Current Fishery Statistics No. 9600

Fisheries of the United States, 1996

July 1997

U.S. DEPARTMENT
OF COMMERCE

National Oceanic and
Atmospheric Administration

National Marine
Fisheries Service

SH
11
.F58
1996

Current Fishery Statistics No. 9600

54
11
F52
1990

Fisheries of the United States, 1996

Prepared by:
Fisheries Statistics Division

Mark C. Holliday, Chief
Barbara K. O'Bannon, Editor

Silver Spring, MD
July 1997

U.S. DEPARTMENT OF COMMERCE,
William Daley, Secretary

National Oceanic and Atmospheric Administration
D. James Baker, Under Secretary

National Marine Fisheries Service
Rolland A. Schmitten, Assistant Administrator

PREFACE

FISHERIES OF THE UNITED STATES, 1996

3T

This publication is a preliminary report for 1996 on commercial and recreational fisheries of the United States with catches in both the U.S. and foreign Exclusive Economic Zones (EEZ). This annual report provides timely answers to frequently asked questions.

SOURCES OF DATA

Information in this report came from many sources. Field offices of the National Marine Fisheries Service (NMFS), in cooperation with various States, collected and compiled data on U.S. commercial landings and processed fishery products. The NMFS Fisheries Statistics and Economics Division in Silver Spring, MD, managed the collection and compilation of recreational statistics, and tabulated and prepared all data for publication. Sources of other data appearing in this publication are: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, U.S. Coast Guard, U.S. Customs Service, U.S. Department of the Interior, and U.S. Department of Agriculture, and Food and Agriculture Organization (FAO) of the United Nations.

PRELIMINARY AND FINAL DATA

Data on U.S. commercial and recreational landings, employment, prices, and production of processed products are preliminary for 1996. Final data will be published in other NMFS Current Fishery Statistics publications.

The Fisheries Statistics Division of NMFS takes this opportunity to thank members of states, industry, and foreign nations who provided the data that made this publication possible.

Program leaders of the field offices were: Gregory Power, New England, Middle Atlantic, and Chesapeake; Tony Frank, National Biological Service Science Center, Great Lakes States; Nelson Johnson, Guy Davenport, and Margot Hightower for the South Atlantic and Gulf States; Patricia J. Donley, California and Hawaii; John K. Bishop, Oregon and Washington; and Patsy Bearden, Alaska.

NOTES

The time series of U.S. catch by species and distance from shore included in this year's "Fisheries of

the U.S." is estimated by the National Marine Fisheries Service.

As in past issues of this publication, the units of quantity and value are defined as follows: U.S. landings are shown in round weight (except mollusks which are in meat weight), unless otherwise noted; quantities shown for U.S. Imports and exports are in product weight, as reported by the U.S. Bureau of the Census, unless otherwise noted; the value of the U.S. domestic commercial catch is exvessel (In the Review Section on important species actual and deflated exvessel prices are shown. The deflated value was computed using the Gross Domestic Products Implicit Price Deflator); the value for U.S. Imports is generally the market value in the foreign (exporting) country and, therefore, excludes U.S. Import duties, freight charges from the foreign country to the United States, and insurance; the value for exports is generally the value at the U.S. port of export, based on the selling price, including inland freight, insurance, and other charges. Countries and territories shown in the U.S. foreign trade section are established for statistical purposes in the Tariff Schedules of the United States Annotated (International Trade Commission) and reported by the U.S. Bureau of the Census.

SUGGESTIONS

The Fisheries Statistics Division wishes to provide the kinds of data sought by users of fishery statistics, and welcomes any comments or suggestions that will improve this publication.

Address all comments or questions to:

Fisheries Statistics and Economics Division, (F/ST1)
National Marine Fisheries Service, NOAA
1315 East-West Highway - Rm. 12340
Silver Spring, MD 20910-3282
PHONE: 301-713-2328
FAX: 301-713-4137

Members of the Fisheries Statistics Division in Silver Spring, who helped with this publication were: Darryl Bullock, Josanne Fabian, Tom Ferris, Karen Foster, Amy Gautam, Ray Glass, Gerry Gray, Deborah Hogans, Mark Holliday, Steven Koplin, Steve Myers, Barbara O'Bannon, Maury Osborn, Liz Pritchard, Ron Salz, Warren Schlechte, Dick Schween, David Sutherland, Glen Taylor, William Uttley, David Van Voorhees, John Ward, and Lella Wise.

CONTENTS

	Page		Page
PREFACE AND ACKNOWLEDGEMENT.....	ii	U.S. EXPORTS -- Continued:	
REVIEW.....	iv	Crabmeat.....	110
U.S. COMMERCIAL FISHERY LANDINGS:		Herring.....	110
Species.....	1	Industrial.....	111
Disposition.....	3	U.S. SUPPLY:	
States.....	4	Edible and nonedible.....	113
Regions.....	4	Finfish and shellfish.....	114
Ports.....	5	Blocks.....	115
Catch by species and distance from		All fillets and steaks.....	115
shore (thousand pounds).....	6	Groundfish fillets and steaks.....	115
Catch by species and distance from		Tuna, fresh and frozen.....	116
shore (metric tons).....	10	Canned sardines.....	117
U.S. Landings for Territorial		Canned salmon.....	117
Processions.....	14	Canned tuna.....	117
U.S. Aquaculture Production,		King crab.....	118
Estimated 1984-1995.....	18	Snow (tanner) crab.....	118
Historical Landings of Swordfish,		Canned crabmeat.....	118
by state.....	20	Lobster, American.....	119
U.S. MARINE RECREATIONAL FISHERIES.....	26	Lobster, Spiny.....	119
MRFSS sample coverage.....	28	Clams.....	120
Number of participants and trips.....	29	Oysters.....	120
Number of fish caught and the weight		Scallops.....	120
of Harvest, by species and sub-		Shrimp.....	121
region or by species and area fished....	34	Industrial.....	122
WORLD FISHERIES:		PER CAPITA:	
U.S. and world.....	83	U.S. consumption.....	124
Countries.....	84	U.S. use.....	127
Continents.....	85	World consumption-by region	
Fishing areas.....	85	and country.....	128
Species groups.....	86	PRICES, INDEX OF EXVESSEL.....	130
Disposition.....	86	VALUE ADDED.....	132
Imports and exports, by leading		EMPLOYMENT, CRAFT, AND PLANTS.....	133
countries.....	87	FISHERY PRODUCTS INSPECTION.....	136
U.S. PRODUCTION OF PROCESSED FISHERY PRODUCTS:		MAGNUSON FISHERY CONSERVATION AND	
Value.....	89	MANAGEMENT ACT OF 1976 (MFCMA):	
Fish sticks, fish portions, and		General.....	138
breaded shrimp.....	89	Optimum yield, U.S. capacity, reserve,	
Fillets and steaks.....	90	and allocations.....	141
Canned.....	91	GENERAL ADMINISTRATIVE INFORMATION.....	142
Industrial.....	93	PUBLICATONS:	
U.S. COLD STORAGE HOLDINGS.....	94	NOAA Library Services.....	148
U.S. IMPORTS:		Government Printing Office.....	148
Principal items.....	97	National Marine Fisheries Service --	
Edible and nonedible.....	98	Nat'l. Technical Informaton Service....	149
Value and duties.....	98	SERVICES:	
Continent and country.....	99	National Marine Fisheries Service --	
Blocks.....	100	Bulletin Boards.....	155
Groundfish fillets and steaks,		FAX-on-Demand.....	156
species.....	100	NMFS HomePages.....	158
Canned tuna and quota.....	101	Sea Grant Marine Advisory.....	160
Shrimp, country of origin.....	102	Fisheries Development.....	162
Shrimp, by product type.....	103	Inspection.....	Inside back cover
Industrial.....	103	GLOSSARY.....	163
U.S. EXPORTS:		INDEX.....	167
Principal items.....	105		
Edible and nonedible.....	106		
Continent and country.....	107		
Shrimp.....	108		
Salmon.....	109		
Crab.....	110		

REVIEW

U.S. LANDINGS. Commercial landings (edible and industrial) by U.S. fishermen at ports in the 50 states were 9.6 billion pounds or 4.3 million metric tons valued at a record \$3.5 billion in 1996—a decrease of 222.7 million pounds (down 2 percent), and \$248.9 million (down 7 percent) compared with 1995. The 1996 landings showed a decrease in major species such as Pacific hake, menhaden, pollock, pink and red salmon, and Pacific sardine when compared with 1995. The 1996 average exvessel price per pound paid to fishermen was 36 cents compared to the 38 cents they received in 1995. Finfish accounted for 86 percent of total landings, but only 51 percent of the total value.

Commercial landings by U.S. fishermen at ports outside the 50 states or transferred to internal water processing vessels (IWPs) were an additional 404.5 million pounds (183,500 metric tons) valued at \$159.4 million. This was a 11 percent, or 47.7 million pounds (21,600 metric ton) decrease in quantity and a \$16.9 million (9 percent) decrease in value compared with 1995. Most of these landings consisted of halibut landings in Canada, tuna landed in Puerto Rico, American Samoa and other foreign ports, and IWP transfers of sea herring.

Edible fish and shellfish landings in the 50 states were 7.5 billion pounds (3.4 million metric tons) in 1996—a decrease of 192 million pounds (87,100 metric tons) compared with 1995.

Landings for reduction and other industrial purposes were 2.1 billion pounds (948,000 metric tons) in 1996—a decrease of 1 percent compared with 1995.

The 1996 U.S. marine recreational finfish catch (including fish caught and released alive) on the Atlantic, Gulf, and Pacific coasts was an estimated 313.8 million fish taken on an estimated 64.2 million fishing trips. The harvest (fish kept) was estimated at 146.0 million fish weighing 208.3 million pounds.

WORLD LANDINGS. In 1995, the most recent year for which data are available, world commercial fishery landings were 112.9 million metric tons—an increase of 2.4 million metric tons (up 2 percent) compared with 1994.

China was the leading nation with 21.6 percent of the total catch; Peru, second with 7.9 percent; Chile, third with 6.7 percent; Japan, fourth with 6.0 percent; and United States, fifth with 5.0 percent.

PRICES. The 1996 annual exvessel price index for edible fish and shellfish decreased 15 percent from 1995. The annual index for industrial fish remained the same compared with 1995. Exvessel price indices decreased for 22 of the 32 species groups being tracked, increased for 9 species groups and stayed constant for only 1 species groups. The bluefin tuna price index had the largest decrease (76 percent) while the hard clams price index had the largest increase (31 percent).

PROCESSED PRODUCTS. The estimated value of the 1996 domestic production of edible and nonedible fishery products was \$7.4 billion, \$131.3 million (2 percent) less than the \$7.5 billion in 1995. The value of edible products was \$6.6 billion—a decrease of \$224.7 million (5 percent) compared with 1995. The value of industrial products was \$782.8 million in 1996—an increase of \$193.4 million (33 percent) compared with 1995.

FOREIGN TRADE. The total import value of edible and nonedible fishery products was \$13.1 billion in 1996—an increase of \$608.7 million (5 percent) compared with 1995. Imports of edible fishery products (product weight) were 3.2 billion pounds (1.4 million metric tons) valued at \$6.7 billion in 1996—an increase of 103.3 million pounds (3 percent), but a decrease of 62.1 million (1 percent) compared with 1995. Imports of nonedible (i.e., industrial) products were \$6.3 billion—an increase of \$670.8 million (11 percent) compared with 1995.

REVIEW

Total export value of edible and nonedible fishery products was \$8.7 billion in 1996—an increase of \$385.3 million (5 percent) compared with 1995. United States firms exported 2.1 billion pounds (958,022 metric tons) of edible products valued at \$3.0 billion—an increase of 64.9 million pounds (29,427 metric tons), but a decrease of \$230.0 million compared with 1995. Exports of nonedible products were valued at a record \$5.6 billion, \$615.3 million more than 1995.

SUPPLY. The U.S. supply of edible fishery products (domestic landings plus imports, round weight equivalent) was 13.6 billion pounds (6.2 million metric tons) in 1996—an increase of 41.0 million pounds compared with 1995. The supply of industrial fishery products was 2.8 billion pounds (1.3 million metric tons) in 1996—a decrease of 51.0 billion pounds (2 percent) compared with 1995.

PER CAPITA CONSUMPTION. U.S. consumption of hery products was 14.8 pounds of edible meat per person in 1996, down 0.2 pound from the 1995 per capita consumption of 15.0 pounds.

CONSUMER EXPENDITURES. U.S. consumers spent an estimated \$41.2 billion for fishery products in 1996. The 1996 total includes \$27.8 billion in expenditures at food service establishments (restaurants, carry-outs, caterers, etc.); \$13.2 billion in retail sales for home consumption; and \$283.9 million for industrial fish products. By producing and marketing a variety of fishery products for domestic and foreign markets, the commercial marine fishing industry contributed \$21.0 billion (in value added) to the U.S. Gross National Product.

REVIEW

OTHER IMPORTANT FACTS

Alaska pollock, with landings of 2.6 billion pounds (1.2 million metric tons), was the most important species in quantity and fifth in value for 1996, accounting for 27 percent of the commercial fishery landings in the United States.

Menhaden was the second most important species in quantity, but low in value.

Salmon were third in quantity and third in value.

Cods were fourth in quantity and seventh in value.

Hakes were fifth in quantity, but low in value.

Flounders were sixth in quantity, and sixth in value.

Shrimp were first in value, but eighth in quantity.

Crabs were second in value, but seventh in quantity.

Lobsters were low in quantity, but fourth in value.

Tuna landings by U.S.-flag vessels at ports outside the continental United States amounted to 370.8 million pounds. Halibut and sea herring also were landed at ports outside the United States or transferred to internal water processing vessels in U.S. waters.

Dutch Harbor-Unalaska, Alaska, was the leading U.S. port in quantity of commercial fishery landings, followed by: Empire-Venice, Louisiana; Cameron, Louisiana; Seattle, Washington; and Kodiak, Alaska.

Dutch Harbor-Unalaska was also the leading U.S. port in terms of value, followed by: New Bedford, Massachusetts; Kodiak, Alaska; Key West, Florida; and Brownsville-Port Isabel, Texas.

Alaska led all states in volume with landings of 5.0 billion pounds, followed by Louisiana, 1.1 billion; Virginia, 659.7 million; California, 460.7 million; and Washington, 391.7 million pounds.

Alaska led all states in value of landings with \$1.2 billion, followed by Louisiana, \$267.3 million; Massachusetts, \$231.4 million; Florida, \$205.2 million; and Maine \$200.9 million.

REVIEW

IMPORTANT SPECIES

ALASKA POLLOCK AND OTHER PACIFIC TRAWL FISH.

U.S. landings of Pacific trawl fish (Pacific cod, flounders, hake, Pacific ocean perch, Alaska pollock, and rockfishes) were 4.2 billion pounds valued at \$494.4 million--a decrease of 3 percent in quantity and a 2 percent decrease in value compared with 1995.

Trend in Commercial Landings, 1987-1996
Alaska Pollock, Other Pacific Trawl Fish

Landings of Alaska pollock decreased 8 percent to 2.6 billion pounds and were 13 percent lower than the 1991-1995 5-year average. Landings of Pacific cod were 605.3 million pounds -- an increase of 2 percent from 591.4 million pounds in 1995. Pacific hake (whiting) landings were 430.5 million pounds (up 10 percent) valued at \$17.0 million (down 5 percent from 1995). Landings of rockfishes were 94.8 million pounds (up 5 percent) and valued at \$39.0 million (down 5 percent) compared to 1995. The 1996 rockfish landings were 10 percent lower than the 5-year average.

ANCHOVIES. U.S. landings of anchovies were 9.9 million pounds--an increase of 3.1 million pounds (46 percent) compared with 1995. Fifty-three percent of all landings were used for bait.

HALIBUT. U.S. landings of Atlantic and Pacific halibut were 49.1 million pounds (round weight) valued at \$83.5 million--an increase of 4.3 million pounds (10

percent) and \$16.7 (25 percent) compared with 1995. The Pacific fishery accounted for all but 29,000 pounds of the 1996 total halibut catch. The average exvessel price per pound in 1996 was \$1.70 compared with \$1.47 in 1995.

HERRING, SEA. U.S. commercial landings of sea herring were 317.6 million pounds valued at \$80.9 million--an increase of 52.9 million pounds (20 percent) and \$23.0 million (40 percent) compared with 1995. Landings of Atlantic sea herring were 197.1 million pounds valued at \$11.2 million--an increase of 49.9 million pounds (34 percent) and \$2.5 million (29 percent) compared with 1995.

Trend in Commercial Landings, 1987-1996
Atlantic Sea Herring

Landings of Pacific sea herring were 120.4 million pounds valued at \$69.7 million--an increase of 3.0 million pounds (3 percent) and \$20.5 million (42 percent) compared with 1995. Alaska landings accounted for 86 percent of the Pacific coast with 107.4 million pounds valued at \$54.8 million--an increase of 1.3 million pounds (1 percent) and \$15.7 million (40 percent) compared with 1995.

JACK MACKEREL. California accounted for 100 percent of the U.S. landings of jack mackerel in 1996. Total landings were 4.8 million pounds valued at

REVIEW

IMPORTANT SPECIES

\$296,000--an increase of 666,000 pounds (16 percent), and \$17,000 (6 percent) compared with 1995. The 1996 average exvessel price per pound stayed constant at 6 cents.

MACKEREL, ATLANTIC. U.S. landings of Atlantic mackerel were 34.8 million pounds valued at \$4.6 million--an increase of 16.1 million pounds (86 percent) and \$1.9 million (68 percent) compared with 1995. Rhode Island with 13.8 million pounds and New Jersey with 18.0 million pounds had a total of 91 percent of the total landings. The average exvessel price per pound in 1996 was 13 cents, down from 15 cents in 1995.

MACKEREL, CHUB. Landings of Chub mackerel were 22.0 million pounds valued at \$1.3 million--an increase of 3.0 million pounds (16 percent) and \$206,000 (18 percent) compared with 1996. The average exvessel price per pound stayed at 6 cents.

valued at \$39.7 million. Gulf region landings were 1.1 billion pounds valued at \$54.5 million. Menhaden are used primarily for the production of meal, oil, and solubles. Small quantities are used for bait and animal food.

NORTH ATLANTIC TRAWL FISH. Landings of butterfish, Atlantic cod, cusk, flounders (blackback, fluke, yellowtail and other), haddock, red and white hake, ocean perch, pollock and whiting (silver hake) in the North Atlantic (combination of New England, Middle Atlantic, and Chesapeake Regions) were 134.7 million pounds valued at \$115.2 million--an increase of 16.6 million pounds (14 percent), but a decrease of \$7.2 million (6 percent) compared with 1995. Of these species, flounder led in total value in the North Atlantic accounting for 49 percent of the total; followed by cod, 23 percent; and whiting, 12 percent.

MENHADEN. The U.S. menhaden landings were 1.8 billion pounds valued at \$94.2 million--a decrease of 91.5 million pounds (5 percent) and \$5.0 million (5 percent) compared with 1995. Landings decreased by 134.6 million pounds (17 percent) in the Atlantic states and increased 43.2 million pounds (4 percent) in the Gulf states compared with 1995. Landings along the Atlantic coast were 671.7 million pounds

The 1996 landings of Atlantic cod were 31.4 million pounds valued at \$26.6 million--an increase of 1.8 million pounds (6 percent), but a decrease of 1.6 million (5 percent) compared with 1995. The exvessel price per pound was 85 cents in 1996 down from 95 cents per pound in 1995.

Trend in Commercial Landings, 1987-1996
Atlantic and Gulf Menhaden

Trend in Commercial Landings, 1987-1996
North Atlantic Trawl Fish

REVIEW

IMPORTANT SPECIES

Landings of yellowtail flounder were 5.3 million pounds—an increase of 1.1 million pounds (28 percent) from 1995, and about 55 percent of its 5-year average.

Haddock landings increased to 1.3 million pounds (43 percent) and \$1.5 million (24 percent) compared to 1995.

North Atlantic pollock landings were 6.5 million pounds valued at \$4.5 million—a decrease of 623,000 pounds (9 percent) and \$2.1 million (31 percent) compared with 1995.

PACIFIC SALMON. U.S. commercial landings of salmon were 877.1 million pounds valued at \$368.7 million—a decrease of 143.7 million pounds (14 percent), and \$117.4 million (24 percent) compared with 1995. Alaska and Washington accounted for 97 percent and 2 percent of the total landings, respectively. Sockeye salmon landings were 318.4 million pounds valued at \$266.4 million—a decrease of 31.2 million pounds (29 percent), and \$45.9 million (15 percent) compared with 1995. Chinook salmon landings decreased to 20.5 million pounds—down 4.3 million pounds (17 percent) from 1995. Pink salmon landings were 309.8 million pounds—a decrease of 134.8 million pounds (30 percent); chum salmon increased to 180.6 million pounds (18 percent); and coho salmon decreased to 47.7 million pounds—a decrease of 1.4 million pounds (3 percent) compared with 1995.

Trend in Commercial Landings, 1987-1996
Pacific Salmon

Alaska landings were 854.8 million pounds valued at \$352.4 million—a decrease of 131.7 million pounds (13 percent), and \$108.8 million (24 percent) compared with 1995. The distribution of Alaska salmon landings by species in 1996 was: sockeye, 316.4 million pounds (37 percent); pink, 309.8 million pounds (36 percent); chum, 173.7 million pounds (20 percent); coho, 45.0 million pounds (5 percent); and chinook, 9.8 million pounds (1 percent). The exvessel price per pound for all species in Alaska was 41 cents in 1996—a decrease of 6 cents from 1995.

Washington salmon landings were 14.2 million pounds valued at \$6.9 million—a decrease of 10.2 million pounds (42 percent), and \$2.6 million (28 percent) compared with 1995. The biennial fishery for pink salmon went from 10.2 million pounds in 1995 to no catch in 1996. Washington landings of chum salmon were 6.9 million pounds (up 1 percent); followed by sockeye, 2.0 million pounds—a decrease of 302,000 pounds (down 13 percent); silver, 2.5 million pounds (down 15 percent); and chinook, 2.7 million pounds (up 27 percent) compared with 1995. The average exvessel price per pound for all species in Washington increased from 39 cents in 1995 to 48 cents in 1996.

Oregon salmon landings were 2.8 million pounds valued at \$3.3 million—an increase of 30,000 pounds (1 percent), but a decrease of \$267,000 (8 percent) compared with 1995. Landings of chinook salmon were 2.6 million pounds (unchanged); and coho, 217,000 pounds (up 14 percent). The average exvessel price per pound for all species in Oregon decreased from \$1.27 in 1995 to \$1.16 in 1996.

California salmon landings were 4.7 million pounds valued at \$6.0 million—a decrease of 1.9 million pounds (29 percent) and \$5.7 million (49 percent) compared with 1995. Landings of chinook salmon were 4.7 million pounds; coho landings were 17,000 pounds. The average exvessel price per pound paid to fishermen in 1996 was \$1.26 compared with \$1.76 in 1995.

SABLEFISH. U.S. commercial landings of sablefish were 59.9 million pounds valued at \$109.0 million—a decrease of 5.9 million pounds (9 percent) and a

REVIEW

IMPORTANT SPECIES

decrease of \$14.7 million (12 percent) compared with 1995. Landings increased in Alaska to 41.0 million pounds, a decrease of 14 percent compared with 1995. Landings decreased in Washington to 4.9 million pounds (10 percent) and \$8.4 million (33 percent). The 1996 Oregon catch was 7.1 million pounds (up 1 percent) and \$10.1 million (up 9 percent) compared with 1995. California landings of 7.0 million pounds and \$8.6 million represent an 14 percent increase in quantity and 20 percent increase in value from 1995. The average exvessel price per pound in 1996 was \$1.82 compared with \$1.88 in 1995.

TUNA. Landings of tuna by U.S. fishermen at ports in the 50 United States, Puerto Rico, American Samoa, other U.S. territories, and foreign ports were 456.3 million pounds valued at \$266.1 million--a decrease of 37.7 million pounds (8 percent) and \$11.1 million (4 percent) compared with 1995. The average exvessel price per pound of all species of tuna in 1996 was 58 cents compared with 56 cents in 1995.

Trend in Commercial Landings, 1987-1996
Tuna (Includes U.S. and Foreign Ports)

Bigeye landings in 1996 were 14.4 million pounds--a decrease of 6.3 million pounds (31 percent) compared with 1995. The average exvessel price per pound was \$1.91 in 1996 compared with \$1.56 in 1995.

Skipjack landings were 283.4 million pounds--a decrease of 61.2 million pounds (18 percent) compared with 1995. The average exvessel price per pound was 40 cents in 1996, compared to 37 cents in 1995.

Yellowfin landings were 104.0 million pounds--an increase of 5.7 million pounds (6 percent) compared with 1995. The average exvessel price per pound was 64 cents in 1996 compared with 69 cents in 1995.

Bluefin landings were 12.1 million pounds--an increase of 8.7 million pounds (355 percent) compared with 1996. The average exvessel price per pound in 1996 was \$1.80 compared with \$7.51 in 1995.

CLAMS. Landings of all species yielded 123.2 million pounds of meats valued at \$127.8 million-- a decrease of 11.0 million pounds (8 percent) and \$12.6 million (9 percent) compared with 1995. The average exvessel price per pound in 1996 was \$10.4 compared with \$10.5 in 1995.

Trend in Commercial Landings, 1987-1996
Clams

Surf clams yielded 63.4 million pounds of meats valued at \$38.2 million--an increase of 93,000 pounds (unchanged) but a decrease of \$815,000 (2 percent) compared with 1995. New Jersey was the leading State with 48.6 million pounds (unchanged), followed by New York, 7.7 million pounds (up 12

REVIEW

IMPORTANT SPECIES

percent) compared with 1995. The average exvessel price per pound of meats was 60 cents in 1996, down 2 cents from 1995.

The ocean quahog fishery produced 46.5 million pounds of meats valued at \$20.6 million--a decrease of 2.5 million pounds (5 percent) and \$162,000 (1 percent) compared with 1995. New Jersey had landings of 17.8 million pounds (down 18 percent) valued at \$7.3 million (down 15 percent) while Massachusetts production was 17.5 million pounds (up 20 percent) valued at \$7.3 million (up 23 percent). Together, they accounted for 76 percent of the total ocean quahog production in 1996. The average exvessel price per pound of meats increased from 42 cents in 1995 to 44 cents in 1996.

The hard clam fishery produced 10.0 million pounds of meats valued at \$49.3 million--a decrease of 7.8 million pounds (44 percent) and \$18.1 million (27 percent) compared with 1995. Landings in the New England region were 1.5 million pounds of meats (down 52 percent); Middle Atlantic region, 4.6 million pounds (up 11 percent); Chesapeake region, 796,000 pounds (down 14 percent); and the South Atlantic region, 1.8 million pounds (up 64 percent). The average exvessel price per pound of meats increased from \$3.78 in 1995 to \$4.94 in 1996.

Soft clams yielded 2.2 million pounds of meats valued at \$8.3 million--a decrease of 234,000 pounds (10 percent) and \$2.9 million (26 percent) compared with 1995. Maine was the leading state with 1.6 million pounds of meats (down 16 percent) followed by Maryland with 319,000 pounds (down 13 percent) and New York with 205,000 pounds (up 26 percent). The average exvessel price per pound of meats was \$3.75 in 1996, compared with \$4.57 in 1995.

CRABS. Landings of all species of crabs were 391.8 million pounds valued at \$426.7 million--an increase of 28.2 million pounds (8 percent), but a decrease of \$85.3 million (17 percent) compared with 1995.

Hard blue crab landings were 219.0 million pounds valued at \$147.1 million--an increase of 17.4 million pounds (9 percent) and \$2.4 million (2 percent) compared with 1995. North Carolina landed

32 percent of the total; Louisiana, 17 percent; Maryland, 16 percent; and Virginia, 15 percent of the total U.S. landings. Hard blue crab landings in the Chesapeake region were 68.3 million pounds--a decrease of 4 percent; Gulf region, 56.9 million, increased 20 percent; and the South Atlantic region with 86.6 million pounds, increased 30 percent. The Middle Atlantic region with 7.2 million pounds valued at \$5.0 million showed a decrease of 8.9 million pounds (55 percent) compared with 1995. The average exvessel price per pound of hard blue crabs was 67 cents in 1996, five cents less than 1995.

Trend in Commercial Landings, 1987-1996
Crabs

Dungeness crab landings were 65.0 million pounds valued at \$87.9 million--an increase of 17.2 million pounds (36 percent) and \$8.3 million (10 percent) compared with 1995. Washington landings of 27.5 million pounds (up 29 percent) led all states with 42 percent of the total landings. Alaska landings were 5.9 million pounds, up 8 percent compared with 1995. Oregon landings were 19.3 million pounds (up 62 percent) and California landings were 12.3 million pounds (up 34 percent) compared with 1995. The average exvessel price per pound was \$1.35 in 1996 compared with \$1.66 in 1995.

U.S. landings of king crab were 21.0 million pounds valued at \$62.6 million--an increase of 6.3 million pounds (43 percent) compared with 1995. The average exvessel price per pound in 1996 was \$2.98 compared with \$3.10 in 1995.

REVIEW

IMPORTANT SPECIES

Snow (tanner) crab landings were 67.9 million pounds valued at \$93.2 million--a decrease of 13.0 million pounds (16 percent) and \$109.1 million (54 percent) compared with 1995. The average exvessel price per pound was \$1.37 in 1996, down from \$2.50 in 1995.

LOBSTER, AMERICAN. American lobster landings were 71.6 million pounds valued at \$241.8 million--an increase of 5.2 million pounds (8 percent), and \$27.0 million (13 percent) compared with 1995. Maine led in landings for the fifteenth consecutive year with 36.0 million pounds valued at \$106.8 million--a decrease of 504,000 pounds (less than 1 percent) compared with 1995. Massachusetts, the second leading producer, had landings of 15.7 million pounds valued at \$64.7 million--a decrease of 63,000 pounds (less than 1 percent) compared with 1995. Together, Maine and Massachusetts produced 72 percent of the total national landings. The average exvessel price per pound was \$3.38 in 1996 compared with \$3.24 in 1995.

LOBSTERS, SPINY. U.S. landings of spiny lobster were 8.3 million pounds valued at \$35.2 million--an increase of 1.2 million pounds (17 percent)--and \$1.1 million (3 percent) compared with 1995. Florida, with landings of 7.4 million pounds valued at \$28.6 million, accounted for 90 percent of the total catch and 81 percent of the value. This was an increase of 1.0 million pounds (15 percent), but a decrease of \$504,000 (62 percent) compared with 1995. Overall the average exvessel price per pound was \$4.24 in 1996 compared with \$4.80 in 1995.

OYSTERS. U.S. oyster landings yielded 38.0 million pounds of meats valued at \$114.8 million -- a decrease of 2.4 million pounds (6 percent) and an increase of \$13.3 million (13 percent) compared with 1995. The Gulf region led in production with 21.6 million pounds of meats, 57 percent of the national total; followed by the Pacific region (principally Washington with 82 percent of the region's total volume) with 9.7 million pounds (26 percent), and the New England region, with 4.1 million pounds (11 percent). The average exvessel price per pound of meats was \$3.02 in 1996 compared with \$2.52 in 1995.

SHRIMP. U.S. landings of shrimp were 316.9 million pounds valued at \$509.2 million--an increase of 10.0 million pounds (3 percent), but a decrease of \$60.8 million (11 percent) compared with 1995. Shrimp landings increased in the South Atlantic (up 3 percent) and New England (up 46 percent), but declined by 1 percent in the Gulf. The landings in the Pacific increased 11 percent when compared with 1995. The average exvessel price per pound of shrimp decreased to \$1.61 in 1996 compared with \$1.86 in 1995. Gulf region landings were the nation's largest with 218.6 million pounds, and 69 percent of the national total. Louisiana led all Gulf states with 90.6 million pounds (up 3 percent), followed by Texas, 75.9 million pounds (down 1 percent); Florida (West Coast), 25.6 million pounds (up 36 percent);

Trend in Commercial Landings, 1987-1996
Shrimp

Alabama, 16.6 million pounds (down 19 percent); and Mississippi, 9.9 million pounds (down 36 percent). In the Pacific region Oregon had landings of 15.7 million pounds (up 30 percent), California had 11.7 pounds (up 53 percent, and Washington landings of 6.8 million pounds (down 21 percent) compared with 1995.

SCALLOPS. U.S. landings of bay and sea scallops totaled 18.2 million pounds of meats valued at \$101.9 million -- a decrease of 372,000 pounds (2 percent), but an increase of \$8.6 million (9 percent)

REVIEW

IMPORTANT SPECIES

compared with 1995. The average exvessel price per pound of meats increased from \$5.03 in 1995 to \$5.60 in 1996.

Bay scallop landings were 35,000 pounds of meats valued at \$94,000--a decrease of 218,000 pounds (86 percent) and \$444,000 (83 percent) compared with 1995. The average exvessel price per pound of meats was \$2.68 in 1996 compared with \$2.13 in 1995.

Seascallop landings were 18.2 million pounds of meats valued at \$101.8 million--a decrease of 154,000 pound (1 percent), but an increase of \$9.0 million (10 percent) compared with 1995. Massachusetts and Virginia were the leading states in landings of sea scallops with 8.6 and 5.0 million pounds of meats, respectively. These represent 75 percent of the national total. The average exvessel price per pound of meats in 1996 was \$5.61 compared with \$5.07 in 1995.

There were no reported commercial landings of calico scallops in 1996.

Trend in Commercial Landings, 1987-1996
Atlantic Sea Scallops

SQUID. U.S. commercial landings of squid were 240.0 million pounds valued at \$60.2 million--an increase of 10.5 million pounds (5 percent) and \$4.3 million (8 percent) compared with 1995. California was the leading state with 173.7 million pounds, 72 percent of the national total. The Pacific region landings were 174.8 million pounds (up 13 percent), followed by the New England region, 34.0 million pounds (down 4 percent); the Middle Atlantic region, 29.9 million pounds (down 19 percent); and the Chesapeake Region, 1.0 million pounds (up 7 percent) compared with 1995. The average exvessel price per pound for squid was 25 cents in 1996, compared with 24 cents in 1995.

REVIEW

PER CAPITA CONSUMPTION

The NMFS calculation of per capita consumption is based on a "disappearance" model. The total U.S. supply of imports and landings is converted to edible weight and decreases in supply such as exports and inventories are subtracted out. The remaining total is divided by a population value to estimate per capita consumption. Data for the model are derived primarily from secondary sources and are subject to incomplete reporting; changes in source data or invalid model assumptions may each have a significant effect on the resulting calculation.

U.S. per capita consumption of fish and shellfish was 14.8 pounds (edible meat) in 1996. This total was 0.2 pounds less than the 15.0 pounds consumed in 1995. Per capita consumption of fresh and frozen products was 10.0 pounds, the same as in 1995. Fresh and frozen finfish

accounted for 6.4 pounds while fresh and frozen shellfish consumption was 3.6 pounds per capita. The fresh and frozen finfish includes approximately 0.9 pounds of farm raised catfish. Consumption of canned fishery products was 4.5 pounds per capita in 1996, a decrease of 0.2 pounds from 1995. Cured fish accounted for 0.3 pounds per capita, the same as in previous years. Imports of edible seafood made up 57 percent of the consumption.

Per Capita Use. Per capita use is based on the supply of fishery products, both edible and non-edible (industrial), on a round-weight equivalent basis without considering beginning or ending stocks, defense purchases, or exports. The per capita use of all edible and industrial fishery products in 1996 was 62.1 pounds, down 0.6 pounds compared with 1995.

REVIEW

PROCESSED FISHERY PRODUCTS

FRESH AND FROZEN

FISH FILLETS AND STEAKS. In 1996 the U.S. production of raw (uncooked) fish fillets and steaks, including blocks, was 398.0 million pounds--12.7 million pounds more than the 385.3 million pounds in 1995. These fillets and steaks were valued at \$885.7 million--\$44.7 million more than 1995. Alaska pollock fillets and blocks led all species with 136.4 million pounds--32 percent of the total. Production of groundfish fillets and steaks (see Glossary Section-Groundfish) was 220.0 million pounds compared with 216.7 million pounds in 1995.

FISH STICKS AND PORTIONS. The combined production of fish sticks and portions was 279.2 million pounds valued at \$362.3 million compared with the 1995 production of 325.3 million pounds valued at \$430.0 million--a decrease of 46.1 million pounds and \$67.7 million.

The total production of fish sticks amounted to 65.2 million pounds valued at \$55.8 million--a decrease of 8.8 million pounds and \$17.7 million compared with 1995. The total production of fish portions amounted to 214.0 million pounds valued at \$306.5 million -- a

decrease of 37.3 million pounds and \$50.0 million compared with 1995.

BREADED SHRIMP. The production of breaded shrimp in 1996 was 108.5 million pounds valued at \$341.8 million, compared with the 1995 production of 100.5 million pounds valued at \$299.4 million.

FROZEN FISHERY TRADE. In 1996, stocks of frozen fishery products in cold storage were at a low of 293.5 million pounds on June 30 and a high of 374.3 million pounds on January 31. Cold storage holdings of shrimp products were at a high of 43.9 million pounds on December 31 and a low of 27.5 million pounds on May 31. Holdings of saltwater fillets and steaks reached a high of 78.5 million pounds on January 31 and were at a low of 57.7 million pounds on September 30. Holdings of blocks and slabs were at a high of 60.5 million pounds on December 31 and a low of 32.1 million pounds on February 28. Surimi and analog product holdings reached a high of 28.4 million pounds on March 31 and were at a low of 15.7 million pounds on August 31.

REVIEW

PROCESSED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS. The pack of canned fishery products in the 50 states, American Samoa, and Puerto Rico was 2.3 billion pounds valued at \$1.9 billion—an increase of 354.9 million pounds, and \$46.9 million compared with the 1995 pack. The 1996 pack included 1.1 billion pounds valued at \$1.4 billion for human consumption and 1.2 billion pounds valued at \$505.1 million for bait and animal food.

CANNED SALMON. The 1996 U.S. pack of salmon was 197.2 million pounds valued at \$284.3 million, compared with 243.6 million pounds valued at \$419.2 million packed in 1995. Alaskan plants accounted for 96 percent in quantity and 95 percent in value of the salmon pack.

CANNED SARDINES. The pack of Maine sardines (small herring) was 17.7 million pounds valued at \$29.9 million, an increase of 4.1 million pounds and \$6.2 million compared with 1995. There were 6.2 million pounds of herring valued at \$10.8 million packed in 1996 -- 605,000 pounds and \$1.2 million less than the 1995 pack.

CANNED TUNA. The U.S. pack of tuna was 675.8 million pounds valued at \$956.9 million—an increase of 9.2 million pounds in quantity and \$18.4 million in value compared with the 1995 pack. The pack of albacore tuna was 165.6

million pounds --1.3 million pounds more than the 64.4 million pounds produced in 1995. Albacore tuna comprised 25 percent of the tuna pack in 1996. Lightmeat tuna (bigeye, bluefin, skipjack, and yellowfin) comprised the remainder with a pack of 510.2 million pounds --8.0 million pounds more than the 502.2 million pounds packed in 1995.

CANNED CLAMS. The 1996 U.S. pack of clams (whole, minced, chowder, juice, and specialties) was 129.4 million pounds valued at \$117.3 million—an increase of 147,000 pounds and \$4.2 million more in value than the pack in 1995. The pack of whole and minced clams was 45.9 million pounds--2.9 million pounds more than the 1995 pack and accounted for 35 percent of the total clam pack. Clam chowder and clam juice was 71.6 million pounds and made up the majority of the pack.

CANNED SHRIMP. The U.S. pack of natural shrimp was 819,000 pounds valued at \$6.1 million—a decrease of 93,000 pounds and \$588,000 in value compared with the 1995 pack.

OTHER CANNED ITEMS. The pack of pet food was 1.2 billion pounds valued at \$505.1 million—an increase of 386.8 million pounds compared with the 1995 pack.

REVIEW

PROCESSED FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS. The value of the domestic production of industrial fishery products was \$277.8 million--an increase of \$31.2 million compared with the 1995 value of \$246.5 million.

FISH MEAL. The domestic production of fish and shellfish meal was 638.5 million pounds valued at \$142.2 million--a decrease of 28.7 million pounds, but an increase of \$20.0 million compared with 1995. Menhaden meal production was 418.9 million pounds valued at \$87.1 million--a decrease of 31.6 million pounds, but an increase of \$4.6 million compared with 1995. Menhaden accounted for 66 percent of the 1996 production of meal. Shellfish meal production was 17.6 million pounds--an increase of 1.2 million pounds from the 1995 level. Tuna and mackerel meal production was 52.3 million pounds--a decrease of 12.3 million pounds from 1995. Production of unclassified meal (consisting mainly of Alaska pollock and unclassified fish) was 149.8 million pounds--an increase of 14.0 million pounds compared with 1995.

FISH SOLUBLES. Domestic production of fish solubles was 82.0 million pounds, 7.5 million pounds less than the 1995 production.

FISH OILS. The domestic production of fish oils was 248.4 million pounds valued at \$43.9 million--an increase of 6.5 million pounds, and \$1.7 million in value compared with 1995 production. The production of menhaden oil was 246.5 million pounds valued at \$43.7 million--an increase of 8.4 million pounds, and \$1.8 million compared with 1995. Menhaden oil accounted for 99 percent of the volume and value of the total 1996 fish oil production.

OTHER INDUSTRIAL PRODUCTS. Oyster shell products, together with agar-agar, animal feeds, crab and clam shells processed for food serving, fish pellets, Irish moss extracts, kelp products, dry and liquid fertilizers, pearl essence, and mussel shell buttons were valued at \$85.6 million, compared with \$74.3 million in 1995--an increase of \$11.3 million.

REVIEW

FOREIGN TRADE IN FISHERY PRODUCTS

IMPORTS. U.S. imports of edible fishery products in 1996 were valued at \$6.7 billion, \$62.1 million less than in 1995. The quantity of edible imports was 3.2 billion pounds, 103.3 million pounds more than the quantity imported in 1995.

Edible imports consisted of 2.7 billion pounds of fresh and frozen products valued at \$6.0 billion, 354.4 million pounds of canned products valued at \$473.7 million, 67.4 million pounds of cured products valued at \$131.7 million, 5.1 million pounds of caviar and roe products valued at \$35.3 million, and 16.0 million pounds of other products valued at \$45.2 million.

The quantity of shrimp imported in 1996 was 582.5 million pounds, 14.7 million pounds less than the quantity imported in 1995. Valued at \$2.5 billion, shrimp imports accounted for 36 percent of the value of total edible imports. Imports of fresh and frozen tuna were 528.7 million pounds, 32.8 million pounds more than the 495.9 million pounds imported in 1995. Imports of canned tuna were 193.0 million pounds, 22.3 million pounds less than in 1995. Imports of fresh and frozen fillets and steaks amounted to 476.5 million pounds, a decrease of 1.0 million pounds from 1995. Regular and minced block imports were 234.2 million pounds, an increase of 23.9 million pounds from 1995.

Imports of nonedible fishery products were valued at \$6.3 billion--an increase of \$670.8 million

compared with 1995. The total value of edible and nonedible products was \$13.1 billion in 1996, \$608.7 million more than in 1995 when \$12.4 billion of fishery products were imported.

EXPORTS. U.S. exports of edible fishery products were 2.1 billion pounds valued at \$3.0 billion, an increase of 64.9 million pounds, but a decrease of \$230.0 million when compared with 1995. Fresh and frozen items were 1.8 billion pounds valued at \$2.3 billion, an increase of 35.1 million pounds, but a decrease of \$193.7 million compared with 1995. In terms of individual species, fresh and frozen exports consisted principally of 277.0 million pounds of salmon valued at \$469.8 million, 284.7 million pounds of surimi valued at \$269.8 million and 46.7 million pounds of crabs valued at \$162.4 million. Canned items were 155.4 million pounds valued at \$223.8 million. Salmon was the major canned item exported, with 95.5 million pounds valued at \$154.1 million. Cured items were 23.2 million pounds valued at \$41.9 million. Caviar and roe exports were 110.9 million pounds valued at \$450.9 million.

Exports of nonedible products were valued at \$5.6 billion compared with \$5.0 billion in 1995. Exports of fishmeal amounted to 186.4 million pounds valued at \$52.9 million. The total value of edible and nonedible exports was \$8.7 billion--an increase of \$385.3 million compared with 1995.

U.S. COMMERCIAL LANDINGS

1

U.S. DOMESTIC LANDINGS, BY SPECIES, 1995 AND 1996 (1)

Species Fish	1995			1996			Average (1991-95)
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds
Alewives.....	854	387	111	975	442	198	2,237
Anchovies.....	6,788	3,079	1,193	9,933	4,506	988	11,566
Bluefish.....	8,379	3,801	2,855	9,356	4,244	3,166	10,721
Bonito.....	624	283	267	1,339	607	425	2,012
Butterfish.....	6,430	2,917	3,186	9,685	4,393	5,847	8,181
Cod:							
Atlantic.....	29,631	13,441	28,184	31,422	14,253	26,634	54,541
Pacific.....	591,399	268,257	109,680	605,314	274,569	111,978	527,746
Croaker.....	16,027	7,270	5,855	20,483	9,291	7,386	9,340
Cusk.....	1,702	772	1,033	1,031	468	664	2,804
Flounders:							
Atlantic and Gulf:							
Blackback.....	8,823	4,002	12,661	12,537	5,687	15,421	11,743
Fluke.....	19,553	8,869	34,763	16,793	7,617	28,027	18,532
Yellowtail.....	4,149	1,882	5,887	5,297	2,403	7,639	9,694
Other.....	18,060	8,192	23,933	14,862	6,741	20,926	22,220
Pacific.....	372,858	169,127	72,995	410,038	185,992	82,036	437,849
Total.....	423,443	192,072	150,239	459,527	208,440	154,049	500,038
Groupers.....	10,491	4,759	22,605	9,703	4,401	22,409	11,716
Haddock.....	877	398	1,207	1,257	570	1,494	2,541
Hake:							
Pacific (whiting).....	390,302	177,040	18,002	430,537	195,290	17,031	287,480
Red.....	3,543	1,607	996	2,397	1,087	695	3,873
White.....	9,434	4,279	6,111	7,252	3,289	4,553	13,851
Halibut.....	44,796	20,319	66,781	49,092	22,268	83,468	60,133
Herring, sea:							
Atlantic.....	147,181	66,761	8,654	197,124	89,415	11,194	117,577
Pacific.....	117,479	53,288	49,245	120,434	54,629	69,747	123,817
Jack mackerel.....	4,132	1,874	279	4,798	2,176	296	4,137
Lingcod.....	3,736	1,695	1,782	4,972	2,255	2,277	5,433
Mackerel:							
Atlantic.....	18,727	8,495	2,759	34,801	15,786	4,624	22,328
Chub.....	18,974	8,607	1,130	21,994	9,976	1,336	14,788
King.....	4,519	2,050	6,060	4,560	2,068	5,880	23,918
Spanish.....	4,896	2,221	2,162	3,406	1,545	1,778	5,452
Menhaden:							
Atlantic.....	806,302	365,736	47,247	671,664	304,665	39,677	731,540
Gulf.....	1,040,657	472,039	51,884	1,083,807	491,612	54,473	1,223,503
Total.....	1,846,959	837,775	99,131	1,755,471	796,276	94,150	1,955,043
Mullets.....	22,249	10,092	14,725	17,026	7,723	12,518	27,111
Ocean perch:							
Atlantic.....	962	436	608	720	327	477	1,347
Pacific.....	34,420	15,613	4,660	46,305	21,004	6,171	37,257
Pollock:							
Atlantic.....	7,152	3,244	6,602	6,529	2,962	4,543	12,215
Alaska.....	2,852,618	1,293,939	259,614	2,623,131	1,189,844	238,129	3,008,517
Rockfishes.....	90,119	40,878	41,125	94,760	42,983	39,049	105,004
Sablefish.....	65,904	29,894	123,694	59,949	27,193	109,009	74,754
Salmon, Pacific:							
Chinook or king...	24,733	11,219	34,439	20,463	9,282	23,470	20,044
Chum or keta.....	152,496	69,172	45,345	180,573	81,907	29,442	131,958
Pink.....	444,667	201,700	67,522	309,839	140,542	26,723	343,907
Red or sockeye....	349,690	158,618	312,294	318,443	144,445	266,422	332,960
Silver or coho....	49,179	22,307	26,507	47,738	21,654	22,672	56,281
Total.....	1,020,765	463,016	486,107	877,056	397,830	368,729	885,149
Sardine, Pacific...	93,619	42,465	5,083	71,657	32,503	3,053	42,525
Scup or porgy.....	7,221	3,275	6,646	6,895	3,128	7,330	11,596
Sea bass:							
Black.....	2,860	1,297	3,739	4,361	1,978	4,751	3,775
White.....	72	33	161	101	46	193	106
Sea trout:							
Gray.....	6,824	3,095	4,124	7,189	3,261	4,839	7,218
Spotted.....	1,859	843	2,195	1,066	484	1,155	2,359
White.....	201	91	121	168	76	94	285
Sharks:							
Dogfish.....	52,980	24,032	9,516	65,342	29,639	11,804	45,335
Other.....	14,165	6,425	10,534	15,345	6,960	10,824	15,070

See notes at end of table.

(Continued)

U.S. COMMERCIAL LANDINGS

U.S. DOMESTIC LANDINGS, BY SPECIES, 1995 AND 1996 (1) - Continued

Species	1995			1996			Average (1991-95)
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds
Fish - Continued:							
Snapper:							
Red.....	3,645	1,653	8,356	4,422	2,006	9,529	3,353
Other.....	5,951	2,699	12,223	5,235	2,375	10,155	7,240
Striped bass.....	3,624	1,644	5,584	4,712	2,137	8,021	1,791
Swordfish.....	13,043	5,916	37,270	12,879	5,842	36,494	17,586
Tilefish.....	2,832	1,285	5,002	3,226	1,463	5,356	4,303
Tuna:							
Albacore.....	17,208	7,805	14,284	34,053	15,446	30,157	14,820
Bigeye.....	6,787	3,079	25,613	6,254	2,837	23,673	5,965
Bluefin.....	3,414	1,549	25,639	12,148	5,510	21,857	3,542
Skipjack.....	17,047	7,732	6,808	14,717	6,676	7,084	10,308
Yellowfin.....	18,553	8,416	29,835	17,484	7,931	27,060	20,695
Unclassified.....	855	388	459	783	355	425	1,379
Total.....	63,864	28,969	102,638	85,439	38,755	110,256	56,710
Whiting.....	33,548	15,217	14,632	35,400	16,057	13,494	35,466
Other marine finfishes.....	378,834	171,838	139,763	401,778	182,245	125,294	--
Other freshwater finfishes.....	29,432	13,350	21,413	25,155	11,410	17,432	--
Total, fish....	8,520,086	3,864,686	1,915,642	8,272,709	3,752,476	1,790,966	--
Shellfish, et al.							
Clams:							
Hard.....	17,812	8,079	67,405	9,990	4,531	49,346	13,915
Ocean quahog.....	49,006	22,229	20,714	46,460	21,074	20,552	49,348
Soft.....	2,434	1,104	11,112	2,200	998	8,253	3,567
Surf.....	63,345	28,733	39,035	63,438	28,775	38,220	69,302
Other.....	1,627	738	2,148	1,151	522	11,428	1,888
Total.....	134,224	60,884	140,414	123,239	55,901	127,799	138,019
Crabs:							
Blue, hard.....	201,545	91,420	144,668	218,960	99,320	147,061	214,925
Dungeness.....	47,830	21,696	79,562	64,988	29,478	87,858	42,658
King.....	14,673	6,656	45,457	21,000	9,526	62,560	19,712
Snow (tanner).....	80,817	36,658	202,392	67,867	30,784	93,249	240,657
Other.....	18,774	8,516	39,908	18,982	8,610	35,977	19,914
Total.....	363,639	164,946	511,987	391,797	177,718	426,705	537,867
Lobsters:							
American.....	66,406	30,122	214,838	71,641	32,496	241,796	61,703
Spiny.....	7,123	3,231	34,176	8,308	3,768	35,227	6,654
Oysters.....	40,380	18,316	101,574	38,007	17,240	114,839	36,011
Scallops							
Bay.....	253	115	538	35	16	94	330
Calico.....	957	434	1,219	--	0	--	--
Sea.....	18,316	8,308	92,826	18,162	8,238	101,823	25,498
Shrimp:							
New England.....	14,383	6,524	12,803	20,978	9,516	15,162	8,491
South Atlantic.....	39,369	17,858	91,131	40,437	18,342	66,366	31,222
Gulf.....	219,823	99,711	437,444	218,559	99,138	401,354	216,679
Pacific.....	33,241	15,078	28,387	36,867	16,723	26,155	51,626
Other.....	53	24	269	38	17	166	--
Total.....	306,869	139,195	570,034	316,879	143,735	509,203	308,047
Squid:							
Atlantic.....	74,248	33,679	33,269	65,248	29,596	28,514	82,264
Pacific.....	155,280	70,435	22,660	174,785	79,282	31,712	89,660
Other shellfish.....	99,773	45,257	96,438	84,078	38,138	78,035	--
Total, shellfish et al.....	1,267,468	574,920	1,819,973	1,292,179	586,129	1,695,747	--
Grand total.....	9,787,554	4,439,605	3,735,615	9,564,888	4,338,605	3,486,713	--

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage area States are not available.

Note:--Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels transferred to internal water processing vessels (IWPs) U.S. waters. Data do not include aquaculture products, except oysters and clams.

U.S. COMMERCIAL LANDINGS

3

DISPOSITION OF U.S. DOMESTIC LANDINGS, 1995 AND 1996

End Use	1995		1996	
	Million pounds	Percent	Million pounds	Percent
Fresh and frozen:				
For human food.....	6,871	70.2	6,752	995.9
For bait and animal food.....	228	2.3	302	3.2
Total.....	7,099	72.5	7,054	73.7
Canned:				
For human food.....	706	7.2	629	6.6
For bait and animal food.....	63	0.6	49	0.5
Total.....	769	7.9	678	7.1
Cured for human food.....	90	0.9	93	1.0
Reduction to meal, oil, etc.....	1,830	18.7	1,740	18.2
Grand total.....	9,788	100.0	9,565	100.0

NOTE:--Data are preliminary. Table may not add due to rounding.

DISPOSITION OF U.S. DOMESTIC LANDINGS, BY MONTH, 1996

Month	Landings for Human food		Landings for Industrial purposes (1)		Total	
	Million pounds	Percent	Million pounds	Percent	Million pounds	Percent
January.....	381	5.1	26	1.2	407	4.3
February.....	1,053	14.1	18	0.9	1,071	11.2
March.....	626	8.4	26	1.2	652	6.8
April.....	460	6.2	95	4.5	555	5.8
May.....	616	8.2	258	12.3	874	9.1
June.....	515	6.9	334	16.0	849	8.9
July.....	721	9.6	233	11.1	954	10.0
August.....	775	10.4	327	15.6	1,102	11.5
September.....	1,011	13.5	374	17.9	1,385	14.5
October.....	768	10.3	213	10.2	981	10.3
November.....	302	4.0	138	6.6	440	4.6
December.....	247	3.3	48	2.3	295	3.1
Total.....	7,475	100.0	2,090	100.0	9,565	100.0

(1) Processed into meal, oil, solubles, and shell products, or used as bait and animal food.

U.S. COMMERCIAL LANDINGS OF FISH AND SHELLFISH, 1987-1996 (1)

Year	Landings for Human food		Landings for Industrial purposes (1)		Total	
	Million pounds	Million dollars	Millions pounds	Million dollars	Millions pounds	Million dollars
1987.....	3,946	2,979	2,950	136	6,896	3,115
1988.....	4,588	3,362	2,604	158	7,192	3,520
1989.....	6,204	3,111	2,259	127	8,463	3,238
1990.....	7,041	3,366	2,363	156	9,404	3,522
1991.....	7,031	3,169	2,453	139	9,484	3,308
1992.....	7,618	3,531	2,019	147	9,637	3,678
1993.....	*8,214	3,317	2,253	154	10,467	3,471
1994.....	7,936	3,714	2,525	95	10,461	3,809
1995.....	7,667	3,625	2,121	145	9,788	3,770
1996.....	7,475	3,355	2,090	132	9,565	3,487

(1) Statistics on landings are shown in round weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are shown in weight of meats (excluding the shell). All data are preliminary. (2) Processed into meal, oil, solubles, and shell products, or used as bait or animal food. * Record. Record--1983 industrial purposes, 3,201 million lb. NOTE:--Data do not include landings outside the 50 States or products of aquaculture, except oysters and clams.

U.S. COMMERCIAL LANDINGS

U.S. DOMESTIC LANDINGS, BY STATES, 1995 AND 1996 (1)

States	1995		1996		Record Landings	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Year	Thousand pounds
Alabama.....	28,741	49,656	26,579	38,342	1973	36,744
Alaska.....	5,293,445	1,396,974	5,012,875	1,190,576	1993	5,905,638
California.....	432,520	166,522	460,681	187,461	1936	1,760,193
Connecticut.....	21,914	56,705	20,949	48,409	1930	88,012
Delaware.....	10,108	7,858	5,958	4,397	1953	367,500
Florida.....	133,483	198,067	134,038	205,203	1938	241,443
Georgia.....	20,341	35,268	13,117	21,114	1927	47,607
Hawaii.....	29,892	59,847	31,870	64,288	1993	34,582
Illinois.....	235	444	202	415	-	(2)
Indiana.....	1,025	2,225	303	736	-	(2)
Louisiana.....	1,110,220	290,576	1,130,639	267,286	1984	1,931,027
Maine.....	231,804	216,546	236,567	200,930	1950	356,266
Maryland.....	68,030	60,570	69,179	52,720	1890	141,607
Massachusetts.....	204,255	224,361	236,550	231,380	1948	649,696
Michigan.....	14,331	10,143	14,174	9,228	1930	35,580
Minnesota.....	497	236	584	221	-	(2)
Mississippi.....	145,468	41,735	160,283	32,782	1985	439,518
New Hampshire.....	12,763	14,923	11,047	13,531	-	(2)
New Jersey.....	177,177	95,479	179,306	94,026	1956	540,060
New York.....	53,210	76,501	56,732	83,527	1880	335,000
North Carolina.....	184,664	110,884	193,828	110,057	1981	432,006
Ohio.....	4,722	2,639	4,258	1,984	1936	31,083
Oregon.....	238,764	77,766	264,113	84,186	1992	256,912
Pennsylvania.....	506	496	311	274	-	(2)
Rhode Island.....	121,929	68,422	136,708	69,919	1957	142,080
South Carolina.....	24,162	37,669	15,788	24,067	1965	26,611
Texas.....	94,674	198,876	91,593	190,860	1960	237,684
Virginia.....	777,602	113,659	659,651	106,016	1990	786,794
Washington.....	343,038	115,429	391,741	148,285	1994	527,804
Wisconsin.....	8,034	5,139	5,264	4,493	-	(2)
Total.....	9,787,554	3,735,615	9,564,888	3,486,713	-	-

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage Area States are not available.

(2) Data not available.

NOTE:--Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels transferred to internal water processing vessels (IWPs) in U.S. waters. Data do not include aquaculture products, except oysters and clams.

U.S. DOMESTIC LANDINGS, BY REGIONS, 1995 AND 1996 (1)

Region	1995		1996	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
New England.....	592,665	580,957	641,821	564,169
Middle Atlantic.....	240,413	179,747	241,936	181,869
Chesapeake.....	845,632	174,229	728,830	158,736
South Atlantic.....	277,035	238,112	268,990	209,407
Gulf.....	1,464,718	724,619	1,496,875	680,304
Pacific Coast and Alaska.....	6,307,767	1,756,691	6,129,410	1,610,508
Great Lakes.....	29,432	21,413	25,156	17,432
Hawaii.....	29,892	59,847	31,870	64,288
Total.....	9,787,554	3,735,615	9,564,888	3,486,713

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage Area States are not available.

NOTE:--Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels transferred to internal water processing vessels (IWPs) in U.S. waters. Data do not include aquaculture products, except oysters and clams.

U.S. COMMERCIAL LANDINGS

5

COMMERCIAL FISHERY LANDINGS AND VALUE AT MAJOR U.S. PORTS, 1994-1996

Port	Quantity			Port	Value		
	1994	1995	1996		1994	1995	1996
	-- Million Pounds --				-- Million Dollars --		
Dutch Harbor, AK.....	699.6	684.6	579.6	Dutch Harbor, AK.....	*224.1	146.2	118.7
Empire-Venice, LA.....	431.7	298.1	316.5	New Bedford, MA.....	82.4	86.9	100.5
Cameron, LA.....	401.8	280.0	315.7	Kodiak, AK.....	107.6	105.4	82.3
Seattle, WA.....	391.8	229.0	241.2	Key West, FL.....	53.0	66.7	62.8
Kodiak, AK.....	307.7	362.4	202.7	Brownsville-Port Isabel, TX.....	64.1	66.0	60.0
Intercoastal City, LA.....	304.8	179.2	199.0	Honolulu, HI.....	44.0	46.7	50.1
Morgan City-Berwick, LA.....	243.6	127.4	162.9	Point Judith, RI.....	36.5	43.7	46.0
Los Angeles, CA.....	98.2	168.5	157.6	Empire-Venice, LA.....	60.1	51.1	45.4
Pascagoula-Moss Point, MS.....	200.9	128.6	148.0	Dulac-Chauvin, LA.....	55.0	53.4	45.2
Ketchikan, AK.....	93.6	116.7	136.8	Portland, ME.....	43.6	39.4	38.6
Port Hueneme-Oxnard-Ventura, CA..	68.3	116.8	134.5	Galveston, TX.....	26.3	38.0	37.0
Newport, OR.....	122.2	112.0	115.0	Los Angeles, CA.....	24.5	27.0	36.8
Astoria, OR.....	78.9	89.0	107.0	Petersburg, AK.....	43.4	44.8	36.4
Petersburg, AK.....	126.3	83.0	105.0	Port Hueneme-Oxnard-Ventura, CA..	26.7	26.8	33.6
Cape May-Wildwood, NJ.....	85.3	75.4	82.7	Sitka, AK.....	24.3	32.4	33.0
Point Judith, RI.....	61.9	89.6	79.0	Kenai, AK.....	35.0	25.3	31.6
Portland, ME.....	63.9	66.7	78.3	Westport, WA.....	21.0	25.0	31.0
Beaufort-Morehead City, NC.....	97.0	87.0	75.4	Cape May-Wildwood, NJ.....	33.8	30.5	30.9
New Bedford, MA.....	65.8	70.5	66.0	Cameron, LA.....	33.9	27.8	30.6
Gloucester, MA.....	50.1	61.3	63.8	Bayou La Batre, AL.....	36.7	37.5	28.6
Cordova, AK.....	60.8	42.5	55.4	Astoria, OR.....	18.6	26.0	28.0
Rockland, ME.....	33.8	44.5	52.7	Cordova, AK.....	23.6	24.9	27.8
Westport, WA.....	27.0	24.0	45.6	Port Arthur, TX.....	23.1	22.0	27.0
Wanchese-Stumpy Point, NC.....	39.0	39.0	43.4	Seward, AK.....	16.6	24.3	25.5
Valdez, AK.....	9.5	29.5	41.6	Palacios, TX.....	24.5	21.0	25.0
Atlantic City, NJ.....	42.8	42.3	40.9	Newport, OR.....	19.0	22.0	25.0
Dulac-Chauvin, LA.....	217.0	123.3	38.3	Wanchese-Stumpy Point, NC.....	22.0	25.0	24.6
Kenai, AK.....	44.3	35.0	37.9	Aransas Pass-Rockport, TX.....	29.3	33.0	24.0
Sitka, AK.....	32.4	31.0	32.0	Hampton Roads Area, VA.....	26.2	26.6	23.7
Seward, AK.....	30.7	24.4	29.2	Ketchikan, AK.....	29.1	33.6	23.7
Crescent City, CA.....	28.4	21.8	26.3	Golden Meadow-Leeville, LA.....	30.1	31.3	22.1
Moss Landings, CA.....	14.3	13.4	25.3	Atlantic City, NJ.....	20.9	22.2	21.6
Wrangell, AK.....	18.4	17.2	25.1	Seattle, WA.....	21.6	20.3	20.6
Monterey, CA.....	27.6	18.6	24.9	Beaufort-Morehead City, NC.....	24.0	35.0	20.3
Coos Bay-Charleston, OR.....	24.0	21.0	24.0	San Francisco Area, CA.....	7.4	15.4	20.3
Ilwaco-Chinook, WA.....	24.0	18.0	23.9	Tampa Bay-St. Petersburg, FL.....	20.9	18.2	20.0
Key West, FL.....	21.5	23.4	23.7	Fort Myers, FL.....	23.5	15.9	19.3
Honolulu, HI.....	19.1	22.1	23.6	Homer, AK.....	17.4	16.3	18.9
Point Pleasant, NJ.....	37.0	22.7	22.1	Gloucester, MA.....	27.3	23.2	18.4
Brownsville-Port Isabel, TX.....	21.0	16.0	22.0	Gulfport, MS.....	18.2	23.3	18.2
Homer, AK.....	19.2	23.3	21.8	Grand Isle, LA.....	12.1	17.8	18.1
Bellingham, WA.....	27.0	27.0	21.4	Cape Canaveral, FL.....	30.6	16.9	17.7
Cape Canaveral, FL.....	19.5	10.1	21.2	Crescent City, CA.....	18.4	11.5	16.8
Galveston, TX.....	12.4	17.0	21.0	Delcambre, LA.....	18.9	15.5	16.4
Bayou La Batre, AL.....	18.3	22.1	20.4	Coos Bay-Charleston, OR.....	13.4	14.0	16.0
San Francisco Area, CA.....	10.9	15.7	19.1	Morgan City-Berwick, LA.....	20.0	11.3	14.2
Eureka, CA.....	18.4	15.1	18.0	Apalachicola, FL.....	22.4	10.2	14.1
Newport, RI.....	12.1	13.2	18.0	Bellingham, WA.....	17.0	15.0	14.0
Provincetown-Chatham, MA.....	18.6	18.4	15.2	Freepoint, TX.....	19.6	15.0	14.0
Englehard-Swanquarter, NC.....	14.0	11.0	15.0	Oriental-Vandemere, NC.....	10.0	10.0	13.3
Belhaven-Washington, NC.....	11.0	10.0	14.2	Point Pleasant, NJ.....	15.3	11.8	13.1
Golden Meadow-Leeville, LA.....	17.2	18.7	14.1	Shelton, WA.....	10.0	12.0	12.9
Oriental-Vandemere, NC.....	10.0	9.0	14.0	Ilwaco-Chinook, WA.....	11.0	10.0	12.3
Grand Isle, LA.....	9.6	12.6	13.9	Eureka, CA.....	13.0	10.3	12.3
Aransas Pass-Rockport, TX.....	13.0	12.0	13.0	Newport, RI.....	12.1	11.4	12.0
Brookings, OR.....	10.6	6.0	13.0	Valdez, AK.....	2.3	10.7	11.8
Blaine, WA.....	16.0	12.0	12.3	Poulsbo, WA.....	(1)	6.0	11.6
Port Arthur, TX.....	8.7	6.0	12.0	Belhaven-Washington, NC.....	7.0	6.0	11.5
Anacortes-La Conner, WA.....	7.0	12.0	12.0	Intercoastal City, LA.....	16.3	10.1	11.1
Hampton Roads Area, VA.....	10.8	12.6	11.9	Brookings, OR.....	7.0	5.0	11.0

(1) Not available

* Record value landed: 1960 record quantity of 848.2 million lb in Los Angeles, CA.

Notes:--To avoid disclosure of private enterprise certain leading ports have not been included. Seattle landings include fish caught by at-sea processing vessels.

U.S. COMMERCIAL LANDINGS

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1996 (1)

Species	Distance caught off U.S. Shores			International Waters (Includes catch off foreign coasts)			Total	
	0 to 3 Miles Thousand pounds	3 to 200 Miles Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand dollars
Fish								
Alewives	975	-	198	-	-	-	975	198
Anchovies	7,497	2,436	757	-	-	-	9,933	988
Bluefish	5,188	4,168	1,761	-	-	-	9,356	3,166
Bonito	195	1,144	90	-	-	-	1,339	425
Butterfish	1,000	8,685	558	-	-	-	9,685	5,847
Cod:								
Atlantic	327	31,095	277	-	-	-	31,422	26,634
Pacific	36,332	568,982	6,724	-	-	-	605,314	111,978
Croaker	14,063	6,420	5,102	-	-	-	20,483	7,386
Cusk	11	1,020	7	-	-	-	1,031	664
Flounders:								
Atlantic and Gulf:								
Blackback	1,515	11,022	1,967	-	-	-	12,537	15,421
Fluke	6,060	10,733	10,764	-	-	-	16,793	28,027
Yellowtail	139	5,158	196	-	-	-	5,297	7,639
Other	1,373	13,489	1,986	-	-	-	14,862	20,926
Pacific	30,598	379,440	7,459	-	-	-	410,038	82,036
Total	39,685	419,842	22,372	-	-	459,527	154,049	
Groupers	271	9,432	632	-	-	9,703	22,409	
Haddock	3	1,254	4	-	-	1,257	1,494	
Hake:								
Pacific (whiting)	155,588	274,949	4,145	-	-	430,537	17,031	
Red	110	2,287	25	-	-	2,397	695	
White	99	7,153	62	-	-	7,252	4,553	
Halibut	2,795	47,226	4,749	-	9	50,030	85,350	
Herring, sea:								
Atlantic	87,684	141,614	4,995	-	-	229,298	12,760	
Pacific	120,434	-	69,747	-	-	120,434	69,747	
Jack mackerel	2,111	2,687	130	-	-	4,798	296	
Lingcod	1,186	3,786	562	-	-	4,972	2,277	
Mackerel:								
Atlantic	1,813	33,508	289	-	-	35,321	4,676	
Chub	17,755	4,239	1,074	-	-	21,994	1,336	
King	563	3,997	695	-	-	4,560	5,880	
Spanish	1,227	2,179	689	-	-	3,406	1,778	

See footnotes at end of table.

(Continued)

**COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT
OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1996 (1) - Continued**

U.S. COMMERCIAL LANDINGS

7

Species	Distance caught off U.S. Shores			International Waters (Includes catch off foreign coasts)		Total	
	0 to 3 Miles	(2)	3 to 200 Miles	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Fish - Continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Menhaden							
Atlantic	92,457	4,919	579,207	-	-	671,664	39,677
Gulf	371,819	18,764	711,988	-	-	1,083,807	54,473
Total	464,276	23,683	1,291,195	-	-	1,755,471	94,150
Mullet	16,863	12,343	163	-	-	17,026	12,518
Ocean perch:							
Atlantic	-	-	720	-	-	720	477
Pacific	2,614	321	43,691	-	-	46,305	6,171
Pollock:							
Atlantic	43	31	6,486	-	-	6,529	4,543
Alaska	157,368	14,284	2,465,763	-	-	2,623,131	238,129
Rockfishes	10,042	4,983	84,718	-	-	94,760	39,049
Sablefish	4,425	7,607	55,524	-	-	59,949	109,009
Salmon:							
Chinook or king . .	17,329	19,503	3,134	-	-	20,463	23,470
Chum or keta . . .	180,555	29,439	18	-	-	180,573	29,442
Pink	309,834	26,722	5	-	-	309,839	26,723
Red or sockeye . .	318,441	266,419	2	-	-	318,443	266,422
Silver or coho . .	45,643	20,930	2,095	-	-	47,738	22,672
Total	871,802	363,013	5,254	-	-	877,056	368,729
Sardines, Pacific . .	50,160	2,137	21,497	-	-	71,657	3,053
Scup or porgy . . .	1,238	1,605	5,657	-	-	6,895	7,330
Sea bass:							
Black	269	377	4,092	-	-	4,361	4,751
White	33	64	68	-	-	101	193
Sea trout:							
Gray	5,278	3,695	1,911	-	-	7,189	4,839
Spotted	1,064	1,153	2	-	-	1,066	1,155
White	110	70	58	-	-	168	94
Sharks:							
Dogfish	14,961	2,352	50,381	-	-	65,342	11,804
Other	1,258	753	12,241	1,846	463	15,345	10,824
Snapper:							
Red	239	1,048	4,183	-	-	4,422	9,529
Other	898	1,263	4,409	-	-	5,307	10,288
Striped bass	4,643	7,917	69	-	-	4,712	8,021
Swordfish	134	325	9,809	2,936	7,002	12,879	36,494
Tilefish	1	1	3,225	-	-	3,226	5,356

See footnotes at end of table.

(Continued)

U.S. COMMERCIAL LANDINGS

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT
OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1996 (1) - Continued

Species	Distance caught off U.S. Shores			International Waters (Includes catch off foreign coasts)			Total	
	0 to 3 Miles	3 to 200 Miles	Thousand pounds	Thousand pounds	Thousand dollars	Thousand dollars	Thousand pounds	Thousand dollars
Fish - Continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand pounds	Thousand dollars	Thousand dollars	Thousand pounds	Thousand dollars
Tuna:								
Albacore	6	4	23,001	18,151	17,447	41,158	37,081	
Bigeye	17	52	4,571	9,791	9,939	14,379	27,411	
Bluefin	3	4	6,887	5,258	2,563	12,148	21,857	
Skipjack	220	293	2,066	281,111	109,248	283,397	112,102	
Yellowfin	190	454	9,752	94,087	44,366	104,029	67,030	
Unclassified	124	30	464	565	215	1,153	569	
Total.	560	837	46,741	408,963	183,778	456,264	266,050	
Whiting	3,452	1,260	31,948	-	-	35,400	13,494	
Other marine finfishes	95,960	39,033	305,158	662	590	401,780	125,297	
Other freshwater finfishes	25,155	17,432	-	-	-	25,155	17,432	
Total fish	2,229,758	633,231	6,033,066	414,416	191,854	8,677,240	1,950,396	
Shellfish, et al								
Clams:								
Hard	9,990	49,346	-	-	-	9,990	49,346	
Ocean quahog	3,473	2,059	42,987	-	-	46,460	20,552	
Soft	2,200	8,253	-	-	-	2,200	8,253	
Surf	19,797	13,029	43,641	-	-	63,438	38,220	
Other	1,151	11,428	-	-	-	1,151	11,428	
Total.	36,611	84,115	86,628	-	-	123,239	127,799	
Crabs:								
Blue, hard	218,930	147,044	30	-	-	218,960	147,061	
Dungeness	62,804	84,761	2,184	-	-	64,988	87,858	
King	3,255	11,316	17,745	-	-	21,000	62,560	
Snow (tanner)	2,095	4,277	65,772	-	-	67,867	93,249	
Other	9,988	17,242	8,994	-	-	18,982	35,977	
Total.	297,072	264,640	94,725	-	-	391,797	426,705	
Lobsters:								
American	58,965	191,079	12,676	-	-	71,641	241,796	
Spiny	3,015	14,453	5,293	-	-	8,308	35,227	
Oysters	37,968	114,776	39	-	-	38,007	114,839	

See footnotes at end of table.

(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1996 (1) - Continued

Species	Distance caught off U.S. Shores				International Waters (Includes catch off foreign coasts)		Total	
	0 to 3 Miles	(2)	3 to 200 Miles		Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Shellfish - Continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars				
Scallops:								
Bay.	35	94	-	-	-	-	35	94
Sea.	1,290	7,632	16,872	94,191	-	-	18,162	101,823
Shrimp:								
New England.	6,290	4,518	14,688	10,644	-	-	20,978	15,162
South Atlantic	18,862	49,265	21,575	17,101	-	-	40,437	66,366
Gulf	112,811	162,287	105,748	239,067	-	-	218,559	401,354
Pacific Coast.	29,265	19,976	7,602	6,179	-	-	36,867	26,155
Other.	15	54	23	112	-	-	38	166
Total.	167,243	236,100	149,636	273,103	-	-	316,879	509,203
Squid:								
Atlantic	2,938	2,078	62,310	26,436	-	-	65,248	28,514
Pacific.	165,317	30,061	9,468	1,651	-	-	174,785	31,712
Other shellfish.	79,059	75,737	5,019	2,298	-	-	84,078	78,035
Total shell-								
fish et al.	849,513	1,020,765	442,666	674,982	-	-	1,292,179	1,695,747
Grand total,								
1996	3,079,271	1,653,996	6,475,732	1,800,293	414,416	191,854	9,969,419	3,646,143
Grand total,								
1995.	4,454,110	1,888,517	5,320,580	1,822,082	465,121	201,295	10,239,811	3,911,894

(1) Landings are reported in round (live) weight for all items, except univalve and bivalve mollusks, such as clams, oysters and scallops, which are reported in weight of meats (excluding the shell). The National Marine Fisheries Service estimated the distance-from-shore landings for data collected by the service and states.

(2) Includes landings from the Great Lakes and other inland waters, but excludes Mississippi River Drainage Area States.

(3) Less than 500 lb or \$500.

NOTE:--Data are preliminary. Data include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, and catches by U.S.-flag vessels transferred to internal water processing vessels (IWPs) in U.S. waters. Therefore, they will not agree with "U.S. Commercial Landings" tables beginning on page 1. Data do not include aquaculture products, except oysters and clams.

U.S. COMMERCIAL LANDINGS

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT
OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1996 (1)

Species	Distance caught off U.S. Shores				International Waters (Includes catch off foreign coasts)			Total	
	0 to 3 Miles	3 to 200 Miles	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons
Fish	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons
Alewives.	442	198	-	-	-	-	442	198	-
Anchovies.	3,401	757	1,105	231	-	-	4,506	988	-
Bluefish.	2,353	1,761	1,891	1,405	-	-	4,244	3,166	-
Bonito.	88	90	519	335	-	-	607	425	-
Butterfish.	454	558	3,939	5,289	-	-	4,393	5,847	-
Cod:									
Atlantic.	148	277	14,105	26,357	-	-	14,253	26,634	-
Pacific.	16,480	6,724	258,089	105,254	-	-	274,569	111,978	-
Croaker.	6,379	5,102	2,912	2,284	-	-	9,291	7,386	-
Cusk.	5	7	463	657	-	-	468	664	-
Flounders:									
Atlantic and Gulf:									
Blackback.	687	1,967	5,000	13,454	-	-	5,687	15,421	-
Fluke.	2,749	10,764	4,868	17,263	-	-	7,617	28,027	-
Yellowtail.	63	196	2,340	7,443	-	-	2,403	7,639	-
Other.	623	1,986	6,119	18,940	-	-	6,741	20,926	-
Pacific.	13,879	7,459	172,113	74,577	-	-	185,992	82,036	-
Total.	18,001	22,372	190,439	131,677	-	-	208,440	154,049	-
Groupers.	123	632	4,278	21,777	-	-	4,401	22,409	-
Haddock.	-	-	569	1,490	-	-	569	1,490	-
Hake:									
Pacific (whiting).	70,574	4,145	124,716	12,886	-	-	195,290	17,031	-
Red.	50	25	1,037	670	-	-	1,087	695	-
White.	45	62	3,245	4,491	-	-	3,289	4,553	-
Halibut.	1,268	4,749	21,422	80,580	4	21	22,693	85,350	-
Herring, sea:									
Atlantic.	39,773	4,995	64,236	7,765	-	-	104,009	12,760	-
Pacific.	54,629	69,747	-	-	-	-	54,629	69,747	-
Jack mackerel.	958	130	1,219	166	-	-	2,176	166	-
Lingcod.	538	562	1,717	1,715	-	-	2,255	2,277	-
Mackerel:									
Atlantic.	822	289	15,199	4,387	-	-	16,022	4,676	-
Chub.	8,054	1,074	1,923	262	-	-	9,976	1,336	-
King.	255	695	1,813	5,185	-	-	2,068	5,880	-
Spanish.	557	689	988	1,089	-	-	1,545	1,778	-

See footnotes at end of table.

(Continued)

**COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT
OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1996 (1)**

U.S. COMMERCIAL LANDINGS

11

Species	Distance caught off U.S. Shores			International Waters (Includes catch off foreign coasts)			Total	
	0 to 3 Miles	(2)	3 to 200 Miles	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons
Fish - Continued:								
Menhaden								
Atlantic	41,938	4,919		262,727	34,758	-	-	304,665
Gulf	168,656	18,764		322,956	35,709	-	-	491,612
Total	210,594	23,683		585,682	70,467	-	-	796,276
Mullet	7,649	12,343		74	175	-	-	7,723
Ocean perch:								
Atlantic	0 -			327	477	-	-	327
Pacific	1,186	321		19,818	5,850	-	-	21,004
Pollock:								
Atlantic	20	31		2,942	4,512	-	-	2,962
Alaska	71,382	14,284		1,118,463	223,845	-	-	1,189,844
Rockfishes	4,555	4,983		38,428	34,066	-	-	42,983
Sablefish	2,007	7,607		25,186	101,402	-	-	27,193
Salmon:								
Chinook or king . .	7,860	19,503		1,422	3,967	-	-	9,282
Chum or keta . . .	81,899	29,439		8	3	-	-	81,907
Pink	140,540	26,722		2	1	-	-	140,542
Red or sockeye . .	144,444	266,419		1	3	-	-	144,445
Silver or coho . .	20,704	20,930		950	1,742	-	-	21,654
Total	395,447	363,013		2,383	5,716	-	-	397,830
Sardines, Pacific . .	22,752	2,137		9,751	916	-	-	32,503
Scup or porgy . . .	562	1,605		2,566	5,725	-	-	3,128
Sea bass:								
Black	122	377		1,856	4,374	-	-	1,978
White	-	-		31	129	-	-	31
Sea trout:								
Gray	2,394	3,695		867	1,144	-	-	3,261
Spotted	483	1,153		1	2	-	-	484
White	50	70		26	24	-	-	76
Sharks:								
Dogfish	6,786	2,352		22,853	9,452	-	-	29,639
Other	571	753		5,552	9,608	-	837	6,960
Snapper:								
Red	108	1,048		1,897	8,481	-	-	2,006
Other	407	1,263		2,000	9,025	-	-	2,407
Striped bass	2,106	7,917		31	104	-	-	2,137
Swordfish	61	325		4,449	29,167	1,332	7,002	5,842
Tilefish	(3)	1		1,463	5,355	-	-	1,463

See footnotes at end of table.

(Continued)

U.S. COMMERCIAL LANDINGS

**COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT
OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1996 (1)**

Species	Distance caught off U.S. Shores			International Waters (Includes catch off foreign coasts)			Total	
	0 to 3 Miles Metric tons	3 to 200 Miles Thousand dollars	3 to 200 Miles Metric tons	3 to 200 Miles Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
Fish - Continued:								
Tuna:								
Albacore	3	4	10,433	19,630	8,233	17,447	18,669	37,081
Bigeye	8	52	2,073	17,420	4,441	9,939	6,522	27,411
Bluefin	1	4	3,124	19,290	2,385	2,563	5,510	21,857
Skipjack	100	293	937	2,561	127,511	109,248	128,548	112,102
Yellowfin	86	454	4,423	22,210	42,678	44,366	47,187	67,030
Unclassified	56	30	210	324	256	215	523	569
Total	254	837	21,202	81,435	185,504	183,778	206,960	266,050
Whiting	1,566	1,260	14,492	12,234	-	-	16,057	13,494
Other marine finfishes	43,527	39,033	138,419	85,674	300	590	182,246	125,297
Other freshwater finfishes	11,410	17,432	-	-	-	-	11,410	17,432
Total fish	1,011,412	633,231	2,736,581	1,125,311	187,978	191,854	3,935,970	1,950,396
Shellfish, et al								
Clams:								
Hard	4,531	49,346	-	-	-	-	4,531	49,346
Ocean quahog	1,575	2,059	19,499	18,493	-	-	21,074	20,552
Soft	998	8,253	-	-	-	-	998	8,253
Surf	8,980	13,029	19,795	25,191	-	-	28,775	38,220
Other	522	11,428	-	-	-	-	522	11,428
Total	16,607	84,115	39,294	43,684	-	-	55,901	127,799
Crabs:								
Blue, hard	99,306	147,044	14	17	-	-	99,320	147,061
Dungeness	28,488	84,761	991	3,097	-	-	29,478	87,858
King	1,476	11,316	8,049	51,244	-	-	9,526	62,560
Snow (tanner)	950	4,277	29,834	88,972	-	-	30,784	93,249
Other	4,531	17,242	4,080	18,735	-	-	8,610	35,977
Total	134,751	264,640	42,967	162,065	-	-	177,718	426,705
Lobsters:								
American	26,746	191,079	5,750	50,717	-	-	32,496	241,796
Spiny	1,368	14,453	2,401	20,774	-	-	3,768	35,227
Oysters	17,222	114,776	-	-	-	-	17,222	114,776

See footnotes at end of table.

(Continued)

U.S. COMMERCIAL LANDINGS

13

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1996 (1)

Species	Distance caught off U.S. Shores			International Waters (Includes catch off foreign coasts)		Total	
	0 to 3 Miles Metric tons	3 to 200 Miles Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
Shellfish - Continued:							
Scallops:							
Bay	16	94		-	-	16	94
Sea	585	7,632		-	-	8,238	101,823
Shrimp:							
New England.	2,853	4,518		-	-	9,516	15,162
South Atlantic	8,556	49,265		-	-	18,342	66,366
Gulf	51,171	162,287		-	-	99,138	401,354
Pacific Coast.	13,275	19,976		-	-	16,723	26,155
Other.	7	54		-	-	17	166
Total.	75,861	236,100		67,874	273,103	143,735	509,203
Squid:							
Atlantic	1,333	2,078		-	-	29,596	28,514
Pacific.	74,987	30,061		-	-	79,282	31,712
Other shellfish.	35,861	75,737		-	-	38,138	78,035
Total shell-							
fish et al.	385,337	1,020,765		200,792	674,982	586,129	1,695,747
Grand total,							
1996	1,396,748	1,653,996		2,937,373	1,800,293	4,522,099	3,646,143
Grand total,							
1995.	2,020,371	1,889,517		2,413,399	1,822,082	4,644,748	3,911,894

(1) Landings are reported in round (live) weight for all items, except univalve and bivalve mollusks, such as clams, oysters and scallops, which are reported in weight of meats (excluding the shell). The National Marine Fisheries Service estimated the distance-from-shore landings for data collected by the service and states.

(2) Includes landings from the Great Lakes and other inland waters, but excludes Mississippi River Drainage Area States.

(3) Less than 1 metric ton or \$500.

NOTE:--Data are preliminary. Data include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, and catches by U.S.-flag vessels transferred to internal water processing vessels (IWFs) in U.S. waters. Therefore, they will not agree with "U.S. Commercial Landings" tables beginning on page 1. Data do not include aquaculture products, except oysters and clams.

U.S. COMMERCIAL LANDINGS

DOMESTIC LANDINGS FOR U.S. TERRITORIAL POSSESSIONS, 1996 (1)

Species	Puerto Rico		Guam	
	Pounds	Dollars	Pounds	Dollars
Fish				
Amberjack.....	-	-	127	312
Ballyhoo.....	41,500	37,400	-	-
Barracuda.....	17,700	22,700	1,454	2,203
Dolphinfish.....	107,800	158,500	77,368	112,976
Emperors.....	-	-	2,098	5,572
Goatfish.....	14,300	19,400	66	165
Groupers.....	68,800	117,600	577	1,481
Grouper, red hind.....	43,200	82,100	-	-
Grunts.....	119,200	165,700	-	-
Hogfish.....	47,500	86,500	-	-
Jacks, unclassified.....	56,300	67,600	1,352	2,593
Mackerel, king and cero.	131,900	189,900	-	-
Margate.....	-	-	-	-
Marlin.....	-	-	32,807	32,690
Mojarra.....	19,200	23,800	-	-
Mullet (black or silver)	48,500	54,300	-	-
Nassau grouper.....	10,800	16,800	-	-
Parrotfish.....	62,100	84,500	2,442	6,683
Reef fish.....	-	-	23,692	69,751
Sailfish.....	-	-	1,053	1,059
Scup or porgy.....	20,300	26,400	-	-
Scad, bigeye.....	-	-	961	3,056
Sharks, other.....	41,500	47,300	59	50
Snappers:				
Ehu.....	-	-	18	72
Lane.....	231,900	403,500	-	-
Lehi.....	-	-	136	510
Mutton.....	60,000	102,000	-	-
Onaga.....	-	-	66	372
Opakapakas.....	-	-	272	1,087
Silk.....	262,600	590,900	-	-
Yellowtail.....	205,900	358,300	-	-
Other.....	45,000	83,300	1,397	3,862
Total snappers.....	805,400	1,538,000	1,889	5,903
Snook.....	36,400	52,100	-	-
Spanish sardine.....	26,000	28,600	-	-
Squirrelfish.....	14,400	16,000	-	-
Surgeonfishes.....	-	-	1,524	4,077
Tarpon.....	100	(2)	-	-
Triggerfish.....	54,300	74,400	-	-
Trunkfish (boxfish).....	47,500	86,500	-	-
Tuna:				
Skipjack.....	-	-	37,828	45,414
Yellowfin.....	-	-	33,696	70,711
Unclassified.....	167,800	209,800	1,571	2,718
Total tuna.....	167,800	209,800	73,095	118,843

(Continued on next page)

U.S. COMMERCIAL LANDINGS

15

DOMESTIC LANDINGS FOR U.S. TERRITORIAL POSSESSIONS, 1996 (1)

Species	Puerto Rico		Guam	
	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Wahoo.....	-	-	41,304	84,965
Other marine finfishes..	175,700	185,000	4,805	9,432
Freshwater fish, other..	-	-	-	-
Total, fish.....	2,178,200	3,390,900	266,673	461,811
Shellfish				
Crabs, other.....	8,400	34,400	-	-
Lobster, spiny.....	195,700	759,300	181	664
Conch (snail) meats.....	131,800	200,300	-	-
Oysters.....	11,300	24,900	-	-
Octopus.....	30,200	52,900	224	594
Other shellfish.....	6,700	18,700	-	-
Total, shellfish, et al.....	384,100	1,090,500	405	1,258
Grand total.....	2,562,300	4,481,400	267,078	463,069

Species	American Samoa		Northern Marianas Islands	
	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Fish				
Amberjack.....	82	164	-	-
Barracuda.....	3,996	6,539	243	438
Dolphinfish.....	11,497	22,810	35,655	68,049
Emperors.....	10,627	19,957	11,531	30,706
Goatfish.....	-	-	26,625	49,219
Groupers.....	7,099	13,447	6,042	16,657
Jacks, unclassified.....	3,033	5,697	1,697	4,705
Marlin.....	30,042	33,955	7,040	11,765
Mullet (black or silver)	-	-	171	427
Parrotfish.....	17,483	32,758	6,427	16,459
Reef fish.....	15,190	28,527	108,223	230,069
Sailfish.....	4,252	4,252	681	1,361
Scad, bigeye.....	-	-	4,000	10,739
Sharks, other.....	-	-	-	-
Snappers:				
Ehu.....	2,760	5,771	-	-
Lehi.....	3,405	6,804	2,566	9,886
Onaga.....	3,639	7,584	13,892	60,346
Opakapakas.....	1,381	2,673	4,379	12,217
Yellowtail.....	-	-	-	-
Other.....	5,477	10,433	2,090	6,604
Total snappers.....	16,662	33,265	22,927	89,053

(Continued on next page)

U.S. COMMERCIAL LANDINGS

DOMESTIC LANDINGS FOR U.S. TERRITORIAL POSSESSIONS, 1996 (1)

Species	American Samoa		Northern Marianas Islands	
	Pounds	Dollars	Pounds	Dollars
Fish				
Squirrelfish.....	2,063	3,845	9,561	17,709
Surgeonfishes.....	17,960	33,376	7,208	17,939
Triggerfish.....	-	-	-	-
Tuna:				
Albacore.....	232,460	257,435	-	-
Bigeye.....	10,005	20,009	-	-
Skipjack.....	69,753	69,753	164,881	303,778
Yellowfin.....	91,248	179,305	37,772	77,868
Unclassified.....	6,008	11,148	14,380	29,213
Total tuna.....	409,474	537,650	217,033	410,859
Wahoo.....	10,859	11,210	10,111	23,268
Other marine finfishes..	6,450	14,552	17,005	39,865
Freshwater fish, other..	-	-	-	-
Total, fish.....	566,769	802,004	492,180	1,039,287
Shellfish				
Crabs, other.....	39	119	-	-
Lobster, spiny.....	2,790	9,727	3,830	17,388
Shrimp.....	-	-	-	-
Octopus.....	312	593	179	939
Other shellfish.....	4	15	149	744
Total, shellfish, et al.....	3,145	10,454	4,158	19,071
Grand total.....	569,914	812,458	496,338	1,058,358

(1) Data in this table are preliminary and represent the latest information available.

(2) Less than \$1.00.

U.S. Aquaculture Production

U.S. COMMERCIAL LANDINGS

ESTIMATED U.S. AQUACULTURE PRODUCTION, 1984 - 1995

Species	1984			1985			1986		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Finfish:									
Baitfish.....	23,598	10,704	47,045	24,807	11,252	51,280	25,807	11,706	51,522
Catfish.....	154,255	69,970	106,899	191,616	86,916	138,922	213,756	96,959	142,789
Salmon.....	2,675	1,213	3,414	3,921	1,779	5,465	2,878	1,305	4,399
Striped bass.....	NA	NA	NA	NA	NA	NA	10	5	195
Trout.....	49,940	22,653	54,435	50,600	22,952	55,154	51,000	23,133	55,590
Shellfish:									
Clams.....	2,088	947	6,670	1,999	907	4,698	2,564	1,163	8,173
Crawfish.....	66,280	30,064	27,936	65,011	29,489	29,350	69,834	31,676	35,009
Mussels.....	782	355	309	1,210	549	642	1,175	533	1,032
Oysters.....	25,365	11,505	47,906	21,906	9,936	38,882	24,475	11,102	49,666
Shrimp (SW).....	528	239	874	440	200	1,566	1,354	614	1,687
Miscellaneous:									
	10,217	4,635	11,598	14,267	6,471	21,541	15,668	7,107	22,398
Totals.....	335,728	152,285	307,086	375,777	170,451	347,500	408,521	185,304	372,460
Species	1987			1988			1989		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Finfish:									
Baitfish.....	26,000	11,794	71,500	26,400	11,975	71,000	24,005	10,889	62,489
Catfish.....	280,496	127,232	173,347	295,109	133,861	225,463	341,900	155,085	245,142
Salmon.....	4,024	1,825	7,462	6,777	3,074	20,647	8,504	3,857	23,742
Striped bass.....	405	184	813	880	399	1,820	1,020	463	2,173
Trout.....	56,247	25,513	57,556	56,032	25,416	57,927	55,528	25,187	60,041
Shellfish:									
Clams.....	2,409	1,093	10,311	2,128	965	11,320	2,370	1,075	12,721
Crawfish.....	70,000	31,752	29,400	65,848	29,868	24,364	66,000	29,937	20,460
Mussels.....	1,164	528	1,024	1,064	483	1,130	618	280	1,136
Oysters.....	23,926	10,853	49,549	24,398	11,067	58,900	22,255	10,095	58,082
Shrimp (SW).....	2,656	1,205	3,408	2,200	998	7,609	1,500	680	7,551
Miscellaneous:									
	16,845	7,641	32,722	19,406	8,803	40,102	24,330	11,036	45,964
Totals.....	484,172	219,619	437,092	500,242	226,908	520,282	548,030	248,585	539,501

U.S. COMMERCIAL LANDINGS

19

ESTIMATED U.S. AQUACULTURE PRODUCTION, 1984 - 1995

Species	1990			1991			1992		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Finfish:									
Baitfish.....	21,610	9,802	53,978	21,182	9,608	55,948	20,618	9,352	61,183
Catfish.....	360,435	163,492	273,210	390,870	177,297	246,639	457,367	207,460	273,506
Salmon.....	9,069	4,114	26,341	16,753	7,599	44,156	23,937	10,858	75,193
Striped bass.....	1,590	721	3,490	2,250	1,021	5,086	3,550	1,610	8,266
Trout.....	56,816	25,772	64,640	59,422	26,954	59,142	56,264	25,521	53,942
Shellfish:									
Clams.....	3,680	1,669	13,486	3,784	1,716	11,133	4,282	1,942	11,539
Crawfish.....	71,000	32,205	34,000	60,585	27,481	33,285	63,032	28,591	34,860
Mussels.....	607	275	1,173	210	95	947	282	128	1,162
Oysters.....	22,192	10,066	77,949	20,632	9,359	63,463	23,986	10,880	82,432
Shrimp (SW).....	1,984	900	7,937	3,527	1,600	14,110	4,409	2,000	17,637
Miscellaneous.....	23,548	10,681	98,908	24,891	11,290	102,319	33,455	15,175	104,467
Totals.....	572,531	259,698	655,112	604,106	274,021	636,228	691,182	313,518	724,187
Species	1993			1994			1995		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Finfish:									
Baitfish.....	20,574	9,332	63,033	21,709	9,847	68,714	21,759	9,870	72,522
Catfish.....	459,013	208,207	325,432	439,269	199,251	344,475	446,886	202,706	351,222
Salmon.....	25,279	11,466	68,358	24,714	11,210	61,915	31,315	14,204	75,991
Striped bass.....	5,950	2,699	14,270	7,625	3,459	18,835	8,315	3,772	21,156
Trout.....	54,642	24,785	54,309	52,075	23,621	52,569	55,428	25,142	52,659
Shellfish:									
Clams.....	6,125	2,778	12,096	4,872	2,210	14,023	4,325	1,962	19,709
Crawfish.....	56,784	25,757	28,518	49,080	22,263	26,994	58,146	26,375	34,714
Mussels.....	308	140	927	424	193	1,249	410	186	1,221
Oysters.....	24,399	11,067	76,139	28,016	12,708	69,928	23,221	10,533	70,628
Shrimp (SW).....	6,614	3,000	26,455	4,409	2,000	17,637	2,205	1,000	8,818
Miscellaneous.....	19,113	8,670	112,857	33,442	15,169	74,770	38,434	17,433	97,856
Totals.....	678,801	307,902	782,394	665,635	301,930	751,109	690,444	313,183	806,496

NA:--Not available.

NOTE:--Table may not add due to rounding. Clams, oysters and mussels are reported as meat weights (excludes shell) while other identified species such as shrimp are reported as whole (live) weights. Some clam and oyster aquaculture production are reported with U.S. commercial landings. Only pen-reared aquaculture production is indicated for salmon. Weights and values usually represent final sales of products to processors and dealers. Shrimp (saltwater) are primarily Pacific white shrimp (Penaeus vannamei). Miscellaneous includes ornamental fish, alligators, algae, aquatic plants, eels, scallops, tilapia, and others.

Source:--Fisheries Statistics and Economics Division, F/ST1, NMFS.

COMMERCIAL LANDINGS

SUMMARY OF COMMERCIAL SWORDFISH LANDINGS, BY STATE, 1950-96

Year	Maine		Massachusetts		Rhode Island	
	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>
1950...	(2)	(2)	824	293	58	30
1951...	-	-	144	63	55	33
1952...	-	-	213	70	87	42
1953...	-	-	201	66	41	15
1954...	-	-	207	62	135	43
1955...	-	-	298	88	54	18
1956...	-	-	367	126	79	26
1957...	-	-	648	211	135	47
1958...	-	-	1,155	335	283	84
1959...	1	(2)	1,178	304	206	60
1960...	1	(2)	713	289	211	84
1961...	6	2	694	268	128	49
1962...	52	21	703	307	109	48
1963...	445	101	1,717	431	169	45
1964...	241	84	1,149	326	65	21
1965...	210	82	550	210	28	13
1966...	171	73	683	272	1	(2)
1967...	88	30	514	205	39	15
1968...	89	39	264	134	37	20
1969...	109	46	208	108	18	8
1970...	53	28	209	131	6	4
1971...	-	-	73	71	-	-
1972...	-	-	(2)	604	124	152
1973...	(2)	1	811	1,148	62	100
1974...	119	118	2,898	2,682	336	480
1975...	146	198	3,389	4,169	754	942
1976...	611	825	2,459	3,267	338	510
1977...	380	460	2,436	3,177	81	118
1978...	790	1,186	4,132	5,307	668	913
1979...	417	631	3,828	5,701	585	814
1980...	649	1,190	2,636	4,675	514	900
1981...	603	1,339	1,937	4,036	636	1,213
1982...	468	1,145	2,718	7,075	411	1,040
1983...	337	682	2,650	7,007	289	827
1984...	349	926	3,001	8,430	89	275
1985...	125	318	2,937	7,058	250	581
1986...	145	394	2,186	6,751	126	380
1987...	341	1,047	2,682	8,827	119	470
1988...	310	894	4,136	12,164	58	231
1989...	395	1,070	3,620	10,553	504	1,502
1990...	203	570	2,656	7,725	369	1,008
1991...	335	996	1,811	5,214	141	416
1992...	265	723	1,777	4,852	51	169
1993...	468	1,394	1,596	4,348	30	103
1994...	274	787	1,412	4,174	41	153
1995...	81	280	1,750	4,622	85	302
1996...	167	427	-	-	83	332

See footnotes at end of table.

COMMERCIAL LANDINGS

21

SUMMARY OF COMMERCIAL SWORDFISH LANDINGS, BY STATE, 1950-96 - Continued

Year	New York		New Jersey		Maryland	
	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>
1950...	24	12	-	-	-	-
1951...	2	1	-	-	-	-
1952...	1	1	(2)	(2)	-	-
1953...	1	1	-	-	-	-
1954...	3	1	-	-	-	-
1955...	2	1	-	-	-	-
1956...	14	7	-	-	-	-
1957...	13	6	-	-	-	-
1958...	84	41	13	4	-	-
1959...	100	40	25	10	-	-
1960...	49	28	20	9	-	-
1961...	49	22	23	12	-	-
1962...	41	22	26	16	-	-
1963...	47	17	193	90	-	-
1964...	171	58	307	103	-	-
1965...	88	30	1,001	438	-	-
1966...	83	35	253	120	-	-
1967...	2	1	257	86	-	-
1968...	57	27	73	29	-	-
1969...	3	1	31	13	-	-
1970...	18	10	-	-	-	-
1971...	4	2	(2)	(2)	-	-
1972...	-	-	-	-	-	-
1973...	-	-	5	5	-	-
1974...	1	1	7	12	-	-
1975...	-	-	122	225	-	-
1976...	-	-	163	268	-	-
1977...	27	37	189	359	(2)	(2)
1978...	60	103	402	592	-	-
1979...	112	222	293	415	(2)	(2)
1980...	180	541	1,394	2,323	74	145
1981...	135	377	114	292	536	1,050
1982...	373	1,244	472	1,177	593	1,289
1983...	428	1,375	676	1,645	561	1,251
1984...	537	2,177	997	2,885	438	1,090
1985...	295	956	587	1,531	233	620
1986...	617	1,959	859	2,417	402	1,102
1987...	531	1,885	655	2,328	337	1,159
1988...	503	1,504	824	2,650	185	570
1989...	344	992	844	2,535	169	489
1990...	367	980	1,313	3,893	173	553
1991...	421	1,351	1,103	3,380	139	468
1992...	452	1,443	800	2,436	97	306
1993...	380	1,245	682	2,063	153	488
1994...	248	826	603	1,969	143	481
1995...	271	893	315	1,090	127	429
1996...	136	451	245	802	-	-

See footnotes at end of table.

COMMERCIAL LANDINGS

SUMMARY OF COMMERCIAL SWORDFISH LANDINGS, BY STATE, 1950-96 - Continued

Year	Virginia		North Carolina		South Carolina	
	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>
1950...	-	-	-	-	-	-
1951...	-	-	-	-	-	-
1952...	-	-	-	-	-	-
1953...	-	-	-	-	-	-
1954...	-	-	-	-	-	-
1955...	-	-	-	-	-	-
1956...	-	-	-	-	-	-
1957...	-	-	-	-	-	-
1958...	-	-	-	-	-	-
1959...	-	-	-	-	-	-
1960...	-	-	-	-	-	-
1961...	-	-	-	-	-	-
1962...	-	-	-	-	-	-
1963...	183	79	1	1	-	-
1964...	635	218	483	233	-	-
1965...	302	112	524	283	-	-
1966...	89	41	77	38	-	-
1967...	145	72	-	-	-	-
1968...	86	50	-	-	-	-
1969...	7	4	-	-	-	-
1970...	-	-	-	-	-	-
1971...	-	-	-	-	-	-
1972...	-	-	-	-	-	-
1973...	2	5	-	-	-	-
1974...	68	93	-	-	-	-
1975...	27	37	-	-	-	-
1976...	25	34	-	-	-	-
1977...	6	10	-	-	-	-
1978...	48	72	439	669	582	818
1979...	22	48	-	-	823	1,009
1980...	308	583	317	455	845	1,155
1981...	54	92	251	562	688	1,351
1982...	71	162	147	378	1158	2,625
1983...	27	59	161	419	1160	3,074
1984...	58	173	132	419	673	1,762
1985...	19	53	78	225	435	1,364
1986...	16	53	94	324	195	555
1987...	24	80	35	130	309	1,144
1988...	20	56	37	135	517	2,061
1989...	15	48	64	278	484	1,540
1990...	(1)	(1)	112	313	476	1,503
1991...	(1)	(1)	48	169	305	1,002
1992...	(1)	(1)	61	238	216	685
1993...	(1)	(1)	27	96	289	931
1994...	(1)	(1)	97	292	259	886
1995...	(1)	(1)	164	497	(1)	(1)
1996...	25	82	171	515	223	296

See footnotes at end of table.

COMMERCIAL LANDINGS

23

SUMMARY OF COMMERCIAL SWORDFISH LANDINGS, BY STATE, 1950-96 - Continued

Year	Florida, East Coast		Florida, West Coast		Louisiana	
	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>
1950...	-	-	-	-	-	-
1951...	-	-	-	-	-	-
1952...	-	-	-	-	-	-
1953...	-	-	-	-	-	-
1954...	-	-	-	-	-	-
1955...	-	-	-	-	-	-
1956...	-	-	-	-	-	-
1957...	-	-	-	-	-	-
1958...	-	-	-	-	-	-
1959...	-	-	-	-	-	-
1960...	-	-	-	-	-	-
1961...	-	-	-	-	-	-
1962...	-	-	-	-	-	-
1963...	-	-	-	-	-	-
1964...	-	-	-	-	-	-
1965...	-	-	-	-	-	-
1966...	-	-	-	-	-	-
1967...	-	-	-	-	-	-
1968...	-	-	-	-	-	-
1969...	-	-	-	-	-	-
1970...	-	-	56	23	-	-
1971...	-	-	1	(2)	-	-
1972...	-	-	-	-	-	-
1973...	-	-	-	-	14	14
1974...	-	-	50	86	-	-
1975...	-	-	131	226	-	-
1976...	262	355	391	816	-	-
1977...	113	172	2	2	-	-
1978...	538	939	54	94	-	-
1979...	1,854	2,565	434	593	-	-
1980...	3,173	5,200	881	1,460	-	-
1981...	2,719	5,687	723	1,564	-	-
1982...	3,018	7,641	1,025	2,482	-	-
1983...	2,818	7,499	604	1,855	-	-
1984...	2,639	7,399	595	1,641	(2)	(2)
1985...	2,625	6,928	887	2,364	102	376
1986...	1,447	3,978	445	1,261	138	358
1987...	1,964	8,646	566	2,286	748	2,082
1988...	2,593	11,275	580	2,239	1,321	4,098
1989...	2,824	10,775	764	2,818	1,000	2,627
1990...	2,891	10,766	492	1,898	352	959
1991...	2,241	9,343	229	853	985	2,468
1992...	1,726	7,592	147	595	960	2,370
1993...	1,860	7,832	319	1,267	626	1,552
1994...	1,342	5,779	395	1,615	309	763
1995...	1,302	5,202	578	2,445	633	1,613
1996...	978	4,884	709	3,244	749	1,866

See footnotes at end of table.

COMMERCIAL LANDINGS

SUMMARY OF COMMERCIAL SWORDFISH LANDINGS, BY STATE, 1950-96 - Continued

Year	Texas		California		Hawaii	
	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>
1950...	-	-	27	12	27	6
1951...	-	-	228	100	37	10
1952...	-	-	266	100	26	7
1953...	-	-	143	68	12	2
1954...	-	-	23	12	11	2
1955...	-	-	135	58	38	6
1956...	-	-	275	111	29	7
1957...	-	-	376	156	28	5
1958...	-	-	472	165	25	4
1959...	-	-	448	170	27	5
1960...	-	-	325	146	29	6
1961...	-	-	369	162	23	4
1962...	-	-	39	20	25	4
1963...	-	-	98	58	22	4
1964...	-	-	183	103	24	4
1965...	-	-	327	150	19	4
1966...	-	-	469	220	16	4
1967...	-	-	305	164	12	2
1968...	-	-	199	134	10	2
1969...	-	-	1,032	511	14	3
1970...	-	-	945	534	12	4
1971...	-	-	154	86	2	1
1972...	-	-	266	160	-	-
1973...	-	-	614	773	-	-
1974...	-	-	650	887	-	-
1975...	-	-	866	1,397	1	1
1976...	-	-	84	230	3	2
1977...	-	-	512	1,269	41	68
1978...	-	-	2,604	4,563	29	41
1979...	-	-	586	1,812	29	43
1980...	1,353	1,353	1,197	3,144	33	44
1981...	592	592	1,652	3,355	20	33
1982...	500	500	2,452	5,116	36	74
1983...	210	210	3,875	6,826	36	83
1984...	229	229	6,370	11,685	22	50
1985...	373	373	7,535	13,342	11	26
1986...	381	381	5,577	12,791	15	42
1987...	541	541	3,974	11,126	13	40
1988...	884	884	3,602	9,727	21	58
1989...	1,286	1,286	4,148	11,434	373	1,224
1990...	487	487	2,724	7,171	2,477	7,906
1991...	448	448	2,269	6,344	6,844	20,075
1992...	551	551	3,407	7,573	8,206	23,887
1993...	207	207	3,902	8,975	8,457	25,608
1994...	105	105	3,747	9,599	4,558	15,407
1995...	176	176	2,554	6,532	3,726	12,215
1996...	51	146	2,276	5,501	5,871	13,869

See footnotes at end of table.

COMMERCIAL LANDINGS

25

SUMMARY OF COMMERCIAL SWORDFISH LANDINGS, BY STATE, 1950-96 - Continued

Year	Other States (1)		Total	
	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>	<u>Thousand Pounds</u>	<u>Thousand Dollars</u>
1950...	5	2	965	354
1951...	1	(2)	467	207
1952...	2	1	595	221
1953...	-	-	398	153
1954...	-	-	379	119
1955...	1	(2)	528	169
1956...	33	11	796	288
1957...	13	4	1,213	429
1958...	30	12	2,062	646
1959...	12	5	1,997	595
1960...	17	7	1,365	568
1961...	1	1	1,292	520
1962...	3	1	999	439
1963...	-	-	2,875	827
1964...	1	(2)	3,259	1,150
1965...	(2)	(2)	3,049	1,322
1966...	-	-	1,842	803
1967...	-	-	1,362	575
1968...	-	-	814	434
1969...	2	1	1,423	695
1970...	290	226	1,589	959
1971...	-	-	234	160
1972...	-	-	390	916
1973...	-	-	1,507	2,046
1974...	36	63	4,165	4,422
1975...	23	36	5,460	7,232
1976...	1	2	4,336	6,310
1977...	4	26	3,791	5,698
1978...	3	5	10,349	15,301
1979...	-	-	8,984	13,853
1980...	108	228	13,662	23,396
1981...	135	319	10,795	21,861
1982...	36	133	13,477	32,080
1983...	-	-	13,831	32,812
1984...	8	42	16,136	39,184
1985...	-	-	16,494	36,115
1986...	-	-	12,643	32,746
1987...	-	-	12,839	41,791
1988...	4	10	15,595	48,556
1989...	-	-	16,834	49,172
1990...	99	338	15,191	46,070
1991...	62	216	17,381	52,742
1992...	58	201	18,774	53,622
1993...	36	127	19,032	56,237
1994...	34	124	13,567	42,961
1995...	237	814	11,999	37,111
1996...	1,195	4,079	12,879	36,494

(1) Includes confidential data or state landings for New Hampshire, Connecticut, Delaware, Georgia, Alabama, Mississippi, and Washington.

(2) Less than 500 lb or \$500.

NOTE:--Represents the latest information available and therefore may not match previously published data.

U.S. MARINE RECREATIONAL FISHERIES

DATA COLLECTION. While data on commercial fisheries was collected for many years, prior to 1979 there was no continuous, systematic collection of marine recreational fishery data. Detailed information on marine recreational fishing is required to support a variety of fishery management and development purposes and is mandated by the Magnuson Fishery Conservation and Management Act, Public Law 94-265, as amended. Therefore, NMFS began the comprehensive Marine Recreational Fishery Statistical Survey (MRFSS) in 1979. Data collected through the MRFSS show that recreational fisheries have tremendous impacts on fish stocks. For several important species recreational landings surpass commercial landings.

The MRFSS data collection consists of an intercept survey of anglers in the field and a telephone survey of coastal county households. These independent components, along with census information, are combined to produce estimates of recreational catch, effort, and participation. Estimates are generated by subregion, state, species, mode and primary area fished. In addition, information on catch rates and measurements of fish lengths and weights are obtained.

The MRFSS is being conducted in 1997 along the coast of the entire continental United States except the state of Texas. The MRFSS was conducted in the following areas and years:

Atlantic and Gulf (except Texas), 1979-1996;
Texas 1981-1995;
Pacific (not including Alaska), mid-1979 through 1989, 1993 - 1996;
Western Pacific, 1979 through 1981; and
Caribbean, 1979, 1981.

In 1995, the MRFSS estimation process was updated to reflect results of statistical research on the survey. Improvements included 1) statistical substitution for missing data, 2) replacement of missing weights, and 3) telephone survey sample weighting by county. Atlantic and Gulf coast data for all years were also run through rigorous cleaning programs. Pacific coast data for 1993-1996 were also cleaned, while cleaning of 1981-1989 is underway. Due to the updating of the statistical process, historical estimates for 1981 to 1993 for the Atlantic and Gulf coasts and for 1993 for the Pacific coast were recalculated. Data from 1979-1980 were not recalculated since telephone data by county were not kept in those years. This publication contains the new estimates for all years since 1981. Old MRFSS publications are now obsolete and should be discarded. Most estimates did not change dramatically, and in all cases, fisheries trends did not change.

Estimates of trips, participation and catch from the MRFSS for the Atlantic, Gulf and Pacific coasts for 1996 are presented in the following tables. Data from other NMFS and state surveys (SE head boats, Texas, California Passenger Fishing Vessels (for-hire), Oregon and Washington ocean boat fishing, Pacific coast salmon estimates, and Alaska) are not included here in order to show the revised MRFSS historical data.

DATA TABLES. The total number of fish caught and the weight of the harvest are presented for sixty-four commonly caught species on the Atlantic, Gulf, and Pacific coasts. Total number caught includes fish which were brought ashore in whole form and were available for identification, weighing, and measuring as well as fish which were not available for identification. This latter category includes fish which were used for bait, discarded, filleted or released alive.

Trips and numbers of participants are presented by state and total catch and harvest weight estimates are presented by subregion. Weight estimates apply to harvest, not catch, and do not include fish that were released alive. Total catch in numbers of fish do include fish that were released alive. Catch and harvest weight estimates are also shown by primary fishing area. The fishing areas are: state territorial seas, or ocean 3 miles or less from land; Exclusive Economic Zone (EEZ), or ocean more than 3 miles from land; and inland (sounds, rivers, bays). The state territorial sea for Florida's Gulf coast is 10 miles or less from land.

All estimates are shown with their proportional standard errors (PSE). PSE's express the standard error of an estimate as a percentage of the estimate and are a measure of precision. Usual (95%) confidence intervals for estimates are calculated as a lower limit of the estimate minus 1.96 times the standard error and an upper limit of the estimate plus 1.96 times the standard error. Example: Estimated trips of 64 million with a PSE of 1% means an upper limit of 65,254,400 (1.96 times 1% of 64 million) and a lower limit of 62,745,600. A 95% confidence interval indicates a 95% certainty that the true value lies between the lower and upper limits.

Sampling coverage by wave (two-month sampling periods) has varied across the time series. More detailed information as well as the ability to summarize data by year, wave, state, fishing mode and/or area are available on the Fisheries Statistics and Economics web page (<http://remora.ssp.nmfs.gov>) and will be available in a separate MRFSS report to be published later.

1996 MRFSS DATA. In 1996, over 8 million people made 64 million marine recreational fishing trips on the Atlantic, Gulf and Pacific coasts. The marine recreational finfish catch in 1996 was an estimated 313 million fish. Over 50% percent of the catch was released alive. The total weight of the harvest (excluding fish released alive) was an estimated 208 million pounds.

The Atlantic and Gulf coasts accounted for 79% of the participants, 88% of the fishing trips, and 89% of the total U.S. marine recreational finfish catch by number. Nationwide, 55% of the catch came from inland waters, 31% came from state territorial seas, and 13% came from the EEZ. This distribution is different for the Atlantic and Gulf versus the Pacific coasts. On the Atlantic and Gulf coasts the majority of the catch was from inland waters, while on the Pacific coast, the majority of the catch was from the state territorial seas.

ATLANTIC AND GULF. The number of Atlantic and Gulf coast trips made from 1981 to 1996 ranged from a low of 44 million trips in 1981 to a high of 60 million in 1986 with no clear trend. The number of people engaged in marine recreational fishing on the Atlantic and Gulf coast ranged from a low of 6.3 million in 1989 to a high of 8.9 million in 1983. In 1996, 8.8 marine recreational fishing participants took 56 million trips and caught a total of 280 million fish.

By subregion, the Gulf of Mexico accounted for the highest numbers of fish caught (42%) in 1996 followed by the Mid-Atlantic (31%). Thirty percent of the Atlantic and Gulf coast recreational fishing trips were made in the South Atlantic, 29% in the Gulf of Mexico, 29% in the Mid-Atlantic, and 12% in the North Atlantic.

The most commonly caught non-bait species (numbers of fish) in 1996 were spotted seatrout, summer flounder, Atlantic croaker, black sea bass, bluefish, and striped bass. Top-ranked non-bait species by subregion were striped bass in the North Atlantic, summer flounder in the Mid-Atlantic, spot in the South Atlantic, and spotted seatrout in the Gulf of Mexico. By weight, the largest harvests were bluefish, striped bass, red drum, dolphin, spotted seatrout, summer flounder, and king mackerel. Average weights for all fish combined was 1.5 pounds while the average weight for the top harvests were 3.2 pounds for bluefish, 11.2 for striped bass, 4.6 for red drum, 7.6 for dolphin, 1.3 for spotted seatrout, 1.4 for summer flounder, and 9.9 for king mackerel.

Although there is no clear trend for all species combined, historical trends in number of fish caught do appear for some species. Spotted seatrout catch increased since the early 1980's from less than 15 million fish to about 20 million. Summer flounder catches were 13 million or more fish until two

very low years with less than 10 million fish in 1989 and 1990, followed by an increase back to levels similar to the early 1980's. Most of the decrease in 1989-1990 occurred in the Mid-Atlantic. Atlantic croaker and black sea bass showed no clear trends. Bluefish show a general decrease in numbers caught from highs near 30 million fish in the early 1980's to lows near 10 million fish since 1992. The catch of striped bass increased steadily and dramatically since 1990 with a record catch of over 14 million fish in 1996. Over 90% of these fish were released alive in 1996.

Thirteen percent of the total marine recreational catch on the Atlantic and Gulf coasts came from the EEZ. The most commonly caught species in federally managed waters were black sea bass, Atlantic mackerel, dolphin, red snapper, and bluefish.

PACIFIC. In 1996, 1.8 marine recreational fishing participants took 7.8 million trips on the Pacific coast and caught a total of 34 million fish. Seventy-three percent of the Pacific coast recreational fishing trips (excluding salmon and California for-hire boat trips) were made in California, followed by 21% in Washington, and 6% in Oregon.

Commonly caught species in 1996 (by numbers) were Pacific mackerel, surf smelt, white croaker, kelp bass and barred sand bass. By weight, the largest harvests were California halibut, Pacific mackerel, black rockfish, barred sandbass, and lingcod. Average weights for all fish combined was 1.1 pounds while the average weight for the top harvests were 7.7 pounds for California halibut, 0.9 for Pacific (chub) mackerel, 1.9 for black rockfish, 1.6 for barred sandbass, and 6.7 for lingcod.

Historical trends in number of fish can not be examined until the 1981-1989 estimates are recalculated; however, there are some changes that should be noted. In 1996, surf smelt jumped from the 1993-1995 average of a little over a million fish to almost 5 million fish. California halibut catch steadily increased from 347,000 fish in 1993 to 712,000 fish in 1996. Pacific mackerel reached a 4-year high in 1996 with 5.5 million fish caught. It should be noted, however, that the 1996 data include Washington state catches whereas the 1993-1995 data do not.

Eleven percent of the total marine recreational catch on the Pacific coast came from the EEZ. The most commonly caught Pacific coast species in federally managed waters for 1996 were Pacific mackerel, barred sand bass, Pacific barracuda, kelp bass, and white croaker. The percent of the catch from the state territorial sea dropped from above 65% in 1993-1995 to 51% in 1996, while the inland catch increased from 13-17% to 38% of the catch.

U.S. MARINE RECREATIONAL FISHERIES

MRFSS SAMPLING COVERAGE BY WAVE, STATE AND MODE, 1979-1996 FOR THE ATLANTIC, GULF AND PACIFIC COASTS

Note: Salmon trips are excluded on the Pacific coast. Ocean boat trips were excluded in WA in 1989 and in OR. during July/August.

U.S. MARINE RECREATIONAL FISHERIES

29

ESTIMATED NUMBER OF PEOPLE PARTICIPATING IN MARINE RECREATIONAL FISHING AND PSE (%) BY STATE AND YEAR, 1981 TO 1996 FOR THE ATLANTIC COAST AND GULF COASTS.

YEAR	NORTH ATLANTIC SUB-REGION												TOTAL (1)			
	MAINE		NEW HAMPSHIRE		MASSACHUSETTS		RHODE ISLAND		CONNECTICUT							
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)						
	NUMBER IN THOUSANDS															
1981.	216	21	110	20	701	15	274	14	272	11	971	6				
1982.	123	22	115	25	695	18	278	17	304	19	844	9				
1983.	166	20	148	30	1,011	13	411	23	230	14	1,123	7				
1984.	135	20	135	23	751	11	297	14	322	13	1,024	6				
1985.	202	39	56	18	980	15	605	15	351	12	1,121	8				
1986.	209	21	148	18	1,000	10	302	17	427	11	1,200	6				
1987.	282	18	77	35	577	13	213	18	227	11	859	7				
1988.	320	67	104	27	620	10	226	16	301	11	959	11				
1989.	210	13	171	26	547	10	191	16	369	11	1,034	6				
1990.	178	17	116	23	684	9	229	14	348	12	963	5				
1991.	338	16	122	27	694	10	300	15	471	11	1,203	5				
1992.	136	19	53	21	594	11	218	15	503	12	977	6				
1993.	202	18	76	21	719	9	254	14	233	10	876	5				
1994.	216	20	122	37	686	9	208	15	228	12	845	6				
1995.	234	21	97	25	688	9	220	17	295	13	874	5				
1996.	268	17	96	19	597	8	243	13	387	12	972	5				
YEAR	MID-ATLANTIC SUB-REGION												TOTAL (1)			
	NEW YORK		NEW JERSEY		DELAWARE		MARYLAND		VIRGINIA							
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)						
	NUMBER IN THOUSANDS															
1981.	827	10	962	14	88	27	844	12	812	26	2,330	7				
1982.	622	12	654	11	205	25	866	16	1,091	9	1,998	6				
1983.	591	11	1,030	13	228	17	971	10	1,432	36	2,588	9				
1984.	555	13	1,057	13	202	18	621	17	559	18	1,919	6				
1985.	628	15	1,323	15	115	20	746	15	534	17	1,913	7				
1986.	784	8	1,247	13	154	19	816	15	720	10	2,197	5				
1987.	664	9	1,018	8	134	19	682	12	494	9	1,947	4				
1988.	647	9	786	8	159	12	637	14	504	11	1,837	4				
1989.	673	16	672	8	246	13	507	11	535	10	1,843	5				
1990.	591	9	886	7	241	13	623	9	413	9	1,795	4				
1991.	734	10	1,032	8	181	13	644	10	717	11	2,215	4				
1992.	521	10	758	9	195	14	534	10	380	10	1,596	4				
1993.	622	9	1,025	8	249	14	840	9	454	9	2,129	4				
1994.	770	9	1,113	8	201	14	811	9	566	7	2,317	4				
1995.	487	9	927	8	293	10	870	9	555	9	1,861	4				
1996.	584	8	997	7	236	11	893	10	507	9	1,994	4				

(1) SUB-REGION TOTALS DO NOT INCLUDE OUT OF STATE ANGLERS SINCE THESE CAN BE COUNTED MULTIPLE TIMES. THEREFORE, THE SUM OF FISHING PARTICIPANTS ACROSS STATES WILL NOT EQUAL THE TOTALS SHOWN IN LAST COLUMN. NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED NUMBER OF PEOPLE PARTICIPATING IN MARINE RECREATIONAL FISHING AND PSE (%) BY STATE AND YEAR, 1981 TO 1996 FOR THE ATLANTIC COAST AND GULF COASTS.

YEAR	SOUTH ATLANTIC SUB-REGION										TOTAL (1)	
	NORTH CAROLINA		SOUTH CAROLINA		GEORGIA		EAST FLORIDA					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)		
	NUMBER IN THOUSANDS											
1981.	592	16	243	23	109	31	1,097	15	1,259	8		
1982.	1,101	22	411	23	150	17	1,251	19	1,690	8		
1983.	1,296	16	413	18	159	25	1,706	12	1,983	6		
1984.	1,092	14	688	41	135	20	2,008	10	2,192	8		
1985.	933	12	498	33	114	18	1,897	11	1,947	6		
1986.	720	13	441	18	146	13	1,924	10	1,727	5		
1987.	1,155	10	602	14	190	16	1,744	9	1,880	4		
1988.	1,357	7	761	11	136	15	1,618	7	2,074	4		
1989.	1,208	9	428	16	102	22	1,749	9	1,762	3		
1990.	1,345	7	469	13	216	22	1,558	7	2,057	4		
1991.	1,119	7	571	15	283	21	2,091	7	2,195	4		
1992.	1,285	5	479	12	170	11	2,143	4	2,278	3		
1993.	1,367	5	512	10	180	12	1,941	4	2,181	2		
1994.	1,480	5	580	10	323	12	2,167	3	2,529	2		
1995.	1,276	5	420	11	313	13	2,086	3	2,287	2		
1996.	1,150	6	471	10	210	13	1,841	4	1,835	3		
YEAR	GULF OF MEXICO SUB-REGION										TOTAL (1)	
	WEST FLORIDA		ALABAMA		MISSISSIPPI		LOUISIANA					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)		
	NUMBER IN THOUSANDS											
1981.	2,401	27	150	31	162	25	371	15	1,416	7		
1982.	1,701	10	351	30	168	19	433	18	1,512	6		
1983.	3,657	21	432	40	321	26	609	12	2,508	8		
1984.	4,138	15	187	21	225	25	467	12	2,314	7		
1985.	3,055	14	226	21	152	20	667	23	2,096	7		
1986.	3,378	9	310	18	230	18	745	16	2,314	6		
1987.	2,660	12	200	19	202	16	664	9	2,011	4		
1988.	2,942	6	440	25	211	13	586	7	2,283	4		
1989.	2,549	8	220	18	183	19	445	9	1,688	5		
1990.	2,114	7	223	15	211	22	501	10	1,696	4		
1991.	3,004	6	206	16	238	16	551	10	1,897	4		
1992.	2,379	4	215	10	264	11	472	7	1,928	3		
1993.	2,402	3	284	11	251	9	506	6	1,877	3		
1994.	2,665	3	275	10	240	10	446	6	1,931	2		
1995.	2,231	3	283	10	280	10	538	6	2,009	2		
1996.	2,251	3	258	11	230	11	493	7	1,818	3		

(1) SUB-REGION TOTALS DO NOT INCLUDE OUT OF STATE ANGLERS SINCE THESE CAN BE COUNTED MULTIPLE TIMES.

THEREFORE, THE SUM OF FISHING PARTICIPANTS ACROSS STATES WILL NOT EQUAL THE TOTALS SHOWN IN LAST COLUMN.

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

31

ESTIMATED NUMBER OF MARINE RECREATIONAL FISHING TRIPS AND PSE (%) BY STATE AND YEAR, 1981-1996 FOR THE ATLANTIC AND GULF COASTS.

YEAR	NORTH ATLANTIC SUB-REGION												TOTAL	
	MAINE		NEW HAMPSHIRE		MASSACHUSETTS		RHODE ISLAND		CONNECTICUT					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBER IN THOUSANDS-----													
1981.	513	16	280	17	2,806	8	925	10	1,240	10	5,764	5		
1982.	487	13	339	23	3,192	9	1,088	10	1,933	32	7,039	10		
1983.	439	12	341	27	3,801	7	1,257	16	1,257	12	7,095	6		
1984.	373	12	335	19	2,382	7	880	10	1,345	9	5,315	5		
1985.	570	21	74	19	3,253	9	1,630	39	1,547	10	7,073	10		
1986.	513	11	300	12	3,829	6	1,214	10	1,627	8	7,482	4		
1987.	620	11	190	29	2,686	8	847	10	1,441	9	5,784	5		
1988.	695	45	229	20	2,575	6	991	9	1,250	10	5,739	7		
1989.	483	8	386	19	2,275	6	725	10	1,360	10	5,229	4		
1990.	467	11	312	15	2,536	6	1,006	9	1,220	10	5,542	4		
1991.	895	9	263	22	2,899	6	1,070	9	1,674	10	6,801	4		
1992.	442	11	192	18	2,389	7	836	10	1,842	10	5,701	5		
1993.	608	12	197	14	3,094	5	1,109	9	1,218	10	6,225	4		
1994.	606	12	314	23	3,249	5	1,003	9	1,109	11	6,281	4		
1995.	628	13	286	15	3,368	5	885	10	1,347	12	6,513	4		
1996.	687	13	250	12	3,290	5	1,001	8	1,528	11	6,756	4		

YEAR	MID-ATLANTIC SUB-REGION												TOTAL	
	NEW YORK		NEW JERSEY		DELAWARE		MARYLAND		VIRGINIA					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBER IN THOUSANDS-----													
1981.	4,078	8	4,255	9	560	20	2,292	9	2,828	16	14,013	5		
1982.	4,168	13	4,805	7	750	17	2,980	12	2,796	41	15,498	8		
1983.	5,134	12	5,373	9	924	11	3,173	8	3,967	20	18,571	6		
1984.	5,337	12	4,963	8	1,037	14	2,507	12	1,919	11	15,763	5		
1985.	3,958	21	6,330	9	546	15	2,191	12	1,718	10	14,742	5		
1986.	4,891	11	7,752	6	864	13	2,755	11	2,579	7	18,840	4		
1987.	4,537	11	5,259	5	550	11	2,349	8	2,028	7	14,724	3		
1988.	4,101	45	4,449	5	830	8	3,057	8	2,462	7	14,898	3		
1989.	3,741	8	3,865	5	826	11	1,986	8	1,749	6	12,167	4		
1990.	3,851	11	4,694	4	740	10	2,107	7	1,962	6	13,353	3		
1991.	4,450	9	5,720	5	539	9	2,223	7	3,045	8	15,977	3		
1992.	3,409	11	4,559	5	587	11	1,782	8	1,878	7	12,215	3		
1993.	4,189	12	5,193	6	795	10	3,045	7	2,068	6	15,290	3		
1994.	4,380	12	5,659	5	692	11	2,872	7	2,634	5	16,237	3		
1995.	4,019	13	4,956	5	865	7	2,851	7	2,885	5	15,576	3		
1996.	4,372	13	5,500	4	816	7	3,027	7	2,786	5	16,502	3		

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED NUMBER OF MARINE RECREATIONAL FISHING TRIPS AND PSE (%) BY STATE AND YEAR, 1981-1996 FOR THE ATLANTIC AND GULF COASTS.

YEAR	SOUTH ATLANTIC SUB-REGION										TOTAL	
	NORTH CAROLINA		SOUTH CAROLINA		GEORGIA		EAST FLORIDA					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)		
	NUMBER IN THOUSANDS										EST	PSE (%)
1981.	2,074	12	606	15	327	20	5,544	7	8,551	6		
1982.	3,439	7	1,459	15	493	17	8,240	10	13,630	7		
1983.	4,563	10	1,183	12	480	16	8,234	6	14,460	5		
1984.	3,809	9	1,734	26	529	14	9,016	5	15,088	5		
1985.	3,380	7	1,572	19	439	12	9,927	6	15,318	5		
1986.	2,977	9	1,448	9	639	9	9,840	5	14,904	4		
1987.	3,862	6	1,648	8	751	10	10,687	4	16,948	3		
1988.	4,763	5	1,906	7	667	9	11,485	3	18,821	3		
1989.	3,849	6	1,081	9	626	14	10,806	4	16,361	3		
1990.	3,868	5	931	9	705	12	8,068	3	13,572	3		
1991.	3,762	5	1,796	8	741	14	11,087	3	17,386	3		
1992.	4,372	4	1,457	7	572	8	10,340	2	16,741	2		
1993.	4,716	4	1,776	5	673	7	9,630	2	16,796	2		
1994.	5,170	3	1,987	6	956	9	11,815	2	19,928	1		
1995.	4,992	4	1,502	6	778	9	11,482	2	18,754	2		
1996.	4,605	4	1,390	6	577	9	10,251	8	16,823	2		
GULF OF MEXICO SUB-REGION												
YEAR	WEST FLORIDA		ALABAMA		MISSISSIPPI		LOUISIANA		TOTAL (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)		
	NUMBER IN THOUSANDS											
	1981.	9,520	17	523	24	662	15	1,358	11	12,064	11	
1982.	8,808	6	1,363	30	717	12	2,536	12	13,424	5		
1983.	14,521	12	1,739	33	1,038	14	2,685	8	19,983	8		
1984.	16,521	9	613	15	797	16	1,711	8	19,643	7		
1985.	11,583	9	711	16	572	10	2,554	19	15,419	6		
1986.	14,367	5	867	10	777	10	3,029	12	19,040	4		
1987.	12,321	7	622	11	776	8	2,371	6	16,089	6		
1988.	14,730	3	1,183	17	908	7	2,923	4	19,743	3		
1989.	12,032	4	623	9	704	9	2,264	6	15,623	3		
1990.	9,923	3	723	9	686	11	1,978	6	13,310	3		
1991.	14,261	3	649	10	844	8	2,420	6	18,174	3		
1992.	13,764	2	763	5	1,001	6	2,551	4	18,079	2		
1993.	12,928	2	933	6	866	6	2,704	4	17,431	1		
1994.	13,167	2	887	6	964	6	2,485	4	17,504	1		
1995.	12,159	2	977	5	1,033	6	2,947	4	17,115	1		
1996.	11,766	2	870	7	903	6	2,780	5	16,319	2		

(1) Gulf of Mexico totals do not include Texas data.

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

33

ESTIMATED NUMBER OF PEOPLE PARTICIPATING IN MARINE RECREATIONAL FISHING AND PSE (%) BY STATE AND YEAR, 1993-1996 FOR THE PACIFIC COAST

YEAR	PACIFIC COAST SUB-REGION								TOTAL (1)	
	SO. CALIFORNIA		NO. CALIFORNIA		OREGON		WASHINGTON			
	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)
	-----NUMBER IN THOUSANDS-----									
1993. . .	985	6	620	7	300	8	NA	NA	1,661	4
1994. . .	1,285	6	449	7	216	7	NA	NA	1,671	4
1995. . .	1,063	7	634	7	249	7	NA	NA	1,678	4
1996. . .	958	10	523	7	219	11	447	9	1,783	4

(1) SUB-REGION TOTALS DO NOT INCLUDE OUT OF STATE ANGLERS SINCE THEY CAN BE COUNTED MULTIPLE TIMES THEREFORE, THE SUM OF PARTICIPANTS ACROSS STATES WILL NOT EQUAL TOTALS SHOWN IN LAST COLUMN.

NOTE: EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

NA - NOT AVAILABLE (MRFSS NOT CONDUCTED IN WASHINGTON FROM 1993-1995).

ESTIMATED NUMBER OF MARINE RECREATIONAL FISHING TRIPS AND PSE(%) BY STATE AND YEAR, 1993-1996 FOR THE PACIFIC COAST

YEAR	PACIFIC COAST SUB-REGION								TOTAL	
	SO. CALIFORNIA		NO. CALIFORNIA		OREGON		WASHINGTON			
	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)
	-----NUMBER IN THOUSANDS-----									
1993. . .	4,038	4	2,152	5	704	6	NA	NA	6,893	3
1994. . .	4,748	4	1,968	6	471	5	NA	NA	7,187	3
1995. . .	4,300	4	2,340	5	579	5	NA	NA	7,220	3
1996. . .	3,519	5	2,186	4	497	8	1,648	7	7,849	3

NOTE: EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

NA - NOT AVAILABLE (MRFSS NOT CONDUCTED IN WASHINGTON FROM 1993-1995).

ESTIMATED NUMBER OF PEOPLE PARTICIPATING IN MARINE RECREATIONAL FISHING AND PSE (%) BY COAST AND YEAR, 1993-1996 U.S. TOTALS

YEAR	U.S. TOTALS						TOTAL	
	ATLANTIC COAST		GULF OF MEXICO		PACIFIC COAST			
	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)
	-----NUMBER IN THOUSANDS-----							
1993.	5,186	3	1,877	3	1,661	4	8,724	2
1994.	5,691	2	1,931	2	1,671	4	9,293	2
1995.	5,022	2	2,009	2	1,678	4	8,709	2
1996.	4,801	3	1,818	3	1,783	4	8,402	2

NOTE: EST = ESTIMATE. PSE(%) = PROPORTIONAL STANDARD ERROR. TOTALS ONLY INCLUDE CONTINENTAL U.S.

TEXAS DATA NOT INCLUDED FOR ALL YEARS AND WASHINGTON NOT INCLUDED FOR 1993-1995.

ESTIMATED NUMBER OF MARINE RECREATIONAL FISHING TRIPS AND PSE(%) BY COAST AND YEAR, 1993-1996 U.S. TOTALS

YEAR	U.S. TOTALS							
	ATLANTIC COAST		GULF OF MEXICO		PACIFIC COAST		TOTAL	
	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)	EST	PSE(%)
	-----NUMBER IN THOUSANDS-----							
1993.	38,311	1	17,431	1	6,893	3	62,635	1
1994.	42,446	1	17,504	1	7,187	3	67,137	1
1995.	40,843	1	17,115	1	7,220	3	65,178	1
1996.	40,081	1	16,319	2	7,849	3	64,249	1

NOTE: EST = ESTIMATE. PSE(%) = PROPORTIONAL STANDARD ERROR. TOTALS ONLY INCLUDE CONTINENTAL U.S.

TEXAS DATA NOT INCLUDED FOR ALL YEARS AND WASHINGTON NOT INCLUDED FOR 1993-1995.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	ATLANTIC COD								TOTAL	
	NORTH ATLANTIC		MID-ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	4,280	18	401	16	0	0	0	0	4,681	17
1982. . .	2,813	22	671	29	0	0	0	0	3,484	18
1983. . .	3,074	13	265	27	0	0	0	0	3,340	12
1984. . .	1,514	8	83	28	0	0	0	0	1,597	8
1985. . .	3,703	36	112	40	0	0	0	0	3,815	35
1986. . .	1,417	13	51	24	0	0	0	0	1,468	13
1987. . .	2,906	17	190	34	0	0	0	0	3,097	16
1988. . .	2,151	19	657	19	0	0	0	0	2,809	15
1989. . .	1,998	10	338	16	0	0	0	0	2,336	9
1990. . .	2,103	11	209	15	0	0	0	0	2,311	10
1991. . .	2,171	13	84	21	0	0	0	0	2,255	13
1992. . .	731	12	119	15	0	0	0	0	850	10
1993. . .	2,270	11	423	15	0	0	0	0	2,693	10
1994. . .	1,749	8	112	23	0	0	0	0	1,861	8
1995. . .	1,747	15	195	19	0	0	0	0	1,942	14
1996. . .	1,061	10	19	24	0	0	0	0	1,080	10

YEAR	ATLANTIC CROAKER								TOTAL	
	NORTH ATLANTIC		MID-ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	0	0	1,313	18	2,775	15	5,312	15	9,400	10
1982. . .	0	0	361	29	3,691	18	10,462	13	14,515	10
1983. . .	0	0	5,180	15	3,898	17	10,267	11	19,345	8
1984. . .	0	0	3,002	14	8,442	10	8,753	11	20,197	7
1985. . .	0	0	3,935	10	5,484	25	7,345	11	16,764	10
1986. . .	0	0	9,137	9	6,726	25	14,204	9	30,067	8
1987. . .	0	0	5,534	6	6,213	16	4,640	14	16,387	7
1988. . .	0	0	6,161	10	4,467	10	6,948	19	17,577	9
1989. . .	0	0	3,612	6	3,822	7	2,799	13	10,233	5
1990. . .	0	0	6,488	10	4,247	6	4,094	13	14,829	6
1991. . .	0	0	15,578	7	3,232	7	7,122	14	25,932	6
1992. . .	0	0	9,722	8	3,403	4	3,827	9	16,953	5
1993. . .	0	0	14,136	6	2,921	5	3,959	7	21,016	5
1994. . .	0	0	17,472	5	5,753	5	3,445	6	26,671	3
1995. . .	0	0	12,246	6	2,970	7	2,537	6	17,753	4
1996. . .	0	0	12,082	6	2,245	5	2,539	7	16,867	5

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE --EST = ESTIMATE PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

35

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	ATLANTIC MACKEREL								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	2,129	22	2,969	20	10	76	0	0	5,108	15
1982. . .	689	33	854	28	0	0	0	0	1,543	21
1983. . .	953	14	3,146	31	21	72	0	0	4,119	24
1984. . .	1,437	16	2,388	25	0	0	0	0	3,825	17
1985. . .	5,185	39	2,625	22	15	73	0	0	7,825	27
1986. . .	1,552	23	3,836	26	0	0	0	0	5,388	20
1987. . .	2,991	20	4,743	20	0	0	0	0	7,735	15
1988. . .	4,890	22	1,105	34	4	100	0	0	5,999	19
1989. . .	2,926	10	1,109	24	0	0	0	0	4,035	10
1990. . .	2,585	11	1,406	25	0	0	0	0	3,994	12
1991. . .	3,287	16	2,168	19	0	0	0	0	5,455	12
1992. . .	787	11	252	35	0	0	0	0	1,045	12
1993. . .	2,161	10	144	35	0	0	0	0	2,307	10
1994. . .	4,690	12	170	44	0	0	0	0	4,860	12
1995. . .	2,934	13	1,074	35	0	0	0	0	4,008	13
1996. . .	3,001	10	647	26	1	55	0	0	3,650	9

YEAR	BLACK DRUM								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	0	0	4	74	71	21	473	15	548	13
1982. . .	0	0	0	0	194	22	1,514	13	1,708	12
1983. . .	0	0	46	22	220	19	1,497	14	1,764	12
1984. . .	0	0	4	62	273	16	668	16	946	12
1985. . .	0	0	7	31	240	18	658	14	905	12
1986. . .	0	0	35	40	415	18	1,442	13	1,892	11
1987. . .	0	0	16	30	388	19	1,180	14	1,584	11
1988. . .	0	0	1	58	210	14	1,213	8	1,424	7
1989. . .	0	0	5	32	108	19	622	14	736	12
1990. . .	0	0	3	47	134	16	680	16	818	14
1991. . .	0	0	5	40	348	13	671	12	1,024	9
1992. . .	0	0	5	34	270	9	1,130	7	1,405	6
1993. . .	0	0	12	34	253	9	1,268	9	1,534	7
1994. . .	0	0	4	41	297	8	824	8	1,125	6
1995. . .	0	0	27	23	505	10	1,063	8	1,595	6
1996. . .	0	0	22	29	355	8	818	7	1,196	6

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	BLACK SEA BASS								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	228	26	3,299	16	2,606	15	246	65	6,379	10
1982. . .	321	21	11,025	32	3,555	13	1,036	14	15,936	22
1983. . .	232	19	6,878	13	2,847	15	1,194	20	11,152	9
1984. . .	129	22	2,956	12	4,009	10	558	23	7,652	7
1985. . .	122	29	5,769	8	3,450	11	4,191	20	13,532	8
1986. . .	874	15	27,939	17	1,947	10	2,065	12	32,825	14
1987. . .	346	26	4,552	9	2,785	7	2,861	13	10,544	6
1988. . .	258	20	7,540	8	2,947	13	5,049	7	15,794	5
1989. . .	141	15	6,209	5	2,261	9	5,453	8	14,064	4
1990. . .	58	19	8,960	6	1,384	11	3,323	8	13,725	4
1991. . .	88	22	10,592	5	1,900	9	3,280	12	15,859	4
1992. . .	40	13	7,515	6	1,824	7	2,380	6	11,759	4
1993. . .	67	14	8,898	14	1,418	7	2,375	7	12,758	10
1994. . .	33	38	6,995	7	2,131	6	2,735	6	11,892	4
1995. . .	122	12	13,841	7	1,660	6	2,170	6	17,793	6
1996. . .	195	13	9,807	7	1,312	7	1,435	7	12,750	6

YEAR	BLUEFISH								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	8,707	14	18,397	24	4,157	14	494	28	31,755	14
1982. . .	10,096	12	11,276	9	5,848	11	499	19	27,719	6
1983. . .	7,190	18	15,866	7	7,082	13	2,337	30	32,475	6
1984. . .	5,485	10	15,176	9	5,847	7	560	45	27,068	6
1985. . .	5,709	13	12,756	7	4,009	8	519	26	22,993	5
1986. . .	8,437	7	18,459	6	3,514	10	888	23	31,298	4
1987. . .	6,541	8	17,318	5	3,744	7	888	16	28,491	4
1988. . .	2,311	6	7,318	8	3,736	8	1,070	11	14,435	5
1989. . .	2,931	9	12,103	4	3,603	7	878	11	19,515	3
1990. . .	2,866	7	9,702	4	3,878	6	427	19	16,873	3
1991. . .	4,845	7	11,040	4	2,407	6	959	16	19,251	3
1992. . .	3,080	6	5,640	4	2,681	6	589	13	11,990	3
1993. . .	2,425	5	4,516	5	2,984	4	376	12	10,301	3
1994. . .	2,220	6	6,190	6	3,510	4	484	12	12,405	3
1995. . .	2,022	6	5,113	5	3,341	5	464	12	10,940	3
1996. . .	2,810	7	5,135	5	1,954	4	471	12	10,370	3

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE --EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

37

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	DOLPHIN								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	0	0	0	0	607	24	224	21	1,128	16
1982. . .	0	0	2	100	595	14	728	23	1,332	14
1983. . .	0	0	4	40	981	16	209	21	1,194	13
1984. . .	0	0	9	71	801	24	297	35	1,107	20
1985. . .	0	0	34	36	704	21	397	30	1,138	16
1986. . .	0	0	31	27	756	11	750	16	1,539	10
1987. . .	0	0	14	25	902	10	623	15	1,554	8
1988. . .	0	54	27	33	1,121	11	460	16	1,689	9
1989. . .	1	74	153	21	2,046	8	694	14	2,923	7
1990. . .	1	94	92	34	1,150	10	536	25	1,925	10
1991. . .	2	58	142	20	1,883	7	1,112	14	3,141	6
1992. . .	0	100	154	20	924	6	388	12	1,484	5
1993. . .	18	29	246	22	961	5	675	11	1,927	5
1994. . .	1	54	86	20	1,680	7	653	11	2,450	6
1995. . .	11	60	74	21	1,523	4	963	8	2,613	4
1996. . .	1	100	199	35	1,233	5	461	9	1,905	5

GAG									TOTAL	
YEAR	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	0	0	0	0	61	42	182	27	243	23
1982. . .	0	0	0	0	7	41	381	14	388	14
1983. . .	0	0	0	0	22	49	758	23	780	22
1984. . .	0	0	0	0	77	20	261	35	338	27
1985. . .	0	0	0	0	78	26	280	17	359	14
1986. . .	0	0	0	0	46	22	198	18	244	15
1987. . .	0	0	0	0	102	29	298	13	400	12
1988. . .	0	0	0	0	63	24	272	13	335	12
1989. . .	0	0	0	0	124	15	432	13	556	11
1990. . .	0	0	0	0	73	22	585	17	658	15
1991. . .	0	0	0	0	66	15	1,139	11	1,205	11
1992. . .	0	0	0	0	81	12	1,014	8	1,095	7
1993. . .	0	0	0	0	86	19	1,652	6	1,738	6
1994. . .	0	0	0	0	137	15	2,095	5	2,232	5
1995. . .	0	0	0	0	123	12	2,416	5	2,539	5
1996. . .	0	0	0	0	96	12	1,494	5	1,590	5

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE --EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	GRAY SNAPPER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	0	0	0	0	897	39	746	17	1,643	22
1982. . .	0	0	0	0	532	28	1,500	11	2,032	11
1983. . .	0	0	0	0	472	16	3,625	34	4,097	31
1984. . .	0	0	0	0	409	18	3,965	22	4,373	20
1985. . .	0	0	0	0	938	19	1,383	20	2,321	14
1986. . .	0	0	0	0	524	13	1,570	18	2,093	14
1987. . .	0	0	0	0	653	13	1,378	41	2,031	28
1988. . .	0	0	0	0	587	11	1,396	9	1,983	7
1989. . .	0	0	1	100	736	10	2,415	8	3,152	7
1990. . .	0	0	0	0	697	12	1,872	10	2,570	8
1991. . .	0	0	0	0	1,074	10	6,332	8	7,405	7
1992. . .	0	0	0	0	1,178	7	4,185	7	5,363	5
1993. . .	0	0	0	0	745	7	4,408	4	5,154	4
1994. . .	0	0	0	0	1,312	8	3,534	5	4,845	4
1995. . .	0	0	0	0	1,315	12	3,237	5	4,552	5
1996. . .	0	0	0	0	1,084	8	3,330	6	4,413	5

YEAR	GRAY TRIGGERFISH								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	0	0	0	0	36	28	338	24	374	22
1982. . .	0	0	1	49	68	21	626	18	695	17
1983. . .	0	0	14	60	51	25	138	16	203	13
1984. . .	2	100	0	0	66	22	180	65	247	48
1985. . .	0	0	8	82	147	28	154	23	308	18
1986. . .	3	100	7	31	135	22	515	24	660	19
1987. . .	0	0	35	37	94	19	693	27	822	23
1988. . .	0	0	4	71	151	18	760	12	914	10
1989. . .	1	63	43	33	378	18	997	12	1,419	10
1990. . .	1	59	35	29	181	15	1,099	14	1,315	12
1991. . .	2	40	67	21	382	15	957	12	1,408	9
1992. . .	1	100	20	21	197	9	818	8	1,035	6
1993. . .	1	52	89	23	154	13	661	8	906	7
1994. . .	1	53	31	27	115	10	686	8	834	6
1995. . .	0	100	38	28	131	13	661	8	830	7
1996. . .	1	50	106	34	162	12	392	8	662	8

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

39

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	GREATER AMBERJACK								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	0	0	0	0	69	31	122	28	190	21
1982. . .	0	0	7	62	38	38	505	19	550	17
1983. . .	0	0	0	0	27	26	243	25	270	22
1984. . .	0	0	10	56	78	19	77	18	164	13
1985. . .	0	0	2	50	126	20	128	20	257	14
1986. . .	0	0	28	29	126	15	628	16	782	13
1987. . .	0	0	9	55	127	24	676	19	811	16
1988. . .	0	0	7	63	93	16	292	19	392	14
1989. . .	0	0	18	20	94	25	723	15	835	13
1990. . .	0	0	30	31	84	15	139	27	253	16
1991. . .	0	0	88	36	103	14	518	13	709	11
1992. . .	0	0	12	33	103	14	577	22	692	18
1993. . .	0	0	694	19	67	12	380	10	1,141	12
1994. . .	0	0	1	52	98	13	233	11	332	9
1995. . .	0	0	2	73	35	16	126	14	164	11
1996. . .	0	0	25	37	90	13	142	9	258	8

YEAR	KING MACKEREL								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	0	0	3	76	462	39	238	62	703	33
1982. . .	0	0	0	0	742	14	750	62	1,492	32
1983. . .	0	0	0	0	684	18	261	34	945	16
1984. . .	0	0	0	0	685	15	304	31	989	14
1985. . .	0	0	0	61	849	25	149	19	998	21
1986. . .	0	0	11	28	689	11	177	13	877	9
1987. . .	0	0	7	37	633	10	443	11	1,083	7
1988. . .	0	0	13	34	672	10	356	9	1,041	7
1989. . .	0	0	7	20	427	8	416	24	850	13
1990. . .	0	0	2	55	582	7	487	16	1,071	8
1991. . .	1	71	12	27	672	6	751	9	1,436	6
1992. . .	0	0	13	26	790	9	485	7	1,289	6
1993. . .	0	0	17	40	506	5	500	6	1,023	4
1994. . .	0	0	5	47	461	6	682	6	1,148	4
1995. . .	0	0	1	61	628	6	622	6	1,252	4
1996. . .	0	0	2	59	485	5	748	7	1,235	4

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE:--EST = ESTIMATE PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	RED DRUM								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	0	0	50	59	136	23	1,517	11	1,704	10
1982. . .	0	0	0	0	428	15	2,907	10	3,335	9
1983. . .	0	0	35	45	652	14	4,969	12	5,657	11
1984. . .	0	0	1	100	1,100	12	3,760	11	4,862	9
1985. . .	0	0	1	73	1,218	15	2,439	11	3,658	9
1986. . .	0	0	49	24	607	9	3,542	6	4,197	6
1987. . .	0	0	2	59	1,487	9	4,881	7	6,370	6
1988. . .	0	0	8	50	1,292	10	4,504	5	5,805	5
1989. . .	0	0	23	26	570	10	3,814	7	4,407	6
1990. . .	0	0	2	72	612	13	2,401	7	3,015	6
1991. . .	0	0	39	34	1,390	12	6,642	7	8,070	7
1992. . .	0	0	29	29	844	6	7,809	4	8,682	3
1993. . .	0	0	64	36	1,274	7	6,310	4	7,649	4
1994. . .	0	0	12	32	1,683	6	5,913	4	7,609	3
1995. . .	0	0	36	37	2,105	7	7,096	4	9,236	3
1996. . .	0	0	3	40	1,130	6	5,952	3	7,085	3

YEAR	RED SNAPPER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	0	0	0	0	166	25	1,791	19	1,957	18
1982. . .	0	0	0	0	60	31	1,456	19	1,516	18
1983. . .	0	0	0	0	206	18	2,617	16	2,823	15
1984. . .	0	0	0	0	539	15	676	15	1,215	11
1985. . .	0	0	0	0	619	17	827	13	1,445	11
1986. . .	0	0	0	0	181	32	875	12	1,056	12
1987. . .	0	0	0	0	170	37	857	21	1,027	19
1988. . .	0	0	0	0	270	25	912	11	1,183	10
1989. . .	0	0	0	0	196	17	985	14	1,181	12
1990. . .	0	0	0	0	17	30	930	14	947	14
1991. . .	0	0	0	0	91	27	1,509	9	1,600	9
1992. . .	0	0	0	0	116	15	1,908	6	2,024	5
1993. . .	0	0	0	0	87	23	2,458	5	2,546	5
1994. . .	0	0	0	0	95	21	1,916	6	2,011	5
1995. . .	0	0	0	0	69	16	1,539	6	1,609	6
1996. . .	0	0	0	0	34	24	1,700	6	1,733	6

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

41

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	SAND SEATROUT								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	0	0	0	0	0	0	9,215	45	9,215	45
1982. . .	0	0	0	0	0	0	3,498	22	3,498	22
1983. . .	0	0	0	0	0	0	5,457	18	5,457	18
1984. . .	0	0	0	0	0	0	7,681	22	7,681	22
1985. . .	0	0	0	0	0	0	6,791	16	6,791	16
1986. . .	0	0	0	0	0	0	7,118	8	7,118	8
1987. . .	0	0	0	0	0	0	4,008	9	4,008	9
1988. . .	0	0	0	0	1	100	2,951	8	2,953	8
1989. . .	0	0	0	0	0	0	3,421	16	3,421	16
1990. . .	0	0	0	0	0	0	4,583	9	4,583	9
1991. . .	0	0	0	0	0	0	5,135	10	5,135	10
1992. . .	0	0	0	0	0	0	3,780	10	3,780	10
1993. . .	0	0	0	0	0	0	4,068	7	4,068	7
1994. . .	0	0	0	0	0	0	5,665	5	5,665	5
1995. . .	0	0	0	0	0	0	4,355	7	4,355	7
1996. . .	0	0	0	0	0	0	4,624	6	4,624	6

YEAR	SCUP								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	4,954	12	5,419	37	5	49	0	0	10,389	20
1982. . .	5,200	12	1,980	14	5	46	0	0	7,185	10
1983. . .	4,064	13	6,091	17	0	66	0	0	10,156	11
1984. . .	2,846	12	4,929	22	0	0	0	0	7,775	15
1985. . .	7,953	15	5,908	16	8	56	0	0	13,868	11
1986. . .	19,454	10	11,418	10	2	71	0	0	30,874	7
1987. . .	9,278	11	3,097	15	2	57	0	0	12,377	9
1988. . .	5,598	8	1,940	16	2	31	0	0	7,540	7
1989. . .	6,507	8	4,877	7	10	20	0	0	11,395	6
1990. . .	4,178	8	5,993	7	1	79	0	0	10,172	5
1991. . .	10,032	6	6,811	6	13	34	0	0	16,855	5
1992. . .	5,392	8	4,621	8	65	19	0	0	10,078	5
1993. . .	4,337	8	2,723	8	17	24	0	0	7,077	6
1994. . .	2,431	7	3,192	13	39	41	0	0	5,662	8
1995. . .	2,572	7	1,111	20	5	27	0	0	3,688	8
1996. . .	3,533	9	1,321	13	4	34	0	0	4,858	7

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	SHEEPSHEAD								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	0	0	7	72	311	19	832	16	1,150	13
1982. . .	0	0	0	0	1,149	15	1,937	9	3,087	8
1983. . .	0	0	3	63	600	23	3,075	16	3,678	14
1984. . .	0	0	0	0	1,142	15	2,660	11	3,803	9
1985. . .	0	0	0	100	527	17	1,839	13	2,366	11
1986. . .	0	0	1	100	921	13	2,096	23	3,018	16
1987. . .	0	0	12	71	1,280	14	1,577	8	2,870	8
1988. . .	0	0	1	49	939	12	3,356	7	4,296	6
1989. . .	0	0	5	91	714	18	3,128	9	3,847	8
1990. . .	0	0	2	93	860	10	2,071	11	2,933	8
1991. . .	0	0	1	74	1,270	9	2,240	10	3,510	7
1992. . .	0	0	10	65	1,535	8	4,389	5	5,933	4
1993. . .	0	0	1	74	1,263	14	4,329	5	5,593	5
1994. . .	0	0	4	78	1,715	8	2,663	5	4,383	5
1995. . .	0	0	14	42	1,538	8	3,552	6	5,118	5
1996. . .	0	0	2	59	944	6	2,593	5	3,542	4

YEAR	SOUTHERN FLOUNDER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	0	0	0	0	122	30	740	20	862	18
1982. . .	0	0	158	56	620	54	1,620	19	2,398	19
1983. . .	0	0	0	0	428	14	2,305	31	2,733	26
1984. . .	0	0	1	100	444	10	602	18	1,048	11
1985. . .	0	0	3	62	610	12	659	18	1,272	11
1986. . .	0	0	10	33	489	13	2,499	18	2,998	15
1987. . .	0	0	0	0	623	39	389	10	1,013	24
1988. . .	0	0	25	49	359	10	953	14	1,337	10
1989. . .	0	0	2	65	403	14	630	29	1,035	18
1990. . .	0	0	0	0	406	10	1,168	17	1,574	13
1991. . .	0	0	2	59	432	8	839	9	1,274	6
1992. . .	0	0	30	48	501	6	616	7	1,148	5
1993. . .	0	0	2	73	509	6	572	8	1,083	5
1994. . .	0	0	0	0	830	6	539	7	1,369	4
1995. . .	0	0	0	0	740	7	706	6	1,446	5
1996. . .	0	0	1	59	454	7	738	7	1,192	5

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

43

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	SPANISH MACKEREL								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	4	100	0	0	806	18	1,643	15	2,454	11
1982. . .	0	0	0	0	896	29	3,099	18	3,995	16
1983. . .	0	0	0	0	135	24	3,307	24	3,442	23
1984. . .	0	0	0	0	976	31	819	16	1,795	18
1985. . .	0	0	0	0	526	20	1,126	11	1,652	10
1986. . .	0	0	9	59	1,108	16	10,388	12	11,505	11
1987. . .	0	0	25	45	1,065	7	2,192	8	3,281	6
1988. . .	0	0	102	38	1,697	6	2,122	8	3,921	5
1989. . .	0	100	107	24	1,244	8	1,579	7	2,930	5
1990. . .	0	85	91	21	1,299	6	3,665	9	5,056	7
1991. . .	12	31	178	14	1,672	5	2,924	9	4,786	6
1992. . .	1	100	106	16	1,474	4	3,994	5	5,575	4
1993. . .	1	62	197	14	949	6	2,506	6	3,653	4
1994. . .	0	0	341	13	1,502	6	2,007	5	3,850	4
1995. . .	0	0	147	23	847	6	1,574	9	2,568	6
1996. . .	0	0	100	35	1,069	6	1,818	7	2,988	5

YEAR	SPOT								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	0	0	22,965	17	6,398	18	188	34	29,551	13
1982. . .	0	0	12,137	11	7,597	9	154	26	19,888	8
1983. . .	0	0	17,562	17	7,504	13	411	66	25,477	13
1984. . .	0	0	6,190	10	5,691	12	20	60	11,901	8
1985. . .	0	0	9,361	7	13,201	11	41	52	22,603	7
1986. . .	0	0	13,095	7	6,067	14	179	40	19,341	7
1987. . .	0	0	9,031	7	3,866	7	123	28	13,021	5
1988. . .	0	0	4,252	11	6,464	11	99	41	10,814	8
1989. . .	0	0	8,211	5	4,793	7	52	66	13,057	4
1990. . .	0	0	13,822	6	3,124	7	424	52	17,371	5
1991. . .	0	0	20,205	6	4,425	6	413	42	25,043	5
1992. . .	0	0	10,698	9	4,047	6	229	39	14,974	6
1993. . .	0	0	7,713	8	5,562	7	988	33	14,263	6
1994. . .	0	0	8,815	5	9,449	6	227	33	18,491	4
1995. . .	0	0	5,343	8	6,039	6	185	29	11,567	5
1996. . .	0	0	2,668	10	4,630	9	66	27	7,364	7

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	SPOTTED SEATROUT								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	0	0	0	0	1,068	21	5,048	12	6,116	11
1982. . .	0	0	0	0	1,812	20	12,843	9	14,654	8
1983. . .	0	0	0	0	1,614	14	13,109	9	14,723	8
1984. . .	0	0	0	0	1,168	11	11,434	11	12,602	10
1985. . .	0	0	0	0	1,843	13	9,501	10	11,344	9
1986. . .	0	0	132	19	2,061	10	24,475	15	26,668	13
1987. . .	0	0	77	41	2,382	8	19,310	4	21,768	4
1988. . .	0	0	485	19	2,264	9	19,276	3	22,026	3
1989. . .	0	0	283	15	1,494	7	18,814	5	20,591	4
1990. . .	0	0	117	23	1,420	10	11,862	4	13,399	4
1991. . .	0	0	150	16	3,726	7	26,054	4	29,931	4
1992. . .	0	0	55	20	2,262	6	19,986	3	22,304	3
1993. . .	0	0	176	16	2,336	5	19,026	3	21,538	3
1994. . .	0	0	425	11	2,319	6	19,438	3	22,181	3
1995. . .	0	0	579	19	3,425	5	20,610	3	24,615	3
1996. . .	0	0	304	19	1,976	5	18,282	3	20,563	3

YEAR	STRIPED BASS								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	67	23	244	18	557	57	0	100	869	37
1982. . .	790	51	211	24	0	0	48	54	1,048	39
1983. . .	135	24	548	28	12	70	0	0	695	22
1984. . .	227	37	310	18	7	58	8	58	553	18
1985. . .	255	28	253	22	46	48	35	49	590	16
1986. . .	494	35	602	23	15	47	32	34	1,142	20
1987. . .	268	17	484	20	1	42	7	63	760	14
1988. . .	299	13	776	37	23	28	35	32	1,133	26
1989. . .	401	10	837	27	4	50	15	44	1,257	18
1990. . .	559	10	1,257	11	0	0	157	26	1,974	8
1991. . .	902	16	2,421	11	12	75	97	24	3,432	9
1992. . .	1,341	8	2,326	8	11	56	162	22	3,840	6
1993. . .	1,692	9	3,080	9	13	40	15	25	4,900	6
1994. . .	3,243	7	5,241	9	22	23	15	34	8,636	6
1995. . .	5,190	7	5,405	8	63	13	30	30	10,839	5
1996. . .	6,799	8	6,987	7	297	9	18	24	14,101	5

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

45

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	SUMMER FLOUNDER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	351	23	12,286	8	966	20	0	0	13,603	8
1982. . .	1,788	13	19,256	32	2,547	14	0	0	23,591	26
1983. . .	1,240	17	29,435	8	1,435	17	0	0	32,110	7
1984. . .	1,003	13	26,729	7	2,167	22	0	0	29,900	6
1985. . .	430	31	11,975	12	1,121	16	0	0	13,526	10
1986. . .	4,072	16	19,946	6	1,289	26	0	0	25,316	5
1987. . .	945	13	19,450	4	686	14	0	0	21,082	4
1988. . .	577	11	15,089	4	1,556	11	0	0	17,223	3
1989. . .	179	12	1,980	6	534	11	0	0	2,694	5
1990. . .	213	13	7,613	4	1,288	9	0	0	9,114	3
1991. . .	278	10	14,859	4	1,074	6	0	0	16,211	4
1992. . .	430	9	11,054	4	435	9	0	0	11,918	3
1993. . .	551	9	21,815	4	553	7	0	0	22,919	4
1994. . .	1,019	7	16,317	4	404	7	0	0	17,741	3
1995. . .	833	9	15,244	4	162	9	0	0	16,239	4
1996. . .	1,426	7	17,981	3	394	7	0	0	19,801	3
YEAR	TAUTOG								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- NUMBERS IN THOUSANDS -----									
1981. . .	594	24	1,444	19	12	48	0	0	2,051	15
1982. . .	1,545	14	1,719	13	15	76	0	0	3,279	9
1983. . .	1,358	12	1,978	14	38	67	0	0	3,375	9
1984. . .	1,371	11	1,394	13	0	0	0	0	2,764	9
1985. . .	493	15	2,723	15	9	61	0	0	3,224	13
1986. . .	3,457	11	4,655	19	14	70	0	0	8,126	12
1987. . .	1,312	14	3,416	11	4	41	0	0	4,732	9
1988. . .	1,485	11	2,782	11	4	53	0	0	4,272	8
1989. . .	870	9	2,709	7	16	23	0	0	3,594	6
1990. . .	625	8	3,090	6	7	34	0	0	3,737	5
1991. . .	977	9	4,203	5	7	44	0	0	5,187	5
1992. . .	1,241	10	2,945	7	9	30	0	0	4,195	6
1993. . .	718	8	3,491	7	5	22	0	0	4,215	6
1994. . .	729	10	1,921	8	3	32	0	0	2,653	7
1995. . .	583	11	3,228	8	4	31	0	0	3,816	7
1996. . .	547	9	1,726	8	7	31	0	0	2,279	6

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.
NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	VERMILION SNAPPER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . . .	0	0	0	0	20	38	132	20	151	18
1982. . . .	0	0	0	0	351	30	518	20	869	17
1983. . . .	0	0	0	0	319	39	137	16	456	28
1984. . . .	0	0	0	0	267	19	193	22	460	14
1985. . . .	0	0	0	0	676	26	352	33	1,028	21
1986. . . .	0	0	0	0	56	32	658	22	714	20
1987. . . .	0	0	0	0	130	36	700	33	831	28
1988. . . .	0	0	0	0	150	23	933	14	1,083	12
1989. . . .	0	0	0	0	294	20	568	17	861	13
1990. . . .	0	0	0	0	190	30	593	20	783	17
1991. . . .	0	0	0	0	213	25	1,020	15	1,233	13
1992. . . .	0	0	0	0	138	19	812	8	950	8
1993. . . .	0	0	0	0	139	17	1,090	8	1,228	7
1994. . . .	0	0	0	0	119	13	706	9	826	8
1995. . . .	0	0	0	0	171	23	1,029	8	1,200	8
1996. . . .	0	0	0	0	110	18	357	9	467	8
	WEAKFISH									
YEAR	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)		TOTAL	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . . .	46	31	9,341	35	243	33	0	0	9,629	34
1982. . . .	30	49	1,709	16	305	33	0	0	2,046	14
1983. . . .	84	52	5,095	14	737	21	0	0	5,916	12
1984. . . .	9	65	2,744	14	1,016	29	0	0	3,769	13
1985. . . .	20	55	2,422	10	334	29	0	0	2,776	9
1986. . . .	12	54	9,745	8	1,217	21	0	0	10,974	7
1987. . . .	1	59	4,915	11	804	17	0	0	5,720	10
1988. . . .	1	100	5,796	12	650	15	0	0	6,446	11
1989. . . .	0	0	1,292	9	382	12	0	0	1,675	7
1990. . . .	0	63	1,472	6	199	15	0	0	1,672	6
1991. . . .	21	38	2,253	8	328	18	0	0	2,601	7
1992. . . .	10	65	1,456	8	201	11	0	0	1,668	7
1993. . . .	2	43	1,828	7	388	10	0	0	2,219	6
1994. . . .	1	100	4,290	6	638	9	0	0	4,929	5
1995. . . .	2	53	5,359	6	378	10	0	0	5,739	5
1996. . . .	1	53	7,250	5	343	10	0	0	7,594	5

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE --EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

47

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (WITH RELEASED ALIVE) WITH PSE (%) BY
MARINE RECREATIONAL ANGLERS, BY SPECIES, SUB-REGION, 1981-1996 FOR THE
ATLANTIC AND GULF COASTS

YEAR	WINTER FLOUNDER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	7,740	12	9,719	11	0	0	0	0	17,459	8
1982. . .	11,531	28	7,055	10	0	0	0	0	18,587	18
1983. . .	5,027	9	8,134	11	1	100	0	0	13,163	8
1984. . .	4,854	9	15,032	11	0	0	0	0	19,886	8
1985. . .	6,953	12	14,612	18	0	0	0	0	21,566	13
1986. . .	4,702	20	5,582	7	0	0	0	0	10,284	10
1987. . .	4,980	12	7,289	10	0	0	0	0	12,269	8
1988. . .	2,932	13	8,186	10	0	0	0	0	11,118	8
1989. . .	3,835	25	4,233	29	0	0	0	0	8,068	19
1990. . .	1,816	11	2,816	7	0	0	0	0	4,632	6
1991. . .	849	11	3,713	10	0	0	0	0	4,562	9
1992. . .	413	10	1,131	10	0	0	0	0	1,544	8
1993. . .	651	9	2,930	23	0	0	0	0	3,582	19
1994. . .	486	9	1,814	13	0	0	0	0	2,300	11
1995. . .	473	14	1,851	10	0	0	0	0	2,324	9
1996. . .	400	10	2,514	14	0	0	0	0	2,913	12

YEAR	ALL FISHES								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----NUMBERS IN THOUSANDS-----									
1981. . .	36,982	5	100,820	7	44,482	5	87,391	8	269,674	4
1982. . .	46,749	8	81,150	9	64,150	6	113,332	3	305,381	3
1983. . .	35,200	8	125,023	4	62,990	3	146,166	4	369,379	2
1984. . .	24,583	4	101,110	3	59,767	3	133,865	4	319,325	2
1985. . .	41,080	8	90,846	4	67,175	5	101,201	5	300,302	3
1986. . .	49,886	5	153,940	4	59,416	5	144,077	3	407,319	2
1987. . .	34,294	5	99,922	3	50,300	3	101,561	2	286,078	2
1988. . .	25,723	6	77,895	3	56,083	3	130,954	2	290,654	1
1989. . .	24,575	5	64,578	3	46,053	2	113,907	3	249,113	2
1990. . .	18,654	3	84,593	2	40,779	2	106,377	3	250,402	2
1991. . .	26,689	4	125,999	2	54,952	2	177,341	3	384,980	1
1992. . .	17,738	4	75,026	2	54,094	2	145,025	2	291,884	1
1993. . .	20,991	3	97,574	2	50,887	2	147,332	2	316,784	1
1994. . .	25,880	8	94,945	2	72,173	1	148,856	3	341,854	1
1995. . .	21,983	5	88,522	2	65,240	1	135,781	3	311,526	1
1996. . .	23,427	4	86,419	2	51,257	2	118,625	2	279,728	1

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	ATLANTIC COD								TOTAL	
	NORTH ATLANTIC		MID-ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	15,182	22	2,542	16	0	0	0	0	17,725	19
1982. . .	12,464	26	9,070	34	0	0	0	0	21,534	21
1983. . .	13,112	22	1,472	38	0	0	0	0	14,584	20
1984. . .	5,425	12	515	26	0	0	0	0	5,940	11
1985. . .	22,525	58	554	26	0	0	0	0	23,078	56
1986. . .	7,237	34	290	22	0	0	0	0	7,527	33
1987. . .	8,135	20	852	26	0	0	0	0	8,987	18
1988. . .	8,186	20	3,919	22	0	0	0	0	12,105	15
1989. . .	5,155	12	1,955	21	0	0	0	0	7,110	10
1990. . .	6,790	17	1,121	18	0	0	0	0	7,911	15
1991. . .	8,844	17	463	23	0	0	0	0	9,307	17
1992. . .	1,906	18	430	26	0	0	0	0	2,335	16
1993. . .	5,190	17	1,949	20	0	0	0	0	7,139	14
1994. . .	4,083	25	203	27	0	0	0	0	4,285	24
1995. . .	3,437	20	1,164	17	0	0	0	0	4,601	16
1996. . .	3,260	21	72	27	0	0	0	0	3,332	20

YEAR	ATLANTIC CROAKER								TOTAL	
	NORTH ATLANTIC		MID-ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	538	19	809	17	1,735	19	3,082	12
1982. . .	0	0	526	58	1,132	17	3,143	20	4,800	15
1983. . .	0	0	518	25	946	21	1,828	14	3,292	11
1984. . .	0	0	721	17	2,684	19	1,419	18	4,824	12
1985. . .	0	0	861	13	1,076	15	1,228	15	3,164	8
1986. . .	0	0	2,153	11	3,105	29	2,806	14	8,064	13
1987. . .	0	0	1,498	9	1,437	18	1,193	22	4,128	9
1988. . .	0	0	3,318	13	1,327	14	1,643	39	6,288	13
1989. . .	0	0	1,349	8	1,029	10	449	19	2,827	6
1990. . .	0	0	913	13	804	10	771	29	2,488	10
1991. . .	0	0	1,860	11	688	11	1,888	44	4,437	19
1992. . .	0	0	1,826	10	802	7	569	13	3,197	7
1993. . .	0	0	2,481	9	537	8	593	10	3,611	6
1994. . .	0	0	4,019	6	851	9	602	17	5,472	5
1995. . .	0	0	3,374	8	661	18	392	18	4,426	7
1996. . .	0	0	3,815	8	413	9	433	12	4,661	7

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE --EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

49

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	ATLANTIC MACKEREL								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	1,911	22	5,166	21	0	0	0	0	7,077	16
1982. . .	844	31	1,781	28	0	0	0	0	2,625	22
1983. . .	1,093	19	5,487	34	38	72	0	0	6,618	28
1984. . .	1,726	17	3,387	27	0	0	0	0	5,113	19
1985. . .	4,197	31	1,784	76	0	0	0	0	5,982	32
1986. . .	2,128	32	7,183	31	0	0	0	0	9,311	25
1987. . .	2,623	23	6,265	23	0	0	0	0	8,889	17
1988. . .	5,669	21	1,511	42	18	0	0	0	7,198	18
1989. . .	2,444	12	1,495	24	0	0	0	0	3,939	12
1990. . .	2,638	14	1,478	26	0	0	0	0	4,116	13
1991. . .	3,576	17	2,080	21	0	0	0	0	5,657	13
1992. . .	530	14	96	35	0	0	0	0	629	13
1993. . .	1,255	12	66	44	0	0	0	0	1,326	12
1994. . .	3,675	16	85	52	0	0	0	0	3,760	16
1995. . .	1,847	13	907	36	0	0	0	0	2,754	15
1996. . .	2,699	12	422	25	2	59	0	0	3,123	11

YEAR	BLACK DRUM								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	95	0	122	21	1,065	18	1,283	15
1982. . .	0	0	0	0	276	26	2,600	18	2,876	16
1983. . .	0	0	1,378	21	397	22	3,020	19	4,796	14
1984. . .	0	0	39	0	586	23	1,385	22	2,011	16
1985. . .	0	0	345	36	572	21	1,506	23	2,424	16
1986. . .	0	0	722	20	469	21	2,817	19	4,008	14
1987. . .	0	0	463	32	388	17	3,799	35	4,651	29
1988. . .	0	0	36	0	428	20	2,222	12	2,686	11
1989. . .	0	0	247	29	222	37	1,903	16	2,372	14
1990. . .	0	0	11	79	181	36	832	22	1,023	19
1991. . .	0	0	84	1	549	20	1,219	22	1,852	16
1992. . .	0	0	238	39	566	15	1,549	8	2,352	8
1993. . .	0	0	2	42	428	13	1,478	13	1,908	11
1994. . .	0	0	3	74	693	13	1,177	20	1,873	13
1995. . .	0	0	155	42	658	16	1,307	9	2,121	8
1996. . .	0	0	99	67	568	13	1,159	8	1,826	8

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	BLACK SEA BASS								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	143	15	1,060	16	759	19	265	75	2,229	13
1982. . .	319	26	9,568	36	1,872	17	404	20	12,163	28
1983. . .	294	23	3,760	21	907	21	128	26	5,088	16
1984. . .	66	31	1,165	14	2,333	16	197	24	3,761	11
1985. . .	48	37	2,036	14	1,328	16	1,834	34	5,246	14
1986. . .	639	22	11,745	22	475	14	1,177	19	14,037	18
1987. . .	141	39	1,777	14	1,043	14	812	19	3,773	9
1988. . .	245	28	2,610	16	1,472	33	1,361	12	5,687	12
1989. . .	98	20	3,182	7	1,155	21	1,765	14	6,200	7
1990. . .	47	24	2,705	9	546	21	607	18	3,905	7
1991. . .	63	42	4,070	11	853	15	488	14	5,475	8
1992. . .	30	18	2,570	8	727	10	417	10	3,744	6
1993. . .	49	16	4,776	22	560	16	509	16	5,894	18
1994. . .	37	53	2,890	13	623	17	531	11	4,081	10
1995. . .	64	27	6,099	14	588	12	288	11	7,040	12
1996. . .	85	19	5,812	15	654	13	249	11	6,801	13

YEAR	BLUEFISH								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	29,632	22	59,148	7	6,507	21	580	34	95,867	8
1982. . .	41,226	19	34,978	13	6,802	18	418	27	83,424	11
1983. . .	33,988	22	38,431	15	16,703	32	3,589	32	92,711	12
1984. . .	18,985	13	38,066	12	10,402	17	880	78	68,333	8
1985. . .	17,205	21	28,339	13	6,970	22	665	32	53,180	10
1986. . .	38,718	9	48,710	10	5,459	13	856	25	93,742	6
1987. . .	20,930	10	48,407	6	7,316	12	551	18	77,204	5
1988. . .	11,726	7	27,996	7	8,501	14	1,171	13	49,393	5
1989. . .	11,332	10	23,183	5	4,744	13	1,724	25	40,984	5
1990. . .	10,487	9	16,697	5	3,372	8	356	18	30,913	4
1991. . .	12,199	8	17,672	6	3,127	10	969	28	33,966	4
1992. . .	8,414	8	13,365	6	2,496	10	506	15	24,782	4
1993. . .	9,209	6	8,735	7	2,348	7	349	22	20,641	4
1994. . .	7,996	8	6,284	8	1,261	6	451	21	15,992	5
1995. . .	5,992	8	6,973	9	1,209	9	600	26	14,775	5
1996. . .	6,644	14	7,050	10	1,040	8	354	14	15,089	8

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE --EST = ESTIMATE PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

51

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	DOLPHIN								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	0	0	4,918	23	550	20	5,469	21
1982. . .	0	0	1	0	3,788	14	3,249	38	7,038	19
1983. . .	0	0	51	38	6,152	17	665	24	6,868	15
1984. . .	0	0	0	0	3,423	19	983	30	4,406	16
1985. . .	0	0	79	31	5,537	23	1,280	30	6,895	20
1986. . .	0	0	183	37	6,784	17	2,984	22	9,952	14
1987. . .	0	0	73	32	4,350	11	2,739	22	7,162	11
1988. . .	1	0	145	0	6,302	14	1,158	18	7,606	12
1989. . .	0	0	806	24	9,810	9	2,882	20	13,499	8
1990. . .	0	0	349	32	7,331	13	5,096	30	12,777	14
1991. . .	8	0	555	18	11,198	8	5,448	15	17,209	7
1992. . .	0	0	692	29	5,154	8	3,945	23	9,791	10
1993. . .	143	21	1,783	40	5,368	6	3,524	13	10,818	9
1994. . .	0	0	393	30	9,619	8	2,765	15	12,778	7
1995. . .	0	0	754	27	12,142	5	6,896	9	19,792	5
1996. . .	0	0	522	49	7,387	6	4,640	12	12,549	6

GAG										TOTAL	
YEAR	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)				
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	
	----- THOUSANDS OF POUNDS -----										
1981. . .	0	0	0	0	86	50	332	22	418	20	
1982. . .	0	0	0	0	3	0	1,308	20	1,311	20	
1983. . .	0	0	0	0	91	59	1,483	18	1,574	17	
1984. . .	0	0	0	0	406	32	2,642	62	3,048	54	
1985. . .	0	0	0	0	161	36	1,667	22	1,828	21	
1986. . .	0	0	0	0	45	49	627	22	672	21	
1987. . .	0	0	0	0	504	36	978	15	1,482	16	
1988. . .	0	0	0	0	222	22	1,410	18	1,632	16	
1989. . .	0	0	0	0	430	26	960	16	1,391	14	
1990. . .	0	0	0	0	349	46	1,432	28	1,781	24	
1991. . .	0	0	0	0	220	23	2,114	16	2,334	15	
1992. . .	0	0	0	0	476	16	1,729	9	2,205	8	
1993. . .	0	0	0	0	544	22	2,282	8	2,827	8	
1994. . .	0	0	0	0	561	21	1,947	9	2,507	9	
1995. . .	0	0	0	0	303	19	2,628	8	2,930	8	
1996. . .	0	0	0	0	278	21	1,964	8	2,242	8	

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.
 NOTE --EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	GRAY SNAPPER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----THOUSANDS OF POUNDS-----									
1981.	0	0	0	0	601	52	671	27	1,272	28
1982.	0	0	0	0	140	20	844	17	983	15
1983.	0	0	0	0	282	24	945	21	1,227	17
1984.	0	0	0	0	219	20	3,623	30	3,843	28
1985.	0	0	0	0	733	30	1,538	24	2,272	19
1986.	0	0	0	0	172	20	1,148	17	1,320	15
1987.	0	0	0	0	281	22	1,161	37	1,442	30
1988.	0	0	0	0	342	15	746	16	1,089	12
1989.	0	0	0	0	234	15	1,356	12	1,590	11
1990.	0	0	0	0	245	19	1,144	19	1,389	16
1991.	0	0	0	0	366	16	1,690	12	2,056	10
1992.	0	0	0	0	369	12	1,091	7	1,460	6
1993.	0	0	0	0	245	13	1,124	8	1,369	7
1994.	0	0	0	0	281	10	1,136	9	1,417	8
1995.	0	0	0	0	320	14	1,058	8	1,378	7
1996.	0	0	0	0	231	13	955	8	1,187	7

YEAR	GRAY TRIGGERFISH								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	-----THOUSANDS OF POUNDS-----									
1981.	0	0	0	0	82	38	648	39	730	35
1982.	0	0	1	0	139	26	1,010	24	1,151	22
1983.	0	0	12	72	64	43	239	18	315	17
1984.	6	0	0	0	78	21	112	21	196	15
1985.	0	0	24	82	74	29	183	28	281	21
1986.	7	0	17	38	49	26	1,338	25	1,411	23
1987.	0	0	69	40	36	25	1,666	33	1,772	31
1988.	0	0	6	78	72	24	1,366	15	1,445	14
1989.	3	0	119	34	257	35	1,422	15	1,800	13
1990.	0	0	52	23	208	28	2,095	18	2,355	16
1991.	3	53	137	26	165	21	2,121	14	2,426	13
1992.	0	0	32	25	273	17	1,325	9	1,631	8
1993.	1	0	106	25	177	17	1,182	11	1,465	9
1994.	2	78	39	32	142	13	1,165	11	1,348	10
1995.	0	0	65	32	97	15	1,017	9	1,179	8
1996.	1	65	155	43	183	15	496	11	836	11

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

53

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	GREATER AMBERJACK								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	0	0	1,344	17	568	43	1,912	17
1982. . .	0	0	0	0	494	48	3,380	20	3,874	18
1983. . .	0	0	0	0	207	25	2,015	18	2,222	17
1984. . .	0	0	335	0	1,439	26	955	27	2,730	17
1985. . .	0	0	0	0	1,347	25	1,323	20	2,670	16
1986. . .	0	0	664	30	1,568	21	7,540	20	9,773	16
1987. . .	0	0	242	60	2,641	42	5,240	20	8,123	19
1988. . .	0	0	68	0	1,787	24	2,501	23	4,356	16
1989. . .	0	0	207	39	1,626	29	4,563	22	6,395	17
1990. . .	0	0	357	51	981	22	690	33	2,027	18
1991. . .	0	0	20	52	1,042	20	2,891	19	3,953	15
1992. . .	0	0	25	63	1,102	13	2,659	12	3,787	9
1993. . .	0	0	254	23	578	21	3,498	17	4,330	14
1994. . .	0	0	0	0	1,626	19	1,562	16	3,188	12
1995. . .	0	0	0	0	623	21	811	15	1,434	13
1996. . .	0	0	6	57	970	14	994	10	1,970	9

YEAR	KING MACKEREL								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	10	0	4,394	30	1,622	8	6,026	22
1982. . .	0	0	0	0	6,807	12	5,755	71	12,562	33
1983. . .	0	0	0	0	7,438	21	2,077	32	9,515	18
1984. . .	0	0	0	0	6,612	16	3,133	27	9,744	14
1985. . .	0	0	6	0	7,562	24	1,104	19	8,671	21
1986. . .	0	0	109	34	6,206	10	1,723	19	8,037	9
1987. . .	0	0	44	41	5,402	11	2,878	11	8,324	8
1988. . .	0	0	137	29	5,810	11	2,919	12	8,866	8
1989. . .	0	0	67	20	3,917	10	2,630	16	6,614	9
1990. . .	0	0	30	0	4,225	8	3,168	14	7,422	8
1991. . .	2	0	53	31	5,183	7	4,325	13	9,563	7
1992. . .	0	0	58	30	7,017	9	3,135	9	10,210	7
1993. . .	0	0	141	50	4,285	7	4,119	8	8,545	5
1994. . .	0	0	11	41	4,176	7	4,634	8	8,821	5
1995. . .	0	0	15	0	5,008	7	4,697	7	9,719	5
1996. . .	0	0	7	71	4,314	6	5,700	7	10,020	5

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	RED DRUM								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	352	60	409	38	3,127	14	3,888	13
1982. . .	0	0	0	0	911	20	6,415	18	7,326	16
1983. . .	0	0	54	44	1,075	16	6,878	13	8,008	11
1984. . .	0	0	1	0	2,615	41	6,879	15	9,496	15
1985. . .	0	0	0	0	2,203	32	5,435	14	7,638	13
1986. . .	0	0	900	57	1,065	13	5,189	9	7,154	10
1987. . .	0	0	44	90	1,592	12	4,569	11	6,206	9
1988. . .	0	0	9	71	1,900	16	2,932	8	4,841	8
1989. . .	0	0	30	34	885	12	5,741	8	6,655	7
1990. . .	0	0	3	100	1,355	29	4,053	9	5,411	10
1991. . .	0	0	36	32	1,247	12	5,362	9	6,645	8
1992. . .	0	0	55	44	1,116	10	7,801	4	8,972	4
1993. . .	0	0	46	11	1,168	8	8,710	5	9,924	5
1994. . .	0	0	4	0	1,439	9	7,528	5	8,970	4
1995. . .	0	0	66	0	1,661	11	11,939	4	13,665	4
1996. . .	0	0	2	0	1,333	8	11,708	5	13,043	4

YEAR	RED SNAPPER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	0	0	383	33	3,999	26	4,382	24
1982. . .	0	0	0	0	158	27	2,198	19	2,356	18
1983. . .	0	0	0	0	199	27	4,128	20	4,327	20
1984. . .	0	0	0	0	454	17	1,426	23	1,880	18
1985. . .	0	0	0	0	1,336	29	2,457	22	3,792	18
1986. . .	0	0	0	0	114	27	2,425	17	2,538	17
1987. . .	0	0	0	0	134	20	1,647	27	1,780	25
1988. . .	0	0	0	0	225	23	1,899	22	2,124	19
1989. . .	0	0	0	0	269	28	1,814	22	2,083	19
1990. . .	0	0	0	0	115	8	1,060	16	1,175	14
1991. . .	0	0	0	0	132	34	1,503	13	1,635	13
1992. . .	0	0	0	0	618	38	2,613	8	3,231	10
1993. . .	0	0	0	0	142	27	4,136	7	4,278	7
1994. . .	0	0	0	0	201	36	3,734	8	3,935	8
1995. . .	0	0	0	0	67	20	2,876	8	2,943	8
1996. . .	0	0	0	0	102	35	2,617	8	2,719	8

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE.--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

55

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	SAND SEATROUT								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	0	0	0	0	4,073	41	4,073	41
1982. . .	0	0	0	0	0	0	1,249	18	1,249	18
1983. . .	0	0	0	0	0	0	2,486	22	2,486	22
1984. . .	0	0	0	0	0	0	3,032	27	3,032	27
1985. . .	0	0	0	0	0	0	5,094	20	5,094	20
1986. . .	0	0	0	0	0	0	3,047	9	3,047	9
1987. . .	0	0	0	0	0	0	2,014	10	2,014	10
1988. . .	0	0	0	0	0	0	1,561	11	1,561	11
1989. . .	0	0	0	0	0	0	1,455	18	1,455	18
1990. . .	0	0	0	0	0	0	1,835	14	1,835	14
1991. . .	0	0	0	0	0	0	2,709	13	2,709	13
1992. . .	0	0	0	0	0	0	1,643	10	1,643	10
1993. . .	0	0	0	0	0	0	2,090	10	2,090	10
1994. . .	0	0	0	0	0	0	2,884	6	2,884	6
1995. . .	0	0	0	0	0	0	2,002	8	2,002	8
1996. . .	0	0	0	0	0	0	1,889	8	1,889	8

YEAR	SCUP								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	2,586	15	3,225	44	3	1	0	0	5,815	25
1982. . .	4,281	14	924	24	2	62	0	0	5,206	12
1983. . .	2,502	14	3,750	21	0	69	0	0	6,252	14
1984. . .	1,185	16	1,230	27	0	0	0	0	2,416	16
1985. . .	3,243	19	2,850	18	3	78	0	0	6,096	13
1986. . .	7,525	13	4,080	14	5	0	0	0	11,610	10
1987. . .	4,853	17	1,343	20	1	0	0	0	6,197	14
1988. . .	3,383	11	883	25	1	9	0	0	4,268	10
1989. . .	3,564	11	1,990	9	4	21	0	0	5,558	8
1990. . .	1,746	14	2,394	9	1	0	0	0	4,140	8
1991. . .	5,003	8	3,082	9	3	35	0	0	8,088	6
1992. . .	2,300	10	2,102	11	10	21	0	0	4,412	8
1993. . .	2,275	13	920	12	4	18	0	0	3,198	10
1994. . .	1,542	16	1,076	16	10	57	0	0	2,629	12
1995. . .	1,013	13	299	29	1	54	0	0	1,313	12
1996. . .	1,618	10	621	14	0	0	0	0	2,239	8

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.
 NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	SHEEPSHEAD								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . . .	0	0	17	0	480	22	1,031	24	1,528	18
1982. . . .	0	0	0	0	1,875	17	1,962	13	3,837	11
1983. . . .	0	0	2	0	735	21	3,288	20	4,026	17
1984. . . .	0	0	0	0	1,857	14	2,812	15	4,669	10
1985. . . .	0	0	0	0	888	23	2,939	23	3,827	18
1986. . . .	0	0	0	0	1,402	14	2,279	30	3,680	19
1987. . . .	0	0	76	73	1,891	16	1,762	12	3,730	10
1988. . . .	0	0	2	0	1,569	13	4,382	10	5,953	8
1989. . . .	0	0	0	0	921	12	4,953	12	5,874	10
1990. . . .	0	0	0	0	1,243	13	2,478	14	3,721	10
1991. . . .	0	0	2	0	2,019	11	3,068	14	5,089	10
1992. . . .	0	0	0	0	2,466	10	4,897	6	7,363	5
1993. . . .	0	0	0	0	1,879	13	4,577	6	6,456	6
1994. . . .	0	0	0	0	2,902	10	2,734	8	5,636	6
1995. . . .	0	0	9	77	2,597	11	4,901	6	7,507	6
1996. . . .	0	0	5	58	1,702	8	3,348	6	5,055	5

YEAR	SOUTHERN FLOUNDER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . . .	0	0	0	0	160	30	822	22	982	19
1982. . . .	0	0	106	72	827	59	827	15	1,760	29
1983. . . .	0	0	0	0	393	17	3,055	39	3,448	35
1984. . . .	0	0	3	0	421	12	359	15	783	9
1985. . . .	0	0	4	65	560	13	837	22	1,401	14
1986. . . .	0	0	1	0	538	15	2,619	21	3,159	18
1987. . . .	0	0	0	0	289	11	415	12	706	8
1988. . . .	0	0	12	36	475	14	861	10	1,348	8
1989. . . .	0	0	0	0	522	21	515	18	1,038	14
1990. . . .	0	0	0	0	503	12	855	15	1,358	11
1991. . . .	0	0	2	0	645	12	932	10	1,579	7
1992. . . .	0	0	4	60	818	9	814	8	1,637	6
1993. . . .	0	0	0	0	693	8	655	9	1,348	6
1994. . . .	0	0	0	0	1,132	7	664	8	1,796	5
1995. . . .	0	0	0	0	924	9	715	8	1,639	6
1996. . . .	0	0	1	0	478	11	780	8	1,258	7

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA
 NOTE --EST = ESTIMATE PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

57

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	SPANISH MACKEREL								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	0	0	1,290	20	1,733	15	3,023	12
1982. . .	0	0	0	0	1,209	24	2,794	20	4,004	16
1983. . .	0	0	0	0	227	29	2,646	16	2,873	15
1984. . .	0	0	0	0	1,398	31	1,061	22	2,458	20
1985. . .	0	0	0	0	698	21	1,197	12	1,895	11
1986. . .	0	0	13	58	1,195	14	6,789	15	7,997	13
1987. . .	0	0	19	48	1,685	7	2,925	10	4,630	7
1988. . .	0	0	160	39	2,939	7	2,052	9	5,151	6
1989. . .	1	0	120	23	1,386	7	1,560	8	3,066	6
1990. . .	0	0	95	24	1,630	7	2,367	8	4,092	6
1991. . .	44	34	189	15	2,240	7	2,520	8	4,992	5
1992. . .	0	0	107	17	1,841	6	3,423	6	5,371	4
1993. . .	1	0	175	18	1,262	7	1,941	7	3,378	5
1994. . .	0	0	214	14	1,158	6	1,762	6	3,135	4
1995. . .	0	0	145	29	672	8	1,630	9	2,447	6
1996. . .	0	0	81	46	986	9	1,637	7	2,704	6
YEAR	SPOT								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	5,216	15	1,700	18	42	53	6,957	12
1982. . .	0	0	2,324	17	1,662	10	16	27	4,002	11
1983. . .	0	0	2,879	21	2,119	19	30	48	5,029	15
1984. . .	0	0	776	18	1,024	13	6	5	1,806	11
1985. . .	0	0	2,156	9	3,788	14	7	69	5,952	9
1986. . .	0	0	2,352	10	1,041	16	33	29	3,426	8
1987. . .	0	0	2,882	10	965	9	54	39	3,901	8
1988. . .	0	0	888	13	1,634	14	30	62	2,553	10
1989. . .	0	0	2,045	7	1,249	8	0	0	3,294	6
1990. . .	0	0	2,912	9	672	9	54	83	3,639	7
1991. . .	0	0	3,432	8	1,082	8	26	56	4,540	7
1992. . .	0	0	3,048	11	976	8	43	47	4,067	9
1993. . .	0	0	1,591	11	1,780	7	108	56	3,479	7
1994. . .	0	0	1,956	6	2,372	8	55	42	4,383	5
1995. . .	0	0	1,571	10	1,536	7	50	42	3,158	6
1996. . .	0	0	832	12	1,214	12	5	51	2,051	9

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	SPOTTED SEATROUT								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . . .	0	0	0	0	1,184	33	4,652	14	5,836	13
1982. . . .	0	0	0	0	1,547	16	11,440	10	12,988	9
1983. . . .	0	0	0	0	1,343	16	11,161	11	12,505	10
1984. . . .	0	0	0	0	1,163	13	8,606	20	9,770	17
1985. . . .	0	0	0	0	2,065	14	6,471	12	8,536	10
1986. . . .	0	0	69	21	2,052	12	16,966	18	19,087	16
1987. . . .	0	0	61	31	2,334	10	11,865	5	14,260	5
1988. . . .	0	0	497	24	1,829	10	12,610	5	14,936	4
1989. . . .	0	0	297	15	1,474	9	12,798	8	14,569	7
1990. . . .	0	0	160	32	1,357	15	4,847	7	6,364	6
1991. . . .	0	0	157	19	3,085	10	12,052	6	15,294	5
1992. . . .	0	0	64	23	1,710	7	9,545	5	11,320	4
1993. . . .	0	0	214	22	1,554	7	8,295	5	10,064	4
1994. . . .	0	0	202	14	1,633	6	9,342	4	11,178	3
1995. . . .	0	0	178	18	2,030	8	10,361	5	12,569	4
1996. . . .	0	0	78	22	803	8	9,665	5	10,545	4

YEAR	STRIPED BASS								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . . .	215	28	931	26	807	53	0	0	1,953	25
1982. . . .	2,134	52	388	33	0	0	1	0	2,523	44
1983. . . .	596	31	2,087	71	15	99	0	0	2,698	55
1984. . . .	138	50	1,139	43	5	7	1	0	1,284	38
1985. . . .	407	54	414	36	25	50	3	0	849	31
1986. . . .	418	31	686	39	4	43	20	49	1,128	26
1987. . . .	356	31	499	20	2	40	5	59	862	17
1988. . . .	591	20	665	27	28	33	38	34	1,321	16
1989. . . .	470	22	262	26	8	0	1	0	742	17
1990. . . .	657	24	1,569	14	0	0	69	27	2,295	12
1991. . . .	1,128	17	2,513	11	4	0	62	28	3,706	9
1992. . . .	1,524	18	2,494	13	21	15	28	36	4,067	10
1993. . . .	1,846	10	3,803	12	16	38	1	0	5,666	9
1994. . . .	2,284	10	4,443	9	77	31	9	37	6,813	7
1995. . . .	2,657	8	8,365	9	237	15	5	17	11,264	7
1996. . . .	3,441	9	10,885	6	288	13	6	36	14,619	5

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA

NOTE --EST = ESTIMATE PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

59

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	SUMMER FLOUNDER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	389	34	9,221	9	488	24	0	0	10,098	8
1982. . .	2,310	16	14,314	32	1,640	23	0	0	18,264	25
1983. . .	1,322	17	26,100	8	586	21	0	0	28,008	7
1984. . .	900	16	16,559	8	1,378	29	0	0	18,837	8
1985. . .	744	34	10,883	12	863	21	0	0	12,490	11
1986. . .	5,880	19	10,817	9	1,177	44	0	0	17,885	9
1987. . .	1,338	20	10,634	10	257	11	0	0	12,228	9
1988. . .	712	12	13,302	4	644	9	0	0	14,658	4
1989. . .	316	17	2,559	7	301	13	0	0	3,176	6
1990. . .	235	21	4,376	5	531	11	0	0	5,142	4
1991. . .	356	14	7,370	4	432	16	0	0	8,158	4
1992. . .	430	13	6,459	5	267	8	0	0	7,157	4
1993. . .	552	11	7,812	5	479	7	0	0	8,844	4
1994. . .	980	9	7,886	4	481	7	0	0	9,347	4
1995. . .	858	11	4,394	5	251	23	0	0	5,503	5
1996. . .	1,232	8	8,777	4	407	7	0	0	10,416	3
YEAR	TAUTOG								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	1,698	26	2,417	24	1	0	0	0	4,116	18
1982. . .	4,615	15	3,707	14	16	67	0	0	8,338	10
1983. . .	2,911	14	2,818	19	21	67	0	0	5,751	12
1984. . .	3,277	16	2,104	20	0	0	0	0	5,381	12
1985. . .	1,077	16	3,221	17	7	65	0	0	4,305	14
1986. . .	10,744	14	6,159	13	4	60	0	0	16,906	10
1987. . .	3,365	17	5,515	12	8	0	0	0	8,889	10
1988. . .	3,478	18	5,819	17	5	33	0	0	9,302	13
1989. . .	2,413	11	3,935	9	31	35	0	0	6,379	7
1990. . .	1,485	11	3,669	9	3	31	0	0	5,156	7
1991. . .	2,459	11	5,622	7	25	54	0	0	8,105	6
1992. . .	3,374	14	4,285	10	13	35	0	0	7,671	8
1993. . .	1,673	10	4,244	11	10	64	0	0	5,927	8
1994. . .	1,119	14	2,346	19	3	0	0	0	3,468	13
1995. . .	959	16	3,641	10	3	33	0	0	4,604	9
1996. . .	918	13	2,336	13	12	31	0	0	3,266	10

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	VERMILION SNAPPER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	0	0	0	0	5	43	86	21	91	20
1982. . .	0	0	0	0	233	34	271	20	504	19
1983. . .	0	0	0	0	416	45	64	19	480	39
1984. . .	0	0	0	0	210	17	155	21	365	13
1985. . .	0	0	0	0	435	26	246	64	681	29
1986. . .	0	0	0	0	11	31	932	40	944	39
1987. . .	0	0	0	0	207	41	491	30	699	24
1988. . .	0	0	0	0	135	28	467	17	602	14
1989. . .	0	0	0	0	106	23	411	20	517	17
1990. . .	0	0	0	0	121	28	518	26	639	22
1991. . .	0	0	0	0	105	26	829	22	934	20
1992. . .	0	0	0	0	118	22	602	10	720	9
1993. . .	0	0	0	0	98	23	759	11	857	10
1994. . .	0	0	0	0	73	19	608	13	681	12
1995. . .	0	0	0	0	44	21	564	11	608	10
1996. . .	0	0	0	0	79	45	229	14	309	15

YEAR	WEAKFISH								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	281	33	15,724	16	99	27	0	0	16,105	16
1982. . .	155	50	7,792	16	339	43	0	0	8,285	15
1983. . .	624	57	10,403	13	703	21	0	0	11,731	12
1984. . .	28	68	6,424	23	562	47	0	0	7,014	21
1985. . .	149	57	5,025	11	315	28	0	0	5,489	11
1986. . .	102	54	9,464	10	575	19	0	0	10,142	9
1987. . .	4	79	5,957	16	789	23	0	0	6,750	14
1988. . .	0	0	5,881	12	450	14	0	0	6,332	11
1989. . .	0	0	1,912	9	265	14	0	0	2,177	8
1990. . .	1	63	1,215	9	131	14	0	0	1,347	8
1991. . .	0	0	1,919	8	212	20	0	0	2,131	7
1992. . .	21	110	1,258	9	120	16	0	0	1,399	9
1993. . .	7	59	887	11	209	13	0	0	1,102	9
1994. . .	0	0	1,471	11	324	11	0	0	1,796	10
1995. . .	0	0	1,689	8	163	18	0	0	1,852	7
1996. . .	0	0	2,849	7	102	10	0	0	2,951	7

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR

U.S. MARINE RECREATIONAL FISHERIES

61

ESTIMATED WEIGHT (LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	WINTER FLOUNDER								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	6,751	15	5,673	14	0	0	0	0	12,424	10
1982. . .	11,865	37	4,553	12	0	0	0	0	16,417	27
1983. . .	3,781	11	5,857	14	2	0	0	0	9,640	10
1984. . .	5,012	11	10,145	15	0	0	0	0	15,157	11
1985. . .	6,608	15	8,765	24	0	0	0	0	15,373	15
1986. . .	4,039	19	3,596	9	0	0	0	0	7,635	11
1987. . .	5,663	15	5,305	13	0	0	0	0	10,967	10
1988. . .	3,243	17	5,537	13	0	0	0	0	8,780	10
1989. . .	3,180	18	2,184	15	0	0	0	0	5,363	12
1990. . .	1,651	14	1,505	10	0	0	0	0	3,156	9
1991. . .	769	13	2,131	13	0	0	0	0	2,899	10
1992. . .	430	12	641	11	0	0	0	0	1,072	8
1993. . .	559	12	1,570	30	0	0	0	0	2,130	22
1994. . .	393	12	1,104	17	0	0	0	0	1,497	13
1995. . .	389	23	1,161	13	0	0	0	0	1,549	11
1996. . .	328	12	1,383	14	0	0	0	0	1,712	11
YEAR	ALL FISHES								TOTAL	
	NORTH ATLANTIC		MID ATLANTIC		SOUTH ATLANTIC		GULF OF MEXICO (1)			
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	----- THOUSANDS OF POUNDS -----									
1981. . .	68,790	11	118,575	5	37,873	7	52,978	6	278,215	4
1982. . .	85,706	11	105,417	8	48,533	4	75,703	7	315,360	4
1983. . .	68,382	12	124,645	6	65,202	10	80,920	5	339,150	4
1984. . .	39,631	7	100,531	6	50,050	5	71,753	7	261,966	3
1985. . .	59,426	23	79,398	7	59,956	7	65,446	5	264,227	6
1986. . .	81,972	6	135,525	5	53,561	5	96,564	5	367,623	3
1987. . .	55,168	6	116,717	4	51,555	5	66,536	4	289,976	2
1988. . .	39,726	6	85,891	4	54,851	4	70,845	3	251,314	2
1989. . .	33,100	5	76,967	4	46,353	3	66,904	3	223,324	2
1990. . .	28,887	8	56,797	4	35,772	4	51,548	4	173,004	2
1991. . .	35,631	6	65,186	3	47,656	3	79,768	3	228,241	2
1992. . .	21,169	5	47,334	3	44,967	3	68,931	2	182,401	2
1993. . .	24,298	5	55,082	4	37,346	2	68,519	2	185,244	2
1994. . .	23,915	6	45,859	3	50,089	3	63,572	2	183,436	1
1995. . .	19,788	6	58,870	8	50,444	2	73,055	2	202,157	3
1996. . .	21,286	6	55,744	3	43,757	3	64,567	2	185,354	2

(1) GULF OF MEXICO ESTIMATES DO NOT INCLUDE TEXAS DATA.
 NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%)
BY MARINE RECREATIONAL ANGLERS, BY SPECIES, 1993-1996 FOR THE PACIFIC COAST.

YEAR	BARRED SANDBASS		BARRED SURFPERCH		BLACK ROCKFISH		BLUE ROCKFISH		BOCACCIO	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- NUMBERS IN THOUSANDS -----										
1993. .	1,542	4	678	9	949	6	1,862	7	147	14
1994. .	1,487	5	385	11	693	7	544	7	179	14
1995. .	1,514	6	672	10	631	6	440	7	24	18
1996. .	1,487	4	542	11	731	7	520	7	53	16
YEAR	BROWN ROCKFISH		CABEZON		CALIFORNIA HALIBUT		CANARY ROCKFISH		CHILIPEPPER ROCKF.	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- NUMBERS IN THOUSANDS -----										
1993. .	154	9	109	7	347	7	231	7	46	25
1994. .	67	14	76	9	491	6	178	8	56	18
1995. .	80	11	85	11	924	6	201	10	28	26
1996. .	121	10	127	9	712	6	107	9	22	21
YEAR	COPPER ROCKFISH		CORBINA		GOPHER ROCKFISH		GRASS ROCKFISH		KELP BASS	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- NUMBERS IN THOUSANDS -----										
1993. .	156	9	17	18	299	10	32	13	2,610	5
1994. .	159	11	26	17	216	10	17	17	1,848	4
1995. .	77	10	57	17	92	12	15	18	1,599	6
1996. .	229	7	30	15	121	10	17	16	1,556	5
YEAR	KELP GREENLING		LINGCOD		PACIFIC BARRACUDA		PACIFIC BONITO		PACIFIC COD	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- NUMBERS IN THOUSANDS -----										
1993. .	209	8	381	5	1,250	6	630	7	0	0
1994. .	101	9	262	6	1,765	6	346	10	1	63
1995. .	95	9	243	6	1,379	6	100	13	0	0
1996. .	240	7	371	5	514	6	125	11	11	45
YEAR	PAC. CHUB MACKEREL		PACIFIC SARDINE		PILE PERCH		QUILLBACK ROCKFISH		REDTAIL SURFPERCH	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- NUMBERS IN THOUSANDS -----										
1993. .	4,651	4	329	17	33	19	34	34	69	17
1994. .	5,313	4	368	42	31	13	9	14	90	17
1995. .	5,146	5	73	38	29	25	5	24	91	14
1996. .	5,507	4	271	22	157	22	61	11	110	22
YEAR	SHEEPHEAD (CAL.)		SILVER SURFPERCH		STRIPED BASS		STRIPED SEAPERCH		SURF SMELT	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- NUMBERS IN THOUSANDS -----										
1993. .	68	11	110	17	101	13	132	9	1,632	26
1994. .	87	11	46	19	115	12	73	13	1,202	28
1995. .	60	14	57	16	151	12	98	19	1,413	25
1996. .	77	12	60	20	174	9	286	12	4,807	25
YEAR	WHITE CROAKER		WHITE STURGEON		YELLOWTAIL		YELLOWTAIL ROCKF.		ALL FISH	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- NUMBERS IN THOUSANDS -----										
1993. .	2,019	5	22	16	120	10	284	8	30,922	2
1994. .	900	9	5	30	24	15	164	8	27,169	2
1995. .	1,408	15	47	19	30	16	140	8	27,609	2
1996. .	1,958	7	22	15	64	10	83	10	34,047	4

NOTE: EST= ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

1993-1995 ESTIMATES DO NOT INCLUDE WASHINGTON STATE DATA

U.S. MARINE RECREATIONAL FISHERIES

63

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS BY SPECIES, 1993-1996 FOR THE PACIFIC COAST.

YEAR	BARRED SANDBASS		BARRED SURFPERCH		BLACK ROCKFISH		BLUE ROCKFISH		BOCACCIO	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- THOUSANDS OF POUNDS -----										
1993. .	1,048	6	315	13	1,621	7	1,310	7	271	14
1994. .	1,034	7	167	14	1,150	8	503	8	424	17
1995. .	1,468	8	354	12	1,121	7	395	8	68	21
1996. .	1,198	6	306	13	1,405	8	503	8	163	19
YEAR	BROWN ROCKFISH		CABEZON		CALIFORNIA HALIBUT		CANARY ROCKFISH		CHILIPEPPER ROCKF.	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- THOUSANDS OF POUNDS -----										
1993. .	148	11	262	8	596	11	251	7	36	41
1994. .	59	14	171	9	790	9	184	8	50	20
1995. .	97	12	186	13	2,349	8	266	9	23	26
1996. .	109	11	280	10	1,619	9	136	9	31	28
YEAR	COPPER ROCKFISH		CORBINA		GOPHER ROCKFISH		GRASS ROCKFISH		KELP BASS	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- THOUSANDS OF POUNDS -----										
1993. .	218	10	12	21	224	11	38	17	1,434	6
1994. .	203	12	14	26	174	11	22	16	1,395	6
1995. .	116	12	37	21	82	13	15	17	1,131	7
1996. .	347	8	29	22	88	11	25	18	770	6
YEAR	KELP GREENLING		LINGCOD		PACIFIC BARRACUDA		PACIFIC BONITO		PACIFIC COD	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- THOUSANDS OF POUNDS -----										
1993. .	195	8	1,605	6	1,688	9	707	9	0	0
1994. .	95	9	906	8	2,016	8	519	10	1	72
1995. .	85	10	856	9	2,491	8	177	16	0	0
1996. .	221	8	1,172	7	996	9	87	18	14	44
YEAR	PAC. CHUB MACKEREL		PACIFIC SARDINE		PILE PERCH		QUILLBACK ROCKFISH		REDTAIL SURFPERCH	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- THOUSANDS OF POUNDS -----										
1993. .	1,373	6	51	20	37	23	94	41	58	19
1994. .	2,225	8	42	34	26	14	16	15	70	18
1995. .	2,163	8	4	69	20	23	8	20	62	15
1996. .	1,520	6	19	29	171	23	88	15	101	23
YEAR	SHEEPHEAD (CAL.)		SILVER SURFPERCH		STRIPED BASS		STRIPED SEAPERCH		SURF SMELT	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- THOUSANDS OF POUNDS -----										
1993. .	154	21	23	17	106	18	130	10	159	27
1994. .	234	17	10	21	104	19	61	16	90	28
1995. .	106	19	18	19	380	15	99	21	122	24
1996. .	170	16	18	23	351	12	282	14	538	27
YEAR	WHITE CROAKER		WHITE STURGEON		YELLOWTAIL		YELLOWTAIL ROCKF.		ALL FISH	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
----- THOUSANDS OF POUNDS -----										
1993. .	425	7	207	24	943	11	249	8	20,935	2
1994. .	174	15	44	36	209	18	179	8	17,924	2
1995. .	410	21	764	21	308	17	198	9	24,313	2
1996. .	659	9	543	16	497	12	106	14	22,963	2

NOTE:--EST= ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.

1993-1995 ESTIMATES DO NOT INCLUDE WASHINGTON STATE DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS,
BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	ATLANTIC COD						ATLANTIC CROAKER					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	303	33	1,380	34	2,998	21	5,500	14	3,526	14	374	36
1982.	222	90	942	49	2,320	17	6,199	13	8,088	16	227	18
1983.	90	28	849	17	2,401	16	9,764	10	6,719	13	2,861	24
1984.	55	53	453	16	1,088	10	10,998	9	8,107	12	1,092	17
1985.	252	61	631	31	2,932	44	8,380	9	6,421	11	1,962	63
1986.	61	48	333	16	1,073	17	22,515	10	6,950	11	602	23
1987.	30	31	932	36	2,134	18	11,598	9	3,971	15	818	16
1988.	84	24	275	17	2,449	17	11,459	9	4,648	23	1,470	25
1989.	533	22	255	17	1,548	10	7,419	6	2,431	8	382	16
1990.	75	18	356	13	1,880	12	12,168	6	2,467	20	194	30
1991.	130	28	208	18	1,917	15	22,787	6	2,834	12	312	25
1992.	21	38	103	15	726	12	13,547	5	2,901	14	505	20
1993.	80	22	263	14	2,350	11	17,594	5	2,702	7	721	19
1994.	297	25	318	15	1,247	9	21,197	4	4,945	6	528	15
1995.	63	29	154	19	1,725	15	14,126	5	2,853	7	774	25
1996.	29	36	89	15	962	11	12,590	6	3,435	8	841	13
NUMBER IN THOUSANDS												
YEAR	ATLANTIC MACKEREL						BLACK DRUM					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	1,067	30	2,509	23	1,532	25	347	17	188	21	13	37
1982.	544	40	120	26	879	28	913	16	771	17	25	39
1983.	186	20	233	20	3,700	27	819	17	687	19	257	33
1984.	129	22	774	20	2,923	21	443	20	480	14	22	34
1985.	1,651	77	2,669	58	3,505	18	548	15	344	19	14	25
1986.	566	29	537	30	4,285	24	1,343	15	522	13	27	21
1987.	560	29	3,777	19	3,397	25	1,042	15	511	15	31	37
1988.	1,548	58	1,564	23	2,887	21	921	9	430	13	73	28
1989.	714	19	2,089	13	1,231	22	538	16	152	21	46	31
1990.	599	26	1,465	16	1,930	19	520	17	246	28	52	25
1991.	1,154	34	1,429	21	2,872	16	720	11	288	15	17	28
1992.	370	18	324	18	350	26	991	6	381	12	33	18
1993.	1,097	16	472	15	737	17	964	9	510	15	60	26
1994.	1,595	14	2,188	19	1,078	30	810	8	276	8	39	27
1995.	1,445	23	1,071	17	1,493	25	1,010	8	525	10	60	38
1996.	683	13	1,400	15	1,566	16	915	7	261	8	20	16
NUMBER IN THOUSANDS												

NOTE:---EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

65

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	BLACK SEA BASS						BLUEFISH					
	INLAND			OCEAN 0 TO 3MILES			INLAND			OCEAN 0 TO 3MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
	NUMBER IN THOUSANDS											
1981.	1,999	14	1,799	25	2,581	15	10,782	8	12,606	35	8,366	8
1982.	1,609	13	9,372	37	4,955	12	12,517	10	8,624	9	6,578	12
1983.	2,570	20	1,955	13	6,628	13	14,412	7	10,083	10	7,980	19
1984.	1,499	14	1,831	17	4,322	9	14,333	10	8,023	8	4,712	9
1985.	3,359	9	2,744	14	7,429	12	11,896	7	6,576	7	4,521	15
1986.	8,938	9	12,935	33	10,952	16	14,664	7	10,559	6	6,076	9
1987.	2,395	14	4,001	10	4,148	7	12,088	6	11,098	6	5,305	7
1988.	4,553	9	4,399	9	6,842	9	6,018	9	5,607	6	2,810	7
1989.	3,118	5	4,317	8	6,629	6	9,574	5	6,790	4	3,152	7
1990.	6,070	7	2,636	8	5,018	7	8,823	4	6,274	5	1,776	6
1991.	5,270	6	4,306	10	6,283	7	10,864	5	6,353	5	2,034	8
1992.	3,415	6	2,690	6	5,654	7	5,603	5	4,776	4	1,612	7
1993.	2,892	7	4,429	24	5,437	10	5,382	4	3,736	4	1,184	8
1994.	4,208	6	2,241	6	5,443	8	6,726	5	4,774	4	904	9
1995.	5,652	7	2,662	7	9,479	9	5,201	4	4,862	5	876	8
1996.	3,705	9	1,755	7	7,289	8	5,676	5	3,406	4	1,289	11

YEAR	DOLPHIN						GAG					
	INLAND			OCEAN 0 TO 3MILES			INLAND			OCEAN 0 TO 3MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
	NUMBER IN THOUSANDS											
1981.	2	100	27	37	1,098	16	4	71	106	42	132	23
1982.	5	45	755	17	571	24	5	52	164	22	219	18
1983.	0	0	204	22	990	15	23	92	502	33	255	16
1984.	2	100	350	31	755	26	5	54	192	46	141	17
1985.	2	74	477	26	659	21	11	43	71	29	277	17
1986.	2	100	617	18	920	10	28	32	79	37	137	15
1987.	2	72	333	15	1,219	10	21	29	154	22	225	16
1988.	22	96	515	18	1,152	10	33	39	80	21	221	15
1989.	2	100	574	16	2,348	7	227	22	143	17	186	12
1990.	2	56	561	24	1,363	9	114	26	118	17	426	22
1991.	9	25	395	13	2,738	7	273	18	505	19	426	18
1992.	29	32	233	15	1,221	6	197	20	337	13	561	9
1993.	40	33	265	14	1,620	6	284	15	466	12	988	7
1994.	24	28	220	35	2,206	5	583	10	744	9	905	7
1995.	1	100	315	9	2,297	4	386	10	566	10	1,588	6
1996.	12	29	179	12	1,714	6	364	10	399	9	827	6

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS,
BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	GRAY SNAPPER						GRAY TRIGGERFISH					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1981.	205	21	559	16	879	40	2	53	244	30	128	27
1982.	324	20	1399	14	309	32	0	0	144	17	551	21
1983.	365	21	3425	36	306	21	20	46	144	21	84	17
1984.	306	25	3817	22	250	27	9	84	159	73	80	21
1985.	198	24	1917	17	206	21	3	79	160	28	145	22
1986.	436	21	1464	18	193	20	13	48	250	26	397	27
1987.	442	16	1205	46	384	20	21	45	298	34	503	31
1988.	849	10	996	11	138	20	30	32	448	16	437	14
1989.	1448	8	1402	12	302	22	49	32	591	14	779	14
1990.	1273	11	1020	13	276	26	27	25	451	16	837	17
1991.	2551	10	4505	9	349	18	59	23	774	12	575	14
1992.	3196	8	1799	7	368	11	41	30	442	9	552	9
1993.	2530	5	2194	7	430	11	39	20	324	12	543	8
1994.	2445	6	1943	6	458	15	44	22	256	10	534	9
1995.	1972	8	2170	6	410	12	27	21	262	13	541	8
1996.	1998	8	1731	7	685	10	43	20	225	13	394	11
NUMBER IN THOUSANDS												
YEAR	GREATER AMBERJACK						KING MACKEREL					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1981.	4	47	102	31	84	30	220	79	243	61	240	17
1982.	1	100	140	26	408	22	1	50	899	52	592	15
1983.	9	100	30	28	232	25	5	75	484	23	455	23
1984.	2	100	46	25	116	15	3	100	417	24	569	17
1985.	9	59	44	34	203	16	6	53	255	20	737	28
1986.	10	53	120	20	651	16	0	61	275	12	602	12
1987.	6	80	162	29	644	19	8	34	511	11	564	10
1988.	0	0	75	19	318	17	24	24	389	9	628	10
1989.	3	71	492	19	339	17	3	66	439	23	409	9
1990.	5	45	45	23	203	19	7	46	544	14	520	8
1991.	4	50	313	20	392	12	47	37	777	9	612	7
1992.	9	38	298	41	385	9	8	28	493	7	789	9
1993.	16	36	814	16	311	10	31	24	545	6	448	5
1994.	19	50	41	19	272	10	54	21	464	6	631	6
1995.	4	61	43	24	116	13	52	20	474	6	726	6
1996.	2	52	69	16	187	9	25	24	467	9	742	5
NUMBER IN THOUSANDS												

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

67

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	RED DRUM						RED SNAPPER					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	793	13	848	17	63	48	1	100	568	29	1,388	22
1982.	1,419	13	1,812	13	104	25	0	0	690	33	826	19
1983.	2,553	15	2,650	17	453	23	0	100	145	22	2,678	16
1984.	2,135	12	2,600	14	127	19	16	100	130	25	1,069	12
1985.	2,098	12	1,482	15	78	25	80	48	74	25	1,292	11
1986.	2,125	7	1,942	9	131	18	4	67	220	18	831	14
1987.	3,952	8	2,275	10	143	15	7	52	304	38	716	21
1988.	4,458	6	1,207	8	140	22	113	28	187	30	883	12
1989.	3,037	7	1,219	16	151	36	55	34	158	22	968	14
1990.	1,735	7	1,112	11	168	23	2	60	201	21	745	16
1991.	5,570	9	2,366	9	134	37	102	39	295	18	1,203	11
1992.	6,356	4	1,981	6	345	14	40	23	346	11	1,639	6
1993.	5,905	4	1,494	8	250	16	45	32	205	16	2,296	6
1994.	5,916	4	1,560	6	132	12	32	24	223	12	1,756	6
1995.	6,803	4	2,296	5	137	12	17	32	226	16	1,365	6
1996.	5,524	4	1,409	5	152	13	12	35	358	17	1,363	6
SCUP												
YEAR	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
	NUMBER IN THOUSANDS											
1981.	1,355	30	7,740	53	120	26	7,218	28	2,238	23	933	22
1982.	370	20	2,784	28	344	19	3,208	12	2,576	18	1,401	23
1983.	312	33	4,462	22	683	30	4,772	15	2,178	16	3,205	26
1984.	561	62	6,752	25	368	21	5,629	20	1,419	19	727	26
1985.	1,171	21	4,803	22	817	32	12,416	12	1,051	18	402	28
1986.	2,777	13	4,046	10	295	18	17,138	10	10,243	12	3,493	28
1987.	933	20	2,700	11	375	15	3,760	10	5,664	14	2,952	22
1988.	1,825	11	939	12	189	20	5,067	9	2,003	14	471	28
1989.	2,388	23	977	13	56	47	8,194	7	2,594	12	608	16
1990.	1,593	13	2,259	14	732	30	6,023	7	3,327	9	823	16
1991.	3,380	15	1,539	12	216	34	12,365	6	3,583	10	907	13
1992.	2,575	15	1,032	11	173	22	7,485	7	2,368	10	225	17
1993.	2,033	9	1,586	12	449	22	4,867	6	1,188	13	1,022	23
1994.	3,505	7	1,705	10	455	17	3,619	11	1,077	12	965	16
1995.	2,582	9	1,498	11	275	20	1,573	9	1,201	13	913	23
1996.	2,152	7	1,847	10	625	23	3,576	9	946	13	335	21

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	SHEEPSHEAD						SOUTHERN FLOUNDER					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
NUMBER IN THOUSANDS												
1981.	682	18	456	18	13	44	596	23	263	29	3	55
1982.	1,675	11	1,270	12	142	31	1,016	34	1,355	22	26	39
1983.	1,916	22	1,585	18	178	26	590	14	2,048	34	95	68
1984.	1,368	13	2,317	12	117	30	499	13	537	18	15	35
1985.	1,015	17	1,279	15	72	33	725	14	532	18	15	32
1986.	2,147	22	823	11	48	27	2,133	20	776	19	88	35
1987.	1,784	11	1,026	10	60	19	392	9	601	40	21	36
1988.	2,470	8	1,674	11	152	19	1,051	13	272	16	14	25
1989.	2,248	10	1,488	14	111	35	871	21	145	18	19	35
1990.	1,900	9	916	19	117	20	1,166	16	382	25	26	23
1991.	2,857	8	631	12	22	34	739	8	514	12	21	26
1992.	4,808	5	995	9	131	22	884	6	250	10	13	20
1993.	4,450	5	980	12	163	23	822	6	243	12	17	25
1994.	3,369	5	891	8	123	18	1,085	5	259	9	25	36
1995.	3,984	6	973	8	161	18	1,128	5	299	9	19	36
1996.	2,693	5	698	7	151	15	965	6	207	12	19	54
SPOT												
YEAR	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
NUMBER IN THOUSANDS												
1981.	494	29	1,531	15	428	18	6,999	13	20,275	19	2,276	22
1982.	174	46	2,908	20	914	23	8,250	12	11,497	10	140	31
1983.	370	51	1,777	39	1,295	23	12,795	22	10,038	14	2,644	23
1984.	71	63	702	18	1,022	30	6,116	11	4,815	13	970	23
1985.	166	28	1,022	14	463	14	10,779	9	11,565	11	260	27
1986.	204	26	10,177	12	1,124	12	13,707	7	5,456	15	178	22
1987.	91	16	2,374	7	816	10	9,731	7	2,915	8	375	18
1988.	478	16	2,397	7	1,046	9	6,755	9	3,991	14	69	32
1989.	456	14	1,926	7	549	8	9,269	5	3,561	7	227	15
1990.	1,580	16	2,697	9	778	8	14,399	6	2,719	12	254	21
1991.	941	11	3,199	8	647	9	20,801	6	3,926	6	317	49
1992.	1,686	9	3,294	4	595	6	11,994	7	2,880	12	100	23
1993.	1,040	8	2,208	6	404	9	10,186	7	4,058	9	19	43
1994.	1,122	7	2,251	4	477	12	9,816	4	8,556	7	119	21
1995.	396	9	1,659	6	513	23	4,695	6	6,759	7	113	23
1996.	1,121	10	1,330	6	537	8	3,139	8	4,128	11	97	30

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	SPOTTED SEATROUT						STRIPED BASS					
	INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
NUMBER IN THOUSANDS												
1981.	2,838	14	2,861	18	416	22	755	42	102	32	13	55
1982.	5,563	12	8,345	12	747	17	902	45	78	48	68	32
1983.	5,464	15	6,957	12	2,303	21	332	16	330	44	33	52
1984.	3,283	22	8,537	12	782	36	225	21	327	27	1	100
1985.	4,428	11	6,642	13	274	21	436	20	154	21	0	0
1986.	13,796	25	11,391	6	1,481	11	482	28	645	28	15	41
1987.	9,274	6	10,670	5	1,824	10	295	20	390	19	75	62
1988.	12,030	4	8,108	6	1,888	11	440	22	651	42	42	23
1989.	12,087	6	7,363	7	1,141	17	996	23	235	14	26	22
1990.	8,312	5	4,646	7	441	16	1,416	10	503	11	55	30
1991.	18,955	5	10,202	6	774	13	2,350	10	967	20	115	24
1992.	15,816	4	5,576	5	912	10	2,411	7	1,314	11	116	18
1993.	15,791	4	5,402	5	344	17	3,475	9	1,105	8	220	15
1994.	15,284	3	6,486	4	412	14	6,557	8	1,580	8	384	15
1995.	15,566	3	8,735	4	314	17	7,141	7	2,859	8	688	11
1996.	13,885	3	6,388	4	289	16	9,323	7	3,955	6	822	9
TAUTOG												
YEAR	SUMMER FLOUNDER						TAUTOG					
	INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
NUMBER IN THOUSANDS												
1981.	8,039	8	4,968	16	596	15	884	18	893	29	273	19
1982.	8,362	7	14,098	44	1,132	30	1,183	14	1,212	18	884	17
1983.	18,860	7	11,044	17	2,207	13	1,346	14	1,356	16	673	22
1984.	15,377	9	13,526	10	997	19	1,066	12	1,573	12	125	20
1985.	4,864	9	6,554	19	2,108	26	1,740	15	736	22	748	36
1986.	14,433	7	10,048	8	835	13	2,723	8	3,146	17	2,257	34
1987.	10,583	6	9,626	6	892	13	2,170	15	1,276	13	1,286	15
1988.	9,657	4	5,927	6	1,639	8	2,526	11	1,092	13	653	22
1989.	1,357	6	1,239	9	98	13	2,221	7	811	13	562	14
1990.	5,114	4	3,575	6	425	12	2,182	7	836	9	718	11
1991.	9,311	5	6,468	5	432	11	2,891	6	1,566	9	731	11
1992.	7,913	4	3,749	6	256	11	2,397	7	918	10	880	14
1993.	14,724	4	7,648	7	547	14	2,904	7	771	17	540	11
1994.	11,963	4	5,326	6	452	15	1,682	9	366	17	605	13
1995.	12,401	5	3,172	7	665	14	1,992	9	1,155	14	668	15
1996.	12,936	4	5,969	5	896	10	1,054	8	543	18	683	10

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS,
BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS

YEAR	VERMILION SNAPPER						WEAKFISH					
	INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	0	0	92	24	59	27	1,570	12	6,937	47	1,122	26
1982.	0	0	124	27	745	19	671	20	1,140	22	234	31
1983.	0	0	65	21	391	32	3,584	13	1,566	34	766	25
1984.	0	0	66	25	394	16	1,165	26	1,812	19	792	21
1985.	3	78	305	44	720	23	924	14	1,061	18	790	14
1986.	25	35	140	25	549	26	5,351	9	3,645	14	1,978	20
1987.	1	100	129	37	701	33	3,537	14	1,111	16	1,072	14
1988.	0	89	255	23	827	14	3,851	15	1,382	29	1,213	20
1989.	0	0	204	28	658	15	1,163	9	435	16	77	25
1990.	10	57	146	25	627	20	1,026	8	413	12	233	17
1991.	0	0	522	22	711	15	1,855	7	368	15	379	33
1992.	28	81	213	19	709	8	1,394	8	149	14	125	30
1993.	10	50	159	17	1,059	8	1,738	7	346	15	135	27
1994.	2	100	142	23	683	8	3,687	6	744	10	498	17
1995.	8	53	351	15	841	9	4,553	6	898	12	288	19
1996.	0	100	93	19	374	9	6,217	6	974	10	402	14
NUMBER IN THOUSANDS												
YEAR	WINTER FLOUNDER						ALL FISHES					
	INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	14,786	9	2,316	16	358	23	97,473	4	133,452	7	38,749	4
1982.	11,456	19	6,859	37	271	26	104,216	3	165,075	6	36,090	4
1983.	10,467	9	2,523	14	173	18	139,072	3	163,839	4	66,469	5
1984.	17,084	9	2,691	14	111	30	115,355	3	165,984	3	37,986	4
1985.	18,431	14	3,090	20	45	66	119,924	3	132,949	5	47,429	6
1986.	8,700	11	1,362	10	222	32	181,632	3	172,025	3	53,662	5
1987.	7,772	10	3,808	14	689	31	113,731	2	124,334	3	48,013	3
1988.	9,673	9	1,058	12	388	19	141,473	2	100,617	3	48,564	3
1989.	6,822	23	1,191	12	55	26	126,239	2	82,726	4	40,148	3
1990.	3,486	8	1,068	8	78	21	140,921	2	75,288	2	34,194	3
1991.	3,915	10	589	9	58	26	213,416	2	127,207	3	44,358	3
1992.	1,280	9	232	11	32	25	170,260	2	87,933	2	33,692	2
1993.	3,120	21	382	14	81	20	187,752	2	91,952	2	37,080	2
1994.	2,038	12	233	13	29	32	204,137	2	100,690	1	37,028	2
1995.	2,106	9	152	17	66	52	163,466	2	100,462	3	47,598	4
1996.	2,739	13	155	15	19	25	161,205	2	80,685	2	37,838	2
NUMBER IN THOUSANDS												

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS.

YEAR	ATLANTIC COD						ATLANTIC CROAKER					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	1,019	36	4,719	35	11,986	24	1,636	18	1,270	17	176	34
1982.	701	97	3,320	48	17,514	24	1,414	15	3,194	22	192	30
1983.	159	35	2,177	22	12,247	24	1,756	15	1,353	16	183	27
1984.	162	50	1,573	24	4,204	13	3,211	17	1,322	13	290	23
1985.	639	60	1,738	46	20,701	63	1,887	11	1,174	14	103	21
1986.	194	56	1,313	31	6,020	40	6,386	15	1,515	17	164	21
1987.	54	39	2,576	41	6,358	20	2,613	11	1,192	20	323	26
1988.	330	30	1,394	26	10,381	17	3,579	9	1,749	37	960	34
1989.	1,269	24	600	35	5,241	12	2,113	7	602	12	111	18
1990.	280	32	1,182	17	6,449	18	1,962	8	515	41	10	31
1991.	516	37	728	25	8,063	19	3,862	21	560	56	15	29
1992.	25	37	360	30	1,951	18	2,681	7	431	19	85	29
1993.	106	39	467	21	6,566	15	3,177	7	328	11	105	32
1994.	304	30	553	22	3,428	30	4,595	6	756	15	121	27
1995.	87	47	196	24	4,318	17	3,800	7	339	12	288	41
1996.	105	80	220	25	3,007	22	3,629	8	525	11	507	18
YEAR	ATLANTIC MACKEREL						BLACK DRUM					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	620	44	4,082	22	2,375	27	677	23	449	24	156	20
1982.	742	33	67	28	1,816	28	1,159	25	1,687	22	30	42
1983.	165	23	132	37	6,321	29	2,081	15	1,799	25	916	40
1984.	109	25	895	19	4,109	23	754	22	1,186	24	70	51
1985.	1,044	76	1,932	51	3,006	47	866	18	1,377	25	180	48
1986.	612	45	625	43	8,073	29	3,079	17	888	24	41	32
1987.	395	39	3,712	23	4,782	27	3,238	40	874	22	539	53
1988.	1,313	63	2,163	26	3,722	24	1,666	14	815	19	206	27
1989.	387	23	2,141	15	1,410	24	1,687	14	578	36	108	31
1990.	650	35	1,431	18	2,035	20	422	18	529	33	72	38
1991.	979	31	1,533	23	3,145	19	1,180	18	636	31	35	32
1992.	172	20	215	23	681	22	1,541	10	749	14	62	21
1993.	375	18	271	19	1,258	20	1,516	11	516	26	133	36
1994.	646	19	2,114	22	999	35	1,084	11	663	33	126	32
1995.	474	19	1,014	20	1,266	27	1,407	11	575	14	139	31
1996.	564	17	1,393	18	1,166	18	1,395	9	386	12	44	22

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS.

YEAR	BLACK SEA BASS										BLUEFISH																			
	INLAND					OCEAN 0 TO 3MILES					OCEAN 3 TO 200 MILES					INLAND					OCEAN 0 TO 3MILES					OCEAN 3 TO 200 MILES				
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)				
-----THOUSANDS OF POUNDS-----																														
1981.	552	21	448	21	1,228	21	19,875	14	27,832	20	48,160	10																		
1982.	512	22	8,465	40	3,186	20	14,104	24	21,692	12	47,628	16																		
1983.	339	26	434	19	4,315	18	23,565	10	24,680	21	44,466	21																		
1984.	269	16	755	23	2,738	14	17,918	20	18,983	11	31,431	11																		
1985.	508	11	845	21	3,893	18	21,375	9	11,520	16	20,285	23																		
1986.	1,963	16	5,538	37	6,536	23	25,631	12	31,360	8	36,752	13																		
1987.	501	21	1,465	17	1,807	10	25,008	7	26,211	9	25,985	10																		
1988.	580	14	880	14	4,228	15	16,791	9	17,063	9	15,539	8																		
1989.	819	8	1,751	12	3,630	9	13,670	7	13,033	7	14,281	9																		
1990.	469	10	726	16	2,710	12	15,043	7	8,780	7	7,090	8																		
1991.	751	10	955	11	3,769	12	16,889	7	9,593	7	7,484	8																		
1992.	404	9	1,007	12	2,332	8	10,273	6	8,699	8	5,809	9																		
1993.	562	18	2,188	41	3,143	18	9,979	6	5,816	6	4,846	10																		
1994.	377	12	453	13	3,251	12	8,128	7	5,172	8	2,692	14																		
1995.	608	15	476	20	5,956	14	7,268	8	3,989	10	3,517	11																		
1996.	481	16	560	18	5,759	15	5,365	11	3,919	9	5,804	17																		

YEAR	DOLPHIN										GAG																			
	INLAND					OCEAN 0 TO 3MILES					OCEAN 3 TO 200 MILES					INLAND					OCEAN 0 TO 3MILES					OCEAN 3 TO 200 MILES				
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)				
-----THOUSANDS OF POUNDS-----																														
1981.	0	0	54	32	5,415	21	11	85	74	40	334	24																		
1982.	49	46	3,399	34	3,590	19	1	0	276	38	1,035	24																		
1983.	0	0	774	22	6,094	17	0	0	214	38	1,360	19																		
1984.	4	100	1,484	22	2,917	21	19	94	2,235	73	794	20																		
1985.	1	0	1,647	25	5,248	24	4	52	176	38	1,648	23																		
1986.	12	100	2,326	20	7,615	17	7	54	167	60	498	19																		
1987.	13	62	1,731	24	5,419	12	65	36	418	25	999	21																		
1988.	82	94	1,724	31	5,800	12	59	58	280	27	1,293	19																		
1989.	3	100	2,288	25	11,208	8	158	48	379	24	853	17																		
1990.	18	87	4,121	35	8,638	12	23	54	341	30	1,417	30																		
1991.	84	34	2,923	15	14,202	8	507	48	1,064	19	762	20																		
1992.	106	38	1,721	37	7,964	10	111	32	546	16	1,549	10																		
1993.	65	38	1,138	17	9,615	9	91	37	529	15	2,207	9																		
1994.	76	49	1,335	40	11,367	6	158	30	418	17	1,931	10																		
1995.	10	100	2,659	11	17,123	5	222	20	516	20	2,193	9																		
1996.	63	31	1,389	18	11,096	7	126	24	447	16	1,669	9																		

NOTE:---EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

73

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS.

YEAR	GRAY SNAPPER										GRAY TRIGGERFISH																																																																																																																																																																																																			
	INLAND					OCEAN 0 TO 3MILES					OCEAN 3 TO 200 MILES					INLAND					OCEAN 0 TO 3MILES					OCEAN 3 TO 200 MILES																																																																																																																																																																																				
	EST	PSE (%)	EST	PSE (%)	EST	EST	PSE (%)	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)																																																																																																																																																																																			
1981.	139	40	456	24	677	50	4	64	509	49	216	30	1982.	99	21	577	19	308	31	0	223	28	927	26	1983.	165	27	765	25	297	26	20	50	159	28	135	19	1984.	211	38	3,272	33	359	40	11	91	53	25	132	18	1985.	95	35	1,672	24	505	37	1	100	129	30	152	30	1986.	233	35	800	20	287	26	15	20	484	38	912	30	1987.	143	29	852	48	447	32	19	62	512	47	1,241	40	1988.	379	13	554	20	155	31	66	44	787	22	592	19	1989.	444	11	749	15	396	30	58	46	653	19	1,088	18	1990.	642	24	454	21	293	41	29	35	722	23	1,604	22	1991.	614	16	1,112	15	330	26	103	38	1,072	20	1,250	18	1992.	590	9	578	10	291	15	37	42	563	14	1,031	10	1993.	386	8	647	11	336	18	49	21	514	17	902	11	1994.	412	9	583	11	422	19	43	30	362	21	944	11	1995.	388	10	499	10	491	14	26	28	334	17	820	9	1996.	325	11	437	11	425	14	42	23	188	17	606	14

YEAR	GREATER AMBERJACK										KING MACKEREL																																																																																																																																																																																																				
	INLAND					OCEAN 0 TO 3MILES					OCEAN 3 TO 200 MILES					INLAND					OCEAN 0 TO 3MILES					OCEAN 3 TO 200 MILES																																																																																																																																																																																					
	EST	PSE (%)	EST	PSE (%)	EST	EST	PSE (%)	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)	EST	EST	PSE (%)																																																																																																																																																																																				
1981.	2	51	841	37	1,069	11	1,506	79	1,980	14	2,539	21	1982.	47	100	710	39	3,117	21	10	55	7,629	54	4,923	13	1983.	0	0	257	33	1,965	18	57	83	5,296	25	4,162	25	1984.	74	100	540	27	2,115	20	23	100	3,669	22	6,053	17	1985.	293	76	378	41	1,999	17	39	77	2,492	22	6,141	28	1986.	34	74	1,204	26	8,536	18	4	79	2,902	15	5,132	11	1987.	2	70	1,048	31	7,073	21	84	57	3,711	11	4,529	12	1988.	0	0	501	24	3,856	18	188	25	3,255	11	5,423	11	1989.	59	83	1,787	28	4,549	22	24	68	3,134	16	3,456	9	1990.	48	98	262	27	1,717	21	53	49	3,386	13	3,984	9	1991.	1	44	1,729	28	2,222	15	90	38	4,775	12	4,698	8	1992.	9	120	650	19	3,127	11	44	36	3,711	8	6,455	9	1993.	0	62	1,099	15	3,231	19	121	30	4,171	8	4,253	6	1994.	273	64	379	44	2,537	12	353	23	3,523	10	4,944	6	1995.	73	100	332	32	1,029	13	287	21	3,715	8	5,717	6	1996.	0	0	446	21	1,524	10	187	29	3,396	8	6,436	6

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS.

YEAR	RED DRUM						RED SNAPPER					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	1,702	16	1,800	20	387	55	1	100	807	31	3,573	29
1982.	2,866	17	4,163	25	297	44	0	0	1,015	26	1,341	24
1983.	3,745	17	3,008	19	1,255	23	0	0	188	25	4,139	20
1984.	3,258	14	5,517	25	720	20	0	0	167	24	1,713	20
1985.	3,821	14	3,506	25	311	28	39	77	190	35	3,564	19
1986.	3,718	15	3,065	13	371	20	3	60	641	31	1,895	20
1987.	3,602	12	1,571	11	1,033	27	17	54	370	36	1,394	31
1988.	3,646	9	1,002	16	194	33	46	40	255	24	1,823	22
1989.	4,460	9	1,969	15	226	22	34	49	202	47	1,847	21
1990.	2,911	14	1,964	16	535	23	4	101	281	31	890	16
1991.	4,445	10	2,141	13	60	37	25	79	343	30	1,267	14
1992.	6,190	5	2,434	6	348	15	32	49	531	26	2,668	11
1993.	6,987	6	2,210	9	727	15	60	71	344	15	3,873	7
1994.	6,589	5	1,919	8	463	23	38	31	396	17	3,500	9
1995.	10,109	5	2,860	6	697	21	5	83	329	17	2,609	9
1996.	9,099	5	3,063	8	880	19	3	100	254	23	2,462	9

YEAR	SAND SEATRUT						SCUP					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	846	29	3,130	53	97	32	3,970	36	1,220	26	624	32
1982.	193	26	785	26	271	28	1,737	17	1,883	21	1,585	25
1983.	87	44	2,138	25	261	31	2,158	18	1,475	22	2,619	28
1984.	162	61	2,630	31	240	26	1,540	23	600	25	276	31
1985.	642	30	3,861	25	592	34	5,699	14	271	22	126	21
1986.	985	15	1,853	12	208	21	4,879	13	5,208	15	1,522	33
1987.	431	20	1,323	14	260	17	1,456	14	2,967	23	1,774	26
1988.	978	15	489	16	94	25	2,442	13	1,369	18	456	36
1989.	938	27	504	17	13	30	3,547	9	1,744	18	266	26
1990.	497	15	866	18	472	39	2,472	11	1,371	11	297	21
1991.	1,715	18	853	15	141	36	5,776	8	1,834	12	479	19
1992.	1,017	15	490	12	136	27	3,149	7	1,176	17	87	30
1993.	781	10	819	16	490	29	1,942	17	498	17	758	34
1994.	1,663	8	877	12	344	19	1,721	17	564	15	343	22
1995.	1,077	10	769	14	155	22	464	22	468	16	382	24
1996.	832	12	768	12	289	23	1,528	10	508	17	203	31

NOTE: --EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

75

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS.

YEAR	SOUTHERN FLOUNDER									
	SHEEPSHEAD		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		OCEAN 0 TO 3MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	995	24	494	25	39	32	736	25	243	18
1982.	1,882	15	1,601	15	354	41	973	51	758	18
1983.	1,484	18	2,203	28	339	27	520	16	2,834	42
1984.	1,769	14	2,536	16	364	39	422	13	346	15
1985.	1,303	19	2,418	27	106	46	775	17	601	24
1986.	2,706	26	938	18	36	24	2,436	22	701	24
1987.	2,361	14	1,287	12	82	20	419	10	252	14
1988.	3,098	10	2,611	14	244	27	1,062	9	269	15
1989.	3,414	12	2,366	19	94	64	847	16	170	31
1990.	2,410	12	1,154	21	157	28	927	10	397	28
1991.	3,595	11	1,468	19	27	53	949	9	600	13
1992.	5,450	6	1,571	10	341	30	1,209	7	409	14
1993.	5,025	7	1,078	12	353	36	1,010	7	305	12
1994.	4,198	8	1,262	12	176	25	1,435	6	320	11
1995.	5,362	7	1,690	12	455	27	1,264	7	350	14
1996.	3,554	6	1,164	9	337	23	1,021	7	189	14
THOUSANDS OF POUNDS										
YEAR	SPANISH MACKEREL									
	OCEAN 0 TO 3MILES		INLAND		OCEAN 3 TO 200 MILES		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	567	29	1,631	16	825	23	2,015	19	4,331	17
1982.	203	59	2,635	18	1,166	35	1,218	15	2,758	14
1983.	155	49	1,175	22	1,543	22	2,146	27	2,406	18
1984.	155	68	845	25	1,458	29	745	14	822	15
1985.	192	32	1,039	16	664	16	2,589	13	3,285	13
1986.	260	30	6,466	16	1,271	14	2,507	10	880	18
1987.	124	17	3,077	8	1,429	14	3,052	9	748	11
1988.	414	19	3,308	8	1,428	8	1,509	10	1,023	20
1989.	347	15	1,857	7	862	10	2,318	7	920	9
1990.	599	15	2,456	8	1,037	9	3,024	8	555	19
1991.	933	14	2,964	7	1,096	10	3,721	8	801	9
1992.	1,110	11	3,336	5	926	8	3,518	10	540	15
1993.	826	10	1,881	7	671	10	2,244	9	1,234	10
1994.	719	8	1,911	6	505	9	2,211	6	2,144	9
1995.	348	12	1,392	8	708	14	1,380	8	1,755	9
1996.	799	10	1,244	8	661	11	968	11	1,068	14
THOUSANDS OF POUNDS										
YEAR	SPOT									
	OCEAN 0 TO 3MILES		INLAND		OCEAN 3 TO 200 MILES		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	567	29	1,631	16	825	23	2,015	19	4,331	17
1982.	203	59	2,635	18	1,166	35	1,218	15	2,758	14
1983.	155	49	1,175	22	1,543	22	2,146	27	2,406	18
1984.	155	68	845	25	1,458	29	745	14	822	15
1985.	192	32	1,039	16	664	16	2,589	13	3,285	13
1986.	260	30	6,466	16	1,271	14	2,507	10	880	18
1987.	124	17	3,077	8	1,429	14	3,052	9	748	11
1988.	414	19	3,308	8	1,428	8	1,509	10	1,023	20
1989.	347	15	1,857	7	862	10	2,318	7	920	9
1990.	599	15	2,456	8	1,037	9	3,024	8	555	19
1991.	933	14	2,964	7	1,096	10	3,721	8	801	9
1992.	1,110	11	3,336	5	926	8	3,518	10	540	15
1993.	826	10	1,881	7	671	10	2,244	9	1,234	10
1994.	719	8	1,911	6	505	9	2,211	6	2,144	9
1995.	348	12	1,392	8	708	14	1,380	8	1,755	9
1996.	799	10	1,244	8	661	11	968	11	1,068	14

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS.

YEAR	SPOTTED SEATROUT						STRIPED BASS					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1981.	2,730	18	22	2,558	22	549	1,177	37	532	39	245	43
1982.	4,391	12	13	7,559	13	1,038	297	29	1,773	62	453	32
1983.	3,610	16	15	5,576	15	3,318	360	26	2,056	72	282	50
1984.	2,947	39	20	5,223	20	1,600	410	41	874	53	0	0
1985.	3,328	10	16	4,822	16	385	514	44	335	43	0	0
1986.	10,210	29	7	7,260	7	1,618	220	56	810	32	98	70
1987.	6,256	7	7	6,536	7	1,467	178	30	529	21	156	56
1988.	7,868	5	9	5,286	9	1,782	417	22	710	26	195	35
1989.	7,644	8	15	5,868	15	1,057	365	26	313	25	64	40
1990.	3,786	8	10	2,274	10	304	1,200	17	864	17	232	49
1991.	8,899	7	7	5,820	7	576	1,764	13	1,559	14	383	25
1992.	7,706	5	7	2,937	7	678	2,185	13	1,641	18	241	23
1993.	7,268	5	7	2,450	7	345	2,718	9	2,188	19	760	18
1994.	7,395	4	6	3,520	6	263	4,160	10	2,296	10	357	20
1995.	8,554	5	5	3,821	5	194	6,001	8	4,403	13	861	12
1996.	7,067	6	7	3,303	7	175	6,004	7	6,959	8	1,656	16

YEAR	SUMMER FLOUNDER						TAUTOG					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1981.	6,358	11	15	3,023	15	717	1,536	24	1,976	32	604	26
1982.	6,905	8	45	10,077	45	1,281	2,502	15	2,928	17	2,908	20
1983.	17,452	8	16	8,443	16	2,112	1,890	20	2,474	16	1,386	28
1984.	7,751	10	12	9,652	12	1,433	1,457	13	3,650	17	273	22
1985.	4,675	11	20	5,472	20	2,343	2,260	18	1,245	29	800	26
1986.	8,733	13	12	8,349	12	803	5,250	11	8,551	17	3,105	22
1987.	4,361	9	15	6,865	15	1,003	3,135	16	2,469	18	3,285	18
1988.	8,000	5	8	4,732	8	1,926	4,751	19	2,562	17	1,989	29
1989.	1,659	7	11	1,375	11	142	4,035	8	1,286	14	1,059	21
1990.	2,720	6	7	2,119	7	302	3,114	10	1,072	14	970	15
1991.	4,584	6	6	3,189	6	385	3,948	8	2,739	12	1,418	14
1992.	4,255	5	7	2,669	7	233	4,167	12	1,670	12	1,834	18
1993.	5,563	5	9	3,052	9	229	3,824	10	1,065	19	1,038	22
1994.	6,461	5	7	2,564	7	321	2,029	20	510	23	929	22
1995.	4,084	6	9	1,196	9	224	2,388	13	1,407	16	809	19
1996.	6,256	4	6	3,483	6	676	1,516	13	702	23	1,048	18

NOTE: --EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

77

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND FISHING AREA, 1981-1996 FOR THE ATLANTIC AND GULF COASTS.

YEAR	VERMILION SNAPPER						WEAKFISH					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	0	0	51	24	39	33	4,897	15	6,878	31	4,330	25
1982.	0	0	80	29	424	22	1,754	20	4,693	22	1,838	34
1983.	0	0	32	22	448	42	7,078	14	2,606	34	2,046	26
1984.	0	0	51	28	314	15	917	35	4,436	31	1,661	22
1985.	1	100	214	46	467	36	2,288	16	1,549	23	1,652	17
1986.	5	47	162	38	777	47	4,704	12	3,032	17	2,406	22
1987.	0	0	116	44	583	28	4,081	21	1,531	23	1,138	17
1988.	0	93	164	26	437	17	3,188	13	1,618	33	1,525	15
1989.	0	0	108	34	409	19	1,645	9	459	17	74	32
1990.	2	59	107	26	530	25	904	10	320	17	123	19
1991.	0	0	390	31	544	25	1,758	8	235	18	138	28
1992.	1	55	101	24	619	10	1,142	9	218	24	39	33
1993.	2	78	96	24	760	11	882	11	184	18	37	41
1994.	0	0	92	44	589	11	1,320	12	318	14	157	21
1995.	2	73	159	18	447	12	1,486	8	311	19	55	24
1996.	0	0	60	23	249	18	2,417	8	452	18	83	17
THOUSANDS OF POUNDS												
YEAR	WINTER FLOUNDER						ALL FISHES					
	INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1981.	10,022	12	2,171	18	231	25	71,676	6	98,352	7	108,186	6
1982.	9,063	25	7,123	54	232	27	63,442	7	133,832	7	118,086	8
1983.	7,351	12	2,134	16	155	22	86,471	4	112,276	6	140,402	8
1984.	12,239	13	2,826	17	92	35	63,233	7	110,956	5	87,776	5
1985.	12,398	18	2,916	25	59	67	75,551	4	84,193	5	104,484	14
1986.	6,030	13	1,216	12	389	53	99,744	5	125,953	4	141,926	5
1987.	5,860	12	4,346	18	762	35	73,288	4	101,190	4	115,498	4
1988.	7,527	12	880	16	373	20	81,229	3	73,900	3	96,185	3
1989.	4,354	15	958	18	52	23	66,085	3	63,606	3	93,632	4
1990.	2,404	11	684	10	68	25	56,246	3	52,613	4	64,145	5
1991.	2,404	12	441	11	54	31	86,109	3	71,720	3	70,412	4
1992.	804	10	234	14	34	33	74,019	2	52,204	3	56,177	3
1993.	1,766	27	309	19	55	28	67,278	2	50,334	4	67,633	3
1994.	1,311	14	163	17	23	39	70,268	2	47,577	2	65,591	3
1995.	1,362	12	108	24	79	65	68,871	2	47,165	3	86,120	6
1996.	1,617	12	80	18	15	34	66,313	2	47,625	3	71,416	3
THOUSANDS OF POUNDS												

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR. "OCEAN TO 3 MILES" INCLUDES TRIPS OFF OF FLORIDA'S WEST COAST FROM 0 TO 10 MILES FROM SHORE (STATE TERRITORIAL WATERS) WHILE "OCEAN 3 TO 200 MILES" INCLUDES TRIPS OFF FLORIDA'S WEST COAST BEYOND 10 MILES FROM SHORE. ESTIMATES DO NOT INCLUDE TEXAS DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND PRIMARY FISHING AREA, 1993-1996 FOR THE PACIFIC COAST

YEAR	BARRED SANDBASS						BARRED SURFPERCH					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	314	10	701	6	527	7	21	24	657	10	0	0
1994.	239	12	1,056	6	193	10	4	47	381	12	0	100
1995.	293	19	841	7	379	10	8	33	664	10	0	0
1996.	240	11	937	6	309	9	21	45	521	11	0	0
NUMBER IN THOUSANDS												
YEAR	BLACK ROCKFISH						BLUE ROCKFISH					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	51	14	811	7	87	15	21	24	1,786	7	55	12
1994.	27	17	656	7	11	27	0	64	490	8	53	19
1995.	22	18	580	7	29	19	9	56	418	8	14	27
1996.	64	14	551	8	117	20	10	29	466	8	44	15
NUMBER IN THOUSANDS												
YEAR	BOCACCIO						CABEZON					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	7	48	21	17	119	16	14	14	90	8	4	28
1994.	0	100	26	25	152	16	6	17	67	10	3	28
1995.	0	0	6	29	18	22	4	30	79	12	2	44
1996.	1	76	18	23	34	21	30	22	95	10	2	28
NUMBER IN THOUSANDS												
YEAR	CALIFORNIA HALIBUT						CANARY ROCKFISH					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	138	11	166	9	42	18	3	29	189	9	38	15
1994.	191	10	263	9	37	17	0	0	160	9	18	14
1995.	446	8	451	9	26	19	1	100	156	13	44	11
1996.	344	8	318	9	50	13	1	38	84	11	22	16
NUMBER IN THOUSANDS												
YEAR	CHILIPEPPER ROCKFISH						KELP BASS					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	0	0	12	31	34	33	131	13	1,863	6	616	9
1994.	0	0	10	60	47	17	101	14	1,348	5	399	9
1995.	0	0	6	56	22	29	104	19	1,313	6	182	15
1996.	0	0	3	44	19	23	61	16	1,300	5	196	12
NUMBER IN THOUSANDS												

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.
1993-1995 ESTIMATES DO NOT INCLUDE WASHINGTON STATE DATA.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT (INCLUDING RELEASED ALIVE) WITH PSE (%) BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND PRIMARY FISHING AREA, 1993-1996 FOR THE PACIFIC COAST

YEAR	KELP GREENLING						LINGCOD					
	INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1993.	83	15	122	9	4	37	26	13	315	6	40	12
1994.	23	18	77	10	1	39	9	34	235	7	18	13
1995.	31	15	63	11	1	41	13	27	204	7	26	15
1996.	163	9	76	10	1	41	116	11	228	7	27	11
NUMBER IN THOUSANDS												
YEAR	PACIFIC BARRACUDA						PACIFIC COD					
	INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1993.	74	30	785	8	391	8	0	0	0	0	0	0
1994.	61	25	1,107	8	597	9	0	0	1	63	0	0
1995.	41	30	1,136	7	202	11	0	0	0	0	0	0
1996.	11	26	293	8	210	9	11	45	0	0	0	0
NUMBER IN THOUSANDS												
YEAR	PACIFIC CHUB MACKEREL						REDTAIL SURFPERCH					
	INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1993.	397	13	2,678	5	1,576	7	1	46	68	17	0	0
1994.	567	19	3,522	6	1,225	8	2	32	88	18	0	0
1995.	477	13	3,000	7	1,669	9	13	22	78	16	0	0
1996.	464	9	3,806	5	1,237	7	26	36	85	27	0	0
NUMBER IN THOUSANDS												
YEAR	STRIPED SURFPERCH						WHITE CROAKER					
	INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1993.	49	13	83	12	0	0	438	10	1,388	7	193	12
1994.	14	17	58	16	0	0	175	14	657	11	68	21
1995.	33	48	66	14	0	0	371	10	623	8	414	50
1996.	191	17	95	16	0	0	615	12	1,160	10	184	22
NUMBER IN THOUSANDS												
YEAR	WHITE STURGEON						ALL FISHES					
	INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES		INLAND		OCEAN 0 TO 3 MILES		OCEAN 3 TO 200 MILES	
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)
1993.	21	17	1	58	0	0	5,214	4	20,347	3	5,361	3
1994.	5	30	0	0	0	0	3,492	5	18,283	3	5,394	3
1995.	47	19	0	0	0	0	4,965	4	17,841	3	4,803	6
1996.	21	15	1	67	0	0	12,975	9	17,255	3	3,818	3
NUMBER IN THOUSANDS												

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.
1993-1995 ESTIMATES DO NOT INCLUDE WASHINGTON STATE DATA.

U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND PRIMARY FISHING AREA, 1993-1996 FOR THE PACIFIC COAST

BARRED SANDBASS																						BARRED SURFPERCH									
YEAR	INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)									
THOUSANDS OF POUNDS																															
1993.	143	14	537	9	368	9	368	9	5	26	310	13	310	13	0	0	0	0	0	0	0	0									
1994.	37	29	858	8	138	12	138	12	2	59	165	14	165	14	0	100	0	0	0	0	0	100									
1995.	52	21	820	10	595	12	595	12	7	37	347	12	347	12	0	0	0	0	0	0	0	0									
1996.	46	19	747	8	405	11	405	11	14	46	292	14	292	14	0	0	0	0	0	0	0	0									
THOUSANDS OF POUNDS																															
BLACK ROCKFISH																						BLUE ROCKFISH									
YEAR	INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)									
THOUSANDS OF POUNDS																															
1993.	73	16	1,390	8	158	16	158	16	35	26	1,209	8	1,209	8	65	13	65	13	65	13	65	13									
1994.	30	20	1,095	8	25	46	25	46	0	66	475	8	475	8	28	26	28	26	28	26	28	26									
1995.	26	21	1,027	7	68	21	68	21	5	53	376	9	376	9	14	24	14	24	14	24	14	24									
1996.	140	17	1,053	8	212	35	212	35	7	27	444	9	444	9	51	17	51	17	51	17	51	17									
THOUSANDS OF POUNDS																															
BOCACCCIO																						CABEZON									
YEAR	INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)									
THOUSANDS OF POUNDS																															
1993.	4	61	25	20	242	15	242	15	26	17	226	9	226	9	11	32	11	32	11	32	11	32									
1994.	0	0	57	31	367	19	367	19	5	33	160	10	160	10	6	26	6	26	6	26	6	26									
1995.	0	0	9	43	59	23	59	23	3	38	180	13	180	13	4	55	4	55	4	55	4	55									
1996.	0	100	44	28	118	24	118	24	51	17	224	11	224	11	5	25	5	25	5	25	5	25									
THOUSANDS OF POUNDS																															
CALIFORNIA HALIBUT																						CANARY ROCKFISH									
YEAR	INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)									
THOUSANDS OF POUNDS																															
1993.	146	16	397	16	52	23	52	23	7	31	189	9	189	9	54	16	54	16	54	16	54	16									
1994.	264	14	420	14	106	25	106	25	0	0	162	9	162	9	22	16	22	16	22	16	22	16									
1995.	1,384	12	930	12	35	29	35	29	0	100	180	12	180	12	85	11	85	11	85	11	85	11									
1996.	1,047	13	495	13	77	26	77	26	2	34	98	11	98	11	36	17	36	17	36	17	36	17									
THOUSANDS OF POUNDS																															
CHILIPEPPER ROCKFISH																						KELP BASS									
YEAR	INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					INLAND					OCEAN 0 TO 3 MILES					OCEAN 3 TO 200 MILES					
	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)	EST	PSE (%)									
THOUSANDS OF POUNDS																															
1993.	0	0	7	34	29	50	29	50	42	24	1,119	8	1,119	8	273	9	273	9	273	9	273	9									
1994.	0	0	0	0	50	20	50	20	10	32	1,049	8	1,049	8	335	11	335	11	335	11	335	11									
1995.	0	0	4	59	29	29	29	29	7	40	963	7	963	7	160	19	160	19	160	19	160	19									
1996.	0	0	4	64	27	31	27	31	11	39	679	7	679	7	80	13	80	13	80	13	80	13									
THOUSANDS OF POUNDS																															

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.
1993-1995 ESTIMATES DO NOT INCLUDE WASHINGTON STATE DATA.

U.S. MARINE RECREATIONAL FISHERIES

81

ESTIMATED WEIGHT (IN LBS.) AND PSE (%) OF FISH HARVESTED BY MARINE RECREATIONAL ANGLERS, BY SPECIES AND PRIMARY FISHING AREA, 1993-1996 FOR THE PACIFIC COAST

YEAR	KELP GREENLING						LINGCOD					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	55	14	138	10	38	2	88	15	1,333	7	184	17
1994.	19	22	76	10	42	0	14	22	828	9	64	18
1995.	18	15	66	12	54	1	23	25	752	10	81	18
1996.	134	11	84	11	38	2	167	16	883	9	121	17
THOUSANDS OF POUNDS												
YEAR	PACIFIC BARRACUDA						PACIFIC COD					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	25	35	901	13	11	762	0	0	0	0	0	0
1994.	11	43	989	10	13	1,016	0	0	1	72	0	0
1995.	7	63	2,123	9	16	361	0	0	0	0	0	0
1996.	3	46	506	11	13	486	14	44	0	0	0	0
THOUSANDS OF POUNDS												
YEAR	PACIFIC CHUB MACKEREL						REDTAIL SURFPERCH					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	148	24	761	7	13	465	1	47	57	19	0	0
1994.	179	20	1,570	10	14	475	2	33	69	19	0	0
1995.	155	18	1,101	9	15	907	16	24	47	18	0	0
1996.	125	13	1,018	7	13	378	26	39	75	28	0	0
THOUSANDS OF POUNDS												
YEAR	STRIPED SURFPERCH						WHITE CROAKER					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	42	14	88	13	0	0	128	13	277	9	20	23
1994.	12	19	49	19	0	0	32	32	129	17	13	79
1995.	35	54	64	16	0	0	128	14	160	12	122	66
1996.	175	19	106	17	0	0	257	13	355	14	47	39
THOUSANDS OF POUNDS												
YEAR	WHITE STURGEON						ALL FISHES					
	INLAND			OCEAN 0 TO 3 MILES			INLAND			OCEAN 0 TO 3 MILES		
	EST	PSE (%)		EST	PSE (%)		EST	PSE (%)		EST	PSE (%)	
1993.	205	24	2	100	0	0	2,731	5	13,027	2	5,177	4
1994.	44	36	0	0	0	0	1,419	6	11,596	2	4,909	4
1995.	764	21	0	0	0	0	4,632	6	14,071	3	5,610	6
1996.	534	16	9	73	0	0	8,689	4	10,365	3	3,909	5
THOUSANDS OF POUNDS												

NOTE:--EST = ESTIMATE. PSE (%) = PROPORTIONAL STANDARD ERROR.
1993-1995 ESTIMATES DO NOT INCLUDE WASHINGTON STATE DATA.

WORLD FISHERIES

WORLD COMMERCIAL CATCH BY
LEADING COUNTRIES, 1991-1995

U.S. AND WORLD COMMERCIAL FISH CATCHES, 1958-95

Year	U.S. commercial catch and exvessel value			World commercial catch				
	Published by U.S. (excludes weight of mollusk shells)	Published by FAO (1)	Exvessel value	Fresh- water	Marine			Grand total
					Peruvian anchovy	Other (2)	Total	
	<u>-Million metric tons- Live weight</u>		<u>Billion dollars</u>		<u>-Million metric tons- Live weight</u>			
1958..	2.2	2.7	0.4	4.5	0.8	28.0	28.8	33.3
1959..	2.3	2.9	0.4	5.1	2.0	29.8	31.8	36.9
1960..	2.2	2.8	0.4	5.6	3.5	31.1	34.6	40.2
1961..	2.4	2.9	0.4	5.7	5.3	32.6	37.9	43.6
1962..	2.4	3.0	0.4	5.8	7.1	31.9	39.0	44.8
1963..	2.2	2.8	0.4	5.9	7.2	33.5	40.7	46.6
1964..	2.1	2.6	0.4	6.2	9.8	35.9	45.7	51.9
1965..	2.2	2.7	0.4	7.0	7.7	38.5	46.2	53.2
1966..	1.9	2.5	0.5	7.3	9.6	40.4	50.0	57.3
1967..	1.8	2.4	0.4	7.2	10.5	42.7	53.2	60.4
1968..	1.9	2.5	0.5	7.4	11.3	45.2	56.5	63.9
1969..	1.9	2.5	0.5	7.6	9.7	47.1	56.8	64.4
1970..	2.2	2.8	0.6	8.4	13.1	44.1	57.2	65.6
1971..	2.3	2.9	0.7	9.0	11.2	45.9	57.1	66.1
1972..	2.2	2.8	0.7	5.7	4.8	51.5	56.3	62.0
1973..	2.2	2.8	0.9	5.8	1.7	55.2	56.9	62.7
1974..	2.3	2.8	0.9	5.8	4.0	56.0	60.0	65.8
1975..	2.2	2.8	1.0	6.0	3.3	56.4	59.7	65.7
1976..	2.4	3.0	1.3	5.7	4.3	59.1	63.4	69.1
1977..	2.4	3.0	1.5	5.8	0.8	61.6	62.4	68.2
1978..	2.7	3.4	1.9	5.7	1.4	63.1	64.5	70.2
1979..	2.8	3.5	2.2	5.9	1.4	63.6	65.0	70.9
1980..	2.9	3.6	2.2	6.2	0.8	65.1	65.9	72.1
1981..	2.7	3.8	2.4	6.6	1.6	66.4	68.0	74.6
1982..	2.9	4.0	2.4	6.8	1.8	68.2	70.0	76.8
1983..	2.9	4.3	2.4	7.5	0.1	69.9	70.0	77.5
1984..	2.9	5.0	2.3	8.0	0.1	75.8	75.9	83.9
1985..	2.8	4.9	2.3	8.7	1.0	76.7	77.7	86.4
1986..	2.7	5.2	2.8	9.7	4.9	78.2	83.1	92.8
1987..	3.1	6.0	3.1	10.4	2.1	81.9	84.0	94.4
1988..	3.3	5.9	3.5	11.1	3.6	84.4	88.0	99.1
1989..	3.8	5.8	3.2	11.4	5.4	83.3	88.7	100.1
1990..	4.3	5.9	3.5	11.4	3.8	82.8	86.6	98.0
1991..	4.3	5.5	3.3	12.4	4.0	81.4	85.4	97.8
1992..	4.4	5.6	3.7	13.2	6.2	80.7	86.9	100.1
1993..	4.7	5.9	3.5	14.7	8.5	80.0	88.5	103.2
1994..	4.7	5.9	3.8	16.4	12.5	81.6	94.1	110.5
1995..	4.5	5.6	3.8	18.1	8.6	86.2	94.8	112.9

(1) Includes U.S.-flag vessel landings at foreign ports, transfer of catches onto foreign vessels within the U.S. EEZ (joint ventures), and the weight of mollusk shells. (2) Includes diadromous fishes including salmon and other anadromous fishes and catadromous fishes such as eels.

Note:--There are 2,204.6 pounds in a metric ton. Prior to 1970, the world commercial catch of whales and seals is excluded. For the years 1970-1995, data for marine mammals and aquatic plants are excluded.

Source:--Fishery Statistics of the United States; Fisheries of the United States; Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, Rome; various issues.

WORLD FISHERIES

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY COUNTRIES,
1991-95 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

Country	1991 (1)	1992 (1)	1993 (1)	1994 (1)	1995
-----Thousand metric tons-----					
Live-weight					
China.....	13,125	15,007	17,568	20,719	24,433
Peru.....	6,888	7,503	9,010	11,997	8,943
Chile.....	6,006	6,502	6,035	7,838	7,591
Japan.....	9,301	8,502	8,081	7,396	6,758
United States (2)...	5,487	5,600	5,934	5,922	5,634
India.....	4,045	4,233	4,546	4,738	4,904
Russia.....	7,047	5,611	4,461	3,781	4,374
Indonesia.....	3,352	3,439	3,685	3,917	4,118
Thailand.....	2,972	3,246	3,395	3,537	3,502
Norway.....	2,173	2,561	2,562	2,551	2,808
South Korea.....	2,513	2,696	2,649	2,700	2,688
Philippines.....	2,316	2,272	2,264	2,276	2,269
Denmark.....	1,793	1,996	1,656	1,916	2,041
North Korea (3).....	1,745	1,780	1,782	1,802	1,850
Iceland.....	1,050	1,577	1,718	1,560	1,616
Mexico.....	1,453	1,247	1,201	1,264	1,358
Spain (3).....	1,273	1,260	1,255	1,372	1,320
Taiwan.....	1,307	1,314	1,416	1,249	1,288
Malaysia.....	978	1,105	1,155	1,182	1,240
Viet Nam (3).....	1,020	1,080	1,100	1,150	1,200
Bangladesh.....	893	967	1,047	1,091	1,170
Argentina.....	641	705	932	949	1,149
United Kingdom.....	851	870	929	964	1,004
Canada.....	1,565	1,372	1,212	1,089	901
Morocco.....	593	548	623	752	846
Burma.....	769	800	837	824	832
Brazil (3).....	800	790	780	820	800
France.....	819	821	860	853	793
Turkey.....	365	454	559	603	652
New Zealand.....	417	503	470	492	612
Italy.....	552	558	565	576	610
Ecuador.....	374	347	331	340	592
South Africa.....	501	696	563	521	575
Pakistan.....	515	553	622	552	541
Netherlands.....	459	487	533	530	521
Venezuela.....	344	333	397	441	505
Poland.....	457	506	423	460	451
Ukraine.....	865	526	371	311	425
Ireland.....	265	276	308	319	413
Sweden.....	245	315	348	394	412
All others.....	9,663	9,219	8,989	8,790	9,171
Total.....	97,797	100,177	103,172	110,538	112,910

(1) Revised.

(2) Includes the weight of clam, oyster, scallop, and other mollusk shells. This weight is not included in U.S. landings statistics shown elsewhere.

(3) Data estimated by FAO.

Note:--Statistics on quantities caught by recreational fishermen in the United States are excluded

Source:--Food and Agriculture Organization of the United Nations (FAO)

**WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY CONTINENT,
1991-95 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)**

Continent	1991 (1)	1992 (1)	1993 (1)	1994 (1)	1995
	-----Thousand metric tons----- Live-weight				
North America.....	9,122	8,780	8,887	8,834	8,490
South America.....	15,386	16,556	17,837	22,727	19,990
Europe.....	11,455	12,743	12,607	12,896	13,463
Former USSR.....	9,447	6,862	5,448	4,579	5,313
Asia.....	46,587	48,896	52,168	55,243	59,042
Africa.....	4,851	5,292	5,191	5,214	5,475
Oceania.....	832	916	887	893	1,009
Other.....	117	132	147	152	128
Total.....	97,797	100,177	103,172	110,538	112,910

(1) Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO)

**WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY MAJOR FISHING
AREAS, 1991-95 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)**

Area	1991 (1)	1992 (1)	1993 (1)	1994 (1)	1995
	-----Thousand metric tons----- Live-weight				
Marine Areas:					
Pacific Ocean....	52,358	52,844	54,334	59,975	59,185
Atlantic Ocean...	23,792	24,372	23,748	23,720	24,690
Indian Ocean.....	6,879	7,356	7,857	7,818	8,031
Total.....	83,029	84,572	85,939	91,513	91,906
Inland waters:					
North America....	551	583	578	573	549
South America....	331	352	376	391	415
Europe.....	493	504	497	510	528
Former USSR.....	764	682	568	490	489
Asia.....	10,798	11,627	13,336	15,188	17,091
Africa.....	1,808	1,832	1,855	1,849	1,908
Oceania.....	23	25	23	24	24
Total.....	14,768	15,605	17,233	19,025	21,004
Grand total...	97,797	100,177	103,172	110,538	112,910

(1) Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO)

WORLD FISHERIES

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY SPECIES GROUPS, 1991-95, (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

Species group	1991 (1)	1992 (1)	1993 (1)	1994 (1)	1995
-----Thousand metric tons----- Metric tons					
Carp, barbels, cyprinids.....	6,483	7,227	8,177	9,533	10,881
Cods, hakes, haddocks.....	10,297	10,456	9,931	9,665	10,618
Flatfish.....	1,103	1,179	1,116	1,000	930
Herrings, sardines, anchovies...	21,725	21,196	21,925	25,856	22,017
Jacks, mullets, sauries.....	10,387	10,539	10,147	10,089	11,195
Mackerel, snoeks, cutlassfishes.	3,467	3,448	4,010	4,522	4,654
Redfish, basses, congers.....	6,021	6,058	5,822	6,456	6,960
River eels.....	202	208	203	205	205
Salmons, trouts, smelts.....	1,710	1,478	1,712	1,814	2,101
Shads.....	681	705	679	645	674
Sharks, rays, chimaeras.....	706	725	737	750	755
Sturgeons, paddlefish.....	15	14	9	8	7
Tilapias.....	1,002	1,063	1,087	1,134	1,213
Tunas, bonitos, billfishes.....	4,632	4,518	4,585	4,680	4,783
Other fishes.....	15,513	16,250	17,320	17,511	18,053
Crabs.....	1,020	1,062	1,066	1,258	1,293
Krill.....	356	305	89	82	119
Lobsters.....	225	213	212	222	227
Shrimp.....	2,836	2,951	2,920	3,118	3,193
Other crustaceans.....	848	909	1,165	1,301	1,472
Abalones, winkles, conchs.....	80	85	94	100	100
Clams, cockles, arkshells.....	1,545	1,803	1,967	2,021	2,134
Mussels.....	1,316	1,338	1,312	1,262	1,265
Oysters.....	990	1,083	1,171	1,221	1,339
Scallops.....	847	1,056	1,459	1,634	1,652
Squids, cuttlefishes, octopus...	2,572	2,742	2,722	2,776	2,841
Other mollusks.....	834	944	1,110	1,170	1,658
Sea urchins, other echinoderms..	100	102	105	117	128
Miscellaneous.....	284	520	320	388	443
Total.....	97,797	100,177	103,172	110,538	112,910

(1) Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO)

DISPOSITION OF WORLD COMMERCIAL CATCH, 1991-95
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

Item	1991 (1)	1992 (1)	1993 (1)	1994 (1)	1995
-----Percent of total-----					
Marketed fresh.....	22.4	26.2	26.2	27.2	31.6
Frozen.....	23.9	23.7	23.5	22.0	21.4
Canned.....	13.1	12.2	12.3	11.4	11.0
Cured.....	11.1	9.8	9.6	9.2	9.0
Reduced to meal and oil (2).....	27.9	26.3	26.6	28.6	25.3
Miscellaneous purposes.....	1.6	1.8	1.8	1.6	1.7
Total.....	100.0	100.0	100.0	100.0	100.0

(1) Revised.

(2) Only waste fish destined for the manufacture of oils and meals are included. Raw material for reduction derived from fish primarily destined for marketing fresh, frozen, canned, cured, and miscellaneous purposes is excluded; such waste quantities are included under the other disposition channels.

Source:--Food and Agriculture Organization of the United Nations (FAO)

WORLD FISHERIES

87

WORLD IMPORTS AND EXPORTS OF SEVEN FISHERY COMMODITY GROUPS, BY LEADING COUNTRIES, 1991-95

Country	1991 (1)	1992 (1)	1993 (1)	1994 (1)	1995
-----Thousand U.S. dollars-----					
IMPORTS					
Japan.....	12,085,125	12,831,760	14,187,149	16,140,465	17,853,481
United States.....	5,999,580	6,024,064	6,290,233	7,043,431	7,141,428
France.....	2,925,994	2,934,588	2,556,151	2,796,719	3,221,298
Spain.....	2,748,304	2,898,232	2,629,799	2,638,737	3,105,684
Germany.....	2,114,720	2,190,892	1,884,301	2,316,449	2,478,817
Italy.....	2,689,639	2,643,440	2,131,181	2,257,462	2,281,316
United Kingdom.....	1,911,905	1,906,861	1,628,852	1,880,350	1,910,091
Hong Kong.....	1,232,076	1,398,181	1,376,856	1,642,105	1,827,691
Denmark.....	1,148,255	1,197,370	1,094,253	1,415,239	1,573,732
Netherlands.....	867,511	888,606	791,608	1,017,635	1,191,857
Belgium.....	775,966	828,086	730,459	920,918	1,035,818
Canada.....	675,242	686,876	821,404	913,404	1,034,070
China.....	438,090	680,844	575,929	855,706	941,293
Thailand.....	1,052,918	942,090	830,480	815,616	825,606
South Korea.....	568,229	498,036	537,346	718,451	824,817
Portugal.....	757,843	734,928	627,713	669,888	763,245
Singapore.....	460,545	543,769	566,502	619,595	659,681
Taiwan.....	458,830	491,029	544,243	560,799	589,723
Sweden.....	441,490	467,773	371,756	448,661	546,076
Other Countries.....	4,137,182	4,467,246	4,394,097	5,391,889	6,034,407
Total.....	43,489,444	45,254,671	44,570,312	51,063,519	55,840,131
EXPORTS					
Thailand.....	2,901,360	3,071,780	3,404,268	4,190,036	4,449,457
United States.....	3,281,746	3,582,545	3,179,474	3,229,585	3,383,589
Norway.....	2,282,247	2,436,832	2,302,346	2,718,132	3,122,662
China.....	1,181,989	1,559,977	1,542,429	2,320,125	2,854,373
Denmark.....	2,302,299	2,319,917	2,150,665	2,359,034	2,459,629
Taiwan.....	1,524,735	1,802,097	2,369,422	2,213,259	2,328,105
Canada.....	2,168,122	2,085,495	2,055,438	2,182,078	2,314,413
Chile.....	1,066,781	1,252,364	1,124,679	1,303,974	1,704,260
Indonesia.....	1,186,062	1,178,552	1,419,492	1,583,416	1,666,752
Russia.....	-	826,299	1,471,446	1,720,459	1,628,204
South Korea.....	1,490,659	1,359,050	1,335,238	1,411,052	1,564,878
Netherlands.....	1,356,885	1,405,567	1,296,340	1,435,824	1,447,239
Iceland.....	1,280,006	1,252,713	1,137,638	1,264,615	1,342,552
India.....	647,652	673,369	835,980	1,125,440	1,240,603
United Kingdom.....	1,121,885	1,146,138	1,036,674	1,180,158	1,195,477
Spain.....	772,651	712,729	813,750	1,021,015	1,190,676
France.....	925,560	955,379	857,752	909,734	993,364
Argentina.....	448,012	559,029	709,292	728,091	917,580
Germany.....	715,975	692,954	652,956	790,357	899,248
Other Countries.....	12,262,841	11,341,410	11,712,740	13,576,105	15,041,899
Total.....	38,917,467	40,214,196	41,408,019	47,262,489	51,744,960

(1) Revised.

Note:--Data on imports and exports cover the international trade of 176 countries or areas. The total value of exports is consistently less than the total value of imports, probably because charges for insurance, freight, and similar expenses were included in the import value but not in the export value. The seven fishery commodity groups covered by this table are: 1. Fish, fresh, chilled or frozen; 2. Fish, dried, salted, or smoked; 3. Crustaceans and mollusks, fresh, dried, salted,, etc.; 4. Fish products and preparations, whether or not in airtight containers; 5. Crustacean and mollusk products and preparations, whether or not in airtight containers; 6. Oils and fats, crude or refined, of aquatic animal origin; and 7. Meals, solubles and similar animal foodstuffs of aquatic animal origin.

Source:--Food and Agriculture Organization of the United Nations (FAO)

PROCESSED FISHERY PRODUCTS

VALUE OF PROCESSED FISHERY PRODUCTS FROM DOMESTIC CATCH & IMPORTED PRODUCTS 1992 - 1996

######

######

91

Species	Pounds per case	1995 (1)			1996		
		Standard cases	Thousand pound	Thousand dollars	Standard cases	Thousand pound	Thousand dollars
For human consumption:							
Fish:							
Herring.....	23.4	292,193	6,837	12,032	266,308	6,232	10,826
Salmon:							
Chinook.....	44.25	3,825	169	474	2,589	115	628
Chum.....	44.25	234,938	10,396	16,173	337,634	14,940	19,572
Pink.....	44.25	4,049,808	179,204	258,900	2,947,797	130,440	158,969
Coho.....	44.25	66,339	2,935	6,318	61,867	2,738	5,594
Sockeye.....	44.25	1,149,476	50,864	137,371	1,105,756	48,930	99,582
Total salmon...		5,504,386	243,568	419,236	4,455,643	197,163	284,345
Specialties.....	48	9,761	469	4,197	10,520	505	4,272
Sardines, Maine....	23.4	579,797	13,567	23,669	755,232	17,672	29,857
Tuna: (2)							
Albacore:							
Solid.....	18	7,718,778	138,938	326,701	7,798,889	140,380	310,999
Chunk.....	18	1,411,782	25,412	54,236	1,403,026	25,254	51,691
Total.....		9,130,560	164,350	380,937	9,201,915	165,634	362,690
Lightmeat:							
Solid.....	18	228,547	4,114	5,765	331,726	5,971	8,938
Chunk.....	18	27,676,500	498,117	551,839	28,011,722	504,211	585,296
Total.....		27,905,047	502,231	557,604	28,343,448	510,182	594,234
Total tuna...		37,035,607	666,581	938,541	37,545,363	675,816	956,924
Specialties.....	48	226	11	44	155	7	80
Other.....	48	327,419	15,716	21,502	324,317	15,567	12,185
Total fish.....	--	43,749,389	946,749	1,419,221	43,357,538	912,962	1,298,489
Shellfish:							
Clam and clam products: (3)							
Whole and minced.	15	2,865,294	42,979	61,677	3,057,118	45,856	61,987
Chowder and juice	30	2,491,088	74,733	38,198	2,385,018	71,551	46,164
Specialties.....	48	239,633	11,502	9,908	249,037	11,954	9,100
Crabs, natural.....	19.5	3,309	65	356	4,778	93	380
Lobster meat and specialties.....	48	8,627	414	479	7,104	341	384
Oyster, specialties	48	124	6	76	175	8	131
Shrimp, Natural (4)	6.75	135,175	912	6,662	121,321	819	6,074
Other.....	48	156,374	7,506	7,631	195,574	9,388	6,191
Total shellfish.	--	5,899,624	138,117	124,987	6,020,125	140,010	130,411
Total for human consumption....	--	49,649,013	1,084,866	1,544,208	49,377,663	1,052,972	1,428,900
For bait and animal food	48	17,548,979	842,351	342,842	25,607,813	1,229,175	505,060
Grand total.....	--	67,197,992	1,927,217	1,887,050	74,985,476	2,282,147	1,933,960

(1) Revised.

(2) Flakes included with chunk.

(3) "Cut out" or "drained" weight of can contents are given for whole or minced clams, and net contents for other clam products.

(4) Drained weight.

PROCESSED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED FISHERY PRODUCTS, 1987-96

Year	For human consumption		For animal food and bait		Total	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
1987...	965,012	1,476,484	220,641	85,416	1,185,653	1,561,900
1988...	908,687	1,388,122	222,920	97,492	1,131,607	1,485,614
1989...	1,109,788	1,753,536	345,464	238,343	1,455,252	1,991,879
1990...	956,962	1,414,846	221,320	146,947	1,178,282	1,561,793
1991...	981,275	1,439,362	404,440	204,917	1,385,715	1,644,279
1992...	936,117	1,330,173	607,678	247,261	1,543,795	1,577,434
1993...	983,225	1,375,377	725,822	312,597	1,709,047	1,687,974
1994...	985,675	1,470,234	782,272	325,264	1,767,947	1,795,498
1995...	1,084,866	1,544,208	842,351	342,842	1,927,217	1,887,050
1996...	1,052,972	1,428,900	1,229,175	505,060	2,282,147	1,933,960

93

Product	1995 (1)		1996	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Dried scrap and meal:				
Fish:				
Menhaden.....	450,528	82,453	418,898	87,064
Tuna and mackerel....	64,548	8,140	52,258	7,682
Unclassified.....	135,748	30,579	149,772	46,223
Total.....	650,824	121,172	620,928	140,969
Shellfish.....	16,416	1,038	17,572	1,194
Total, scrap and meal	667,240	122,210	638,500	142,163
Solubles, total.....	89,513	7,809	81,994	6,068
Body oil:				
Menhaden.....	238,164	41,929	246,536	43,713
Unclassified.....	3,777	331	1,863	232
Total, oil.....	241,941	42,260	248,399	43,945

(1) Revised.

Note:--To convert pounds of oil to gallons divide by 7.75. The above data includes production in American Samoa and Puerto Rico.

Year	Quantity			Value		
	Meal	Solubles	Marine animal oil	Meal, solubles, and oil	Other industrial products	Grand total
	-----Thousand pounds-----			-----Thousand dollars-----		
1987.....	786,978	249,289	298,496	174,321	37,524	211,845
1988.....	643,796	223,449	224,733	188,843	46,737	235,580
1989.....	618,382	232,709	225,478	156,321	49,756	206,077
1990.....	577,498	185,660	281,949	163,796	42,759	206,555
1991.....	612,716	169,607	267,345	170,495	37,707	208,202
1992.....	644,512	93,007	184,725	157,693	45,310	203,003
1993.....	750,744	126,903	293,452	182,170	43,689	225,859
1994.....	807,833	146,568	291,882	186,222	61,992	248,214
1995.....	667,240	89,513	241,941	172,279	74,264	246,543
1996.....	638,500	81,994	248,399	192,176	85,583	277,759

Note:--Does not include the value of imported items that may be further processed.

U.S. COLD STORAGE HOLDINGS

FROZEN FISHERY PRODUCTS

U.S. COLD STORAGE HOLDINGS OF FISHERY PRODUCTS, 1996

Item	January 31	February 28	March 31	April 30	May 31	June 30
Fish	-----Thousand pounds-----					
Blocks:						
Cod.....	5,753	5,967	4,178	4,845	4,368	4,533
Flounder.....	1,015	970	1,041	1,095	951	836
Haddock.....	2,196	1,268	741	1,288	1,884	2,556
Ocean perch.....	138	144	149	176	92	100
Pollock: Alaska.....	10,972	13,923	17,119	15,404	14,549	13,215
Saithe and other....	5,673	3,481	4,791	6,553	10,253	9,029
Whiting.....	737	1,073	1,218	763	471	987
Minced (grated) all species...	3,492	2,941	4,866	6,803	12,946	15,769
Unclassified.....	2,997	2,372	2,413	3,301	3,370	1,565
Total blocks.....	32,973	32,139	36,516	40,228	48,884	48,590
Filletts and steaks:						
Cod.....	15,168	16,095	15,372	16,727	20,264	21,997
Flounder.....	4,903	4,402	4,537	4,572	4,274	4,463
Haddock.....	4,741	3,999	3,068	3,872	3,773	3,894
Halibut.....	968	882	732	613	912	606
Ocean perch.....	5,343	5,440	3,695	4,349	2,974	3,454
Pollock.....	11,810	12,006	9,187	10,052	7,035	8,323
Whiting.....	5,651	2,364	4,041	3,640	2,623	2,552
Unclassified.....	29,881	27,007	22,954	21,823	27,624	25,840
Total filletts and steaks...	78,465	72,195	63,586	65,648	69,479	71,129
Fish sticks and portions (cooked uncooked, all species). Round, dressed, etc.:	25,642	19,116	23,058	17,611	16,995	17,000
Catfish.....	10,525	8,716	9,301	9,022	9,608	8,486
Halibut.....	4,482	3,176	2,319	2,176	2,829	3,354
Rainbow trout.....	946	1,175	985	974	889	878
Salmon.....	57,092	44,429	33,642	23,481	13,714	11,971
Whiting.....	712	592	1,329	4,195	2,190	4,399
Unclassified.....	32,989	28,116	22,515	21,944	26,019	22,050
Surimi and analog products....	24,394	21,271	28,352	25,950	24,819	21,204
Shellfish						
Clams and clam meats.....	4,589	4,897	6,169	5,294	4,475	4,998
Crabs:						
King.....	4,109	2,984	2,665	2,295	2,530	2,715
Snow.....	7,523	5,762	12,229	12,919	10,356	9,575
Unclassified.....	8,062	6,879	7,822	6,234	4,676	3,497
Lobsters (spiny and other).....	4,282	5,122	3,730	2,832	2,515	2,386
Scallops.....	2,282	2,628	2,520	2,185	1,754	1,978
Shrimp:						
Raw, headless.....	13287	11787	8873	9587	7541	6,864
Breaded.....	5,138	5,637	4,574	5,618	4,362	4,422
Peeled.....	14,855	13,537	8,702	9,653	8,644	10,917
Unclassified.....	10,272	9,361	8,401	7,353	6,913	8,299
Total shrimp.....	43,552	40,322	30,550	32,211	27,460	30,502
Squid.....	20,035	21,056	19,538	18,709	14,728	11,988
Other snellfish.....	4,145	3,383	3,273	3,530	4,341	4,069
Bait and animal food.....	6,911	7,380	8,170	7,627	10,488	12,488
Cured fish.....	574	616	424	291	302	291
Total fish and shellfish...	374,284	331,954	318,693	305,356	299,051	293,548

U.S. COLD STORAGE HOLDINGS

95

FROZEN FISHERY PRODUCTS

U.S. COLD STORAGE HOLDINGS OF FISHERY PRODUCTS, 1996 - Continued

Item	July 31	August 31	September 30	October 31	November 30	December 31
Fish	-----Thousand pounds-----					
Blocks:						
Cod.....	4,033	4,046	7,451	3,810	3,936	4,452
Flounder.....	939	964	983	1,385	972	947
Haddock.....	2,011	1,695	1,356	1,167	978	905
Ocean perch.....	133	186	182	181	270	222
Pollock: Alaska.....	13,681	12,963	14,758	18,953	23,499	26,590
Saithe and other....	7,472	5,041	3,285	8,307	10,378	11,162
Whiting.....	478	559	587	614	935	888
Minced (grated) all species...	16,084	8,313	16,230	12,888	6,397	13,261
Unclassified.....	2,015	1,374	1,422	1,529	1,933	2,097
Total blocks.....	46,846	35,141	46,254	48,834	49,298	60,524
Fillets and steaks:						
Cod.....	24,080	16,965	12,109	14,695	13,211	9,107
Flounder.....	8,895	5,539	5,176	5,373	5,719	4,778
Haddock.....	3,627	4,004	3,810	3,291	3,371	4,584
Halibut.....	560	432	515	604	517	663
Ocean perch.....	3,321	2,573	1,654	4,477	4,503	4,255
Pollock.....	12,916	7,603	8,380	13,413	11,781	12,725
Whiting.....	1,096	2,861	3,344	3,318	4,539	5,434
Unclassified.....	21,653	24,806	22,754	23,420	23,536	24,312
Total fillets and steaks.	76,148	64,783	57,742	68,591	67,177	65,858
Fish sticks and portions (cooked uncooked, all species).	17,862	14,585	20,833	18,807	20,759	23,614
Round, dressed, etc.:						
Catfish.....	9,643	9,871	10,275	11,021	11,762	12,328
Halibut.....	4,073	6,673	8,019	8,366	7,811	6,300
Rainbow trout.....	711	539	493	447	488	75
Salmon.....	39,128	59,535	61,002	51,497	45,232	37,051
Whiting.....	2,282	1,590	1,392	1,130	1,137	918
Unclassified.....	33,847	36,778	37,901	40,125	41,232	44,608
Surimi and analog products....	15,846	15,682	16,340	20,855	19,915	18,000
Shellfish						
Clams and clam meats.....	5,813	8,062	4,809	7,939	7,778	2,146
Crabs:						
King.....	2,835	2,693	3,329	4,016	3,323	3,981
Snow.....	8,616	7,396	7,806	6,318	5,475	3,600
Unclassified.....	4,318	3,962	3,433	3,365	2,988	3,982
Lobsters (spiny and other).....	2,661	3,080	3,661	3,636	4,395	4,042
Scallops.....	2,448	3,545	2,509	2,407	2,416	2,238
Shrimp:						
Raw, headless.....	6,736	6,518	6,737	7,021	8,031	10,564
Breaded.....	5,993	9,306	5,122	5,602	6,039	5,662
Peeled.....	9,813	10,254	13,740	15,286	16,264	16,640
Unclassified.....	6,859	6,611	9,341	11,088	12,271	11,011
Total shrimp.....	29,401	32,689	34,940	38,997	42,605	43,877
Squid.....	8,376	5,011	6,244	8,194	11,693	17,902
Other shellfish.....	7,233	4,100	4,378	4,782	5,727	4,131
Bait and animal food.....	15,075	15,013	13,847	11,042	11,963	13,450
Cured fish.....	666	1143	1250	1112	1249	795
Total fish and shellfish.	333,828	331,871	346,457	361,481	364,423	369,420

Note:--Holdings of frozen fishery products include domestic and imported fish and shellfish.

Source:--Frozen Fishery Products - Annual Summary, 1996, Current Fishery Statistics No. 9601 will provide additional information.

FOREIGN TRADE

IMPORTS

**U.S. IMPORTS OF EDIBLE FISHERY PRODUCTS, 1996
FROM MAJOR MARKETS** **U.S. IMPORTS OF EDIBLE FISHERY PRODUCTS, 1996
BY MAJOR GROUP**

FOREIGN TRADE

97

IMPORTS

FISHERY PRODUCTS IMPORTS, BY PRINCIPAL ITEMS, 1995 AND 1996

Item	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Edible fishery products:						
Fresh and frozen:						
Whole or eviscerated:						
Freshwater.....	58,332	26,459	61,804	64,923	29,449	68,072
Flatfish.....	31,817	14,432	58,081	31,371	14,230	56,929
Groundfish.....	55,091	24,989	45,310	59,760	27,107	47,080
Salmon.....	126,123	57,209	280,781	142,258	64,528	304,612
Tuna (1).....	495,876	224,928	457,493	528,703	239,818	509,783
Other.....	240,242	108,973	272,829	228,211	103,516	274,515
Fillets and steaks:						
Freshwater.....	26,080	11,830	68,536	26,133	11,854	74,688
Flatfish.....	47,134	21,380	112,922	45,091	20,453	96,092
Groundfish.....	184,845	83,845	323,836	178,209	80,835	310,417
Other.....	219,424	99,530	446,318	227,036	102,983	448,706
Blocks and slabs.....	210,275	95,380	213,566	234,210	106,237	213,323
Surimi.....	11,023	5,000	8,361	29,312	13,296	15,956
Shrimp.....	590,634	267,910	2,564,830	578,908	262,591	2,448,468
Crabmeat.....	12,363	5,608	64,294	11,272	5,113	50,043
Lobster:						
American.....	37,095	16,826	210,442	37,948	17,213	220,988
Spiny.....	28,785	13,057	281,227	25,082	11,377	224,872
Scallops (meats).....	48,331	21,923	174,103	58,686	26,620	197,855
Other fish and shellfish..	174,025	78,937	427,668	219,702	99,656	481,321
Total, fresh and frozen.	2,597,495	1,178,216	6,072,401	2,726,817	1,236,876	6,043,720
Canned:						
Anchovy.....	6,371	2,890	21,403	7,050	3,198	23,197
Herring.....	1,656	751	2,306	1,563	709	2,458
Mackerel.....	20,086	9,111	9,664	20,274	9,196	10,758
Salmon.....	1,202	545	5,627	2,266	1,028	6,219
Sardines.....	42,280	19,178	48,923	40,926	18,564	46,532
Tuna.....	215,365	97,689	233,505	193,037	87,561	215,892
Clams.....	9,938	4,508	11,570	11,054	5,014	12,410
Crabmeat.....	12,441	5,643	49,226	12,773	5,794	48,719
Lobsters.....	1,096	497	10,347	798	362	7,271
Oysters.....	10,602	4,809	30,964	10,198	4,626	28,753
Shrimp.....	6,570	2,980	16,061	3,563	1,616	9,032
Balls, cakes, and puddings	7,881	3,575	14,208	8,344	3,785	13,948
Other fish and shellfish..	42,935	19,475	49,590	42,602	19,324	48,517
Total, canned.	378,422	171,651	503,394	354,449	160,777	473,706
Cured:						
Dried.....	22,906	10,390	64,043	22,064	10,008	60,201
Pickled or salted.....	38,552	17,487	46,794	36,971	16,770	47,057
Smoked or kippered.....	9,467	4,294	24,948	8,382	3,802	24,462
Total, cured.	70,924	32,171	135,785	67,417	30,580	131,720
Caviar and roe.....	4,727	2,144	33,709	5,088	2,308	35,305
Prepared meals.....	2,923	1,326	8,384	2,661	1,207	8,252
Other fish and shellfish...	11,967	5,428	38,017	13,355	6,058	36,911
Total edible fishery products.	3,066,458	1,390,936	6,791,690	3,169,787	1,437,806	6,729,614
Nonedible fishery products:						
Meal and scrap.....	139,101	63,096	24,658	135,561	61,490	33,981
Fish oils.....	23,913	10,847	13,795	35,622	16,158	18,967
Other.....	-	-	5,621,480	-	-	6,277,793
Total nonedible fishery products.	-	-	5,659,933	-	-	6,330,741
Grand total.	-	-	12,451,623	-	-	13,060,355

(1) Includes loins and discs.

Note:--Data include imports into the United States and Puerto Rico and landings of tuna by foreign vessels at American Samoa. Statistics on imports are the weight of individual products as exported, i.e., fillets, steaks, whole, headed, etc.

Imports and Exports of Fishery Products, Annual Summary, 1996, Current Fishery Statistics No. 9602 provides additional information.

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

IMPORTS

EDIBLE AND NONEDIBLE FISHERY PRODUCTS IMPORTS, 1987-96

Year	Edible		Nonedible		Total
	Thousand pounds	Metric tons	--Thousand dollars--		
1987.....	3,201,099	1,452,009	5,711,233	3,106,464	8,817,697
1988.....	2,967,755	1,346,165	5,441,628	3,430,369	8,871,997
1989.....	3,243,022	1,471,025	5,497,849	4,106,507	9,604,356
1990.....	2,884,596	1,308,444	5,233,167	3,814,513	9,047,680
1991.....	3,014,819	1,367,513	5,671,887	3,763,173	9,435,060
1992.....	2,893,954	1,312,689	5,705,876	4,165,386	9,871,262
1993.....	2,917,160	1,323,215	5,848,738	4,773,649	10,622,387
1994.....	3,034,841	1,376,595	6,645,132	5,341,740	11,986,872
1995.....	3,066,458	1,390,936	6,791,690	5,659,933	12,451,623
1996.....	3,169,787	1,437,806	6,729,614	6,330,741	13,060,355

Source:--U.S. Department of Commerce, Bureau of the Census.

FISHERY PRODUCTS IMPORTS: VALUE, DUTIES COLLECTED, AND AD VALOREM EQUIVALENT, 1987-96

Year	Value		Duties collected		Average ad valorem equivalent	
	Fishery imports	All imports	Fishery imports	All imports	Fishery imports	All imports
	--Thousand dollars--				--Percent--	
1987.....	8,817,697	402,066,002	178,861	13,922,567	2.0	3.5
1988.....	8,871,997	437,140,185	206,470	15,054,304	2.3	3.4
1989.....	9,604,356	472,976,600	235,851	16,096,400	2.5	3.4
1990.....	9,047,680	490,553,800	213,710	16,338,700	2.4	3.3
1991.....	9,435,060	483,027,900	204,694	16,197,300	2.2	3.4
1992.....	9,871,262	525,091,414	206,480	17,164,481	2.1	3.3
1993.....	10,622,387	486,386,000	215,885	18,333,800	2.0	3.8
1994.....	11,986,872	657,884,700	242,977	19,846,400	2.0	3.0
1995.....	12,451,623	739,660,200	221,270	18,596,800	1.8	2.5
1996.....	13,060,355	790,469,700	219,114	18,005,300	1.7	2.3

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

99

IMPORTS

EDIBLE AND NONEDIBLE FISHERY PRODUCTS IMPORTS, 1996

Continent and Country		Edible		Nonedible		Total	
		Thousand pounds	Metric tons	- - - - -Thousand dollars- - - - -			
North America:							
Canada.....	524,532	237,926	1,153,499	711,052	1,864,551		
Mexico.....	143,830	65,241	449,720	176,673	626,393		
Costa Rica.....	19,837	8,998	56,899	46,813	103,712		
Honduras.....	27,926	12,667	103,216	26	103,242		
Dominican Republic....	194	88	388	99,931	100,319		
Other.....	122,128	55,397	347,972	32,316	380,288		
Total.....	838,447	380,317	2,111,694	1,066,811	3,178,505		
South America:							
Ecuador.....	197,354	89,519	499,460	7,860	507,320		
Chile.....	146,546	66,473	283,312	21,955	305,267		
Brazil.....	15,267	6,925	59,980	42,618	102,598		
Argentina.....	69,489	31,520	75,017	14,354	89,371		
Peru.....	22,976	10,422	38,888	35,179	74,067		
Other.....	74,344	33,722	156,018	63,611	219,629		
Total.....	525,976	238,581	1,112,675	185,577	1,298,252		
Europe:							
European Union:							
Italy.....	778	353	2,705	1,320,593	1,323,298		
France.....	31,923	14,480	19,420	499,218	518,638		
Germany.....	1,217	552	2,419	295,177	297,596		
United Kingdom.....	11,876	5,387	23,226	125,504	148,730		
Spain.....	23,567	10,690	29,299	56,666	85,965		
Other.....	31,751	14,402	56,500	189,880	246,380		
Total.....	101,112	45,864	133,569	2,487,038	2,620,607		
Other:							
Iceland.....	89,844	40,753	180,379	5,073	185,452		
Russia.....	131,886	59,823	178,208	3,961	182,169		
Norway.....	58,404	26,492	108,771	20,218	128,989		
Switzerland.....	2	1	5	97,570	97,575		
Turkey.....	454	206	1,268	61,032	62,300		
Other.....	6,510	2,953	12,287	50,322	62,609		
Total.....	287,101	130,228	480,918	238,176	719,094		
Asia:							
Thailand.....	344,101	156,083	1,113,387	385,352	1,498,739		
Japan.....	67,018	30,399	145,094	448,803	593,897		
India.....	65,840	29,865	144,938	298,699	443,637		
China.....	224,651	101,901	285,256	141,567	426,823		
Hong Kong.....	8,459	3,837	12,044	409,389	421,433		
Other.....	537,867	243,975	888,873	554,400	1,443,273		
Total.....	1,247,936	566,060	2,589,592	2,238,210	4,827,802		
Oceania:							
New Zealand.....	83,422	37,840	165,437	6,013	171,450		
Australia.....	4,266	1,935	33,305	48,184	81,489		
French Polynesia.....	280	127	369	15,277	15,646		
Fiji.....	5,104	2,315	7,406	1,293	8,699		
Western Samoa.....	2,617	1,187	2,838	4	2,842		
Other.....	9,270	4,205	7,838	2,655	10,493		
Total.....	104,959	47,609	217,193	73,426	290,619		
Africa:							
South Africa.....	18,920	8,582	27,174	22,260	49,434		
Morocco.....	6,541	2,967	17,193	6,197	23,390		
Namibia.....	4,493	2,038	11,384	22	11,406		
Mauritius.....	8,990	4,078	10,222	322	10,544		
Ghana.....	18,728	8,495	9,904	329	10,233		
Other.....	6,585	2,987	8,096	12,373	20,469		
Total.....	64,257	29,147	83,973	41,503	125,476		
Grand total.....	3,169,787	1,437,806	6,729,614	6,330,741	13,060,355		

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

IMPORTS

REGULAR AND MINCED FISH BLOCKS AND SLABS IMPORTS,
BY SPECIES AND TYPE, 1995 AND 1996

Species and type	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Regular blocks and slabs:						
Cod.....	35,540	16,121	60,064	23,439	10,632	33,755
Flatfish.....	5,732	2,600	10,589	3,433	1,557	6,461
Haddock.....	12,802	5,807	19,549	12,740	5,779	18,122
Ocean Perch.....	1,023	464	1,465	1,111	504	1,872
Pollock.....	102,029	46,280	71,443	144,234	65,424	109,985
Whiting.....	27,042	12,266	24,354	16,830	7,634	14,310
Other.....	4,949	2,245	6,773	6,903	3,131	6,450
Total.....	189,117	85,783	194,237	208,690	94,661	190,955
Minced blocks and slabs.....	21,158	9,597	19,329	25,520	11,576	22,368
Grand total.....	210,275	95,380	213,566	234,210	106,237	213,323

Source:--U.S. Department of Commerce, Bureau of the Census.

REGULAR AND MINCED FISH BLOCKS AND SLABS IMPORTS,
BY COUNTRY OF ORIGIN, 1995 AND 1996

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Russia.....	42,458	19,259	35,251	74,848	33,951	61,670
China.....	67,556	30,643	46,310	81,120	36,796	59,366
Iceland.....	17,379	7,883	27,041	16,380	7,430	22,859
Norway.....	16,660	7,557	27,842	12,335	5,595	17,485
Canada.....	12,884	5,844	13,706	15,227	6,907	15,454
Denmark.....	9,627	4,367	17,207	5,333	2,419	8,296
Argentina.....	8,618	3,909	6,718	9,257	4,199	6,890
South Africa.....	5,670	2,572	8,053	3,084	1,399	4,274
Peru.....	2,736	1,241	1,981	5,622	2,550	3,726
Other.....	26,687	12,105	29,457	11,003	4,991	13,303
Total.....	210,275	95,380	213,566	234,210	106,237	213,323

Source:--U.S. Department of Commerce, Bureau of the Census.

GROUND FISH FILLET AND STEAK IMPORTS, BY SPECIES, 1995 AND 1996 (1)

Species	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Cod.....	75,869	34,414	166,437	74,191	33,653	163,986
Haddock (2).....	73,883	33,513	100,589	79,031	35,848	102,752
Ocean Perch.....	35,093	15,918	56,810	24,987	11,334	43,679
Total.....	184,845	83,845	323,836	178,209	80,835	310,417

(1) Does not include data on fish blocks and slabs.

(2) Includes some quantities of cusk, hake, and pollock fillets.

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

101

IMPORTS

CANNED TUNA NOT IN OIL, QUOTA AND IMPORTS, 1987-96

Year	Quota (1)		Over quota (2)		Total	
	Thousand pounds	Metric tons	Thousand pounds	Metric tons	Thousand pounds	Metric tons
1987.....	91,539	41,522	123,365	55,958	214,904	97,480
1988.....	85,186	38,640	193,784	87,900	278,970	126,540
1989.....	76,733	34,806	234,323	106,288	311,056	141,094
1990.....	87,157	39,534	171,472	77,779	258,628	117,313
1991.....	75,093	34,062	237,237	107,610	312,330	141,672
1992.....	73,724	33,441	259,739	117,817	333,463	151,258
1993.....	72,681	32,968	144,287	65,448	216,968	98,416
1994.....	73,294	33,246	168,224	76,306	241,518	109,552
1995.....	73,367	33,279	126,176	57,233	199,543	90,512
1996.....	80,027	36,300	117,205	53,164	197,232	89,464

(1) Imports have been subject to tariff quotas since April 14, 1956, and are based on 20 percent of the previous year's domestic pack, excluding the pack in American Samoa. Dutiable in 1956 to 1967 at 12.5 percent ad valorem; 1968, 11 percent; 1969, 10 percent; 1970, 8.5 percent; 1971, 7 percent; and 1972 to 1996, 6 percent.

(2) Dutiable in 1972 to 1996, 12.5 percent.

Note:--Data in this table will not agree with tuna import data released by the U.S. Department of Commerce, Bureau of the Census. Any tuna entered for consumption or withdrawn from a warehouse for consumption during the calendar year, except for receipts from insular possessions of the U.S., is subject to this quota.

Source:--U.S. Department of the Treasury, U.S. Customs Service.

CANNED TUNA, BY COUNTRY OF ORIGIN, 1995 AND 1996

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Thailand.....	122,734	55,672	136,589	95,869	43,486	113,345
Philippines.....	56,380	25,574	51,126	64,639	29,320	60,569
Indonesia.....	31,389	14,238	38,028	28,168	12,777	35,150
Malaysia.....	2,227	1,010	4,245	2,079	943	3,753
Ecuador.....	827	375	738	906	411	852
Spain.....	207	94	555	247	112	675
Singapore.....	273	124	348	212	96	374
South Korea.....	115	52	213	203	92	359
Mexico.....	0	-	-	375	170	277
Other.....	1,213	550	1,663	340	154	538
Total.....	215,365	97,689	233,505	193,037	87,561	215,892

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

IMPORTS

SHRIMP IMPORTS, BY COUNTRY OF ORIGIN, 1995 AND 1996

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
North America:						
Mexico.....	72,974	33,101	342,874	67,873	30,787	327,720
Honduras.....	18,616	8,444	66,607	19,559	8,872	69,564
Panama.....	18,922	8,583	77,490	19,092	8,660	68,574
El Salvador.....	8,256	3,745	27,706	12,079	5,479	38,624
Guatemala.....	5,977	2,711	18,467	9,178	4,163	29,595
Canada.....	16,323	7,404	26,208	19,744	8,956	26,611
Nicaragua.....	7,908	3,587	29,705	7,432	3,371	25,298
Costa Rica.....	2,773	1,258	12,740	3,364	1,526	15,511
Belize.....	1,321	599	5,875	1,105	501	4,292
Greenland.....	487	221	1,533	939	426	2,503
Other.....	531	241	1,966	64	29	246
Total.....	154,088	69,894	611,171	160,429	72,770	608,538
South America:						
Ecuador.....	114,106	51,758	443,478	97,194	44,087	369,817
Venezuela.....	10,631	4,822	41,520	15,119	6,858	47,862
Colombia.....	6,861	3,112	24,842	6,695	3,037	26,506
Guyana.....	7,238	3,283	18,099	8,814	3,998	22,220
Peru.....	5,997	2,720	24,426	4,469	2,027	18,196
Brazil.....	4,162	1,888	15,768	1,997	906	6,528
Chile.....	562	255	2,003	664	301	2,353
Uruguay.....	146	66	176	-	-	-
Total.....	149,701	67,904	570,312	134,952	61,214	493,482
Europe:						
European Union:						
Denmark.....	139	63	502	787	357	2,112
Belgium.....	342	155	1327	278	126	905
United Kingdom.....	732	332	3,184	256	116	567
Netherlands.....	57	26	374	22	10	48
Portugal.....	9	4	17	13	6	23
Other.....	86	39	289	9	4	30
Total.....	1,365	619	5,693	1,365	619	3,685
Other:						
Iceland.....	119	54	550	494	224	1,636
Norway.....	130	59	552	291	132	1,032
Other.....	15	7	10	2	1	20
Total.....	265	120	1,112	787	357	2,688
Asia:						
Thailand.....	171,509	77,796	981,088	160,310	72,716	888,410
India.....	39,077	17,725	109,957	41,773	18,948	118,590
Indonesia.....	11,775	5,341	58,568	21,792	9,885	110,711
Bangladesh.....	10,917	4,952	65,700	20,357	9,234	109,623
China.....	32,284	14,644	79,515	17,077	7,746	35,407
Viet Nam.....	2,877	1,305	16,622	5,686	2,579	28,226
Pakistan.....	4,980	2,259	13,014	5,355	2,429	14,089
Philippines.....	4,581	2,078	21,727	2,676	1,214	12,332
Singapore.....	3,724	1,689	14,984	1,958	888	5,976
Malaysia.....	2,690	1,220	8,907	1,814	823	5,632
Other.....	5,624	2,551	19,614	5,567	2,525	19,032
Total.....	290,037	131,560	1,389,696	284,365	128,987	1,348,028
Oceania.....	53	24	362	60	27	435
Africa.....	1,695	769	2,545	514	233	644
Grand total.....	597,204	270,890	2,580,891	582,471	264,207	2,457,500

Note:--Statistics on imports are the weights of the individual products as exported, i.e., raw headless, peeled, etc.

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

103

IMPORTS

SHRIMP IMPORTS, BY TYPE OF PRODUCT, 1995 AND 1996

Type of product	1995			1996		
	<u>Thousand pounds</u>	<u>Metric tons</u>	<u>Thousand dollars</u>	<u>Thousand pounds</u>	<u>Metric tons</u>	<u>Thousand dollars</u>
Shell-on (heads off)....	327,295	148,460	1,482,667	318,000	144,244	1,393,216
Peeled:						
Canned.....	6,570	2,980	16,061	3,563	1,616	9,032
Not breaded:						
Raw.....	226,684	102,823	876,832	206,670	93,745	763,008
Other.....	35,234	15,982	198,667	53,766	24,388	289,809
Breaded.....	1,422	645	6,664	472	214	2,435
Total.....	597,204	270,890	2,580,891	582,471	264,207	2,457,500

Source:--U.S. Department of Commerce, Bureau of the Census.

FISH MEAL AND SCRAP IMPORTS, BY COUNTRY OF ORIGIN, 1995 AND 1996

Country	1995			1996		
	<u>Thousand pounds</u>	<u>Metric tons</u>	<u>Thousand dollars</u>	<u>Thousand pounds</u>	<u>Metric tons</u>	<u>Thousand dollars</u>
Mexico.....	18,666	8,467	3,673	38,197	17,326	8,968
Chile.....	24,886	11,288	3,764	30,554	13,859	7,076
Denmark.....	9,266	4,203	2,477	13,252	6,011	4,335
Canada.....	23,212	10,529	6,613	13,419	6,087	4,281
Peru.....	23,763	10,779	3,845	16,883	7,658	3,633
Iceland.....	3,300	1,497	737	11,243	5,100	3,302
Panama.....	35,847	16,260	3,449	11,155	5,060	1,965
Germany.....	-	-	-	439	199	141
Ukraine.....	-	-	-	152	69	102
Other.....	161	73	100	267	121	178
Total.....	139,101	63,096	24,658	135,561	61,490	33,981

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

**U.S. EXPORTS OF EDIBLE FISHERY PRODUCTS, 1996
TO MAJOR MARKETS** **U.S. EXPORTS OF EDIBLE FISHERY PRODUCTS, 1996
BY MAJOR GROUP**

FOREIGN TRADE

105

EXPORTS

FISHERY PRODUCTS EXPORTS, BY PRINCIPAL ITEMS, 1995 AND 1996 (1)

Item	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Edible fishery products:						
Fresh and frozen:						
Whole or eviscerated:						
Freshwater.....	4,650	2,109	6,116	4,749	2,154	6,742
Flatfish.....	198,489	90,034	160,909	179,161	81,267	140,753
Groundfish.....	119,983	54,424	119,043	139,840	63,431	112,375
Herring.....	94,974	43,080	69,658	79,866	36,227	53,131
Sablefish.....	38,241	17,346	101,000	37,716	17,108	93,756
Salmon.....	332,165	150,669	553,751	276,973	125,634	469,812
Tuna.....	28,869	13,095	44,098	31,382	14,235	38,278
Other.....	247,001	112,039	226,030	299,058	135,652	245,564
Fillets, and steaks:						
Freshwater.....	304	138	1,003	710	322	2,206
Groundfish.....	24,606	11,161	31,534	41,691	18,911	44,399
Other.....	25,875	11,737	46,306	31,967	14,500	52,887
Blocks and slabs.....	36,689	16,642	37,729	64,229	29,134	60,481
Surimi.....	298,540	135,417	353,496	284,702	129,140	269,754
Fish sticks.....	30,223	13,709	42,479	21,729	9,856	29,555
Clams.....	2,176	987	3,679	2,661	1,207	4,594
Crabs.....	46,879	21,264	204,710	46,742	21,202	162,403
Crabmeat.....	1,523	691	4,841	3,106	1,409	6,094
Lobsters.....	36,967	16,768	176,920	41,398	18,778	195,261
Scallops (meats).....	5,926	2,688	19,242	6,191	2,808	22,318
Sea urchins.....	6,365	2,887	13,473	5,622	2,550	12,998
Shrimp.....	39,202	17,782	156,681	38,638	17,526	145,064
Squid.....	120,316	54,575	66,561	137,042	62,162	69,419
Other fish and shellfish	28,342	10,747	48,964	28,342	10,702	56,654
Total, fresh and frozen	1,763,656	799,989	2,488,223	1,798,766	815,915	2,294,498
Canned:						
Salmon.....	98,197	44,542	175,392	95,530	43,332	154,093
Sardines.....	11,773	5,340	8,915	12,207	5,537	9,623
Tuna.....	7,385	3,350	10,957	9,866	4,475	14,937
Abalone.....	880	399	7,026	805	365	5,427
Crabmeat.....	276	125	741	337	153	1,358
Shrimp.....	3,250	1,474	17,048	2,665	1,209	11,581
Squid.....	6,382	2,895	3,366	7,608	3,451	4,404
Other fish and shellfish	14,233	6,456	13,158	26,389	11,970	22,393
Total, canned.....	142,375	64,581	236,603	155,407	70,492	223,816
Cured:						
Dried.....	6,120	2,776	15,198	9,431	4,278	19,653
Pickled or salted.....	6,629	3,007	8,368	12,665	5,745	19,090
Smoked or kippered.....	492	223	2,375	1,096	497	3,150
Total, cured.....	13,241	6,006	25,941	23,192	10,520	41,893
Caviar and roe:						
Herring.....	28,428	12,895	38,406	34,806	15,788	51,638
Pollock.....	33,274	15,093	144,343	29,284	13,283	154,633
Salmon.....	25,082	11,377	128,882	27,952	12,679	97,775
Sea Urchin.....	8,527	3,868	130,264	7,167	3,251	107,384
Other.....	12,513	5,676	53,800	11,680	5,298	39,467
Total, caviar and roe..	107,825	48,909	495,695	110,889	50,299	450,897
Prepared meals.....	4,429	2,009	5,896	1,975	896	2,848
Other fish and shellfish.	15,655	7,101	9,884	21,826	9,900	18,330
Total edible fishery products.....	2,047,181	928,595	3,262,242	2,112,055	958,022	3,032,282
Nonedible fishery products:						
Meal and scrap.....	176,981	80,278	41,331	186,412	84,556	52,931
Fish oils.....	260,394	118,114	44,214	187,294	84,956	36,423
Other.....	-	-	4,964,547	-	-	5,568,238
Total nonedible fishery products.....	-	-	5,005,878	-	-	5,621,169
Grand total.....	-	-	8,268,120	-	-	8,653,451

(1) Figures reflect both domestic and foreign (re-exports).

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

EXPORTS

FISHERY PRODUCTS EXPORTS, 1987-96 (1)

Year	Edible		Nonedible		Total
	<u>Thousand pounds</u>	<u>Metric tons</u>	- - - - <u>-Thousand dollars-</u> - - - -		
1987.....	806,116	365,652	1,625,385	96,725	1,722,110
1988.....	1,085,935	492,577	2,213,326	125,061	2,338,387
1989.....	1,405,977	637,747	2,355,603	2,582,538	4,938,141
1990.....	1,947,292	883,286	2,881,262	3,084,677	5,965,939
1991.....	2,058,594	933,772	3,155,771	3,386,037	6,541,808
1992.....	2,087,606	946,932	3,465,667	3,653,965	7,119,632
1993.....	1,986,027	900,856	3,076,813	3,847,911	6,924,724
1994.....	1,978,507	897,445	3,126,120	4,254,741	7,380,861
1995.....	2,047,181	928,595	3,262,242	5,005,878	8,268,120
1996.....	2,112,055	958,022	3,032,282	5,621,169	8,653,451

(1) Figures reflect both domestic and foreign (re-exports).

NOTE:--The increase in the nonedible value beginning in 1989 is due to re-examination of commodities that are considered to be based on fishery products including fish, shellfish, aquatic plants and animals and any products thereof, including processed and manufactured products.

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

107

EXPORTS

EDIBLE AND NONEDIBLE FISHERY PRODUCTS EXPORTS, 1996 (1)

Continent and Country	Edible		Nonedible		Total
	Thousand pounds	Metric tons	-----Thousand dollars-----		
North America:					
Canada.....	323,869	146,906	526,885	1,191,546	1,718,431
Mexico.....	19,683	8,928	38,954	343,312	382,266
Panama.....	1,669	757	2,186	44,875	47,061
Dominican Republic..	3,139	1,424	3,506	32,821	36,327
Netherlands Antilles	930	422	1,771	33,171	34,942
Other.....	17,773	8,062	24,578	139,600	164,178
Total.....	367,064	166,499	597,880	1,785,325	2,383,205
South America:					
Brazil.....	924	419	1,490	139,930	141,420
Argentina.....	465	211	398	55,775	56,173
Colombia.....	3,362	1,525	2,082	45,253	47,335
Chile.....	628	285	864	44,790	45,654
Venezuela.....	2,941	1,334	1,597	37,261	38,858
Other.....	4,050	1,837	4,673	80,928	85,601
Total.....	12,370	5,611	11,104	403,937	415,041
Europe:					
European Union:					
United Kingdom....	55,036	24,964	89,368	245,817	335,185
France.....	50,386	22,855	80,547	144,419	224,966
Germany.....	16,385	7,432	26,061	170,444	196,505
Netherlands.....	13,554	6,148	23,296	147,975	171,271
Belgium.....	10,408	4,721	16,671	119,461	136,132
Other.....	84,734	38,435	111,160	218,843	330,003
Total.....	230,502	104,555	347,103	1,046,959	1,394,062
Other:					
Switzerland.....	992	450	2,737	325,994	328,731
Russia.....	13,393	6,075	5,458	23,115	28,573
Norway.....	8,909	4,041	10,504	14,005	24,509
Poland.....	333	151	342	9,318	9,660
Turkey.....	657	298	563	5,596	6,159
Other.....	9,458	4,290	6,621	21,387	28,008
Total.....	33,741	15,305	26,225	399,415	425,640
Asia:					
Japan.....	1,005,040	455,883	1,623,322	627,032	2,250,354
South Korea.....	186,095	84,412	146,049	208,615	354,664
Hong Kong.....	26,164	11,868	50,342	301,955	352,297
Taiwan.....	23,016	10,440	65,075	131,673	196,748
Singapore.....	4,458	2,022	5,468	133,940	139,408
Other.....	174,611	79,203	126,271	416,966	543,237
Total.....	1,419,383	643,828	2,016,527	1,820,181	3,836,708
Oceania:					
Australia.....	31,005	14,064	24,980	97,000	121,980
New Zealand.....	1,468	666	1,461	18,164	19,625
French Polynesia....	489	222	607	1,236	1,843
Fiji.....	1,475	669	774	319	1,093
Fed States of Micron	-	-	-	741	741
Other.....	725	329	692	954	1,646
Total.....	35,163	15,950	28,514	118,414	146,928
Africa:					
South Africa.....	2,745	1,245	2,106	32,767	34,873
Egypt.....	6,316	2,865	1,479	4,788	6,267
Nigeria.....	4,026	1,826	550	2,385	2,935
Mauritius.....	254	115	83	1,342	1,425
Zimbabwe.....	-	-	-	1,348	1,348
Other.....	492	223	711	4,308	5,019
Total.....	13,832	6,274	4,929	46,938	51,867
Grand total...	2,112,055	958,022	3,032,282	5,621,169	8,653,451

(1) Figures reflect both domestic and foreign (re-exports).

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

EXPORTS

FRESH AND FROZEN SHRIMP EXPORTS,
BY COUNTRY OF DESTINATION, 1995 AND 1996 (1)

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Canada.....	19,553	8,869	84,428	19,015	8,625	74,828
Mexico.....	7,577	3,437	25,238	7,211	3,271	24,123
Japan.....	2,456	1,114	12,149	2,284	1,036	11,286
Thailand.....	679	308	2,640	1,687	765	6,086
China.....	2,480	1,125	7,435	1,975	896	5,071
Honduras.....	520	236	2,566	904	410	3,869
Norway.....	1,155	524	4,597	820	372	3,567
Hong Kong.....	269	122	900	941	427	2,337
South Korea.....	439	199	2,012	500	227	2,027
Other.....	4,074	1,848	14,716	3,300	1,497	11,870
Total.....	39,202	17,782	156,681	38,638	17,526	145,064

(1) Figures reflect both domestic and foreign (re-export).
Source:--U.S. Department of Commerce, Bureau of the Census.

CANNED SHRIMP EXPORTS,
BY COUNTRY OF DESTINATION, 1995 AND 1996 (1)

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Canada.....	937	425	4,586	963	437	4,739
Thailand.....	606	275	4,379	437	198	2,281
Ecuador.....	238	108	1,527	207	94	1,315
Belgium.....	99	45	617	132	60	818
South Korea.....	181	82	1,231	84	38	520
Greece.....	470	213	394	538	244	427
Indonesia.....	126	57	670	57	26	348
Philippines.....	40	18	248	51	23	283
Hong Kong.....	18	8	84	37	17	224
Other.....	536	243	3,312	159	72	626
Total.....	3,250	1,474	17,048	2,665	1,209	11,581

(1) Figures reflect both domestic and foreign (re-export).
Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

109

EXPORTS

FRESH AND FROZEN SALMON EXPORTS, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1995 AND 1996 (1)

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Japan.....	213,637	96,905	421,094	176,441	80,033	344,756
Canada.....	69,566	31,555	71,277	55,565	25,204	73,794
France.....	16,601	7,530	20,139	11,180	5,071	11,068
Denmark.....	4,577	2,076	5,000	5,337	2,421	5,973
Taiwan.....	2,176	987	5,291	2,901	1,316	5,333
Belgium.....	3,880	1,760	4,680	4,559	2,068	5,288
China.....	3,205	1,454	4,297	2,156	978	3,182
Sweden.....	3,342	1,516	3,306	3,627	1,645	3,084
United Kingdom.....	2,705	1,227	2,842	2,341	1,062	2,460
Other.....	12,476	5,659	15,825	12,866	5,836	14,874
Total.....	332,165	150,669	553,751	276,973	125,634	469,812

(1) Figures reflect both domestic and foreign (re-exports).

Source:--U.S. Department of Commerce, Bureau of the Census.

CANNED SALMON EXPORTS, BY COUNTRY OF DESTINATION, 1995 AND 1996 (1)

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
United Kingdom.....	44,881	20,358	86,688	40,809	18,511	73,252
Canada.....	31,299	14,197	52,843	29,297	13,289	42,845
Australia.....	8,869	4,023	15,468	12,225	5,545	18,103
Netherlands.....	7,518	3,410	11,764	6,329	2,871	10,148
Belgium.....	2,132	967	3,033	1,270	576	1,826
France.....	243	110	323	611	277	1,085
Ireland.....	741	336	1,229	650	295	966
Sweden.....	-	-	-	520	236	900
New Zealand.....	688	312	1,131	672	305	881
Other.....	1,828	829	2,913	3,146	1,427	4,087
Total.....	98,197	44,542	175,392	95,530	43,332	154,093

(1) Figures reflect both domestic and foreign (re-exports).

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

EXPORTS

FRESH AND FROZEN CRAB EXPORTS,
BY COUNTRY OF DESTINATION, 1995 AND 1996 (1)

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Japan.....	38,706	17,557	184,172	35,044	15,896	137,529
Canada.....	6,186	2,806	12,672	8,702	3,947	15,535
China.....	1,206	547	4,865	1,962	890	5,849
Thailand.....	148	67	736	216	98	951
United Kingdom.....	68	31	333	104	47	528
South Korea.....	121	55	415	86	39	316
Hong Kong.....	90	41	467	51	23	284
Mexico.....	24	11	81	79	36	244
France.....	40	18	110	108	49	201
Other.....	289	131	859	390	177	966
Total.....	46,879	21,264	204,710	46,742	21,202	162,403

(1) Figures reflect both domestic and foreign (re-exports).

Source:--U.S. Department of Commerce, Bureau of the Census.

FRESH AND FROZEN CRABMEAT EXPORTS,
BY COUNTRY OF DESTINATION, 1995 AND 1996 (1)

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Japan.....	494	224	2,370	853	387	2,636
Russia.....	2	1	15	547	248	499
Canada.....	106	48	377	126	57	397
South Korea.....	26	12	59	198	90	331
Thailand.....	115	52	189	243	110	299
Hong Kong.....	148	67	340	236	107	245
Netherlands Antilles.....	46	21	82	86	39	212
Netherlands.....	-	-	-	95	43	176
China.....	-	-	-	97	44	130
Other.....	586	266	1,409	626	284	1,169
Total.....	1,523	691	4,841	3,106	1,409	6,094

(1) Figures reflect both domestic and foreign (re-exports).

Source:--U.S. Department of Commerce, Bureau of the Census.

FRESH AND FROZEN HERRING EXPORTS, WHOLE OR EVISCERATED
BY COUNTRY OF DESTINATION, 1995 AND 1996 (1)

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Japan.....	54,952	24,926	52,786	30,516	13,842	30,365
Canada.....	8,874	4,025	5,087	20,759	9,416	13,630
China.....	23,576	10,694	10,734	6,065	2,751	5,642
Egypt.....	-	-	-	5,897	2,675	1,178
Russia.....	1,724	782	443	8,984	4,075	730
South Korea.....	302	137	229	855	388	547
Nigeria.....	5,190	2,354	224	3,993	1,811	478
Other.....	357	162	155	2,798	1,269	561
Total.....	94,974	43,080	69,658	79,866	36,227	53,131

(1) Figures reflect both domestic and foreign (re-exports).

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

111

EXPORTS

FISH AND MARINE ANIMAL OIL EXPORTS, BY COUNTRY OF DESTINATION, 1995 AND 1996 (1)

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Netherlands.....	176,461	80,042	27,612	99,416	45,095	16,248
Canada.....	41,579	18,860	8,661	55,904	25,358	13,013
Mexico.....	3,305	1,499	725	14,888	6,753	3,229
South Korea.....	4,123	1,870	1,151	8,719	3,955	1,905
Japan.....	20,201	9,163	3,280	3,673	1,666	657
China.....	31	14	295	1,003	455	631
Spain.....	5,950	2,699	801	2,864	1,299	395
Taiwan.....	126	57	37	381	173	102
Hong Kong.....	2,222	1,008	475	51	23	91
Other.....	6,398	2,902	1,177	395	179	152
Total.....	260,394	118,114	44,214	187,294	84,956	36,423

(1) Figures reflect both domestic and foreign (re-exports).
Source:--U.S. Department of Commerce, Bureau of the Census.

FISH MEAL EXPORTS, BY COUNTRY OF DESTINATION, 1995 AND 1996 (1)

Country	1995			1996		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
Taiwan.....	53,358	24,203	12,168	49,456	22,433	13,882
China.....	22,324	10,126	5,563	24,486	11,107	7,653
Canada.....	30,818	13,979	6,961	31,274	14,186	7,224
Japan.....	21,874	9,922	4,944	20,719	9,398	5,683
Philippines.....	21,744	9,863	3,505	19,868	9,012	4,567
Italy.....	35	16	22	11,409	5,175	2,812
Thailand.....	1,563	709	1,203	1,164	528	2,651
Hong Kong.....	7,156	3,246	1,695	6,261	2,840	1,688
Germany.....	7	3	44	7,145	3,241	1,419
Other.....	18,102	8,211	5,226	14,630	6,636	5,352
Total.....	176,981	80,278	41,331	186,412	84,556	52,931

(1) Figures reflect both domestic and foreign (re-exports).
Source:--U.S. Department of Commerce, Bureau of the Census.

SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF EDIBLE FISHERY PRODUCTS
(ROUND WEIGHT)
1987 - 1996

SUPPLY OF FISHERY PRODUCTS

113

U.S. SUPPLY OF EDIBLE AND INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1987-96 (Round weight)

Year	Domestic commercial landings (1)		Imports (2)		Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1987.....	6,896	43.8	8,848	56.2	15,744
1988.....	7,192	49.2	7,436	50.8	14,628
1989.....	8,463	54.7	7,022	45.3	15,485
1990.....	9,404	57.5	6,945	42.5	16,349
1991.....	9,484	58.0	6,879	42.0	16,363
1992.....	9,637	59.8	6,469	40.2	16,106
1993.....	10,467	51.5	9,867	48.5	20,334
1994.....	10,461	54.2	8,848	45.8	19,309
1995.....	9,788	59.4	6,696	40.6	16,484
1996.....	9,565	58.1	6,909	41.9	16,474

(1) Preliminary.

(2) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa.

Note:--The weights of U.S. landings and imports represent the round (live) weight of all items except univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.) which are shown in weight of meats (excluding the shell).

U.S. SUPPLY OF EDIBLE COMMERCIAL FISHERY PRODUCTS, 1987-96 (Round weight)

Year	Domestic commercial landings (1)		Imports (2)		Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1987.....	3,946	37.4	6,615	62.6	10,561
1988.....	4,588	43.7	5,917	56.3	10,505
1989.....	6,204	50.6	6,064	49.4	12,268
1990.....	7,041	55.6	5,621	44.4	12,662
1991.....	7,031	54.0	5,989	46.0	13,020
1992.....	7,618	57.5	5,624	42.5	13,242
1993.....	8,214	59.4	5,607	40.6	13,821
1994.....	7,936	57.9	5,778	42.1	13,714
1995.....	7,667	56.4	5,917	43.6	13,584
1996.....	7,475	54.9	6,150	45.1	13,625

(1) Preliminary.

(2) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa.

U.S. SUPPLY OF INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1987-96 (Round weight)

Year	Domestic commercial landings (1)		Imports		Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1987.....	2,950	56.9	2,233	43.1	5,183
1988.....	2,604	63.2	1,519	36.8	4,123
1989.....	2,259	70.2	958	29.8	3,217
1990.....	2,363	64.1	1,324	35.9	3,687
1991.....	2,453	73.4	890	26.6	3,343
1992.....	2,019	70.5	845	29.5	2,864
1993.....	2,253	34.6	4,260	65.4	6,513
1994.....	2,525	45.1	3,070	54.9	5,595
1995.....	2,121	73.1	779	26.9	2,900
1996.....	2,090	73.4	759	26.6	2,849

(1) Preliminary.

SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1995 AND 1996

Item	Domestic commercial landings		Imports (1)		Total	
	1995	1996	1995	1996	1995	1996
-----Million pounds--round weight-----						
Edible fishery products:						
Finfish.....	6,414	6,205	4,278	4,494	10,692	10,699
Shellfish.....	1,252	1,271	1,639	1,656	2,891	2,927
Total.....	7,667	7,476	5,917	6,150	13,584	13,626
Industrial fishery products:						
Finfish.....	2,106	2,068	779	759	2,885	2,827
Shellfish.....	15	21	(3)	(3)	15	21
Total.....	2,121	2,089	779	759	2,900	2,848
Total:						
Finfish.....	8,520	8,273	5,057	5,253	13,577	13,526
Shellfish.....	1,267	1,292	1,639	1,656	2,906	2,948
Total.....	9,788	9,565	6,696	6,909	16,484	16,474

See footnotes below.

VALUE OF U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1995 AND 1996

Item	Domestic commercial landings		Imports (1)		Total	
	1995	1996	1995	1996	1995	1996
-----Million dollars-----						
Edible fishery products:						
Finfish.....	1,783	1,667	2,904	2,974	4,687	4,641
Shellfish.....	1,808	1,688	3,888	3,756	5,696	5,444
Total.....	3,591	3,355	6,792	6,730	10,383	10,085
Industrial fishery products:						
Finfish.....	133	124	25	34	158	158
Shellfish.....	12	8	(3)	(3)	12	8
Total.....	145	132	(2) 25	(2) 34	170	166
Total:						
Finfish.....	1,916	1,791	2,929	3,008	4,845	4,799
Shellfish.....	1,820	1,696	3,888	3,756	5,708	5,452
Total.....	3,736	3,487	6,817	6,764	10,553	10,251

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa.

(2) Includes only quantity and value of fish meal.

(3) Not available.

Note:--Value of domestic commercial landings is exvessel value.

SUPPLY OF FISHERY PRODUCTS

115

U.S. SUPPLY OF REGULAR AND MINCED BLOCKS, 1987-96 (Edible weight)

Year	U.S. Production	Imports	Total	Exports (1)	Total Supply
<u>Thousand pounds</u>					
1987.....	13,559	403,577	417,136	(2)	417,136
1988.....	44,602	303,237	347,839	(2)	347,839
1989.....	30,898	283,278	314,176	35,296	278,880
1990.....	9,739	264,468	274,207	34,255	239,952
1991.....	22,013	290,485	312,498	14,502	297,996
1992.....	66,898	229,314	296,212	41,588	254,624
1993.....	37,860	211,569	249,429	38,199	211,230
1994.....	27,960	199,607	227,567	59,908	167,659
1995.....	38,460	210,275	248,735	36,689	212,046
1996.....	69,789	234,210	303,999	64,229	239,770

(1) For the period 1989-1991 data is estimated based on removal of surimi which was included in the export classification. (2) Not reported.

U.S. SUPPLY OF ALL FILLETS AND STEAKS, 1987-96 (Edible weight)

Year	U.S. Production (1)	Imports	Total	Exports	Total Supply
<u>Thousand pounds</u>					
1987.....	356,081	620,985	977,066	66,036	911,030
1988.....	378,236	517,709	895,945	100,301	795,644
1989.....	371,082	517,620	888,702	68,931	819,771
1990.....	440,692	458,413	899,105	51,599	847,506
1991.....	472,668	440,018	912,686	69,086	843,600
1992.....	448,664	408,059	856,723	52,247	804,476
1993.....	420,169	440,354	860,523	48,847	811,676
1994.....	425,022	439,059	864,081	43,252	820,829
1995.....	385,293	477,483	862,776	50,785	811,991
1996.....	397,965	476,469	874,434	74,368	800,066

(1) Includes fillets used to produce blocks.

U.S. SUPPLY OF GROUND FISH FILLETS AND STEAKS, 1987-96 (Edible weight)

Year	U.S. Production (1)	Imports	Total	Exports (2)	Total Supply
<u>Thousand pounds</u>					
1987.....	199,743	315,418	515,161	12,341	502,820
1988.....	206,786	253,187	459,973	14,417	445,556
1989.....	211,498	265,001	476,499	9,652	466,847
1990.....	258,809	200,980	459,789	6,944	452,845
1991.....	264,323	202,409	466,732	34,442	432,290
1992.....	252,358	172,755	425,113	17,507	407,606
1993.....	233,755	186,516	420,271	12,242	408,029
1994.....	220,357	189,097	409,454	17,639	391,815
1995.....	216,699	184,845	401,544	24,606	376,938
1996.....	220,102	178,209	398,311	41,691	356,620

(1) Includes fillets used to produce blocks. Species include: cod, cusk, haddock, hake, pollock, and ocean perch. (2) Species include: cod 1987-96; pollock 1991-96.

SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF FRESH AND FROZEN TUNA, 1987-96
(Round weight)

Year	U.S. commercial landings (1)			Imports (2)			Exports Total	Total supply
	For canning	Other	Total	For canning	Other	Total		
	----- <u>Thousand pounds</u> -----							
1987.....	507,872	119,783	627,655	562,220	16,663	578,883	(3)	1,206,538
1988.....	486,640	122,935	609,575	538,588	18,900	557,488	(3)	1,167,063
1989.....	452,278	87,823	540,101	625,738	38,564	664,302	17,478	1,186,925
1990.....	391,954	119,955	511,909	526,496	37,826	564,322	19,773	1,056,458
1991.....	346,322	178,025	524,347	579,556	50,290	629,846	17,714	1,136,479
1992.....	435,924	137,933	573,857	482,677	63,524	546,201	20,011	1,100,047
1993.....	426,036	62,933	488,969	453,046	92,965	546,011	21,660	1,013,320
1994.....	401,732	157,695	559,427	469,514	92,352	561,866	28,512	1,092,781
1995.....	407,036	86,956	493,992	531,266	105,304	636,570	28,869	1,101,693
1996.....	364,652	91,612	456,264	567,266	119,247	686,513	31,382	1,111,395

(1) Includes a quantity of fish landed at other ports by U.S.-flag vessels.

(2) Includes landings in American Samoa of foreign caught fish.

(3) Not reported.

U.S. SUPPLY OF FRESH AND FROZEN TUNA
(Round weight)

SUPPLY OF FISHERY PRODUCTS

117

U.S. SUPPLY OF CANNED SARDINES, 1987-96 (Canned weight)

Year	U.S. pack	Imports	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	13,116	65,022	78,138	1,157	76,981
1988.....	18,611	53,359	71,970	8,717	63,253
1989.....	13,221	56,379	69,600	9,070	60,530
1990.....	13,240	56,963	70,203	9,048	61,155
1991.....	13,986	48,515	62,501	10,668	51,833
1992.....	17,437	36,511	53,948	12,690	41,258
1993.....	14,354	39,111	53,465	12,275	41,190
1994.....	15,560	43,942	59,502	11,010	48,492
1995.....	13,567	42,280	55,847	11,773	44,074
1996.....	17,672	40,926	58,598	12,207	46,391

U.S. SUPPLY OF CANNED SALMON, 1987-96 (Canned weight)

Year	U.S. pack	Imports	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	105,206	6,652	111,858	36,108	75,750
1988.....	88,419	3,528	91,947	32,993	58,954
1989.....	197,044	2,943	199,987	40,497	159,490
1990.....	196,383	1,378	197,761	49,546	148,215
1991.....	195,744	983	196,727	66,134	130,593
1992.....	149,453	974	150,427	77,895	72,532
1993.....	198,344	428	198,772	84,610	114,162
1994.....	206,841	1,093	207,934	90,915	117,019
1995.....	243,568	1,202	244,770	98,197	146,573
1996.....	197,163	2,266	199,429	95,530	103,899

U.S. SUPPLY OF CANNED TUNA, 1987-96 (Canned weight)

Year	U.S. pack	Imports	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	653,983	211,685	865,668	(1)	865,668
1988.....	598,181	244,504	842,685	(1)	842,685
1989.....	686,267	348,212	1,034,479	6,495	1,027,984
1990.....	580,601	284,593	865,194	9,039	856,155
1991.....	592,786	351,744	944,530	11,310	933,220
1992.....	608,981	323,413	932,394	10,141	922,253
1993.....	618,743	224,419	843,162	8,534	834,628
1994.....	609,514	249,043	858,557	8,391	850,166
1995.....	666,581	215,365	881,946	7,385	874,561
1996.....	675,816	193,037	868,853	9,866	858,987

(1) Not reported.

SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF KING CRAB, 1987-96
(Round weight)

Year	U.S. commercial landings	Imports (1)	Total	Exports (1)	Total supply
-----Thousand pounds-----					
1987.....	29,065	(2)	29,065	15,039	14,026
1988.....	20,973	(2)	20,973	10,554	10,419
1989.....	26,391	5,150	31,541	(3) 13,196	18,345
1990.....	33,917	4,925	38,842	(3) 19,486	19,356
1991.....	28,140	7,087	35,227	15,320	19,907
1992.....	19,056	11,958	31,014	16,241	14,773
1993.....	24,732	7,395	32,127	24,372	7,755
1994.....	11,960	15,035	26,995	15,013	11,982
1995.....	14,673	18,360	33,033	11,847	21,186
1996.....	21,000	26,533	47,533	17,650	29,883

(1) Imports, exports, foreign exports converted to round (live) weight by using these conversion factors: frozen, 1.75; meat, 4.50; and canned, 5.33 (2) Not reported.

(3) Estimated, based on available foreign import data.

U.S. SUPPLY OF SNOW (TANNER) CRABS, 1987-96
(Round weight)

Year	U.S. commercial landings	Imports (1)	Total	Exports (2)	Total supply
-----Thousand pounds-----					
1987.....	113,812	7,706	121,518	92,644	28,874
1988.....	146,326	6,765	153,091	122,741	30,350
1989.....	164,643	3,927	168,570	(3) 111,028	57,542
1990.....	213,395	10,772	224,167	(3) 187,069	37,098
1991.....	357,122	19,091	376,213	(3) 316,162	60,051
1992.....	350,039	18,882	368,921	281,214	87,707
1993.....	255,733	31,224	286,957	220,618	66,339
1994.....	159,574	27,446	187,020	147,006	40,014
1995.....	80,817	20,969	101,786	59,805	41,981
1996.....	67,867	28,336	96,203	50,509	45,694

(1) Converted to round (live) weight by multiplying fresh and frozen by 1.50; meat, 4.50; and canned, 5.00. (2) Domestic merchandise converted to round (live) weight by multiplying frozen weight by 2.13 (believed to be mostly sections); meat, 4.50; and canned, 5.33. Foreign exports converted using the same factors as imports. (3) Estimated, based on available foreign import data.

U.S. SUPPLY OF CANNED CRABMEAT, 1987-96
(Canned weight)

Year	U.S. pack	Imports	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	200	7,967	8,167	63	8,104
1988.....	359	7,720	8,079	250	7,829
1989.....	504	8,280	8,784	930	7,854
1990.....	695	8,563	9,258	434	8,824
1991.....	77	11,385	11,462	525	10,937
1992.....	99	9,577	9,676	789	8,887
1993.....	70	9,817	9,887	668	9,219
1994.....	17	9,852	9,869	511	9,358
1995.....	65	12,441	12,506	276	12,230
1996.....	93	12,773	12,866	337	12,529

SUPPLY OF FISHERY PRODUCTS

119

U.S. SUPPLY OF AMERICAN LOBSTERS, 1987-96 (Round weight)

Year	U.S. commercial landings	Imports (1)	Total	Exports (2)	Total supply
-----Thousand pounds-----					
1987.....	45,558	70,207	115,765	(3)	115,765
1988.....	48,643	72,638	121,281	(3)	121,281
1989.....	52,926	42,530	95,456	10,310	85,146
1990.....	61,017	49,592	110,609	15,274	95,335
1991.....	63,337	65,381	128,718	21,485	107,233
1992.....	55,841	59,335	115,176	20,332	94,844
1993.....	56,513	55,570	112,083	20,354	91,729
1994.....	66,416	65,949	132,365	31,646	100,719
1995.....	66,406	62,923	129,329	35,587	93,742
1996.....	71,641	65,379	137,020	39,919	97,101

(1) Only imports from Canada and St. Pierre and Miquelon are considered American lobster and were converted to round (live) by using these conversion factors: 1.00, Whole; 4.50, meat; and 4.64, canned. (2) Domestic exports converted to live weight by 1.00, whole; 4.00, meat; and 4.50, canned. Foreign exports converted using import factors. (3) Not reported.

U.S. SUPPLY OF SPINY LOBSTERS, 1987-96 (Round weight)

Year	U.S. commercial landings	Imports (1)	Total	Exports (2)	Total supply
-----Thousand pounds-----					
1987.....	5,755	145,706	151,461	(3)	151,461
1988.....	7,166	132,071	139,237	(3)	139,237
1989.....	8,125	87,793	95,918	6,373	89,545
1990.....	7,120	88,426	95,546	6,948	88,598
1991.....	7,096	81,332	88,428	3,388	85,040
1992.....	4,872	77,848	82,720	2,001	80,719
1993.....	6,076	70,884	76,960	1,306	75,654
1994.....	8,104	68,787	76,891	1,304	75,587
1995.....	7,123	86,900	94,023	5,035	88,988
1995.....	8,308	75,595	83,903	3,033	80,870

(1) Imports were converted to round (live) weight by using these conversion factors: 1.00, whole; 3.00, tails; 4.35, other; and 4.50 canned. (2) Domestic exports converted to round weight by using: 1.00, whole; 3.00, tails; 4.00, other; 4.50, canned. Foreign exports converted using import factors. (3) Not reported.

SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF CLAMS, 1987-96
(Meat weight)

Year	U.S. commercial landings (1)	Imports (2)	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	134,357	17,641	151,998	1,157	150,841
1988.....	131,740	14,872	146,612	1,458	145,154
1989.....	138,166	13,254	151,420	1,863	149,557
1990.....	139,198	15,830	155,028	2,961	152,067
1991.....	134,243	12,291	146,534	2,948	143,586
1992.....	142,449	14,262	156,711	1,662	155,049
1993.....	147,752	9,579	157,331	1,809	155,522
1994.....	131,427	15,507	146,934	2,617	144,317
1995.....	134,224	12,645	146,869	2,853	144,016
1996.....	123,239	14,340	137,579	3,448	134,131

(1) For specific breakout see table on page 1.

(2) Imports and exports were converted to meat weight by using these conversion factors: 0.40, in shell or shucked; 0.30, canned chowder and juice; and 0.93, other.

U.S. SUPPLY OF OYSTERS, 1987-96
(Meat weight)

Year	U.S. commercial landings	Imports (1)	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	39,807	52,085	91,892	(2)	91,892
1988.....	31,892	46,414	78,306	(2)	78,306
1989.....	29,250	37,662	66,912	1,090	65,822
1990.....	29,193	27,546	56,739	1,004	55,735
1991.....	31,859	30,547	62,406	739	61,667
1992.....	36,156	26,529	62,685	797	61,888
1993.....	33,575	28,244	61,819	1,131	60,688
1994.....	38,086	24,694	62,780	1,988	60,792
1995.....	40,380	24,200	64,580	1,908	62,672
1996.....	38,007	21,708	59,715	1,648	58,067

(1) Imports and exports were converted to meat weight by using these conversion factors: 0.93, canned; 3.12, canned smoked; and 0.75, other. (2) Not reported.

U.S. SUPPLY OF SCALLOPS, 1987-96
(Meat weight)

Year	U.S. commercial landings (1)	Imports	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	40,773	39,934	80,707	1,343	79,364
1988.....	42,994	32,039	75,033	1,369	73,664
1989.....	40,611	40,874	81,485	2,498	78,987
1990.....	41,591	39,839	81,430	7,099	74,331
1991.....	39,740	29,528	69,268	7,083	62,185
1992.....	33,884	38,682	72,566	3,589	68,977
1993.....	18,638	51,973	70,611	4,147	66,464
1994.....	25,469	56,676	82,145	5,990	76,155
1995.....	19,526	48,331	67,857	5,926	61,931
1996.....	18,197	58,686	76,883	6,191	70,692

(1) For specific breakout see table on page 1.

SUPPLY OF FISHERY PRODUCTS

121

U.S. SUPPLY OF ALL FORMS OF SHRIMP, 1987-96 (Heads-off weight)

Year	U.S. commercial landings (1)	Imports (2)	Total	Exports (3)	Total supply
-----Thousand pounds-----					
1987.....	223,514	583,030	806,544	33,813	772,731
1988.....	203,350	598,210	801,560	34,784	766,776
1989.....	215,825	563,523	779,348	36,056	743,292
1990.....	213,899	579,427	793,326	59,683	733,643
1991.....	198,115	632,775	830,890	87,186	743,704
1992.....	207,086	694,254	901,340	81,604	819,736
1993.....	180,687	708,683	889,370	81,447	807,923
1994.....	174,969	749,993	924,962	77,755	847,207
1995.....	190,208	719,463	909,671	77,677	831,994
1996.....	195,902	720,852	916,754	72,190	844,564

(1) Commercial landings were converted to heads-off weight by using these conversion factors: South Atlantic and Gulf, 0.629; and New England, Pacific and other, 0.57.

(2) Imports were converted to heads-off weight by using these conversion factors: breaded, 0.63; shell-on, 1.00; peeled raw, 1.28; canned, 2.52; and other, 2.40.

(3) Exports were converted to heads-off weight by using these conversion factors: domestic--fresh and frozen, 1.18; canned, 2.02; other, 2.40; foreign--fresh and frozen, 1.00; canned, 2.52; and other, 2.40.

U.S. SUPPLY OF CANNED SHRIMP, 1987-96 (Canned weight)

Year	U.S. pack	Imports	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	4,382	17,132	21,514	2,419	19,095
1988.....	4,476	14,138	18,614	2,187	16,427
1989.....	2,623	11,315	13,938	2,128	11,810
1990.....	710	9,735	10,445	2,670	7,775
1991.....	632	9,361	9,993	2,352	7,641
1992.....	640	9,273	9,913	1,931	7,982
1993.....	658	8,170	8,828	2,557	6,271
1994.....	463	6,314	6,777	1,841	4,936
1995.....	912	6,570	7,482	3,250	4,232
1996.....	819	3,563	4,382	2,665	1,717

SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1987-96
(Product weight)

Year	U.S. production (1)	Imports (2)	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	911,622	393,730	1,305,352	104,086	1,201,266
1988.....	755,520	265,310	1,020,830	153,946	866,884
1989.....	734,736	171,112	905,848	107,350	798,498
1990.....	670,328	239,426	909,754	141,888	767,866
1991.....	697,520	158,916	856,436	206,320	650,116
1992.....	691,016	150,911	841,927	258,511	583,416
1993.....	814,196	760,664	1,574,860	212,859	1,362,001
1994.....	880,852	548,288	1,429,140	159,937	1,269,203
1995.....	711,996	139,101	851,097	176,981	674,116
1996.....	679,472	135,561	815,033	186,412	628,621

(1) Includes shellfish meal production plus the production of U.S. solubles. (2) Data do not include imports of fish solubles.

Note:--Wet weight of solubles has been converted to dry weight by reducing its poundage by one-half.

U.S. SUPPLY OF FISH MEAL, 1987-96
(Product weight)

Year	U.S. production (1)	Imports	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	786,978	393,730	1,180,708	104,086	1,076,622
1988.....	643,796	265,310	909,106	153,946	755,160
1989.....	618,382	171,112	789,494	107,350	682,144
1990.....	577,498	239,426	816,924	141,888	675,036
1991.....	612,716	158,916	771,632	206,320	565,312
1992.....	644,512	150,911	795,423	258,511	536,912
1993.....	750,744	760,664	1,511,408	212,859	1,298,549
1994.....	807,833	548,288	1,356,121	159,937	1,196,184
1995.....	667,240	139,101	806,341	176,981	629,360
1996.....	638,500	135,561	774,061	186,412	587,649

(1) Includes shellfish meal.

U.S. SUPPLY OF FISH OILS, 1987-96

Year	U.S. production	Imports	Total	Exports	Total supply
-----Thousand pounds-----					
1987.....	298,496	25,697	324,193	249,246	74,947
1988.....	224,733	27,667	252,400	150,002	102,398
1989.....	225,478	25,449	250,927	198,009	52,918
1990.....	281,949	36,702	318,651	236,589	82,062
1991.....	267,345	21,828	289,173	254,525	34,648
1992.....	184,725	23,772	208,497	177,444	31,053
1993.....	293,452	26,052	319,504	184,488	135,016
1994.....	291,189	40,642	331,831	242,788	89,043
1995.....	241,941	23,913	265,854	260,394	5,460
1996.....	248,399	35,622	284,021	187,294	96,727

SUPPLY OF INDUSTRIAL FISHERY PRODUCTS (ROUND WEIGHT) 1987 - 1996

PER CAPITA

U.S. CONSUMPTION

Annual per capita consumption of seafood products represents the pounds of edible meat consumed from domestically-caught and imported fish and shellfish adjusted for beginning and ending inventories, and exports, divided by the civilian population of the United States as of July 1 of each year.

U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-96

Year	Civilian resident population July 1 (1)	Per capita consumption			
		Fresh and frozen (2)	Canned (3)	Cured (4)	Total
	<u>Million persons</u>	<u>-----Pounds, edible meat-----</u>			
1909 (5)	90.5	4.3	2.7	*4.0	11.0
1910	92.2	4.5	2.8	3.9	11.2
1911.....	93.9	4.8	2.8	3.7	11.3
1912.....	95.3	5.0	2.9	3.4	11.3
1913.....	97.2	5.3	2.9	3.3	11.5
1914.....	99.1	5.6	3.0	3.1	8.7
1915.....	100.5	5.8	2.4	3.0	11.2
1916.....	102.0	6.0	2.2	2.8	11.0
1917.....	103.3	6.2	2.0	2.7	10.9
1918.....	103.2	6.4	2.0	2.5	10.9
1919.....	104.5	6.4	2.8	2.4	11.6
1920	106.5	6.3	3.2	2.3	11.8
1921.....	108.5	6.2	2.2	2.1	10.5
1922.....	110.0	6.1	3.2	2.0	11.3
1923.....	111.9	6.0	2.9	1.8	10.7
1924.....	114.1	6.1	3.2	1.7	11.0
1925.....	115.8	6.3	3.2	1.6	11.1
1926.....	117.4	6.6	3.4	1.4	11.4
1927.....	119.0	7.0	3.9	1.3	12.2
1928.....	120.5	7.1	3.9	1.1	12.1
1929.....	121.8	6.9	3.9	1.1	11.9
1930	122.9	5.8	3.4	1.0	10.2
1931.....	123.9	4.9	3.2	0.7	8.8
1932.....	124.7	4.3	3.4	0.7	8.4
1933.....	125.4	4.2	3.9	0.6	8.7
1934.....	126.2	4.3	4.2	0.7	9.2
1935.....	127.1	5.1	4.7	0.7	10.5
1936.....	127.9	5.2	*5.8	0.7	11.7
1937.....	128.6	5.6	5.3	0.9	11.8
1938.....	129.6	5.2	4.8	0.8	10.8
1939.....	130.7	5.3	4.7	0.7	10.7
1940	132.1	5.7	4.6	0.7	11.0
1941.....	132.1	6.3	4.2	0.7	11.2
1942.....	131.4	5.2	2.9	0.6	8.7
1943.....	128.0	5.5	1.8	0.6	7.9
1944.....	127.2	5.5	2.6	0.6	8.7
1945.....	128.1	6.6	2.6	0.7	9.9
1946.....	138.9	5.9	4.2	0.7	10.8
1947.....	143.1	5.8	3.8	0.7	10.3
1948.....	145.7	6.0	4.4	0.7	11.1
1949.....	148.2	5.8	4.5	0.6	10.9
1950	150.8	6.3	4.9	0.6	11.8
1951.....	151.6	6.3	4.3	0.6	11.2
1952.....	153.9	6.2	4.3	0.7	11.2
1953.....	156.6	6.4	4.3	0.7	11.4
1954.....	159.7	6.2	4.3	0.7	11.2
1955.....	163.0	5.9	3.9	0.7	10.5
1956.....	166.1	5.7	4.0	0.7	10.4
1957.....	169.1	5.5	4.0	0.7	10.2
1958.....	172.2	5.7	4.3	0.6	10.6
1959.....	175.3	5.9	4.4	0.6	10.9

See notes at end of table.

(Continued)

PER CAPITA

125

U.S. CONSUMPTION

U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-96 - Continued

Year	Civilian resident population July 1 (1)	Per capita consumption			
		Fresh and frozen (2)	Canned (3)	Cured (4)	Total
	<u>Million persons</u>	- - - - -Pounds, edible meat- - - - -			
1960.....	178.1	5.7	4.0	0.6	10.3
1961.....	181.1	5.9	4.3	0.5	10.7
1962.....	183.7	5.8	4.3	0.5	10.6
1963.....	186.5	5.8	4.4	0.5	10.7
1964.....	189.1	5.9	4.1	0.5	10.5
1965.....	191.6	6.0	4.3	0.5	10.8
1966.....	193.4	6.1	4.3	0.5	10.9
1967.....	195.3	5.8	4.3	0.5	10.6
1968.....	197.1	6.2	4.3	0.5	11.0
1969.....	199.1	6.6	4.2	0.4	11.2
1970.....	201.9	6.9	4.5	0.4	11.8
1971.....	204.9	6.7	4.3	0.5	11.5
1972.....	207.5	7.1	4.9	0.5	12.5
1973.....	209.6	7.4	5.0	0.4	12.8
1974.....	211.6	6.9	4.7	0.5	12.1
1975.....	213.8	7.5	4.3	0.4	12.2
1976.....	215.9	8.2	4.2	0.5	12.9
1977.....	218.1	7.7	4.6	0.4	12.7
1978.....	220.5	8.1	5.0	0.3	13.4
1979.....	223.0	7.8	4.8	0.4	13.0
1980.....	225.6	7.9	4.3	0.3	12.5
1981.....	227.8	7.8	4.6	0.3	12.7
1982.....	230.0	7.9	4.3	0.3	12.5
1983.....	232.1	8.4	4.7	0.3	13.4
1984.....	234.1	9.0	4.9	0.3	14.2
1985.....	236.2	9.8	5.0	0.3	15.1
1986.....	238.4	9.8	5.4	0.3	15.5
1987.....	240.6	*10.7	5.2	0.3	*16.2
1988.....	242.8	10.0	4.9	0.3	15.2
1989.....	245.1	10.2	5.1	0.3	15.6
1990.....	247.8	9.6	5.1	0.3	15.0
1991.....	250.5	9.7	4.9	0.3	14.9
1992.....	253.5	9.9	4.6	0.3	14.8
1993.....	256.4	10.2	4.5	0.3	15.0
1994.....	259.2	10.4	4.5	0.3	15.2
1995.....	261.4	10.0	4.7	0.3	15.0
1996.....	264.0	10.0	4.5	0.3	14.8

(1) Resident population for 1909 to 1929 and civilian resident population for 1930 to date.

(2) Fresh and frozen fish consumption from 1910 to 1928 is estimated. Beginning in 1973, data include consumption of artificially cultivated catfish. Domestic landings used in calculating consumption are preliminary after 1977.

(3) Canned fish consumption for 1911 to 1920 is estimated. Beginning in 1921, it is based on production reports, packer stocks, and foreign trade statistics for individual years.

(4) Cured fish consumption for 1910 to 1928 is estimated.

(5) Data for 1909 estimate based on the 1908 census and foreign trade data.

*Record.

PER CAPITA

U.S. CONSUMPTION

U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1976-96

Year	Salmon	Sardines	Tuna	Shellfish	Other	Total
-----Pounds-----						
1976...	0.3	0.3	2.8	0.4	0.4	4.2
1977...	0.5	0.3	2.8	0.6	0.4	4.6
1978...	0.6	0.3	3.3	0.5	0.3	5.0
1979...	0.5	0.3	3.2	0.5	0.3	4.8
1980...	0.5	0.3	3.0	0.4	0.1	4.3
1981...	0.5	0.4	3.0	0.4	0.3	4.6
1982...	0.5	0.3	2.8	0.4	0.3	4.3
1983...	0.5	0.2	3.2	0.4	0.4	4.7
1984...	0.6	0.2	3.2	0.4	0.5	4.9
1985...	0.5	0.3	3.3	0.5	0.4	5.0
1986...	0.5	0.3	3.6	0.5	0.5	5.4
1987...	0.4	0.3	3.5	0.5	0.5	5.2
1988...	0.3	0.3	3.6	0.4	0.3	4.9
1989...	0.3	0.3	3.9	0.4	0.2	5.1
1990...	0.4	0.3	3.7	0.3	0.4	5.1
1991...	0.5	0.2	3.6	0.4	0.2	4.9
1992...	0.5	0.2	3.5	0.3	0.1	4.6
1993...	0.4	0.2	3.5	0.3	0.1	4.5
1994...	0.4	0.2	3.3	0.3	0.3	4.5
1995...	0.5	0.2	3.4	0.3	0.3	4.7
1996...	0.5	0.2	3.2	0.3	0.3	4.5

NOTE:--Domestic landings data used in calculating these data are preliminary after 1977.

U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1976-96

Year	Filletts and steaks (1)	Sticks and portions	Shrimp all preparation
-----Pounds (2)-----			
1976...	2.5	2.0	1.5
1977...	2.5	2.0	1.6
1978...	2.7	2.2	1.5
1979...	2.7	*2.2	1.3
1980...	2.4	2.0	1.4
1981...	2.4	1.8	1.5
1982...	2.5	1.7	1.5
1983...	2.7	1.8	1.7
1984...	3.0	1.8	1.9
1985...	3.2	1.8	2.0
1986...	3.4	1.8	2.2
1987...	*3.6	1.7	2.4
1988...	3.2	1.5	2.4
1989...	3.1	1.5	2.3
1990...	3.1	1.5	2.2
1991...	3.0	1.2	2.4
1992...	2.9	0.9	2.5
1993...	2.9	1.0	2.5
1994...	3.1	0.9	*2.6
1995...	2.9	1.2	2.5
1996...	3.0	1.0	2.5

(1) Data include groundfish and other species. Data do not include blocks, but filletts could be made into blocks from which sticks and portions could be produced.

(2) Product weight of filletts and steaks and sticks and portions, edible (meat) weight of shrimp.
*Record.

Note:--Domestic landings data used in calculating these data are preliminary after 1977.

PER CAPITA

127

U.S. USE

Per capita use of commercial fish and shellfish is based on the supply of fishery products, both edible and nonedible (industrial), on a round weight equivalent basis, without considering beginning or ending stocks, defense purchases, or exports.

Per capita use figures are not comparable with per capita consumption data. Per capita consumption figures represent edible (for human use) meat weight consumption rather than round weight consumption. In addition, per capita consumption includes allowances for beginning and ending stocks and exports, whereas the use does not include such allowances.

Per capita use is derived by using total population including U.S. Armed Forces overseas. The per capita consumption is derived by using civilian resident population.

U.S. ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1960-96 (1)

Year	Total population including armed forces overseas July 1	U.S. supply			
			Commercial landings	Imports	Total
	<u>Million persons</u>	<u>Million pounds</u>	<u>-----Pounds-----</u>		
1960.....	180.7	8,223	27.3	18.2	45.5
1961.....	183.7	9,570	28.2	23.9	52.1
1962.....	186.5	10,408	28.7	27.1	55.8
1963.....	189.2	11,434	25.6	34.8	60.4
1964.....	191.9	12,031	23.7	39.0	62.7
1965.....	194.3	10,535	24.6	29.6	54.2
1966.....	196.6	12,469	22.2	41.2	63.4
1967.....	198.7	13,991	20.4	50.0	70.4
1968.....	200.7	17,381	20.7	65.9	86.6
1969.....	202.7	11,847	21.4	37.0	58.4
1970.....	205.1	11,474	24.0	31.9	55.9
1971.....	207.7	11,804	24.1	32.7	56.8
1972.....	209.9	13,849	22.9	43.1	66.0
1973.....	211.9	10,378	22.9	26.1	49.0
1974.....	213.9	9,875	23.2	23.0	46.2
1975.....	216.0	10,164	22.6	24.5	47.1
1976.....	218.0	11,593	24.7	28.5	53.2
1977.....	220.2	10,652	23.9	24.4	48.3
1978.....	222.6	11,509	27.1	24.6	51.7
1979.....	225.1	11,831	27.9	24.7	52.6
1980.....	227.7	11,357	28.5	21.4	49.9
1981.....	230.0	11,353	26.0	23.4	49.4
1982.....	232.2	12,011	27.4	24.3	51.7
1983.....	234.3	12,352	27.5	25.2	52.7
1984.....	236.3	12,552	27.3	25.8	53.1
1985.....	238.5	15,150	26.2	37.3	63.5
1986.....	240.7	14,368	25.1	34.6	59.7
1987.....	242.8	15,744	28.4	36.4	64.8
1988.....	245.0	14,628	29.3	30.4	59.7
1989.....	247.3	15,485	34.2	28.4	62.6
1990.....	249.9	16,349	37.6	27.8	65.4
1991.....	252.7	16,363	37.5	27.3	64.8
1992.....	255.5	16,106	37.7	25.3	63.0
1993.....	258.2	20,334	40.6	38.2	78.8
1994.....	260.7	19,309	40.1	34.0	74.1
1995.....	263.0	16,484	37.2	25.5	62.7
1996.....	265.3	16,474	36.1	26.0	62.1

(1) Data include U.S. commercial landings and imports of both edible and nonedible (industrial) fishery products on a round weight basis. "Total supply" is not adjusted for beginning and ending stocks, defense purchases, or exports.

WORLD CONSUMPTION

**ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD,
BY REGION AND COUNTRY, 1991-93 AVERAGE**

Region and Country	Estimated live weight equivalent		Region and Country	Estimated live weight equivalent	
	Kilograms	Pounds		Kilograms	Pounds
North America:			Europe - Continued:		
Canada.....	23.0	50.7	Belarus.....	1.4	3.1
Greenland.....	82.3	181.4	Belgium and Luxembourg.....	18.6	41.0
St. Pierre and Miquelon.....	57.4	126.5	Bosnia-Herzegovina.....	0.7	1.5
United States.....	21.8	48.1	Bulgaria.....	2.6	5.7
Caribbean:			Croatia.....	1.2	2.6
Anguilla.....	48.1	106.0	Czech Republic.....	1.6	3.5
Antigua.....	63.1	139.1	Denmark.....	20.5	45.2
Aruba.....	30.9	68.1	Estonia.....	43.6	96.1
Bahamas.....	24.9	54.9	Faeroe Island.....	86.4	190.5
Barbados.....	25.8	56.9	Finland.....	32.5	71.6
Bermuda.....	36.5	80.5	France.....	29.0	63.9
British Virgin Islands.....	79.5	175.3	Georgia.....	8.4	18.5
Cayman Islands.....	32.1	70.8	Germany.....	12.5	27.6
Cuba.....	11.8	26.0	Greece.....	22.5	49.6
Dominica.....	25.3	55.8	Hungary.....	4.0	8.8
Dominican Republic.....	8.2	18.1	Iceland.....	91.8	202.4
Grenada.....	39.0	86.0	Ireland.....	15.1	33.3
Guadeloupe.....	42.2	93.0	Italy.....	22.1	48.7
Haiti.....	2.6	5.7	Kazakhstan.....	4.1	9.0
Jamaica.....	15.9	35.1	Kyrgyzstan.....	0.2	0.4
Martinique.....	50.8	112.0	Latvia.....	34.9	76.9
Montserrat.....	9.9	21.8	Lithuania.....	33.0	72.8
Netherland Antilles.....	20.3	44.8	Macedonia.....	2.1	4.6
St. Christopher-Nevis.....	50.8	112.0	Malta.....	23.8	52.5
Saint Lucia.....	20.9	46.1	Moldova.....	1.1	2.4
St. Vincent.....	17.2	37.9	Monaco.....	0.1	0.2
Trinidad-Tobago.....	11.5	25.4	Netherlands.....	11.4	25.1
Turks & Caicos.....	40.2	88.6	Norway.....	45.9	101.2
Latin America:			Poland.....	9.9	21.8
Argentina.....	7.4	16.3	Portugal.....	58.6	129.2
Belize.....	7.2	15.9	Romania.....	2.9	6.4
Bolivia.....	1.1	2.4	Russian Federation.....	18.9	41.7
Brazil.....	5.7	12.6	Slovakia.....	0.2	0.4
Chile.....	29.8	65.7	Slovenia.....	2.5	5.5
Colombia.....	3.1	6.8	Spain.....	38.0	83.8
Costa Rica.....	5.1	11.2	Sweden.....	26.8	59.1
Ecuador.....	7.2	15.9	Switzerland.....	13.4	29.5
El Salvador.....	2.4	5.3	Tajikistan.....	0.7	1.5
French Guiana.....	35.8	78.9	Turkmenistan.....	10.1	22.3
Guatemala.....	0.8	1.8	Ukraine.....	8.7	19.2
Guyana.....	43.7	96.3	United Kingdom.....	18.5	40.8
Honduras.....	1.1	2.4	Uzbekistan.....	1.2	2.6
Mexico.....	11.7	25.8	Yugoslavia.....	1.2	2.6
Nicaragua.....	1.3	2.9	Near East:		
Panama.....	16.0	35.3	Afghanistan.....	0.1	0.2
Paraguay.....	3.7	8.2	Bahrain.....	17.8	39.2
Peru.....	18.5	40.8	Cyprus.....	17.2	37.9
Suriname.....	20.6	45.4	Egypt.....	7.2	15.9
Uruguay.....	6.3	13.9	Iran.....	5.3	11.7
Venezuela.....	14.9	32.8	Iraq.....	1.1	2.4
Europe:			Israel.....	20.9	46.1
Albania.....	0.7	1.5	Jordan.....	3.0	6.6
Armenia.....	1.3	2.9	Kuwait.....	7.7	17.0
Austria.....	9.8	21.6	Lebanon.....	0.7	1.5
Azerbaijan.....	5.2	11.5	Libya.....	4.0	8.8
			Oman.....	23.3	51.4
			Qatar.....	19.9	43.9
			Saudi Arabia.....	5.9	13.0
			Sudan.....	1.4	3.1
			Syria.....	0.5	1.1
			Turkey.....	6.7	14.8
			United Arab Emirates.....	24.8	54.7
			Yemen Republic.....	6.7	14.8

See note at end of table.

(Continued on next page)

PER CAPITA

129

WORLD CONSUMPTION

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1991-93 AVERAGE

Region and Country	Estimated live weight equivalent		Region and Country	Estimated live weight equivalent	
	Kilograms	Pounds		Kilograms	Pounds
Far East:			Africa - Continued:		
Bangladesh.....	8.2	18.1	Madagascar.....	7.3	16.1
Brunel.....	21.8	48.1	Malawi.....	6.4	14.1
Burma.....	15.6	34.4	Mali.....	7.0	15.4
Cambodia.....	12.0	26.5	Mauritania.....	17.4	38.4
China.....	12.4	27.3	Mauritius.....	26.0	57.3
Hong Kong.....	58.8	129.6	Morocco.....	7.9	17.4
India.....	4.0	8.8	Mozambique.....	2.3	5.1
Indonesia.....	15.6	34.4	Namibia.....	10.8	23.8
Japan.....	67.0	147.7	Niger.....	0.4	0.9
Laos.....	6.7	14.8	Nigeria.....	8.3	18.3
Macao.....	39.4	86.9	Reunion.....	24.7	54.5
Maldives.....	125.8	277.3	Rwanda.....	0.7	1.5
Malaysia.....	29.5	60.6	Sao Tome.....	20.9	46.1
Mongolia.....	0.8	1.8	Senegal.....	27.0	59.5
Nepal.....	0.8	1.8	Seychelles.....	71.4	157.4
North Korea.....	43.2	95.2	Sierra Leone.....	14.7	32.4
Pakistan.....	2.1	4.6	Somalia.....	1.3	2.9
Philippines.....	36.1	79.6	South Africa.....	4.9	10.8
Singapore.....	36.8	81.1	St. Helena.....	55.3	121.9
South Korea.....	47.7	105.2	Swaziland.....	0.1	0.2
Sri Lanka.....	16.2	35.7	Tanzania.....	12.2	26.9
Taiwan.....	37.0	81.6	Togo.....	11.0	24.3
Thailand.....	25.4	56.0	Tunisia.....	8.8	19.4
Vietnam.....	13.4	29.5	Uganda.....	11.8	26.0
Africa:			Zaire.....	5.8	12.8
Algeria.....	3.4	7.5	Zambia.....	7.9	17.4
Angola.....	11.8	26.0	Zimbabwe.....	2.2	4.9
Benin.....	10.8	23.8	Oceania:		
Botswana.....	8.0	17.6	Australia.....	18.7	41.2
Burkina.....	1.4	3.1	Fiji.....	36.5	80.5
Burundi.....	3.8	8.4	French Polynesia.....	34.2	75.4
Cameroon.....	8.8	19.4	Kiribati.....	73.9	162.9
Cape Verde.....	18.1	39.9	Marshall.....	4.7	10.4
Central African Rep....	4.6	10.1	Micronesia.....	18.7	41.2
Chad.....	5.8	12.8	Nauru.....	33.9	74.7
Comoros.....	14.7	32.4	Niue.....	61.7	136.0
Congo.....	32.6	71.9	New Caledonia.....	20.9	46.1
Djibouti.....	1.6	3.5	New Zealand.....	17.7	39.0
Equatorial Guinea.....	22.9	50.5	Palau.....	93.4	205.9
Eritrea.....	0.1	0.2	Papua New Guinea.....	21.9	48.3
Ethiopia.....	0.1	0.2	Solomon Islands.....	32.2	71.0
Gabon.....	30.3	66.8	Tokelau.....	103.7	228.6
Gambia.....	20.2	44.5	Tonga.....	24.0	52.9
Ghana.....	24.7	54.5	Tuvalu.....	55.8	123.0
Guinea.....	7.7	17.0	Vanuatu.....	29.0	63.9
Guinea-Bissau.....	4.7	10.4	Wallis & Futuna.....	8.6	19.0
Ivory Coast.....	13.7	30.2	Western Samoa.....	40.9	90.2
Kenya.....	5.9	13.0	World.....		
Lesotho.....	0.1	0.2		13.0	28.7
Liberia.....	4.9	10.8			

Note:--Data for most countries are tentative. Aquatic plants are included where applicable.

Source:--Food and Agriculture Organization of the United Nations (FAO) Yearbook of Fishery Statistics, 1994, vol. 78, Rome.

PRICES

The Exvessel Price table is an index of changes in the relative dockside value of fish and shellfish sold by fishing vessels. The table indexes the average annual exvessel value (price per pound) received for each species or group to the average price per pound received for the same species or group in the base year 1982.

The exvessel price for each year was obtained by dividing total value for each species or group by its total quantity as reported in the U. S. commercial landings tables on pages 1 and 2. The index for each species or group was obtained by multiplying the current annual price by the

total quantity caught in 1982 (the base year). That number was then divided by the 1982 value to obtain the final index:

$$\frac{(100 \times \text{Current price} \times \text{1982 quantity})}{\text{1982 Annual Value}} = \text{Index}$$

Each index number measures price changes from the 1982 reference period when the index equaled 100. A species of fish that sold for \$0.75 a pound in 1982 and a \$1.00 a pound in 1982 would have an index of 75 in 1986. In 1996, if the price of the same species increased to \$1.07, the index in 1996 would be 107.

EXVESSEL PRICE INDEX, 1990-1996 BASE YEAR 1982 = 100

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY YEARS, 1990-96
(1982=100)

Species	1990 (1)	1991 (1)	1992 (1)	1993	1994	1995	1996
Groundfish, et al:							
Cod.....	79	106	105	105	92	77	76
Haddock.....	220	227	219	277	287	277	239
Pollock:							
Atlantic.....	223	255	297	299	365	412	311
Alaska.....	151	149	194	194	212	161	160
Flounders.....	112	97	60	61	80	96	91
Total groundfish, et al...	121	122	108	115	125	125	115
Halibut.....	159	175	91	115	171	173	199
Sea herring.....	97	86	86	63	86	126	137
Salmon:..							
Chinook.....	101	101	112	81	76	76	63
Chum.....	109	73	112	95	58	66	36
Pink.....	138	57	69	59	73	67	38
Sockeye.....	140	88	136	80	101	100	94
Coho.....	105	72	84	74	76	54	48
Total salmon.....	125	82	113	78	85	82	69
Swordfish.....	108	102	111	92	107	104	103
Tuna:							
Albacore.....	127	114	147	132	125	120	130
Bluefin.....	572	1,158	477	766	666	954	229
Skipjack.....	85	83	72	85	127	83	82
Yellowfin.....	112	116	96	112	205	283	113
Total tuna.....	112	126	97	117	181	212	105
Total edible finfish.....	120	106	106	97	122	130	96
Clams:							
Hard.....	127	142	135	113	105	113	148
Ocean quahog.....	111	124	124	128	129	136	142
Soft.....	213	192	222	233	248	250	205
Surf.....	86	84	83	88	118	118	115
Total clams.....	127	132	133	126	133	138	147
Crabs:							
Blue.....	152	131	183	201	260	284	266
Dungeness.....	162	159	124	95	145	176	143
King.....	145	99	139	127	146	104	100
Snow.....	83	53	60	78	144	237	130
Total crabs.....	131	99	124	123	166	182	144
American lobster.....	110	113	125	117	128	141	147
Oysters.....	228	219	225	183	175	179	214
Scallops:							
Bay.....	149	157	150	161	49	55	69
Calico.....	110	(2)	(2)	(2)	94	124	-
Sea.....	105	110	132	159	138	138	153
Total scallops.....	109	135	118	141	126	131	129
Shrimp:							
Gulf and South Atlantic...	79	87	86	80	110	99	88
Other.....	113	130	113	128	142	179	148
Total shrimp.....	81	89	88	82	111	103	91
Total edible shellfish.....	111	110	115	110	138	135	124
Total edible fish and shellfish.....	115	108	111	104	131	133	111
Industrial fish,							
Menhaden.....	128	103	128	128	154	128	128
All fish and shellfish.....	116	108	112	105	132	132	112

(1) Revised.

(2) Confidential data.

**SUMMARY OF 1996 VALUE ADDED, MARGINS, AND CONSUMER EXPENDITURES FOR COMMERCIAL MARINE
FISHERY PRODUCTS IN THE UNITED STATES (1)**

Sector or type of activity	Purchase of fishery inputs	Mark-up of fishery inputs	Total mark-up within sector	Value added as percent of total mark-up	Value added within sector	Value of sales by sector	Value added contribution	Offshore fleet & exported fishery products
	Thousand Dollars	Percentage of Fishery Inputs	Thousand Dollars	Percentage	Thousand Dollars	Thousand Dollars	Percentage of GNP Contribution	Thousand Dollars
Domestic Harvest:								
Edible.....	-	100.0	\$3,392,563	62.7	\$2,127,556	\$3,392,563	10.1	-
Industrial.....	-	100.0	\$94,150	60.9	\$57,316	\$94,150	0.3	-
Harvest not landed in U.S....	-	100.0	\$159,430	68.2	\$108,742	\$159,430	0.5	\$159,430
Imports, Unprocessed	\$3,023,888	-	-	-	-	\$3,023,888	-	-
Exports, Unprocessed	-	-	-	-	-	-	-	\$1,133,159
Primary Wholesale and Processing.....	\$5,377,442	96.6	\$5,192,619	51.6	\$2,680,359	\$10,570,061	12.8	-
Imports, Processed..	\$3,857,733	-	-	-	-	\$3,857,733	-	-
Exports, Processed..	-	-	-	-	-	-	-	\$1,911,971
Secondary Wholesale and Processing:								
Edible.....	\$12,336,541	58.3	\$7,197,211	29.1	\$2,091,283	\$19,533,751	10.0	-
Industrial.....	\$179,282	58.3	\$104,594	29.1	\$30,392	\$283,876	0.1	-
Retail Trade from Food Service.....	\$9,816,984	182.7	\$17,938,131	67.0	\$12,009,638	\$27,755,115	57.3	-
Retail Trade from Stores.....	\$9,716,767	35.3	\$3,433,547	54.4	\$1,867,345	\$13,150,314	8.9	-
TOTAL U.S. VALUE ADDED ACTIVITY:					\$20,972,632		100.0	
CONSUMERS EXPENDITURES (& WHOLESALE PURCHASES OF INDUSTRIAL PRODUCTS) FOR FISHERY PRODUCTS:						\$41,189,306		

(1) Includes industrial products and landings by U.S.-flag vessels at U.S. ports, foreign ports, and transfers to internal water processing vessels.

Note.-- The table reports the contribution of commercial marine fishing to the national economy as measured by margin, value added, and sales. These measures are consistent with the Bureau of the Census definitions.

Margin or mark-up is the difference between the price paid for the product by the consumer or wholesale purchaser and the dockside or wholesale value for an equivalent weight of the product. (It is assumed that fishermen catch their fish without paying purchase price and therefore the entire dockside or exvessel price is considered margin.) Value added is a measure of the factors added to the total worth of a product at each stage of the production process. It is defined as the gross receipts of firms minus the cost of purchased goods and services needed to fabricate the product. Gross National Products (GNP) is equal to the sum of the value added of all economic entities in the economy. Value added within a sector represents that sector's contribution to GNP.

Value added includes wages, salaries, interest, depreciation, rent, taxes and profit. Consumer expenditures are the final retail value of seafood products sold through stores and food service outlets plus secondary wholesale and processing of industrial products.

EMPLOYMENT, CRAFT, AND PLANTS

133

ESTIMATED NUMBER OF COMMERCIAL FISHING VESSELS (1) AND FISHING BOATS (2) BY REGION AND STATE, 1994 - 1995

REGIONS	1994			1995		
	VESSELS	BOATS	TOTAL	VESSELS	BOATS	TOTAL
Northeast Fisheries:						
Connecticut.....	133	470	603	149	392	541
Delaware.....	29	423	452	32	555	587
Maine.....	1,818	5,477	7,295	1,798	5,439	7,237
Maryland (3).....	36	-	36	33	-	33
Massachusetts.....	820	4,500	5,320	805	4,490	5,295
New Hampshire.....	139	396	535	139	467	606
New Jersey.....	397	1,382	1,779	423	1,282	1,705
New York (4).....	696	2,905	3,601	698	2,924	3,622
Rhode Island.....	280	2,888	3,168	291	2,863	3,154
Virginia (3).....	133	-	133	122	2,138	2,260
South Atlantic and Gulf Fisheries:						
North Carolina.....	1,024	9,921	10,945	1,034	9,361	10,395
South Carolina.....	571	832	1,403	530	1,022	1,552
Georgia.....	312	652	964	305	NA	305
Florida.....	2,340	8,439	10,779	2,311	8,919	11,230
Alabama.....	426	644	1,070	378	720	1,098
Mississippi.....	535	934	1,469	438	874	1,312
Louisiana.....	2,846	12,954	15,800	2,805	12,969	15,774
Texas.....	2,200	2,378	4,578	1,902	1,969	3,871
West Coast Fisheries:						
Washington.....	1,349	748	2,097	1,176	630	1,806
Oregon.....	911	449	1,360	927	378	1,305
Alaska.....	7,387	9,145	16,532	7,141	9,373	16,514
California.....	6,247	NA	6,247	5,968	NA	5,968
Hawaii.....	3,110	NA	3,110	3,470	NA	3,470
Great Lakes Fisheries: (5)						
Illinois.....	5	-	5	5	-	5
Indiana.....	NA	NA	NA	NA	NA	NA
Michigan.....	61	74	135	61	75	136
Minnesota.....	2	27	29	2	29	31
New York.....	3	15	18	3	16	19
Ohio.....	25	25	50	33	18	51
Pennsylvania.....	5	2	7	NA	NA	NA
Wisconsin.....	91	47	138	93	40	133

(1) Vessels are documented craft greater than 5 net registered tons.

(2) Boats are craft less than 5 net registered tons.

(3) Only Federal collected data are available. Inshore data not available.

(4) Includes vessels and boats in the Great Lakes.

(5) Commercial fishing fleet sizes for the Great Lakes states represent only the number of licenses issued by the state; therefore, may not be an accurate total. Tribal data are not included in this table.

NA -- Data not available separately.

EMPLOYMENT, CRAFT, AND PLANTS

EMPLOYMENT BY REGION, 1995

EMPLOYMENT, CRAFT, AND PLANTS

135

PROCESSORS AND WHOLESALERS: PLANTS, AND EMPLOYMENT, 1995

State and Area	Processing				Wholesale (1)				Total	
	Plants	Employment average		Plants	Employment average		Plants	Employment average		
		Season	Year		Season	Year		Season	Year	
-----Number-----										
New England:	64	1,814	1,199	195	(2)	1,529	259	(3)	3,328	
	11	336	336	30	(2)	183	41	(3)	519	
	90	2,261	2,232	279	(2)	2,583	369	(3)	4,815	
	24	512	512	84	(2)	447	108	(3)	959	
	5	73	73	37	(2)	301	42	(3)	374	
	194	4,996	4,952	625	(2)	5,043	819	(3)	9,995	
Mid-Atlantic:	15	214	214	317	(2)	2,362	332	(3)	2,576	
	16	898	898	132	(2)	847	148	(3)	1,745	
	5	1,115	1,115	72	(2)	815	77	(3)	1,930	
	(4)	(4)	(4)	(4)	(2)	(4)	(4)	(3)	(4)	
	-	-	-	6	(2)	69	6	(3)	69	
	40	1,383	1,255	87	(2)	711	127	(3)	1,966	
South Atlantic:	51	2,006	1,903	83	(2)	685	134	(3)	2,588	
	127	5,616	5,385	697	(2)	5,489	824	(3)	10,874	
	52	1,206	1,140	98	(2)	926	150	(3)	2,066	
	10	155	154	30	(2)	189	40	(3)	343	
	11	1,131	1,131	62	(2)	611	73	(3)	1,742	
	35	1,143	1,075	(5)	(2)	(5)	35	(3)	1,075	
Gulf:	108	3,635	3,500	190	(2)	1,726	298	(3)	5,226	
	88	2,168	2,141	411	(2)	3,050	499	(3)	5,191	
	89	1,569	1,530	83	(2)	997	172	(3)	2,527	
	29	934	929	34	(2)	224	63	(3)	1,153	
	159	4,048	3,563	170	(2)	1,281	329	(3)	4,844	
	25	1,408	1,386	112	(2)	1,003	137	(3)	2,389	
Pacific:	390	10,127	9,549	810	(2)	6,555	1,200	(3)	16,104	
	185	10,232	7,832	220	(2)	928	405	(3)	8,760	
	104	5,442	4,286	194	(2)	1,889	298	(3)	6,175	
	44	1,553	1,462	27	(2)	457	71	(3)	1,919	
	153	6,449	6,355	401	(2)	4,743	554	(3)	11,098	
	486	23,676	19,935	842	(2)	8,017	1,328	(3)	27,952	
Inland States, Total:	33	1,350	1,208	260	(2)	2,579	293	(3)	3,787	
	32	10,385	10,233	59	(2)	583	91	(3)	10,816	
	1,370	59,785	54,762	3,483	(2)	29,992	4,853	(3)	84,754	

(1) Data are based on Standard Industrial Classification 5146 as reported to the Bureau of Labor Statistics.

(2) Not reported. (3) Can not be calculated. (4) Included with Inland States. (5) Included with Florida, West Coast.

(6) Includes American Samoa, Hawaii, and Puerto Rico.

FISHERY PRODUCTS INSPECTION

FISHERY PRODUCTS AND ESTABLISHMENTS INSPECTED IN CALENDAR YEAR, 1996

Region	Edible fishery products						
	Establishment						
	(1)		Amount inspected				
	SIFE	In-Plant	Grade A	PUFI	No Mark	Lot	Total
	(2)	(3)	(4)	(4)	(5)	(6)	
	-Average number-		-----Thousand pounds-----				
Northeast.....	0	116	30,378	171,766	62,042	79,272	343,549
Southeast.....	0	133	18,262	98,940	42,717	93,878	253,797
West.....	16	70	23,631	329,335	80,856	170,191	604,012
Total, 1996.	16	319	72,271	680,041	185,615	343,340	1,201,268
Total, 1995.	12	312	75,764	365,011	188,428	383,680	1,012,884

(1) These establishments are inspected under contract and certified as meeting U.S. Department of Commerce (USDC) regulations for construction and maintenance of facilities and equipment processing techniques, and employment practices.

(2) Fish processing establishments approved for sanitation under the Sanitary Inspected Fish Establishment service (SIFE). Products are not processed under inspection.

(3) Sanitarily inspected fish establishments processing fishery products under USDC inspection. As of December 1996, 110 of these establishments were in the Hazard Analysis Critical Control Point (HACCP) Program.

(4) Products processed under USDC inspection in inspected establishments and labeled with USDC inspection mark as "Processed Under Federal Inspection" (PUFI) and/or "U.S. Grade A."

(5) Products processed under inspection in inspected establishments but bearing no USDC inspection mark.

(6) Lot inspected and marked products checked for quality and condition at the time of examination and located in processing plants, warehouses, cold storage facilities, or terminal markets anywhere in the United States.

Note:--Table may not add due to rounding.

Source:--NMFS, Office of Sustainable Fisheries, F/SF6.

National Marine Fisheries Service Principal Facilities

THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

The Magnuson-Stevens Fishery Conservation and Management Act, Public Law 94-265 as amended (Magnuson-Stevens Act), provides for the conservation and management of fishery resources within the U.S. Exclusive Economic Zone (EEZ). It also provides for fishery management authority over continental shelf resources and anadromous species beyond the EEZ, except when they are found within a foreign nation's territorial sea or fishery conservation zone (or equivalent), to the extent that such sea or zone is recognized by the United States.

The EEZ extends from the seaward boundary of each of the coastal States (generally 3 nautical miles from shore for all but two States) to 200 nautical miles from shore. The seaward boundaries of Texas, Puerto Rico, and the Gulf coast of Florida are 3 marine leagues (9 nautical miles).

GOVERNING INTERNATIONAL FISHERY AGREEMENTS

Under the Magnuson-Stevens Act, the Secretary of State, in cooperation with the Secretary of Commerce, negotiates Governing International Fishery Agreements (GIFAs) with foreign nations requesting to fish within the EEZ. After a GIFA is signed, it is transmitted by the President to the Congress for ratification.

FOREIGN FISHING PERMITS

Title II of the Magnuson-Stevens Act governs foreign fishing in the EEZ. The process applied to foreign fishing has been described in prior issues of this publication. As U.S. fishing capacity grew, foreign participation in directed fisheries, as well as in foreign joint ventures in which U.S. vessels delivered U.S. harvested fish to permitted foreign vessels in the EEZ diminished until, in 1991, foreign vessels no longer were permitted to conduct any harvesting or processing operations in the EEZ. This marked the achievement of one of the objectives of the Magnuson-Stevens Act, that is, the development of the U.S. fishing industry to take what were in 1976 underutilized species, and the displacement of the foreign fishing effort in the EEZ by 1991.

As a result of the above, there has been no total allowable level of foreign fishing since 1991, although 35,000 mt of Atlantic mackerel and 40,000 mt of Atlantic

herring were available for joint venture fishing in 1996. However, no joint venture permits were issued in 1996 because no foreign nations elected to participate in joint venture fishing in 1996. NMFS continues to maintain certain regulations pertaining to foreign fishing, such as the foreign fishing fee schedule, should there be a situation in the future in which allowing limited foreign fishing in an underutilized fishery would be of advantage to the U.S. fishing industry.

FMPs and PMPs

Under the Magnuson-Stevens Act, eight Regional Fishery Management Councils are charged with preparing Fishery Management Plans (FMPs) for the fisheries needing management within their areas of authority. After the Councils prepare FMPs that cover domestic and foreign fishing efforts, the FMPs are submitted to the Secretary of Commerce (Secretary) for approval and implementation. The Department, through NMFS agents and the U.S. Coast Guard, is responsible for enforcing the law and regulations.

The Secretary is empowered to prepare FMPs in the Atlantic and Gulf of Mexico for highly migratory species. Where no FMP exists, Preliminary Fishery Management Plans (PMPs), which only cover foreign fishing efforts, are prepared by the Secretary for each fishery for which a foreign nation requests a permit. The Secretary is also empowered to produce an FMP for any fishery that a Council has not duly produced. In this latter case, the Secretary's FMP covers domestic and foreign fishing.

As of December 31, 1996, five Preliminary Fishery Management Plans (PMPs) were in effect, many of which have been amended since first being implemented.

Foreign Trawl Fisheries of the Northwest
Atlantic
Hake Fisheries of the Northwest
Atlantic
Bering Sea/Northeast Pacific Herring
Bering Sea Snails
Atlantic Herring of the Northwestern
Atlantic

THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

139

The Atlantic swordfish, Atlantic sharks, and Atlantic billfish fisheries are currently being managed by the Secretary under the Magnuson-Stevens Act and the Western Atlantic bluefin tuna fishery is managed under the Atlantic Tunas Convention Act.

FISHERY MANAGEMENT PLANS (FMPs)

Under section 304 of the Magnuson-Stevens Act, all Council-prepared FMPs must be reviewed for approval by the Secretary. After FMPs have been approved under section 304 of the Magnuson-Stevens Act, they are implemented by Federal regulations, under section 305 of the Act. As of December 31, 1996, there are 39 FMPs in place. Of these, three are Secretarial FMPs for Atlantic highly migratory species. The 36 FMPs Council prepared are listed below. The FMPs are amended by the Councils and the amendments are submitted for approval under the same Secretarial review process as new FMPs. Most of the FMPs listed have been amended since initial implementation. Those marked with a double asterisk (**) were amended in 1996.

Northeast Multispecies (**)
American Lobster (**)
Atlantic Bluefish
Atlantic Coast Red Drum
Atlantic Mackerel, Squid, and Butterfish (**)
Atlantic Salmon
Atlantic Sea Scallops (**)
Atlantic Surf Clams and Ocean Quahogs (**)
Summer Flounder, Scup, and Black Sea Bass (**)
Gulf and South Atlantic Spiny Lobster
Caribbean Reef Fish

Gulf of Mexico Reef Fish (**)
Gulf of Mexico Corals
South Atlantic Corals
South Atlantic Golden Crab
Caribbean Coral Reef Resources
Gulf of Mexico Shrimp
Gulf of Mexico Stone Crab
Gulf of Mexico Red Drum
Coastal Migratory Pelagics
Caribbean Queen Conch
Caribbean Spiny Lobster
South Atlantic Snapper/Grouper
South Atlantic Shrimp (**)
Northern Anchovy
King and Tanner Crab
Commercial and Recreational Salmon
High Seas Salmon
Pacific Coast Groundfish
Gulf of Alaska Groundfish (**)
Bering Sea and Aleutian Islands
Groundfish (**)
Alaska Scallops (**)
Western Pacific Crustaceans (**)
Western Pacific Precious Corals
Western Pacific Bottomfish and Seamount
Groundfish
Western Pacific Pelagics

During 1996, 855 regulatory actions were processed via the Federal Register to implement FMP fishery management actions and rules for domestic fishing. This number includes hearings, meetings, and correction notices.

THE MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT

REGIONAL FISHERY MANAGEMENT COUNCILS

<u>Council</u>	<u>States</u>	<u>Telephone Number</u>	<u>Executive Director and Address</u>
NEW ENGLAND	(Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut)	617-231-0422 FAX: 565-8937	Paul J. Howard Suntaug Office Park 5 Broadway (Rt. 1) Saugus, MA 01906
MID-ATLANTIC	(New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, and North Carolina)	302-674-2331 FAX: 674-5399	David R. Keifer Federal Bldg., Rm. 2115 300 South New St. Dover, DE 19901
SOUTH ATLANTIC	(North Carolina, South Carolina, Georgia and Florida)	803-571-4366 FAX: 769-4520	Robert K. Mahood 1 Southpark Circle Suite 306 Charleston, SC 29407
GULF OF MEXICO	(Texas, Louisiana Mississippi, Alabama, and Florida)	813-228-2815 FAX: 225-7015	Wayne E. Swingle 3018 U.S. Highway 301 North, Suite 1000 Tampa, FL 33619
CARIBBEAN	(Virginia Islands and the Commonwealth of Puerto Rico)	809-766-5926 FAX: 766-6239	Miguel A. Rolon 268 Ave. Munoz Rivera Suite 1108 San Juan, PR 00918
PACIFIC	(California, Washington, Oregon, and Idaho)	503-326-6352 FAX: 326-6831	Lawrence D. Six 2130 S.W. 5th Ave. Suite 224 Portland, OR 97201
NORTH PACIFIC	(Alaska, Washington, and Oregon)	907-271-2809 FAX: 271-2817	Clarence G. Pautzke 605 W. 4th Ave. Room 306 Anchorage, AK 99501
WESTERN PACIFIC	(Hawaii, American Samoa, Guam, and the Northern Marianas Islands)	808-522-8220 FAX: 522-8226	Kitty M. Simonds 1164 Bishop St. Room 1405 Honolulu, HI 96813

NOTE:--Massachusetts, Pennsylvania, and Virginia are "Commonwealth States."

**OPTIMUM YIELD AND OTHER SPECIFICATIONS, INCLUDING AMOUNTS AVAILABLE FOR JOINT VENTURE
PROCESSING: NORTH ATLANTIC, BY SPECIES, 1996 (1)**

Item	Loligo squid	Illex squid	Atlantic mackerel	Butter- fish	Atlantic herring
	-----Metric tons, round weight-----				
Maximum OY.....	(2) 44,000	(2) 30,000	(3)	(2) 16,000	(4) 89,000
ABC.....	(5) 30,000	(5) 30,000	(5) 1,175,500	(5) 7,200	89,220
Initial OY.....	25,000	21,000	105,500	5,900	89,220
DAH.....	25,000	21,000	(6) 105,500	5,900	89,220
DAP.....	25,000	21,000	50,000	5,900	49,220
JVP.....	0	0	35,000	0	40,000
TALFF.....	0	0	0	0	0

- (1) OY=Optimum Yield; ABC=Allowable Biological Catch; DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; JVP=Joint Venture Processing; and TALFF=Total Allowable Level of Foreign Fishing.
- (2) Maximum OY based on the Fishery Management Plan for Atlantic Mackerel, Squid and Butterfish.
- (3) Not applicable based on the Fishery Management Plan for Atlantic Mackerel, Squid and Butterfish.
- (4) Maximum OY based on the Preliminary Fishery Management Plan for Atlantic Herring.
- (5) Initial OY can increase to this amount.
- (6) Contains 20,500 metric tons projected recreational catch.

Source:--NMFS, Office of Sustainable Fisheries, F/SF; and NMFS, Northeast Region, F/NER.

GENERAL ADMINISTRATIVE INFORMATION**UNITED STATES DEPARTMENT OF COMMERCE**

*14th and E Streets, NW
Washington, D.C. 2023*

<u>MAIL ROUTING CODE</u>		<u>TELEPHONE NUMBER</u>
--	Secretary of Commerce William Daley	202-482-2112
A	Under Secretary for Oceans and Atmosphere D. James Baker	202-482-3436

NATIONAL MARINE FISHERIES SERVICE

*1315 East-West Highway
Silver Spring Metro Center #3 (SSMC)
Silver Spring, MD 20910-3226*

F	Assistant Administrator for Fisheries Rolland A. Schmitt	301-713-2239
	Deputy Assistant Administrator for Fisheries -- David L. Evans	301-713-2239
Fx1	Staff Office for Industry and Trade Linda Chaves	301-713-2379
Fx2	Staff Office for Intergovernmental and Recreational Fisheries Richard Schaefer	301-427-2401
Fx3	Equal Employment Opportunity Eula Brown	301-713-2252
F/EN	Office of Law Enforcement -- David McKinney	301-427-2300
F/EN1	Enforcement Operations Division	301-427-2300
F/EN11	Enforcement Programs Branch	301-427-2300
F/HC	Office of Habitat Conservation -- James Burgess	301-713-2325
F/HCx1	Chesapeake Bay Program Office	410-267-5660
F/HC1	Watershed Division	301-713-2325
F/HC2	Habitat Protection Division	301-713-2325
F/HC3	Habitat Restoration Division	301-713-0174
F/OMI	Office of Operations, Management & Information -- Charles Karnella (Acting)	301-713-2239
F/OMI1	Administrative & Budget Processes Division	301-713-2245
F/OMI2	Planning and Development Division	301-713-2252
F/OMI3	Information Management Division	301-713-2372
F/PR	Office of Protected Resources -- Hilda Diaz-Soltero	301-713-2332
F/PRx1	Marine Biodiversity Team	301-713-2319
F/PR1	Permits and Documentation Division	301-713-2289
F/PR2	Marine Mammal Conservation Division	301-713-2322
F/PR3	Endangered Species Division	301-713-1401

(CONTINUED)

GENERAL ADMINISTRATIVE INFORMATION

143

UNITED STATES DEPARTMENT OF COMMERCE

Silver Spring, Md. 20910-3226

MAIL ROUTING CODE

TELEPHONE NUMBER

F/SF	Office of Sustainable Fisheries -- Gary Matlock	301-713-2334
FSF1	Highly Migratory Species Division	301-713-2347
F/SF2	Financial Services Division	301-713-2390
F/SF3	Domestic Fisheries Division	301-713-2341
F/SF4	International Fisheries Division	301-713-2376
F/SF5	Regulatory Services Division	301-713-2337
F/SF6	Seafood Inspection Division	301-713-2355
F/SF61	National Seafood Laboratory	601-769-8964
F/ST	Office of Science and Technology -- William Fox	301-713-2367
F/ST1	Fisheries Statistics & Economics Division	301-713-2328
F/ST2	Research Analysis & Coordination Division	301-713-2372
F/ST21	Scientific Publications Unit	206-526-6107
F/ST3	International Science Coordination and Analysis Division	301-713-2288
LA11	Office of Congressional Affairs - Fisheries -- Peter Hill (Acting)	301-713-2263
PAF	Office of Public Affairs - Fisheries -- Scott Smullen / Gordon Helms	301-713-2370
GCF	Office of General Counsel - Fisheries -- Margaret Hayes	301-713-2231

REFERRAL DIRECTORY - SILVER SPRING, MD OFFICES

FOREIGN FEES AND PERMITS -- 301-713-2339

Joint Ventures
Regulations:
Foreign Fishing
U.S. Nationals Fishing in Russian EZ

FINANCIAL SERVICES -- 301-713-2390

Compensation for Loss of Gear
Construction, vessels (Tax Deferral Prog.)
Insurance-Vessel Seizure by Foreign Govt.
Loans and Loan Guarantees

FISHERY MANAGEMENT OPER. -- 301-713-2341

Artificial Reefs
Fishery Management Plans
Fishery Regulations

INDUSTRY SERVICES -- 301-713-2351

Consumer Education and Marketing
Exports/Imports Licenses & Trade Issues
Saltonstall-Kennedy (S-K) Grants

INTERNATIONAL FISHERIES -- 301-713-2272

Allocation (Foreign Fishing Catches)
Foreign Fisheries (General)

LAW ENFORCEMENT AND FINES -- 301-427-2300

Lacey Act (general information)
Marine Mammal Protection Act (General)
Permits and Regulations

RESOURCES INVESTIGATIONS -- 301-713-2367

Acid Rain and Pollution
Aquaculture Information
Disease of Fish
Ecology and Fish Recruitment
Fishing Methods & Resource Abundance

STATISTICAL DATA SERVICES -- 301-713-2328

Commercial Fisheries - Landings & Value
Imports and Exports
Market News Reports (General)
Operating Units (Fishermen & Vessels)
Processed Fishery Products
Recreational Fisheries

UTILIZATION RESEARCH -- 301-713-2328

Botulism and Ciguatera Poisoning
Nutrition and Quality of Fishery Products
Safety and Products Standards
Seafood Inspection and Identity

GENERAL ADMINISTRATIVE INFORMATION

NATIONAL MARINE FISHERIES SERVICE

REGIONAL FACILITIES

<u>MAIL ROUTING CODE</u>		<u>TELEPHONE AND FAX NUMBER</u>	<u>LOCATION</u>
F/NE	Northeast Region One Blackburn Drive Gloucester, MA 01930	508-281-9300 Fax-281-9371	Gloucester, MA
F/NEC	Northeast Fisheries Science Center 166 Water St. - Rm. 312 Woods Hole, MA 02543	508-495-2233 Fax-495-2258	Woods Hole, MA
F/NEC3	Woods Hole Laboratory 166 Water St. Woods Hole, MA 02543	508-495-2233 Fax-495-2258	Woods Hole, MA
F/NEC5	Sandy Hook Laboratory Building 74, McGruder Highlands, NJ 07732	908-872-3000 FAX-872-3088	Highlands, NJ
F/NEC51	Milford Laboratory Milford, CT 06460	203-783-4200 FAX-783-4212	Milford, CT
F/NEC52	Narragansett Laboratory 28 Tarzell Drive Narragansett, RI 02882	401-782-3200 Fax-782-3201	Narragansett, RI
	Oxford Laboratory 609 S. Morris St. Oxford, MD 21654	410-226-5193 FAX-226-5925	Oxford, MD
F/NEC3	Natl. Systematics Laboratory, MRC153 10th & Constitution Ave., NW Washington, DC 20560	202-357-2550 FAX-357-1896	Washington, DC
F/SE	Southeast Region 9721 Executive Center Drive, N. St. Petersburg, FL 33702	813-570-5301 FAX-570-5300	St. Petersburg, FL
F/SEC	Southeast Fisheries Science Center, 75 Virginia Beach Dr. Miami, FL 33149	305-361-4284 FAX-361-4219	Miami, FL
F/SEC4	Miami Laboratory 75 Virginia Beach Dr. Miami, FL 33149	305-361-4225 FAX-361-4499	Miami, FL
F/SEC5	Mississippi Laboratories 3209 Frederick St., P.O. Drawer 1207 Pascagoula, MS 39567	601-762-4591 FAX-769-9200	Pascagoula, MS
F/SEC6	Panama City Laboratory 3500 Delwood Beach Rd. Panama City, FL 32408	904-234-6541 FAX-235-3559	Panama City, FL
F/SEC7	Galveston Laboratory 4700 Avenue U Galveston, TX 77551	409-766-3500 FAX-766-3508	Galveston, TX

(Continued)

GENERAL ADMINISTRATIVE INFORMATION

145

NATIONAL MARINE FISHERIES SERVICE

REGIONAL FACILITIES

<u>MAIL ROUTING CODE</u>		<u>TELEPHONE and FAX NUMBER</u>	<u>LOCATION</u>
F/SEC8	Charleston Laboratory 219 Fort Johnson Rd. Charleston, SC 29412	803-762-8500 FAX-762-8700	Charleston, SC
F/SEC9	Beaufort Laboratory 101 Pivers Island Beaufort, NC 28516	919-728-3595 FAX-728-8784	Beaufort, NC
F/NW	Northwest Region 7600 Sand Point Way, N.E. BIN C15700, Bldg. 1 Seattle, WA 98115	206-526-6150 FAX-526-6426	Seattle, WA
F/NWC	Northwest Fisheries Science Center West Bldg. - Rm. 363 2725 Montlake Boulevard, East Seattle, WA 98112	206-860-3200 FAX-860-3217	Seattle, WA
F/SW	Southwest Region 501 West Ocean Blvd., Suite 4200 Long Beach, CA 90802	562-980-4000 FAX-980-4018	Long Beach, CA
F/SWC	Southwest Fisheries Science Center 8604 La Jolla Shores Dr. P.O. Box 271 La Jolla, CA 92038	619-546-7000 FAX-546-7003	La Jolla, CA
F/SWC2	Honolulu Laboratory 2570 Dole St., P.O. Box 3830 Honolulu, HI 96812	808-943-1221 FAX-943-1290	Honolulu, HI
F/SWC3	Tiburon Laboratory 3150 Paradise Dr. Tiburon, CA 94920	415-435-3149 FAX-435-3675	Tiburon, CA
F/SWC4	Pacific Fisheries Environmental Group 1352 Lighthouse Ave. Pacific Grove, CA 93950	408-648-8515 FAX-648-8440	Pacific Grove, CA
F/AK	Alaska Region 709 West 9th Street, Room 453 P.O. Box 21668 Juneau, AK 99802	907-586-7221 FAX-586-7249	Juneau, AK
F/AKC	Alaska Fisheries Science Center, 7600 Sand Point Way, N.E. BIN C15700 - Bldg. #4 - Rm. 2149 Seattle, WA 98115	206-526-4000 FAX-526-4004	Seattle, WA
	Kodiak Investigations P.O. Box 1638 Kodiak, AK 99615	907-487-4961 FAX-487-5960	Kodiak, AK
F/AKC4	Auke Bay Laboratory 11305 Glacier Highway Auke Bay, AK 99801	907-789-6000 FAX-789-6094	Auke Bay, AK

GENERAL ADMINISTRATIVE INFORMATION

NATIONAL MARINE FISHERIES SERVICE
NATIONAL FISHERY STATISTICS OFFICES

<u>CITY</u>	<u>TELEPHONE NUMBER</u>	<u>NAME AND ADDRESS</u>
<u>NORTHEAST REGION</u>		
<u>NEW ENGLAND</u>		
Portland	207-780-3322 FAX:780-3340	Robert C. Morrill / Scott McNamara, Marine Trade Center, Suite 212, Two Portland Fish Pier Portland, ME 04101
Rockland	207-594-5969 FAX:596-7651	Peter S. Marckoon, Federal Bldg., 21 Limerock St., Rm. 207, P.O. Box 708, Rockland, ME 04841
Boston	617-223-8015 FAX:223-8526 617-223-8012 FAX:223-8526	Paul Sheahan, Statistics Office, 408 Atlantic Ave., Rm. 141, Boston, MA 02210 Jack French, Boston Market News, 408 Atlantic Ave., Rm. 141, Boston, MA 02210
(1) Gloucester	508-281-9304 FAX:281-9161	Gregory R. Power, Fishery Inf. Section, One Blackburn Dr., Gloucester, MA 01930
Gloucester	508-281-9307 FAX:281-9372	Kelly McGrath / Don Mason, Rm. 107, 1 Blackburn Dr. Gloucester, MA 01930
New Bedford	508-999-2452 FAX:990-2506	Dennis E. Main, U.S. Custom House, 37 N. Second St. New Bedford, MA 02740
Chatham	508-945-5961 FAX:945-3793	Lorraine Spenle, 29C Stage Harbor Road Chatham, MA 02633
Woods Hole	508-548-5123 FAX:548-5124	John Mahoney, Northeast Fisheries Science Center, 166 Water St., Woods Hole, MA 02543
Newport	401-847-3115 FAX:842-0980	Margaret Toner, Post Office Bldg., Thames St., Newport, RI 02840
Pt. Judith	401-783-7797 FAX:782-2113	Walter Anoushian, 310 Great Island Rd., Rm. 203, P.O. Box 547, Narragansett, RI 02882
<u>MIDDLE ATLANTIC</u>		
New York	212-620-3405 FAX:620-3577	Leo Gaudin / R. Santangelo, New York Market News 201 Varick Street, Rm. 731, New York, NY 10014
East Hampton	516-324-3569 FAX:324-3314	Erik Braun, 62 Newtown Lane, Suite 203, East Hampton, NY 11937
Patchogue	516-475-6988 FAX:289-8361	David McKernan, Social Security Bldg., 50 Maple Ave., P.O. Box 606, Patchogue, L.I., NY 11772
Toms River	908-349-3533 FAX:349-4319	Eugene Steady / Kathy Corbo, 26 Main St., P.O. Box 143, Toms River, NJ 08754
Cape May	609-884-2113 FAX:884-4908	Walt Makowski, 1382 Lafayette St., P.O. Box 624, Cape May, NJ 08204
<u>CHESAPEAKE</u>		
Ocean City	410-213-2761 FAX:213-7029	Ingo Fleming, 12904 Kelly Bridge Rd., P.O. Box 474, Ocean City, MD 21842
Hampton	757-723-3369 FAX:728-3947	David Ulmer / Steve Ellis, 1026 Settlers Landing Rd., Suite F, P.O. Box 436, Hampton, VA 23669
<u>SOUTHEAST REGION</u>		
(1) Beaufort	919-728-8720 FAX:728-8772	Nelson Johnson, Beaufort Laboratory, 101 Piver Island Road, Beaufort, NC 28516
New Smyrna Beach	904-427-6562 FAX: SAME	Claudia Dennis, Coast Guard Station/Ponce P.O. Box 2025, New Smyrna Beach, FL 32170
Tequesta	407-575-4461 FAX: SAME	Howard C. Schaefer, 19100 S.E. Federal Highway Tequesta, FL 33469
(1) Miami	305-361-4468 FAX:361-4460	Guy S. Davenport, 75 Virginia Beach Dr., Miami, FL 33149
Key West	305-294-1921 FAX: SAME	Edward J. Little, Jr., Post Office & Custom House Bldg., P.O. Box 269, Key West, FL 33040

GENERAL ADMINISTRATIVE INFORMATION

147

NATIONAL MARINE FISHERIES SERVICE NATIONAL FISHERY STATISTICS OFFICES

<u>CITY</u>	<u>TELEPHONE NUMBER</u>	<u>NAME AND ADDRESS</u>
<u>GULF</u>		
Fort Myers	941-334-4364 FAX: SAME	Tom Herbert, 2000 Main St., Suite 409 Fort Myers, FL 33901
St. Petersburg	813-570-5393 FAX: 570-5300	Vacant, 9721 Executive Center Drive, St. Petersburg, FL 33702
Panama City	904-234-6541 FAX: 235-3559	Deborah Fable, 3500 Delwood Beach Rd., Panama City, FL 32407
Mobile	334-639-6493 FAX: SAME	Ted Flowers, U.S.Coast Guard - ATC P.O. Box 97, Mobile, AL 36608
Pascagoula	601-762-7402 FAX: 769-9200	Rene Labadens, Jr., 3209 Frederic St., Pascagoula Lab., P.O. Box Drawer 1207, Pascagoula, MS 39567
Chalmette	504-277-0365 FAX: 271-9150	Maggie Bourgeois / Jay Boulet, 2626 Charles Dr., Suite 201, Chalmette, LA 70043
Golden Meadow	504-632-4324 FAX: SAME	Gary J. Rousse, 290 E. 57th St. (Cutoff, LA 70345) P.O. Box 623, Golden Meadow, LA 70357
Houma	504-872-3321 FAX: SAME	Kathleen Hebert, 425 Lafayette St., Rm. 128, Houma, LA 70360
	504-872-1403 FAX: SAME	Billy Ray Tucker, 1340 W. Tunnel Blvd., Suite 222, Houma, LA 70360
Marrero	504-340-5820 FAX: SAME	Jan Simpson, 5201 Westbank Expressway, Suite 312, Marrero, LA 70072
New Iberia	318-365-1558 FAX: SAME	Linda F. Picou, 705-A West Admiral Doyle Dr. New Iberia, LA 70560
New Orleans	504-589-6151 FAX: 589-6149	Debbie Batiste, 423 Canal St., Rm. 213, New Orleans, LA 70130
Aransas Pass	512-758-0436 FAX: SAME	Roy Spears, 132 Cleveland Blvd., P.O. Box 1815, Aransas Pass, TX 78336
Brownsville/ Port Isabel	210-548-2516 FAX: SAME	Kit Doncaster / Edie Lopez, Shrimp Turning Basin, HC 70 Box 15, Brownville, TX 78521
Freeport	409-233-4551 FAX: SAME	Thomas R. Mauermann, Texas Gulf Bank, Suite 213 P.O. Box 2533, Freeport, TX 77542
(1) Galveston	409-766-3705 FAX: 766-3543	Margot Hightower or W. Keith Roberts 4700 Avenue U, Bldg. 308, Galveston, TX 77551
Port Arthur	409-727-2271 FAX: SAME	Linda S. Trahan, Federal Bldg., Rm. 113, 2875 Jimmy Johnson Blvd., Port Arthur, TX 77640
<u>SOUTHWEST REGION</u>		
(1) Long Beach, CA or Honolulu, HI	562-980-4033 FAX: 980-4047	Patricia J. Donley, 501 West Ocean Boulevard, P.O. Box 32469, Long Beach, CA 90832
<u>NORTHWEST REGION</u>		
(1) Seattle	206-526-6128 FAX: 526-4461	John K. Bishop, 7600 Sand Point Way, NE, Bldg. 1 BIN C15700, Seattle, WA 98115
<u>ALASKA REGION</u>		
(1) Juneau	907-586-7228 FAX: 586-7465	Patsy Bearden, Federal Building, 4th Floor, 709 West 9th Street, P.O. Box 21668 Juneau, AK 99802

(1) Regional or area headquarters for statistics offices.

PUBLICATIONS

LIBRARY INFORMATION

The NOAA Library and Information Network Catalog (NOAALINC) resides on Stilas, an integrated library system provided by the Sirsi Corporation. NOAALINC represents the automated holdings of the NOAA Central Library in Silver Spring, Maryland and 22 other NOAA libraries located around the U.S. Currently, the NOAALINC contains records for more than 200,000 items with 5,000-10,000 added each year.

NOAALINC provides several search methods to locate records of items. Users can search for keywords in titles, subject headings, authors, or series. Users can browse indexes of titles, subject headings, authors, series, or call number. Each bibliographic record shows a brief description of the item with a list of which libraries hold the item. The list of libraries will show the call number, item's specific information, and whether the item is available for circulation.

NOAALINC is available to anyone, without restriction, 24 hours a day, every day of the year. Visitors to the NOAA Central Library can access the catalog thru workstations located throughout the Library. Remote users can access the catalog thru a link from the NOAA Central Library's homepage at - <http://www.lib.noaa.gov/>.

NOAA personnel may contact the nearest NOAA Library or the NOAA Central Library and arrange to borrow materials. The general public should contact their local library to arrange for an interlibrary loan. Restrictions apply on circulation of certain materials.

For further information contact the NOAA Central Library, 1315 East-West Highway., 2nd Floor, Silver Spring, MD 20910-3282. Telephone: 301-713-2699 (Ext. 124) or E-mail: reference@nodc.noaa.gov.

PUBLICATIONS AVAILABLE FROM U.S. GOVERNMENT PRINTING OFFICE

STATISTICAL REPORTS

003-020-00167-0 Fisheries of the United States, 1995
...\$12.00

003-020-00168-8 Fisheries of the United States, 1996
...NA

003-009-00635-0 United States Industrial Outlook
1994: Business Forecasts for 350
Industries ...\$48.00

003-009-00650-3 United States Industrial Outlook
1995: Business Forecasts for 350
Industries ...\$19.00

003-009-00650-3 U.S. Global Outlook (Name change)
1995: Business Forecasts for 350
Industries...\$20.00

MISCELLANEOUS REPORTS

003-009-00618-0 United States Industrial Outlook
1993: Business Forecasts for 350
Industries ...\$37.00

S/N 703-023-
00000-2 Fishery Bulletin (Quarterly): Publishes
(FB) 2D Original Research Papers, etc.
\$32.00 a year

*For information or to purchase publications listed above (Advance
Payment Required), call or write:*

**Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20202
PHONE: 202-512-1800 / FAX: 512-2250**

PUBLICATIONS AVAILABLE FROM NATIONAL MARINE FISHERIES SERVICE AND
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)
U.S. DEPARTMENT OF COMMERCE

SCIENTIFIC PUBLICATIONS:

Information on formal scientific publications by NMFS (such as NMFS journals and technical publications) may be obtained from the Scientific Publications Office (F/NWR1), 7600 Sand Point Way, N.E., BIN C-15700, Seattle, WA 98115.

Telephone: 206-526-6107

CURRENT FISHERY STATISTICS (CFS) SERIES:

The reports listed below are in the Current Fisheries Statistics (CFS) series. They are statistical bulletins on marine recreational fishing, commercial fishing, and on the manufacture and commerce of fishery products. For further information or to obtain a subscription to these publications, contact the office shown below:

NOAA, National Marine Fisheries Service
Fisheries Statistics Division (F/ST1)
1335 East-West Highway
Silver Spring, MD 20910--3226
Telephone: 301-713-2328

The bulletins shown below cover freezings and holdings, the production of various processed products, and the U.S. foreign trade in fishery products. If you wish a copy of the following publications, check the designated space () and return to the Office indicated above. The following are available annually:

- () FF - Frozen Fishery Products
- () MF-Processed Fishery Products

The following publication is only available quarterly.

- () Fish Meal and Oil

OTHER PUBLICATIONS:

All publications listed below may be obtained from NTIS (address and phone number listed on page 154) or the originating office (code follows in parentheses). Copies are available only as long as supply lasts.

() Endangered Species Act, Biennial Report, Status of Recovery Program, FY 1989-1991. (F/PR)

() Fishery Management Plan for Sharks of the Atlantic Ocean. (F/SF)

() Habitat Protection Activity Report. 1991 - 1993. (F/PR)

() Magnuson Fishery Conservation and Management Act, As Amended through November 28, 1990. (F/SF)

() Marine Mammal Protection Act, Annual Report. 1988-1989. (F/PR)

() Marine Mammal Protection Act, Annual Report. 1990-1991. (F/PR)

() Our Living Oceans - The First Annual Report on the Status of U.S. Living Marine Resources. (F/ST)

() Our Living Oceans - Report on The Status of U.S. Living Marine Resources, 1992 Data. (F/ST)

() Our Living Oceans - Report on The Status of U.S. Living Marine Resources, 1993 Data. (F/ST)

() Our Living Oceans - Report on The Economic Status of the U.S. Fisheries, 1996. (F/ST)

() Report on Apportionments of Membership on the Regional Fishery Management Council (RFMCs) in 1994. (F/SF)

() The Saltonstall-Kennedy Grant Program: Fisheries Development and Utilization Research and Development Grants (F/IS)

() The Saltonstall-Kennedy Grant Program: Fisheries Development and Utilization Research and Development Grants - Annotated Bibliography (F/SF)

() USDC Approved List of Fish Establishments and Products -- Semi-Annual Report. (National Seafood Inspection Laboratory, Pascagoula, MS.)

Aquaculture and Capture Fisheries: Impacts in U.S. Seafood Markets. (NTIS No. PB-88-204185/GBA)

Developments of Value Added, Margin and Expenditures for Marine Fishery Products. (NTIS No. PB-89-125108)

PUBLICATIONS

Marine Mammal Strandings in the United States: Proceedings of the Second Marine Mammal Stranding Workshop, 1987. 1991. Reynolds, John E., III and Daniel K. Odell, (editors). (NOAA-TR-NMFS-98). 157 p. (F/PR)

Protecting Marine Mammals: Look from a Distance... but Don't Touch, Feed or Harm in the Wild. Prepared by the Texas Sea Grant Program for the Office of Protected Resources, NMFS, 1992. 6 p. (F/PR)

Recovery Plan for the Humpback (*Megaptera novaeangliae*). Prepared by the Humpback Whale Recovery Team for the National Marine Fisheries Service, 1991. 1992. Silver Spring, Maryland. 105 p. (F/PR)

Recovery Plan for the Kemp's Ridley Sea Turtle (*Lepidochelys kempi*). Prepared by the Kemp's Ridley Recovery Team for the U.S. Fish and Wildlife Service and NMFS, 1992. Washington, DC. (F/PR)

Recovery Plan for Leatherback Turtles in the U.S. Caribbean, Atlantic, and Gulf of Mexico. National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1992. Washington, D.C. (F/PR)

Recovery Plan for the Northern Right Whale (*Eubalaena glacialis*). Prepared by the Right Whale Recovery Team for the National Marine Fisheries Service, 1991. 1992. Silver Spring, Maryland. 86 p. (F/PR)

Recovery Plan for U.S. Population of Atlantic Green Turtle. National Marine Fisheries Service, and Fish and Wildlife Service. 1991. Washington, D.C. (F/PR)

Recovery Plan for U.S. Population of Loggerhead Turtle (*Caretta caretta*). Prepared by the Loggerhead/Green Turtle Recovery Team for the U.S. Fish and Wildlife Service and NMFS, 1992. Washington, DC. (F/PR)

Recovery Plan for the Steller Sea Lion (*Eumetopias jubatus*). Prepared by the Steller Sea Lion Recovery Team for the National Marine Fisheries Service. 1992. Silver Spring, Maryland. 92 p. (F/PR)

Striped Bass Research Study Report for 1993. National Marine Fisheries Service and U.S. Fish and Wildlife Service, 1995. Silver Spring, Maryland. 34 p. (F/SF)

COMMERCIAL FISHERIES:

Fisheries of the United States is a preliminary report with historical comparisons on the Nation's fishing, fish processing, and foreign trade in fishery products. The following reports are available through NTIS.

<u>Year</u>	<u>Accession No.</u>
1966	COM-75-10662
1967	COM-75-10663
1968	COM-75-10664
1969	COM-75-10665
1970	COM-71-50081
1971	COM-75-10666
1972	COM-73-50644
1973	COM-74-50546
1974	COM-75-10862
1975	PB-253966
1976	PB-268662
1977	PB-282741
1978	PB-297083
1979	PB-80-201593
1980	PB-81-241648
1981	PB-82-215542
1982	PB-83-216473
1983	PB-84-195148
1984	PB-86-144953
1985	PB-87-143145
1986	PB-88-164132
1987	PB-88-215173
1988	PB-89-216485
1989	PB-91-129-320
1990	PB-92-174523/AS
1991	PB-93-204536/AS
1992	PB-94-156387
1993	PB-95-219192

Fisheries Statistics of the United States (Statistical Digest) is a final report on the Nation's commercial fisheries showing more detail than *Fisheries of the United States*.

<u>Year</u>	<u>Accession No.</u>
1939	COM-75-11265
1940	COM-75-11266
1941	COM-75-11267
1942	COM-75-11268
1943	COM-75-11269

<u>Year</u>	<u>Accession No.</u>
-------------	----------------------

1944	COM-75-11270
1945	COM-75-11271
1946	COM-75-11272
1947	COM-75-11273
1948	COM-75-11274
1949	COM-75-11275
1950	COM-75-11056
1951	COM-75-11053
1952	COM-75-11054
1953	COM-75-11055
1954	COM-75-11057
1955	COM-75-11058
1956	COM-75-11059
1957	COM-75-11060
1958	COM-75-11061
1959	COM-75-11062
1960	COM-75-11063
1961	COM-75-11064
1962	COM-75-11065
1963	COM-75-11066
1964	COM-75-11067
1965	COM-75-11068
1966	PB-246429
1967	PB-246430
1968	COM-72-50249
1969	COM-75-10887
1970	COM-75-10643
1971	COM-74-51227
1972	COM-75-11430
1973	PB-262058
1974	PB-277796
1975	PB-300625
1976	PB-81-163438
1977	PB-84-192038

Atlantic and Gulf Coast States, 1950 - 1991. Current Fisheries Statistics No. 9210 - Historical Series No. 10-Revised. Report covers landings and value of major species, by Region. (NTIS No. PB-93-174274)

IMPORTS AND EXPORTS OF FISHERY PRODUCTS
Annual Summary

<u>Year</u>	<u>Accession No.</u>
-------------	----------------------

1982	PB-92-218635
1983	PB-92-218643
1984	PB-92-214972
1985	PB-92-222280
1986	PB-92-228196
1987	PB-92-228055
1988	PB-92-222272
1989	PB-92-222264
1990	PB-92-222256
1991	PB-92-221803
1992	PB-95-219499
1993	PB-95-219481
1994	PB-95-219507

MARINE RECREATIONAL FISHING

1970 Salt-Water Angling Survey, PB-265416.

Determination of the Number of Commercial and Non-Commercial Recreational Boats in the United States, Their Use, and Selected Characteristics, COM-74-11186.

Participation in Marine Fishing:

Northeastern United States, 1973-74, COM-75-10655.
Southeastern United States, 1974, PB-273160.

MARINE RECREATIONAL FISHERY STATISTICS
SURVEY:

Atlantic and Gulf Coasts:

<u>Year</u>	<u>Accession No.</u>
-------------	----------------------

1979-80	PB-84-199652
1979 (Revised)-1980	PB-89-102552
1981-1982	PB-89-102560

HISTORICAL REPORTS

Historical Catch Statistics is a series of publications reporting catch of certain species in the United States for historical purposes. The following reports are available through NTIS:

Atlantic and Gulf Coast States, 1879 - 1989. Current Fisheries Statistics No. 9010 - Historical Series Nos. 5-9 Revised. Report covers total landings for major species, by state and by region. (NTIS No. PB-93-174266)

PUBLICATIONS

Atlantic and Gulf Coasts - Continued:

<u>Year</u>	<u>Accession No.</u>
1983-1984	PB-89-102628
1985	PB-89-102669
1986	PB-89-102701
1987-1989	PB-92-174820
1990-1991	(F/ST1)

Pacific Coast:

1981-1982	PB-89-102925/AS
1983-1984	PB-89-102933/AS
1985	PB-89-102941/AS
1986	PB-89-102958/AS
1987-1989	(F/ST1)

PROCESSED FISHERY PRODUCTS --
Annual Summary

<u>Year</u>	<u>Accession No.</u>
1979	PB-89-215248/AS
1980	PB-89-215255/AS
1981	PB-89-215263/AS
1982	PB-89-215289/AS
1983	PB-89-215271/AS
1984	PB-89-215297/AS
1985	PB-89-215305/AS
1986	PB-89-215313/AS
1987	PB-92-172956
1988	PB-92-204528/AS

STATE LANDINGS

Maine: 1946-76, PB-271-296; 1977-79, PB-128258.

Massachusetts: 1943-76, PB-275866; 1977-79, PB-81-143182.

Rhode Island: 1954-77; PB-287627; 1978-79, PB-81-157158.

New York: 1954-76, PB-275449; 1977-79, PB-81-134546.

New Jersey: 1952-76, PB-275696; 1977-79, PB-81-159048

Maryland: 1960-76, PB-300636; 1977-79, PB-81-159003.

Virginia: 1960-76, PB-300637; 1977-79, PB-82-151960.

North Carolina: 1955-76, PB-288928; 1977-79, PB-82-151978.

South Carolina: 1957-76, PB-289405; 1977-79, PB-81-163198.

Georgia: 1956-76, PB-289814; 1977-79, PB-81-157166.

Florida: 1950-76, PB-292068.

Alabama: 1950-77, PB-80-121262; 1978, PB-82-168071.

Mississippi: 1951-77, PB-80-121270; 1978, PB-82-169079.

Louisiana: 1957-77, PB-300583; 1978, PB-82-168063.

Texas: 1949-77, PB-300603; 1978-79, PB-82-169004.

Shrimp Landings: 1956-76, PB-80-124696; 1978-79, PB-82-156183.

Gulf Coast Shrimp Data: 1958-76, PB-80-126899; 1978-79, PB-82-170390.

INTERNATIONAL REPORTS

In 1993, the Office of International Affairs, NMFS, prepared a six-volume study which analyzes past, present, and future trends in the world's distant-water fishing fleets. The subjects covered include catch, fishing areas, vessel construction and imports, flag-of-convenience registration, international agreements, and joint ventures. These studies can be purchased through the National Technical Information Service (NTIS) using the following titles and reference numbers.

World fishing Fleets: An analysis of Distance-water Fleet Operations. Complete six-volume set. (NTIS No. PB-94-140811/GBA).

Volume I: Executive Summary. Overview of world distance-water fishing fleets and summarizes regional trends. 54 p. (NTIS No. PB-94-140829/GBA).

Volume II: Africa. Compilation of information by U.S. Embassies on fleet operations in selected African countries. 51 p. (NTIS No. PB-94-140837/GBA).

Volume III: Asia. Overview of Asian fleets and individual studies of China, Japan, Republic of Korea, and Taiwan fleets. 144 p. (NTIS No. PB-94-140845/GBA).

Volume IV: Latin America. Overview of Caribbean Central America, South America, and individual reports on the Latin American fleets engaged in distant-water fisheries. 513 p. (NTIS No. PB-94-140852/GBA).

Volume V: Baltic States, Commonwealth of Independent States, and Eastern Europe. Overview of each of these three blocs and 10 individual country studies including Russia, Poland, and Ukraine. 286 p. (NTIS No. PB-94-140860/GBA).

Volume VI: Western Europe and Canada. Overview sections for Europe Community and non-EC countries and individual country studies for all West European fishing nations and Canada. 362 p. (NTIS No. PB-94-140878/GBA).

OTHER REPORTS FROM THE OFFICE OF INTERNATIONAL FISHERIES (F/IA)

Available Foreign Fisheries Market Reports, 1976-1983. These lists detail available reports covering 59 countries and regions. (NTIS No. ITA-83-02-010/GBA).

Available Foreign Fishery Reports, 1984-1992. Covering the same information as the 1976-1983 report. (F/IA2).

World Salmon Culture (NTIS No. PB-93-134617/GBA).

World Shrimp Culture (NTIS No. PB-93-134625/GBA).

NORTHEAST REGION

A History of Benthic Research in the NMFS Northeast Fisheries Science Center. Steimle, F.W., J.M. Burnett, and R.B. Theroux. 1995. *Mar. Fish. Rev.* 57(2):1-13. (F/NEC).

History of Salmon Fisheries and Management in the North Atlantic. Friedland, K.D. 1994. *ICES Coop. Res. Rep.* 197:6-22. (F/NEC).

Marine Mammal Studies Supported by the Northeast Fisheries Science Center during 1980-89. Waring, G.T.,

J.M. Quintal, and T.D. Smith. 1994. *NOAA Tech. Memo. NMFS F/NEC-103.* (NTIS No. PB-95-108213).

Ownership of Renewable Ocean Resources. Edwards, S.F. 1994. *Mar. Resour. Econ.* 9:253-273. (F/NEC).

Scaling Fisheries: The Science of Measuring the Effects of Fishing, 1855-1955. Smith, T.D. 1994. Cambridge, England: Cambridge University Press. (F/NEC).

Second Survey of Fish Collections in the United States and Canada. Poss, S.G., and B.B. Collette. 1995. *Copeia* 1995(1):48-70. (F/NEC).

Status of Fishery Resources off the Northeastern United States for 1995. Conservation and Utilization Division, Northeast Fisheries Science Center. 1995. *NOAA Tech. Memo. NMFS NE-108.* (NTIS No. PB-95-263414).

SOUTHEAST REGION:

Habitat Protection Accomplishments of the National Marine Fisheries Service - Fiscal Year 1996. Habitat Conservation Division, Southeast Regional Office. 1996. 88 p.+Appen. (F/SER).

National Marine Fisheries Service Guidelines for Proposed Wetland Alteration in the Southeastern United States. Habitat Conservation Division. Southeast Regional Office. March 1992. 17 p. (F/SER).

Summary of Federal Aid Grants and Cooperative Agreements Programs, National Marine Fisheries Service, Southeast Region, 1986-1995. Sutter, Frederick C. 1995. 112p. (F/SER)

SOUTHWEST REGION:

A Global Perspective on Artificial Reefs and Fish Aggregating Devices. In *Indo-Pacific Fishery Commission (IPFC), Proceedings of the Symposium on Artificial Reefs and Fish Aggregating Devices as Tools for the Management and Enhancement of Marine Fishery Resources, Colombo, Sri Lanka, 14-17 May 1990.* Regional Office for Asia and the Pacific (RAPA), Food and Agriculture Organization of the United States, Bangkok. (F/SWC).

Biodiversity and the Sustainability of Marine Fisheries. Boehlert, G. W. 1996. *Oceanography* 9(1): 28-35. (F/SWC).

Hawaii Longline Vessel Economics. Hamilton, M. S., R. E. Curtis, M. D. Travis. 1996. *Mar. Res. Econ.* 11:137-140. (F/SWC)

Hawaiian Monk Seals: Past, Present and Future. Brownell, R. L., Jr. 1996. *IBI Reports* 6:35-41. (F/SWC)

The Hawaiian Monk Seal in the Northwestern Hawaiian Islands, 1993. Johanos, T. C., and T. J. Ragen (eds.). 1996. 141 p. (NOAA-TM-NMFS-SWFSC-227). (F/SWC)

The Hawaiian Monk Seal in the Northwestern Hawaiian Islands, 1994. Johanos, T. C., and T. J. Ragen. 1996. 111 p. (NOAA-TM-NMFS-SWFSC-229). (F/SWC)

The Japanese Market for U.S. Tuna Products. Sonu, S. C. 1994. (NOAA-TM-NMFS-SWR-029). 64 p. (S/SWR).

The Japanese Sea Urchin Market. Sonu, S.C. 1995. (NOAA-TM-NMFS-SWR-030). 33 p. (F/SWR).

The Japanese Sablefish Market. Sonu, S.C. 1996. (NOAA-TM-NMFS-SWR-031). 52p. (F/SWR).

Japan's Mackerel Market. Sonu, S.C., September 1992. (NOAA-TM-NMFS-SWR-027). (F/SWR).

Private Property Rights and Crises in World Fisheries: Turning the Tide? Grafton, R. Q., D. Squires, and J. E. Kirkley. 1996. *Contemp. Econ. Policy* 14:91-99. (F/SWC)

NORTHWEST REGION:

Status Review of Pink Salmon from Washington, Oregon, and California. Hard, J.J., R.G. Kope, W.S. Grant, F.W. Waknitz, L.T. Parker, and R.S. Waples. 1996. (NOAA-TM-NMFS-NWFSC-25) 131 p. (NTIS No. PB96-162607)

Status Review of West Coast Steelhead from Washington, Idaho, Oregon, and California. Busby, P.J., T.C. Wainwright, G.J. Bryant, L. Lierheimer, R.S. Waples, F.W. Waknitz, and I.V. Lagomarsino. 1996. (NOAA-TM-NMFS-NWFSC-27) 261 p. (NTIS No. PB96-210166).

ALASKA REGION:

Fur Seal Investigations, 1994. Sinclair, E.H. (editor). 1996. (NOAA-TM-AFSC-69). 144 p. (NTIS No. PB97-129456).

Oregon, Washington, and Alaska exports of edible fishery products, 1994. Kinoshita, R. K., and J. M. Terry. 1996. (NOAA-TM-AFSC-63). 49 p. (NTIS No. PB96-183553).

Oregon, Washington, and Alaska exports of edible fishery products, 1995. Kinoshita, R. K., and J. M. Terry. 1996. (NOAA-TM-AFSC-66). 48 p. (NTIS No. PB96-214663).

Status of Pacific Salmon and Steelhead Escapements in Southern Alaska. Baker, T. T., A. C. Wertheimer, R. D. Burkett, R. Dunlap, D. M. Eggers, E. I. Fritts, A. J. Gharrett, R. A. Holmes, and R. L. Wilmot. 1996. *Fisheries* 21(10): 6-18. (F/AKC).

The Threatened Status of Steller Sea Lions, *Eumetopias jubatus*, Under the Endangered Species Act: Effects on Alaska Groundfish Fisheries Management. Fritz, L.W., R. C. Ferrero, and R.J. Berg. 1995. *Mar. Fish. Rev.* 57(2):14-27. (F/AKC).

=====

To purchase the preceding reports listed with NTIS, call or write:

**NTIS -- ATTN: Order Desk
5285 Port Royal Road
Springfield, VA 2216**

PHONE: 703-487-4650 / FAX: 321-8547

**NATIONAL MARINE FISHERIES SERVICE
FISHERIES MARKET NEWS****BULLETIN BOARDS**

Several National Marine Fisheries Service offices provide public access to electronic bulletin board services operating 24-hours a day to furnish the fishing industry with current information. Listed below are necessary facts needed to access these bulletin boards via a personal computer.

Alaska Region:

The Alaska Regional service is available by dialing **907-586-7259** at no parity, 8 data bits, 1 stop bit, full duplex. The bulletin board operates on a 80486 standalone PC with 4 MB of memory and four 14,400 baud modems. A menu-driven system directs callers to areas and manages viewing of files, downloading, and in certain cases, uploading files. A message utility handles transfer of mail between users and to the sysop. Information is organized in ANSI format into categories consisting of: news releases; regulations; current catch statistics; allocations / seasons / closure histories; PacFIN data; and miscellaneous information. Catch statistics are updated weekly, other files are added as needed. For additional information contact Galen Tromble, 907-586-7228, at the Alaska Regional Office.

Northwest Region:

The Northwest Regional Office service is available by dialing **206-526-6405** at 2400 baud, no parity, 8 data bits, 1 stop bit, full duplex. (The region plans to upgrade baud rate to 28.8 by January 1995.) Information is presented through a system of menus and displayed on-line. A variety of reports are included: current groundfish and salmon regulations; current entry program, limited entry groundfish permits; foreign trade news and data files; HACCP FDA information; Saltonstall / Kennedy Program; view your account; testing system; NMFS news and phone numbers; list of files or transfers; and miscellaneous information. For additional information contact John Bishop, 206-526-6119, at the Northwest Regional Office.

Southwest Region:

The Southwest Regional Office service is available by dialing **310-980-4059** at 2400 baud, no parity, 8 data bits, 1 stop bit, full duplex. Information is presented in the form of bulletins organized through a system of menus and displayed on-line. Announcements include Federal Register notices of seasons, trip limits, and quotas for groundfish, salmon, and coastal pelagic fisheries. Trade and industry reports are available for fishery product imports into Southern California / Arizona / Hawaii, canned tuna industry updates and status of canned tuna import quotas, catch reports and the status of quotas or allocations for various California fisheries, a calendar of public meetings and events, Pacific Council News and information concerning protected species and marine recreational fisheries. For additional information contact Dan Viele, 310-980-4039, at the Southwest Regional Office.

SERVICES

NATIONAL MARINE FISHERIES SERVICE FISHERIES MARKET NEWS

FAX-ON-DEMAND SYSTEM

The National Marine Fisheries Service (NMFS) has collected market information at principal U.S. ports for 60 years. In an effort to provide a continuing high level of service to the seafood community this information is now available through the NMFS Fax-on-Demand Service. Up-to-date information on various landings data, wholesale values, foreign trade, cold storage holdings, trade leads, and Japanese market are now just a phone call away. The cost to you is a phone call, the service is free. Please feel free in helping NMFS spread the word about the Fax-on-Demand Service.

INSTRUCTIONS

1. You **must** place your call from a fax machine. At any fax machine, pick up handset (or use speaker phone capability, if so equipped) and using the fax machine's numeric keypad, dial the NMFS Fax Management System phone number:

301 - 713 - 1415

2. A human voice will greet you and welcome you to the NMFS Fax Management System and will immediately ask you to enter your **Fax Mailbox Number, followed by the pound (#) sign**. Respond by entering the mailbox number for Fisheries Market News:

200 #

3. After you are welcomed to the Fisheries Market News Fax Service you will be guided by a series of human voice prompts. First you are given the opportunity to **enter a document number (like those found on the document listing), followed by the pound (#) sign**:

Examples: For daily New York Fulton Market Fresh Prices, enter 21#
 For most recent Cold Storage Report enter 71#

For a list of available documents (Menu of Document Choices), enter 1#

4. Follow remaining voice prompts for confirmation of selection(s) and entering additional document numbers. After you have selected the documents you want, you will be prompted to press the pound (#) key to proceed.
5. You will now be asked to press the **START or SEND** key on fax machine. Wait until you hear the typical fax tone indicating a good connection and hang up the handset.

Please call (301-713-2328) for further information or if you have any questions or problems.

NATIONAL MARINE FISHERIES SERVICE FISHERIES MARKET NEWS

FAX-ON-DEMAND MENU CHOICES -- MAILBOX #2\00
FAX: (301) 713-1415

DOCUMENT NUMBER	REPORT	UPDATE SCHEDULE
1	Menu Choices	
2	Commonly Used Abbreviations	
5*	Trade Leads	Friday
	NEW YORK: Leo Gaudin (212) 620-3405	
21*	Fulton Market Fresh Prices	Daily
22*	New York Frozen Prices	Friday
	BOSTON: Jack French (617) 223-8018	
30	Boston Lobster Prices	Daily (exc.Wed)
31*	New England Auction	Daily
32*	Boston Frozen Market Prices	Wednesday
33	New England Auction Summary	Friday
34	New England Cold Storage	Friday
	NEW ORLEANS: Maggie Bourgeois (504) 589-6151	
41	Gulf Shrimp Landings by Area and Species	Monday
42	Ex-Vessel Gulf Fresh Shrimp Prices and Landings	Monday
43	Gulf Finfish and Shellfish Landings	Monday
44*	Fish Meal and Oil Prices	Thursday
45*	Shrimp Statistics	Monthly
	LONG BEACH: Patricia Donley (310) 980-4033	
52	San Pedro, CA Market Prices	Friday
53	Canned Tuna Import Quota Update	Friday
55	United States Tuna Cannery Receipts	Monthly
	SEATTLE: John Bishop (206) 526-6119	
61	Wholesale Canned Salmon Prices (West Coast)	Tuesday
62*	Wholesale Shellfish Prices (West Coast)	Tuesday
63	Preliminary Oregon Landings	Tuesday
64	Halibut & Sablefish Total IFQ Landings	Weekly
65	Groundfish: Gulf of Alaska - Preliminary Catch	Weekly
66	Bering Sea & Aleutians - Preliminary Catch	Weekly
67	Oregon Landings & Exvessel Price	Monthly
68	Washington Landngs & Exvessel Price	Monthly
	NMFS HEADQUARTERS: William Uttley (301) 713-2328	
71*	National Cold Storage	Monthly
72	West Coast Cold Storage	Monthly
73	Foreign Trade of Selected Products	Monthly
74	Imports of Shrimp	Monthly
75	Imports of Frozen Fish Blocks	Monthly
76	Fish Meal and Oil Production	Quarterly
	JAPANESE DATA: Long Beach - Sunee C. Sonu (310) 980-4038	
81	Japanese Shrimp Imports	Monthly
82	Japanese Fishery Imports	Monthly
83	Japanese Fishery Exports	Monthly
84	Japanese Cold Storage Holdings	Monthly
85	Tokyo Wholesale Shrimp Prices	Bi-weekly
86	Tokyo Wholesale Prices	Bi-weekly
87	Fish Landings and Average Ex-vessel Prices	Monthly
88	Sales Volume and Average Wholesale Prices	Monthly

UPDATE SCHEDULES: 3:00 pm ET.

*NOTE:--Accessible via (internet) - <http://remora.ssp.nmfs.gov/>

SERVICES

NATIONAL MARINE FISHERIES SERVICE FISHERIES MARKET NEWS

HOME PAGES

The National Marine Fisheries Service provides information on programs and data available to the public and fishing industry via home page. Please use the following address for NMFS' home page - <http://kingfish.ssp.nmfs.gov/home-page.html> through a personal computer. If you wish to access individual office home pages the addresses and a brief description follows:

Fisheries Statistics - <http://remora.ssp.nmfs.gov/>. Descriptions of commercial and recreational fisheries statistics data collection programs. Access to commercial monthly landings data bases, Marine Recreational Fisheries Statistics Survey (MRFSS) data, cold storage, Market News Reports, processed products data, and trade data base.

Inspection Program- <http://kingfish.ssp.nmfs.gov/lss/issue.html>. Provides information on the National Voluntary Seafood Inspection Program, list of approved fish establishments and products, fees and charges, and policies for advertising services and marks.

Saltonstall-Kennedy Grant Program - <http://www.nmfs.gov/sfweb/skhome.html>. Description of the Saltonstall-Kennedy (S-K) Program, the most recent solicitation for proposals, application forms and instructions, FAQs, and Regional contacts for the S-K Program, as well as the latest update to the S-K Annotated Bibliography of completed projects.

Protected Resources - <http://kingfish.ssp.nmfs.gov/>. Contains recovery efforts for species considered endangered or threatened; depleted species of marine mammals; and a comprehensive list of other Internet resources pertaining to protection programs and other issues. Information on Endangered Species Act and Marine Mammal Protection Act.

Northeast Region - <http://www.nero.nmfs.gov/doc/nero.html>. Describes the mission and responsibilities of the Regional Office Staffs and Divisions. Provides information on fisheries regulations, quota reports for summer flounder, and links to other NOAA sites.

Northeast Scientific Center - <http://www.nefsc.nmfs.gov>. Provides press releases, lab descriptions, history of fisheries in the New England Region (photos, timeline, and outline of NE groundfish history). Includes fish facts (questions and answers) and status of the stocks by species for the Region.

Southeast Region - <http://caldera.sero.nmfs.gov/>. Provides information on regional Federal activities including: fisheries regulations, vessel and dealer permits, fishery management plan implementation/quotas, marine mammals and endangered species management and protection, habitat protection and restoration activities, and federal aid programs for grants and cooperative agreements.

Southeast Fisheries Science Center - <http://www.sefsc.noaa.gov/>. Describes the mission of the Center in support of NMFS including laboratories dedicated to research covering North Carolina--Texas and the Caribbean. Provides research data to support the programs which include large marine ecosystem, collecting and reporting statistical/economic data, fishery resource conservation, protection of marine mammals and endangered species, and impact analysis / environmental assessments.

**NATIONAL MARINE FISHERIES SERVICE
FISHERIES MARKET NEWS**

HOME PAGES

Alaska Region - <http://wwwfak.afsc.noaa.gov/akr-home.htm>. Provides information on in season state of groundfish, catch statistics, new releases, regulations, maps, and tables. Sablefish and halibut quota program, catch data and appeal cases. Information on Marine Mammal Authorization Program.

Alaska Fisheries Science Center - <http://www.afsc.noaa.gov/>. Describes the mission of the Center and the organization and purpose of its laboratories, divisions, and programs dedicated to Federal fisheries research in the coastal oceans off Alaska and the West Coast of the United States and marine mammal research in the Antarctic, Arctic, Alaska and California current ecosystems.

Northwest Fisheries Science Center - <http://research.nwfsc.noaa.gov/nwfsc-homepage.html>. Describes Center's research programs by division, including status assessments and recovery of endangered salmon species, chemical pollutants in coastal ecosystems throughout the U.S., and monitoring and assessments of west coast groundfish. Also includes staff directory, current Center news, publications and library resource information.

Southwest Region - <http://swr.ucsd.edu>. Described the mission and responsibilities of the regional office. Provides information on fisheries statistics, policies, and links with other pertinent sites.

Southwest Fisheries Science Center - <http://swfsc.ucsd.edu>. Descriptions of programs, laboratories, geographic scope, center organization, research vessels, upper level scientific/management staffs, publications, newsletters (tuna and billfish), and mission of the Center. Information on types of research being conducted on fishes, marine mammal, sea turtles, habitat and marine ecosystems. Also, updated NOAA's Resource Guide for Teachers of Marine Science is available for download.

=====

NOAA Public Affairs - <http://www.noaa.gov/public-affairs>. All NOAA and NMFS related Press Releases and links to other NOAA material available to the public. If you would like these releases through electronic mail rather than fax, send e-mail to jslaff@hq.noaa.gov.

SERVICES

SEA GRANT MARINE ADVISORY SERVICE

The Office of Sea Grant is a major program element of the National Oceanic and Atmospheric Administration. The National Sea Grant College Program is funded jointly by the Federal Government and colleges or universities. Sea Grant's Marine Advisory Service offers a broad range of information to recreational and commercial fishermen, fish processors, and others concerning the Nation's fisheries. The following program leaders, listed alphabetically by State, can provide information on Sea Grant activities:

William Hosking, Coordinator
Alabama Sea Grant Extension
Auburn University Marine
Extension & Research Center
4170 Commander's Drive
Mobile, AL 36615
(334) 438-5690 FAX: 438-5670

Donald E. Kramer, Leader
Alaska Sea Grant College Program
Marine Advisory Program
2221 East Northern Lights #110
Anchorage, AK 99508
(907) 274-9691 FAX: 277-5242

Christopher M. DeWees,
Coordinator
Sea Grant Extension Program
Department of Wildlife
and Fisheries
Univ. of CA - Davis
Davis, CA 95616
(916) 752-1497 FAX: 752-4154

Susan Yoder, MAS Leader
USC Sea Grant Program
Hancock Institute of Marine
Studies, University Park
Los Angeles, CA 90089
(213) 740-1964 FAX: 740-5936

Nancy Balcom, Interim MAS Leader
Sea Grant Marine Advisory
Program, Univ. of Connecticut
1084 Shennecossett Road
Groton, CT 06340
(860) 405-9107 FAX: 485-9109

Kent Price, MAS Leader
Delaware Sea Grant College Prog.
Marine Advisory Service
700 Pilottown Road
Lewes, DE 19958
(302) 645-4256 FAX: 645-4007

Marion L. Clarke, Leader
Florida Sea Grant Extension
Univ. of FL - Bldg. 803
P.O. Box 110405
Gainesville, FL 32611
(352) 392-1837 FAX: 392-5113

Keith Gates, MAS Leader
Marine Extension Service
715 Bay Street
Brunswick, GA 31520
(912) 264-7268 FAX: 264-7312

Bruce J. Miller, Assoc. Dir.
Director of Extension/Pacific
Programs, Sea Grant Extension
Service, Univ. of HA
1000 Pope Road, MSB 227
Honolulu, HI 96822
(808) 956-8645 FAX: 956-2858

Brian Miller, MAS Leader
Forestry & Natural Resources
Purdue Univ. - Forestry Bldg.
West Lafayette, IN 47907
(317) 494-3586 FAX: 494-0409

Michael Liffman, Assist. Dir.
Louisiana Sea Grant College
Program, LA State Univ.
136 Wetland Resources Building
Baton Rouge, LA 70803
(504) 388-6290 FAX: 388-6331

Ron Beard, Interim MAS Leader
ME/NH Sea Grant College Program
21 Coburn Hall, Univ. of ME
Orono, ME 04469
(207) 581-1440 FAX: 581-1423

Douglas Lipton, MAS Leader
Cooperative Extension Service
2218B Symons Hall - Univ. of MD
College Park, MD 20742
(301) 405-1280 FAX: 314-9032

Cliff Goudey, MAS Leader
MIT Sea Grant College Program
E38-324/Kendall Square
292 Main Street
Cambridge, MA 02139
(617) 253-7079 FAX: 258-5730

Dale Leavitt, MAS Leader
WHOI Sea Grant Program
Mail Stop #2, Coastal Research Lab.
Woods Hole Oceanographic
Institute
Woods Hole, MA 02543
(508) 289-2997 FAX: 457-2172

John Schwartz, MAS Leader
Michigan Sea Grant College Prog.
Michigan State University
334 Natural Resource Building
East Lansing, MI 48824
(517) 355-9637 FAX: 353-6496

Jeffery Gunderson, MAS Leader
Minnesota Sea Grant
Univ. of MN - Duluth
208 Washburn Hall
Duluth, MN 55812
(218) 726-8715 FAX: 726-6556

David C. Veal, MAS Leader
MS Sea Grant Advisory Service
Coastal Research/Extension Center
2710 Beach Blvd., Suite 1-E
Biloxi, MS 39531
(601) 338-4710 FAX: 388-1375

SEA GRANT MARINE ADVISORY SERVICE

Brian E. Doyle, MAS Leader
Sea Grant College Program
Univ. of NH - Kingman Farm
Durham, NH 03824
(603) 749-1565 FAX: 743-3997

Alex Wypyszinski, MAS Leader
New Jersey Sea Grant College
Program, Cook College
P.O. Box 231
New Brunswick, NJ 08903
(908) 932-9636 ext: 221
FAX: (908) 932-6557

Dale R. Baker, MAS Leader
New York Sea Grant
Cornell University
340 Roberts Hall
Ithaca, NY 14853
(607) 255-2832 FAX: 255-2812

Leroy J. Hushak, Assoc. Dir.
and MAS Leader
Ohio State University
2120 Fyffe Rd.
Columbus, OH 43210
(614) 292-3548 FAX: 292-7710

James Murray, MAS Leader
NC State Univ.
105 1911 Building
Box 8605
Raleigh, NC 27695
(919) 515-2454 FAX 515-7095

Jay Rasmussen, Program Leader
Oregon Extension Sea Grant
Hatfield Marine Science Center
2030 S. Marine Science Drive
Newport, OR 97365
(541) 867-0368 FAX: 867-0369

Javier Velez-Arocho, MAS Leader
Sea Grant College Program
Univ. of Puerto Rico

P.O. Box 5000
Mayaguez, PR 00681
(787) 832-8045 FAX: 265-2880

Kathy Castro, Coordinator
Rhode Island Sea Grant MAS
Graduate School of Oceanography
University of RI
South Ferry Road
Narragansett, RI 02882
(401) 874-6800 FAX: 789-8340

Bob Bacon, MAS Leader
South Carolina Sea Grant
Marine Extension Program
287 Meeting Street
Charleston, SC 29401
(803) 727-2075 FAX: 727-2080

Mike Hightower,
Program Coordinator
Texas Marine Advisory Service
Sea Grant College Program
1716 Briarcrest Drive, Suite 702
Bryan, TX 77802
(409) 845-7524 FAX: 845-7525

Wm. D. DuPaul, MAP Coordinator
Virginia Sea Grant College Prog.
Marine Advisory Service
Virginia Inst. of Marine Science
Gloucester Point, VA 23062
(804) 642-7164 FAX: 642-7161

Michael S. Spranger, MAS Leader
Washington Sea Grant HG-30
University of WA
3716 Brooklyn Avenue, N.E.
Seattle, WA 98105
(206) 685-9291 FAX: 685-0380

Allen H. Miller, MAS Leader
Wisconsin Sea Grant Institute
Univ. of WI., Madison Campus
1800 University Avenue
Madison, WI 53705
(608) 262-0644 FAX: 263-2063

National Sea Grant Depository (Clearing House for all Sea Grant Publications)

Pell Library
University of Rhode Island
Bay Campus
Narragansett, RI 02882
PHONE: 401-874-6114
FAX: 874-6160

SERVICES

TRADE AND INDUSTRY SERVICES

The National Marine Fisheries Service conducts activities designed to improve the competitiveness of the U.S. fishing industry in domestic and world markets and to enhance the safety and quality of U.S. seafood products. Programs include: (1) international trade negotiations; (2) financial assistance on the form of loan guarantees, insurance programs, a capital construction fund, and research and development grants; (3) administration of fishery product inspection and grading, and product standard programs; (4) research and development on product safety, quality, and use; and (5) advise to the U.S. Department of Agriculture on the use of its Surplus Commodity Program and export financing programs for fishery products.

HEADQUARTERS:

Director, Industry and Trade
Program
1315 East-West Highway
Silver Spring, MD 20910
PHONE: (301) 713-2379
FAX: (301) 713-2384

Chief, Financial Services Division
1315 East-West Highway
Silver Spring, MD 20910
Address same as above
Phone: (301) 713-2390
FAX: (301) 713-1306

Chief, Inspection Services Division
Address same as above
Phone: (1-800-713-1668)
FAX: (301) 713-1081

REGIONAL OFFICES:

Chief, Northeast Inspection Branch
1 Blackburn Drive
Gloucester, MA 01930
Phone: (508) 281-9292
FAX: (508) 281-9134

Chief, Fisheries Analysis Division
Address same as above
Phone: (508) 281-9232
FAX: (508) 281-9333

Chief, Financial Services Branch
Address same as above
Phone: (508) 281-9203
FAX: (508) 281-9375

Chief, Southeast Inspection Branch
9721 Executive Center Drive, North
St. Petersburg, FL 33702
Phone: (813) 570-5383
FAX: (813) 570-5387

Chief, Economics and Trade
Analysis Division
Address same as above
Phone: (813) 570-5335
FAX: (813) 570-5300

Chief, Financial Services Branch
Address same as above
Phone: (813) 570-5335
FAX: (813) 570-5300

Chief, Western Inspection Branch
5600 Rickenbacker Road, Bldg. 7
Bell, CA 90201
Phone: (213) 526-7412
FAX: (213) 526-7417

REGIONAL OFFICES: - Continued

Chief, Fisheries Management Division
501 W. Ocean Blvd., Suite 4200
Long Beach, CA 90802
Phone: (310) 980-4030
FAX: (310) 980-4047

International Trade Specialist
Development Section
Address same as above
Phone: (562) 980-4038
FAX: (562) 980-4047

Chief, Trade and Industry
Services Division
7600 Sand Point Way N.E.
BIN C15700 (Building 1)
Seattle, WA 98115
Phone: (206) 526-6117
FAX: (206) 526-6544

Chief, Financial Services Branch
(Pacific Coast Area)
Address same as above
Phone: (206) 526-6122
FAX: (206) 526-6306

Fisheries Development Specialist
International Affairs Officer
709 West 9th St., 4th Floor
P.O. Box 21668
Juneau, AK 99802
Phone: (907) 586-7224
FAX: (907) 586-7249

OVERSEAS:

Eric Fleury, Commercial Specialist
Commercial Section
U.S. Embassy
2 Avenue Gabriel
75382 Paris Cedex 08
FRANCE
Phone: 011-33-1-43-12-20-04
FAX: 011-33-1-43-12-21-72

U.S. Mission to the European Union
40 Blvd. du Regent
B-1000 Brussels
BELGIUM
Phone: 011-32-2-508-2769
FAX: 011-32-2-513-1228

Tom Asakawa, Commercial Specialist
Commercial Section
1-10-5 Akasaka
Minato-ku, TOKYO 107
JAPAN
Phone: 011-81-3-3224-5077
FAX: 011-81-3-3589-4235

ANADROMOUS SPECIES. These are species of fish that mature in the ocean, and then ascend streams to spawn in freshwater. In the Magnuson Act, these species include, but are not limited to, Atlantic and Pacific salmon, steelhead trout, and striped bass. See 42 FR 60682, Nov. 28, 1977.

ANALOG PRODUCTS. These include imitation and simulated crab, lobster, shrimp, scallops, and other fish and shellfish products fabricated from processed fish meat (such as surimi).

AQUACULTURE. The farming of aquatic organisms in marine, brackish or freshwater. Farming implies private or corporate ownership of the organism and enhancement of production by stocking, feeding, providing protection from predators or other management measures. Aquaculture production is reported as the weight and value of cultured organisms at their point of final sale.

BATTER-COATED FISH PRODUCTS. Sticks and portions or other forms of fish or shellfish coated with a batter containing a leavening agent and mixture of cereal products, flavoring, and other ingredients, and partially cooked in hot oil a short time to expand and set the batter.

BOAT, OTHER. Commercial fishing craft not powered by a motor, e.g., rowboat or sailboat, having a capacity of less than 5 net tons. See motorboat.

BREADED FISH PRODUCTS. Sticks and portions or other forms of fish or shellfish coated with a non-leavened mixture containing cereal products, flavorings, and other ingredients. Breaded products are sold raw or partially cooked.

BREADED SHRIMP. Peeled shrimp coated with breading. The product may be identified as fantail (butterfly) and round, with or without tail fins and last shell segment; also known as portions, sticks, steaks, etc., when prepared from a composite unit of two or more shrimp pieces whole shrimp or a combination of both without fins or shells.

BUTTERFLY FILLET. Two skin-on fillets of a fish joined together by the belly skin. See fillets.

CANNED FISHERY PRODUCTS. Fish, shellfish, or other aquatic animals packed in cans, or other containers, which are hermetically sealed and heat-sterilized. Canned fishery products may include milk, vegetables, or other products. Most, but not all, canned fishery products can be stored at room temperature for an indefinite time without spoiling.

COMMERCIAL FISHERMAN. An individual who derives income from catching and selling living resources taken from inland or marine waters.

CONSUMPTION OF EDIBLE FISHERY PRODUCTS. Estimated amount of commercially landed fish, shellfish, and other aquatic animals consumed by the civilian population of the United States. Estimates are on an edible-weight basis and have been adjusted for beginning and ending inventories of edible fishery products. Consumption includes U.S. production of fishery products from both domestically caught and imported fish, shellfish, other edible aquatic plants, animals, and imported products and excludes exports and purchases by the U.S. Armed Forces.

CONTINENTAL SHELF FISHERY RESOURCES. These are living organisms of any sedentary species that at the harvestable stage are either (a) immobile on or under the seabed, (b) unable to move except in instant physical contact with the seabed or subsoil of the continental shelf. The Magnuson Act now lists them as certain abalones, surf clam and ocean quahog, queen conch, Atlantic deep-sea red crab, dungeness crab, stone crab, king crabs, snow (tanner) crabs, American lobster, certain corals, and sponges.

CURED FISHERY PRODUCTS. Products preserved by drying, pickling, salting, or smoking; not including canned, frozen, irradiated, or pasteurized products. Dried products are cured by sun or air-drying; pickled or salted products are those products preserved by applying salt, or by pickling (immersing in brine or in a vinegar or other preservative solution); smoked products are cured with smoke or a combination of smoking and drying or salting.

DEFLATED VALUE. The deflated values referred to in this document are calculated with the Gross Domestic Products Implicit Price Deflator. The base year for this index is 1987.

GLOSSARY

EDIBLE WEIGHT. The weight of a seafood item exclusive of bones, offal, etc.

EEZ. See U.S. Exclusive Economic Zone.

EUROPEAN UNION. Belgium and Luxembourg, Denmark, Federal Republic of Germany, Greece, France, Ireland, Italy, Netherlands, Portugal, Spain, and United Kingdom. This was formerly known as European Economic Community (EEC).

EXPORT VALUE. The value reported is generally equivalent to f.a.s. (free alongside ship) value at the U.S. port of export, based on the transaction price, including inland freight, insurance, and other charges incurred in placing the merchandise alongside the carrier at the U.S. port of exportation. The value excludes the cost of loading, freight, insurance and other charges or transportation cost beyond the port of exportation.

EXPORT WEIGHT. The weight of individual products as exported, i.e., fillets, steaks, whole, breaded, etc. Includes both domestic and foreign re-exports data.

EXVESSEL PRICE. Price received by the harvester for fish, shellfish, and other aquatic plants and animals.

FISH BLOCKS. Regular fish blocks are frozen blocks or slabs of fillets or pieces of fillets cut or sliced from fish. Minced fish blocks are frozen blocks or slabs of minced flesh produced by a meat and bone separating machine.

FISH FILLETS. The sides of fish that are either skinned or have the skin on, cut lengthwise from the backbone. Most types of fillets are boneless or virtually boneless; some may be labeled as "boneless fillets."

FISH MEAL. A high-protein animal feed supplement made by cooking, pressing, drying, and grinding fish or shellfish.

FISH OIL. An oil extracted from body (body oil) or liver (liver oil) of fish and marine mammals; mostly a byproduct of fish meal production.

FISH PORTION. A piece of fish flesh that is generally of uniform size with thickness of 3/8 of an inch or more and

differs from a fish stick in being wider or of a different shape. A fish portion is generally cut from a fish block.

FISH SOLUBLES. A water-soluble protein byproduct of fish meal production. Fish solubles are generally condensed to 50 percent solids and marketed as "condensed fish solubles."

FISH STEAK. A cross-section slice cut from a large dressed fish. A steak is usually about 3/4 of an inch thick.

FISH STICK. An elongated piece of breaded fish flesh weighing not less than 3/4 of an ounce and not more than 1-1/2 ounces with the largest dimension at least three times that of the next largest dimension. A fish stick is generally cut from a fish block.

FISHERY MANAGEMENT PLAN (FMP). A plan developed by a Regional Fishery Management Council, or the Secretary of Commerce under certain circumstances, to manage a fishery resource in the U.S. EEZ pursuant to the MFCMA (Magnuson Act).

FISHING CRAFT, COMMERCIAL. Boats and vessels engaged in capturing fish, shellfish, and other aquatic plants and animals for sale.

FULL-TIME COMMERCIAL FISHERMAN. An individual who receives more than 50 percent of their annual income from commercial fishing activities, including port activity, such as vessel repair and re-rigging.

GROUND FISH. Broadly, fish that are caught on or near the sea floor. The term includes a wide variety of bottomfishes, rockfishes, and flatfishes. However, NMFS sometimes uses the term in a narrower sense. In "Fisheries of the United States," the term applies to the following species—Atlantic and Pacific: cod, hake, ocean perch, and pollock; cusk; and haddock.

IMPORT VALUE. Value of imports as appraised by the U.S. Customs Service according to the Tariff Act of 1930, as amended. It may be based on foreign market value, constructed value, American selling price, etc. It generally represents a value in a foreign country, and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States.

IMPORT WEIGHT. The weights of individual products as received, i.e., fillets, steaks, whole, headed, etc.

INDUSTRIAL FISHERY PRODUCTS. Items processed from fish, shellfish, or other aquatic plants and animals that are not consumed directly by humans. These items contain products from seaweeds, fish meal, fish oils, fish solubles, pearl essence, shark and other aquatic animal skins, and shells.

INTERNAL WATER PROCESSING (IWP). An operation in which a foreign vessel is authorized by the governor of a state to receive and process fish in the internal waters of a state. The Magnuson Act refers to internal waters as all waters within the boundaries of a state except those seaward of the baseline from which the territorial sea is measured.

JOINT VENTURE. An operation authorized under the MFCMA (Magnuson Act) in which a foreign vessel is authorized to receive fish from U.S. fishermen in the U.S. EEZ. The fish received from the U.S. vessel are part of the U.S. harvest

LANDINGS, COMMERCIAL. Quantities of fish, shellfish, and other aquatic plants and animals brought ashore and sold. Landings of fish may be in terms of round (live) weight or dressed weight. Landings of crustaceans are generally on a live-weight basis except for shrimp which may be on a heads-on or heads-off basis. Mollusks are generally landed with the shell on, but for some species only the meats are landed, such as sea scallops. Data for all mollusks are published on a meat-weight basis.

MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT. Public Law 94-265, as amended. The Magnuson Act provides a national program for the conservation and management of fisheries to allow for an optimum yield (OY) on a continuing basis and to realize the full potential of the Nation's fishery resources. It established the U.S. Exclusive Economics Zone (EEZ) (formerly the FCZ - Fishery Conservation Zone) and a means to control foreign and certain domestic fisheries through PMPs and FMPs. Within the U.S. EEZ, the United States has exclusive management authority over fish (meaning finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals, birds, and highly migratory species of tuna). The Magnuson Act provides further exclusive management authority beyond the U.S. EEZ for all continental shelf fishery resources and all anadromous species throughout the migratory range of each such species, except during the time

they are found within any foreign nation's territorial sea or fishery conservation zone (or the equivalent), to the extent that such a sea or zone is recognized by the United States.

MARINE RECREATIONAL FISHING. Fishing for pleasure, amusement, relaxation, or home consumption.

MARINE RECREATIONAL CATCH. Quantities of finfish, shellfish and other living aquatic organisms caught, but not necessarily brought ashore, by marine recreational fisherman.

MARINE RECREATIONAL FISHERMEN. Those people who fish in marine waters primarily for recreational purposes. Their catch is primarily for home consumption, although occasionally a part or all of their catch may be sold and enter commercial channels. This definition is used in the NMFS Marine Recreational Fishery Statistics Survey, and is not intended to represent a NMFS policy on the sale of angler-caught fish.

MAXIMUM SUSTAINABLE YIELD (MSY). MSY from a fishery is the largest annual catch or yield in terms of weight of fish caught by both commercial and recreational fishermen that can be taken continuously from a stock under existing environmental conditions. A determination of MSY, which should be an estimate based upon the best scientific information available, is a biological measure necessary in the development of optimum yield.

METRIC TONS. A measure of weight equal to 1,000 kilograms, 0.984 long tons, 1.1023 short tons, or 2,204.6 pounds.

MOTORBOAT. A motor-driven commercial fishing craft having a capacity of less than 5 net tons, or not officially documented by the Coast Guard. See "boat, other."

NORTHWEST ATLANTIC FISHERIES ORGANIZATION (NAFO). This convention, which entered into force January 1, 1979, replaces ICNAF. NAFO provides a forum for continued multilateral scientific research and investigation of fishery resources that occur beyond the limits of coastal nations' fishery jurisdiction in the northwest Atlantic, and will ensure consistency between NAFO management measures in this area and those adopted by the coastal nations within the limits of their fishery jurisdiction.

OPTIMUM YIELD (OY). In the MFCMA (Magnuson Act), OY with respect to the yield from a fishery, is the amount of fish that (1) will provide the greatest overall benefit to the United States, with particular reference to food production and recreational opportunities; and (2) is prescribed as such on the basis of

GLOSSARY

maximum sustainable yield from such fishery, as modified by any relevant ecological, economic, or social factors.

PACKAGED FISH. A term used in NMFS publications prior to 1972 to designate fresh or frozen raw fish fillets and steaks.

PART-TIME COMMERCIAL FISHERMAN. An individual who receives less than 50 percent of their annual income from commercial fishing activities.

PER CAPITA CONSUMPTION. Consumption of edible fishery products in the United States divided by the total civilian population. In calculating annual per capita consumption, estimates of the civilian resident population of the United States on July 1 of each year are used. These estimates are taken from current population reports, series P-25, published by the U.S. Bureau of the Census.

PER CAPITA USE. The use of all fishery products, both edible and nonedible, in the United States divided by the total population of the United States.

PRELIMINARY FISHERY MANAGEMENT PLAN (PMP). The Secretary of Commerce prepares a PMP whenever a foreign nation with which the United States has made a Governing International Fishery Agreement (GIFA) submits an application to fish in a fishery not managed by an FMP. A PMP is replaced by an FMP as soon as the latter is implemented. A PMP applies only to foreign fishing.

RE-EXPORTS. Re-exports are commodities which have entered the U.S. as imports and are subsequently exported in substantially the same condition as when originally imported.

RETAIL PRICE. The price of fish and shellfish sold to the final consumer by food stores and other retail outlets.

ROUND (LIVE) WEIGHT. The weight of fish, shellfish, or other aquatic plants and animals as taken from the water; the complete or full weight as caught. The tables on world catch found in this publication include, in the case of mollusks, the weight of both the shells and the meats, whereas the tables on U.S. landings include only the weight of the meats.

SURMI. Minced fish meat (usually Alaska pollock) which has been washed to remove fat and undesirable matters (such as blood, pigments, and odorous substances), and mixed with cryoprotectants, such as sugar and/or sorbitol, for a good frozen shelf life.

TOTAL ALLOWABLE LEVEL OF FOREIGN FISHING (TALFF). The TALFF, if any, with respect to any fishery subject to the exclusive fishery management authority of the United States, is that portion of the optimum yield of such fishery which will not be harvested by vessels of the United States, as determined by provisions of the MFCMA.

U.S. EXCLUSIVE ECONOMIC ZONE (EEZ). The MFCMA (Magnuson Act) defines this zone as contiguous to the territorial sea of the United States and extending seaward 200 nautical miles measured from the baseline from which the territorial sea is measured. This was formerly referred to as the FCZ (Fishery Conservation Zone).

U.S.-FLAG VESSEL LANDINGS. Includes landings by all U.S. fishing vessels regardless of where landed as opposed to landings at ports in the 50 United States. These include landings at foreign ports, U.S. territories, and foreign vessels in the U.S. FCZ under joint venture agreements. U.S. law prohibits vessels constructed or registered in foreign countries to land fish catches at U.S. ports.

U.S. TERRITORIAL SEA. A zone extending 3 nautical miles from shore for all states except Texas and the Gulf Coast of Florida where the seaward boundary is 3 marine leagues (9 nautical miles).

USE OF FISHERY PRODUCTS. Estimated disappearance of the total supply of fishery products, both edible and nonedible, on a round-weight basis without considering beginning or ending stocks, exports, military purchases, or shipments to U.S. territories.

VESSEL. A commercial fishing craft having a capacity of 5 net tons or more. These craft are either enrolled or documented by the U.S. Coast Guard and have an official number assigned by that agency.

WHOLESALE FISH AND SHELLFISH PRICES. Those prices received at principal fishery markets by primary wholesalers (processors, importers, and brokers) for customary quantities, free on board (f.o.b.) warehouse.

STATISTICAL SUBJECT INDEX

(Reference gives page number)

167

AQUACULTURE

Production 18

CLAMS

Aquaculture, 18
Canned, 91
Exports, 105, 120
Frozen holdings, 94
Imports, 97, 120
Landings, 2, 8, 12, 120
Supply, 120
Value of landings, 2, 8, 12

COLD STORAGE

Holdings, monthly, 94

CONSUMPTION

Canned, 124, 126
Cured, 124
Fillets and steaks, 126
Fresh and frozen, 124
Per capita, by country, 128
Per capita, U.S., 124
Per capita, use, 127
Salmon, canned, 126
Sardines, canned, 126
Shellfish, canned, 126
Shrimp, 126
Sticks and portions, 126
Tuna, canned, 126

CRABS

Canned, 91, 118
Exports, 105, 110, 118
Frozen holdings, 94
Imports, 97, 118
Landings, 2, 8, 12, 15, 16
Supply, 118
Value of landings, 2, 8, 12, 15, 16
World catch, 86

CRAFT FISHING

Number, by region and state, 133

DISPOSITION OF LANDINGS

United States, 3
World, 86

DUTIES

Collected, 98

EMPLOYMENT

Processors and wholesalers, 135
Region and State, 135

EXPORTS

All fishery products, 105
Crabs, 105, 110
Crabmeat, 105, 110
Continent and country, by, 107
Cured, 105
Edible, by years, 106
Fish meal, 105, 110, 122
Herring, 105
Nonedible, by years, 106
Oils, 105, 110, 122
Principal items, 105
Salmon, canned, 105, 109, 117
Salmon, whole or eviscerated, 105, 109
Sardines, canned, 105, 117
Shrimp, canned, 105, 108, 121
Shrimp, domestic and foreign products, 108, 121
Shrimp, fresh and frozen, 105, 108
Snow (tanner) crab, 118
Value, by years, 106
Volume, by years, 106
World, by country, 87

FLOUNDERS

Fillets, 90
Frozen holdings, 94
Landings, 1, 6, 10
Value of landings, 1, 6, 10

GROUNDFISH FILLETS AND STEAKS

Exports, 105
Fillets, supply, 114
Imports, 97, 100

HALIBUT

Fillets and steaks, 90
Frozen holdings, 94
Landings, 1, 6, 10
Value of landings, 1, 6, 10

HERRING SEA

Canned (sardines), 91
Consumption (sardines), per capita, 126

HERRING SEA - Continued

Landings, 1, 6, 10
Exports (sardines), 105, 110
Imports (sardines), 97
Value of landings, 1, 6, 10
World catch, 86

IMPORTS

All fishery products, 97, 98
Blocks and slabs, 97, 100
Clams, canned, 97
Continent and country, by, 99
Crabmeat, canned, fresh and frozen, 97, 118
Cured, 97
Duties collected, 98
Edible, 97, 98, 99, 114, 115
Fillets, groundfish, 97, 100
Fillets, other than groundfish and ocean perch, 97
Finfish, 114
Groundfish, 97, 100, 115
Herring, canned, 97
Industrial, 113, 114
Lobsters, canned, 97
Lobsters, fresh and frozen, 97
Meal and scrap, 97, 103
Nonedible, 97, 98, 99
Oils, 97, 120
Oysters, canned, 97
Principal items, 97
Quota, canned tuna, not in oil, 101
Salmon, canned, 97, 117
Salmon, fresh and frozen, 97
Sardines, canned, 97, 117
Scallop meats, 97, 120
Shellfish, 114
Shrimp, by country, 102
Shrimp, by products, 103
Tuna, canned, 97, 101, 117
Tuna, fresh and frozen, 97, 116
Value, by years, 98
Volume, by year, 98
World, by country, 87

INSPECTION

Establishments and amount inspected, 136

STATISTICAL SUBJECT INDEX

(Reference gives page number)

LANDINGS

Disposition, 3
 Foreign shores, off, 6, 10
 Human food (edible), 3
 Industrial, 3
 Months, by, 3
 Ports, major U.S., 5
 Record year, by States, 4
 Species, 1, 6, 10
 State and region, current, 4
 Swordfish, historical by state, 20
 Territory, 14
 U.S. shores, distance from, 6, 10
 World, 83, 84, 85, 86

LOBSTERS, AMERICAN

Imports, 97, 119
 Landings, 2, 8, 12, 119
 Supply, 119
 Value of landings, 2, 8, 12

LOBSTER, SPINY

Frozen holdings, 94
 Imports, 97, 119
 Landings, 2, 8, 12, 15, 16, 119
 Supply, 119
 Value of landings, 2, 8, 12, 15, 16

MACKERELS

Landings, 1, 6, 10
 Value of landings, 1, 6, 10
 World catch, 86

MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT (MFCMA)

Fishery Management Plan, 139
 Fees, foreign fishing, 138
 General description, 138
 Optimum yield by species, 141
 Regional Fishery Management
 Councils, 140

MEAL AND SCRAP

Exports, 105, 110
 Imports, 97, 103
 Landings, disposition, 3
 Mackerel, 93
 Menhaden, 93
 Production, U.S., 93
 Supply, 122
 Tuna, 93
 World, disposition, 86

MENHADEN

Landings, 1, 7, 11
 Meal, 93
 Oil, 93
 Value of landings, 1, 7, 11

OIL

Exports, 105, 122
 Imports, 97, 122
 Menhaden, 93
 Production, 93
 Supply, 122
 World, disposition, 86

OYSTERS

Aquaculture, 18
 Canned, 91
 Imports, 97, 120
 Landings, 2, 8, 12, 15, 16
 Supply, 120
 Value of landings, 2, 8, 12, 15, 16
 World catch, 86

PLANTS AND FIRMS

Employment, 135
 Processors and wholesalers, 135

PRICES

Exvessel index, 131

PROCESSING

Animal food and bait, canned,
 89, 91, 92
 Canned products, 89, 91, 92
 Canned, by year, 92
 Clams, canned 91
 Crabs, canned, 91, 118
 Employment in, 135
 Fillets and steaks, fresh
 and frozen, 90
 Frozen holdings, 94
 Industrial products, 93
 Meal, oil, 89, 93
 Oysters, canned, 91
 Plants, number of, 135
 Salmon canned, 91
 Sardines, canned, 91
 Shrimp, canned, 91
 Sticks, portions, and breaded
 shrimp, 89

RECREATIONAL FISHERIES

Atlantic & Gulf Statistics:
 Catch (number) by species and
 sub-region, 34 - 47
 Catch (weight) by species and
 sub-region, 48 - 61
 Catch (number) by species and
 area, 64 - 70
 Catch (weight) by species and
 area, 71 - 77
 Participants (number) by sub-
 region and state, 29 - 30
 Fishing trips (number) by sub-
 region and state, 31 - 32
 Pacific Statistics:
 Catch(number) by species, 62
 Catch (weight) by species, 63
 Catch (number) by species and
 fishing area, 78 - 79
 Catch (weight) by species and
 fishing area, 80-81
 Participants (number) by sub-
 region and state, 33
 Fishing trips (number) by sub-
 region and state, 33
 U.S., Total:
 Participants by coast, 33
 Fishing trips by coast, 33
 Sampling coverage, 28

SALMON

Aquaculture, 18
 Canned, 91, 117
 Consumption, per capita, 126
 Exports, 105, 109
 Fillets and steaks, 90
 Frozen holdings, 94
 Imports, 97
 Landings, 1, 7, 11
 Supply, canned, 117
 Value of landings, 1, 7, 11
 World catch, 86

SARDINES

Canned, 91, 117
 Consumption, per capita, 126
 Exports, 105, 117
 Imports, 97, 117
 Supply, canned, 117
 World catch, 86

STATISTICAL SUBJECT INDEX

(Reference gives page number)

169

SCALLOPS

Exports, 105, 120
Imports, 97, 120
Landings, 2, 9, 13
Supply, 120
Value of landings, 2, 9, 13
World catch, 86

SHRIMP

Aquaculture, 18
Breaded, 89
Canned, 91, 97, 121
Consumption, per capita, 126
Exports, 105, 108, 121
Frozen holdings, 94
Imports, 97, 102, 103, 121
Landings, head-off, 121
Landings, head-on, 2, 9, 13, 16
Supply, canned, 121
Supply, total, 121
Value of landings, 2, 9, 13, 16
World catch, 86

SUPPLY

All fishery products, 113, 114
Blocks, 115
Clam meats, 120
Crabs, 118
Crabmeat, 118
Edible fishery products, 113, 114
Fillets and steaks, all, 115
Fillets & steaks, groundfish, 115
Finfish, 114
Industrial products, 113, 114
Lobsters, American, 119
Lobsters, spiny, 119
Meal, 122
Meal and solubles, 122
Oils, 122
Oysters, 120
Salmon, canned, 117
Sardines, canned, 117
Scallop meats, 120

SUPPLY- Continued

Shellfish, 114
Shrimp, 121
Tuna, 116

SWORDFISH

Historical landing by state, 20
Landings, 2, 8, 11
Value of landings, 2, 8, 11

TUNA

Canned, 91, 97, 101
Consumption, per capita, 126
Exports, 105
Imports, 97, 101, 116
Landings, 2, 8, 12, 14, 16, 116
Meal, 93
Quota, imports, canned, 101
Supply, canned, 117
Value of landings, 2, 8, 12, 14, 16
World catch, 86

USE

Per capita, 127
Landings, by month, 3
Valued added, 132

WHITING

Frozen holdings, 94
Landings, 2, 8, 12
Value of landings, 2, 8, 12

WORLD FISHERIES

Catch by countries, 84
Catch by continents, 85
Catch by major fishing areas, 85
Catch by species groups, 86
Catch by years, 83
Disposition, 86
Imports and exports value, 87
Per capita consumption, by country, 128

-- NOTES --

Federal Inspection Marks for Fishery Products

NATIONAL FISHERY PRODUCTS INSPECTION PROGRAM. The U.S. Department of Commerce (USDC), National Marine Fisheries Service, a part of the National Oceanic and Atmospheric Administration, conducts a voluntary seafood inspection program on a fee-for-service basis. A HACCP-based service is also available. Services provided by the program include vessel and plant sanitation, product inspection and grading, label reviews, product specification reviews, laboratory analyses, training, education and information. Inspection and certification services are available nationwide and in U.S. territories for all interested parties. Consultative services are provided in foreign countries. Inspection and certification services are also provided for imported and exported products. The USDC Seafood Inspection Division also provides HACCP training, plan development, implementation assistance, and verification service to industry for the purpose of demonstrating compliance with FDA's HACCP rule (21 CFR Parts 123 and 1240) regarding "Procedures for the Safe and Sanitary Processing and Importing of Fish and Fishery Products" which will be implemented December 18, 1997.

USERS OF INSPECTION SERVICES. The users of the voluntary seafood inspection service include vessel owners, processors, distributors, brokers, retailers, food service operators, exporters, importers, and those who have a financial interest in buying and selling seafood products. The U.S. Department of Agriculture recommends that USDC inspected products be purchased for its food feeding programs. The **USDC APPROVED LIST OF FISH ESTABLISHMENTS AND PRODUCTS**, published bi-annually, provides a listing of products and participants who contract with USDC.

USDC INSPECTION MARKS. These marks designate the level and the type of inspection performed by the federal inspector. The marks can be used in advertising and labeling under the guidelines provided by the Inspection Services Division and in accordance with federal and state regulations regarding advertising and labeling. Products bearing the USDC official marks have been certified as being safe, wholesome, and properly labeled.

"US GRADE A" MARK. The U.S. GRADE A mark signifies that a product has been processed under federal inspection in an approved facility and meets the established level of quality of an existing U.S. grade standard. The U.S. Grade A mark indicates that the product is of high quality, uniform in size, practically free from blemishes and defects, in excellent condition and possessing good flavor and odor.

"PROCESSED UNDER FEDERAL INSPECTION" MARK. The PUFi mark or statement signifies that the product has been inspected in an approved facility and was found to be safe, wholesome and properly labeled according to approved specifications or criteria. The language within the PUFi mark has been amended to "Processed Under Federal Inspection" to reflect actual inspection procedures and the regulatory requirements for use of the mark.

"LOT INSPECTED" MARKS. A new Lot Inspected mark was created to replace the existing "Officially Sampled" and "Accepted Per Specifications" marks currently used on retail labels. The use of this mark meets the needs of both industry and consumers by conveying that the products bearing the mark have been examined by the USDC Program.

"RETAIL" MARK. In response to requests made by industry, a new mark has been created for retail or food service establishments. Participants qualify for use of the "Retail Mark" by receiving the NMFS HACCP-based service or being under contract for sanitation services and associated product evaluation. Usage of such a mark will give the retail industry the opportunity to advertise on their banners, logos, or menus that their facility has been recognized by USDC for proper sanitation and handling of fishery products.

USDC HACCP MARK. The USDC HACCP-based service is available to all interested parties on a fee-for-service basis. Label approval, record keeping and analytical testing are program requirements. An industry USDC certified employee trained in HACCP principles is also required for each facility/site in the program. Compliance ratings determine frequency of official visits. Benefits to participants include increased controls through a more scientific approach, use of established marks, increased efficiency of federal inspection personnel, and enhanced consumer confidence. The USDC has made available a HACCP mark and a "banner" to distinguish products that have been produced under the HACCP-based program. The HACCP banner must be used as an attachment to existing inspection grade marks. Establishments meeting HACCP program requirements may use these marks in conjunction with promotional material, packaging, point-of-sale notices, and menus.

FOR FURTHER INFORMATION:

Seafood Inspection Division
U.S. Department of Commerce
NOAA/NMFS
1315 East-West Highway
Silver Spring, MD 20910
(301) 713-2355 (FAX: 713-1081)
Internet: <http://seafood.ssp.nmfs.gov/iss/issue.html>

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service, F/ST1
1315 East West Highway -
Silver Spring, MD 20910-3282

40

OFFICIAL BUSINESS

0002543034

Marine Biological Laboratory,
Government Documents Section
Library
Woods Hole,, MA 02543