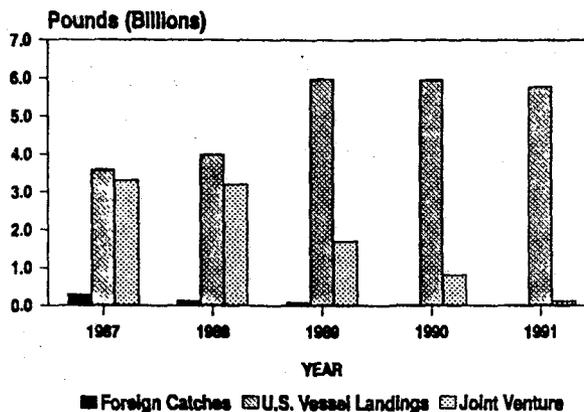
1989 Pacific Coast

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 in the Pacific, 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, 1991.

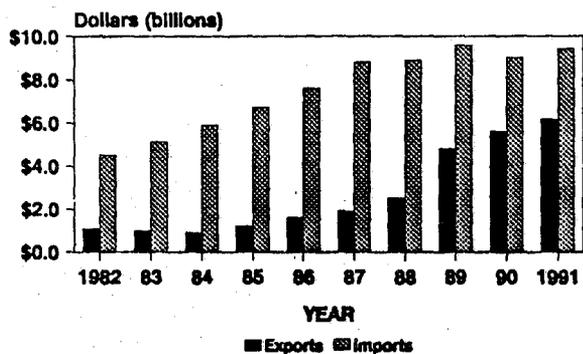
Joint Ventures

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

venture catches were 23.3 million pounds (10,600 metric tons) worth \$1.3 million. The joint venture catches peaked in 1988 when 3.2 billion pounds (1,452.2 thousand metric tons) were caught worth \$221.1 million. The U.S. harvesting and processing capabilities have expanded greatly in the last few years, decreasing the need for these joint venture arrangements. In 1991 the joint venture catch decreased to 124.1 million pounds (56,300 metric tons) worth \$3.9 million. While joint ventures were an important transitional opportunity for U.S. harvesters, current domestic processing technologies and marketing arrangements are capable of handling the catches from U.S. fishery resources.

Foreign Trade

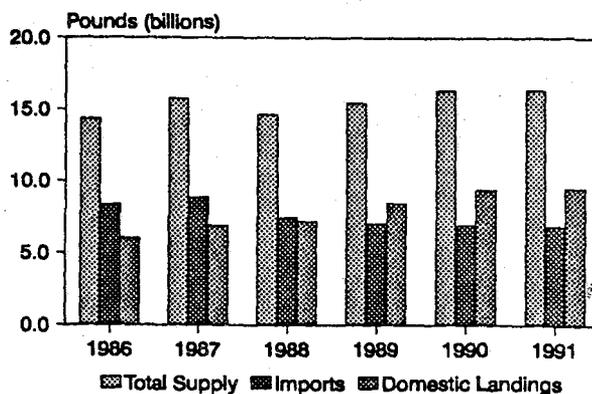
Total fishery imports in 1991 were valued at \$9.4 billion (up 4.3 percent), while U.S. exports of fishery products were valued at \$6.2 billion (up 9 percent). The U.S. has run a fishery trade deficit since 1895, but the deficit has been shrinking in recent years. Shrimp imports alone were valued at \$1.8 billion in 1991. Other major items were tuna, fresh and frozen fish filets, and frozen fish blocks used to produce fish sticks. Major export items included salmon (fresh, frozen and canned); crabs (fresh and frozen); blocks and slabs (fresh and frozen); and industrial fishery products.



U.S. Supply of Fishery Products

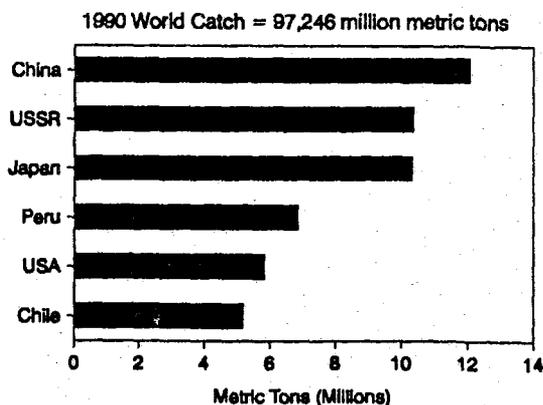
Despite the generally increasing volume of U.S. commercial landings over the years, the U.S. has remained a major importer of fishery products. In

1991 imports accounted for 42 percent of the total U.S. supply of all fishery products.



Leading Fishing Nations

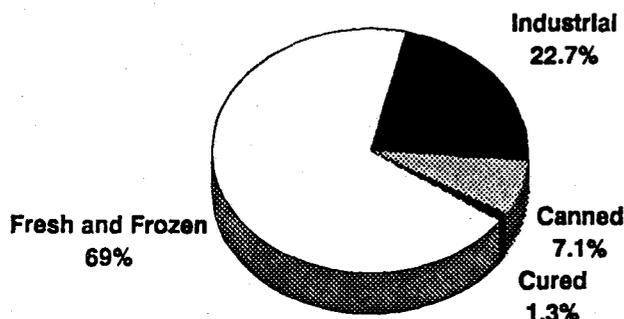
The U.S. ranked fifth among major fishing nations in 1990 world catch, the most recent year for which comparable data are available. The "live" weights shown in the graph include shell weights, which are not included in totals used elsewhere in this brochure. Statistics for mariculture, aquaculture, and other kinds of fish farming are included in country totals. Statistics on quantities caught by recreational fishermen are excluded.



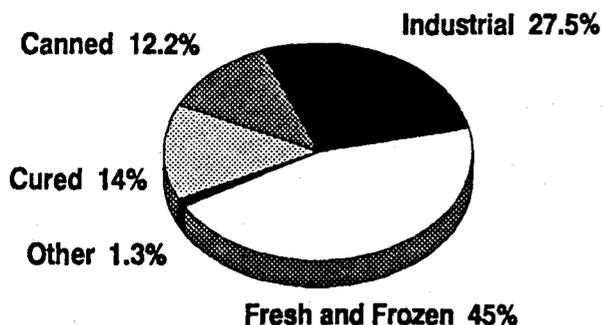
Disposition of Catch: U.S. and World

The U.S. utilized 74 percent (7.0 billion pounds) of its domestic landings for human food in 1991. This percentage was only slightly lower than the 1990 record of 75 percent. The high utilization rate for human food is due largely to the landings of Alaska pollock and other groundfish species used in surimi and other analog products. Landings used for industrial (non-food) purposes showed an increase for the second year in a row with 2.5 million pounds (up one percent). Landings used for canned bait and pet food declined to 62 million pounds (down 36 percent).

1991 - U.S.



1990 - World



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
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(508) 281-9300

Northwest Region
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BIN C15700, Bldg. 1
Seattle, WA 98115
(206) 526-6150

Southeast Region
Duval Bldg.
9450 Koger Blvd.
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
501 West Ocean Blvd., Suite 4200
Long Beach, CA 90802
(310) 980-4001

REGIONAL FISHERY MANAGEMENT COUNCILS

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5 Broadway (Route 1)
Saugus, MA 01906
(617) 231-0422

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

Mid-Atlantic
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Dover, DE 19901
(302) 674-2331

Pacific
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2000 S.W. First Ave.
Portland, OR 97201
(503) 326-6352

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

North Pacific
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P.O. Box 103136
Anchorage, AK 99510
(907) 271-2809

Gulf of Mexico
Lincoln Center
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Western Pacific
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Additional copies of this publication are available from:
Fisheries Statistics Division (F/RE1)
National Marine Fisheries Service, NOAA
1335 East West Highway - Rm. 8313
Silver Spring, MD 20910
(301) 713-2328

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 1991
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 1991 are presented in the following tables. Summary graphs for 1981-1991 catch and trips are also shown. The survey is being conducted in 1992 along the Atlantic and Gulf coasts.

These MRFSS 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 measurements of fish lengths and weights are 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 which were brought ashore in whole form and were available for identification, weighing, and measuring as well as those fish which were not available for identification. This latter category includes those fish which were 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 1991 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 trip tables indicate the estimated number of fishing 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 1991 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 1991 MRFSS DATA. The Atlantic and Gulf coasts marine recreational finfish catch in 1991 was an estimated 379.5 million fish. These fish were taken on an estimated 59.1 million fishing trips. The harvested catch was estimated at 186.0 million fish weighing approximately 233.0 million pounds.

In terms of number of fish, frequently caught species in 1991 were herrings, spotted seatrout, saltwater catfishes, summer flounder, pinfish, spot, bluefish, Atlantic croaker and black sea bass. Top-ranked species in each subregion in 1991 were scup in the North Atlantic, spot in both the Mid-Atlantic and South Atlantic, and spotted seatrout in the Gulf of Mexico. The Gulf (43 percent) and Mid-Atlantic (35 percent) subregions accounted for the highest numbers of Atlantic and Gulf coast fishes.

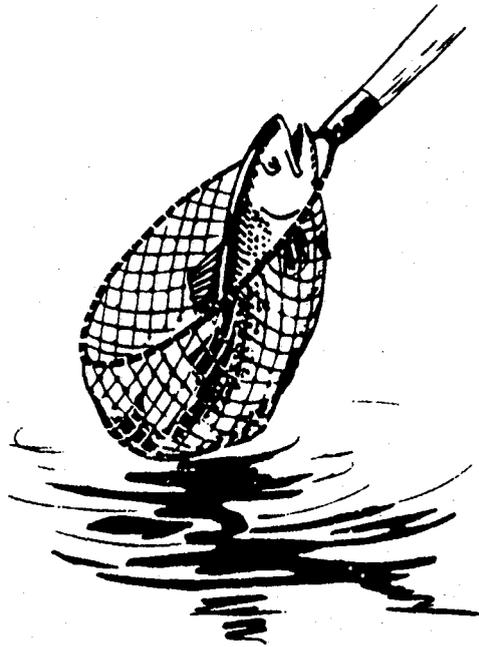
U.S. MARINE RECREATIONAL FISHERIES

The inland, ocean 3 miles or less from shore, and ocean 10 miles or less from shore areas accounted for approximately 89 percent of the Atlantic and Gulf coasts catch in number. The remaining 11 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 70 percent of the catch was made in the EEZ.

Sixty-eight percent of the Atlantic and Gulf coasts catch was taken in the private/rental boat mode in 1991. However, other modes were im-

portant for particular species such as king mackerel from the charter boat mode and kingfishes from the shore mode. Overall, shore-mode catches were 28 percent of the total and party/charter boat catches (excluding South Atlantic and Gulf partyboats) were 4 percent of the total.

Coastal residents accounted for 74 percent of the Atlantic and Gulf trips made in 1991. 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 1991 - DECEMBER 1991

Species group	North Atlantic	Mid-Atlantic	South Atlantic	Gulf of Mexico	Total
	-----Thousands-----				
Herrings.....	526	2,723	2,838	25,293	31,379
Saltwater catfishes....	*	*	3,746	12,969	16,715
Black sea bass.....	95	11,027	1,775	2,694	15,591
Bluefish.....	5,039	10,576	2,547	849	19,011
Red snapper.....	*	*	85	1,375	1,461
Scup.....	10,488	7,073	-	*	17,575
Pinfish.....	*	-	2,783	13,004	15,789
Sheepshead.....	*	-	1,290	2,068	3,359
Spotted seatrout.....	*	226	3,601	25,487	29,314
Weakfish.....	19	2,151	318	*	2,488
Sand seatrout.....	*	*	*	4,785	4,785
Spot.....	*	22,369	4,582	370	27,320
Kingfishes.....	*	943	2,800	1,438	5,181
Atlantic croaker.....	*	17,892	3,143	6,589	27,625
Red drum.....	*	36	1,324	6,569	7,929
Mulletts.....	*	679	2,333	2,284	5,296
King mackerel.....	-	-	635	781	1,433
Summer flounder.....	278	15,037	1,059	*	16,375
Winter flounder.....	969	4,241	*	*	5,210
Other fishes.....	10,953	38,570	19,614	56,548	125,685
Total.....	28,369	133,560	54,486	163,102	379,519

Note:-- A dash (-) denotes an estimate of less than thirty thousand which 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 1991 - DECEMBER 1991.

Species group	Shore	Charter Boats	Party/ Charter Boats	Private/ Rental Boats	Total
	-----Thousands-----				
Herrings.....	11,615	357	35	19,371	31,379
Saltwater catfishes....	5,886	74	*	10,755	16,715
Black sea bass.....	1,940	132	2,491	11,027	15,591
Bluefish.....	8,997	76	1,389	8,548	19,011
Red snapper.....	62	467	*	932	1,461
Scup.....	2,034	*	1,356	14,186	17,575
Pinfish.....	7,552	67	*	8,169	15,789
Sheepshead.....	994	-	*	2,358	3,359
Spotted seatrout.....	2,546	438	*	26,330	29,314
Weakfish.....	307	-	83	2,095	2,488
Sand seatrout.....	2,142	56	*	2,587	4,785
Spot.....	8,666	-	540	18,114	27,320
Kingfishes.....	3,404	-	-	1,761	5,181
Atlantic croaker.....	6,605	-	277	20,730	27,625
Red drum.....	1,256	70	*	6,603	7,929
Mulletts.....	3,607	*	*	1,688	5,296
King mackerel.....	147	454	*	831	1,433
Summer flounder.....	1,823	-	834	13,716	16,375
Winter flounder.....	1,555	*	165	3,490	5,210
Other fishes.....	35,186	4,935	2,408	83,157	125,685
Total.....	106,324	7,162	9,584	256,449	379,519

Note:-- A dash (-) denotes an estimate of less than thirty thousand which is included in row and column totals. An asterisk (*) denotes none reported. Figures for Charter Boats include only catches in the South Atlantic and Gulf of Mexico excluding Texas. Figures for Party/Charter Boats are only for the North Atlantic and Mid-Atlantic subregions. Row and column totals may not add due to rounding.

U.S. MARINE RECREATIONAL FISHERIES

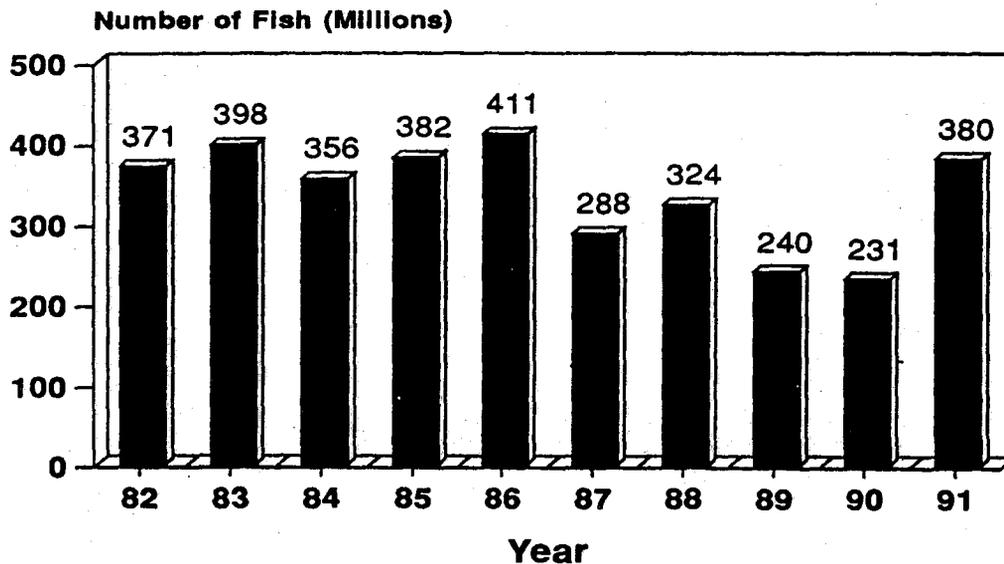
ESTIMATED NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL ANGLERS BY SPECIES GROUP AND AREA OF FISHING:

ATLANTIC AND GULF COASTS, JANUARY 1991 - DECEMBER 1991

Species group	Ocean				Inland	Total
	3 Miles or less	Over 3 miles	10 Miles or less	Over 10 Miles		
	-----Thousands-----					
Herrings.....	2,843	201	7,035	1,779	19,521	31,379
Saltwater catfishes..	4,215	375	1,957	42	10,126	16,715
Black sea bass.....	2,559	5,530	1,510	523	5,468	15,591
Bluefish.....	6,300	1,912	390	-	10,404	19,011
Red snapper.....	46	980	265	72	98	1,461
Scup.....	3,975	889	*	*	12,711	17,575
Pinfish.....	1,716	92	5,591	906	7,483	15,789
Sheepshead.....	510	-	102	*	2,724	3,359
Spotted seatrout.....	5,770	536	4,075	193	18,740	29,314
Weakfish.....	361	226	*	*	1,901	2,488
Sand seatrout.....	1,341	214	195	*	3,035	4,785
Spot.....	3,997	367	124	*	22,833	27,320
Kingfishes.....	2,191	36	694	*	2,260	5,181
Atlantic croaker.....	2,581	323	191	*	24,529	27,625
Red drum.....	1,583	35	693	82	5,535	7,929
Mulletts.....	1,274	81	552	-	3,387	5,296
King mackerel.....	205	498	607	80	43	1,433
Summer flounder.....	6,632	393	*	*	9,349	16,375
Winter flounder.....	622	59	*	*	4,530	5,210
Other fishes.....	21,162	12,800	28,759	10,695	52,269	125,685
Total.....	69,882	25,570	52,741	14,379	216,946	379,519

Note:--"Ocean 10 mi or less" and "ocean over 10 mi" refer only to the Florida Gulf coast where state jurisdiction extends to three marine leagues, approximately ten nautical miles. The total estimate is additive across the four areas. A dash (-) denotes an estimate of less than thirty thousand which is included in row and column totals. An asterisk (*) denotes none reported. Row and column totals may not add due to rounding. Figures do not include any recreational catches for Texas or partyboat catches for the South Atlantic and Gulf of Mexico.

MARINE RECREATIONAL FISHERIES CATCH ATLANTIC AND GULF COASTS, 1982 - 1991



Note: 1991 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 1991 - DECEMBER 1991

Subregion	Trips by coastal residents	Trips by non-coastal residents	Non- resident trips	Total
-----Thousands-----				
North Atlantic.....	5,620	326	1,745	7,691
Mid-Atlantic.....	13,469	472	3,149	17,090
South Atlantic.....	12,843	1,036	3,766	17,645
Gulf of Mexico.....	11,935	142	4,640	16,717
Total.....	43,867	1,976	13,300	59,143

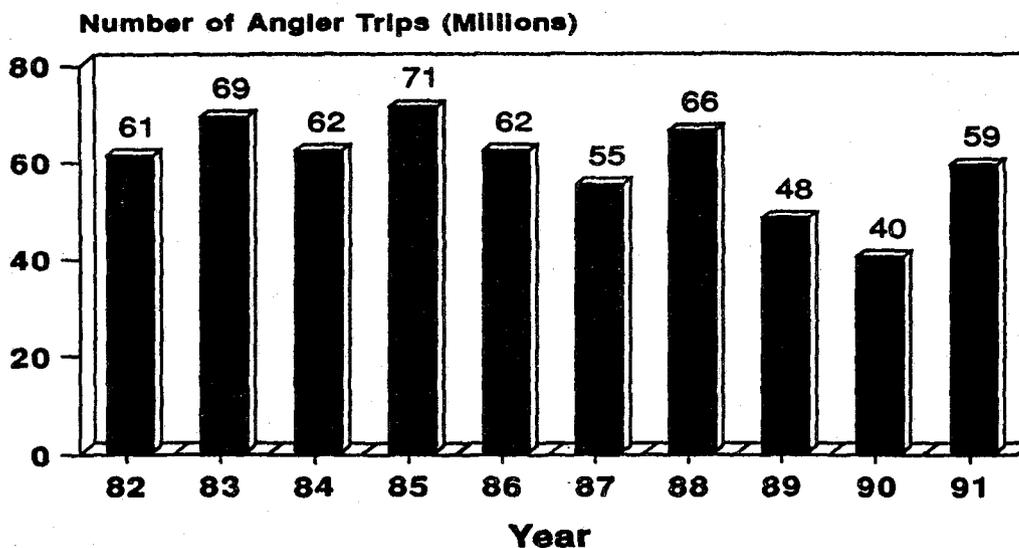
Note:--Estimates for the Gulf of Mexico exclude Texas. Estimates for the South Atlantic and Gulf of Mexico subregions exclude partyboat trips. Estimates also exclude January/February trips in the North Atlantic subregions and in the South Atlantic states north of Florida, as well as November/December trips in the North Atlantic states north of Massachusetts.

ESTIMATED TOTAL NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL ANGLERS BY SUBREGION AND AREA OF RESIDENCE: ATLANTIC AND GULF COASTS, JANUARY 1991 - DECEMBER 1991.

Subregion	Shore	Charter Boats	Party/ Charter Boats	Private/ Rental Boats	Total
-----Thousands-----					
North Atlantic.....	3,644	*	223	3,824	7,691
Mid-Atlantic.....	5,906	*	960	10,224	17,090
South Atlantic.....	10,056	416	*	7,174	17,646
Gulf of Mexico.....	7,616	533	*	8,568	16,717
Total.....	27,222	949	1,183	29,790	59,144

Note:--An (*) denotes none reported. Figures for Charter Boats include only trips in the South Atlantic and Gulf of Mexico excluding Texas. Figures for Party/Charter Boats are only for the North Atlantic and Mid-Atlantic subregions. Row and column totals may not add due to rounding.

MARINE RECREATIONAL FISHING TRIPS ATLANTIC AND GULF COASTS, 1982 - 1991



Note: 1991 data are provisional.