NOAA Technical Memorandum NMFS-SECF-84

A REPORT ON THE ECONOMIC DATA BASES FOR THE COASTAL MIGRATORY PELAGIC RESOURCE (MACKEREL) MANAGEMENT UNITS

J. Ward and J. Poffenberger

March 1981

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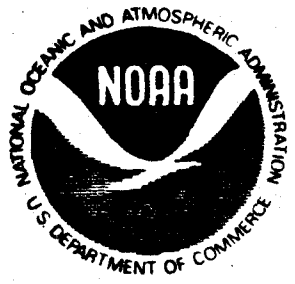

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Malcolm Baldrige, Secretary
National Oceanic and Atmospheric Administration
John V. Byrne, Administrator
National Marine Fisheries Service
William G. Gordon, Assistant Administrator of Fisheries

Abstract

This report presents an inventory of existing economic data useful in the analysis of the coastal migratory pelagic resources (mackerel) within the Southeast Region. The actual list providing an inventory of the existing data describes the available data and provides representative examples. The second section of this report discusses this data inventory and describes near term plans to supplement the existing data bases. A fairly complete list of the bibliographic influences applicable to the economic analysis of the coastal pelagic fishery is also presented.

I. Introduction

The need for adequate economic data to promote a complete understanding and analysis of U.S. domestic fisheries has been emphasized in all aspects of fishery research and management literature. It is the responsibility of the Southeast Fisheries Center to provide economic data and analysis in support of the management of marine fishery resources in the southeastern United States within the confines of existing manpower and budgetary constraints. This report presents an inventory of the existing economic data useful in the analysis of the coastal migratory pelagic resources (mackerel) within the Southeast Region. The actual list providing an inventory of the existing data is outlined in Appendix A. This inventory describes the available data and provides representative examples. The second section of this report discusses this data inventory and describes near-term plans to supplement the existing data bases A fairly complete list of bibliographical references applicable to the economic analysis of the coastal pelagic fishery is presented in Appendix B.

It is important to clearly define the fisheries that the data base supports. Historically, the species in the mackerel management unit have been sought by both commercial and recreational fishermen. King mackerel, Spanish mackerel, and bluefish have been important as target species of major commercial fisheries. In addition, these species have been important in supporting recreational fishing from charter boats, private boats, and beach fishing. Cobia is mainly a recreational species and the commercial catch is incid ntal. Thus, it is important to monitor economic information, where available, on all these species for both commercial and recreational use. Also, procedures must be determined that value the recreational catch so that it includes th non-pecuniary benefits received by recr ational fishermen.

For management purposes, the coastal pelagic fisheries have been combined in one fishery management plan (FMP) for the two geographical areas, i.e., the South Atlantic and Gulf of Mexico Fishery Management Councils. The sp cies comprising the fishery are presented in the FMP, which provides the species' scientific names and descriptions of their biological characteristics and habitat. The following is a list of the species included in the fishery:

Species in Management Unit for which regulations are proposed	Species in Management Unit for which no regulations are proposed
King Mackerel	Cero
Spanish Mackerel	Little Tunny
Cobia	Dolphin
	Bluefish

II. Data Inventory

This section provides an explicit discussion of the data outline presented in Appendix A. Current plans to increase the available data are also discussed.

Dockside Price and Landings

The National Marine Fisheries Service (NMFS) has collected and published landings data since the mid 1950s. The publication of the value of these landings was initiated in the early 1960s. The specific years varied by state and are provided in the Current Fisheries Statistics (CFS) section of the inventory outline. NMFS published these data in both monthly reports and annual summaries. The monthly reports usually provide a more detailed geographical distribution than the annual summaries. Several of these monthly and annual reports are no longer published by the NMFS. However, the data are still being collected and are available from 1963 to the most current month via computer printout. Tables 1A through 1D provide examples of these data from the CFS series.

Annual data on landings, value (price per pound), and gear type are available in the Fisheries Statistics of the United States. Tables 2A though 2C provide examples of this type of data for three species by region. Currently, work is being done which will provide on-line access to these monthly and annual data. This will greatly facilitate the analysis of proposed management regulations.

Recreational catch data are provided by the Saltwater Angling Surveys and the Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1979. These surveys provide estimates of the total number of fish caught by marine recreational fishermen over the period of analysis by species, region, weight, etc. Tables 3A through 3C provide examples of these data from the most recent survey.

Wholesale/Retail

The term wholesale may refer to any process or operation beginning with the dockside purchase of the fishery product from the fisherman to, but not including, the sale of the product for consumption. Because of this wide range of activities, it is important to define what is meant by wholesale price and quantity. Wholesale price and quantity are defined here as those reported by the Fulton Fish Market in New York and compiled by the New York Market News Office, NMFS. Monthly summaries of the quantity received at Fulton and average price for bluefish, king mackerel, and Spanish mackerel are presented in Table 4A, 4B, and 4C, respectively. Information on the quantity received by state is also provided. However, since this does not mean that the fish were necessarily landed in that state, future research is planned which should indicate how useful these data are in establishing product flow.

The price data in the columns labeled Average Monthly Prices in Tables 4A, 4B, and 4C should also be explained. The Market News Report provides two separate pieces of information (the quantity received and the prices of selected species) which are not necessarily related. The reported price provided by Fulton is usually a range of prices over various time periods. More importantly, not all of the quantity received on a given day is sold on that day. Therefore, the average prices presented in these tables are simple averages of the midpoints of the reported ranges for the entire month. It is not a weighted average price per pound as are the dockside exvessel prices presented in Table 1A through 1D and 2A through 2C.

Work is currently in progress which will provide monthly quantity received and average price data from the Fulton Fish Market for 1973 through the most current month. This information will be available on the computer system.

The wholesale market in New York does not represent the only marketing outlet for the coastal pelagic fishery. Unfortunately, the flow or movement of these fishery products from the docks to the final consumers is not well documented. The Gulf of Mexico and South Atlantic FMP does present some discussion on industry structure and product flow. However, little historical data are available for use in detailed economic analyses. The FMP also provides estimates of the annual amount of processed Spanish mackerel (Table 5). Similar estimates are available for the South Atlantic states in the Fisheries Statistics of the United States, NMFS. Historical data have not been kept for bluefish and cobia because of the nature of their markets. A request for proposals to perform a methodological study for the collection of this type of

product flow data has been prepared by SEFC. Although this study will not provide specific data on the quantity received or prices at different marketing levels, it should provide the basis for a pilot study to collect such data during FY82.

Similar to wholesale prices, retail prices are somewhat difficult to collect. For example, a consumer can purchase fish from any market level ranging from dockside purchases, to fish dealers, to wholesale market, or at restaurants. NMFS has not collected this type of data for coastal pelagic fisheries. However, a recent contract which will include the consumption of fish and fishery products on a national survey questionaire to participating households should provide a better understanding of consumer demand. There are two problems with this national fish consumption survey. First, this survey is designed to collect information on the buying and eating habits of a randomly selected group, but it does not attempt to measure purchase price and quantity. Secondly, this survey will provide one-time cross-sectional data on consumer characteristics and there are no provisions for the collection of this important price and consumption data over time.

Imports-Exports

Imports of fishery products if of sufficient volume could significantly affect the demand for the domestically produced product. The extent of this influence depends on the many factors which combine to determine the interaction of supply and demand and the resulting market price such as existing tariff structures and production costs. These supply and demand curves are difficult to estimate even with adequate data; however, the important data element in this analysis is the price of the foreign imports. Based on the data provided in the FMP, only data on the quantity of all mackerel imported are available (Table 6).

If price data were available, for example, the degree of industry protection provided by the U. S. tariff system could be investigated. Since tariff rates on fresh and frozen imports are nonexistent or are being phased out, and some imputs into the industry are subject to tariff charges, there could exist a hidden tax on the domestic fishing fleet. Without a detailed survey of the cost of inputs into the fishery and the quantities and value of imports of species specific products, it would be difficult to determine the degree of harm or protection the fleet receives from the U.S. tariff structure.

Vessel

It is basic to both the management and analysis of fisheries that a list of vessels utilizing the respective fishery resource be available. Changes in the number of vessels fishing or types of gear used in a given fishery could indicate economic or biological problems within that fishery (Table 7). Unfortunately, neither NMFS nor state regulatory agencies maintain either complete or compatible vessel registration files. The NMFS uses the U.S. Coast Guard documented vessel file, which defines a vessel as a craft larger than five net tons, and supplements these records with information on the type and amount of gear and crew size for commercial vessels (Table 8).

Information on the number of anglers, the fish caught by different methods of fishing, and the cost per trip for the recreational fishery is available from the Marine Recreational Statistical Survey, Atlantic and Gulf Coasts, 1979 (see Tables 9A, 9B, and 10A through 10C). These data are considered to be statistically sound and this survey is scheduled through 1985. However, reliable

historical data are not available since the earlier surveys are not comparable to the most recent survey. Information on the recreational catch is particularly important if this fishery is to be managed, since the FMP allocates almost seventy-five percent of the total established quota to it. In short, the existing procedure is not acceptable especially with the increased need for timely economic data and analysis in the management of a dynamic fishery.

Obviously, if one attempts to describe the financial well-being of a fleet of vessels, it is fundamental that revenue and cost information be made available. In more precise language, one needs to measure the gross revenue, the fixed and variable costs, and the resulting profit or net income to the fleet. The data comprising these costs and revenues can be disaggregat d or collected in any way consistent with the purpose of the analysis.

While these data are useful for the commercial fleet, it is of limited usefulness in analysing the recreation portion of the fishery. First, recreational fishermen do not use species-specific gear. Second, their catch is not valued simply at the market price since it includes a nonpecuniary value. Finally, a portion of the recreational fleet is made up of private boat owners who are not subject to the same profit and loss market requirements as are the commercial fishermen or charter and head-boat operators. Since recreational fishing makes up a large portion of the catch, these problems need to be addr ssed.

III Data Deficiencies

This section provides a brief discussion of the most critical data deficiencies with respect to economic analyses. The following discussion presents these needs in priority order beginning with the most critical.

It is fundamental to an economic analysis and to management decision making in general that reasonably current and reliable data be available on the number of fishing vessels and their representative catch per unit of fishing effort. The important problems of measuring and/or standardizing appropriate units of effort are well documented in the general fishery literature. However, even more basic than measuring fishing effort, is the need for a data collection system which provides monthly data on the number of vessels in these fisheries, the amount and species they are landing, and the value of the catch.

A second critical need is to provide data on the recreational utilization of the coastal pelagic resources. The species to be managed in the FMP are utilized to a great extent by recreational fishermen. The emphasis on recreational catch in the FMP will have an effect on the income of the commercial industry through the allocation of the resource. Therefore, it is important that the fishery managers provide a reasonably clear indication of how they intend to include this recreational segment in their management strategies and their ultimate obj ctives. The most obvious management need is a viable means of determining a Pareto optimal method of allocating the available fishery resources between commercial and recreational users. There is no well defined method of making this allocation and this is a critical area in which additional research is needed.

A third need is the availability of cost and revenue data for vessels operating in these fisheries. Studies have been performed on the commercial and recreational fishery vessels (Cato, Morris, and Prochaska, 1978 and Daniel, 1974 for example), but no detailed historical data are available. In addition, it is

important to be able to relate the cost and revenue data to the fishing effort of the respective vessel. In short, the collection of this data should be closely associated with the collection of the data on fishing effort discussed above.

The last informational need is for data on the price and quantity purchased at the retail or consumer level. As discussed in the text of this report, these data are difficult and costly to collect and therefore may be prohibitive to collect routinely under existing budgetary constraints.

Appendix A

Dockside Price and Landings

A. Monthly data for the following states

1. Computer Records

a. This data base provides monthly landings and values of fish species by state.

b. The data starts in 1963 and continues to the most current month.

c. This information will be accessible in the near future.

2. CFS Data: Tables 1A - 1D

N. Carolina - Monthly Report...Landings (no prices) by county beginning January 1962.

- Annual Summary...Annual landings by county and monthly landings by state for 1961 through 1970.

- Price (Value) Data beginning with 1963 Annual Summary.

- Species...King mackerel, Spanish mackerel, Cobia, Bluefish.

S. Carolina - Annual Summaries...Landings and price (starting in 63) for 1961 through 1970.

- Species...King mackerel, Spanish mackerel, Bluefish.

Georgia - Annual Summaries...Landings and price (beginning in 1963) for 1961, and 1963 through 1970.

- Species...King Mackerel

Florida - Annual Summaries....Landings by County, East and West Coast beginning 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77.

- Species...King Mackerel, Spanish Mackerel, Cobia, Dolphin, Bluefish.

Alabama - Annual Summaries...Landings and value (61) beginning 1956-64, 68, 69, 70, 72, 73, 74, 75, 77.

- Species...Spanish mackerel, Cobia, Bluefish.

Mississippi - Annual Summaries...Landings and value (61) for 1956-68, 1970-75, 77.

- Species...Spanish mackerel, Little Tunny, Bluefish.

Louisiana - Annual Summaries...Landings and value (61) for 1958, 1962-73, 77.

- Species...Spanish Mackerel, Cobia, Bluefish.

Texas - Annual...Landings and value for 1962-73, 75, 77

- Species...Cobia.

B. Annual Data

Tables 2A-2C provide annual data by gear type for the S. Atlantic and Gulf Coasts for the commercial fishery from 1960-1976.

Tables 3A through 3C provide estimated numbers of fish and weight of identified fish caught by subregion for the recreational fishery in 1979.

II Wholesale Price and Quantity

A. New York, Fulton Fish Market:
Tables 4A-4C provide monthly data on average price and quantity received at Fulton from the indicated states. Bluefish, king mackerel, and Spanish mackerel data are provided in these tables. These tables provide data only for 1979, it is planned that data from 1973 through the current month will be available.

B. Table 5 provides estimates of processed product flow which were cited in the FMP.

III Import-Export

A. Table 6 provides existing data on imports of mackerel to the southeastern region. All imports from Mexico and at least some imports from South America are probably species closely related to the species in the mackerels management unit.

IV Vessel

A. Table 7 provides the number of operating units by region and type of gear for commercial vessels 1960-1976. The vessel characteristics are also available but were not included in this table.

B. Table 8 provides examples of the commercial vessels engaged in the mackerel fishery. Vessel characteristics available are:

1) vessel name
2) documentation number
3) year the vessel operated in the fishery
4) crew size: full and part time employment
5) construction code
6) propulsion: type of engine and horsepower
7) weight
8) length
9) year built
10) gear code: type and quantity of gear utilized
11) auxiliary boats: motor and nonmotor
12) Region, state, and county code.

C. Tables 9A and 9B estimate the number of anglers who caught fish in the management unit by state and the amount of fish caught by the method of fishing in 1979, respectively.

D. Cost-revenue data is available in Cato, Morris, and Prochaska (1978); Daniel (1974), and Morris and Prochaska, 1977 for recreational and commercial vessels.

E. Tables 10A-10C provide estimated trip cost, hours per trip, and one way distance traveled for recreational fishermen during 1979 by region and type of fishing.

Table 1A

Texas Landings by District

OCTOBER 1977

SPECIES	SABINE DISTRICT	GALVESTON DISTRICT	MATAGORDA DISTRICT	ARANSAS DISTRICT	LAGUNA DISTRICT
FISH	POUNDS				
CABIO -LING-		488		106	1,574
CROAKER		1,870		2,124	10,775
DRUM -BLACK-	1,215	15,452	776	30,730	83,832
RED (REDFISH)		3,374	3,176	36,888	48,455
FLOUNDER	350	12,571	3,772	26,365	5,854
GROUPER	40	216			78
KING WHITING	25	5,087		28	
MULLET		582	100	327	
POMPANO				89	81
GAFFTOP CATFISH		947		2,562	1,912
SEA TROUT - SPOTTED		5,807	5,886	26,289	31,835
SHEEPHEAD(SW)	222	8,003	858	6,283	6,127
SNAPPER, RED	599	9,114	8	7,898	21,376
UNCLASSIFIED FOOD		12,734		80	315
UNCLASSIFIED SCRAP		6,949			
TOTAL FISH	2,451	83,194	14,576	139,739	212,214
SHELLFISH	POUNDS				
CRABS BLUE	19,633	267,505	49,316	484,520	137,032
BROWN & PINK	25,305	1,272,190	394,093	1,977,602	2,443,948
WHITE	397,439	2,152,872	820,169	1,684,440	148,747
OTHER		46,335			
OYSTERS		78,143			525
SQUID		1,204	386		
TOTAL SHELLFISH	442,377	3,818,249	1,263,964	4,146,562	2,730,252
GRAND TOTAL	444,828	3,901,443	1,278,540	4,286,301	2,942,466

SEE NOTE ON PAGE 1.

Source: U.S. National Marine Fisheries Service. Texas Landings, October, 1977. Current Fisheries Statistics No. 7429. U.S. Government Printing Office, Washington D.C.

Table 1A (con't)

Texas Landings by Species

SPECIES	OCTOBER 1976 POUNDS	OCTOBER 1976 VALUE	OCTOBER 1977 POUNDS	OCTOBER 1977 VALUE	JANUARY THRU OCTOBER 1976 POUNDS	JANUARY THRU OCTOBER 1976 VALUE	JANUARY THRU OCTOBER 1977 POUNDS	JANUARY THRU OCTOBER 1977 VALUE
FISH								
CABIO -LING-	426	162	2,168	304	26,487	4,980	19,881	4,885
CROAKER	51,672	4,419	14,769	1,293	108,563	10,884	27,912	3,026
DRUM -BLACK-	127,396	33,873	132,005	39,231	1,809,920	457,641	1,287,079	352,315
RED (REDFISH)	256,657	114,246	91,893	56,167	1,639,027	745,896	795,048	422,940
FLOUNDER	115,073	50,244	48,932	28,428	298,733	133,908	172,083	96,345
GROUPER	2,181	427	334	84	88,617	13,845	21,376	4,988
KING WHITING	6,285	823	9,140	731	71,961	10,495	30,602	4,989
MENHADEN					1,831	363	70	14
MULLET	356	93	1,009	219	51,424	5,308	8,891	1,397
POMPANO	1,233	849	120	58	9,268	3,924	822	504
GAFFTOP CATFISH	11,214	1,838	5,421	973	88,880	13,266	72,908	13,823
SEA TROUT - SPOTTED	125,843	58,913	69,817	42,804	1,558,146	718,542	1,204,645	644,272
SEA TROUT WHITE	4,077	880			40,862	17,434	66	30
SHEEPSHEAD(SEA)	44,280	4,330	21,403	3,585	290,674	33,268	257,573	25,712
SNAPPER, RED	34,954	27,257	39,995	30,466	429,388	309,840	373,730	340,986
UNCLASSIFIED FOOD	25,551	2,712	13,129	2,627	201,309	22,498	102,607	18,657
UNCLASSIFIED SCRAP	31,566	3,137	4,949	417	172,494	12,732	156,967	17,790
TOTAL FISH	839,034	302,803	452,174	207,471	6,859,384	2,507,804	4,530,260	1,972,471
SHELLFISH								
CRABS BLUE	567,786	114,094	958,006	220,827	5,937,951	1,018,943	7,062,206	1,686,243
SHRIMP (HEADS ON)								
BROWN & PINK	6,172,646	10,981,881	6,113,136	9,971,172	52,815,987	83,319,118	62,779,481	86,302,189
WHITE	2,986,926	4,090,572	5,203,657	6,955,016	13,234,702	20,630,682	14,642,513	18,967,561
OTHER	33,846	6,769	46,335	10,552	276,930	46,364	190,377	221,267
OYSTERS	181,403	165,928	79,888	143,494	2,250,093	1,771,627	2,037,906	2,740,865
SQUID	412	92	1,590	908	20,158	4,575	12,439	3,691
TOTAL SHELLFISH	9,903,019	15,360,326	12,401,404	17,310,559	74,535,821	106,791,309	86,724,502	109,421,816
GRAND TOTAL	10,742,023	15,663,129	12,553,578	17,518,030	81,395,205	109,299,113	91,254,762	111,394,287

NOTE.--THE CUMULATIVE AND COMPARATIVE MONTHLY DATA MAY INCLUDE REVISIONS. OYSTERS ARE REPORTED IN POUNDS OF MEATS (8.75 POUNDS PER GALLON). ALL OTHER SPECIES ARE SHOWN IN ROUND WEIGHT.

Source: See Table 1A

Tabl 1B

Alabama Landings by County, June 1977

(PRELIMINARY)

SPECIES	COUNTY			
	BALDWIN		MOBILE	
FISH	POUNDS	DOLLARS	POUNDS	DOLLARS
BLUEFISH	61	6	-	-
CABIO	152	9	-	-
CATFISH	8	2	-	-
CROAKER, UNCLASSIFIED	3,910	672	64,465	9,126
DRUM, RED (REDFISH)	127	26	216	28
FLOUNDERS, UNCLASSIFIED	9,860	4,311	7,925	1,844
GROUPERS	1,461	784	7,388	2,425
JEWFISH	104	18	2,229	534
KING WHITING OR KINGFISH	1,923	147	10,673	1,439
MULLET	55,414	10,236	14,984	2,719
POMPANO	44	19	-	-
SEA CATFISH	257	19	485	29
SEA TROUT, SPOTTED	269	149	444	195
SEA TROUT, WHITE	456	30	7,457	847
SHEEPSHEAD, SALTWATER	239	17	1,363	101
SNAPPER, RED	12,570	13,403	29,501	18,061
SPANISH MACKEREL	154	14	155	14
SPOT	111	7	-	-
TOTAL FISH	87,160	25,869	147,288	37,366
SHELLFISH				
CRABS, BLUE, HARD	17,762	3,934	251,006	65,860
SHRIMP, SALTWATER (HEADS-ON)	1,307,124	1,361,931	4,768,667	3,896,438
OYSTERS (MEATS)	-	-	120,020	120,935
SQUID	95	19	491	49
TOTAL SHELLFISH	1,324,981	1,365,884	5,120,184	4,083,282
GRAND TOTAL	1,412,141	1,391,753	5,267,473	4,121,648

Source: U.S. National Marine Fisheries Service. "Alabama Landings, June 1977" Current Fisheries Statisitcs No. 7341. U.S. Government Printing Office, Washington D.C.

Table 1B (Cont't)

Alabama Landings for Specified Periods, 1976 and 1977

(PRELIMINARY)

SPECIES	JUNE			
	1976		1977	
FISH	POUNDS	DOLLARS	POUNDS	DOLLARS
BLUEFISH	87	5	61	6
CABIO	1,123	87	152	9
CATFISH	-	-	8	2
CROAKER, UNCLASSIFIED	317,796	43,811	68,375	9,798
DRUM, BLACK	256	13	-	-
DRUM, RED (REDFISH)	345	39	343	54
FLOUNDERS, UNCLASSIFIED	33,167	8,369	17,789	6,155
GROUPERS	9,257	2,738	8,849	3,209
JEWFISH	2,404	559	2,333	552
KING WHITING OR *KINGFISH*	33,691	3,962	12,596	1,586
MULLET	59,810	7,951	70,398	12,955
POMPANO	790	158	44	19
SEA CATFISH	495	29	742	48
SEA TROUT, SPOTTED	1,229	462	733	348
SEA TROUT, WHITE	48,013	6,100	7,913	877
SHEEPSHEAD, SALTWATER	5,152	349	1,602	118
SNAPPER, RED	66,882	41,672	42,071	31,464
SPANISH MACKEREL	2,858	344	309	28
SPOT	344	27	111	7
TOTAL FISH	583,695	116,675	234,629	67,235
SHELLFISH				
CRABS, BLUE, HARD	209,085	44,094	268,768	69,794
SHRIMP, SALTWATER (HEADS-ON)	3,183,458	3,770,274	6,055,791	9,258,869
OYSTERS (MEATS)	40,802	38,257	120,020	120,935
SQUID	85	17	586	88
TOTAL SHELLFISH	3,433,430	3,852,642	6,445,165	9,449,686
GRAND TOTAL	4,017,125	3,969,317	6,679,794	9,516,921

SEE NOTE ON PAGE 2.

(PRELIMINARY)

SPECIES	6 MONTHS ENDING WITH JUNE			
	1976		1977	
FISH	POUNDS	DOLLARS	POUNDS	DOLLARS
BLUEFISH	1,223	100	580	58
BUFFALOFISH	-	-	23	3
CABIO	2,311	152	1,323	72
CATFISH	943	243	58	14
CROAKER, UNCLASSIFIED	3,653,337	498,225	1,649,521	233,080
DRUM, BLACK	13,565	881	21,083	1,097
DRUM, RED (REDFISH)	32,686	4,929	33,829	4,288
FLOUNDERS, UNCLASSIFIED	204,861	47,975	136,418	38,321
GROUPERS	38,855	10,883	32,212	10,717
JEWFISH	6,624	1,276	11,928	2,534
KING WHITING OR *KINGFISH*	86,604	9,885	82,304	10,262
MULLET	414,180	46,058	473,695	75,072
PADDLEFISH OR SPOONBILL	363	39	-	-
POMPANO	7,723	2,866	2,782	1,338
SEA CATFISH	5,795	680	48,585	2,564
SEA TROUT, SPOTTED	37,116	13,205	14,816	6,323
SEA TROUT, WHITE	628,746	71,773	227,339	27,480
SHEEPSHEAD, SALTWATER	156,177	12,424	153,780	8,704
SNAPPER, RED	335,527	206,388	243,296	150,217
SPANISH MACKEREL	27,405	3,862	4,758	383
SPOT	5,654	478	6,675	514
TOTAL FISH	5,863,693	933,322	3,165,005	583,041
SHELLFISH				
CRABS, BLUE, HARD	545,712	115,179	570,724	155,798
SHRIMP, SALTWATER (HEADS-ON)	6,585,044	10,325,209	10,086,469	10,778,136
OYSTERS (MEATS)	346,674	315,399	385,769	377,869
SQUID	468	65	1,092	178
TOTAL SHELLFISH	7,477,928	10,755,852	11,044,054	11,311,981
GRAND TOTAL	13,341,621	11,689,174	14,185,059	11,895,022

NOTE--THE CUMULATIVE AND COMPARATIVE MONTHLY DATA MAY INCLUDE REVISIONS. THE CATCH OF FRESHWATER FISH IN MOBILE COUNTY WAS FROM THE ALABAMA-TOMBIGBEE RIVER SYSTEM AND MAY INCLUDE LANDINGS FROM BALDWIN COUNTY. OYSTERS ARE REPORTED IN POUNDS OF MEATS (8.75 POUNDS PER GALLON). ALL OTHER SPECIES ARE SHOWN IN ROUND WEIGHT. THE PUBLISHED WEIGHT OF OYSTER MEATS FOR JUNE 1977 WAS BASED ON AN AVERAGE OF 23.8 POUNDS PER ALABAMA BARREL.

Source: See Table 1B previous page.

Table 1C

South Carolina Landings by Districts, November 1977

(PRELIMINARY)

SPECIES	DISTRICT					
	NORTHERN		CENTRAL		SOUTHERN	
FISH	POUNDS	DOLLARS	POUNDS	DOLLARS	POUNDS	DOLLARS
BLUEFISH	13,903	1,933	81	12	-	-
FLOUNDERS, UNCLASSIFIED	-	-	293	176	857	488
GROUPERS	-	-	15,646	11,473	-	-
KING MACKEREL	-	-	306	198	-	-
KING WHITING OR "KINGFISH"	-	-	333	83	1,093	273
MENHADEN	-	-	117	7	-	-
MULLET	165,000	16,500	807	161	-	-
SCUP OR PORGY, UNCLASSIFIED	-	-	9,566	4,306	-	-
SEA BASS, UNCLASSIFIED	-	-	230	138	-	-
SEA TROUT, SPOTTED	-	-	90	38	-	-
SHARKS	-	-	65	23	-	-
SNAPPER, RED	-	-	2,275	3,868	-	-
SNAPPER, VERMILION	-	-	7,094	7,094	-	-
SNAPPER, UNCLASSIFIED	-	-	221	232	-	-
SPOT	145,000	29,000	1,908	473	50	10
TILEFISH	-	-	236	72	-	-
UNCLASSIFIED FOR FOOD	-	-	436	143	-	-
TOTAL FISH	320,000	47,000	39,745	28,498	2,000	771
SHELLFISH						
CRABS, BLUE, HARD	200	36	206,020	38,049	806,935	152,559
SHRIMP, SALTWATER (HEADS-ON)	940	1,015	45,956	70,122	126,504	219,128
CLAMS, HARD (MEATS)	116	153	11,472	14,914	3,776	4,733
OYSTERS (MEATS)	2,176	1,547	54,791	39,944	124,248	83,742
TOTAL SHELLFISH	3,036	2,751	318,239	172,025	1,061,063	460,162
GRAND TOTAL	323,036	49,751	358,004	200,523	1,063,063	460,933

Source: U.S. National Marine Fisheries Service. "South Carolina Landings, November 1977" Current Fisheries Statistics No. 7442. U.S. Government Printing Office, Washington D.C.

Table 1C (Con't)

South Carolina Landings for Specified Periods, 1976 and 1977

(PRELIMINARY)

SPECIES	NOVEMBER 1976 POUNDS	NOVEMBER 1976 DOLLARS	NOVEMBER 1977 POUNDS	NOVEMBER 1977 DOLLARS
FISH				
BLUEFISH	-	-	10,081	1,512
CATFISH	48,000	12,000	-	-
EELS, COMMON	5,000	1,000	-	-
FLOUNDERS, UNCLASSIFIED	21,771	5,567	1,150	664
GROUPERS	10,937	9,577	15,646	11,473
KING MACKEREL	1,267	824	396	198
KING WHITING OR "KINGFISH"	1,461	339	1,426	356
MENHADEN	-	-	117	7
MULLET	175,000	17,500	165,807	16,661
SCUP OR PORGY, UNCLASSIFIED	5,826	2,345	9,569	4,306
SEA BASS, UNCLASSIFIED	866	362	230	138
SEA TROUT, SPOTTED	-	-	90	38
SHARKS	-	-	65	20
SNAPPER, RED	3,433	5,486	2,275	3,868
SNAPPER, VERMILION	6,045	6,045	7,094	7,094
SNAPPER, UNCLASSIFIED	201	201	221	232
SPOT	43,474	6,087	146,958	29,483
TILEFISH	-	-	204	72
UNCLASSIFIED FOR FOOD	550	138	436	143
TOTAL FISH	329,831	67,471	361,765	76,265
SHELLFISH				
CRABS, BLUE, HARD	250,729	91,616	1,312,755	153,644
SHRIMP, SALTWATER (HEADS-ON)	950,751	876,434	173,000	299,265
CLAMS, HARD (MEATS)	5,519	6,790	15,366	19,800
OYSTERS (MEATS)	181,906	125,761	181,215	125,233
TOTAL SHELLFISH	1,397,905	1,060,601	1,382,336	634,962
GRAND TOTAL	1,727,736	1,128,072	1,744,101	711,207

SEE NOTE ON PAGE 2.

(PRELIMINARY)

SPECIES	11 MONTHS ENDING WITH NOVEMBER 1976 POUNDS	1976 DOLLARS	1977 POUNDS	1977 DOLLARS
FISH				
ALEWIVES	66,925	2,931	80,725	4,817
AMBERJACK	531	136	162	24
BLUEFISH	838	180	10,223	1,549
CATFISH	268,500	65,275	40,000	10,000
CATFISH AND BULLHEADS	15,000	3,750	130,000	32,500
CROAKER, UNCLASSIFIED	1,213	238	214	46
DOLPHIN	3,532	2,072	2,903	1,046
DRUM, BLACK	1,096	353	5,060	1,771
DRUM, RED (REDFISH)	2,408	818	779	261
EELS, COMMON	17,500	5,075	4,000	800
FLOUNDERS, UNCLASSIFIED	73,209	21,608	15,920	6,387
GROUPERS	168,314	87,814	339,139	195,322
GRUNTS	925	232	517	171
KING MACKEREL	7,566	4,772	5,947	2,972
KING WHITING OR "KINGFISH"	63,700	12,543	15,527	3,909
MENHADEN	-	-	134	8
MULLET	3,536,563	425,617	1,082,788	145,318
PIGFISH	85	43	-	-
POMPANO	-	-	111	33
SCUP OR PORGY, UNCLASSIFIED	96,374	43,529	154,554	65,632
SEA BASS, LARGE	-	-	1,376	690
SEA BASS, MEDIUM	-	-	1,399	455
SEA BASS, SMALL	-	-	763	196
SEA BASS, UNCLASSIFIED	89,482	26,802	11,369	3,554
SEA TROUT, GREY	1,050	280	-	-
SEA TROUT, SPOTTED	5,321	2,501	327	152
SHAD	32,430	19,832	79,531	53,992
SHARKS	23,534	3,439	5,883	1,140
SHEEPSHEAD, SALTWATER	361	108	-	-
SNAPPER, RED	35,382	52,253	69,498	122,539
SNAPPER, VERMILION	52,806	53,853	48,016	52,709
SNAPPER, UNCLASSIFIED	15,753	17,828	53,022	66,399
SPANISH MACKEREL	3,536	577	69	17
SPOT	1,013,576	181,264	294,403	58,984
STURGEON	88,207	25,595	134,236	23,474
TILEFISH	1,251	321	16,396	4,815
UNCLASSIFIED FOR FOOD	4,454	1,478	8,469	3,052
TOTAL FISH	5,688,122	1,063,287	2,587,430	866,776
SHELLFISH				
CRABS, BLUE, HARD	5,668,399	961,540	6,767,934	1,451,102
SHRIMP, SALTWATER (HEADS-ON)	8,543,959	10,962,833	3,960,962	5,393,415
CLAMS, HARD (MEATS)	164,232	107,982	152,923	195,126
OCTOPUS	-	-	580	145
OYSTERS (MEATS)	983,309	633,383	993,270	660,328
SQUID	12,454	3,311	10,471	2,578
TOTAL SHELLFISH	15,372,303	12,759,069	11,886,140	7,702,658
GRAND TOTAL	21,060,425	13,822,136	14,473,570	8,567,672

NOTE --THE CUMULATIVE AND COMPARATIVE MONTHLY DATA MAY INCLUDE REVISIONS. CLAMS AND OYSTERS ARE REPORTED IN POUNDS OF MEATS. ALL OTHER SPECIES ARE SHOWN IN ROUND WEIGHT.

CONVERSION FACTORS USED IN PREPARING THIS REPORT

SPECIES	DATA COLLECTED AS	CONVERTED TO AND PUBLISHED AS	BY MULTIPLYING BY
CLAMS, HARD	U.S. STANDARD BUSHELS	POUNDS OF MEATS	8.75
OYSTERS	GALLONS	DO	8.75
DO	U.S. STANDARD BUSHELS	DO	3.18
SHRIMP:			
BROWN	HEADS-OFF	HEADS-ON	1.61
WHITE	DO	DO	1.54

Source: See Table 1C previous page.

Table 1D

Florida Landings for Specifi d Periods, 1974 and 1975

SPECIES	DECEMBER				JANUARY - DECEMBER			
	1974		1975		1974		1975	
FISH	POUNDS	DOLLARS	POUNDS	DOLLARS	POUNDS	DOLLARS	POUNDS	DOLLARS
ALEWIVES					178,785	11,003	1,839	275
AMBERJACK	7,033	791	8,913	1,280	92,675	8,110	144,815	18,826
ANGELFISH	717	76	458	87	11,114	976	9,082	1,831
BALLYHOO	32,899	6,634	82,967	16,772	391,721	83,364	383,456	86,687
BARRACUDA					284	3	420	23
BLUE RUNNER OR HARDTAIL	16,986	1,366	1,711	175	735,976	63,639	1,728,166	176,233
BLUEFISH	199,965	26,196	101,722	16,823	1,773,667	369,030	1,637,090	202,276
BONITO	172	10	26,827	1,368	106,163	8,006	152,173	9,309
CATFISH: FRESH-WATER(1)	103,359	24,826	179,795	66,958	1,733,687	636,999	1,304,665	356,816
SEA	3,356	320	2,353	97	162,741	10,730	98,678	5,017
CIGARFISH			6,440	786	724,913	110,313	696,266	106,518
COBIA	10,130	1,931	10,022	2,111	100,588	11,766	97,926	16,677
CREVALLE (JACKS)	98,459	6,606	166,537	12,431	2,209,665	143,220	2,871,013	200,712
CROAKER	139,238	20,360	107,210	17,195	1,963,160	287,807	2,183,682	365,798
DOLPHIN	2,381	666	2,211	815	83,280	21,661	132,022	32,955
DRUM: BLACK	13,426	1,476	23,998	3,269	132,202	17,068	171,611	21,027
RED	110,380	24,766	82,920	21,317	1,327,753	296,939	836,371	206,615
EELS	137,867	40,892	58,086	26,781	319,268	86,038	636,693	229,697
FLOUNDERS	38,257	10,070	49,174	15,307	637,272	125,105	403,852	126,695
GOATFISH	4,180	1,203	3,623	2,317	64,268	22,735	87,742	30,501
GROUPERS AND SCAMP	400,295	146,080	871,768	276,918	6,700,227	2,352,387	7,613,703	3,039,936
GRUNTS	16,762	3,039	16,082	3,057	287,723	57,170	268,952	68,302
HERRING, THREAD			4,075	163	767,777	36,080	920,423	54,969
HOGFISH	1,090	337	1,656	380	16,636	5,617	21,788	6,832
JEWFISH	11,779	1,817	18,297	2,373	207,146	31,117	225,958	33,911
KING MACKEREL	1,022,825	268,483	912,069	303,070	10,601,155	3,271,879	6,313,510	2,355,115
KING WHITING	90,392	10,302	80,375	12,060	1,115,877	173,765	873,271	160,360
MENHADEN	65,910	2,165	87,215	3,304	13,339,138	660,050	13,245,803	328,559
MULLET: BLACK	3,661,072	629,630	4,482,100	820,368	27,883,062	3,636,666	25,301,699	3,823,008
SILVER	39,831	12,068	86,829	12,395	1,183,966	137,990	843,730	135,758
PERMIT	9,127	2,768	3,503	1,221	98,548	12,323	213,931	42,888
PIGFISH	1,911	121	387	31	27,718	2,365	9,302	1,090
POMPANO	179,368	231,332	202,382	208,960	1,632,357	1,802,313	1,281,544	1,632,229
SAND PERCH (MOJARRA)	6,755	819	13,330	1,717	300,331	36,982	381,175	68,718
SCUP	11,727	3,019	19,376	3,368	135,091	38,238	262,766	72,177
SEA BASS	11,021	2,638	8,925	2,539	145,682	36,222	138,685	38,010
SEA TROUT: GRAY	25,617	4,609	3,946	2,031	139,008	29,136	113,636	27,683
SPOTTED	347,036	128,313	368,322	138,617	2,819,061	1,130,693	2,668,191	1,160,295
WHITE	32,776	4,333	19,837	3,881	226,339	36,779	192,862	30,840
SHAD	859	158	816	167	112,293	23,883	38,867	9,348
SHARKS	7,870	628	2,761	209	26,616	1,352	18,398	1,891
SHEEPSHEAD	73,215	8,725	56,775	7,053	587,047	76,326	500,112	70,620
SNAPPER: LANE	1,086	169	6,067	2,990	32,731	11,908	61,191	18,021
MANGROVE	19,383	3,236	17,298	8,150	718,566	277,013	803,519	228,196
MUTTON	33,717	18,605	19,622	11,996	638,750	271,869	396,847	232,166
RED	424,370	332,616	391,633	348,668	5,168,918	3,976,288	8,068,079	6,331,621
VERMILION	32,802	19,886	32,373	36,012	278,992	182,660	545,119	356,801
YELLOWTAIL	33,003	20,326	30,769	27,175	1,042,661	667,268	738,545	699,386
SPANISH MACKEREL	1,429,717	236,789	2,346,192	666,363	10,612,023	1,902,842	10,739,910	1,861,693
SPANISH SARDINES	2,229		20,330	1,630	788,319	39,105	238,923	25,992
SPOT	19,986	2,933	31,376	10,695	1,891,836	273,118	976,720	178,896
STURGEON			135	13	6,224	601	2,197	389
SWORDFISH			23,000	63,250	69,806	85,860	130,990	226,320
TENPOUNDER (LADYFISH)	2,000	95	1,319	86	1,970,625	87,245	1,011,376	82,637
TILAPIA (NILE PERCH)	1,800	360	227	36	11,876	2,022	18,390	4,708
TILEFISH	5,202	1,761	4,856	2,066	102,320	36,196	179,063	65,326
TRIGGER FISH	5,079	341	12,015	1,982	71,609	6,897	113,108	16,649
TRIPLETAIL	360	82	121	16	2,510	231	3,623	366
WAHOO	62	12	517	191	870	227	5,377	1,892
WARSAW	9,356	2,225	12,093	2,951	178,590	63,136	169,227	66,998
UNCLASSIFIED: FOR FOOD	160,093	23,160	149,989	26,282	1,767,472	230,588	1,721,700	290,506
FOR MISC.	57,211	3,036	31,799	2,682	805,256	38,987	1,086,803	56,889
TOTAL FISH	9,173,827	2,101,616	11,155,037	2,900,809	106,541,172	23,372,985	98,623,061	25,311,678

SEE FOOTNOTES AT END OF TABLE.

Source: U.S. National Marine Fisheries Service. "Florida Landings, December 1975" Current Fisheries Statistics No. 6957. U.S. Government Printing Office, Washington D.C.

Table 2A
KING MACKEREL COMMERCIAL LANDINGS AND VALUE
BY TYPE OF GEAR

	GULF				S. ATLANTIC			
	HOOK/LINE		GILL-NET		HOOK/LINE		GILL-NET	
YEAR	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
1960	1762800	179805	12600	1285	1829100	231085	17700	2587
1961	1599600	16358	58400	6074	2087300	273239	19400	2774
1962	808500	87315	1159200	125194	1991100	292635	125500	18593
1963	655900	68872	2133700	224040	1691500	196692	530800	60882
1964	226200	18998	1031900	86412	1654100	228518	445500	60922
1965	264300	31634	1541700	189126	1779200	270712	901900	130210
1966	280400	34138	2261500	274641	1106000	205361	770200	135770
1967	303000	35971	2398900	271897	1111300	191573	1899800	309874
1968	295600	38816	2880900	368385	1110600	248978	1483100	255919
1969	627800	83261	2389400	301732	1202800	255729	1756000	346396
1970	459400	61656	1796000	243263	1995200	480635	2354000	536936
1971	339600	58523	2293900	395995	1285300	376671	1629900	445613
1972	353600	71474	977900	173571	2206800	706842	1290500	346957
1973	394700	112843	1747300	462427	2560900	1061265	1175600	482610
1974	991000	261149	5109100	1324436	2711900	1074079	1593200	627034
1975	646100	160174	1895400	454891	2593800	1213766	1197500	560188
1976	404700	130812	2355100	746497	2908600	1569175	2068700	1077915

Source: U.S. National Marine Fisheries Service. Fishery Statistics of the United States. U.S. Government Printing Office, Washington D.C. Annual Issues.

Table 2B
SPANISH MACKEREL COMMERCIAL LANDINGS AND VALUE
BY TYPE OF GEAR

	GULF				S. ATLANTIC			
	HOOK/LINE		GILL-NET		HOOK/LINE		GILL-NET	
YEAR	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
1960	484400	45532	4003900	373357	152300	16236	2117900	208480
1961	290700	27907	3100000	297602	116200	12910	3073500	317262
1962	299700	29373	5620100	550769	112200	10965	2475000	232904
1963	295200	26862	4518400	411174	66500	6938	2042900	186642
1964	157900	15004	3425800	326592	64900	6112	2021800	171890
1965	255300	31591	4055000	486587	144600	14805	2786800	277818
1966	300900	34887	5922000	689222	176700	19564	2020900	214570
1967	233000	23694	4604500	485130	130800	12599	1690300	142749
1968	214200	23820	5646900	642741	152200	14190	4219000	364657
1969	179400	20815	6903500	811539	100300	11229	2239900	240103
1970	89000	21689	6476500	763837	105800	21798	3457300	435066
1971	218900	25543	5651300	652007	134900	15824	2416400	288884
1972	335400	42230	4524700	582402	104400	14238	3221200	405557
1973	120000	19274	5370100	862928	154800	26781	3020300	350397
1974	646700	112672	6972000	1221103	167800	31918	2164400	425210
1975	739800	124498	4527900	775730	374100	65114	4753900	833553
1976	790900	137172	6619600	1160157	823300	151917	8731400	1620386

Source: See Table 2A.

Table 2C
BLUEFISH COMMERCIAL LANDINGS AND VALUE
BY GEAR TYPE

	GULF				S. ATLANTIC			
	HOOK/LINE		GILL-NET		HOOK/LINE		GILL-NET	
YEAR	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
1960	95300	10483	435400	47894	134800	14152	950800	104112
1961	83600	9196	335600	36916	170800	16227	895800	92311
1962	85500	7182	493300	41434	205900	19561	1254000	127496
1963	70400	6128	443500	38583	99400	8688	1324100	116306
1964	45700	4527	352700	34920	75400	7175	1167400	111144
1965	48500	5218	382500	40105	95400	10051	849500	86980
1966	25400	2723	237000	25857	112100	12579	1137400	128329
1967	16200	1713	196000	21422	109000	13481	1270900	151469
1968	29800	3215	231900	25731	203500	23142	1556700	177773
1969	20500	2076	156100	15924	145200	16284	1661800	186071
1970	37400	3776	275900	27921	134500	15068	1543300	168067
1971	23100	2293	232200	23761	82900	10321	1160400	146415
1972	20000	2249	217800	23683	70200	7590	1076100	113014
1973	45000	5416	206100	23929	126600	19243	859300	118505
1974	26500	3038	189100	21124	91600	15258	717600	117523
1975	23400	2628	182300	21400	91700	13635	516700	77370
1976	24200	2826	200300	23129	104000	17759	672200	117000

Source: See Table 2A

Table 3A

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND MODE OF FISHING
GULF SUBREGION, JAN. 1979-DEC. 1979

SPECIES GROUP	MAN-MADE	BEACH/BANK	PARTY/CHARTER	PRIVATE/RENTAL	ALL MODES
	THOUSANDS				
1. BARRACUDAS	•	•	•	38	38
2. BASSES, SEA	47	•	290	2,103	2,440
3. BLUEFISH	551	•	53	1,299	1,903
4. BLUE RUNNER	38	81	•	378	498
5. BONIT , ATLANTIC	•	•	–	141	142
6. CATFISHES, SEA	2,888	1,532	47	10,526	14,993
7. CATFISHES, FRESHWATER	•		•	187	198
9. CROAKER, ATLANTIC	1,840	875		8,287	11,008
11. DOLPHINS		•	•	53	54
12. DRUM, BLACK	235	32	•	1,978	2,245
13. DRUM, RED	199	142		3,249	3,593
14. DRUMS	154	–	•	221	381
15. EEL, AMERICAN			•	33	43
16. FLOUNDERS, SUMMER	210	281		1,375	1,882
18. FLOUNDERS	78	145	–	178	427
19. GROUPERS	265	160	88	387	880
20. GRUNT, WHITE	185	•	34	2,683	2,902
21. GRUNTS	158	544	354	488	1,548
23. HERRINGS	578	497	•	1,087	2,142
24. JACK, CREVALLE	498	70	•	835	1,204
25. JACKS	391	120		388	907
26. KINGFISHES	1,280	1,094	•	1,009	3,383
27. LADYFISH	239	38	•	484	761
28. LITTLE TUNNY	210	•	–	98	328
30. MACKEREL, KING	–	•	–	569	598
31. MACKEREL, SPANISH	115		82	1,107	1,292
32. MACKERELS AND TUNAS	53	•		72	144
33. MULLETS	938	3,031	•	1,238	5,205
34. PERCH, SAND	118	•		1,523	1,643
35. PERCH, SILVER	790	–	•	824	1,822
38. PIGFISH	542	147	•	831	1,521
39. PINFISH	4,005	1,578		3,485	9,070
41. PORGIES	44	•	•	115	159
42. PUFFERS	120		•	42	187
43. SCUP	–	•	•	•	–
44. SEAROBINS		•		123	128
45. SEATROUT, SAND	723	211	–	5,348	8,286
46. SEATROUT, SILVER	34	•	•	145	178
47. SEATROUT, SPOTTED	921	358	529	11,699	13,508
48. SHARKS	172	103	74	420	769

CONTINUED

Table 3A

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND MODE OF FISHING
GULF SUBREGION, JAN. 1979-DEC. 1979

SPECIES GROUP	MAN-MADE	BEACH/BANK	PARTY/CHARTER	PRIVATE/RENTAL	ALL MODES
	THOUSANDS				
49. SHARKS, DOGFISH		*	_	73	80
50. SHEEPSHEAD	581	_	_	1,258	1,881
51. SKATES AND RAYS		_	*	565	821
53. SNAPPER, GRAY	246	162	610	70	1,088
54. SNAPPER, RED	57	569	1,609	1,332	3,567
55. SNAPPER, VERMILLION	*	*	240	118	358
56. SNAPPERS		485	_	113	620
57. SPADEFISH, ATLANTIC	242		_	188	451
58. SPOT	368	527	*	37	932
59. STRIPED BASS	*	*	*	_	_
61. TOADFISHES	42			141	202
63. TRIGGER AND FILEFISHES		*	268	233	506
66. OTHER FISH	437	280	_	2,187	2,896
TOTALS	20,686	13,153	4,472	71,081	109,372

NOTE: AN ASTERISK (*) DENOTES NONE REPORTED.

NOTE: AN UNDERSCORE (_) DENOTES LESS THAN THIRTY THOUSAND REPORTED. HOWEVER, THE FIGURE IS INCLUDED IN ROW AND COLUMN TOTALS.

END OF TABLE

Source: Marine Recreational Fishery Statistics Survey, 1979.

Table 3B

ESTIMATED WEIGHT OF FISH CAUGHT (CATCH TYPE A) BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION
JAN. 1979-DEC. 1979

SPECIES GROUP	NORTH ATLANTIC	MID-ATLANTIC	SOUTH ATLANTIC	GULF	ALL REGIONS
	THOUSAND KILOGRAMS				
1. BARRACUDAS	*		287	*	275
2. BASSES, SEA		172	271	101	548
3. BLUEFISH	1,937	16,314	3,055	473	21,781
4. BLUE RUNNER	*	*	308	108	415
5. BONITO, ATLANTIC	-	186	-	101	388
6. CATFISHES, SEA	-		137	324	466
7. CATFISHES, FRESHWATER		50	*	39	89
8. COD, ATLANTIC	688		*	*	728
9. CROAKER, ATLANTIC	*	711	411	564	1,685
10. CUNNER	14	7	*	*	21
11. DOLPHINS	*	-	2,127	165	2,297
12. DRUM, BLACK	*		322	1,187	1,528
13. DRUM, RED	*	*	469	1,319	1,788
14. DRUMS	*			109	137
15. EEL, AMERICAN	-	31	-	-	43
16. FLOUNDERS, SUMMER	281	5,355	358	549	6,543
17. FLOUNDER, WINTER	1,803	2,006	*	*	3,809
18. FLOUNDERS		37		40	82
19. GROUPERS	*	*	500	1,930	2,430
20. GRUNT, WHITE	*	*	140	238	378
21. GRUNTS	*	*	324	25	349
22. HAKES	-	124	-	*	129
23. HERRINGS		-			14
24. JACK, CREVALLE	*	-	66	940	1,006
25. JACKS	*	-	320	448	787
26. KINGFISHES	*		130	322	456
27. LADYFISH	*	*	27		34
28. LITTLE TUNNY	*		401	188	673
29. MACKEREL, ATLANTIC	548	1,163	*	*	1,711
30. MACKEREL, KING	*	-	865	1,799	2,678
31. MACKEREL, SPANISH	*	*	954	460	1,414
32. MACKERELS AND TUNAS	855	1,158	240		2,125
33. MULLETS	*	*	812	978	1,590
34. PERCH, SAND	*	*	16	13	29
35. PERCH, SILVER	*	-	29	22	51
36. PERCH, WHITE	6	467		*	473
37. PERCH, YELLOW	*	17	*	*	17
38. PIGFISH	*		12	58	71
39. PINFISH		-	177	90	271
40. POLLOCK	248	*	*	*	248

CONTINUED

Table 3B

ESTIMATED WEIGHT OF FISH CAUGHT (CATCH TYPE A) BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION
JAN. 1979-DEC. 1979

SPECIES GROUP	NORTH ATLANTIC	MID-ATLANTIC	SOUTH ATLANTIC	GULF	ALL REGIONS
	THOUSAND KILOGRAMS				
41. PORGIES	-	310	170	-	486
42. PUFFERS	*		-	-	7
43. SCUP	698	1,017	-	-	1,722
44. SEAROBINS	-	17	-	*	24
45. SEATROUT, SAND	*	*	*	1,333	1,333
46. SEATROUT, SILVER	*		99	10	128
47. SEATROUT, SPOTTED	*	440	539	3,031	4,010
48. SHARKS	*	3,477	88	385	3,949
49. SHARKS, DOGFISH		77			101
50. SHEEPSHEAD	-	*	787	741	1,527
51. SKATES AND RAYS					28
52. SMELTS	76	-	*	-	76
53. SNAPPER, GRAY	*	*	158	425	582
54. SNAPPER, RED	*	*	143	1,220	1,362
55. SNAPPER, VERMILLION	*	*	7	42	49
56. SNAPPERS	*		251		258
57. SPADEFISH, ATLANTIC	*	-		25	26
58. SPOT	*	425	514	30	968
59. STRIPED BASS	286	870	-	-	1,144
60. TAUTOG	583	952	-	*	1,536
61. TOADFISHES	*			*	
62. TOMCOD, ATLANTIC	132	-	*	*	136
63. TRIGGER AND FILEFISHES	*	-	73	303	381
64. WEAKFISH	-	3,446	95	*	3,574
65. WINDOWPANE	-	15	*	*	19
66. OTHER FISH	190	497	760	1,920	3,367
TOTALS	8,214	38,578	16,391	22,155	88,338

NOTE: AN ASTERISK (*) DENOTES NONE REPORTED.

NOTE: AN UNDERSCORE (_) CORRESPONDS TO AN UNDERSCORE IN TABLE 2, I.E. LESS THAN THIRTY THOUSAND FISH WERE REPORTED CAUGHT. HOWEVER, THE WEIGHT HAS BEEN INCLUDED IN ROW AND COLUMN TOTALS.

CATCH TYPE A: AN ESTIMATE OF PART OF THE TOTAL CATCH BASED ON FISH BROUGHT ASHORE IN WHOLE FORM, AVAILABLE FOR INTERVIEWER IDENTIFICATION AND ENUMERATION, FROM WHICH SAMPLES OF LENGTHS AND WEIGHTS WERE OBTAINED.

END OF TABLE

Source: Marine Recreational Fishery Statistics Survey, 1979.

Table 3C

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND MODE OF FISHING
SOUTH ATLANTIC SUBREGION, JAN. 1979-DEC. 1979

SPECIES GROUP	MAN-MADE	BEACH/BANK	PARTY/CHARTER	PRIVATE/RENTAL	ALL MODES
			THOUSANDS		
1. BARRACUDAS	92	-	42	216	350
2. BASSES, SEA	90	-	372	2,879	3,341
3. BLUEFISH	1,158	1,308	-	2,517	4,994
4. BLUE RUNNER	588	95	32	87	802
5. BONITO, ATLANTIC	*	*	-	87	89
6. CATFISHES, SEA	1,430	1,648	*	2,439	5,517
9. CROAKER, ATLANTIC	668	226	-	2,883	3,778
11. DOLPHINS	-	*	66	2,682	2,748
12. DRUM, BLACK	112	162	*	140	415
13. DRUM, RED	105	-	*	386	520
14. DRUMS	70	-	*	84	154
15. EEL, AMERICAN	-	-	*	-	47
16. FLOUNDERS, SUMMER	203	249	-	535	988
18. FLOUNDERS	-	-	*	-	-
19. GROUPERS	-	*	-	504	537
20. GRUNT, WHITE	34	-	107	829	970
21. GRUNTS	696	59	424	2,009	3,187
22. HAKES	-	*	*	-	-
23. HERRINGS	2,748	-	*	179	2,927
24. JACK, CREVALLE	75	169	*	107	351
25. JACKS	432	194	-	216	852
26. KINGFISHES	371	498	-	210	1,083
27. LADYFISH	-	-	*	89	105
28. LITTLE TUNNY	-	*	65	134	200
30. MACKEREL, KING	-	*	53	324	393
31. MACKEREL, SPANISH	-	*	*	891	917
32. MACKERELS AND TUNAS	-	*	-	76	126
33. MULLETS	1,505	752	*	941	3,198
34. PERCH, SAND	145	*	37	-	190
35. PERCH, SILVER	45	89	*	137	271
36. PERCH, WHITE	-	56	*	-	67
38. PIGFISH	43	34	-	380	456
39. PINFISH	1,189	1,570	-	960	3,720
41. PORGIES	198	-	31	95	347
42. PUFFERS	83	-	-	80	150
43. SCUP	*	*	-	-	-
44. SEAROBINS	40	437	-	177	655
45. SEATROUT, SAND	*	*	*	-	-
46. SEATROUT, SILVER	82	*	-	452	534
47. SEATROUT, SPOTTED	111	85	*	1,315	1,511

CONTINUED

Table 3C

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND MODE OF FISHING
SOUTH ATLANTIC SUBREGION, JAN. 1979-DEC. 1979

SPECIES GROUP	MAN-MADE	BEACH/BANK	PARTY/CHARTER	PRIVATE/RENTAL	ALL MODES
	THOUSANDS				
48. SHARKS	-	30	-	400	439
49. SHARKS, DOGFISH	*	*	*	*	54
50. SHEEPSHEAD	481	81	-	565	1,106
51. SKATES AND RAYS	57	*	*	102	172
53. SNAPPER, GRAY	178	-	56	[illegible]	660
54. SNAPPER, RED	33	*	108	548	687
55. SNAPPER, VERMILLION	*	*	100	53	153
56. SNAPPERS	58	*	69	2,073	2,209
57. SPADEFISH, ATLANTIC	*	*	*	*	*
58. SPOT	5,840	1,690	-	1,310	8,840
59. STRIPED BASS	42	*	*	*	47
60. TAUTOG	*	*	*	*	*
61. TOADFISHES	88	*	*	197	285
63. TRIGGER AND FILEFISHES	-	*	43	314	364
64. WEAKFISH	-	-	*	113	124
66. OTHER FISH	881	1,275	43	2,237	4,436
T TALS	20,127	10,899	1,737	33,372	66,135

NOTE: AN ASTERISK (*) DENOTES NONE REPORTED.

NOTE: AN UNDERSCORE (_) DENOTES LESS THAN THIRTY THOUSAND REPORTED. HOWEVER, THE FIGURE IS INCLUDED IN ROW AND COLUMN TOTALS.

END OF TABLE

Source: Marine Recreational Fishery Statistics Survey, 1979.

Table 4A
Quantity R ceived and Av rage Price Reported at Fulton Fish Market, New York

Bluefish

Quantity by State (thousand pounds)

1979	NC	SC	GA	FL	AL	MS	other	Average Monthly Price
Jan	141.3	-	-	149.4	-	-	15.0	.78
Feb	182.3	4.0	3.5	132.0	-	-	6.9	.69
Mar	218.6	.2	-	161.1	-	-	31.3	.75
Apr	300.01	2.4	.3	154.1	-	-	526.1	.60
May	185.9	.1	-	26.3	-	-	284.2	.48
Jun	89.4	-	-	15.0	-	-	301.4	.53
Jul	47.9	-	-	25.5	-	.8	527.5	.39
Aug	20.0	-	-	24.4	-	.1	410.2	.48
Sep	18.5	-	-	16.3	-	-	394.8	.47
Oct	60.2	-	-	46.3	-	.2	432.9	.35
Nov	76.8	.1	-	45.2	-	-	253.5	.48
Dec	227.6	-	-	53.1	-	-	116.1	.68

Source: U.S. National Marine Fisheries Service. Fishery Market News Report, Various Issues During 1979. Market News Office, New York, New York.

Table 4B
Quantity R c iv d and Average Price Reported
at Fulton Fish Market, New York

King Mackerel

Quantity by State (thousand pounds)

1979	NC	SC	GA	FL	AL	MS	other	Average Monthly Price
Jan	.2	-	-	187.2	-	-	-	1.24
Feb	3.9	-	-	171.8	-	-	-	1.32
Mar	4.6	1.8	-	151.9	-	-	-	1.35
Apr	7.8	-	5.3	103.5	-	-	-	1.62
May	35.0	-	8.2	132.2	-	-	-	1.32
Jun	.8	5.4	2.7	100.4	-	-	-	1.42
Jul	.1	-	-	156.6	-	-	-	1.47
Aug	5.9	2.7	.3	191.5	-	1.0	-	1.39
Sep	6.0	.8	1.2	48.9	-	-	-	1.63
Oct	135.6	6.5	3.6	91.7	-	.5	-	1.30
Nov	131.0	1.6	4.5	30.4	-	-	-	1.18
Dec	68.2	.2	-	123.1	-	-	-	1.35

Source: See Table 4A.

Table 4C
Quantity Received and Average Price R ported
at Fulton Fish Market, New York
Spanish Mackerel
Quantity by State (thousand pounds)

1979	NC	SC	GA	FL	AL	MS	other	Average Monthly Price
Jan	-	-	-	30.2	-	-	-	.77
Feb	-	.1	-	72.3	-	-	-	.62
Mar	-	-	-	22.5	-	-	-	.66
Apr	-	-	-	34.5	-	4.6	-	.76
May	3.0	-	-	-	-	-	-	-
Jun	-	-	-	-	-	1.4	-	-
Jul	-	-	-	.3	-	-	-	-
Aug	.2	-	-	6.8	-	2.1	-	-
S p	-	-	-	2.0	-	-	-	-
Oct	4.9	-	-	8.3	-	.2	-	.68
Nov	1.0	-	-	5.5	-	-	-	.65
Dec	.1	-	-	33.3	-	-	-	.69

Source: See Table 4A.

Table 5

Pounds, Value, and Average Price of Fresh and Frozen Spanish Mackerel Fillets 1960-1975

Year	South Atlantic[2]			Gulf of Mexico			South Atlantic and Gulf of Mexico		
	Pounds	Value $	Average Price per Pound $	Pounds	Value $	Average Price per Pound $	Pounds	Value $	Average Price per Pound $
1975	684,000	457,000	0.668	2,373,000	1,885,000	0.794	3,057,000	2,342,000	0.766
1974	822,360	496,260	0.603	2,985,220	2,394,700	0.802	3,807,570	2,890,960	0.759
1973	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1972	(1)	(1)	(1)	1,140,620	706,550	0.619	(3)	(3)	(3)
1971	(1)	(1)	(1)	1,764,520	831,170	0.471	(3)	(3)	(3)
1970	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1969	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1968	1,122,540	554,690	0.494	743,460	317,140	0.427	1,866,000	871,830	0.467
1967	595,770	279,530	0.469	848,680	318,580	0.375	1,444,450	598,110	0.414
1966	437,500	177,800	0.406	2,816,490	1,372,220	0.487	3,253,944	1,550,020	0.476
1965	199,000	69,750	0.351	922,000	356,040	0.386	1,121,000	425,790	0.380
1964	128,000	47,530	0.371	801,820	265,740	0.331	929,820	313,270	0.337
1963	134,000	45,510	0.340	757,530	246,240	0.325	891,530	291,750	0.327
1962	578,000	177,770	0.308	910,080	288,250	0.317	1,488,080	466,020	0.313
1961	527,300	159,930	0.303	(1)	(1)	(1)	(3)	(3)	(3)
1960	247,700	56,690[2]	0.229	(1)	(1)	(1)	(3)	(3)	(3)

1 Included with unclassified fish.

2 North Carolina products included with unclassified fish.

3 Undetermined because a large portion of the products were included with unclassified fish.

Source: U.S. Department of Commerce, National Marine Fishery Service, Fishery Statistics of the United States, (Washington, D.C.: U.S. Government Printing Office), various years.

Table 6

Imports of Mackerel* to the Southeast U.S.
(pounds)

	Japan		Mexico		South America		Europe	
	Frozen	Canned	Fresh/ Frozen	Canned	Frozen	Canned	Frozen	Canned
1967	-	2,084,700	5,100	-	2,000	-	-	-
1968	-	3,904,700	-	-	-	-	-	-
1969	-	2,380,600	400	-	-	-	-	5,900
1970	-	8,357,200	11,200	-	-	-	2,360	1,900
1971	-	4,528,100	2,800	-	-	-	-	40,200
1972	-	1,940,800	53,600	-	2,100	-	-	5,800
1973	-	5,772,700	114,200	-	94,400	104,000	84,000	4,600
1974	-	5,173,300	479,200	-	6,200	-	-	-
1975	-	1,989,700	1,400	-	10,200	-	-	-
1976	-	1,301,900	6,300	-	56,400	-	-	-
1977	-	114,100	54,600	-	49,600	146,800	-	28,900

*Includes king and Spanish as well as Pacific and Atlantic mackerel

Source: National Marine Fisheries Service, Statistics and Market News, New Orleans Office

TABLE 7
NUMBER OF OPERATING UNITS BY GEAR TYPE

YEAR	HOOK/LINE				GILL NET-VESSELS		GILL NET-BOATS	
	GULF		S. ATLANTIC		GULF	S. ATLANTIC	GULF	S. ATLANTIC
	610	660	610	660				
1960	179	17	48	4	36	7	696	430
1961			38	5		6		436
1962	232	39	42	2	46	12	962	480
1963	280	22	49	3	44	19	922	394
1964	334	31	45	4	63	22	954	386
1965	337	36	59	19	69	17	1006	358
1966	247	41	67	32	83	21	963	303
1967	267	39	67	21	74	24	970	353
1968	256	33	74	19	75	17	801	337
1969	242	19	37	12	60	17	893	308
1970	257	32	39	10	58	5	788	303
1971	282	44	47	12	59	15	834	320
1972	306	44	61	25	62	9	931	305
1973	331	41	85	29	66	11	895	346
1974	353	48	80	38	86	11	817	316
1975	425	46	90	34	98	15	795	323
1976	449	64	90	47	115	22	866	363

Wher 610 is the computer code for Hand
660 is the computer code for Troll.

Source: Unpublished Data. U.S. National Marine Fisheries Service. Southeast Fisheries Center, Miami, Florida. 1960-1976

Table 8

Examples of Vessel Characteristics for Hook & Line Equipped Vessels
1977

NAME	GROSS TONS	LENGTH	CREW FC	CREW PC	GEAR NO.	GEAR ACT.	TYPE CONT	PROPULSION TYPE	PROPULSION HP	YEAR BUILT	STATE	COUNTY
COWBOY	5	30	2	0	2	2	8	3	160	76	11	29
ROTH F	7	31	2	0	2	0	1	3	140	68	11	29
MINIMI	14	31	2	0	2	0	1	2	440	63	11	29
RAVEN	8	31	2	0	2	0	1	3	115	55	11	29
DAWN	5	31	2	0	2	0	1	3	96	57	11	29
BLUE DOLPHIN	4	31	0	2	2	2	1	3	135	56	11	1
MY JO	4	32	2	0	2	0	1	2	185	62	11	29
TRITON	13	32	2	0	2	0	1	3	68	61	11	29
JACK G	10	32	2	0	2	2	1	3	120	54	11	29
ROBERT G.	11	32	2	0	2	0	1	3	140	71	11	29
MA LAIK I OS	14	33	2	0	2	2	1	2	450	68	11	29
BLUE DOLPHIN	10	33	2	0	2	0	1	3	225	63	11	29
BLUEFIN	13	33	2	0	2	2	1	2	370	48	11	29
FINDEST KIND	12	33	2	0	2	0	8	3	450	64	11	29
PEGUOD	14	34	3	0	2	0	8	3	450	75	11	29
EILEEN	4	34	2	0	2	0	1	3	62	67	11	29
NOR' WESTER	12	34	2	0	2	0	1	3	165	49	11	29
FISHERMAN	6	34	2	0	2	0	1	3	105	34	11	29
LINDA LEE	13	35	2	0	2	0	1	3	174	55	11	29
MISS PENNY	11	36	0	2	2	2	1	3	265	58	11	1
LINDA	15	36	2	0	2	2	1	3	350	69	11	29
OSPREY	17	36	0	2	2	2	8	3	420	72	11	1
ANITA	21	37	0	2	2	2	8	3	404	73	11	1
KEY HAVEN	15	37	3	0	2	0	8	3	350	71	11	29
MACHELORS TWO	24	37	0	3	3	3	1	3	220	67	11	1
CAROLYN	13	37	2	0	2	2	1	3	345	65	11	29
OFF SHOR	16	37	0	2	2	2	1	3	260	62	11	31
LULA	14	37	2	0	2	2	1	3	150	63	11	29
LOOKOUT II	21	38	2	0	2	0	8	3	390	64	11	29
C. O. JONES	15	38	3	0	2	0	8	3	450	72	11	29
POLARUS II	19	38	2	0	2	0	1	2	280	47	11	29
MISS PRISCILLA	13	38	2	0	2	0	1	3	115	46	11	29
TINA MARIE	13	39	2	0	2	0	1	3	255	69	11	29
GAIL L	22	40	3	0	2	0	8	3	450	74	11	29
GLORY	28	40	0	3	3	3	1	3	28[illegible]	69	11	31

Source: Unpublished Data. U.S. National Marine Fisheries Serviec. Southeast Fisheries Center, Miami, Florida. 1977.

ESTIMATED NUMBER OF FISH CAUGHT (CATCH TYPE A) BY MARINE RECREATIONAL FISHERMEN BY AREA OF FISHING AND MODE OF FISHING FOR EACH SUBREGION, JAN. 1979-DEC. 1979

MODE	OCEAN MORE THAN 3 MI	OCEAN 3 MI OR LESS	INLAND	UNKNOWN (1)	ALL AREAS
SUBREGION					
			THOUSANDS		
NORTH ATLANTIC					
MAN-MADE	*	545	1,680	8	2,232
BEACH/BANK	*	205	532	8	745
PARTY/CHARTER	285	33	112	*	410
PRIVATE/RENTAL	723	1,324	5,836	*	7,883
TOTALS	988	2,107	7,960	14	11,068
MID-ATLANTIC					
MAN-MADE	*	1,062	1,548	1,072	3,881
BEACH/BANK	*	2,060	726	413	3,199
PARTY/CHARTER	3,078	774	741	*	4,593
PRIVATE/RENTAL	3,173	3,301	18,193	1,696	26,362
TOTALS	6,251	7,196	21,208	3,180	37,836
SOUTH ATLANTIC					
MAN-MADE	*	4,381	1,412	1,789	7,582
BEACH/BANK	*	2,171	243	1,380	3,794
PARTY/CHARTER	853	380	14	*	1,047
PRIVATE/RENTAL	2,798	2,355	4,550	1,707	11,409
TOTALS	3,651	9,287	6,218	4,876	23,811
GULF					
MAN-MADE	*	1,211	708	2,810	4,728
BEACH/BANK	*	1,081	1,612	472	3,165
PARTY/CHARTER	258	*	188	1,821	2,248
PRIVATE/RENTAL	4,382	1,945	8,775	4,256	20,358
TOTALS	4,640	4,237	12,282	9,358	30,487

NOTE: AN ASTERISK (*) DENOTES NONE REPORTED.

1. THIS CATEGORY INCLUDES "MISSING DATA" ON AREA, AND LOCAL VARIATION IN MARINE GEOGRAPHIC TERMINOLOGY WHICH SOMETIMES PREVENTED INTERVIEWERS FROM DETERMINING ACCEPTABLE ANSWERS TO QUESTIONS ON "DISTANCE FROM SHORE."

CATCH TYPE A: AN ESTIMATE OF PART OF THE TOTAL CATCH BASED ON FISH BROUGHT ASHORE IN WHOLE FORM, AVAILABLE FOR INTERVIEWER IDENTIFICATION AND ENUMERATION, FROM WHICH SAMPLES OF LENGTHS AND WEIGHTS WERE OBTAINED.

Sourc : Marine Recreational Fishery Statistics Survey, 1979.

TABLE 35. ESTIMATES FROM INTERCEPT SURVEY DATA OF MEAN COST, MEAN NUMBER OF HOURS PER TRIP, AND MEAN ONE-WAY DISTANCE TRAVELED BY MODE, JAN. 1979-DEC. 1979

MODE		MEAN	MEDIAN	STD DEV
MAN-MADE				
	HOURS	3.7	3.0	2.487
	COST $	7.0	3.0	85.751
	MILES	30.0	10.0	60.398
BEACH/BANK				
	HOURS	3.8	3.0	2.613
	COST $	7.6	3.0	24.266
	MILES	31.0	14.0	58.465
PARTY/CHARTER				
	HOURS	4.6	4.0	1.787
	COST $	36.6	25.0	51.988
	MILES	58.2	45.0	67.321
PRIVATE/RENTAL				
	HOURS	4.6	4.0	2.283
	COST $	14.5	9.0	34.761
	MILES	36.0	20.0	61.985

TABLE 36. ESTIMATES FROM INTERCEPT SURVEY DATA OF MEAN COST, MEAN NUMBER OF HOURS PER TRIP, AND MEAN ONE-WAY DISTANCE TRAVELED BY SUBREGION, JAN. 1979-DEC. 1979

SUBREGION		MEAN	MEDIAN	STD DEV
NORTH ATLANTIC				
	HOURS	3.9	3.5	2.261
	COST $	10.8	4.0	29.167
	MILES	30.3	15.0	54.108
MID-ATLANTIC				
	HOURS	4.4	4.0	2.329
	COST $	13.8	7.0	25.553
	MILES	43.3	25.0	63.637
SOUTH ATLANTIC				
	HOURS	4.2	4.0	2.557
	COST $	13.6	5.0	44.305
	MILES	30.0	8.0	72.342
GULF				
	HOURS	4.1	4.0	2.436
	COST $	15.6	5.0	111.98
	MILES	31.1	15.0	58.481

Source: Marine Recreational Fisheries Statistics Survey, 1979.

NOTE: TRIP COST INFORMATION WAS COLLECTED AS OF TIME OF INTERVIEW AND DOES NOT INCLUDE ANY COSTS INCURRED AFTER COMPLETION OF FISHING.

Table 10A

ESTIMATES FROM INTERCEPT SURVEY DATA OF MEAN COST, MEAN NUMBER OF HOURS PER TRIP, AND MEAN ONE-WAY DISTANCE TRAVELED BY SUBREGION AND MODE, JAN. 1979-DEC. 1979

MODE	SUBREGION	MEAN	MEDIAN	STD DEV
PARTY/CHARTER				
	NORTH ATLANTIC			
	HOURS	4.1	4.0	1.436
	COST $	27.1	20.0	35.713
	MILES	80.8	50.0	71.182
	MID-ATLANTIC			
	HOURS	5.1	5.0	1.836
	COST $	36.1	28.0	42.879
	MILES	84.4	50.0	58.100
	SOUTH ATLANTIC			
	HOURS	3.9	3.5	1.898
	COST $	46.7	30.0	89.172
	MILES	39.2	10.0	87.853
	GULF			
	HOURS	4.2	4.0	1.418
	COST $	52.0	35.0	62.681
	MILES	40.0	15.0	88.890
PRIVATE/RENTAL				
	NORTH ATLANTIC			
	HOURS	4.7	4.5	2.383
	COST $	12.6	7.5	32.339
	MILES	31.1	15.0	80.598
	MID-ATLANTIC			
	HOURS	4.6	4.5	2.229
	COST $	13.4	10.0	23.105
	MILES	43.3	30.0	85.717
	SOUTH ATLANTIC			
	HOURS	4.7	4.5	2.228
	COST $	16.1	9.0	53.169
	MILES	26.9	10.0	73.978
	GULF			
	HOURS	4.5	4.0	2.333
	COST $	17.0	10.0	40.044
	MILES	31.4	20.0	45.722

NOTE: TRIP COST INFORMATION WAS COLLECTED AS OF TIME OF INTERVIEW AND DOES NOT INCLUDE ANY COSTS INCURRED AFTER COMPLETION OF FISHING.

END OF TABLE

Source: Marine Recreational Fisheries Statistics Survey, 1979.

Table 10B

ESTIMATES FROM INTERCEPT SURVEY DATA OF MEAN COST, MEAN NUMBER OF HOURS PER TRIP, AND MEAN ONE-WAY DISTANCE TRAVELED BY MODE, JAN. 1979-DEC. 1979

MODE		MEAN	MEDIAN	STD DEV
MAN-MADE				
	HOURS	3.7	3.0	2.487
	COST $	7.0	3.0	85.751
	MILES	30.0	10.0	80.398
BEACH/BANK				
	HOURS	3.8	3.0	2.813
	COST $	7.8	3.0	24.268
	MILES	31.0	14.0	58.485
PARTY/CHARTER				
	HOURS	4.8	4.0	1.787
	COST $	38.8	25 0	51.988
	MILES	58.2	45.0	87.321
PRIVATE/RENTAL				
	HOURS	4.8	4.0	2.283
	COST $	14.5	9.0	34.761
	MILES	36.0	20.0	81.885

Table 10C

TABLE 38. ESTIMATES FROM INTERCEPT SURVEY DATA OF MEAN COST, MEAN NUMBER OF HOURS PER TRIP, AND MEAN ONE-WAY DISTANCE TRAVELED BY SUBREGION, JAN. 1979-DEC. 1979

SUBREGION		MEAN	MEDIAN	STD DEV
NORTH ATLANTIC				
	HOURS	3.9	3.5	2.261
	COST $	10.8	4.0	29.187
	MILES	30.3	15.0	54.108
MID-ATLANTIC				
	HOURS	4.4	4.0	2.329
	COST $	13.8	7.0	25.553
	MILES	43.3	25.0	83.837
SOUTH ATLANTIC				
	HOURS	4.2	4.0	2.557
	COST $	13.8	5 0	44.305
	MILES	30.0	8.0	72.342
GULF				
	HOURS	4.1	4.0	2.436
	COST $	15 8	5.0	111 98
	MILES	31.1	15.0	58.481

Source: Marine Recreational Fisheries Statistics Survey, 1979.

NOTE: TRIP COST INFORMATION WAS COLLECTED AS OF TIME OF INTERVIEW AND DOES NOT INCLUDE ANY COSTS INCURRED AFTER COMPLETION OF FISHING.

Appendix B

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