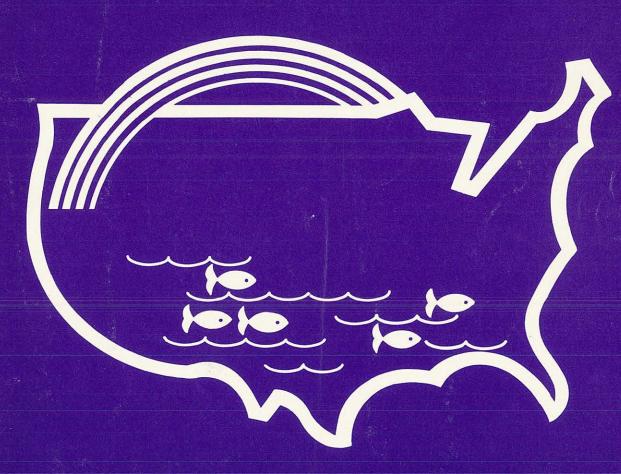
Current Fishery Statistics No. 8700

# Fisheries of the United States, 1987

May 1988





U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration National Marine Fisheries Service Current Fishery Statistics No. 8700

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Edited by Barbara K. O'Bannon

Washington, D.C. May 1988



#### U.S. DEPARTMENT OF COMMERCE

C. William Verity, Secretary

#### **National Oceanic and Atmospheric Administration**

William E. Evans, Under Secretary

National Marine Fisheries Service Fisheries Statistics Division

#### FISHERIES OF THE UNITED STATES, 1987

This publication is a preliminary report for 1987 on commercial and recreational fisheries of the United States and foreign catches in the U.S. Exclusive Economic Zone (EEZ). This annual report provides timely answers to frequently asked questions for the previous year.

#### **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 field offices also compiled data on the foreign catch from reports submitted by designated foreign officials. The NMFS National Fishery Statistics Program in Washington, D.C., managed the collection and compilation of recreational statistics, and tabulated and prepared the 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, U.S. Department of Agriculture, Food and Agriculture Organization (FAO) of the United Nations (Rome), and the countries fishing in the U.S. EEZ.

#### PRELIMINARY AND FINAL DATA

Data on U.S. commercial and recreational landings, foreign catches, employment, prices, and production of processed products are preliminary for 1987. Final data will be published in <u>Fishery Statistics of the United States</u> and other NMFS Current Fishery Statistics publications.

#### DEFINITIONS - (See Glossary)

As in past issues of this publication, the units of quantity and value are defined as follows: U.S. landings and foreign catch are shown in round weight (mollusk shells excluded), 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; 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 (Tariff 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 Division (F/REI) National Marine Fisheries Service, NOAA Washington, DC 20235 202-673-5335

#### **ACKNOWLEDGEMENT**

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: Ronnee Schultz and Robert A. Hall, New England, Middle Atlantic, Chesapeake, Great Lakes, and northern Mississippi River States; Richard Raulerson and Ernest Snell, South Atlantic, Gulf, and southern Mississippi River States; Patricia J. Donley, California; John K. Bishop, Oregon and Washington; Doyle E. Gates, Hawaii; and Janet Smoker, Alaska.

Members of the Washington, D.C., Fisheries Statistics Division who helped with this publication were: Michele Bradley-Holt, Mary Cotton, Margret Dancy, Ronald Essig, Mark Fisher, Donald FitzGibbon, Deborah Hogans, Mark Holliday, Willie Mae Holloway, Steve Koplin, Barbara O'Bannon, Robert Rosette, Richard Schween, William Uttley, Michael Williams, Leila Wise, and John Witzig.

## CONTENTS

Р	age		Page
PREFACE AND ACKNOWLEDGEMENTS	ii	U.S. EXPORTS - Continued:	•
REVIEW	iv	King crab Snow (tanner) crab	62 62
U.S. COMMERCIAL FISHERY LANDINGS:		HerringIndustrial	62 63
Species	1	Industrial services services services services	00
Disposition	3	U.S. SUPPLY:	
States	4	Edible and nonedible	65
Regions	4	Finfish and shellfish	, 66
Ports	5	Blocks	67
Catch by species and distance from		All fillets	67
shore (thousand pounds)	6	Groundfish fillets	67
Catch by species and distance from	10	Tuna	68
shore (metric tons)	10 14	Canned sardines	69 69
nistorical surinip randings by regions	14	Clam meats	69
		King crab	70
U.S. JOINT VENTURE CATCHES	17	Snow (tanner) crab	70
VIOLOGIA VALORED VALORED TOTAL VALORED		Canned crabmeat	70
AQUACULTURE, CATFISH PRODUCTION	18	Lobster, American	71
•		Lobster, spiny	71
U.S. MARINE RECREATIONAL FISHERIES	20	Oysters	72
		Scallop meats	. 72
U.S. EXCLUSIVE ECONOMIC ZONE:		Shrimp	73
Foreign catch, by continent and country	27	Industrial	74
Foreign catch, by species and area	29	DED CADITA'.	
Foreign catch, by country and species	31	PER CAPITA: U.S. consumption	76
WORLD FISHERIES:		U.S. use	79
U.S. and world	36	World consumption-by region and country	80
Countries	37	north consumption by region and country is	-
Continents	38		
Fishing areas	38	PRICES, INDEX OF EXVESSEL	82
Species groups	39		
Disposition	39	VALUED ADDED	84
Imports and exports, by leading			
countries	40	EMPLOYMENT, CRAFT, AND PLANTS	86
U.S. PRODUCTION OF PROCESSED FISHERY PRODUCTS:		FISHERY PRODUCTS INSPECTION	89
Value	41		
Fish sticks, portions, and breaded			
shrimp	41		
Fillets and steaks	42	MAGNUSON FISHERY CONSERVATION AND	
Canned	43	MANAGEMENT ACT OF 1976 (MFCMA):	90
Industrial	46	General Optimum yield, U.S. capacity, reserve,	90
U.S. COLD STORAGE HOLDINGS	47	and allocations	92
0.5. GOLD STOWNER HOLDINGS	7,	and arroady on seeing the seeing	-
U.S. IMPORTS:		CENEDAL ADMINISTRATIVE INCORMATION	97
Edible and nonedible	49	GENERAL ADMINISTRATIVE INFORMATION	97
Value and duties	49	PUBLICATIONS:	
Principal items	50	National Marine Fisheries Service	104
Continent and country	51 .	Government Printing Office	105
Blocks	52	National Technical Information	
Groundfish fillets and steaks,		Service	108
by species	52	·	
Canned tuna and quota	53	CERUTOEC.	
Shrimp Industrial	54 55	SERVICES: Sea Grant Marine Advisory	108
THURSELL GITTER TO THE TENTON OF THE TENTON	99	Fisheries Development	100
U.S. EXPORTS:		InspectionInside back	
Principal items	57	2 Op door, on a very series as a series as a series of butter of	
Continent and country	58		
Edible and nonedible	59	GLOSSARY	111
Shrimp	60		
Salmon	61	INDEX	114

#### **IMPORTANT FACTS**

U.S. LANDINGS. Commercial landings (edible and industrial) by U.S. fishermen at ports in the 50 States were 6.9 billion pounds (3.1 million metric tons) valued at \$3.1 billion in 1987—an increase of 865.1 million pounds (392,000 metric tons) in quantity, and an increase of \$352,000 in value compared with 1986. Landings of major finfish species such as Pacific cod, flounders, menhaden, Alaska pollock and tuna increased. The 1987 average exvessel price per pound paid to fishermen of 45 cents was similar to the 46 cents they received in 1986. Finfish accounted for 83 percent of total landings but only 52 percent of the total value of finfish and shellfish.

Commercial landings by U.S. fishermen at ports outside the 50 States or transferred in the U.S. Exclusive Economic Zone (EEZ) onto foreign vessels (joint ventures) were an additional 4.1 billion pounds (1.9 million metric tons) valued at \$454.0 million. This was a 22 percent or 729.3 million pound (331,000 metric tons) increase in quantity and a \$126.8 million (39 percent) increase in value compared with 1986. Most of these landings consisted of tuna landed at canneries in Puerto Rico and Amercian Samoa and joint venture catches of Alaska poliock.

Edible fish and shellfish landings in the 50 States were 3.9 billion pounds (1.8 million metric tons) in 1987—an increase of 553.0 million pounds (251,000 metric tons) compared with 1986. Landings of shrimp and salmon decreased, but there were increases in Alaska pollock, crabs, Pacific cod, flounders, and tuna.

Landings for reduction and other industrial purposes were 3.0 billion pounds (1.3 million metric tons) in 1987—an increase of 12 percent compared with 1986.

JOINT VENTURE CATCH IN THE U.S. EEZ. Joint venture catches by U.S. fishermen unloaded onto foreign vessels were 3.5 billion pounds (1.6 million metric tons) valued at \$213.8 million. This was a 22 percent increase in quantity over 1986, when 2.9 billion pounds (1.3 million metric tons) were caught, valued at \$154.9 million. The major species were flounders, Pacific hake, and Alaska pollock.

FOREIGN CATCH IN U.S. EEZ. The foreign catch of fish (excluding tunas) and shellfish in the U.S. EEZ was 149,000 metric tons (328.4 million pounds) in 1987, a 75 percent decrease compared to 1986 and 87 percent below the average for the preceding 5 years. As in other years, the U.S. EEZ off Alaska supplied the largest share of the foreign catch (46 percent) followed by California, Oregon and Washington (34 percent), and the North Atlantic (20 percent).

Pacific cod comprised 36 percent of the foreign catch; Pacific hake, 33 percent; Atlantic mackerel 20 percent; and other fish and shellfish the remainder.

Japan continued as the leading nation fishing in the U.S. EEZ with a catch of 67.4 thousand metric tons, 45 percent of the total foreign catch. Catches by vessels of Poland, the second leading nation fishing in the U.S. EEZ, were 49.0 thousand metric tons representing 33 percent of the catch in 1987.

The foreign catch in the Pacific U.S. EEZ in 1987 was 119,000 metric tons, 443,000 metric tons less than 1986. Fifty-eight percent of this catch was made in the Eastern Bering Sea and 42 percent was taken off California, Oregon, and Washington. Pacific cod, 54,000 metric tons (46 percent of the total), was the leading species followed by Pacific take, 50,000 metric tons (42 percent). Japan and Poland were the major countries fishing this area in 1987 taking 97 percent of the total catch.

Foreign catches in the North Atlantic U.S. EEZ in 1987 were 30,000 metric tons, 4,000 metric tons (14 percent) more than the 1986 catch when 26,000 metric tons were taken. The German Democratic Republic had the highest catch of 19,000 metric tons (63 percent) followed by the Netherlands with 11,000 metric tons (37 percent). Atlantic mackerel catches amounted to 29,000 metric tons (99 percent).

U.S. VS. FOREIGN CATCH IN U.S. EEZ. The combined catch by U.S. and foreign vessels in the U.S. EEZ was 3.0 million metric tons in 1987, similar to 1986. However, the U.S. share was 95 percent of the total, up 15 percentage points from 1986.

WORLD LANDINGS. In 1986, the most recent year for which data are available, world commercial fishery landings were a record 92.2 million metric tons—an increase of 5.7 million metric tons (7 percent) compared with 1985. Japan continued to be the leading nation with 13 percent of the total catch; the USSR, second with 12 percent; China, third with 9 percent; followed by Peru and Chile each with 6 percent. The United States was the sixth leading nation with 5 percent of the total catch.

PRICES. The procedure for calculating the Index of Exvessel Prices for all fish and shellfish was reviewed and modified in 1986. Major changes in the U.S. fishing industry have occurred since the index was originally designed. The result was that the "market basket" or group of species used to calculate the index was no longer representative of price trends for all fish and shellfish. The index has been recalculated with a new market basket and 1986 as the base year. The result is a recalculated annual index for 1981 - 1986. The annual index for edible fish and shellfish increased 31 percent from 1986. The annual index for industrial fish decreased 2 percent from 1986.

PROCESSED PRODUCTS. The 1987 estimated value of the domestic production of edible and nonedible fishery products was \$5.5 billion, \$236.6 million (4 percent) more than the \$5.3 billion in 1986. The value of edible products was \$5.2 billion—an increase of \$226.9 million (5 percent) compared with 1986. The value of industrial products was \$286.6 million in 1987—an increase of \$9.6 million (3 percent) compared with 1986.

FOREIGN TRADE. The total import value of edible and nonedible fishery products was a record \$8.8 billion in 1987—an increase of \$1.2 billion (16 percent) compared with 1986. Imports of edible fishery products (product weight) were a record 3.2 billion pounds (1.5 million metric tons) valued at a record \$5.7 billion in 1987—an increase of 222.2

#### IMPORTANT FACTS

million pounds (7 percent) in quantity and \$897.7 million (19 percent) in value compared with 1986. Imports of nonedible (industrial) products also set a value record in 1987, with products valued at \$3.1 billion—an increase of \$293.7 million compared with 1986.

Total export value of edible and nonedible fishery products of domestic origin was a record \$1.7 billion in 1987—an increase of \$304.3 million (22 percent) compared with 1986. United States firms exported 782.9 million pounds (355,000 metric tons) of edible products valued at \$1.6 billion—an increase of 47.9 million pounds (22,000 metric tons) in quantity and \$287.8 million in value compared with 1986. Exports of nonedible products were valued at \$82.8 million, \$16.5 million more than-1986 nonedible exports. The \$213.8 million received for U.S.-flag vessel catches transferred onto foreign vessels in the U.S. EEZ in joint venture operations are not included in the export statistics.

SUPPLY. The U.S. supply of edible fishery products (domestic landings plus imports, round weight equivalent) was a record 10.6 billion pounds (4.8 million metric tons) in 1987—an increase of 941.0 million pounds (10 percent) compared with the previous record supply in 1986. The change reflects an increase of 6 percent in imports, and an increase of 16 percent in domestic commercial landings. The supply of industrial fishery products was 5.2 billion pounds (2.4 million metric tons) in 1987—an increase of

435.0 million pounds (9 percent) compared with 1986. Domestic commercial landings for industrial products of 2.9 billion pounds (1.3 million metric tons) was 251.0 million pounds less than the record of 3.2 billion pounds set in 1983.

PER CAPITA CONSUMPTION. U.S. consumption of fishery products was a record 15.4 pounds of edible meat per person in 1987, up 0.7 pound from 1986.

CONSUMER EXPENDITURES. U.S. consumers spent an estimated \$28.8 billion for fishery products in 1987. The total includes \$19.7 billion in expenditures in food service establishments (restaurants, carry-outs, caterers, etc.); \$8.9 billion in retail stores (for home consumption); and \$214.0 million for industrial fish products. In producing and marketing a variety of fishery products for domestic and foreign markets, the commercial marine fishing industry contributed \$17.0 billion (in valued added) to the U.S. gross national products (GNP).

The estimates of consumer expenditures and industry contribution to GNP are derived from a model developed for NMFS specifically for this purpose. The model replaces an earlier version which was the basis for estimates last published in "Fisheries of the U.S., 1982." The latter estimates were for 1981 and showed \$13.5 billion in consumer expenditures on fishery products, and a \$7.6 billion industry contribution to GNP.

#### OTHER IMPORTANT FACTS

Menhaden, with landings of 2.7 billion pounds (1.2 million metric tons), was the most important species in quantity in 1987, accounting for 39 percent of the commercial fishery landings in the United States. Menhaden was eighth in value.

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

Salmon was the third most important in quantity and first in value.

Crabs were fourth in quantity, and third in value.

Shrimp were the fifth most important in quantity and second in value.

Lobster and flounders were the fourth and fifth most important species in value, respectively.

Tuna landings by U.S.-flag vessels at ports outside the continental United States amounted to 526.2 million pounds. Other species landed at ports outside the United States were Atlantic squid and mackerel and Pacific groundfish, transferred onto foreign vessels in the U.S. EEZ.

Cameron, Louisiana, was the leading U.S. port in quantity of commercial fishery landings, followed by Pascagoula-Moss Point, Mississippi; Empire-Venice, Dulvac-Chauvin and Intercoastal City, Louisiana. Menhaden was the principal species landed at these ports.

New Bedford, Massachusetts, was the leading U.S. port in terms of value, followed by Kodiak, Alaska; Dulac-Chauvin, Louisiana; Dutch Harbor-Unalaska, Alaska; and Empire-Venice, Louisiana.

Louisiana led all States in volume with landings of 1.8 billion pounds, followed by Alaska, 1.7 billion; Virginia, 709.6 million; California, 451.7 million; and Mississippi 436.7 million pounds.

Alaska led all States in value with \$941.7 million, followed by Louisiana, \$315.9; Massachusetts, \$278.9; Texas, \$199.7; and California \$173.2 million.

#### IMPORTANT SPECIES

ALASKA POLLOCK AND OTHER PACIFIC TRAWL FISH. U.S. landings of Pacific trawl fish (Pacific cod, flounders, hake (Pacific whiting), Pacific ocean perch, Alaska pollock, and rockfishes) were 1.0 billion pounds valued at \$151.0 million—an increase of 133 percent in quantity compared with 1986.

Landings of Alaska pollock increased 323 percent to 552.0 million pounds, more than 10 times higher than the 5-year average. Landings of Pacific cod were 170.6 million pounds – an increase of 63 percent from 104.4 million pounds in 1986. Pacific hake (whiting) landings were 38.8 million pounds valued at \$1.9 million, an increase of 13.2 million pounds (51 percent) and \$718,000 (61 percent) compared with 1986. The 1987 landings of Pacific hake were 116 percent higher than the 5-year average. These significant increases in harvests by U.S. vessels continue to replace directed foreign fishing off Alaska.

In the California-Oregon-Washington trawl fishery, landings of rockfishes were 117.9 million pounds (28 percent higher than 1986) valued at \$38.2 million. The 1987 landings were 21 percent higher than the 5-year average.

ANCHOVIES. U.S. landings of anchovies were 12.9 million pounds—a decrease of 579,000 pounds (4 percent) compared with 1986. Of this amount, 12.3 million pounds (96 percent) were used as bait. Of the remaining landings, 328,000 pounds went into reduction plants for fish meal and oil.

HALIBUT. U.S. landings of Atlantic and Pacific halibut were 76.1 million pounds (round weight) valued at \$88.3 million—a decrease of 1.6 million pounds (2 percent), but an increase of \$5.3 million (6 percent) in value compared with 1986. The Pacific fishery accounted for all but 68,000 pounds of the 1987 total catch. The average exvessel price per pound in 1987 was \$1.16 compared with \$1.07 in 1986.

HERRING, SEA. U.S. commercial landings of sea herring were 207.1 million pounds valued at \$52.3 million—a decrease of 3.0 million pounds (1 percent) in quantity, but an increase of \$3.4 million (7 percent) in value compared with 1986. Landings of Atlantic sea herring increased to 84.5 million pounds valued at \$4.4 million—an increase of 5.2 million pounds (6 percent) in quantity and \$54,000 (1 percent) in value compared with 1986.

Landings of Pacific sea herring were 122.6 million pounds valued at \$47.9 million—a decrease of 8.2 million pounds (6 percent) in quantity, but an increase of \$3.3 million (7 percent) in value compared with 1986. Alaskan landings of 102.4 million pounds decreased by 10.2 million pounds (9 percent) compared with 1986, but the 1987 value was about \$3.3 million greater than 1986.

JACK MACKEREL. Landings of jack mackerel in 1987 were 26.7 million pounds valued at \$1.8 million—an increase of 3.0 million pounds (13 percent) in quantity but only \$56,000 in value compared with 1986. Landings continued to be below the 5-year average. The 1987 average exvessel price per pound was 7 cents.

MACKEREL, ATLANTIC. U.S. landings of Atlantic mackerel were 9.9 million pounds valued at \$1.1 million—an increase of 580,000 pounds (6 percent) in quantity, but a decrease of \$145,000 in value (12 percent) when compared with 1986. New Jersey was the leading State for the seventh consecutive year with 6.3 million pounds (63 percent

of the total catch). The average exvessel price per pound in 1987 was 11 cents, down 2 cents from 1986.

MACKEREL, PACIFIC. Landings of Pacific mackerel were 93.8 million pounds valued at \$6.4 million—an increase of 8.3 million pounds (10 percent) in quantity and \$25,000 (less than I percent) in value compared with 1986. The average exvessel price remained stable at about 7 cents per pound.

MENHADEN. The U.S. menhaden landings were 2.7 billion pounds valued at \$104.4 million—an increase of 320.9 million pounds (13 percent) in quantity and \$10.7 million (11 percent) in value compared with 1986. Landings increased by 147.6 million pounds (26 percent) in the Atlantic States and 173.3 million pounds (9 percent) in the Gulf States compared with 1986. Landings along the Atlantic coast were 712.5 million pounds valued at \$33.9 million. Gulf region landings were 2.0 billion pounds valued at \$70.5 million. Menhaden are used primarily for the production of meal, oil, and solubles. Small quantities are used for bait and canned pet food.

NORTH ATLANTIC TRAWL FISH. North Atlantic landings of butterfish, Atlantic cod, cusk, flounders (blackback, fluke, yellowtail and other), haddock, red and white hake, ocean perch, pollock, and whiting (silver hake) were 273.4 million pounds valued at \$213.7 million—a decrease of 36.4 million pounds (12 percent) in quantity, but an increase of \$23.0 million (12 percent) in value compared with 1986. Of these species, flounders led in value, accounting for 53 percent of the total; followed by Atlantic cod, 21 percent; and pollock, 8 percent.

Landings of Atlantic cod declined for the fourth consecutive year to 59.1 million pounds in 1987, 35 percent below the 5-year average. The exvessel price per pound was 75 cents per pound in 1987 compared with 59 cents per pound in 1986.

The 1987 landings of yellowtail flounder were 16.7 million pounds, a decrease of 6.2 million pounds from 1986 and 60 percent below the 5-year average.

Haddock landings are near historic lows, declining in 1987 to 6.7 million pounds (down 39 percent from 1986). Value decreased to \$8.5 million (down 22 percent from 1986).

The North Atlantic pollock landings were 45.6 million pounds in 1987 valued at \$17.9 million, a decrease of 8.8 million pounds (16 percent) but an increase of \$3.9 million (28 percent) in value from 1986.

PACIFIC SALMON. U.S. commercial landings of salmon were 562.0 million pounds valued at \$596.4 million—a decrease of 96.5 million pounds (15 percent) in quantity, but an increase of \$102.4 million (21 percent) in value compared with 1986. Alaska accounted for 87 percent of the total landings; Washington, 9 percent; and Oregon and California the remaining 4 percent. Landings of 21,000 pounds of chinook and silver salmon were taken from the Great Lakes. Red salmon landings were 227.4 million pounds valued at \$359.8 million, an increase of 15.2 million pounds (7 percent) in quantity and \$54.4 million (18 percent) in value compared with 1986. King salmon landings increased to 39.9 million pounds—up 9.1 million pounds (29 percent) from 1986. Pink salmon landings of 169.3 million pounds in 1987 decreased by 99.3 million pounds (37 percent); chum

#### IMPORTANT SPECIES

salmon, 86.3 million pounds, decreased 139,000 pounds (less than I percent); and silver salmon, 39.0 million pounds, decreased 21.3 million pounds (35 percent) compared with 1986.

Alaska landings of 489.4 million pounds valued at \$473.0 million were a decrease of 100.2 million pounds (17 percent) in quantity and an increase of \$68.9 million (17 percent) in value compared with 1986. The distribution of Alaska salmon landings by species in 1987 was pink, 159.6 million pounds (33 percent); red or sockeye, 215.4 million pounds (44 percent); chum or keta, 78.3 million pounds (16 percent), silver or coho, 23.9 million pounds (5 percent), and chinook or king, 12.2 million pounds (2 percent). The exvessel price per pound for all species in Alaska was 97 cents in 1987, up 28 cents from 1986.

Washington salmon landings were 48.9 million pounds valued at \$71.3 million—an increase of 787,000 pounds (2 percent) in quantity and \$17.9 million (34 percent) in value compared with 1986. The biennial fishery for pink salmon went from 4,000 pounds in 1986 to 9.6 million pounds in 1987. Landings of red salmon were 11.9 million pounds—down 5.4 million pounds (31 percent), followed by silver salmon, 11.8 million pounds (down 1 percent), chum, 8.0 million pounds (down 38 percent), and chinook, 7.6 million pounds (up 26 percent) compared with 1986. The average exvessel price per pound for all species in Washington went from \$1.11 in 1986 to \$1.46 in 1987.

Oregon salmon landings were 14.4 million pounds valued at \$26.5 million—an increase of 1.0 million pounds (8 percent) in quantity and \$11.3 million (74 percent) in value compared with 1986. Red salmon landings increased to 124,000 pounds, more than eight times the 1986 landings. Landings of chinook salmon increased to 11.1 million pounds (up 73 percent); chum, 7,000 pounds (down 12 percent); and silver 3.1 million pounds (down 56 percent) compared with 1986. The average exvessel price per pound for all species in Oregon increased from \$1.14 in 1986 to \$1.84 in 1987.

California salmon landings were 9.3 million pounds valued at \$25.6 million — an increase of 1.9 million pounds (25 percent) in quantity and \$4.3 million (20 percent) compared with 1986. Chinook salmon landings were 9.0 million pounds valued at \$25.1 million — an increase of 1.8 million pounds (25 percent) in quantity and \$4.1 million (19 percent) in value compared with 1986. Landings of silver salmon increased to 246,000 pounds (up 26 percent) in quantity and \$263,000 (up 115 percent) in value compared with 1986. The average exvessel price per pound paid to fishermen for all species in 1987 was \$2.75 compared with \$2.86 in 1986.

SABLEFISH. U.S. commercial landings of sablefish were 102.7 million pounds valued at \$58.1 million—an increase of 17.8 million pounds (21 percent) in quantity, and \$12.2 million (27 percent) in value compared with 1986. Landings increased 27 percent in Alaska to 74.0 million pounds. Landings increased in Washington to 7.6 million pounds (up 27 percent), in Oregon to 11.6 million pounds (up 13 percent), and decreased in California to 9.6 million pounds (down 7 percent) compared with 1986. The average exvessel price per pound in 1987 was 57 cents compared with 54 cents in 1986.

TUNA. Landings of tuna by U.S. fishermen at ports in the 50 States, Puerto Rico, American Samoa, other U.S.

territories, and foreign ports were 626.2 million pounds valued at \$321.4 million—an increase of 71.2 million pounds (13 percent) in quantity and \$104.2 million (48 percent) in value compared with 1986. The average exvessel price per pound of all species of tuna in 1987 was 51 cents compared with 39 cents in 1986.

Bigeye landings were 3.4 million pounds—an increase of 2.1 million pounds (149 percent) compared with 1986. The average exvessel price per pound was \$2.76 in 1987 compared with \$3.68 in 1986.

Skipjack landings were 230.2 million pounds—a decrease of 7.3 million pounds (3 percent) compared with 1986. The average exvessel price per pound was 39 cents in 1987 compared with 33 cents in 1986.

Yellowfin landings were 377.5 million pounds—an increase of 84.8 million pounds (29 percent) compared with 1986. The average exvessel price per pound was 52 cents in 1987 compared with 41 cents in 1986.

Bluefin landings were 4.3 million pounds—a decrease of 6.4 million pounds (59 percent) compared with 1986. The average exvessel price per pound in 1987 was \$3.80 compared with 64 cents in 1986.

Sixteen percent of the tuna landings were at ports in the continental United States, principally California with 69 percent of the continental landings.

<u>CLAMS</u>. Landings of all species yielded 134.4 million pounds of meats valued at \$132.9 million—a decrease of 11.0 million pounds (8 percent) in quantity and \$2.0 million (2 percent) in value compared with 1986. The average exvessel price per pound increased to 99 cents in 1987 from 93 cents in 1986.

Surf clams yielded 60.7 million pounds of meats valued at \$28.0 million—a decrease of 18.0 million pounds (23 percent) in quantity, and \$14.6 million (34 percent) in value compared with 1986. New Jersey was the leading State with 35.8 million pounds (down 2 percent from 1986), followed by Virginia, 8.7 million pounds (down 29 percent); Maryland, 7.7 million pounds (down 12 percent); Massachusetts, 4.2 million pounds (down 42 percent); and New York, 2.8 million pounds (down 76 percent). The average exvessel price per pound of meats was 46 cents in 1987, down from 54 cents in 1986.

The ocean quahog fishery produced 50.3 million pounds of meats valued at \$16.6 million—an increase of 4.9 million pounds (11 percent) in quantity, and \$860,000 (5 percent) in value compared with 1986. New Jersey was the leading producer with 24.4 million pounds of meats accounting for 49 percent of the total ocean quahog landings. The value for New Jersey in 1987 was \$6.9 million—a decrease of \$337,000 (5 percent) compared with 1986. Maryland landings were 12.4 million pounds valued at \$3.7 million—an increase of 398,000 pounds (3 percent) in quantity and \$98,000 (3 percent) in value compared with 1986. The average exvessel price per pound of meats was 33 cents in 1987, compared to 35 cents in 1986.

The hard clam fishery produced 11.4 million pounds of meats valued at \$49.6 million—a decrease of 375,000 million pounds (3 percent) in quantity, but an increase of \$2.8 million (6 percent) in value compared with 1986.

#### IMPORTANT SPECIES

Landings in the New England region were 5.4 million pounds of meats (down 6 percent); Middle Atlantic region, 1.5 million (up 23 percent); Chesapeake region, 1.0 million pounds (up 18 percent); and the South Atlantic region, 2.2 million pounds (down 25 percent). The average exvessel price per pound of meats increased from \$3.97 in 1986 to \$4.34 in 1987.

Soft clams yielded 7.5 million pounds of meats valued at \$19.8 million—an increase of 1.6 million pounds (27 percent) in quantity, and \$1.3 million (7 percent) in value compared with 1986. Maryland was the leading State with 3.2 million pounds of meats (up 310 percent from 1986) followed by Maine with 2.7 million pounds (down 29 percent) and Massachusetts with 1.3 million pounds (up 48 percent). The average exvessel price per pound of meats was \$2.65 in 1987 compared with \$3.13 in 1986.

<u>CRABS.</u> Landings of all species of crabs were 386.4 million pounds valued at \$321.9 million—an increase of 30.7 million pounds (9 percent) in quantity and \$51.7 million (19 percent) in value compared with 1986. Total landings of all crab species increased in 1987.

Hard blue crab landings were 197.8 million pounds valued at \$70.8 million—an increase of 13.3 million pounds (7 percent) in quantity and \$12.8 million (22 percent) in value compared with 1986. Hard blue crab landings in the Chesapeake region of 75.8 million pounds decreased 7.2 million pounds (9 percent), and the South Atlantic region landings of 47.2 million pounds increased by 7.0 million pounds (18 percent). The Gulf region, with 67.6 million pounds, increased 12.1 million pounds (22 percent). The Middle Atlantic region landings of 7.3 million pounds valued at \$2.8 million increased 1.4 million pounds (23 percent) in quantity and \$356,000 (15 percent) in value compared with 1986. The average exvessel price per pound of hard blue crabs was 36 cents in 1987 compared with 31 cents in 1986.

Dungeness crab landings were 29.5 million pounds valued at \$38.5 million—an increase of 7.1 million pounds (31 percent) in quantity and \$9.4 million (32 percent) in value compared with 1986. Alaska led all States with landings of 9.4 million pounds (32 percent of the total landings)—an increase of 3.6 million pounds (64 percent) compared with 1986. Washington increased in landings with 7.5 million pounds, up 41 percent compared with 1986. Oregon landings were 6.0 million pounds, up 29 percent compared to 1986. California decreased in landings with 6.7 million pounds (down 1 percent from 1986). The average exvessel price per pound was \$1.31 in 1987 compared with \$1.30 in 1986.

U.S. landings of king crab were 29.1 million pounds valued at \$98.9 million—an increase of 3.2 million pounds (12 percent) compared with 1986. The average exvessel price per pound in 1987 was \$3.40 compared with \$3.38 received in 1986.

Snow (tanner) crab landings were 113.8 million pounds valued at \$98.7 million—an increase of 3.8 million pounds (3 percent) in quantity and \$15.3 million (18 percent) in value compared with 1986. The average exvessel price per pound was 87 cents in 1987, up from 76 cents in 1986.

LOBSTERS, AMERICAN. American lobster landings were 45.6 million pounds valued at \$133.6 million—a decrease in

quantity of 495,000 pounds (1 percent), but an increase in value of \$13.0 million (11 percent) compared with 1986. Maine led in landings for the sixth consecutive year, with 19.7 million pounds valued at \$54.5 million — up 42,000 pounds (less than I percent) from 1986. Massachusetts, the second leading producer, had landings of 15.1 million pounds valued at \$43.7 million, an increase of 76,000 pounds (less than I percent) compared with 1986. These two States combined to produce 76 percent of the total national landings. The average exvessel price per pound was \$2.93 in 1987 compared with \$2.62 in 1986.

LOBSTERS, SPINY. U.S. landings of spiny lobster were 5.8 million pounds valued at \$21.3 million—a decrease of 1.0 million pounds (15 percent) in quantity, but an increase of \$2.1 million (11 percent) in value compared with 1986. Florida, with landings of 4.8 million pounds valued at \$16.7 million, accounted for 83 percent of the total catch and 78 percent of the value. This was a decrease of 426,000 pounds (8 percent) in quantity but an increase of \$3.1 million (23 percent) in value compared with 1986. Overall the average exvessel price per pound was \$3.70 in 1987 compared with \$2.84 in 1986.

OYSTERS. U.S. oyster landings yielded 39.8 million pounds of meats valued at \$92.4 million—a decrease of 737,000 pounds (2 percent) in quantity, but an increase of \$14.4 million (18 percent) in value compared with 1986. The Gulf region (principally Louisiana with 65 percent of the region's total) led in production with 18.4 million pounds of meats, 46 percent of the national total; followed by the Pacific region with 9.8 million pounds (25 percent), and the Chesapeake region, with 8.7 million pounds (22 percent). The average exvessel price per pound of meats was \$2.32 in 1987 compared with \$1.93 in 1986.

SHRIMP. U.S. landings of shrimp were 363.1 million pounds valued at \$578.1 million—a decrease of 37.0 million pounds (9 percent) in quantity, and \$84.7 million (13 percent) in value compared with 1986. Shrimp landings increased in New England (up 7 percent), and the Pacific coast (up 15 percent), but decreased in the South Atlantic (down 15 percent), when compared with 1986. The average exvessel price per pound of shrimp decreased to \$1.59 in 1987 compared with \$1.66 in 1986. Gulf region landings were 257.1 million pounds compared with 304.1 million pounds in 1986. Louisiana led all Gulf States with 116.3 million pounds (down 21 percent), followed by Texas, 92.4 million pounds (down 5 percent); Florida (west coast), 18.5 million pounds (down 24 percent); Alabama, 17.0 million pounds (down 25 percent); and Mississippi, 12.9 million pounds (unchanged). Oregon was the third leading State with landings of 44.5 million pounds (up 32 percent), and Washington landings were 16.2 million pounds, down 7 percent when compared with 1986.

SCALLOPS. U.S. landings of all species of scallops were 40.8 million pounds of meats valued at \$144.3 million—an increase of 18.4 million pounds (82 percent) in quantity, and \$37.3 million (35 percent) in value compared with 1986. The average exvessel price per pound of meats decreased from \$4.79 in 1986 to \$3.54 in 1987.

U.S. bay scallop landings were 580,000 pounds of meats valued at \$3.2 million—a decrease of 155,000 pounds (21 percent) in quantity, and \$3.4 million (52 percent) in value compared with 1986. Massachusetts was the leading State with 425,000 pounds of meats, 73 percent of the

#### IMPORTANT SPECIES

national total. The average exvessel price per pound of meats was \$5.45 in 1987 compared with \$8.88 in 1986.

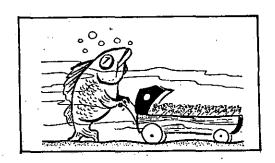
Sea scallop landings were 32.0 million pounds of meats valued at \$132.3 million—an increase of 12.0 million pounds (60 percent) in quantity and \$34.8 million (36 percent) in value compared with 1986. Massachusetts was the leading State in landings of sea scallops with 16.5 million pounds of meats, 51 percent of the national total. The average exvessel price per pound of meats in 1987 was \$4.13 compared with \$4.87 in 1986.

Landings of calico scallops were 8.2 million pounds of meats valued at \$8.9 million—an increase of 6.5 million pounds (405 percent) in quantity and \$5.8 million (188 percent) in value compared with 1986. Florida (east coast)

had 92 percent of the total landings in 1987. The average exvessel price per pound of meats was \$1.09 in 1987 compared with \$1.91 in 1986.

SQUID. U.S. commercial landings of squid were 82.0 million pounds valued at \$16.8 million—an increase of 6.6 million pounds (9 percent) and \$2.1 million (15 percent) compared with 1986. California was the leading State with 43.2 million pounds, 53 percent of the national total.

The New England region landings were 18.0 million pounds (up 245 percent from 1986). Landings in the Middle Atlantic region were 19.7 million pounds (up 68 percent), and the Chesapeake region, 799,000 pounds. The average exvessel price per pound for squid was 20 cents in 1987, compared with 19 cents in 1986.



#### PER CAPITA CONSUMPTION

PER CAPITA CONSUMPTION. U.S. per capita consumption of fish and shellfish was a record 15.4 pounds (edible meat) in 1987. This total was 0.7 pounds more than the 14.7 pounds consumed per capita in 1986. The change was due to increased consumption of fresh and frozen fishery products.

Per capita consumption of fresh and frozen products registered a total of 10.0 pounds, an increase of 1.0 pound above the 1986 level. Fresh and frozen finfish consumption was 6.0 pounds per capita in 1987, while fresh and frozen shellfish registered 4.0 pounds per capita. Record shrimp consumption (2.3 pounds per capita) accounted for most of the increase in shellfish. The fresh and frozen finfish consumption includes approximately 0.6 pounds per capita from domestic farm-raised catfish, an increase of 0.2 pounds above the 1986 level.

Consumption of canned fishery products was 5.1 pounds per capita in 1987, down 0.3 pounds from the 5.4 pounds in 1986.

In addition to consumption of commercially caught fish and shellfish, recreational fishermen caught and consumed an estimated 3 to 4 pounds of edible meat per person.

PER CAPITA USE. The per capita use of all fishery products (edible and industrial) was 64.6 pounds (round weight) — up 5.1 pounds compared with 1986. Higher landings and imports of industrial fishery products in 1987 accounted for most of the increase.

#### PROCESSED FISHERY PRODUCTS

#### FRESH AND FROZEN

FISH FILLETS AND STEAKS. In 1987 the U.S. production of raw (uncooked) fish fillets and steaks was 276.9 million pounds—2.5 million pounds less than the 279.5 million pounds in 1986. These fillets and steaks were valued at \$594.8 million—\$30.7 million more than the record set in 1986, when fish fillets and steaks were valued at \$564.1 million Alaska pollock fillets led all species with 65.1 million pounds—24 percent of the total. Production of groundfish fillets and steaks (cod, cusk, haddock, hake, Atlantic ocean perch, and Atlantic pollock) was 93.7 million pounds compared with 107.0 million pounds in 1986.

FISH STICKS AND PORTIONS. The combined production of fish-sticks and portions was 415.1 million pounds valued at a record \$572.1 million compared with a 1986 production of 428.9 million pounds valued at \$488.2 million.

The total production of fish sticks amounted to 98.9 million pounds valued at \$142.8 million—increased of 11.6 million pounds in quantity, and \$48.6 million in value compared with 1986. The total production of fish portions amounted to 316.2 million pounds valued at \$429.3 million—a decrease of 25.4 million pounds in quantity but an increase of \$35.3 million in value compared with 1986.

BREADED SHRIMP. The production of breaded shrimp produced in 1987 was 99.5 million pounds valued at \$369.0 million, compared with the 1986 production of 107.8 million pounds valued at \$358.4 million.

FROZEN FISHERY TRADE. In 1987 stocks of frozen fishery products in cold storage were at a low of 278.7 million pounds on April 30 and a high of 447.5 million pounds on November 30. Cold storage holdings of shrimp products were at a high of 72.4 million pounds on November 30, and a low of 43.9 million pounds on June 30. Saltwater fillets and steaks holdings reached a high of 105.6 million pounds on November 30, and were at a low of 44.2 million pounds on November 31. Holdings of blocks and slabs were at a high of 77.5 million pounds on September 30, and at a low of 38.2 million pounds on May 31. King crab holdings were 5.1 million pounds on January 31, but reached a low of 3.7 million pounds on August 30, 1987. Cold storage holdings were up every month in 1987 compared to 1986, resulting in a 14 percent annual increase from 3.7 billion pounds in 1986 to 4.3 billion pounds in 1987.

#### .CANNED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS. The pack of canned fishery products in the 50 States, American Samoa, and Puerto Rico was 47.2 million standard cases (1.2 billion pounds) valued at \$1.5 billion—a decrease of 2.9 million standard cases (160.7 million pounds), but an increase of \$15.7 million compared with the 1986 pack. The 1987 pack included 42.9 million standard cases (967.4 million pounds) valued at \$1.4 billion for human consumption, and 4.3 million standard cases (203.7 million pounds) valued at \$76.9 million for bait and animal food.

CANNED SALMON. The 1987 U.S. pack of natural Pacific salmon was 2.3 million standard cases (112.1 million pounds) valued at \$220.6 million, compared with 2.9 million standard cases (141.8 million pounds) valued at \$265.1 million packed a year earlier. Alaskan plants accounted for 92 percent in quantity and 95 percent in value of the salmon pack.

CANNED SARDINES. The pack of Maine sardines (sea herring) was 560,510 standard cases (13.1 million pounds) valued at \$22.4 million, a decrease of 106,191 standard cases (2.5 million pounds) and \$5.3 million compared with 1986. An additional 156,654 standard cases (7.5 million pounds) of herring valued at \$12.6 million were packed in 1987—16,019 standard cases (769 thousand pounds) and \$1.6 million more than the 1986 pack.

CANNED TUNA. The U.S. pack of tuna was 33.5 million standard cases (653.9 million pounds) valued at \$1.0 billion—an increase of 876 thousand standard cases (17.2 million pounds) in quantity, and \$136.1 million compared with the 1986 pack. The pack of albacore tuna was 7.1 million standard cases—896 thousand standard cases less than the

8.1 million standard cases produced in 1986. Albacore tuna was 21 percent of the tuna pack in 1987. Lightmeat tuna (bigeye, bluefin, skipjack, and yellowfin) comprised the remainder with a pack of 26.4 million standard cases—1.8 million standard cases more than the 24.6 million standard cases packed in 1986. Plants in the United States packed 6 percent of the total and plants in American Samoa and Puerto Rico packed the remainder.

CANNED CLAMS. The U.S. pack of clams (whole, minced, chowder, and juice) was 4.6 million standard cases (122.3 million pounds) valued at \$87.6 million, an increase of 121,539 standard cases (5.9 million pounds) in quantity but \$30.0 million less in value than the pack in 1986. The pack of whole and minced clams of 1.3 million standard cases (129,157 standard cases less than the 1986 pack) accounted for 29 percent of the total clam pack. Clam chowder and clam juice (2.9 million standard cases) made up the majority of the remaining pack.

<u>CANNED SHRIMP</u>. The U.S. pack of natural shrimp was 654,531 standard cases (4.4 million pounds) valued at \$22.7 million—a decrease of 26,387 standard cases (178 thousand pounds) and \$487 thousand compared with the 1986 pack.

OTHER CANNED ITEMS. Tunalike fish (bonito) and natural oysters were packed by less than three firms in 1987. The pack of pet food (10 pounds or more of fish per standard case of 48 one-pound cans) was 4.2 million standard cases valued at \$76.9 million—a decrease of 2.4 million standard cases and \$22.7 million compared with the pack in 1987.

# REVIEW PROCESSED FISHERY PRODUCTS

#### INDUSTRIAL FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS. The value of the domestic production of industrial fishery products was \$209.1 million—an increase of \$33.7 million (19 percent) compared with the 1986 value of \$175.4 million. The leading state was Louisiana (\$103.2 million) which accounted for 49 percent of the total U.S. value for 1987.

FISH MEAL AND SCRAP. The domestic production of fish meal and scrap (including shellfish) was 787.2 million pounds valued at \$121.2 million—an increase of 85.0 million pounds (12 percent) from 1986 volume and an increase of \$37.7 million (45 percent) in value compared to 1986. Menhaden meal production was 668.9 million pounds valued at \$105.3 million—an increase of 76.4 million pounds (13 percent) and \$32.2 million (44 percent) compared to 1986. Menhaden accounted for 87 percent of the 1987 production of fish meal and scrap. Shellfish meal production was 18.2 million pounds—a decrease of 4.9 million pounds (21 percent) from the 1986 level. Tuna and mackerel meal production was 84.3 million pounds—an increase of 10.1 million pounds (14 percent) from 1986. Production of unclassified meal (consisting mainly of alewives, anchovy, carp, sea herring, and unclassified fish) was (5.8 million pounds—an increase of 3.5 million pounds (28 percent) compared with 1986.

<u>FISH SOLUBLES.</u> Domestic production of fish solubles was 237.5 million pounds, 42.3 million pounds (22 percent) more than the 1986 production. Menhaden solubles accounted for more than 95 percent of the total production.

FISH OILS. The domestic production of fish oils was 298.3 million pounds valued at \$35.5 million—a decrease of 38.4 million pounds (11 percent) and \$2.8 million (19 percent) compared with 1986 production. The production of menhaden oil was 294.9 million pounds valued at \$35.1 million—a decrease of 37.1 million pounds (11 percent) and \$8.2 million (19 percent) compared with 1986 levels. Menhaden oil accounted for 99 percent of the volume and the value of the total 1987 fish oil production.

Unclassified oil production decreased by 1.4 million pounds. The 1987 tuna and mackerel oil production is included with unclassified oil for reasons of confidentiality.

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, shark leathers, and mussel shell buttons were valued at \$36.0 million, compared with \$36.6 million in 1986—a decrease of \$600 thousand (2 percent).

#### FOREIGN TRADE IN FISHERY PRODUCTS

IMPORTS. U.S. imports of edible fishery products in 1987 were valued at a record \$5.7 billion, \$897.7 million higher than the previous record value established in 1986. The quantity of edible imports was a record 3.2 billion pounds, 222.2 million pounds more than the previous record quantity imported in 1986. The quantity of shrimp imported in 1987 established a record with 478.3 million pounds, 78.2 million pounds more than the previous record quantity imported in 1986. Valued at \$1.7 billion, \$275.9 million more than the 1986 value, shrimp imports accounted for 30 percent of the value of total edible imports. Imports of fresh and frozen tuna, 572.5 million pounds, increased 8.7 million pounds more than the 563.8 million pounds imported in 1986. Imports of canned tuna not in oil decreased for the first year after eight consecutive years to 211.4 million pounds — 25.0 million pounds less than the record 236.3 million pounds imported in 1986. Imports of fresh and frozen fillets and steaks amounted to a record 621.0 million pounds, an increase of 82.5 million pounds over 1986. Regular and minced block imports were 403.6 million pounds, an increase of 39.7 million pounds from 1986. Edible imports consisted of 2.7 billion pounds of fresh and frozen products valued at \$5.0 billion, 428.7 million pounds of canned products valued at \$515.9 million, 64.1 million pounds of cured products valued at \$92.9 million, and 16.1 million pounds of other products valued at \$29.3 million. Analog products (surimi) amounted to 30.5 million pounds valued at \$51.2 million in 1987, compared to 34.3 million pounds valued at \$58.5 million in 1986.

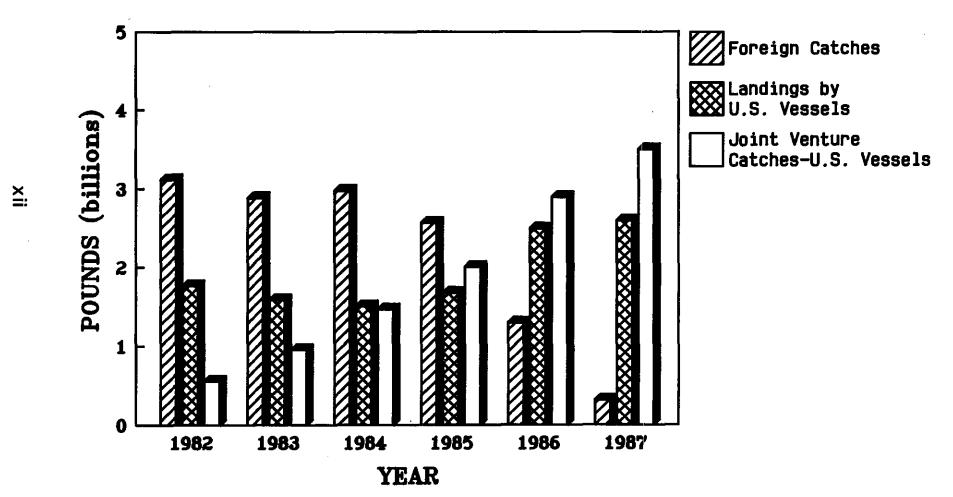
Imports of nonedible fishery products were valued at a record \$3.1 billion — \$293.7 million more than the \$2.8 billion imported in 1986. Total value of edible and nonedible products resulted in a record import value of \$8.8

billion in 1987 — \$1.2 billion more than the previous record in 1986, when \$7.6 billion of fishery products were imported.

U.S. exports of edible fishery products of domestic origin were a record 782.9 million pounds valued at a record \$1.6 billion, compared with 735.0 million pounds valued at \$1.3 billion exported in 1986. Fresh and frozen items were 694.8 million pounds valued at \$1.3 billion, increases of 79.3 million pounds and \$290.6 million compared with 1986. Fresh and frozen exports consisted principally of 269.7 million pounds of salmon valued at \$608.6 million and 95.0 million pounds of herring valued at \$84.0 million. Canned items were 53.6 million pounds valued at \$120.3 million, down 26.0 million pounds and \$12.0 million from 1986 levels. Salmon was the major canned item exported, with 35.9 million pounds valued at \$85.8 million. Cured items were 34.3 million pounds valued at \$122.7 million, a decrease of 5.1 million pounds but an increase of \$9.7 million compared with 1986. Cured exports consisted mainly of salmon and herring roe, which amounted to 23.7 million pounds valued at \$94.8 million. The \$213.8 million received for U.S.-flag vessel catches transferred onto foreign vessels in the U.S. EEZ in joint venture operations are not included in the export statistics.

Exports of nonedible products were valued at \$82.8 million — \$16.5 million more than the \$66.3 million exported in 1986. Exports of menhaden oil amounted to 247.6 million pounds valued at \$21.6 million, increases of 58.7 million pounds and \$1.8 million compared with 1986. Thus, menhaden oil exports accounted for 26 percent of the value of total nonedible exports in 1987. The total value of edible and nonedible exports was \$1.7 billion — an increase of \$304.3 million compared with 1986.

# COMMERCIAL CATCHES IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ) 1982 - 1987



U.S. COMMERCIAL LANDINGS, BY SPECIES, 1986 AND 1987 (1)

Species	1	986	19	87	(1982-86)
Fish	Thousand	Thousand	Thousand	Thousand	Thousand
<del></del>	pounds	dollars	pounds	dollars	pounds
lewives:					
Atlantic and Gulf	10,064	946	6,145	616	11,222
Great Lakes	19,218	488	14,396	1,052	34,275
nchovies	13,436 `	2,523	12,857	2,706	14,283
luefish	13,968 724	2,413 148	15,226	3,254	14,689
onito			11,420	2,507	5,290
itterfish	9,880	6,576	10,315	6,496	14,912
Atlantic	61,134	36,142	59,100	44,179	91,529
Pacific	104,443	11,337	170,611	31,443	104,040
coaker	12,382	3,883			
lsk	4,148	1,775	11,044 3,064	4,396 1,649	11,275 4,365
lounders:					.,303 :==========
Atlantic and Gulf:			·		
Blackback	17,253	16,898	19,310	22,948	27,456
Fluke	30,072	35,923	30,271	41,783	33,442
Yellowtail	22,910	21,041	16,667	20,810	41,535
Other	35,127	31,736	27,422	30,352	43,508
Pacific	63,688	18,988	106,041	29,187	67,385
1001110111111111111111	00,000	10,300	1007041	27,107	077303
Total	169,050	124,586	199,711	145,080	307,997
ouper	.11,482	18,680	9,494	16,058	12,579
addock	10,968	10,911	6,673	8,522	25,756
ke:	·	·			
Pacific (whiting)	25,615	1,182	. 38,783	1,900	17,923
Red	4,630	671	4.428	866	4,662
White	14,591	4,912	13,485	5,466	14,725
alibut	77,691	82,925	76,107	88,254	53,030
erring, sea:					
Atlantic	79,381	4,314	84,536	4,368	66,904
Pacific	130,764	44,598	122,598	47,916	127,228
ck mackerel	23,672	1,775	26,671	1,831	33,058
ngcod	5,738	1,726	7,027	2,603	8,381
Atlantic	9,353	1,210	9,933	1,065	7,318
King	5,482	5,719	4,577	4.981	6,197
Pacific	85,444	6,408	93,755	6,433	77,867
Spanish	6,456	1,933	6,838	2,249	6,169
enhaden:				****	
Atlantic	564,816	26,260	712,454	33,901	777,977
Gulf	1,826,547	67,502	1,999,831	70,524	1,972,165
Galling			1,333,031	707524	1,572,203
Total	2,391,363	93,762	2,712,285	104,425	2,750,142
ıllets	21,646	6,043	30,125	8,224	23,861
_	21,040	6,043	30,125	0,224	23,061
ean perch:	6,576	3,160	4,202	2,709	12,136
Atlantic					8,958
Pacific	15,585	3,116	19,982	4,478	0,738
ollock:	54,469	14 044	AE 64E	17 016	39,931
Atlantic		14,044	45,645	17,916	
Alaska	130,424	7,167	552,048	45,849	50,716
Ockfishes	92,029	28,265	117,881	38,153	97,315 57,068
blefish	84,868	45,879	102,698	58,107	57,068
lmon Pagifice					=
ulmon, Pacific: Chinook or king	30,845	50,630	39,938	80,068	27,754
Chum or keta	86,459	34,589		43,801	92,848
	268,646		86,320 169 308		255,802
Pad or sockeye		55,325 305,407	169,308 227 411	56,459 359 767	237,655
Red or sockeye	212,212 60,359		227,411	359,767 56 281	
Silver or coho	00,339	47,986	39,041	56,281	50,659
Total	658,521	493,937	562,018	596,376	664,718
	16,181	. 9,476	14,295	9,810	18,346
up or porgv		21210		2,010	_0,010
	10/101			F 004	4,250
a bass:	•	4.449	<u>4</u> _967	n_jiua	
ea bass: Black	4,664	4,449 196	4,967 116	5,094 223	<del>-</del>
White	•	4,449 196	4,967 116	223	96
ea bass: Black White ea trout:	4,664 97	196	116	223	96
ea bass: Black White a trout: Gray	4,664 97 20,602	196 7,086	116 17,927	223 7,499	96 18,705
ea bass: Black White a trout: Gray Spotted	4,664 97 20,602 3,422	196 7,086 3,028	116 17,927 3,395	223 7,499 3,181	96 18,705 3,272
ea bass: Black White gray Spotted White	4,664 97 20,602	196 7,086	116 17,927	223 7,499	96 18,705
ea bass: Black White ea trout: Gray Spotted White warks:	4,664 97 20,602 3,422 620	7,086 3,028 286	116 17,927 3,395 549	223 7,499 3,181 234	96 18,705 3,272 639
ea bass: Black White ea trout: Gray Spotted White arks: Dogfish	4,664 97 20,602 3,422 620 11,114	196 7,086 3,028 286 964	116 17,927 3,395 549 14,167	7,499 3,181 234 1,573	96 18,705 3,272 639 12,523
ea bass: Black White ea trout: Gray Spotted White warks:	4,664 97 20,602 3,422 620	7,086 3,028 286	116 17,927 3,395 549	223 7,499 3,181 234	96 18,705 3,272 639

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1986 AND 1987 (1) - Continued

Species	19	986	19	987	(1982-86)
Fish -continued	Thousand	Thousand	Thousand	Thousand	Thousand
	pounds	dollars	pounds	dollars	pounds
apper:	4 400	0.000	2 800	0 663	
Red	4,489	9,820	3,737	8,661	5,705
Other	4,418 335	7,599 338	5,171 431	10,034 485	3,977 1,616
triped basswordfish	9,671	30,508	9,761	34,974	11,312
ilefish	5,985	7,275	7,950	8,852	6,313
TIGITAM	=======================================	•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,052 	0,515 ==========
ına:	11 360	6 007	7 700	c 027	10 540
Albacore	11,368	6,087	7,728	6,037	19,542
Bigeye	1,384 10,687	5,092 6,791	3,305 4,332	9,445 16,463	1,289 8,856
Bluefin	5,103	3,237	15,919	8,700	63,800
Yellowfin	58,128	32,126	67,572	54,152	91,682
Unclassified	1,141	1,242	1,202	1,006	1,190
Total	87,811	54,575	100,058	95,803	186,359
	20 024	**************************************	34 673		**************************************
hiting ther marine finfishes.	39,924 165,481	8,312 50,320	34,673 199,795	11,584 67,731	40 <u>,</u> 738
ther freshwater	102,401	JV; 34U	133,130	01,131	
finfishes	124,826	47,430	117,880	45,838	-
Total	4,870,763	1,319,134	5,708,215	1,629,041	
Shellfish et al.	****		:22====================================	***========	
lams: Hard	11,793	46,808	11,418	49,593	14,056
Ocean quahog	45,383	15,716	50,255	16,576	41,237
Soft	5,887	18,435	7,469	19,770	7,630
Surf	78,749	42,613	60.744	27,993	65,434
Other	3,581	11,338	4,471	18,929	2,158
Total	145,393	134,910	134,357	132,861	130,515
rabs:	104 407	E9 005	107 026	70 776	102 760
Blue, hard	184,491 22,408	58,005 29,107	197,826	70,776	192,760
Dungeness	25,909	87,655	29,460 29,065	38,492 98,929	27,456 24,510
Snow (tanner)	110,000	83,408	113,812	98,684	74,870
Other	12,852	11,963	16,205	14,994	14,972
		·			<del></del>
Total	355,660	270,138	386,368 ===========	321,875 ====================================	334,568 
obsters:					
American	46,053	120,556	45,558	133,554	43,965
Spiny	6,775	19,247	5,755	21,317	6,009
ysters	40,544	78,068	39,807	92,423	47,498
Bay	735	6,527	580	3,159	1,582
Calico	1,616	3,087	8,155	8,889	14,815
Sea	19,992	97,415	32.038	132,263	19,210
hrimp:	10 200	ć =00	77 001	10 1-0	
New England	10,328	6,520	11,081	12,158	19,210
South Atlantic	23,120	59,513	22,905	46,396	6,708
Gulf	304,051	563,045	257,148	469,281	24,493
PacificOther	62,686 _	33 <u>,</u> 666	72,008 (2)	50,247 2	245,919 111
-		<del></del>	<del></del> _		
Total	400,185	662,744	363,142	578,084	296,330
quid:					
	33,145	10,279	38,883	12,493	28,303
Atlantic	42,262	4,368	43,166	4,300	21,419
Pacific					
Pacificther shellfish (marine					
	67,511	36,350	89,702	44,454	
Pacificther shellfish (marine	1,159,871	1,443,689	1,187,511	1,485,672	

<sup>(1)</sup> 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).

(2) Less than 500 lb.

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 unloaded onto foreign vessels within the U.S.

EEZ (joint ventures). Therefore, they will not agree with "U.S. Commercial Landings" table on page 6. Data do not include aquaculture products, except oysters and clams.

#### U.S. COMMERCIAL LANDINGS

DISPOSITION OF U.S. DOMESTIC LANDINGS, 1986 AND 1987 (PRELIMINARY)

B. 3 V.	198	6	1987		
End Use	Million pounds	Percent	Million pounds	Percent	
Fresh and frozen: For human food For bait and	2,325	38.6	2,827	41.0	
animal food	162	2.7	199	2.9	
Total	2,487	41.2	3,026	43.9	
Canned: For human food	1,008	16.7	1,061	15.4	
For bait and animal food	126	2.1	110	1.6	
Total	1,134	16.7	1,171	15.4	
Cured for human food.	60	1.0	58	0.8	
Reduction to meal, oil, etc	2,350	39.0	2,641	38.3	
Grand total	6,031	100.0	6,896	100.0	

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

DISPOSITION OF U.S. COMMERCIAL LANDINGS, BY MONTH, 1987 (PRELIMINARY)

Month	Landin	gs for	Landin	gs for		1	
	Human food		Indus purpos		Total		
	Million pounds	Percent	Million pounds	Percent	Million pounds	Percent	
January	194	4.9	15	0.5	209	3.0	
February	212	5.4	17	0.6	229	3.3	
March	235	6.0	19	0.6	254	3.7	
April	303	7.7	210	7.1	513	7.4	
May	334	8.5	429	14.5	763	11.1	
June	394	10.0	490	16.6	884	12.8	
July	545	13.8	476	16.1	1,021	14.8	
August	51 <b>9</b>	13.2	448	15.2	967	14.0	
September	392	9.9	465	15.8	857	12.4	
October	326	8.3	234	7.9	560	8.1	
November	255	6.5	104	3.5	359	5.2	
December	237	6.0	43	1.5	280	4.1	
Total	3,946	100.0	2,950	100.0	6,896	100.0	

<sup>(1)</sup> Processed into meal, oil, solubles, and shell products, and used as bait and animal food.

U.S. COMMERCIAL LANDINGS OF FISH AND SHELLFISH, 1978-87 (1)

Year		ngs for n Food	Landings for Industrial Purposes (1)		Total	
	Million pounds	Million dollars	Million pounds	Million dollars	Million pounds	Million dollars
1978 (3)	3,177 3,318 3,654 3,547 3,285 3,238 3,320 3,294 3,393	1,733 2,093 2,092 2,277 2,247 2,203 2,206 2,198 2,641	2,851 2,949 2,828 2,430 3,082 * 3,201 3,118 2,964 2,638	121 141 145 111 143 152 144 128	6,028 6,267 6,482 5,977 6,367 6,439 6,438 6,258 6,031	1,854 2,234 2,237 2,388 2,390 2,355 2,350 2,350 2,360

<sup>(1)</sup> 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). (2) processed into fish meal, oil, solubles, and shell products, or used as bait or animal food. (3) Data are preliminary.

are preliminary.

NOTE:--Joint venture catches are included in 1979. Data do not include landings outside the 50 states or products of aquaculture, except oysters and clams. \*Records.

U.S. COMMERCIAL LANDINGS, BY STATES, 1986 AND 1987 (1)

States	19	86	19	87	Record Landings		
	Thousand	Thousand	Thousand	Thousand		Thousand	
	pounds	dollars	pounds	dollars	<u>Year</u>	pounds	
Alabama	36,690	63,988	24,459	44,615	1973	39,749	
Alaska	1,236,062	752,417	1,697,547	941,690	1987	1,697,547	
Arkansas	17,347	7,717	18,179	8,565	_	(3)	
California	386,740	139,205	451,663	173,234	1936	1,760,193	
Connecticut	6,703	15,546	8,562	15,974	1930	88,012	
Delaware	4,829	1,999	6,022	2,308	1953	367,500	
Florida	166,577	154,501	172,734	156,626	1938	241,443	
Georgia	15,476	24,501	14,961	19,624	1927	47,607	
Hawaii	10,590	20,082	16,088	29,056	1984	34,824	
Illinois (2)	6,742	2,054	7,081	2,348	_	(3)	
Indiana	959	896	1,399	1,863	_	(3)	
Louisiana	1,699,321	321,514	1,803,944	315,933	1984	1,931,027	
Maine	174.932	108,720	170.082	132,420	1950	356,266	
Maryland	88,831	51,450	81,658	53,458	1890	141,607	
Massachusetts	272,393	243,524	258,066	278,913	1948	649,696	
Michigan	15,750	7,056	15,072	7,647	1930	35,580	
Minnesota (2)	13,256	3,998	13,730	4,408		(3)	
Mississippi (2)	418,409	45,581	436,729	48,228	1984	476,997	
New Hampshire	7,925	6,180	8,287	7,738	_	(3)	
New Jersey	108,259	66,665	116,141	72,643	1956	540,060	
New York	43,628	45,482	40,882	53,352	1880	335,000	
North Carolina	168,885	63,435	156,608	63,461	1981	432,006	
Ohio	3,470	734	3,217	843	1936	31,083	
Oregon	113,431	62,403	138,545	95,293	1978	134,657	
Pennsylvania	324	158	195	148	-	(3)	
Rhode Island	101,542	75.089	100,150	77.414	1889	128,056	
South Carolina	16,788	25,064	15.003	22,047	1965	26,611	
Texas	116,493	246,122	111,216	199,662	1960	237,684	
Virginia	528,239	79,410	709,595	106,195	1941	751,069	
Washington	186,756	111.347	205,073	150,181	7747	(3)	
Wisconsin (2)	43,246	6,800	38,944	8,787	_	. (3)	
Other (2)	20,041		53,894	20,039		(3)	
Other (2)	20,041	9,185	53,694	20,039	<del></del>	(3)	
Grand Total	6,030,634	2,762,823	6,895,726	3,114,713	1987	6,895,726	

<sup>(1)</sup> 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).

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 unloaded onto foreign vessels within the U.S. EEZ (joint venture). Therefore, they will not agree with "U.S. Commercial Landings" table on page 6. Data do not include aquaculture products, except oysters and clams.

U.S. COMMERCIAL LANDINGS, BY REGIONS, 1986 AND 1987 (PRELIMINARY)

Region	198	86	1987		
	Thousand	Thousand	Thousand	Thousand	
	pounds	dollars	pounds	dollars	
New England	554,658	448,592	545,147	512,459	
	155,942	113,616	162,797	128,049	
Chesapeake	617,070	130,860	791,253	159,653	
	248,634	154,681	235,091	150,361	
Gulf	2,367,870	781,235	2,500,563	719,835	
and Alaska	1,922,989	1,065,372	2,492,828	1,360,398	
	48,169	13,757	41,788	16,940	
Hawaii	10,590	20,082	16,088	29,056	
	104,712	34,628	110,171	37,962	
Total	6,030,634	2,762,823	6,895,726	3,114,713	

<sup>(1)</sup> 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).

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 unloaded onto foreign vessels within the U.S. EEZ (joint venture). Therefore, they will not agree with "U.S. Commercial Landings" table on page 6. Data do not include aquaculture products, except oysters and clams.

<sup>(2)</sup> Estimated State landings from the Mississippi River and its tributaries are included in "other."

<sup>(3)</sup> Not available.

COMMERCIAL FISHERY LANDINGS AND VALUE AT MAJOR U.S. PORTS, 1986-87

		Quantity	?			Value	
Port .	1985	1986	1987	Port	1985	1986	1987
Cameron, LA	673.6	616.8	672.4	New Bedford, MA	103.2	106.0	*143.7
Pascagoula-Moss Point, MS	423.2	365.5	391.6	Kodiak, AK	65.8	89.8	132.1
Empire-Venice, LA	224.5	317.6	357.4	Dulac-Chauvin, LA	59.9	71.0	65.6
Dulac-Chauvin, LA	398.6	294.6	331.7	Dutch Harbor-Unalaska, AK	21.3	37.2	62.7
Intercoastal City, LA	(1)	298.9	314.3	Empire-Venice, LA	34.3	47.1	60.1
Kodiak, AK	96.1	141.2	204.1	Los Angeles, CA	32.5	29.5	55.6
Los Angeles, CA	150.3	187.4	203.1	Brownsville-Port Isabel, TX.	49.6	69.3	54.2
Dutch Harbor-Unalaska, AK	106.3	88.3	128.2	Hampton Roads Areas, VA	22.5	23.6	46.2
Gloucester, MA	116.5	110.0	93.0	Cordova, AK	(1)	(1)	41.9
Beaufort-Morehead City, NC	133.2	98.9	85.7	Petersburg, AK	(1)	38.1	36.9
New Bedford, MA	90.6	65.8	78.7	Golden Meadow-Leeville, LA	23.5	40.0	36.6
Cordova, AK	(1)	(1)	69.6	Aransas Pass-			
Cape May-Wildwood, NJ	30.3	36.6	56.8	Rockport, TX	43.0	60.3	36.4
Bellingham, WA	38.8	45.9	47.5	Portland, ME	17.2	22.4	35.8
Astoria, OR	25.5	36.8	46.6	Gloucester, MA	37.1	37.8	34.0
Point Judith, RI	56.8	52.1	46.6	Sitka, AK	(1)	21.8	33.6
Portland, ME	36.1	34.9	43.8	Cameron, LA	29.9	34.8	31.9
Petersburg, AK	(1)	85.2	42.4	Cape May-Wildwood, NJ	18.1	20.9	30.5 29.5
Port Hueneme-Oxnard-	19.9	21 0	12 2	Bayou La Batre, AL	30.4	43.3	27.4
Ventura, CA	58.6	31.0 43.4	42.3 38.7	Point Judith, RI	28.0 16.6	28.5 28.8	27.4
ROCKIANO, ME	30.0	43.4	30.7	Bellingham, wa	10.0	20.0	41.4
Biloxi, MS	41.1	46.7	38.2	Astoria, OR	9.5	16.4	24.6
Newport, OR	29.4	26.7	35.9	Freeport, TX	17.2	26.7	23.6
Coos Bay-Charleston, OR	25.6	24.3	29.6	Port Arthur, TX	22.6	29.9	22.9
Hampton Roads Area, VA	24.4	24.8	29.6	Ketchikan, AK	(1)	20.6	22.8
Eureka, CA	28.5	19.4	28.5	Beaufort-Morehead City, NC	22.7	24.7	22.7
Wanchese-Stumpy Point, NC	22.7	27.2	28.3	Key West, FL	23.3	27.4	22.4
Ketchikan, AK	(1)	42.2	27.6	Delcambre, LA	12.7	28.4	22.1
Golden Meadow-Leeville, LA	18.2	25.1	27.4	Newport, OR	12.8	13.5	21.9
Sitka, AK	(1)	25.2	27.1	Seattle, WA	18.7	21.8	21.9
San Francisco Area, CA	31.0	25.9	27.0	Cape Canaveral, FL	21.2	15.9	21.7
Morgan City-Berwick, LA	7.7	17.4	27.0	Pascagoula-Moss Point, MS	18.4	20.4	20.3
Westport, WA	12.8	22.9	26.2	Lafitte-Barataria, LA	29.0	24.1	19.2
Fort Bragg, CA	16.0	17.8	25.9	Coos Bay-Charleston, OR	10.4	11.9	19.1
Atlantic City, NJ	21.9	22.0	24.9	Boston, MA	12.1	19.1	16.9
Everett, WA	12.5	12.8	23.5	Montauk, NY	8.9	12.8	15.9
Crescent City, CA	19.8	20.9	23.1	Westport, WA	9.8	11.3	15.8
Boston, MA	19.8	31.4	23.0	Blaine, WA	12.3	11.1	15.2
Ocean City, MD	24.5	29.1	22.5	Biloxi, MS	13.4	15.2	14.2
Seattle, WA	42.2 7.0	38.2	22.2	Wanchese-Stumpy Point, NC	13.3	12.3	13.9
Ilwaco-Chinook, WA	7.0	18.3	18.8	Apalachicola,, FL	12.4	12.4	13.8
Blaine, WA	18.7	14.3	17.9	Intercoastal City, LA	(1)	11.3	13.4
Monterey, CA	18.2	16.4	16.1	Bodega Bay, CA	5.4	6.1	13.4
Bayou La Batre, AL	21.0	25.6	15.1	Ilwaco-Chinook, WA	2.7	9.1	13.1
Montauk, NY	8.4	11.0	14.7	Delacroix-Yscloskey, LA	10.6	12.5	13.1
Cape Canaveral, FL	20.3	8.1	14.6	Bon Secour-Gulf Shores, AL	10.2	13.5	13.0
Delcambre, LA	7.7	18.7	13.9	Grand Isle, LA	12.4	11.9	12.6
Brownsville-Port Isabel, TX.	22.9	25.5	13.4	Eureka, CA	10.7	8.3 11.1	12.6 12.5
Bodega Bay, CA	6.9	8.5	12.9	San Francisco Area, CA	12.5		
Lafitte-Barataria, LA	20.6	16.8	12.7	Fort Bragg, CA	7.8	8.5	12.5
Delacroix-Yscloskey, LA	11.0	16.3	12.5	Newport, RI	13.7	12.8	12.4

<sup>(1)</sup> Not available. \*Record. Record quantity was 848.2 million 1b landed in Los Angeles, California in 1960.

NOTE: -- To avoid disclosure of private enterprise certain leading ports have not been included.

# COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1987 (1)

		Distance Caught C	ff U.S. shores	Internations (Includes of		Total		
. '	0 to 3 i	miles (2)	3 to 20	00 miles	foreign			· 41
Fish	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand
	pounds	dollars	pounds	dollars	pounds	<u>dollars</u>	pounds	dollars
Alewives:								4
Atlantic and Gulf.	6,042	611	151	5	<del>-</del>	_	6,193	616
Great Lakes	14,396	1,052	_	-	-	=	14,396	1,052
Anchovies	1,439	323	11,418	2,383	=	=	12,857	2,706
Bluefish	10,606	2,265	4,620	989	-	_	15,226	3,254
Bonito	107	43	11,313	2,464	-	-	11,420	2,507
Butterfish	619	310	9,696	6,186	-	-	10,315	6,496
Cod:								
Atlantic	1,296	1,004	57,258	42,801	546	374	59,100	44,179
Pacific	25,432	4,664	276,399	42,113	-	-	301,831	46,777
Croaker	9,652	3,832	1,392	564	-	_	11,044	4,396
Cusk	21	8	3,005	1,620	38	21	3,064	1,649
Flounders:					==== <b>===</b> =============================			<b>:====</b>
Atlantic and Gulf:								,
Blackback	3,176	3,031	16,090	19,871	44	46	19,310	22,948
Fluke	8,832	11,944	21,439	29,839	_	-	30,271	41,783
Yellowtail	670	895	12,618	17,234	3,379	2,681	16,667	20,810
Other	2,003	1,654	21,825	26,019	3,594	2,679	27,422	30,352
Pacific	46,251	7,372	554,171	55,087	-	<del></del>	600,422	62,459
Total	60,932	24,896	626,143	148,050	7,017	5,406	694,092	178,352
Groupers	166	290	9,328	15,768	<u></u>	<u>-</u>	9,494	16,058
Haddock	6	10	6,628	8,456	39	56	6,673	8,522
Hake:								
Pacific (whiting).	27,853	1,228	478,293	23,978	-	-	506,146	25,206
Red	153	27	4,275	839	<del>'-</del>	-	4,428	. 866
White	28	10	13,273	5,364	184	92	13,485	5,466
Halibut	27,187	30,743	48,912	57,490	8	21	76,107	88,254
Herring, sea:								
Atlantic	42,782	2,390	41,754	1,978	-	-	84,536	4,368
Pacific	122,598	47,916	-	•	-	-	122,598	47,916
Jack mackerel	_	-	26,671	1,831	· <del>-</del>	-	26,671	1,831
Lingcod	579	204	6,448	2,399	-	-	7,027	2,603
Atlantic	1.158	216	26.438	1.907	_	_	27,596	2,123
King	719	848	3,858	4.133	_	_	4,577	4,981
Pacific	3	(3)	93,752	6,433	_	_	93,755	6,433
Spanish	2,258	696	4.580	1.553	_	-	6,838	2.249

See footnotes at end of table.

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1987 (1)—continued

		Distance caught	off U.S. shores		Internations (Includes of		To	tal
-	0 to 3	miles (2)	3 to 20	00 miles	foreign		1	rei
Fish	Thousand pounds	Thousand dollars	<u>Thousand</u> <u>pounds</u>	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Menhaden								
Atlantic	710,310	33,864	2,144	37	-	-	712,454	33,901
Gulf	1,374,314	48,879	625,517	21,645	<u> </u>	-	1,999,831	70,524
Total	2,084,624	82,743	627,661	21,682		_	2,712,285	104,425
Mullet	30,124	8,224	1	. (3)	<u>-</u>	-	30,125	8,224
Ocean perch:	3	2	4 007	0.000	100	74	4 000	2 700
Atlantic	•	_	4,097	2,636	102	71	4,202	2,709
Pacific	8,046	1,470	13,162	3,181		-	21,208	4,651
Pollock:	100	F4	45 000	4 11 1140	230	416	45 645	17 016
Atlantic	129	51	45,286	17,749	230	116	45,645	17,916
Alaska	82,766	6,870	2,800,238	173,281	-	-	2,883,004	180,151
Rockfishes	15,108	4,028	103,478	34,225	-	-	118,586	38,253
Sablefish	11,045	6,520	91,924	51,62 <b>4</b>		-	102,969	58,144
Salmon, Pacific:							- <b></b>	
Chinook or king	27,297	51,446	12,641	28,622	-	-	39,938	80,068
Chum or keta	86,319	43,800	1	1	-		86,320	43,801
Pink	169,264	56,424	44	35	-	-	169,308	56,459
Red or sockeye	227,411	359,767	_	-			227,411	359,767
Silver or coho	34,677	48,713	4,364	7,568	-	_	39,041	56,281
Total	544,968	560,150	17,050	36,226	-	_	562,018	596,376
Scup or porgy Sea bass:	4,035	2,603	10,260	7,207	<del>-</del>	<del>.</del> .	14,295	9,810
Black	601	892	4.366	4.202	_	_	4.967	5,094
	51	98	4,366	125		_	116	223
White	21	70	03	123	_	-	110	243
	11 054	5.525	5,973	1.974	_		17.927	7.499
Gray	11,954	3,178	- •	3	_	_	3,395	3,181
Spotted	3,391		4 227	82	-	-	3,395 549	234
White	322	152	221	82	-	-	343	434
Sharks:	0 (22	1 004	4 524	260			14 167	1 673
Dogfish	9,633	1,204	4,534	369	29	34	14,167	1,573
Other	888	501	6,748	4,803	29	34	7,665	5,338
Snapper:	60	105	2 (77	0.496			2 727	0 661
Red	60	185	3,677	8,476	-	_	3,737	8,661
Other	602	1,200	4,569	8,834	-	_	5,171	10,034
Striped bass	407	450	24	35	0.000	7 500	431	485
Swordfish	8	27	7,455	27,364	2,298	7,583	9,761	34,974
Tilefish	-	-	7,950	8,852	-	-	7,950	8,852

See footnotes at end of table.

# COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1987 (1)—continued

		Distance caught	off U.S. shores		Internationa (Includes of		To	tal
	0 to 3	miles (2)	3 to 20	00 miles	foreign (	coasts)		
Fish	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Tuna:	_	_	4 545			2 405	0.500	
Albacore	3	1	4,795	3,932	4,735	3,405	9,533	7,338
Bigeye	8	20	2,910	8,646	527	848	3,445	9,514
Bluefin	1	3	2,575	13,944	1,756	2,516	4,332	16,463
Skipjack	-	-	4,226	3,882	225,962	85,140	230,188	89,022
Yellowfin	490	637	16,884	28,015	360,170	169,437	377,544	198,089
Unclassified	146	21	762	518	294	467	.1,202	1,006
Total	648	682	32,152	58,937	593,444	261,813	626,244	321,432
Whiting Other marine	1,006	342	33,678	11,242	-	_	34,684	11,584
finfishes Other freshwater	147,040	40,828	157,519	34,629	324	145	304,883	75,602
finfishes	117,880	45,838	-	-			117,880	45,838
Total fish	3,431,371	897,349 **********	5,747,703	897,042	. 604,259	275,732	9,783,333	2,070,123
<u>Shellfish</u> et al. Clams:								
Hard	11,418	49,593	-		_	-	11,418	49,593
Ocean quahog	1,254	2,420	49,001	14,156	_	-	50,255	16,576
Soft	7,466	19,761	3	9	_	-	7,469	19,770
Surf	11,918	5,001	48,826	22,992	-	_	60.744	27,993
Other	4,471	18,929	-	-	-	-	4,471	18,929
Total	36,527	95,704	97,830	37,157		_	134,357	132,861
Crabs:								
Blue, hard	197,784	70,763	42	13	•	-	197,826	70,776
Dungeness	22,364	29,110	7,096	9,382	-	-	29,460	38,492
King	635	2,058	28,430	96,871	-	-	29,065	98,929
Snow (tanner)	8,114	17,363	105,698	81,321	-	-	113,812	98,684
Other	5,968	4,021	10,187	10,955	50	18	16,205	14,994
Total	234,865	123,315	151,453	198,542	50	18	386,368	321,875

See footnotes at end of table.

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1987 (1) - continued

		Distance caught o	off U.S. shores		Internation: (Includes of		To	tal
	0 to 3	miles (2)	3 to 2	00 miles	foreign			cui
Shellfish et al.	Thousand,	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Lobsters:			<u></u>		,		<del></del>	<u></u>
American	38,133	107,543	7,351	25,683	74	328	45,558	133,554
Spiny	1,386	5,390	4,369	15,927	-	_	5,755	21,317
Oysters	39,807	92,423	-	-			39,807	92,423
Bay	580	3,159		_			580	3,159
Calico	_	<b>.</b>	8,155	8,889	· -	-	8,155	8,889
Sea	1,403	5,941	30,635	126,322	-	-	32,038	132,263
Shrimp:		.==========						
New England	1,581	1,754	9,500	10,404	_	· 🕳	11,081	12,158
South Atlantic	16,571	35,315	6,334	11,081	-	-	22,905	46,396
Gulf	148,242	221,381	108,906	247,900	-	_	257,148	469,281
Pacific Coast	8,777	6,435	63,231	43,812	_	-	72,008	50,247
Other	_	· -	(3)	2	<b>-</b>	-	(3)	2
Total	175,171	264,885	187,971	313,199		-	363,142	578,084
Squid:								
Atlantic	6,748	2,585	41,247	11,285	-	_	47,995	13,870
Pacific	9	4	43,157	4,296	-	-	43,166	4,300
Other shellfish	93,938	53,667	1,862	2,283	-	-	95,800	55,950
Total shell- fish et al	628.567	754.616	574,030	743,583	124	346	1.202.721	1,498,545
IIBH EC AL	020,30/ ====================================	/J4,010	5/4,VJU	/43,383 EEEEE3X2XXXXXXXXX	144 	340 	1,2V2,721 19222222222	1,470,543 Harrenana
Grand Total	4,059,938	1,651,965	6,321,733	1,640,625	604,383	276,078	10,986,054	3,568,668
" ====================================	.=======	=======================================	. 22005020222222			:::::::::::::::::::::::::::::::::::::::	:=========	=======================================
Grand Total 1986 (4)	3,496,893	1,449,431	5,351,481	1,432,616	543,307	207,882	9,391,681	3,089,929

<sup>(1)</sup> 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 for Texas landings data collected by Texas Parks and Wildlife Department.

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 unloaded onto foreign vessels within the U.S. EEZ (joint ventures.) Therefore, they will not agree with "U.S. Commercial Landings" table beginning on page one. Data do not include aquaculture products, except oysters and clams.

<sup>(2)</sup> Includes landings from the Great Lakes and other inland waters.

<sup>(3)</sup> Less than 500 pounds or \$500.

<sup>(4)</sup> For individual species breakout see "Fisheries of the U.S., 1986" pages 8-11.

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1987 (1)

	·	Distance caught o	ff U.S. shores		Internation: (Includes		То	tal
	0 to 3 r	niles (2)	3 to :	200 miles	foreign	coasts)		
Fish	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
Alewives:								
Atlantic and Gulf.	2,741	611	68	5	_	-	2,809	616
Great Lakes	6,530	1.052	<u>-</u>	_	-	_	6,530	1.05
Anchovies	653	323	5,179	2,383	_	_	5,832	2,70
Bluefish	4,811	2,265	2,095	989	_	-	6,906	3,254
Bonito	49	43	5,131	2,454		-	5,180	2,50
Butterfish	281	310	4,398	6,186	_	_	4,679	6,496
Cod:	201	310	4,570	0,100			4,013	0,430
Atlantic	588	1.004	25,971 <sup>.</sup>	42,801	248	374	26.807	44.179
Pacific	11,536	4.664	125,372	42,113	240	214		46,777
				564	_	-	136,908	•
Croaker	4,378	3,832	631		47	. <del>.</del>	5,009	4,396
Cusk	10	8 	1,363	1,620	17	21	1,390	1,649
Flounders:				k.				
Atlantic and Gulf:								
Blackback	1,441	3,031	7,298	19,871	44	46	19,310	22,948
Fluke	4.006	11,944	9,725	29,839	_	-	30,271	41,783
Yellowtail	304	895	5,723	17,234	3,379	2,681	16,667	20,810
Other	909	1,654	9,899	26,019	3,594	2,679	27,422	30,352
Pacific	20,979	7,372	251,368	55,087	-	· -	600,422	62,459
Total	27,639	24,896	284,013	148,050	3,183	5,406	314,835	178,352
Groupers	75	290	4,231	15,768	<del>-</del>	-	4,306	16,058
Haddock	3	10	3,006	8,456	18	56	3,027	8,522
Hake:								
Pacific (whiting).	12,634	1,228	216,950	23,978	-	-	229,584	25,206
Red	69	27	1,940	839	-	-	2,009	866
White	13	10	6,021	5,364	83	92	6,117	5,466
Halibut	12,332	30,743	22,186	57,490	4	21	34,522	88,254
Herring, sea:								
Atlantic	19,406	2,390	18,939 -	1,978	_	_	38,345	4,368
Pacific	55,609	47,916	· · · · · · · · ·	-	<del>-</del>	_	55,609	47,916
Jack mackerel	_		12,098	1,831		. <del>-</del>	12,098	1,831
Lingcod	263	204	2,924	2,399	_	-	3,187	2,603
Mackerel:			-•	• •				•
Atlantic	525	216	11,992	1,907	-	_	12,517	2,123
King	326	848	1.750	4,133	-		2,076	4,981
Pacific	1	(3)	42,526	6,433	_	-	42,527	6,433
Spanish	$1.02\hat{4}$	696	2,078	1,553	-	_	3.102	2.249
Spanish	1,024	676 ===================================	2,018 ====================================	1,555		_ :=:::::::::::::::::::::::::::::::::::	3,102 ====================================	2, ========

See footnotes at end of table.

# COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1987 (1) - continued

	A 4 - 2 -				(Includes of	untak aff	Total	
	0 10 3 1	iles (2)	3 to 2	200 miles	foreign o		10	Lai
Fish	<u>Ketric</u> tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
Menhaden		. •						
Atlantic	322,191	33,864	972	37	-	•	323,163	33,901
Gulf	623,378	48,879	283,729	21,645		_	907,107	70,524
Total	945,569	82,743	284,701	21,682	<del>-</del>	-	1,230,270	104,425
Mullet	13,664	8,224	<del> </del>	-	-	<u> </u>	13,664	8,224
Atlantic	1	2	1,859	2,636	46	71	1,906	2,709
Pacific	3,650	1,470	5,970	3,181	-	_	9,620	4,651
Pollock:	-	•	·	•			•	-
Atlantic	59	51	20,541	17,749	104	116	20,704	17,916
Alaska	37,542	6.870	1,270,166	173,281	_	_	1,307,708	180,151
Rockfishes	6,853	4,028	46,937	34,225	-	-	53,790	38,253
Sablefish	5,010	6,520	41,696	51,624	-	-	46,706	58,144
Salmon, Pacific:					·			
Chinook or king	12,382	51,446	5,734	28,622	-	-	18,116	80,068
Chum or keta	39,154	43,800	(3)	1	-	` -	39,154	43,801
Pink	76,777	56,424	20	35	-	-	76,797	56,459
Red or sockeye	103,152	359,767	-	-	-	-	103,152	359,767
Silver or coho	15,729	48,713	1,980	7,568	<u>-</u>	_	17,709	56,281
Total	247,194	560,150	7,734	36,226	_	-	254,928	596,376
Scup or porgy	1,830	2,603	4,654	7,207	-	-	6,484	9,810
Sea' bass:	273	892	1.980	4.202	_	_	2.253	5 004
Black	273	892 98		• -	<b>-</b>	<del>-</del>	2,253	5,094
White	23	78	30	125	-	-	. 53	223
Gray	5,422	5,525	2,710	1,974	-	-	8,132	7,499
Spotted	1,538	3,178	2	3	-	-	1,540	3,181
White	146	152	103	82		-	249	234
Sharks:								
Dogfish	4,369	1,204	2,057	369	_	· <b>-</b>	6,426	1,573
Other	403	501	3,061	4,803	13	34	3,477	5,338
Red	. 27	185	1.668	8.476	_	-	1.695	8,661
Other	273	1,200	2,073	8,834	-	_	2,346	10,034
Striped bass	. 185	450	. 10	35	· <u>-</u>	· _	195	485
Swordfish	1	27	3,382	27,364	1.042	7,583	4,428	34,974
Tilefish	•	· <u></u>	3,606	8,852	-		3,606	8,852

See footnotes at end of table.

# COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1987 (1) - continued

		Distance caught	off U.S. shores		Internationa (Includes o		To	tal <sup>t</sup>
	0 to 3 m	ailes (2)	3 to 2	00 miles	foreign		1	
<u>Fish</u>	Metric tons	Thousand . dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
funa:	COHS	dollars	<u>tons</u>	dollars	cons	dollars	20113	dollar.
Albacore	1	1	2,175	3,932	2,148	3,405	4,324	7,33
Bigeye	4	20	1.320	8,646	239	848	1,563	9,51
Bluefin.	(3)	3	1.168	13,944	797	2,516	1.965	16.46
Skipjack	-	-	1,916	3,882	102,495	85,140	104,411	89,02
Yellowfin	222	637	7.659	28.015	163,370	169,437	171.251	198.08
Unclassified	66	. 21	346	518	133	467	545	1,00
Total	293	682	14,584	58,937	269,182	261,813	284,059	321,43
hiting	456	342	15,276	11,242	~	_	15,732	11,584
finfishes ther freshwater	66,696	40,828	71,449	34,629	147	145	138,292	75,602
finfishes	53,469	45,838	<del>-</del> :	<u></u>		<del>-</del>	53,469	45,83
otal fish	1,556,445	897,349	2,607,111	897,042	274,087	275,732	4,437,643	2,070,123
Shellfish et al.			,	=======================================				
lams:								40.50
Hard	5,179	49,593	-	44.45-		•	5,179	49,59
Ocean quahog	569	2,420	22,226	14,156	-	-	22,795	16,57
Soft	3,387	19,761	00.447		•	-	3,388	19,77
Surf	5,406	5,001	22,147	22,992	-	-	27,553	27,99
Other	2,028	18,929					2,028	18,92
Total	16,569	95,704	44,374	37,157	<u> </u>		60,943	132,86
rabs:								· ,
Blue, hard	89,713	70,763	19	13	-	-	89,732	70,77
Dungeness	10,144	29,110	3,219	9,382	-	-	13,363	38,49
King	288	2,058	12,896	96,871	-	, <b>-</b>	13,184	98,92
Snow (tanner)	3,680	17,363	47,944	81,321	-	· <b>-</b>	51,624	98,68
Other	2,707	4,021	4,620	10,955	23	18	7,350	14.99
.Total	106,532	123,315	68,698	198,542	23	18	175,253	321,87

See footnotes at end of table.

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1987 (1) - continued

Metric tons	Thousand dollars	3 to	200 miles		(Includes of foreign of		10	tal
tons		Wetric			rororan -	Ounca,		
47 207		tons	Thousand dollars		Metric tons	Thousand dollars	<u>Ketric</u> tons	Thousand dollars
47 207								
17,297	107,543	3,334	25,683		34	328	20,665	133,554
629	5,390	1,981	15,927	,	-	•	2,610	21,317
18,056	92,423	<del>-</del>	_			· <del>-</del>	18,056	92,423
263	3.159	_	_		<b></b>	· _	263	3,159
	-	3,699	8.889		_	· <u> </u>		8.889
636	5,941	13,896	126,322		<del>-</del> -	-	14,532	132,263
	************		*******		************	¥7: 222222222		========
717	1,754	4,309	10,404		_	· · · ·	5,026	12,158
7,516	35,315	2,874	11.081		<b>-</b> ·	-	10,390	46,396
67,241	221,381	49,399	247,900	*	· -	•	116,640	469,281
3,981	6,435	28,681	43,812		-	. <b>-</b>	32,662	50,247
	<b>-</b> ·	(3)	2			·	(3)	2
79,455	264,885	85,263	313,199		-	<u>-</u>	164,718	578,084
2222222	************		**************************************					
3,061	2,585	18,709	11,285		<del>-</del> ,	<b>-</b> ·	21,770	13,870
- 4	. 4			,	· -	• -		4,300
42,610	53,667	844	2,283		· -		43,454	55,950
285,112	754,616	260,374	743,583		57	346	545,543	1,498,545
,841,557	1,651,965	2,867, <b>4</b> 85	1,640,625	********	274,144	276,078	4,983,186	3,568,668
.,586,180	1,449,431	2,427,415	1,432,616		246,442	207,882	4,260,039	3,089,929
	717 7,516 67,241 3,981 	717 1,754 7,516 35,315 67,241 221,381 3,981 6,435  79,455 264,885  3,061 2,585 4 4 42,610 53,667  285,112 754,616	3,699 636 5,941 13,896  717 1,754 4,309 7,516 35,315 2,874 67,241 221,381 49,399 3,981 6,435 28,681 - (3)  79,455 264,885 85,263  3,061 2,585 4 18,709 4 24,610 53,667 844  285,112 754,616 260,374	3,699       8,889         636       5,941       13,896       126,322         717       1,754       4,309       10,404         7,516       35,315       2,874       11,081         67,241       221,381       49,399       247,900         3,981       6,435       28,681       43,812         -       -       (3)       2         79,455       264,885       85,263       313,199         3,061       2,585       18,709       11,285         4       4       19,576       4,296         42,610       53,667       844       2,283         285,112       754,616       260,374       743,583         ,841,557       1,651,965       2,867,485       1,640,625	3,699 8,889 636 5,941 13,896 126,322  717 1,754 4,309 10,404 7,516 35,315 2,874 11,081 67,241 221,381 49,399 247,900 3,981 6,435 28,681 43,812 - (3) 2  79,455 264,885 85,263 313,199  3,061 2,585 18,709 11,285 4 4 19,576 4,296 42,610 53,667 844 2,283  285,112 754,616 260,374 743,583	3,699 8,889 - 636 5,941 13,896 126,322 -  717 1,754 4,309 10,404 - 7,516 35,315 2,874 11,081 - 67,241 221,381 49,399 247,900 - 3,981 6,435 28,681 43,812 - 79,455 264,885 85,263 313,199 -  79,455 264,885 85,263 313,199 -  3,061 2,585 18,709 11,285 - 4 4 19,576 4,296 - 42,610 53,667 844 2,283 -  285,112 754,616 260,374 743,583 57	3,699 8,889	3,699       8,889       -       -       3,699         636       5,941       13,896       126,322       -       -       14,532         717       1,754       4,309       10,404       -       -       5,026         7,516       35,315       2,874       11,081       -       -       10,390         67,241       221,381       49,399       247,900       -       -       116,640         3,981       6,435       28,681       43,812       -       -       32,662         -       -       (3)       2       -       -       (3)         79,455       264,885       85,263       313,199       -       -       164,718         3,061       2,585       18,709       11,285       -       -       21,770         4       4       19,576       4,296       -       -       19,580         42,610       53,667       844       2,283       -       -       43,454         285,112       754,616       260,374       743,583       57       346       545,543         841,557       1,651,965       2,867,485       1,640,625       274,144       276,078 <td< td=""></td<>

<sup>(1)</sup> 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 for Texas landings data collected by Texas Parks and Wildlife Department.

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 unloaded onto foreign vessels within the U.S. EEZ (joint ventures.) Therefore, they will not agree with "U.S. Commercial Landings" table beginning on page one. Data do not include aquaculture products, except oysters and clams.

<sup>(2)</sup> Includes landings from the Great Lakes and other inland waters.

<sup>(3)</sup> Less than 500 pounds (0.23 metric tons) or \$500. One metric ton equals 2,204.6 lbs.

<sup>(4)</sup> For individual species breakout see "Fisheries of the U.S., 1986" pages 8-11.

HISTORICAL LANDINGS OF SHRIMP, BY REGIONS, 1880 - 1987

YEAR	NEW ENG	GLAND	MIDDLE A	PLANTIC	CHESA	PEAKE	SOUTH A	PLANTIC
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS
1880	-	_	-	_	-	_	821	50
1887	. 1	(1) (1)	1	(1) (1)	8	4 4	(1)	(1) (1)
1889	2	1	- 1	(= /	- "	- 7	743	33
1890		_	į	1	8 8	. 4	744	33
1891 1892	Ξ	_	1	i	- °	- *	Ξ	-
1895		-		- 2	- ,	- ,	- 627	- 28
1897	_	-	3	1	- 1	- 1	- 627	_ 20
1899	· . =	-		- 2		- ,	-	-
1901	- 7	- 2	- *		- 4	_ 1	3,811	- 87
1904		·	5	1	2	1	<u> -</u>	-
1905	2 6	(1)	- 7	- 2	=	· · ·	5,697	138
1915		- "	- '		-	· -	_	· -
1916 1917	<del>-</del> .	<u>-</u>	=	<u>-</u> .	_	_	<u>-</u>	. =
1918	-		<b>-</b> .	-	-	<del>-</del>	15,656	470
1919 1920	3	2	. <del>-</del>	<del>-</del>	Ē	. <u>-</u>	. <del>-</del>	-
1921	=	Ξ	108		_	=	<u>-</u>	<del>-</del>
1922	-	<del>-</del>	_	-	-	-	- 23,705	822
1923	- 5	- 3	=		_	-	23,705	-622
1925	-	-		- ,	1	(1)	-	-
1926 1927	-	-	_ 42	- 4	_	_	29,992	1,174
1928	1	1	<b></b>	. <b>-</b>	_	-	33,309	1,358
1929 1930	3 5	2	554 341	32 28	_	_	30,829 26,205	1,449 979
1931	. i	i	340	49	_	_	25,494	914
1932	(1) 41	(1) 2.	117 86	27 15	(1)	(1)	22,463	636
1933	- 41		_	- 13	(1)	(1)	25,961	789
1935	_	-	194	13		-	22 567	1 000
1936 1937	- 7	(1)	. –	16	- 2	(1)	33,567 27,436	1,022 828
1938	105	8	125	· 21	8	1	27,565	821
1939 1940	52 10	(1)	50 161	52 52	_	<del>-</del>	27,685 22,702	857 754
1941,	-	(=/	-	-	-	-		
1942 1943	111 295	14	_ 25	_ 2	=	<del>-</del>	=	-
1944	462	21	-	_	(1)	(1)	-	-
1945	582 166	29 9	-	<del>-</del>	-	<del>-</del>	43,581	3,984
1946	194	11	91	45	_	_	=	-
1948	27	3.	100	50	- (1)	(2)	-	-
1949 1950	10 7	1	90 100	. 45 50	(1)	(1)	36,481	10,032
1951	58	10	86	48	<b>-</b>	<b>-</b>	27,771	7,382
1952 1953	· 104 38	. 18 7	90 86	49 52			25,671 32,933	6,585 9,931
1954	_	-	18	18	-		28,646	6,883
1955 1956	=	<u>-</u>	13 18	13 19	- -	-	28,539 25,518	6,939 7,806
1957	-	-	26	26	2	1	28,509	9,150
1958	5 17	2 5	9 4	8 4	-	<u>-</u>	22,584 26,006	7,958 6,571
1959 1960	90	20	5	5	_	<u> </u>	31,214	8,512
1961	68	14	6	6	_	<u> </u>	19,749	6,939 11,275
1962 1963	388 561	57 . 67	7 7	. 7	=		26,078 15,529	5,246
1964	932	113	2	. 2	-	-	17,341	6,633
1965 1966	2,093 3,894	245 550	- 6	- 6	_	<del>-</del> -	26,191 21,475	10,160 10,814
1967	6,991	872	-	-	-	-	20,598	9,010
1968	14,572 28,272	1,612 3,478	-	_	_	-	24,285 27,306	13,996 16,186
1970	23,522	4,697	-	-	-	_	20,609	11,388

(CONTINUED ON NEXT PAGE)

SOUTH ATLANTIC

HISTORICAL LANDINGS OF SHRIMP, BY REGIONS, 1880 - 1987 - Continued

CHESAPEAKE

MIDDLE ATLANTIC

NEW ENGLAND

YEAR

1EAK	HOW ENGLAND	<b>-</b> \ _ \	MILODOS AL		CHOOME	'AKD	SCOIN AL	MANITO
-		OUSAND OLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS
	<u> 100000</u>		-0000	POULL	10000		<u> 2 0 0 11 10 10 10 10 10 10 10 10 10 10 10</u>	DODUMA
1971	24,536	4,653	_	_	_	_	31,200	20,919
1972	24,460	4,587	1	(1)	-	_	25,248	18,469
1973	20,734	5,657	5	. 3	<b>-</b> .	-	24,557	26,630
1974	17,515	5,577	-	-	-	-	27,091	18,338
1975	11,655	3,063	_	-	-	_	24,926	30,308
1976	2,254	764	-		-	-	26,108	34,905
1977	840	458	_	-	-	-	18,021	24,347
1978	7	1	_	-	-	-	20.138	30,878
1979	1,072	338	-	-	(1)	1	32,295	65,273
1980	731	477	-	-	-	-	32,996	57,399
1981	2,271	1,438	_	_	-	-	16,514	32,469
1982	3,383	2,010	_	_	. <b>-</b>	_	25,580	59,942
1983	3,469	2,312	`-	-	-	-	26,615	69,755
1984	7,114	3,475	-	-	-	-	19,179	33,996
1985	9,247	4,045	_	<b>-</b>	. 7	27	27,970	54,420
1986	10,328	6,520	-	-	-	-	23,120	59,513
1987	11,081	12,158	-	-	(1)	2	22,905	46,396
YEAR		GULF	T	P	ACIFIC		TOTĀI	
<del></del>	MUOHOLNE	mnOt	CAND	THOUSAND	ΨΩΛ11C3 VI	<u> </u>	OUSAND	THOUSAND
	THOUSAND POUNDS		SAND LARS	POUNDS	THOUSANI DOLLARS		OUNDS	DOLLARS
1880	(1)		(1)	_			821	50
1887	(1)		(1)	_			10	4
1888	(1).		(1)	4,907	(1)		4,917	4
1889	8,304		122	4,507	(1)		9,049	156
1890	7,452		110	_	_		8,205	148
1891	,,,,,,,,		_	_			9	5
1892			_	5,315	(1)		5,316	ī
1895	_		-	5,461	`-íe	55	5,461	165
1897	6,792		118	-			7,423	149
1898			_	-			3	1
1899	_		_	6,535	13	13	6,535	113
1901	_		-	-,	-		8	3
1902	12,367		199	_	-		16,185	288
1904	, <u> </u>			3,436	9	98	3,443	100
1905			-	<u>-</u>	_		2	(1)
1908	12,561		270	505	:	53	18,776	464
1915	<del>-</del>		-	(2) 684		25 (2	2) 684	25
1916	-		-	(3) 164	(4)	(3		(4)
1917	-		-	(3) 114	(4)		3) 114	(4)
1918	46,918		1,276	(5) 1,083	(4)		6)63,657	1,746
1919	-		_	(5) 1,188	(4)		3) 1,191	2
1920	_			(5) 1,518	(4)		1,518	(4)
1921	<b>-</b>		-	(5) 3,066	(4)	· (5	3,174	29
1922	<b>-</b>		-	3,154	(4)		3,154	(4)
1923	47,117		1,771	4,026	(4)		74,848	2,593
1924	-		-	4,892	(4)		4,897	(1) (4)
1925	-		-	4,743	(4)	•	4,744	(1) (4)
1926			2-244	4,547	. (4)		4,589	2 510
1927	68,877		2,344	4,810	(4)		103,679	3,518
1928	82,170.		3,092	5,469	(4)	0.1	120,949	4,551 4,560
1929	77,721		2,986	6,216		91	115,323	4,50U 5 110
1930	61,913		2,017	5,983		91 67	94,447	3,119 2,848
1931	70,956		1,817	4,620		67 67	101,411	
1932	65,800		1,400	4,605		67 55	92,985	2,130 72
1933	00 357		2 220	4,127			4,254 123 530	3,122
1934	93,357		2,278	4,212		55 97	123,530 6,121	100
1935	04 072		2 756	5,927		87 77	123,152	3,855
1936	84,273		2,756	5,312		77 57	145,436	5,082
1937	113,839		4,181	4,045		57 75 ·	144,983	4,651
1938	112,587		3,725	4,593			152,149	4,852
1939	120,386		3,991	3,976	(4)		155,013	5,947
1940	127,838		5,141	4,302	(4)		3,755	105
1941			_	3,755		05 30	2,845	36
1942	-		-	2,709		30 28	1,315	42
1943	-		-	1,020		25	1,658	46
1944	145 443	,	17,305	1,196		25 48	191,378	21,366
1945	145,443	_	.7,303	1,772 2,735		*0 13	2,901	122
1946	-		-	2,735		13 77	3,252	333
1947			( <del>4</del> )	3,994		7 / 9 7	4,121	350
1948	(4) 126,506		29,205	4,019		47	130,625	29,499
1949	140,500	•	, 20 .	4,019	2	T.	700 1020	25,255

(CONTINUED ON NEXT PAGE)

#### U.S. COMMERCIAL LANDINGS

HISTORICAL LANDINGS OF SHRIMP, BY REGIONS, 1880 - 1987 - Continued

YEAR	GUI	LF	PAC	IFIC	TO:	ral
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS
	<del></del>			<del></del>		
1950	151,153	33,112	3,954	255	191,695	43,450
1951	193,651	44,136	3,622	286	225,188	51,862
1952	198,268	48,170	4,077	281	228,210	55,103
1953	224,503	66,336	3,944	315	261,504	76,641
1954	237,153	53,652	3,700	278	269,517	60,831
1955	212,402	54,465	4,825	365	245,779	61,782
1956	193,621	62,499	5,400	570	224,557	70,894
1957	168,453	63,288	8,545	680	205,535	73,145
1958	173,354	63,871	17,891	1,091	213,843	72,930
1959	193,503	50,348	20,652	1,249	240,182	58,177
1960	205,725	57,631	12,418	764	249,452	66,932
1961	133,795	43,650	20,912	1,079	174,530	51,688
1962	141,726	60,557	22,906	1,339	191,105	73,235
1963	203,116	63,539	21,260	1,181	240,473	70,040
1964	179,032	62,695	14,497	929	211,804	70,372
1965	195,237	70,907	20,091	1,083	243,618	82,401
1966	179,230	82,973	34,438	1,956	239,037	96,293
1967	225,731	90,577	54,462	3,007	307,782	103,466
1968	204,024	95,829	56,406	3,427	299,287	114,864
1969	200,429	101,062	62,527	3,739	318,534	124,465
1970	230,474	108,186	92,859	5,483	367,464	129,754
1971	227,376	136,274	107,790	5,533	390,902	167,379
1972	228,941	164,401	108,811	7,932	387,461	195,389
1973	182,206	171,854	152,220	16,254	379,722	220,398
1974	186,208	138,041	142,759	18,542	373,573	180,498
1975	170,083	178,337	140,067	13,934	346,731	225,642
1976	210,167	275,222	167,865	20,142	406,394	331,033
1977	265,158	297,684	192,433	38,181	476,452	360,670
1978	248,327	319,590	154,403	35,017	422,875	385,486
1979	206,564	377,642	96,019	28,300	335,950	471,554
1980	208,280	302,077	97,697	42,741	339,704	402,694
1981	268,190	401,400	67,496	27,888	354,471	463,195
1982	209,926	425,748	44,738	21,193	283,627	508,893
1983	198,457	416,911	21,124	14,401	249,665	503,379
1984	254,254	439,727	20,807	9,842	301,354	487,040
1985	262,908	398,694	33,509	15,514	333,641	472,700
1986	304,051	563,045	62,686	33,666	400,185	662,744
1987	257,148	469,281	72,008	50,247	363,142	578,084

NOTE: -- DATA FOR 1978 THRU 1987 ARE PRELIMINARY.



<sup>(1)</sup> LESS THAN 500 LB. OR \$500.
(2) DATA NOT AVAILABLE FOR ALASKA.
(3) DATA NOT AVAILABLE FOR WASHINGTON AND OREGON.
(4) DATA NOT AVAILABLE.
(5) DATA NOT AVAILABLE FOR WASHINGTON.

	<del> </del>		1	<del></del>	<del>-</del>	<u> </u>	<del></del>	
Species	1	980	1	981	1	982	1	983
	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
Alewives Atka mackerel	(1) (1) (1) (1)	(1) (1) (1) (1)	1,633 9,277 21,980	216 1,943 3,391	12,475 13,786 26,649	1,926 3,044 3,997	11,302 16,749 36,958	1,514 3,474 5,287
(whiting) Ocean perch Mackerel, Atlantic. Pollock, Alaska Rockfishes Sablefish	(1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1)	- - 58,950 7 180	8,448 1 26	(1) 3 (1) 128,886 30 124 (1)	(1) (1) 15,954 7 4	(1) 2,114 (1) 283,104 311 363 (1)	(1) 616 (1) 26,083 94 141 (1)
Squid: Illex Loligo Other fish (2)	(1) (1) (1)	(1) (1) (1)	(1) (1) 47,598	(1) (1) 6,980	(1) (1) 72,691	(1) (1) 11,468	8,344 2,332 73,371	1,840 1,646 10,555
Total	62,460	8,373	139,625					
Species		984		985	. – –	986	1	987
	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thous and dollars
Alewives	9 35,493 38,512 54,372	1 5,632 8,546 7,605	39,938 36,373 179,663	6,109 7,799 24,833	(1) 31,991 66,015 215,878	(1) 4,828 14,449 28,847	22 30,030 59,521 224,250	(3) 4,775 15,334 33,272
(whiting) Ocean perch Mackerel, Atlantic. Pollock, Alaska Rockfishes Sablefish Whiting	(1) 2,313 1,423 444,256 346 871 (1)	(1) 689 220 41,591 105 396 (1)	(1) 281 3,788 614,337 70 94	(1) 56 584 59,730 14 30	81,639 273 (1) 904,111 215 434 65	8,736 72 (1) 95,294 57 137	211,994 556 8,012 1,057,315 320 123 5	23,306 173 1,058 134,302 100 37 (3)
Illex	6,010 760 79,192	2,000 395 11,862	2,540 1,082 33,060	595 599 3,971	(1) (1) 9,766	(1) (1) 2,470	3,140 993 608	628 745 66
Total	664,557	79,042	911,226	104,320	1,310,387	154,899	1,596,889	213,796

TABLE 1. JOINT VENTURE CATCHES BY U.S.-FLAG VESSELS, BY SPECIES, 1980-87

Confidential data.

<sup>(2)</sup> Includes alewives, Atlantic mackerel, butterfish, Pacific and red hakes, sea herring, whiting, squid, and other miscellaneous fish unless shown separately.
(3) Less than \$500.

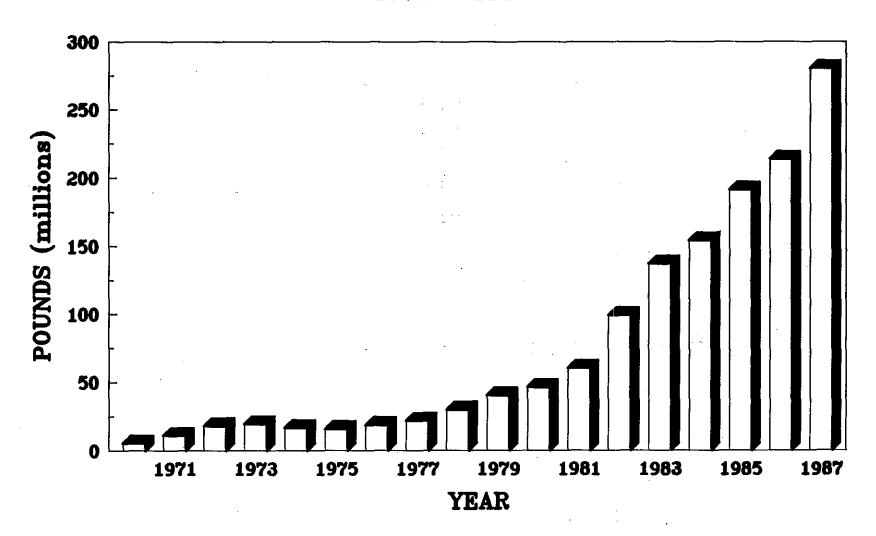
PRODUCTION OF U.S. FARM RAISED CATFISH, BY MONTHS, 1970 - 1987

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY
			(THOUSAND PO	UNDS - ROUND W	EIGHT)		
1970	689	1,092	520	177	97	149	221
1971	926	1,154	1.386	897	487	556	716
1972	1,320	1,520	2,134	1,487	1,531	1,365	1,180
1973	2,128	2,257	2,244	1,388	1,259	1,324	1.646
1974	1,267	1,418	1,734	1,355	1,395	1,436	1,304
1975	1,664	1,729	1,504	1,011	790	1,481	1,426
1976	1,785	1,711	2,094	1,397	1,037	1,471	1,458
1977	1,344	2,278	1,901	1,749	1,810	1,901	1,965
1978	1,598	2,361	2,951	2,510	2,729	2,189	2,310
1979	3,032	3,929	4,010	3,025	3,716	3,081	3,138
1980	3,530	4,892	4,060	3,829	4,045	3,596	3,092
1981	. 3,836	4,844	4,490	6,057	5,385	4,356	5,379
1982	5,448	7,848	8,845	7,937	7,974	8,156	7,269
1983	8,713	11,972	13,104	12,518	11,615	12,068	10,347
1984	13,265	14,585	14,658	13,349	12,856	11,130	12,181
1985	13,429	17,166	18,290	16,474	17,432	15,897	14,311
1986	19,761	19,083	18,664	16,354	16,013	15,951	17,036
1987	20,988	22,163	27,583	26,781	21,623	19,581	21,638
	YEAR	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
	····		UOHT)(THOU	SAND POUNDS - 1	ROUND WEIGHT)		
1970		241	348	702			
1971		241				760	
		012	*	723 1 106	715	769	5,741
12/2000		918 1 638	1,008	1,106	1,097	1,006	11,257
1973	• • • • • • • • • •	1,638	1,008 1,483	1,106 1,673	1,097 1,781	1,006 1,221	11,257 18,333
1973 1974			1,008	1,106	1,097	1,006	11,257
		1,638 1,773 1,541	1,008 1,483 1,642 1,277	1,106 1,673 1,690 1,530	1,097 1,781 1,249 1,324	1,006 1,221 1,129 1,364	11,257 18,333 19,729 16,945
1974		1,638 1,773 1,541 1,369	1,008 1,483 1,642 1,277	1,106 1,673 1,690 1,530	1,097 1,781 1,249 1,324	1,006 1,221 1,129 1,364	11,257 18,333 19,729 16,945
1974 1975 1976		1,638 1,773 1,541 1,369 1,763	1,008 1,483 1,642 1,277 1,339 1,904	1,106 1,673 1,690 1,530 1,402 1,545	1,097 1,781 1,249 1,324 1,100 1,500	1,006 1,221 1,129 1,364 1,325 1,312	11,257 18,333 19,729 16,945 16,140 18,977
1974		1,638 1,773 1,541 1,369	1,008 1,483 1,642 1,277 1,339 1,904 1,986	1,106 1,673 1,690 1,530 1,402 1,545 1,766	1,097 1,781 1,249 1,324 1,100 1,500 1,661	1,006 1,221 1,129 1,364 1,325 1,312 1,573	11,257 18,333 19,729 16,945 16,140 18,977 22,126
1974 1975 1976		1,638 1,773 1,541 1,369 1,763 2,192	1,008 1,483 1,642 1,277 1,339 1,904	1,106 1,673 1,690 1,530 1,402 1,545	1,097 1,781 1,249 1,324 1,100 1,500	1,006 1,221 1,129 1,364 1,325 1,312	11,257 18,333 19,729 16,945 16,140 18,977
1974 1975 1976 1977		1,638 1,773 1,541 1,369 1,763 2,192 3,186	1,008 1,483 1,642 1,277 1,339 1,904 1,986 2,607	1,106 1,673 1,690 1,530 1,402 1,545 1,766 2,647	1,097 1,781 1,249 1,324 1,100 1,500 1,661 2,935	1,006 1,221 1,129 1,364 1,325 1,312 1,573 2,154	11,257 18,333 19,729 16,945 16,140 18,977 22,126 30,177
1975 1976 1977 1978		1,638 1,773 1,541 1,369 1,763 2,192 3,186 3,978	1,008 1,483 1,642 1,277 1,339 1,904 1,986 2,607 3,417	1,106 1,673 1,690 1,530 1,402 1,545 1,766 2,647 3,531	1,097 1,781 1,249 1,324 1,100 1,500 1,661 2,935 3,000	1,006 1,221 1,129 1,364 1,325 1,312 1,573 2,154 2,779	11,257 18,333 19,729 16,945 16,140 18,977 22,126 30,177 40,636
1974 1975 1976 1977 1979		1,638 1,773 1,541 1,369 1,763 2,192 3,186 3,978	1,008 1,483 1,642 1,277 1,339 1,904 1,986 2,607 3,417	1,106 1,673 1,690 1,530 1,402 1,545 1,766 2,647 3,531	1,097 1,781 1,249 1,324 1,100 1,500 1,661 2,935 3,000	1,006 1,221 1,129 1,364 1,325 1,312 1,573 2,154 2,779	11,257 18,333 19,729 16,945 16,140 18,977 22,126 30,177 40,636
1974 1975 1976 1977 1978 1979 1980 1981		1,638 1,773 1,541 1,369 1,763 2,192 3,186 3,978 4,116 5,176	1,008 1,483 1,642 1,277 1,339 1,904 1,986 2,607 3,417	1,106 1,673 1,690 1,530 1,402 1,545 1,766 2,647 3,531 4,310 5,154	1,097 1,781 1,249 1,324 1,100 1,500 1,661 2,935 3,000 3,631 4,757	1,006 1,221 1,129 1,364 1,325 1,312 1,573 2,154 2,779 3,546 5,495	11,257 18,333 19,729 16,945 16,140 18,977 22,126 30,177 40,636 46,464 60,640
1974 1975 1976 1977 1978 1979 1980 1981 1982		1,638 1,773 1,541 1,369 1,763 2,192 3,186 3,978 4,116 5,176 8,398	1,008 1,483 1,642 1,277 1,339 1,904 1,986 2,607 3,417 3,817 5,711 9,883	1,106 1,673 1,690 1,530 1,402 1,545 1,766 2,647 3,531 4,310 5,154 9,209	1,097 1,781 1,249 1,324 1,100 1,500 1,661 2,935 3,000 3,631 4,757 8,609	1,006 1,221 1,129 1,364 1,325 1,312 1,573 2,154 2,779 3,546 5,495 9,829	11,257 18,333 19,729 16,945 16,140 18,977 22,126 30,177 40,636 46,464 60,640 99,405
1975 1976 1977 1978 1979 1980 1981 1983		1,638 1,773 1,541 1,369 1,763 2,192 3,186 3,978 4,116 5,176 8,398 11,998	1,008 1,483 1,642 1,277 1,339 1,904 1,986 2,607 3,417 3,817 5,711 9,883 11,250	1,106 1,673 1,690 1,530 1,402 1,545 1,766 2,647 3,531 4,310 5,154 9,209 11,138	1,097 1,781 1,249 1,324 1,100 1,500 1,661 2,935 3,000 3,631 4,757 8,609 11,754	1,006 1,221 1,129 1,364 1,325 1,312 1,573 2,154 2,779 3,546 5,495 9,829 10,773	11,257 18,333 19,729 16,945 16,140 18,977 22,126 30,177 40,636 46,464 60,640 99,405 137,250
1974		1,638 1,773 1,541 1,369 1,763 2,192 3,186 3,978 4,116 5,176 8,398 11,998 13,379	1,008 1,483 1,642 1,277 1,339 1,904 1,986 2,607 3,417 3,817 5,711 9,883 11,250 12,520	1,106 1,673 1,690 1,530 1,402 1,545 1,766 2,647 3,531 4,310 5,154 9,209 11,138 12,588	1,097 1,781 1,249 1,324 1,100 1,500 1,661 2,935 3,000 3,631 4,757 8,609 11,754 12,527	1,006 1,221 1,129 1,364 1,325 1,312 1,573 2,154 2,779 3,546 5,495 9,829 10,773 11,217	11,257 18,333 19,729 16,945 16,140 18,977 22,126 30,177 40,636 46,464 60,640 99,405 137,250 154,255
1974		1,638 1,773 1,541 1,369 1,763 2,192 3,186 3,978 4,116 5,176 8,398 11,998 13,379	1,008 1,483 1,642 1,277 1,339 1,904 1,986 2,607 3,417 3,817 5,711 9,883 11,250 12,520	1,106 1,673 1,673 1,530 1,530 1,402 1,545 1,766 2,647 3,531 4,310 5,154 9,209 11,138 12,588	1,097 1,781 1,249 1,324 1,100 1,500 1,661 2,935 3,000 3,631 4,757 8,609 11,754 12,527	1,006 1,221 1,129 1,364 1,325 1,312 1,573 2,154 2,779 3,546 5,495 9,829 10,773 11,217 13,363	11,257 18,333 19,729 16,945 16,140 18,977 22,126 30,177 40,636 46,464 60,640 99,405 137,250 154,255 191,616

Source:--U.S. Department of Agriculture, National Agricultural Statistics Services (NASS), Agricultural Statistics Board, Washington, DC 20250 -- phone 202-447-2123.

# CATFISH AQUACULTURE PRODUCTION

(ROUND WEIGHT) 1970 - 1987



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

Atlantic and Gulf, 1979 through 1987 Pacific, mid-1979 through 1987 Western Pacific, 1979 through 1981 Caribbean, 1979, 1981

Preliminary estimates of catch and trips from the MRFSS for the Atlantic, Gulf, and Pacific coasts for 1987 are presented in the tables below. Summary graphs for 1979-1987 catch and trips are also shown. The survey is being conducted in 1988 along the Atlantic, Gulf, and Pacific coasts.

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

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

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

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

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

The fishing trip table indicates the estimated number of trips by coastal residents (generally residing within 25 miles of the coast), non-coastal residents of the subregion bordering saltwater, and non-residents.

The 1987 survey did not include Texas or the January/February wave for Atlantic coast States north of Georgia. Pacific coast salmon fishing trips and catches were not included as a result of a cooperative arrangement with the Pacific coast states. These states had ongoing salmon data collection efforts which estimated a Pacific coast total salmon catch of approximately 1.2 million fish in 1986. The data presented below will be finalized in separate marine recreational fishery reports to be published this summer.

PRELIMINARY 1987 MRFSS DATA. The U.S. marine recreational finfish catch in 1987 (excluding Alaska, Hawaii, and Pacific coast salmon) was an estimated 384.5 million fish. These fish weighed approximately 631.7 million pounds and were taken on an estimated 75.5 million fishing trips. The estimated number of U.S. marine recreational fishermen has been relatively stable over the last few years at 17 million. Excluding catches of

freshwater and industrial species (such as anchovies and menhaden), the marine recreational catch comprised approximately 20 percent of the total U.S. finfish landings used for food in 1987.

The Atlantic and Gulf coasts accounted for approximately 88 percent of the total U.S. marine recreational finfish catch by number. Eighty-seven percent of the estimated U.S. trips were made on the Atlantic and Gulf coasts.

Approximately 16 percent of the total U.S. catch by number was made in the Exclusive Economic Zone (EEZ), the principal area of NMFS management authority. However, for some species (e.g., Atlantic cod, red snapper) over 80 percent of the catch was made in the EEZ.

The private/rental boat mode accounted for 68 percent of the total U.S. marine recreational finfish catch in number. Shore mode catches were 23 percent of the total and party/charter catches (excluding South Atlantic and Gulf partyboats) were 19 percent of the total.

Atlantic and Gulf. In terms of number of fish, bluefish was the most frequently caught species on the Atlantic and Gulf coasts in 1987. Bluefish was the top-ranked species in 6 of the last 9 survey years. Other frequently caught species in 1987 were spotted seatrout, summer flounder, and Atlantic croaker. Top-ranked species in each subregion in 1987 were scup in the North Atlantic, summer flounder in the Mid-Atlantic, Atlantic croaker in the South Atlantic, and spotted seatrout in the Gulf of Mexico. The Mid-Atlantic (36 percent) and Gulf (34 percent) subregions accounted for the highest numbers of Atlantic and Gulf coasts fishes.

The inland, ocean 3 miles or less from shore, and ocean 10 miles or less from shore areas accounted for approximately 84 percent of the Atlantic and Gulf coasts catch in number. The remaining 16 percent of the catch in number was from the EEZ.

Sixty-nine percent of the Atlantic and Gulf coast catches was taken in the private/rental boat mode in 1987. However, other modes were important for particular species such as blue fish from the party/charter boat mode and kingfishes from the shore mode.

Coastal residents accounted for 74 percent of the Atlantic and Gulf trips made in 1987. Non-residents accounted for an additional 22 percent of the trips. Total trips in the South Atlantic exceeded all other subregions. This distribution of trips was similar to previous years.

Pacific. The catch in number of Pacific mackerel was the highest of any species on the Pacific coast in 1987. Top-ranked species groups in each subregion were Pacific mackerel in Southern California, rockfishes in Northern California, black rockfish in Oregon, and spiny dogfish in Washington. Southern California accounted for 67 percent of the Pacific coast in number catch.

The ocean 3 miles or less from shore area had the highest catch in number (59 percent) on the Pacific coast in 1987. The Pacific coast portion of the catch in the ocean more than 3 miles from shore (20 percent) was similar to the 16 percent for the Atlantic and Gulf coasts EEZ.

The overall catch among fishing modes was more evenly distributed on the Pacific coast than on the Atlantic and Gulf coasts. Percentage catches in number of fish were 59 percent for private/rental boats, 23 percent for shore, and 19 percent for party/charter boats.

The percentage of trips by coastal residents (90 percent) was higher on the Pacific coast than the Atlantic and Gulf coasts (74 percent). Fifty-two percent of the Pacific coast trips in 1987 were in the Southern California subregion. Considering that an additional 24 percent of the trips were made in the Northern California subregion, 76 percent of the non-salmon Pacific coast trips in 1987 were made in California.

# ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION ATLANTIC AND GULF COASTS, JANUARY 1987 - DECEMBER 1987

SPECIES GROUP	NORTH ATLANTIC	MID- ATLANTIC	SOUTH ATLANTIC	GULF OF MEXICO	TOTAL
····			_THOUSANDS		
HERRINGS	1,389	3,883	805	2,880	8,958
SALTWATER CATFISHES	*	· 56	3,147	10,774	13,977
BLACK SEA BASS	441	5,634	2,738	2,855	11,668
BLUEFISH	8,073	20,489	4,259	1,005	33,826
RED SNAPPER	*	*	239	688	927
CUP	10,966	3,307		*	14,275
INFISH	*	*	2,830	9,569	12,399
HEEPSHEAD	*	105	1.764	2,044	3,913
POTTED SEATROUT	*	98	2,655	22,918	25,671
EAKFISH		6,982	612	· *	7,595
AND SEATROUT	*	* *	*	5,015	5,015
POT	*	12,464	4,860	180	17,503
INGFISHES	*	153	2.788	1,011	3,952
TLANTIC CROAKER	*	7,748	12,114	5,160	25,022
RED DRUM	*	•	1,499	5,969	7,471
(ULLETS	*	42	1,231	2,277	3,550
ING MACKEREL	*		591	366	966
SUMMER FLOUNDER	1,152	$23,41\overline{4}$	642	*	25,208
INTER FLOUNDER	6,596	7,788	*	*	14,384
OTHER FISHES	11,306	30,169	18,219	41,001	100,695
TOTAL	39,924	122,344	60,995	113,712	336,975

NOTE: A DASH (\_) DENOTES LESS THAN THIRTY THOUSAND. HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS. AN ASTERISK (\*) DENOTES NONE REPORTED. FIGURES FOR THE GULF OF MEXICO DO NOT INCLUDE THE RECREATIONAL CATCH FOR TEXAS ESTIMATED BY THE STATE. FIGURES FOR THE SOUTH ATLANTIC AND GULF OF MEXICO DO NOT INCLUDE CATCHES FOR PARTY BOATS OR CATCHES IN TEXAS. ROW AND COLUMN TOTALS MAY NOT ADD DUE TO ROUNDING.

#### ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION PACIFIC COAST, JANUARY 1987 - DECEMBER 1987

SPECIES GROUP	SOUTHERN CALIFORNIA	NORTHERN CALIFORNIA	OREGON	WASHINGTON	TOTAL
			THOUSANDS		····
PACIFIC HERRING	*	48	85	218	351
SURF SMELT		992	172	222	1,390
SMELTS, OTHER	44				53
WALLEYE POLLOCK	*	*	*	56 <b>4</b>	564
ACKSMELT	577	128		*	705
CELP BASS	2,316	*	*	*	2,316
BARRED SAND BASS	2,600	*	*	*	2,600
HITE CROAKER	1,592	252	*	*	1,84
QUEENFISH	420	*	*	*	420
ALLEYE SURFPERCH	152	89	32	*	27:
EDTAIL SURFPERCH	*	90	40		134
ARRED SURFPERCH	189	40	*	₹	229
ACIFIC BONITO	3,113		*	*	3,113
PACIFIC MACKEREL	8,072	88	*	*	8.15
LACK ROCKFISH	33	304	426	198	96
LUE ROCKFISH	534	623	65	*	1.22
OCCACIO	212	70		*	282
LIVE ROCKFISH	212		*	*	216
OCKFISHES, OTHER	2,442	2,397	114	660	5,61
THER FISHES	9,170	4,136	1,093	2,695	17,094
TOTAL	31,682	9,263	2,032	4,561	47,537

NOTE: A DASH (\_) DENOTES LESS THAN THIRTY THOUSAND. HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS. AN ASTERISK (\*) DENOTES NONE REPORTED. FIGURES DO NOT INCLUDE SALMON CATCHES ESTIMATED BY STATE RECREATIONAL SURVEYS. ROW AND COLUMN TOTALS MAY NOT ADD DUE TO ROUNDING.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND AREA OF FISHING, ATLANTIC AND GULF COASTS COMBINED, JANUARY 1987 - DECEMBER 1987

SPECIES GROUP	OCEAN 3 MI OR LESS	OCEAN MORE THAN 3 MI	OCEAN 10 MI OR LESS	OCEAN OVER 10 MI	INLAND	ALL AREAS
	THOUSANDS					
HERRINGS	4,979	131	1,493		2,352	8,957
SALTWATER CATFISHES	4,699	933	2,694	172	5,479	13,977
BLACK SEA BASS	2,573	3,727	1,762	648	2,957	11,668
BLUEFISH	12,559	6,063	543		14,639	33,826
RED SNAPPER	101	595	79	149	·	927
SCUP	6,777	3,131	*	*	4,36 <del>8</del>	14,275
PINFISH	2,076	153	5,062	137	4,972	12,399
SHEEPSHEAD	648	50	671		2,527	3,913
SPOTTED SEATROUT	6,237	1,476	6,965	51 <del>4</del>	10,478	25,671
WEAKFISH	1,450	1,524	*	*	4,621	7,595
SAND SEATROUT	2,748	618	669		973	5,015
SPOT	3,613	512	123	₩	13,256	17,504
KINGFISHES	2,139	39	466		1,296	3,952
ATLANTIC CROAKER	4,419	1,254	324	-	19,017	25,022
RED DRUM	1,074	188	1,718	44	4,447	7,471
MULLETS	1,141	31	1,512		862	3,550
KING MACKEREL	210	457	205	85		966
SUMMER FLOUNDER	11,305	1,165	*	*	12,741	25,208
WINTER FLOUNDER	4.524	1,062	*	*	8,798	14,384
OTHER FISHES	22,421	18,855	23,901	8,371	27,147	100,695
TOTAL	95,685	41,965	48,187	10,195	140,943	336,975

NOTE: "OCEAN 10 MI OR LESS" AND "OCEAN OVER 10 MI" REFERS ONLY TO THE FLORIDA GULF COAST WHERE STATE
JURISDICTION EXTENDS TO THREE MARINE LEAGUES, APPROXIMATELY TEN NAUTICAL MILES. THE TOTAL OCEAN
ESTIMATE IS ADDITIVE ACROSS THE FOUR AREAS. FIGURES DO NOT INCLUDE PARTY BOAT CATCHES IN THE SOUTH
ATLANTIC AND GULF OF MEXICO OR CATCHES FOR TEXAS. A DASH ( ) DENOTES LESS THAN THIRTY THOUSAND.
HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS. AN ASTERISK (\*) DENOTES NONE REPORTED. ROW
AND COLUMN TOTALS MAY NOT ADD DUE TO ROUNDING.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND AREA OF FISHING, PACIFIC COAST, JANUARY 1987 - DECEMBER 1987

SPECIES GROUP	OCEAN 3 MI OR LESS	OCEAN MORE THAN 3 MI	INLAND	UNDEFINED (1)	ALL ARBAS
			THOUSANDS		
PACIFIC HERRING	214	**	138	*	351
SURF SMELT	1,170	.*	220	*	1,390
MELTS, OTHER	30	*		*	53
ALLEYE POLLOCK		*	56 <del>4</del>	*	564
VACKSMELT	547		155		705
KELP BASS	1,723	472	119	_	2,316
BARRED SAND BASS	1,355	1,023	223	₩.	2,600
HITE CROAKER	1,355	151	337	*	1,844
QUEENFISH	269		135	*	420
ALLEYE SURFPERCH	174	*	99	*	272
EDTAIL SURFPERCH	103	*	30	*	134
BARRED SURFPERCH	213			*	229
ACIFIC BONITO	2,149	75 <del>6</del>	20 <del>8</del>	*	3,113
PACIFIC MACKEREL	5,249	2,450	458		8,159
BLACK ROCKFISH	685	168	97	-	961
SLUE ROCKFISH	1,087	128	_	*	1,222
BOCCACIO	172	109	_	*	282
DLIVE ROCKFISH	201	_	<b>▼</b>		216
ROCKFISHES, OTHER	3,214	1,84 <del>8</del>	541	_	5,614
OTHER FISHES	8,201	2,347	6,386	159	17,094
TOTAL	28,108	9,487	9.754	189	47,533

<sup>(1)</sup> THIS CATEGORY INCLUDES "MISSING DATA" ON AREA, AND LOCAL VARIATION IN MARINE GEOGRAPHIC TERMINOLOGY WHICH SOMETIMES PREVENTED INTERVIEWERS FROM DETERMINING ACCEPTABLE ANSWERS TO QUESTIONS ON "DISTANCE FROM SHORE." NOTE: FIGURES DO NOT INCLUDE THE CATCH OF SALMON ESTIMATED BY STATE RECREATIONAL SURVEYS. A DASH ( ) DENOTES LESS THAN THIRTY THOUSAND. HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS. AN ASTERISK (\*) DENOTES NONE REPORTED. ROW AND COLUMN TOTALS MAY NOT ADD DUE TO ROUNDING.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONALFISHERMEN
BY SPECIES GROUP AND FISHING MODE
ATLANTIC AND GULF COASTS, JANUARY 1987 - DECEMBER 1987

SPECIES GROUP	SHORE	PARTY/ CHARTER BOAT	PRIVATE/ RENTAL BOATS	ALL MODES	
	THOUSANDS				
HERRINGS	7,697	31	1,230	8,958	
SALTWATER CATFISHES	3,564	188	10,225	13,977	
BLACK SEA BASS	692	1,668	9,308	11,668	
BLUEFISH	9,973	4,800	19,053	33.826	
RED SNAPPER	-,	296	621	927	
SCUP	$1.05\overline{4}$	796	12,426	14,275	
PINFISH	6,194	, , , ,	6,180	12,399	
SHEEPSHEAD	908	_	2,991	3,913	
SPOTTED SEATROUT	1.489	831	23.351	25,671	
WEAKFISH	400	691	6,504	7.595	
SAND SEATROUT	341	574	4,100	5,015	
SPOT	4,577	1,066	11,860	17,504	
KINGFISHES	2,535	-,	1,389	3,952	
ATLANTIC CROAKER	12,018	95	12,910	25,023	
RED DRUM	760	135	6,576	7.471	
MULLETS	1.161		2,389	3,550	
KING MACKEREL	.,	224	739	966	
SUMMER FLOUNDER	1,581	2,481	21,149	25,211	
INTER FLOUNDER	930	360	13,094	14,384	
OTHER FISHES	22,589	11,305	66,801	100,695	
TOTAL	78,474	25,607	232,894	336,975	

NOTE: A DASH (\_) DENOTES LESS THAN THIRTY THOUSAND. HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS. AN ASTERISK (\*) DENOTES NONE REPORTED. PARTY BOAT ESTIMATES FOR THE SOUTH ATLANTIC AND GULF SUBREGIONS ARE EXCLUDED FROM THE PARTY/CHARTER COLUMN. FIGURES DO NOT INCLUDE CATCHES FOR TEXAS. ROW AND COLUMN TOTALS MAY NOT ADD DUE TO ROUNDING.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND FISHING MODE.

PACIFIC COAST, JANUARY 1987 - DECEMBER 1987

SPECIES GROUP	SHORE	PARTY/ CHARTER BOAT	PRIVATE/ RENTAL BOATS	ALL MODES	
	THOUSANDS				
PACIFIC HERRING	263		88	351	
SURF SMELT	1,384	*		1,390	
SMELTS, OTHER	46	*	_	53	
ALLEYE POLLOCK		146	411	564	
ACKSMELT	65 <del>0</del>		54	705	
ELP BASS	121	57 <b>4</b>	1,621	2,316	
ARRED SAND BASS	56	820	1,724	2,600	
HITE CROAKER	474	258	1,111	1,844	
UEENFISH	333		65	420	
ALLEYE SURFPERCH	252	*		272	
EDTAIL SURFPERCH	133	*	_	134	
ARRED SURFPERCH	208	*	_	229	
ACIFIC BONITO	340	870	$1,90\overline{3}$	3,113	
ACIFIC MACKEREL	2,137	1,836	4,186	8,159	
BLACK ROCKFISH	87	391	483	961	
BLUE ROCKFISH		303	897	1,222	
BOCCACIO	102	103	77	282	
DLIVE ROCKFISH		124	89 `	216	
ROCKFISHES, OTHER	382	2,121	3,111	5,614	
THER FISHES	3,751	1,374	11,969	17,094	
TOTAL	8,728	10,966	27,843	47,537	

NOTE: A DASH (\_) DENOTES LESS THAN THIRTY THOUSAND. HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS. AN ASTERISK (\*) DENOTES NONE REPORTED. FIGURES DO NOT INCLUDE THE CATCH OF SALMON ESTIMATED BY STATE RECREATIONAL SURVEYS. ROW AND COLUMN TOTALS MAY NOT ADD DUE TO ROUNDING.

ESTIMATED NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL FISHERMEN BY SUBREGION AND AREA OF RESIDENCE
ATLANTIC, GULF AND PACIFIC COASTS, JANUARY 1987 - DECEMBER 1987

SUBREGION	TRIPS BY COASTAL RESIDENTS	TRIPS BY NON-COASTAL RESIDENTS	non- Resident Trips	ALL TRIPS
		THOUSAND	\$	· · · · · · · · · · · · · · · · · · ·
NORTH ATLANTICSOUTH ATLANTICSOUTH ATLANTICSULF OF MEXICO (1)	5,383 14,402 15,438 13,284	260 473 1,030 565	1,630 3,982 4,457 4,637	7,273 18,856 20,924 18,486
TOTAL (2)	48,507	2,328	14,705	65,540
SOUTHERN CALIFORNIA RORTHERN CALIFORNIA DREGON	4,748 2,133 860 1,253	77 191 26 61	362 93 92 78	5,187 2,417 978 1,392
TOTAL (3)	8,994	355	625	9,974
GRAND TOTAL	57,501	2,683	15,330	75,514

(1) EXCLUDES TEXAS DATA.
 (2) EXCLUDES JANUARY/FEBRUARY TRIPS FROM MAINE THRU SOUTH CAROLINA.
 (3) EXCLUDES PACIFIC COAST SALMON FISHING TRIPS.

#### ESTIMATED NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL FISHERMEN BY SUBREGION AND MODE OF FISHING ATLANTIC, GULF AND PACIFIC COASTS, JANUARY 1987 - DECEMBER 1987

SUBREGION	SHORE	PARTY/ CHARTER BOAT	PRIVATE/ RENTAL BOAT	ALL MODES
<del></del>		THOUSAND:	3	
NORTH ATLANTICMID-ATLANTICSOUTH ATLANTICGULF OF MEXICO (1)	2,732 5,738 11,415 7,716	531 2,122 512 351	4,010 10,996 8,998 10,419	7,273 18,856 20,924 18,486
TOTAL (2)	27,601	3,516	34,423	65,540
SOUTHERN CALIFORNIA NORTHERN CALIFORNIA DREGON	1,832 1,003 431 474	860 213 65 39	2,495 1,200 484 879	5,187 2,417 978 1,392
TOTAL (3)	3,740	1,177	5,058	9,974
GRAND TOTAL	31,341	4,693	39,481	75,514

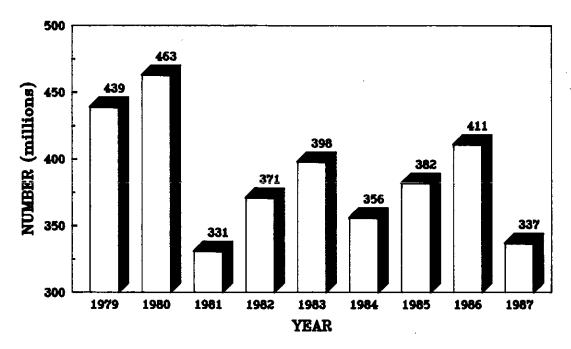
(1) EXCLUDES TEXAS DATA.

(2) EXCLUDES JANUARY/FEBRUARY TRIPS FROM MAINE THRU SOUTH CAROLINA.

(3) EXCLUDES PACIFIC COAST SALMON FISHING TRIPS.

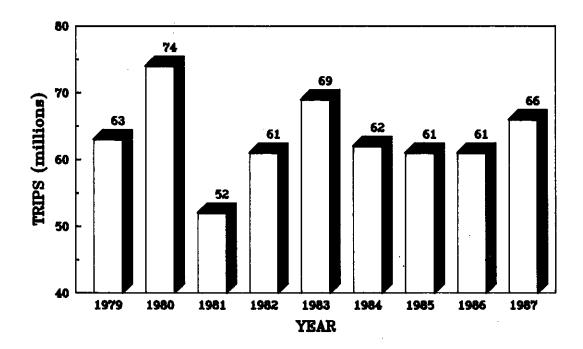
### MARINE RECREATIONAL FISHERIES CATCH

ATLANTIC AND GULF COASTS 1979 - 1987



Note: 1987 data are preliminary.

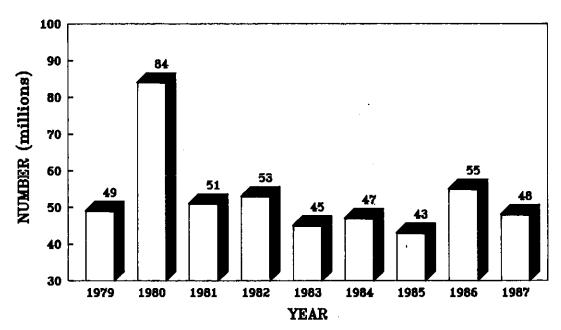
# MARINE RECREATIONAL FISHING TRIPS ATLANTIC AND GULF COASTS 1979 - 1987



Note: 1987 data are preliminary.

### MARINE RECREATIONAL FISHERIES CATCH

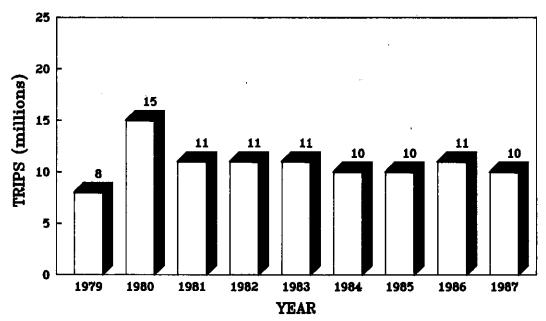
PACIFIC COAST 1979 - 1987



Data for 1979 are for July thru December. Data for 1980-87 are for January thru December. 1987 data are preliminary.

### MARINE RECREATIONAL FISHING TRIPS

PACIFIC COAST 1979 - 1987



Data for 1979 are for July thru December. Data for 1980-87 are for January thru December. 1987 data are preliminary.

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY CONTINENT AND COUNTRY, 1986

			1.	Alaska		•
Continent and Country	North Atlantic (1)	Washington, Oregon, and California	Gulf of Alaska	Eastern Bering Sea and Aleutian Islands	Total Alaska	Grand total
		<del></del>	Metric tons,	round weight		<del></del>
European Economic Community:			•		•	
Italy	4,034.4	-	_	-	_	4,034.4
Spain (2)	2,725.6	-	-	-	-	2,725.6
Other:	-					
German Democratic	10 025 0			•		10 025 0
Republic	19,025.9	70,752.8	-	6,853.0	6,853.0	19,025.9 77,605.8
Asia:	4					
China	-	-	-	2,001.7	2,001.7	2,001.7
Japan	(3)	-	15,850.8	369,484.5	385,335.3	385,335.3
Republic of Korea	-	-	<b>.</b>	97,334.6	97,334.6	97,334.6
Total	25,785.9	70,752.8	15,850.8	475,673.8	491,524.6	588,063.3

<sup>(1)</sup> Cape Hatteras, North Carolina, northward. (2) Joined the European Economic Community in 1986. (3) Included with Gulf of Alaska.

Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

ALL FOREIGN COUNTRIES: CATCH: IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY CONTINENT AND COUNTRY, 1987

Continent and Country	North Washington, Atlantic Oregon, and (1) California		Gulf of Alaska	Eastern Bering Sea and Aleutian Islands	Total Alaska	Grand total
	<del>-1</del>	Metric ton	s, round wei	ght	<del></del>	
urope: European Economic Community:						
Italy.	33.2	_	_	_	_	33.2
Netherlands	10,928.4	•	-	•	-	10,928.4
Other:						10 550 0
German Democratic Republic .	18,553.3	48,975.4	-	-		18,553.3 48,975.4
Poland	-	40,9/5.4	-	-	-	40,975.4
ia:						
China	-	5.0	-	-	-	5.0
Japan	-		-	67,436.5	67,436.5	67,436.5
Republic of Korea	<del>.</del>	1,412.7	<b>-</b>	1,614.4	1,614.4	3,027.1
Grand total	29,514.9	50,393.1	-	69,050.9	69,050.9	148,958.9
	•	-				

<sup>(1)</sup> Cape Hatteras, North Carolina, northward.

Note:--Excludes tunas and prohibited species. For further information see text on page iv <u>FOREIGN CATCH IN U.S.</u>
<u>EEZ</u>. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

				Alaska		
Species	North Atlantic (1)	Washington, Oregon, and California	Gulf of Alaska	Eastern Bering Sea and Aleutian Islands	Total Alaska	Grand total
7874	<del></del>	<u>Met</u>	ric tons, rou	nd weight		
Finfish Atka mackerel	- 125.1	<u>-</u>	(2)	6.4	6.4	6.4 125.1
Cod, Pacific Flounders, Pacific	-	-	15,210.5	39,860.1	55,070.6	55,070.6
(flatfish)	-	1.8	70.5	77,965.4	78,035.9	78,037.7
Red	0.9 546.7 -	- 69,861.0	- - -	- - -	- - -	0.9 546.7 69,861.0
Herring, river (alewives) . Jack mackerel	14.7	549.3	-	<u>-</u>	-	14.7 549.3
Mackerel, Atlantic Ocean perch, Pacific Pollock, Alaska Rockfishes	19,143.5 - - -	1.4 193.5	0.3 113.9 4.0	17.9 352,329.4 17.9	18.2 352,443.3 21.9	19,143.5 19.6 352,443.3 215.4
Sablefish Other finfish	844.5	7.4 138.4	1.4 (3) 450.2	108.8 4,044.6	110.2 4,494.8	117.6 5,477.7
Total fish	20,675.4	70,752.8	15,850.8	474,350.5	490,201.3	581,629.5
Shellfish et al. Snails (meats) Squid:	-	-	-	493.0	493.0	493.0
Atlantic: Short-finned Long-finned Pacific	248.7 4,861.8	-	- - -	- 830.3	- 830.3	248.7 4,861.8 830.3
Total shellfish	5,110.5	<u>.</u>		1,323.3	1,323.3	6,433.8
Grand total	25,785.9	70,752.8	15,850.8	475,673.8	491,524.6	588,063.3

(1) Cape Hatteras, North Carolina, northward. (2) Less than 0.1 metric ton. (3) Includes a small catch from the North Atlantic.

Note:--Excludes tunas and prohibited species. For further information see text on page iv <u>FOREIGN CATCH IN U.S.</u> <u>EEZ.</u> Catches are for calendar year only. Some fishing years overlap 2 calendar years.

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY SPECIES AND AREA, 1987

				Alaska			
Species	North Atlantic (1)	Washington, Oregon, and California	Gulf of Alaska	Eastern Bering Sea and Aleutian Islands	Total Alaska	Grand total	
	<del></del>	Metric to	ons, round v	veight			
Finfish Atka mackerel Butterfish Cod, Pacific Flounders, Pacific	(2)	- - -	- -	0.3 54,373.8	0.3 54,373.8	0.3 (2) 54,373.8	
(flatfish)	-	1.6	-	7,429.8	7,429.8	7,431.4	
Hake: Atlantic, silver (whiting) Pacific (whiting) Herring, river (alewives) Jack mackerel Mackerel, Atlantic Ocean perch, Pacific Pollock, Alaska Rockfishes Sablefish	3.1 - 81.5 - 29,293.7 - -	49,655.7 	-	- - - 5.2 3,595.9 7.3 32.8	- - - - 5.2 3,595.9 7.3 32.8	3.1 49,655.7 81.5 320.6 29,293.7 8.5 3,595.9 226.1 62.5	
Other finfish	136.3	163.4	-	2,629.7	2,629.7	2,929.4	
Total fish	29,514.6	50,393.1	-	68,074.8	68,074.8	147,982.5	
Shellfish et al. Snails (meats)	-	-	-	881.6	881.6	881.6	
Atlantic, Long-finned Pacific	0.3	-	<u>-</u> -	- 94.5	- 94.5	.3 94.5	
Total shellfish	.3	-	-	976.1	976.1	976.4	
Grand total	29,514.9	50,393.1	-	69,050.9	69,050.9	148,958.9	

<sup>(1)</sup> Cape Hatteras, North Carolina, northward. (2) Included with other finfish.

Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

# U.S. EXCLUSIVE ECONOMIC ZONE FOREIGN CATCH

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1985-87

Country and species	1985	1986	1987		
	Metric tons, round weight				
European Economic Community:					
Italy: Butterfish	173.1	83.5	_		
Hake:	1,3.1	03.3			
Red	. 30.9	(1)	-		
Silver (whiting)	938.5	332.9	3.1		
Herring, river (alewives)	38.8	232.1	1 - 1		
Mackerel, Atlantic Other finfish	15,347.5 537.9	232.1 571.0	15.1 14.7		
Squid:	557.9	3/1.0	14.7		
Short-finned	23.2	79.7	-		
Long-finned	2,643.1	2,735.2	0.3		
Total	19,733.0	4,034.4	33.2		
	•	.,	•		
Netherlands:	(5)				
Butterfish	(2)	<del>-</del>	(1)		
Hake, silver (whiting) Herring river (alewives)	(2) (2)		55.1		
Mackerel, Atlantic	(2)	_ _	10,789.		
Other finfish	(2)	-	83.6		
Squid:					
Short-finned Long-finned	(2)	-	(1)		
Total	(2)		10,928.4		
10001	(*/	_			
Total, European Economic		!			
Community	19,733.0	(3)	(3)		
	=======================================	:======================================	========		
Spain: (3)	F07 F	27 0			
Butterfish	597.5	37,9	-		
Red	40.9	0.9	_		
Silver (whiting)	274.2	200.9	-		
Herring, river (alewives)	-	(1)	-		
Mackerel, Atlantic	12.9	15.9	-		
Other finfish	335.6	174.4	-		
Squid: Short-finned	980.0	169.0	_		
Long-finned	3,751.4	2,126.6	-		
Total	5,992.5	2,725.6			
			=========		
Total, European Economic					
Community	-	6,760.0	10,961.6		
See note at end of table.	( Cc	ontinued)			

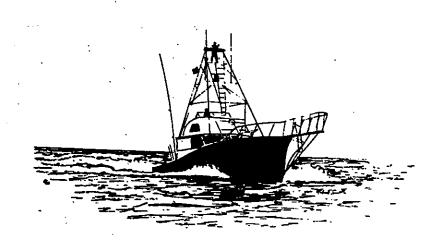
# U.S. EXCLUSIVE ECONOMIC ZONE FOREIGN CATCH

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1985-87 - Continued

Country and species	1985	1986	1987
		tons, round weight -	
Faeroe Island, Shark	(2)	_	-
German Democratic Republic: Butterfish	(1) (1) 23.5 11,023.9 19.1 (1)	3.7 12.9 14.7 18,895.5 99.1 (1)	(1) (1) 26.4 18,488.9 38.0 (1)
Total	11,066.5	19,025.9	18,553.3
Japan: Butterfish	31.7	(4)	· _
Red	(1) 41.2 - 208.2	(4) (4) (4) (4)	-
Squid: Short-finned Long-finned	5.2 163.1	(4) (4)	- -
Total	449.4	(4)	
Grand total	37,241.4	25,785.9	29,514.9

<sup>(1)</sup> Included with other finfish. (2) Included with other finfish for Italy. (3) Spain joined the EEC in 1986. (4) Included with other finfish for Gulf of Alaska.

Note: -Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

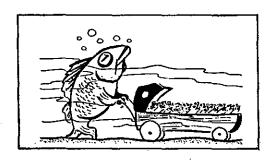


# U.S. EXCLUSIVE ECONOMIC ZONE FOREIGN CATCH

WASHINGTON, OREGON, AND CALIFORNIA: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1985-87

Country and species	1985	1986	1987
hina:	<u>Metri</u>	ic tons, round weigh	<del></del>
Hake, Pacific (whiting) Jack mackerel	<u>-</u>	-	4.9 0.1
Total			5.0
oland:			
Flounders (flatfish)	1.4	1.8	1.0
Hake, Pacific (whiting)	49,853.2	69,861.0	48,277.6
Jack mackerel	35.7	549.3	308.7
Ocean perch, Pacific	10.4	1.4	3.3
Rockfishes	169.4	193.5	202.4
Sablefish	23.7	7.4	29.7
Other finfishes	105.3	138.4	152.7
Total	50,199.1	70,752.8	48,975.4
epublic of Korea: Flounders (flatfish)	_	<b>-</b> .	.6
Hake, Pacific (whiting)	-	=	1,373.2
Jack mackerel	-	<del>-</del>	11.8
Rockfishes	-	-	16.4
Other finfishes	-	-	10.7
Total		-	1,412.7
Grand total	50,199.1	70,752.8	50,393.1

Note: -- Excludes tunas and prohibited species. Catches are for calendar year only.



### U.S. EXCLUSIVE ECONOMIC ZONE FOREIGN CATCH

GULF OF ALASKA: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1985-87

Country and species	1985	1986	1987
	<u>Metri</u>	c tons, round weight	
apan:			
Atka mackerel	0.3	(1)	-
Cod, Pacific	9,060.5	15,210.5	-
Flounders (2)	47.2	70.5	
Ocean perch, Pacific (3)	2.5	0.3	-
Pollock, Alaska	22,937.3	113.9	-
Rockfishes:			
Shortspine thornyhead	3.6	_	_
Other	1.1	4.0	_
OtherSablefish (3)	30.1	1.4	_
Other finfish	94.6	(4) 450.2	
Squid, unclassified	4.0	-	_
Total	32,181.2	15,850.8	_
	•	•	
amuhīta af Vausa			B335555222
epublic of Korea:			
	1.5	:====================================	
Cod, Pacific	1.5	- - -	
Flounders (2)	1.5 25.2 122.8	- - -	, - - -
Cod, Pacific Flounders (2)	1.5 25.2 122.8 5.2	- - - -	, - - - -
Cod, Pacific	1.5 25.2 122.8	- - - - -	, - - - -
Cod, Pacific	1.5 25.2 122.8 5.2 8,649.9	- - - - -	, - - - - -
Cod, Pacific	1.5 25.2 122.8 5.2 8,649.9	- - - - -	, - - - - -
Cod, Pacific	1.5 25.2 122.8 5.2 8,649.9	- - - - - - -	, - - - - -
Cod, Pacific	1.5 25.2 122.8 5.2 8,649.9	- - - - - - -	, - - - - - -
Cod, Pacific	1.5 25.2 122.8 5.2 8,649.9	- - - - - - -	, - - - - - -
Cod, Pacific	1.5 25.2 122.8 5.2 8,649.9	- - - - - - - -	, - - - - - - -
Cod, Pacific	1.5 25.2 122.8 5.2 8,649.9	- - - - - - - -	, - - - - - - -
Cod, Pacific	1.5 25.2 122.8 5.2 8,649.9 .2 .9 8.4 2.3 2.2	-	, - - - - - - -

Less than .1 of a metric ton.

Note: -- Excludes tunas and prohibited species. Catches are for calendar year only.



May include yellowfin sole.

Became a prohibited species during 1985.

A small catch from the North Atlantic has been included with other finfish.

### U.S. EXCLUSIVE ECONOMIC ZONE

#### FOREIGN CATCH

EASTERN BERING SEA AND ALEUTIAN ISLANDS: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1985-87

Country and species	1985	1986	198
hina:	<u></u>	letric tons, round wei	<u>ght</u>
Cod Pacific	_	182.5	_
Flounders (1)	<b>→</b>	363.4	-
Pollock, Alaska	-	1,443.1	-
Rockfishes	-	0.4	-
Sablefish	-	.1	-
Other finfish	-	12.2	
Total		2,001.7	323232222
apan: Atka mackerel	1.1	1.1	0.3
Cod, Pacific	51,974.5	35,616.1	54,145.6
Flounders (1)	95,237.2	66,801.3	6,407.6
Ocean perch, Pacific	58.1	14.3	5.1
Pollock, Alaska		262,422.7	3,283.2
Rockfishes	42.1	13.6	7.3
Sablefish	257.1	73.1	32.7
Other finfish	4,768.1	3,230.1	2,578.6
Snails (meats)	104.1	493.0	881.6
Squid, unclassified	1,469.9	819.2	94.5
Total	774,024.4	369,484.5	67,436.5
oland:			,
Atka mackerel	(2)	.1	-
Cod, Pacific	29.3	8.4	-
Flounders (1)	10.8	4.5	-
Ocean perch, Pacific	6.8		-
Pollock, Alaska	32,060.9	6,831.2	-
Rockfishes	0.5	(0).1	-
Sablefish	2.2	(2)	, <del>-</del>
Other finfish	5.2 ·103.1	1.1 7.4	-
Total	32,218.8	6,853.0	<del></del>
	=======================================	=======================================	=======================================
epublic of Korea: Atka mackerel	.3	5.2	
Cod, Pacific	4,885.2	4,053.1	228.2
Flounders (1)	43,472.6	10,796.2	1,022.2
Ocean perch, Pacific	8.9	3.4	.1
Pollock, Alaska	166,606.3	81,632.4	312.7
Rockfishes	1.4	3.8	-
Sablefish	52.7	35.6	.1
Other finfish	1,475.8	801.2	51.1
Squid, unclassified	14.6	3.7	<b>-</b> .
Total	216,517.8	97,334.6	1,614.4
SSR:		: # = = = = = = = = = = = = = = = = = =	
Cod, Pacific	288.4	•	-
Flounders (1)	8,825.6		=
Ocean perch, Pacific	.1	-	-
Pollock, Alaska	1,503.6	-	-
Rockfishes	-	-	-
Sablefish	.1	<del>-</del> .	-
Other finfish	33.8 .7	-	<del>-</del>
	•		· · · · · · · · · · · · · · · · · · ·
Total			
		475,673.8	69,050.9

NOTE:--Excludes tunas and prohibited species. Catches are for calendar year only.

1985

1986

2.8

4.8

4.9

	U.S. commercial catch and exvessel value			World commercial catch				
Year	Published by U.S. (excludes	Published	Exvessel	Fresh-		Marine		Grand
	weight of mollusk shells}	by FA0 (1)	value	water	Peruvian anchovy	Other (2)	Total	total
	Million me	tric tons	Billion		<u>Mill</u>	ion metric t	<u>ons</u>	
	<u>Live w</u>	reight_	dollars			<u>Live</u> weigh	<u>t</u>	
1953	2.0 2.2	2.7 2.8	.4	3.0 3.2	-	22.9 24.4	22.9 24.4	25.9 27.6
1954 1955	2.2	2.8	.4 .3	3.4	-	25.5	25.5	28.9
1956	2.4	3.0	.4	3.5	0.1	27.2	27.3	30.8
1957	2.2	2.8	.4	3.9	.3	27.5	27.8	31.7
1958	2.2	2.7	-4	4.5	.8	28.0	28.8	33.3
1959	2.3	2.9	.4	5.1	2.0	29.8	31.8	36.9
1960	2.2	2.8	.4	5.6	3.5	31.1	34.6	40.2
1961	2.4	2.9	.4	5.7	5.3	32.6	37.9	43.6
1962	2.4	3.0	.4	5.8	7.1	31.9	39.0	44.8
1963	2.2	2.8	.4	5.9	7.2	33.5	40.7	46.6
1964	2.1	2.6	.4	6.2	9.8	35.9	45.7	51.9
1965	2.2 1.9	2.7 2.5	• 4	7.0 7.3	7.7	38.5	46.2 50.0	53.2 57.3
1966 1967	1.8	2.5 2.4	.5	7.2	9.6 10.5	40.4 42.7	53.2	60.4
1968	1.9	2.5	.5	7.4	11.3	45.2	56.5	63.9
1969	ĩ.9	2.5	.5	7.6	9.7	45.4	55.1	62.7
1970	2.2	2.8	.6	8.4	13.1	46.6	59.7	65.6
1971	2.3	2.9	.7	9.0	11.2	48.3	59.5	66.1
1972	2.2	2.8	.7	5.7	4.8	53.7	58.5	62.0
1973	2.2	2.8	.9	5.7	1.7	55.3	57.0	62.7
1974	2.3	2.8	.9	5.8	4.0	56.7	60.7	66.5
1975	2.2 2.4	2.8	1.0	6.2	3.3	56.9	60.2	66.4
1976 1977	2.4	3.0 3.0	1.3 1.5	5.9 6.1	4.3	59.6 62.0	63.9 62.8	69.8 68.9
1978	2.7	3.4	1.9	5.8	1.2	63.4	64.6	70.4
1979	2.8	3.5	2.2	5.9	1.4	63.8	65.2	71.1
1980	2.9	3.6	2.2	6.2	.7	65.1	65.8	72.0
1981	2.7	3.8	2.4	6.6	1.2	67.0	68.2	74.8
1982	2.9	4.0	2.4	8.5	1.8	66.9	68.7	77.2
1983	2.9	4.3	2.4	9.2	0.1	68.7	68.8	78.0
1984	2.9	4.8	2.3	9.8	0.1	74.3	74.4	84.2

U.S. AND WORLD COMMERCIAL FISHERY CATCHES, 1953-86

(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, salmon and other anadromous fishes, and catadromous fishes such as eels.

10.5

11.1

2.3

2.8

1.0

1.0

75.0

80.1

76.0

81.1

86.5

92.2

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 1970-1986 data for marine mammals and aquatic plants are excluded. There is a revision in the total world commercial catch back to 1970 as published in <u>FAO Yearbook of Fishery Statistics</u>, Vol. 48 and 50. However, prior to 1974, data on freshwater and marine catches were not revised. Therefore, for the years 1970 to 1973, data will not add to the grand total.

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; for various issues.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY COUNTRIES, 1982-86 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

Country	1982(1)	1983(1)	1984(1)	1985(1)	1986
		Tho	usand metric t Live weight	ons	
			Live weight		
Japan	10,827	11,312	12,062	11,424	11,973
JŠŠR	9,991	9,817	10,593	10,523	11,260
China	4,927	5,213	5,927	6,779	8,000
eru	3,513	1,569	3,317	4,136	5,61
hile	3,673	3,978	4,499	4,804	5,57
nited States (2)	3,990	4,258	4,814	4,770	4,94
epublic of Korea	2,281	2,400	2,477	2,650	3,10
ndia	2,367	2,507	2,862	2.824	2,92
ndonesia	1,982	2,205	2,252	2,339	2,52
hailand	2,120	2,260	2,135	2,225	2,11
hilippines	1,836	2,014	1,956	1,878	1.92
lorway	2,501	2,836	2,466	2,119	1.89
enmark	1,927	1,863	1.846	1,753	1,87
orea (3)	1,550	1,600	1,650	1,700	1,70
celand	789	839	1.535	1,680	1,65
anada	1,403	1,348	1,282	1,418	1,46
pain	1,402	1,328	1,351	1.350	1,31
exico	1,321	1,065	1,105	1,227	1,30
cuador	667	324	846	947	1,01
rance	756	788	771	850	<sup>2</sup> 85
nited Kingdom	903	840	836	888	84
razil	733	755	836	839	84
ietnam	640	710	765	780	80
angladesh	686	724	754	774	79
oland	608	735	719	683	64
urma	584	588	610	644	64
epublic of South Africa .	600	582	554	601	62
alaysia	683	741	665	632	61
orocco	364	454	469	478	59
urkey	512	559	570	582	58
taly	557	582	576	594	55
rgentina	505	506	432	504	45.
	475	416	315	406	42
	337	343	372	408	41:
ortugal	255	248	285	299	. 39
ew Zealand	249	330	347	373	354
Il others	232	282	294	305	340
	8,470	9,060	9,070	9,285	9,17
Total	77,216	77,979	84,215	86,471	92,154

Revised.

<sup>(2)</sup> 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 for mariculture, aquaculture, and other kinds of fish farming, etc., except for the United States are included in country totals. Statistics on quantities caught by recreational fishermen are excluded.

Source:--Food and Agriculture Organization of the United Nations (FAO) - <u>Yearbook of Fishery Statistics</u>, 1986; Vol. 62, Rome.

#### WORLD FISHERIES

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY CONTINENTS, 1982-86 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

Continent	1982(1)	1983(1)	1984(1)	1985(1)	1986
33,37,116,110			usand metric 1	· · · · · · · · · · · ·	
Asia	33,315 9,524 12,324 9,991 7,305 4,253 502	35,395 7,531 12,792 9,817 7,313 4,557	37,472 10,346 13,071 10,593 7,807 4,256 671	38,119 11,671 12,854 10,523 8,244 4,277 785	40,492 14,043 12,602 11,260 8,428 4,493 835
Total (2)	77,216	77,979	84,215	86,471	92,154

Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO) -  $\underline{\text{Yearbook of Fishery Statistics, 1986;}}$  Vol. 62, Rome.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY MAJOR FISHING AREAS, 1982-86 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

Area	1982(1)	1983(1)	1984(1)	1985(1)	1986
Naudan and an analysis		The	usand metric Live weight	tons	
Marine areas: Pacific Ocean and adjacent areas	39,335	38,896	44,546	46,493	51,495
Atlantic Ocean and adjacent areas	25,489	25,788	25,507	25,070	25,041
Indian Ocean and adjacent areas	3,906	4,058	4,367	4,420	4,503
Total	68,730	68,742	74,420	75,983	81,039
Inland waters: Asia	5,312 1,456 837 399 314 162	5,884 1,522 856 397 328 246	6,388 1,521 881 407 337 256	7,099 1,474 906 426 326 254	7,669 1,497 927 438 344 232
Total	8,484	9,237	9,795	10,490	11,112
Grand total (2)	77,216	77,979	84,215	86,471	92,154

Source: -- Food and Agriculture Organization of the United Nations (FAO) - <u>Yearbook of Fishery Statistics</u>, 1986; Vol. 62, Rome.

May not add to total because of rounding.

<sup>(1)</sup> Revised.(2) May not add to total because of rounding.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY SPECIES GROUPS, 1982-86 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

(DOES NOT IN	<u> </u>	DE MAKTUE I	IAMMALS AND	AQUATIC PLAN	3.)	
Species group		1982(1)	1983(1)	1984(1)	1985(1)	1986
***************************************			<u>- Thou</u>	sand metric t Live weight	ons	
			•			
Herring, sardines, anchovies,						
etc	•	17,866	17,502	19,618	21,062	23,943
Cods, hakes, haddocks, etc	•	10,973	11,222	12,256	12,471	13,493
Miscellaneous marine and .		1				
diadromous fishes	•	8,573	8,683	8,940	9,143	9,777
Freshwater fishes		6,820	7,541	7,924	8,637	9,273
Jacks, mullets, sauries, etc		7,804	7,963	8,553	8,049	7,188
Mollusks		5,699	5,860	6,261	6,292	6,360
Redfish, basses, congers,		•	•	•	•	-
etc		5,424	5,010	5,481	5,247	5,966
Mackerels, snoeks, cutlass-		-,	• • • • • • • • • • • • • • • • • • • •	.,	•	•
fishes, etc	_	3,850	3,672	4,266	3,825	4,033
Crustaceans		3,406	3,227	3,256	3,500	3,860
Tunas, bonitos, billfishes,	•	0,100	0,227	0,200	0,000	0,000
etc		2,802	2,961	3,128	3,170	3,418
Flounders, halibuts, soles,	•	2,002	2,301	3,123	0,170	0,120
		1,135	1,124	1,191	1,340	1,308
etc	•	838	956	914	1,121	1,011
Salmons, trouts, smelts, etc	•	591	563	7 <b>4</b> 2	773	775
Shads, milkfishes, etc	•				617	628
Sharks, rays, chimaeras, etc	•	630	584	605		
River eels	٠	85	85	96	96	90
Sturgeons, paddlefishes, etc		29	28	27	26	25
Miscellaneous	٠	691	998	959	1,102	1,002
Total (2)		77,216	77,979	84,215	86,471	92,154

<sup>(1)</sup> Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO) -  $\underline{\text{Yearbook of }}$  Fishery Statistics, 1986; Vol. 62, Rome.

DISPOSITION OF WORLD COMMERCIAL CATCH, 1981-85 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

Item	1981(1)	1982(1)	1983(1)	1984(1)	1985
<del></del>	<del></del>	<u>Per</u>	cent of total	<del></del>	
Marketed fresh	20.9 22.8 14.4 15.8 25.1	19.0 24.0 13.6 15.5 26.9	19.0 24.3 13.9 15.8 26.0	18.1 24.2 13.5 14.8 28.3	17.9 23.7 13.4 15.2 28.6 1.2
· Total	100.0	100.0	100.0	100.0	100.0

<sup>1)</sup> Revised.

<sup>(2)</sup> May not add to total because of rounding.

<sup>(2)</sup> Only whole fish destined for the manufacture of oils and meals is 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) -  $\underline{\text{Yearbook of Fishery Statistics, 1985}}$ ; Vol. 61, Rome.

WORLD IMPORTS AND EXPORTS OF SEVEN FISHERY COMMODITY GROUPS, BY LEADING COUNTRIES, 1982-85

Country	1982 (1)	1983 (1)	1984 (1)	1985
IMPORTS		Thousand U.	S. dollars	<del>'</del>
Japan	3,973,739	4,015,122	4,207,710	4,744,277
United States	3,174,633	3,621,380	3,702,249	4,051,794
France	1,035,955	1,049,661	975,559	1,039,848
Italy	752,813	735,374	742,206	984,990
United Kingdom	885,331	911.156	877,703	943,881
Fed. Republic of Germany .	823,189	831,420	800,060	819,555
Hong Kong	469,351	439,507	439,962	471,609
Spain	526,340	397,520	389,954	412,790
Denmark	298,059	309,213	326,669	370,442
Canada	281,406	335,268	373,305	355,915
Netherlands	309.790	272,857	288,821	308,449
Belgium	326,926	318,806	298,878	303,695
Sweden	267,591	261,981	257,737	244,800
Australia	220,517	199,310	232,266	216,245
Singapore	183,907	200,335	224,413	204,376
Portugal	182,372	141.184	139,928	199,595
Switzerland	193,191	194,266	188,897	193,346
Thailand	28,206	42,821	85,581	138,312
USSR	70,637	133,389	137,784	135,207
Other countries	2,628,435	2,490,441	2,277,007	2,201,604
				2,202,001
Total	16,632,388	16,901,011	16,966,689	18,340,730
EXPORTS				
Canada	1,299,651	1,277,287	1,271,842	1,356,462
United States	1,032,248	996,651	923,890	1,058,052
Denmark	901,473	928,365	898,867	952,712
Norway	888,348	977,937	902,866	922,460
Japan	800,557	787,633	881,965	819,840
Republic of Korea	758,464	739,850	781,784	796,878
Thailand	482,012	544,929	632,940	675,063
Iceland	538,734	527,167	509,245	617,355
Netherlands	503,622	511,401	500,543	543,666
Chile	386,340	419,028	419,373	438,630
USSR	218,042	324,037	303,598	383,908
Mexico	396,178	436,751	437,369	370,998
China (2)	314,409	302,755	321,956	366,920
France	292,733	315,622	293,586	359,000
Spain,	289,277	287,111	306,782	354,284
United Kingdom	289,492	311,880	302,171	342,029
India	354,943	353,691	333,465	300,110
Fed. Republic of Germany .	315,878	305,817	298,385	286,989
Australia	313,918	322,490	349,685	280,054
Other countries	4,947,251	5,027,853	5,179,926	5,716,088
Total	15,323,570	15,698,255	15,850,238	16,941,498

(1) Revised. (2) Estimated by FAO.

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, frozen, 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) - Yearbook of Fishery Statistics, 1985; Vol. 61, Rome.

VALUE OF PROCESSED FISHERY PRODUCTS, 1986 AND 1987 (Processed from domestic catch and imported products)

Item	19	86 (1)	1987 (2)		
Edible:	Thousand dollars	Percent of total	Thousand dollars	Percent of total	
Fresh and frozen	3,481,476	66.1	3,664,685	66.6	
Canned	1,394,532	26.5	1,433,682	26.1	
Cured	110,437	2.1	115,000	2.1	
Total edible. :	4,986,445	94.7	5,213,367	94.8	
Industrial: Bait and animal food (canned)	100,377	1.9	76,923	1.4	
solubles Other	138,765 37,845	2.7 .7	173,010 36,700	3.1 .7	
Total industrial	276,987	5.3	286,633	5.2	
Grand total	5,263,432	100.0	5,500,000	100.0	

Note: -- Includes value of sealskins. Value is based on selling price at the plant. Processed Fishery Products Annual Summary, 1987, Current Fishery Statistics No. 8703 will provide additional information.

#### EISH STICKS, FISH PORTIONS, AND BREADED SHRIMP

U.S. PRODUCTION OF FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 1978-87

Year	Fish	sticks	Fish p	ortions	Breaded	shrimp
	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand
	pounds -	dollars	pounds	dollars	pounds	dollars
1978	94,674	86,712	389,430	415,892	110,888	258,467
1979	96,050	99,790	*396,089	429,164	98,993	277,460
1980	88,429	88,762	344,249	388,430	83,182	254,283
1981	88,972	96,754	328.407	388,722	85,177	282,026
1982	91,178	105.516	304,104	385.894	94.391	337.604
1983	86.928	115,556	335,270	410,858	100,106	*386.222
1984	92,441	109,677	333,212	413,789	94.522	369.41
1985	96,239	111.265	330.362	367.734	95.341	354.808
1986	87,289	94.282	341.628	393,955	107.834	358.44
1987	98,877	*142,832	316,186	*429,287	99.509	369.029

<sup>(1) \*</sup>Record. Records--1973 fish sticks production: 127,156,000 lb; 1973 breaded shrimp production: 111,922,000 lb.

Note:--Processed Fishery Products, Annual Summary, 1987, Current Fishery Statistics No. 8703 will provide additional information.

Revised.
 Preliminary.

## PROCESSED FISHERY PRODUCTS FISH FILLETS AND STEAKS

PRODUCTION OF FRESH AND FROZEN FILLETS AND STEAKS, BY SPECIES, 1986 AND 1987

Species	1	986	.19	87
Fillets:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Anglerfish	3,783	7,879	2 151	7,976
Carp	2,146	1,207	3,454 1,669	1,010
Cod	76,332	141,340	60,287	151,731
Cusk	1,404	2,080	1,094	2,067
Flounders	63,924	168,950	56,203	165,289
Groundfish mixed	1,072	2,405	1,832	4,461
Groupers	1,845	8,402	1,531	8,342
Haddock	8,023	24,923	8,910	32,034
Hake, Atlantic	1,865	2,833	1,984	4,104
Halibut	386	1,501	19	109
Lingcod	1,174	1,833	1,050	1,617
Ocean perch:	0.704	6 400	0 551	5 070
Atlantic	2,794	6,403	2,551	5,879
Pacific	1,852 (1)	2,648	1,424	2,303
Ocean pout	(1)	(1)	963	1,154
Atlantic	16,238	20,481	18,680	30,384
Alaska	23,620	24,943	65,110	69,008
Rockfishes	17,115	24,378	15,845	23,808
Sablefish	3,637	4,192	2,413	4,092
Salmon	6,134	16.521	3,674	11,450
Sea trout	501	645	533	979
Shark	4,513	2,818	3,193	3,143
Snapper:	- -			
Red	735	3,992	367	2,133
Unclassified	304	1,592	386	2,334
Spanish mackerel	1,017	1,270	837	1,255
Turbot	514	530	506	442
Whitefish	349	749	147	247
Wolffish	194 896	290	206 639	377
Yellow perch Yellow pike	207	3,775 783	198	2,803 1,088
Unclassified	23,209	47,664	15,345	35,355
0.101000111001	20,205	47,004	10,040	00,000
Total	265,783	527,027	271,050	576,974
Steaks:	***********	=======================================		**********
Cod	352	650	179	447
Halibut	7,121	18,205	2,780	8,028
King mackerel	(1)	(1)	40	178
Salmon	Š,579	16,014	1,458	4,288
Shark	(1)	(1)	. 77	158
Swordfish	258	1,198	223	2,100
Unclassified	375	970	1,116	2,634
Total	13,685	37,037	5,873	17,833
Grand total	279,468	564,064	276,923	594,807
ı				

<sup>(1)</sup> Included with unclassified. Note:--The following amounts of frozen fish blocks were produced from the fillets reported above: 3,919,000 lb valued at \$4,537,000 in 1986, and 2,850,00 lb valued at \$3,392,000 in 1987. Final data for 1987 will be published in Processed Fishery Products, Annual Summary, 1987, Current Fishery Statistics No. 8703.

## PROCESSED FISHERY PRODUCTS CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED FISHERY PRODUCTS, BY SPECIES, 1986 AND 1987

			1986		,	1987	
Species	Pounds per case	Standard cases	Thousand pounds	Thousand dollars	Standard cases	Thousand pounds	Thousand dollars
For human consumption:		- <del></del>					
Gefiltefish Herring Mackerel Roe and caviar Salmon:	. 48 . 48 . 45 . 48	487,620 140,635 375,848 16,393	23,406 6,750 16,913 787	19,045 11,000 6,596 3,505	491,696 156,654 (1) 10,499	23,601 7,519 (1) 504	20,623 12,632 (1) 2,736
Natural	. 48 . 48 . 23.4	2,953,256 5,988 666,701	141,756 287 15,601	265,088 1,277 27,736	2,335,010 3,319 560,510	112,080 159 13,116	220,628 686 22,420
Tuna: Solid (2) Chunk Flakes and grated.	. 19.5 . 19.5	7,612,889 24,985,052 65,070	148,451 487,209 1,171	300,211 580,231 1,076	7,421,969 26,102,420 14,334	144,728 508,997 258	312,077 705,360 222
Total tuna	' <b>.</b>	32,663,011	636,831	881,518	33,538,723	653,983	1,017,659
Specialties Other	. 48 . 48	259,480 485,991	12,455 23,328	14,378 10,477	14 455,732	21,875	4 15,422
Total fish		38,054,923	878,114	1,240,620	37,552,157	832,838	1,312,810
Shellfish: Clam and clam products: (3) Whole and minced Chowder and juice Specialties.	. 30	1,432,133 2,732,531 267,193	21,482 81,976 12,825	50,330 56,092 11,194	1,302,976 2,960,569 289,851	19,545 88,817 13,913	34,695 46,195 6,721
Crabs: Natural Specialties Lobster meat and	. 19.5 . 48	30,324 10,206	591 490	2,392 276	9,117 3,811	178 183	925 154
specialties Oyster, specialties Shrimp:		18,775 70,117	901 3,366	1,270 3,790	17,840 68,407	856 3,284	1,030 3,786
Natural (4) Specialties Other	6.75 48 48	680,918 19,319 118,750	4,596 927 5,700	23,187 952 4,429	654,531 19,136 51,973	4,418 919 2,495	22,700 988 3,678
Total shellfish .		5,380,266	132,854	153,912	5,378,211	134,608	120,872
Total for human consumption	•	43,435,189	1,010,968	1,394,532	42,930,368	967,446	1,433,682
For bait and animal food: Animal food Salmon eggs	• 48 • 48	6,683,692 2,823	320,817 136	99,569 808	4,244,695 31	203,745 2	76,906 17
Total for bait and animal food	1. 48	6,686,515	320,953	100,377.	4,244,726	203,747	76,923
Grand total		50,121,704	1,331,921	1,494,909	47,175,094	1,171,193	1,510,605

<sup>(1)</sup> included with other fish.

<sup>(2)</sup> Standard cases changed from 21 1b to 19.5 1b.

<sup>(3) &</sup>quot;Cut out" or "drained" weight of can contents are given for whole or minced clams, and net contents for other clam products.

<sup>(4)</sup> Drained weight.

Note:--Final figures will be published in <u>Processed Fishery Products, Annual Summary, 1987</u>, Current Fishery Statistics No. 8703.

## PROCESSED FISHERY PRODUCTS CANNED FISHERY PRODUCTS

#### PRODUCTION OF CANNED TUNA, 1985-87

	Pounds	19	85	19	86	19	187
Item per case		Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars
Albacore: Solid (1) Chunk Flakes and grated	19.5 19.5 18	5,974 762 36	240,308 29,001 653	7,268 786 16	291,102 29,253 440	6,291 881 2	278,686 34,873 52
Total		6,772	269,962	8,070	320,795	7,174	313,611
Lightmeat: Solid (1) Chunk Flakes and grated	19.5 19.5 18	407 20,772 (2)	11,903 538,904 (2)	345 24,199 49	9,109 550,978 636	1,131 25,222 12	33,391 670,487 170
Total		21,179	550,807	24,593	560,723	26,365	704,048
Grand total		27,951	820,769	32,663	881,518	33,539	1,017,659

<sup>(1)</sup> Standard cases changed from 21 1b to 19.5 1b beginning in 1985. (2) Included with albacore.

#### PRODUCTION OF CANNED SHRIMP, BY AREA, 1985-87

	Pounds	1985		1986(1)		1987	
Area	per case	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars
Gulf States	6.75 6.75	534 59	17,210 1,749	618 63	21,429 1,758	552 103	19,338 3,362
Total	6.75	593	18,959	681	23,187	655	22,700

<sup>(1)</sup> Revised.

#### PRODUCTION OF CANNED SALMON, 1985-87

	Pounds 1985		85	1986(1)		1987	
Item	per case	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars
Chinook or king Chum or keta	48 48	3 161 2,681 449 17	275 10,397 158,713 56,486 1,763	2 159 2,341 394 57	264 10,613 175,502 71,918 6,791	2 161 1,444 704 24	258 9,098 93,514 114,862 2,896
Total	48	3,311	227,634	2,953	265,088	2,335	220,628

<sup>(1)</sup> Revised.

### PROCESSED FISHERY PRODUCTS

#### **CANNED FISHERY PRODUCTS**

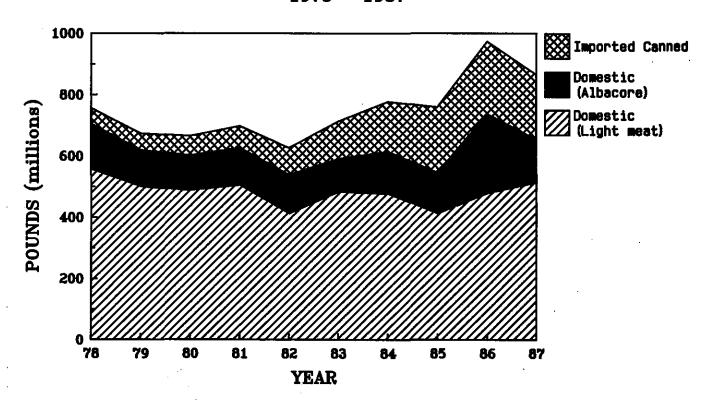
PRODUCTION OF CANNED FISHERY PRODUCTS, 1978-87

Year	For human consumption			For animal food and bait		Total	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	
1978	1,058,095 959,316 1,009,280 *1,067,415 876,157 987,329 1,041,845 913,078 1,010,968 967,446	1,719,165 1,593,015 1,781,948 *1,819,409 1,325,435 1,393,604 1,435,532 1,269,311 1,394,532 1,433,682	539,234 479,764 506,817 408,783 407,219 403,466 369,123 248,068 320,953 203,747	164,959 150,316 145,708 134,562 132,048 140,874 141,931 91,003 100,377 76,923	1,597,329 1,439,080 1,516,097 1,476,198 1,283,376 1,390,795 1,410,968 1,161,146 1,331,921 1,171,193	1,884,124 1,743,331 1,927,656 *1,953,971 1,457,483 1,534,478 1,577,463 1,360,314 1,494,909 1,510,605	

(1) Revised. \*Record. Records--1973 animal food and bait: 696,357,000 lb; 1976 value \$197,955,000; 1973 total: 1,647,357,000 lb.

### U.S. SUPPLY OF CANNED TUNA

(CANNED WEIGHT) 1978 - 1987



# PROCESSED FISHERY PRODUCTS INDUSTRIAL PRODUCTS

PRODUCTION OF FISH MEAL, OIL, AND SOLUBLES, 1986 AND 1987

Product	1986		1987	
Dried scrap and meal:	Thousand pounds	Thousand	Thousand pounds	Thousand dollars
Fish: Menhaden (1) Tuna and mackerel Unclassified	592,504 74,240 12,384	73,092 7,726 1,607	668,884 84,322 15,834	105,346 12,892 2,021
Total	679,128	82,425	769,040	120,259
Shellfish	23,066	1,051	18,192	952
Grand total	702,194	83,476	787,232	121,211
Solubles	195,264	11,558	237,529	16,280
Body oil: Menhaden (1) Unclassified	332,017 4,691	43,279 452	294,964 3,334	35,086 433
Total	336,708	43,731	298,298	35,519

(1) May include small quantities made from other species.

Note:--To convert pounds of oil to gallons divide by 7.75. The above data include production in American Samoa and Puerto Rico. Final data will be published in <a href="Processed Fishery Products">Processed Fishery Products</a>, Annual Summary, 1987, Current Fisheries Statistics 8703.

#### PRODUCTION OF INDUSTRIAL PRODUCTS, 1978-87

j		Quantity			Value	
Year	Fish meal	Fish solubles	Marine animal oil	Fish meal, solubles, and oil	Other industrial products	Grand Total
-		-Thousand pound	<u>s</u>	<del></del>	Thousand dollar	<u>s</u>
1978	725,820	325,086	296,287	204,211	46,714	250,925
1979	748,586	269,856	267,949	200,690	58,768	259,458
1980	723,844	267,364	312,511	206,081	*63,525	*269,606
1981	637,018	257,242	184,302	166,738	43,497	210,235
1982	746,854	305,002	347,513	192,138	41,499	233,637
1983	763,536	317,006	*399.334	*212,606	39,785	252,391
1984	751.528	252,076	372,804	189,796	44,258	234,054
1985	721,682	323,028	285.077	144,724	37,775	182,499
1986	702,194	195,264	336.708	138,765	36,625	175,390
1987	*787.232	237,529	298.298	173,010	36.042	209,052

\*Record. Record-1959 fish solubles production: 330,718,000 lb.
Note:--Does not include the value of imported items that may be further processed, or the value of sealskins.

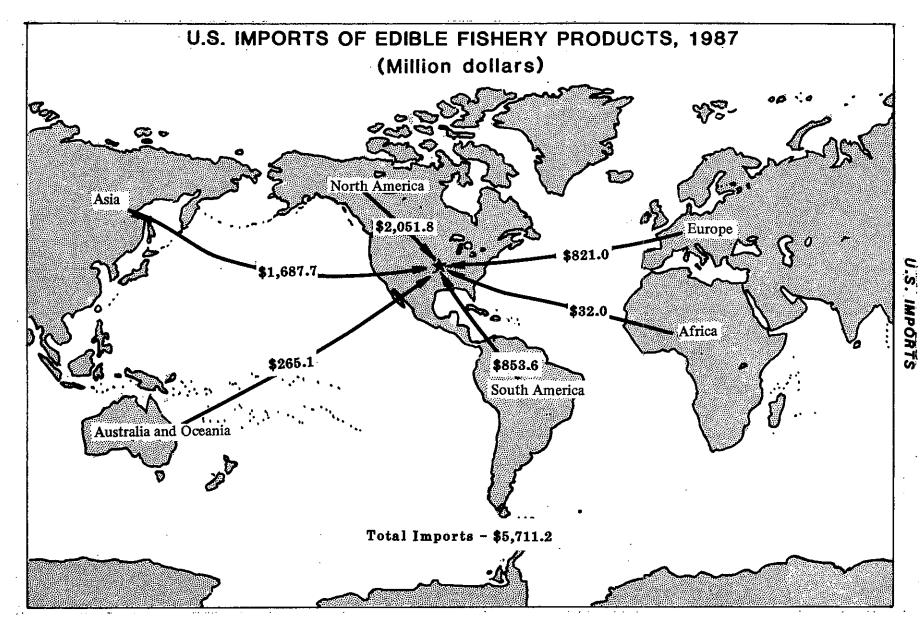
# U.S. COLD STORAGE HOLDINGS FROZEN FISHERY PRODUCTS

U.S. COLD STORAGE HOLDINGS OF FISHERY PRODUCTS, 1987

	<del></del>	T	<del>,                                     </del>		
Item	January 1	March 31	June 30	September 30	December 31
	<del></del>	<del> </del>	Thousand poun	ds	
Blocks:				<del></del>	
Cod	13,491	13,754 2,093	12,472	26,559	24,038
Flounder	2,989 427	125	1,533 560	2,422 885	3,404 995
Haddock	2,620	2,585	1,969	3,899	6,111
Ocean perch	805	716	1,030	1,318	1,916
Pollock (Alaska and other)	7,658	8,579	12,064	20,497	17,544
Whiting a	2,505 12.622	1,211 10,496	3,407 8,952	7,076 9,505	6,708 7,517
Minced (grated) all species . Unclassified	1,927	2,946	2,793	5,305 5,386	3,330
3					
Total blocks	45,044	42,505	44,780	77,547	71,563
Fillets and steaks:	44				
Cod	10,267	14,357	23,307	24,300	27,230
Flounder	9,539 1,562	4,772 449	5,222 1,152	8,142 3,607	8,835 4,417
Haddock	3,604	3,954	4.992	4,110	4,150
Halibut	1,454	1,451	1,230	2,050	1,989
Ocean perch	9,260	5,501	6,908	8,201	10,910
Pollock	5,146	5,724	5,976	12,271	20,902
Whiting	1,980 11,798	1,461 6,492	2,432 9,995	4,227 16,373	4,031 20,729
Unclassified		0,432			20,723
Total fillets and steaks	54,610	44,161	61,214	83,281	103,193
Fish sticks and portions				•	
(cooked uncooked, all species)	30,237	25,293	29,889	24,966 :===================================	31,533
Round, dressed, etc:			•		
Catfish	4,555	4,381	4,423	3,781	5,500
Halibut	15,210	6,704	26,377	25,647	17,923
Rainbow trout	244 42,197	509 15 575	325 5,882	1,293 39,804	1,911 27,082
Whiting	510	15,575 2,544	2,386	747	957
Unclassified fish	23,897	32,731	26,995	28,088	24,131
Surimi & analog products	11,747	8,409	7,602	10,916	11,971
rabs: King	6,132	4,355	3,829	3,906	4,005
Snow	10,812	7,203	11,713	9,664	6.067
Unclassified	4,282	1,668	1,828	2,999	3,920
obsters (spiny and other)	5,582	4,434 ==================================	4,437 :==========	5,693 	6,224 =========
Shrimp:	20 411	00.016	20.010	ac 000	20.010
Raw, headless	32,411 6,048	20,016 6,068	20,218	25,892 6,860	30,019 6,130
Breaded	6,048 11.002	9.104	5,878 10,806	6,860 14,876	14,655
Unclassified	10,554	8,986	7,002	14,827	16,533
Total shrimp	60,015	44,174	43,904	62,455	67,337
ther shellfish	29,113			32,486	33,030
Bait and animal food	7,655	29,570 10,894	33,400 10,376	6,709	6,174
Total fish and shellfish .	351,842	285,110	319,360	419,982	422,521

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

Source:--Frozen Fishery Products, Annual Summary, 1987, Current Fishery Statistics No. 8701 will provide additional information.



EDIBLE AND NONEDIBLE FISHERY PRODUCTS IMPORTS, 1978-87

Year	Ed	ible	Nonedible	Total
	Thousand pounds	<u> </u>	housand dollars -	
978	2,410,673	2,256,314	829.637	3,085,95
979	2,358,920	2,671,860	1,136,931	3,808,79
980	2,144,928	2,686,721	961,731	3,648,45
981	2,272,474	3,034,206	1,171,805	4,206,01
982	2,225,048	3,202,408	1,321,170	4,523,57
983	2,386,771	3,626,704	1,502,668	5,129,37
984	2,454,287	3,742,333	2,141,060	5,883,39
985	2,754,018	4,064,334	2,614,252	6,678,58
986	2,978,905	4,813,488	2,812,805	7,626,29
.987	*3,201,132	*5,711,233	*3,106,464	*8.817.69

<sup>\*</sup>Record. Source:--U.S. Department of Commerce, Bureau of the Census.



FISHERY PRODUCTS IMPORTS: VALUE, DUTIES COLLECTED, AND AD VALOREM EQUIVALENT, 1978-87

	V.	alue	Duties	collected	Average ad equiv	l valorem alent
Year	Fishery imports	All imports	Fishery imports	All imports	Fishery imports	All imports
		Thousand	dollars	<del>. L</del>	Per	cent
1978	3,085,951	172,952,200	88,930	7,161,500	2.9	4.1
1979	3,808,791	205,922,662	116,617	7,202,174	3.1	3.5
1980	3,648,452	239,943,468	87,288	7,535,421	2.4	3.1
1981	4,206,011	260,981,800	102,064	8,893,200	2.4	3.4
1982	4,523,578	243,951,900	111,952	8,687,452	2.5	3.6
1983	5,129,372	256,679,524	116,503	9,430,004	2.3	3.7
1984	5,883,393	322,989,519	145.689	12.042.152	2.5	3.7
1985	6,678,586	343.553.150	191,421	13,066,970	2.9	3.8
1986	7,626,293	368,656,594	187,791	13,312,112	2.5	3.6
1987	8,817,697	402,066,002	178,961	13,922,567	2.0	3.5

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

#### **IMPORTS**

FISHERY PRODUCTS IMPORTS, BY PRINCIPAL ITEMS, 1986 AND 1987

Item		.986	1:	987
	Thousand	Thousand	Thousand	Thousand
	pounds	dollars	pounds	dollars
Edible fishery products:				
Fresh and frozen:				
Whole or eviscerated				
Cod, cusk, haddock and	100 000	FO FO4	105 150	cc 100
flounder	103,080	58,534	105,158	65,198
Halibut	11,257 40,549	25,162 100,669	9,295 41,902	23,138 113,008
Salmon	40,549	100,009	41,902	113,000
Albacore	209,827	154,448	201,988	171,988
Other (1)	353,970	144,399	370,517	158,771
Other	183,741	154,713	214,628	183,022
Fillets and steaks:			•	
Flounder	65,452	112,096	73,003	148,734
Groundfish	287,099	410,718	315,418	570,065
Other	185,981	303,977	232,564	396,324
Blocks and slabs	363,897	379,887	403,577	539,358
Shrimp	384,349	1,404,931	461,173	1,676,844
Crabmeat	14,509	71,742	12,571	67,427
Lobster: American (includes fresh-				
cooked meat)	37,358	148,575	38,974	178,069
Spiny	41,961	316,340	41,949	397,854
Scallops (meats)	47,916	192,558	39,934	162,273
Analog products with shellfish	34,312	58,487	30.539	51,197
Other fish and shellfish	92,716	171,269	98,996	169.855
Canned:			•	•
Herring, not in oil	5,707	9,390	5,617	8,726
Sardines:				
In oil	22,949	28,520	27,352	35,106
Not in oil	30,315	21,049	37,670	25,470
Tuna:	201	707	220	869
In oil	301	707 227,919	329 211,356	206,051
Not in oil	236,320	227,919	211,350	200,031
Analog products without shellfish .	5,384	8,037	4,737	6,786
Other	12,919	18,997	8,797	13,130
Abalone	2,579	15,460	2,790	19,867
Clams	13,885	9,864	13,974	15,288
Crabmeat	8,778	23,975	7,967	20,626
Lobsters:		_		
American	352	2,971	637	4,184
Spiny	37	194	136	748
Oysters	32,050	32,311	32,668	36,144
Shrimp	15,757	29,406	17,132	33,380 89,499
Cured:	51,502	71,649	57,579	05,435
Pickled or salted:				
Cod, haddock, hake, et al	36,915	49,477	31,893	60.542
Herring	21.787	9,269	22,213	9,594
Other	9,354	21,187	9,991	22,792
Other fish and shellfish	14,040	24,601	16,108	29,306
Total edible fishery	·			
products	2,978,905	4,813,488	3,201,132	5,711,233
Non-dittion Cinton and Joseph				
Nonedible fishery products:	270 540	47 047	202 720	E0 E00
Meal and scrap	370,548	.47,247	393,730 30,509	52,508 18,930
Fish oils	22,859	9,258 2,756,300	30,309	3,035,026
Total nonedible fishery	<del>-</del>	2,730,300	<del>_</del>	3,033,020
products	_	2,812,805	_	3,106,464
h. 2000an a a a a a a a a a		=======================================	=======================================	
Grand total	<u> </u>	7,626,293	-	8,817,697
	-			· · · · · · · — — —

<sup>(1)</sup> Includes loins and discs.

Note:--Data include imports into the United States and Puerto Rico and include 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.

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

## FOREIGN TRADE IMPORTS

EDIBLE AND NONEDIBLE FSHERY PRODUCTS IMPORTS, 1987

Continent and country	E	dible	Nonedible	Total	
	Thousand		<del></del>	· · · · · · · · · · · · · · · · · · ·	
1	pounds		<u>Thousand dollars</u> - ·		
forth America:	740 654	1 040 770	07 471	1 220 25	
Canada	749,654	1,240,779	97,471	1,338,25	
Panama	159,458 59,162	475,920 115,536	44,481	520,40	
Honduras	12,548	64,176	8,121 34	123,65	
Dominican Republic	3,733	3,638	39,666	64,21 43,30	
Other	46,695	151,743	35,005	186,74	
		20237.10		1003	
Total	1,031,250	2,051,792	224,778	2,276,57	
South America:	***********	***************			
Ecuador	147,293	415,110	1,626	416,73	
Brazil	43,366	129,679	14,312	143,99	
Chile	43,340	71,592	34,143	105,73	
Argentina	80,391	64,897	10,087	74,98	
Peru	27,009 110,695	34,370	30,507 16.046	64,87 154,04	
Other,	110,093	137,996	10,048	154,04	
Total	452,094	853,644	106,721	960,36	
urope:		=======================================		******	
European Economic Community:	1 055	0.750		1 016 07	
Italy	1,855	2,769	1,013,302	1,016,07	
France	54,939	24,828	178,274	203,10	
Denmark	89,111	159,945	23,896	183,84	
United Kingdom	16,085	44,123	86,418	130,54	
Spain	39,546	43,211	46,193	89,40	
Other	35,392	77,197	112,770	189,96	
Total	236,928	352,073	1,460,853	1,812,92	
Other:					
Iceland	124,578	234,120	2,282	236,40	
Norway	83,747	196,633	8,956	205,58	
Switzerland	4,025	2,280	142,954	145,23	
Poland	28,736	26,310	38	26,34	
Yugoslavia	4,564	2,793	14,231	17,02	
Other	2,138	<u>6,777</u>	20,261	27,03	
Total	247,788	468,913	188,722	657,63	
sia:	150 450				
Japan	150,453	277,776	223,659	501,43	
Thailand	213,849	244,549	215,348	459,89	
Taiwan	207,848	351,882	93,154	445,03	
Hong Kong	24,513	27,186	318,719	345,90	
Republic of Korea	175,413 337,686	247,722 538,547	34,788 219,835	282,51 758,38	
Total	1,109,762		1,105,503		
ustralia and Oceania:	1,107,704	1,687,662	1,103,503	2,793,16	
New Zealand	41,538	140,424	1,549	141,97	
Australia	12,494	117,645	6,199	123,84	
French Pacific Islands	229	485	5,698	6,18	
British Pacific Islands	5,770	2,406	30	2 . 43	
Other Pacific Islands	1,426	1.824	149	1,97	
Other	3,911	2,352	55	2,40	
		•			
Total frica:	65,368	265,136	13,680	278,81	
		**************************************		12 11	
Ghana	38,435 1,571	13,385	18	13,40 6,15	
		3,088 5 125	3,063		
Nigeria	1,835	5,125	285	5,41	
Malagasy Republic	5,957	2,458	353	2,45	
Republic of South Africa Other	2,549 7,595	1,817 6,140	353 2,488	2,17 8,62	
	7,050	0,140	2,400	0,02	
*	57.942	32 013	6 207	<b>32 99</b>	
Total	57,942 3,201,132	32,013	6,207 3,106,464	38,22	

Note:--Statistics on imports are the weights of individual products as exported, i.e., fillets, steaks, whole, headed, etc. Source:--U.S. Department of Commerce, Bureau of the Census.

#### **IMPORTS**

REGULAR AND MINCED FISH BLOCKS AND SLABS IMPORTS, BY SPECIES AND TYPE, 1986 AND 1987

Species and type	19	86	1987	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Regular blocks and slabs: Cod	172,675	215,947	162,910	275,031
Turbot	1,779 6,438	1,805 7,385	2,177 9,142	3,026 13,698
Haddock	24,491 1,872	31,353 1,957	27,245 2,898	43,783 4,213
Pollock	69,725 16,080 15,619	44,266 10,094 23,159	89,216 32,745 37,356	82,165 28,283 61,887
Total	308,679	335,966	363,689	512,086
Minced blocks and slabs: (1).	55,218	43,921	39,888	27,272
Grand total	363,897	379,887	403,577	539,358

<sup>(1)</sup> Most of the shipments were from Canada, Denmark and the Republic of Korea. Source:--U.S. Department of Commerce, Bureau of the Census.

REGULAR AND MINCED FISH BLOCKS AND SLABS IMPORTS, BY COUNTRY OF ORIGIN, 1986 AND 1987

Country	19	1986		1987	
Canada	Thous and pounds 124,557 47,585 49,899 21,930 42,450 18,758 23,805 8,183 26,730	Thousand dollars 137,897 57,126 37,139 25,688 50,664 11,045 27,476 4,045 28,807	Thousand pounds 130,301 61,513 72,525 27,302 26,902 28,494 9,757 16,811 29,972	Thousand dollars 188,931 97,748 76,594 45,213 39,500 26,100 13,732 13,710 37,830	
Total	363,897	379,887	403,577	539,358	

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

#### GROUNDFISH FILLET AND STEAK IMPORTS, BY SPECIES, 1986 AND 1987 (1)

Species	1986		1987	
Cod	Thousand pounds 179,912 58,152 49,035	Thousand dollars 266,967 78,786 64,965	Thousand pounds 192,791 74,654 47,973	Thousand dollars 373,547 122,840 73,678
Total	287,099	410,718	315,418	570,065

<sup>(1)</sup> Does not include data on fish blocks and slabs.
(2) Includes some quantities of cusk, hake, and pollock fillets.
Note:--Import and Exports of Fishery Products Annual Summary, 1987, Current Fishery Statistics No. 8702 will provide additional information.
Source:--U.S. Department of Commmerce, Bureau of the Census.

#### **IMPORTS**

CANNED TUNA NOT IN OIL, QUOTA AND IMPORTS, 1956-87

Year	Quota	Imports		
	(1)	Under quota (2)	Over quota (3)	
		Thousand pounds		
956	28,757	27,783	-	
957	44,529	42,524	-	
958	44,694	44,694	752	
959	52,373	52,373	2,931	
960	53,448	50,322	<u>-</u>	
961	57,115	56,210	-	
962	59,059	54,379	-	
963	63,131	56,414	. <del>-</del>	
964	60,912	52,931	<del>-</del>	
965	66,059	49,204	=	
966	65,662	57,987	-	
967	69,472	62,275		
968	66,985	64,907	-	
969	71,703	71,333	-	
970	70,146	70,146	902	
971	77,296	55,638	-	
972	78,532	54,474	_	
973	109,809	36,973	-	
974	112,176	52,172	_	
975	120,740	48,847	-	
976	98,125	56,409	-	
977	111,246	33,913	_	
978	101,407	50,031	_	
979	125,813	82,202	-	
980	109,074	109,074	5,064	
981	104,355	76,683	-	
982	109,742	92,759	_	
983	91,904	91,904	28,304	
984	95,587	95,587	68,328	
985	97,496	97,496	116,854	
986	81,092	81,092	153,057	
187	91,539	91,539	123,364	

<sup>(1)</sup> 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.

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 calandar 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.



<sup>(2)</sup> 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 1987, 6 percent.

<sup>(3)</sup> Dutiable in 1958 to 1959 at 25 percent ad valorem; 1970, 17 percent, and 1972 to 1987, 12.5 percent.

#### **IMPORTS**

SHRIMP IMPORTS BY COUNTRY OF ORIGIN, 1986 AND 1987

Country	1986		1987	
	Thousand	Thousand	Thousand	Thousand
	pounds	dollars	pounds	dollars
lorth America:				
Mexico	74,413 .	331,436	86,082	400,831
Panama	21,793	77,769	16,614	69,673
Honduras	5,531	24,530	7 <b>,9</b> 28	27,977
El Salvador	7,615	19,960	7,230	21,960
Canada	3,540	11,157	6,943	15,298
Costa Rica	6,930	19,408	4,114	13,827
Guatemala	2,868	9,962	3,415	13,305
Trinidad and Tobago	179	632	643	1,871
Bahamas	19	96	179	842
Belize	88	. 374	167	599
Other	134	588	250	1,090
Total	123,110	495,912.	133,565	567,273
South America:	****	# <b>= =</b> = = = = = = = = = = = = = = = = =	<b>:====</b> ================================	
Ecuador	<b>5</b> 2,021	277,828	101,260	378,515
Brazil	19,932	66,208	16,610	50,880
Peru	3,731	15,902	5,891	21,387
Colombia	4,355	18,148	4,321	19,738
Venezuela	9,027	38,918	6,043	18,165
Guyana	4,984	21,670	4,694	14,967
French Guiana	3,402	17,001	2,305	8,951
Chile	783	2,690	947	4,225
Suriname	429	1,668	589	2,725
Argentina	668	2,086	281	963
Other		<u> </u>		19
Total	109,332	462,119	142,948	520,535
urope:				
European Economic Community:	_			
United Kingdom	3,691	11,623	2,575	8,857
Denmark	479	1,674	669	2,868
Spain	454	1,784	407	1,090
France	161	485	175	935
Netherlands	149	518	130	435
Other	218	587	125	360
Total	5,152	16,671	4,081	14,545
Other:	C 704	**************************************		
Norway	6,794	24,707	4,521	21,357
Iceland	1,579	5,429	596	2,604
Switzerland	222 19	709	67	311
Sweden	19	132	2	10
Cyprus	- 670	714	_ 1	7
Total	9,284	31,691	5,187	24,289
Isia:	7,507		J, 10/	27,203 :====================================
Taiwan	34,584	114,141	37,051	159,617
China	20,661	62,534	42,417	118,916
Thailand	24,115	59,632	24,125	64,496
India	24,442	46,792	28,374	56.980
Pakistan	14,309	29,510	17,621	35,523
Bangladesh	6,064	19,509	9,346	32,436
Philippines	4,614	20,172	5,638	26,376
Singapore	5,755	15,920	7,000	20,054
Malaysia	4,082	9,449	4,400	11,926
Indonesia	2,291	8,206	3,677	11,894
Other	9,688	30,030	9,417	30,257
Total	150,605	415,895	189,066	568,475
Australia and Oceania	1,874	9,664	1,300	
		2,385		
frica	****		2,136 :============	
Grand total	400,106	1,434,337	478,305	1,710,224

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 IMPORTS

SHRIMP IMPORTS, BY TYPE OF PRODUCT, 1986 AND 1987

Type of product	1986		1987	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Shell-on (heads off)	262,044	1,080,127	310,073	1,224,234
Canned	15,757	29,406	17,132	33,380
Raw	91,843 30,229 . 233	221,263 102,709 832	116,708 33,181 1,211	313,521 136,137 2,952
Total	400,106	1,434,337	478,305	1,710,224

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

CANNED TUNA, BY COUNTRY OF ORIGIN, 1986 AND 1987

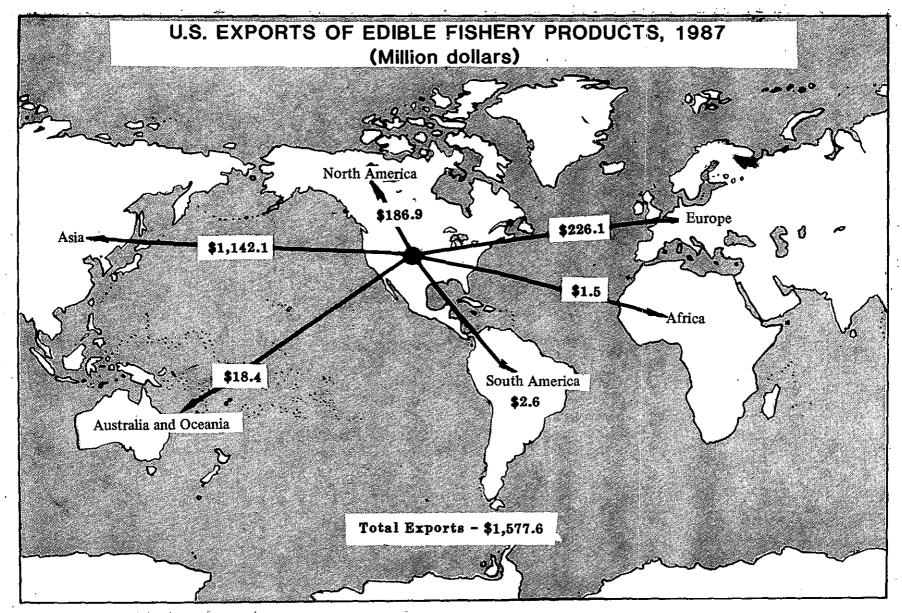
Country	1986		1987	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Thailand	152,297 28,579 27,982 10,558 2,886 7,328 2,401 4,590	139,561 34,483 23,124 14,755 2,603 6,389 3,160 4,551	146,928 25,924 20,858 4,688 5,112 2,914 1,573 3,688	135,368 34,809 16,577 7,375 4,481 2,467 1,985 3,858
Total	236,621	228,626	211,685	206,920

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

FISH MEAL AND SCRAP IMPORTS, BY COUNTRY OF ORIGIN, 1986 AND 1987

Country	1986		1987	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Chile	232,840 36,018 49,752 27,442 20,536 864 166 2,930	31,250 5,476 5,245 3,124 1,575 124 25 428	208,244 64,364 11,890 61,376 44,468 1,324 796 1,268	27,480 8,958 1,446 9,101 4,937 203 90 293
Total	370,548	47,247	393,730	52,508

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



#### **EXPORTS**

DOMESTIC FISHERY PRODUCTS EXPORTS, BY PRINCIPAL ITEMS, 1986 AND 1987

Item	1	986	1987	
	Thousand	Thousand	Thousand	Thousand
. ditio Eichen, musduster	pounds	dollars	pounds	<u>dollars</u>
Edible fishery products:	1,856	2,259	5,537	5,886
Eels, live Fresh and frozen:	1,050	2,239	5,557	3,000
Whole or eviscerated:				•
Butterfish	2,205	1,798	7,575	10,457
Eels	1,324	515	300	461
Halibut	11,004	18,233	7,229	14,108
Herring	84,977	66,177	92,266	81,517
Mackerel	704	278	1,453	779
Mullet	1,566	1,513	2,654	1,689
Pollock	3,031	2,950	6,368	4,643
Sablefish	26,643	36,134	41,889	70,057
Salmon	290,458	546,231	267,735	604,163
Unclassified	59,980	68,641	82,491	103,627
Fillets, steaks, and				
portions:	0.546	12 660	11 405	16 247
Cod	9,546 1 816	12,669 2,996	11,405 1,212	16,347 2,230
Halibut	1,816 5,455	4,045	1,212 2,751	2,230 2,512
Salmon	3,086	6,064	1,960	4,403
Unclassified	21,176	32,112	36,983	50,241
Fish sticks and portions.	2,414	3,210	2,200	3,684
Clams	1,319	2,277	1,232	1,933
Crabs:	2,020	-,7.	-,	2,000
Dungeness	503	2,043	691	3,133
King	3,966	24,487	8,375	60,581
Snow	31,420	73,571	43,339	117,530
Unclassified	5,405	15,706	3,741	11,897
Lobsters	2,602	8,990	3,784	14,392
Scallops	816	3,646	849	3,681
Sea urchins	1,271	11,451	2,931	25,389
Shrimp	20,043	69,119	21,981	74,851
Squid	14,374	11,811	16,422	11,938
Other fish and shellfish.	6,530	14,663	19,405	32,056
Canned:	50 424	101 925	25 001	0.5 016
Salmon	59,434 271	101,235 321	35,901 999	85,816 688
Sardines	999	9,658	1,159	12,380
Abalone	50	117	63	12,380
Shrimp	1,964	5,519	2,334	8,264
Squid	7,815	3,116	4,898	1,943
Other fish and shellfish.	9,057	12,283	8,269	11,035
Cured:	,,,,,	,	•,===	22,000
Cod	1,799	1,617	2,071	2,666
Salmon	862	2,445	266	1,071
Roe:		•		
Herring	10,583	19,148	6,810	23,125
Salmon	19,225	72,048	16,860	71,696
. Sea urchin	284	1,470	607	2,869
Other	4,032	10,896	3,880	13,164
Other fish and shellfish.	2,613	5,267	3,840	8,061
Other	548	1,078	220	520
Total edible fishery	705 000	1 000 007	724 477	
products	735,026	1,289,807	782,935	1,577,609
		=======================================		
onedible fishery products:	77 020	10 571	102 422	10 045
Meal and scrap	77,020	10,571	103,422	13,245
Fish oils	192,214	20,828 548	249,119	23,312
Seal furs	(1)	34,342	(1)	399 45,808
Total nonedible fishery	<del>-</del>	34,344		40,000
products	<b>-</b> !	66,289	_	82,764
p. 444646 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				
Grand total	_	1,356,096	_	1,660,373

<sup>(1)</sup> Number of seal furs was 10,837 in 1986 and 5,489 in 1987. Note--Does not include U.S.-flag vessel catches transferred onto foreign vessels in the U.S. EEZ joint venture operations (see page 17).

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

## FOREIGN TRADE EXPORTS

DOMESTIC FISHERY PRODUCTS EXPORTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1987

Canada       85         Mexico       5         Bermuda       1         Honduras       1         Netherlands Antilles       5         Other       5         Total       99         South America:       2         Ecuador       2         Venezuela       2         Brazil       2         Chile       3         Argentina       3         Other       31         France       31         Netherlands       7         Federal Republic of Germany       5         Belgium and Luxembourg       4         Other       20         Total       104         Sweden       10         Norway       1         Switzerland       1	10ds ,444 ,633 ,171 ,189 ,928 ,033 ,398  ,525 100 111 61 144 ,841 ,939 ,380 ,257 ,896 ,803 ,845	158,540 15,461 4,214 1,515 1,390 5,790 186,910 1,918 1,26 34 176 339 2,593 2,593 68,600 72,856 15,440 11,517 11,238 21,656	5,342 1,622 3 133 121 2,403 9,624 9,624 569 1,179 1,168 663 544 780 4,903	163,882 17,083 4,217 1,648 1,511 8,193  196,534  2,487 1,305 1,202 839 544 1,119  7,496
North America:       85         Canada.       5         Bermuda       1         Honduras.       1         Netherlands Antilles.       1         Other       5         Total       99         South America:       2         Ecuador       2         Venezuela       2         Brazil       2         Chile       3         Argentina       3         Other       3         Europea       2         European       Economic Community:         United Kingdom       3         France       31         Netherlands       7         Federal Republic of Germany       5         Belgium and Luxembourg       4         Other       20         Total       104         *****       10         Norway       1         Switzerland       1	398 	15,461 4,214 1,515 1,390 5,790 186,910 1,918 126 34 176 339 2,593 2,593	5,342 1,622 3 133 121 2,403 9,624 9,624 569 1,179 1,168 663 544 780 4,903	163,882 17,083 4,217 1,648 1,511 8,193 196,534 2,487 1,305 1,202 839 544 1,119 7,496
Canada       85         Mexico       5         Bermuda       1         Honduras       1         Netherlands Antilles       5         Other       5         Total       99         South America:       2         Ecuador       2         Venezuela       2         Brazil       2         Chile       3         Argentina       3         Other       31         France       31         Netherlands       7         Federal Republic of Germany       5         Belgium and Luxembourg       4         Other       20         Total       104         Sweden       10         Norway       1         Switzerland       1	633 171 189 928 033 398 .398 .525 100 11 61 144 .841 .841	15,461 4,214 1,515 1,390 5,790 186,910 1,918 126 34 176 339 2,593 2,593	1,622 3 133 121 2,403 9,624 	17,083 4,217 1,648 1,511 8,193  196,534  2,487 1,305 1,202 839 544 1,119  7,496 73,292 73,196 32,791 12,594
Mexico.       5         Bermuda.       1         Honduras.       1         Netherlands Antilles.       5         Other.       5         Total.       99         South America:       2         Ecuador.       2         Venezuela.       3         Brazil.       4         Chile.       4         Argentina.       3         Other.       3         European Economic Community:       3         United Kingdom.       3         France.       3         Netherlands.       7         Federal Republic of Germany       5         Belgium and Luxembourg.       4         Other:       20         Total.       104         Other:       3         Sweden.       10         Norway.       1         Switzerland.       1	633 171 189 928 033 398 .398 .525 100 11 61 144 .841 .841	15,461 4,214 1,515 1,390 5,790 186,910 1,918 126 34 176 339 2,593 2,593	1,622 3 133 121 2,403 9,624 	17,083 4,217 1,648 1,511 8,193  196,534  2,487 1,305 1,202 839 544 1,119  7,496 73,292 73,196 32,791 12,594
Bermuda	.398 .398 .398 .525 100 111 61 .144 .841 .939 .380 .257 .896 .803 .845	4,214 1,515 1,390 5,790  186,910  1,918 126 34 176 339  2,593  68,600 72,856 15,440 11,517 11,238	3 133 121 2,403 9,624 9,624 179 1,168 663 544 780 4,903 17,351 1,077	4,217 1,648 1,511 8,193 196,534 
Honduras	, 189 928 ,033 ,398 	1,515 1,390 5,790  186,910  1,918 1,26 34 1,76 339  2,593  2,593  68,600 72,856 15,440 11,517 11,238	133 121 2,403 9,624 9,624 1,179 1,168 663 544 780 4,903	1,648 1,511 8,193 196,534 196,534 2,487 1,305 1,202 839 544 1,119 7,496
Netherlands Antilles	928 ,033 ,398 ,525 100 11 61 144 ,841 ,939 ,380 ,257 ,896 ,803 ,845	1,390 5,790 186,910 1,918 1,26 34 176 -339 2,593 2,593 68,600 72,856 15,440 11,517 11,238	2,403  9,624  569 1,179 1,168 663 544 780  4,903  4,692 340 17,351 1,077	1,511 8,193 196,534 2,487 1,305 1,202 839 544 1,119 7,496
Total	398 398 525 100 11 61 144 841 939 380 257 896 803 845	5,790  186,910  1,918 126 34 176 - 339  2,593  68,600 72,856 15,440 11,517 11,238	2,403  9,624  569 1,179 1,168 663 544 780  4,903  4,692 340 17,351 1,077	73,292 73,196 32,791 12,594
Total	398 398 398 300 11 61 144 841 939 380 257 896 803 845	186,910  1,918 126 34 176 339  2,593  68,600 72,856 15,440 11,517 11,238	9,624  569 1,179 1,168 663 544 780  4,903  4,692 340 17,351 1,077	196,534  2,487 1,305 1,202 839 7,496 7,496 32,791 12,594
Couth America:	525 100 11 61 144 841 .841 .939 .380 .257 .896 .803 .845	1,918 126 34 176 339 2,593 2,593 68,600 72,856 15,440 11,517 11,238	4,692 340 17,351 1,077	2,487 1,305 1,202 839 544 1,119 7,496 73,292 73,196 32,791 12,594
Ecuador   2     Venezuela	100 11 61 144 .841 .939 .380 .257 .896 .803 .845	126 34 176 339 2,593 68,600 72,856 15,440 11,517 11,238	1,179 1,168 663 544 780 4,903 4,692 340 17,351 1,077	1,305 1,202 839 544 1,119 7,496 73,292 73,196 32,791 12,594
Venezuela Brazil	100 11 61 144 .841 .939 .380 .257 .896 .803 .845	126 34 176 339 2,593 68,600 72,856 15,440 11,517 11,238	1,179 1,168 663 544 780 4,903 4,692 340 17,351 1,077	1,305 1,202 839 544 1,119 7,496 73,292 73,196 32,791 12,594
Venezuela Brazil	100 11 61 144 .841 .939 .380 .257 .896 .803 .845	126 34 176 339 2,593 68,600 72,856 15,440 11,517 11,238	1,168 663 544 780 4,903 4,692 340 17,351 1,077	1,305 1,202 839 544 1,119 7,496 73,292 73,196 32,791 12,594
### Brazil	11 61 144 .841 .939 .380 .257 .896 .803 .845	34 176 339 2,593 68,600 72,856 15,440 11,517 11,238	1,168 663 544 780 4,903 4,692 340 17,351 1,077	1,202 839 544 1,119 7,496 73,292 73,292 73,791 32,791 12,594
Chile	939 380 257 896 803 845	2,593 2,593 68,600 72,856 15,440 11,517 11,238	4,692 340 17,351 1,077	7,496 73,292 73,196 32,791 12,594
Argentina	939 380 257 896 803 845	2,593 2,593 68,600 72,856 15,440 11,517 11,238	4,692 340 17,351 1,077	7,496 7,496 73,292 73,196 32,791 12,594
Total	,939 ,380 ,257 ,896 ,803 ,845	2,593 68,600 72,856 15,440 11,517 11,238	4,692 340 17,351 1,077	7,496 7,496 73,292 73,196 32,791 12,594
Urope:  European Economic Community:  United Kingdom	,939 ,380 ,257 ,896 ,803 ,845	68,600 72,856 15,440 11,517 11,238	4,692 340 17,351 1,077	73,292 73,196 32,791 12,594
European Economic Community: United Kingdom	380 257 896 803 845	72,856 15,440 11,517 11,238	340 17,351 1,077	73,196 32,791 12,594
European Economic Community: United Kingdom	380 257 896 803 845	72,856 15,440 11,517 11,238	340 17,351 1,077	73,196 32,791 12,594
United Kingdom	380 257 896 803 845	72,856 15,440 11,517 11,238	340 17,351 1,077	73,196 32,791 12,594
France	380 257 896 803 845	72,856 15,440 11,517 11,238	17,351 1,077	73,196 32,791 12,594
Netherlands         7           Federal Republic of Germany         5           Belgium and Luxembourg         4           Other         20           Total         104           Other:         3           Sweden         10           Norway         1           Switzerland         1	257 896 803 845	15,440 11,517 11,238	17,351 1,077	32,791 12,594
Federal Republic of Germany Belgium and Luxembourg	.896 .803 .845	11,517 11,238	1,077	12,594
## Belgium and Luxembourg	,803 ,845	11,238		12,047
Other	845			
Other: Sweden	120	22,000	2,312	23,968
Sweden	, 120	201,307	26,581	227,888
Sweden				===========
Switzerland	775	17,642	351	17,993
Switzerland	528	2,965	827	3,792
	901	2,263	62 ·	2,325
	470	982	-	982
Turkey	436	543	_	543
Other	510	408	289	697
	620	24,803	1,529	26,332
<b>∓</b> ≈ = :		: = = = = = = = = = = = = = = = = = = =		
sia: Japan 495	317	1,057,688	17,223	1,074,911
	682	41,446	1,286	42,732
	829	14,260	5,704	19,964
	821	14,561	4,941	19,502
	136 425	3,388 10,726	550 3,278	3,938 14,004
	210	1,142,069	32,982	1,175,051

(Continued)

## FOREIGN TRADE EXPORTS

DOMESTIC FISHERY PRODUCTS EXPORTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1987 - Continued

Continent and Country		Edible	Nonedible	Total
A 412	Thousand pounds	<u> </u>	<u>Thousand dolla</u>	<u>rs</u>
Australia and Oceania: Australia	11,178 340 416 879 81 107	16,118 899 732 494 114 50	594 86 39 26 -	16,712 985 771 520 114 50
Total	13,001	18,407	745	19,152
Africa: Egypt	2,066 607 40 - 11 21	761 605 61 - 47 46	6,019 112 93 77 -	6,780 717 154 77 47 145
Total	2,745	1,520	6,400	7,920
Grand Total	782,935	1,577,609	82,764	1,660,373

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



#### DOMESTIC FISHERY PRODUCTS EXPORTS, 1978-87

Year		Edible		Total
<del></del>	Thous and pounds		- <u>Thousand dollars</u>	
978	448,312	831,654	73,880	905,534
979	554,294	1,022,335	62,162	1,084,497
980	573,896	904,363	101,791	1,006,154
981	669,272	1:072:765	84,230	1,156,995
981	657,246	998,873	84,230 60,011	1,058,884
983	601,913	907.688	*113.804	1,021,492
984	574,124	842,349	106,490	948,839
985	648,146	1,010,268	73,846	1,084,114
986	735,026	1,289,807	66,289	1,356,096
987	*782 <b>.</b> 935	*1.577.609	82,764	*1,660,373

<sup>\*</sup>Record. Source:--U.S. Department of Commerce, Bureau of the Census.

# FOREIGN TRADE EXPORTS

DOMESTIC AND FOREIGN SHRIMP PRODUCTS EXPORTS, 1986 AND 1987

Item	1:	1986		1987	
Fresh and frozen:	Thousand pounds	Thousand dollars	Thous and pounds	Thousand dollars	
Domestic	20,043 2,548	69,119 9,532	21,981 2,947	74,851 11,563	
Total	22,591	78,651	24,928	86,414	
Canned: Domestic	1,964	5,519 265	2,334 85	8,264 152	
Total	2,077	5,784	2,419	8,416	
Total: Domestic	22,007 2,661 24,668	74,638 9,797 84,435	24,315 3,032 27,347	83,115 11,715 94,830	

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

#### DOMESTIC FRESH AND FROZEN SHRIMP EXPORTS, BY COUNTRY OF DESTINATION, 1986 AND 1987

Country	19	1986		1987	
Canada	Thous and pounds 6,796 4,605 7,310 64 151 253 140 87 49 588	Thousand dollars 23,123 16,978 24,180 272 957 938 320 448 213 1,690	Thousand pounds 8,960 5,824 4,694 280 190 291 360 70 148 1,164	Thousand dollars 28,943 21,976 14,129 1,342 1,147 1,107 967 848 544 3,848	
Total	20,043	69,119	21,981	74,851	

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

#### DOMESTIC CANNED SHRIMP EXPORTS, BY COUNTRY OF DESTINATION, 1986 AND 1987

Country	1986		1987		
Canada	Thousand pounds 1,302 36 192 125 4 35 - 8 45 217	Thousand dollars 3,654 65 584 299 9 93 - 37 181 597	Thous and pounds 1,270 219 341 103 57 51 38 38 28 189	Thousand dollars 4,192 1,041 1,035 383 241 218 194 156 141 663	
Total	1,964	5,519	2,334	8,264	

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

## FOREIGN TRADE EXPORTS

DOMESTIC FRESH AND FROZEN SALMON EXPORTS, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1986 AND 1987

Country	19	86	19	887
	<u>Thous and</u>	Thousand	Thousand	Thousand
	pounds	dollars	pounds	dollars
apan	216,964	445,574	194,140	457,153
rance	23,298	38,814	23,838	57,530
anada	16,873	20,787	20,652	38,490
Inited Kingdom	6,327	8,515	8,327	14,914
elgium and Luxembourg	2,384	5,196	2,166	6,342
epublic of Korea	10,304	7,690	5,598	5,983
enmark	3,082	4,118	3,390	5,905
weden	6,493	7,355	3,977	5,692
ederal Republic of Germany	2,264	3,370	1,901	3,858
etherlands	592 .	1,319	1,576	3,672
witzerland	553	1,012	376	1,182
ong Kong	299	453	473	866
ther	1,025	2,028	1,121	2,576
		-,020	-,	
Total	290,458	546,231	267,735	604,163

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

### DOMESTIC FRESH AND FROZEN SALMON EXPORTS, FILLETS, STEAKS OR PORTIONS, BY COUNTRY OF DESTINATION, 1986 AND 1987

Country	19	86	1987	
Japan	Thous and pounds 637 825 76 1,297 29	Thousand dollars 1,343 1,543 104 2,627 65	Thousand pounds 1,169 410 132 124 75 12 9 6 7 16	Thousand dollars 2,593 912 305 278 188 27 23 18 16 43
Total	3,086	6,064	1,960	4,403

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

#### DOMESTIC CANNED SALMON EXPORTS, BY COUNTRY OF DESTINATION, 1986 AND 1987

Country	19	1986		987
United Kingdom	Thous and pounds 35,362 6,569 8,805 5,016 1,676 293 8 466 257 982	Thousand dollars 62,525 13,949 12,745 6,913 2,277 528 12 586 352 1,348	Thousand pounds 17,722 6,379 6,868 2,107 1,021 326 262 244 136 836	Thous and dollars 45,355 15,004 14,101 5,788 1,734 828 711 612 215 1,468
Total	59,434	101,235	35,901	85,816

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

# FOREIGN TRADE EXPORTS

DOMESTIC FROZEN KING CRAB EXPORTS, BY COUNTRY OF DESTINATION, 1986 AND 1987

Country	1986	1986		1987	
Japan	Thousand pounds 2,797 1,098 4 1,5 14 47	Thousand dollars 19,277 4,718 35 4 41 59 353	Thousand pounds 7,181 1,028 50 18 30 17 51	Thousand dollars 54,674 4,935 189 149 148 123 363	
Total	3,966	24,487	8,375	60,581	

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

#### DOMESTIC FROZEN SNOW CRAB EXPORTS, BY COUNTRY OF DESTINATION, 1986 AND 1987

Country.	1986		1987	
Japan	Thousand pounds 24,182 6,172 1,000 11 - 12 43 31,420	Thousand dollars 62,318 9,176 1,806 33 - 53 185	Thousand pounds 36,564 5,842 874 20 9 12 18	Thousand dollars 100,599 14,901 1,791 120 39 33 47

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

### DOMESTIC FRESH AND FROZEN HERRING EXPORTS, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1986 AND 1987

Country	1986		1987	
Japan	Thousand pounds 63,814 11,471 5,520 3,208	Thousand dollars 46,830 11,806 3,962 2,558	Thousand pounds 67,622 13,290 10,342 899 4 109	Thous and dollars 59,398 13,152 7,939 973 24
Total	84,977	66,177	92,266	81,517

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

# FOREIGN TRADE EXPORTS

DOMESTIC FISH AND MARINE ANIMAL OIL EXPORTS, BY COUNTRY OF DESTINATION, 1986 AND 1987

Country	19	1986		1987	
<u> </u>	Thousand	Thousand	Thousand	Thousand	
Wathau Tauda	pounds	dollars	pounds	dollars	
Wetherlands	126,553	13,531	193,090	16,360	
Jnited Kingdom	13,659	1,494	35,991	3,909	
Spain	5,896	603	7,697	720	
Belgium and Luxembourg	14,348	1,718	8,957	670	
Yorway	13,565	1,399	218	640	
Canada	466	258	598	307	
ederal Republic of Germany	904	88	2,035	220	
Mexico	118	49	139	91	
anama		<u> </u>	225	61	
Other	16,705	1,688	169	334	
Total	192,214	20,828	249,119	23,312	

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

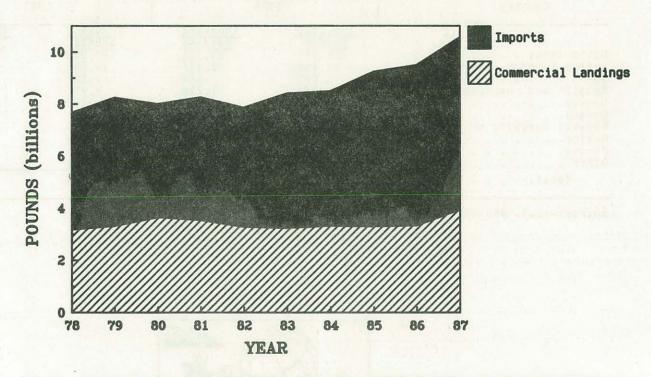


DOMESTIC FISH MEAL EXPORTS, BY COUNTRY OF DESTINATION, 1986 AND 1987

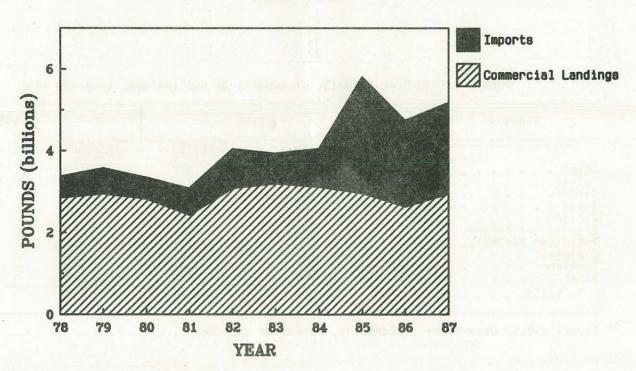
Country		1986		1987	
Egypt	Thous and pounds  42,590 5,096 7,568 3,218 1,342 3,982 1,780 600 722 10,122	Thousand dollars 6,872 749 568 469 168 587 194 111 41 812	Thous and pounds  36,800 17,008 19,404 3,692 4,716 3,242 2,230 748 1,364 14,218	Thousand dollars 6,019 2,399 1,491 691 620 454 294 124 120 1,033	
Total	77,020	10,571	103,422	13,245	

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

# U.S. SUPPLY OF EDIBLE FISHERY PRODUCTS (ROUND WEIGHT) 1978 - 1987



U.S. SUPPLY OF INDUSTRIAL FISHERY PRODUCTS
(ROUND WEIGHT)
1978-1987



U.S.	SUPPLY	0F	EDIBLE	AND	INDUSTRIAL	COMMERCIAL	FISHERY	PRODUCTS,	1978-87
					(Round	weight)			

		•	Υe	ar				Domestic commercia	l landings (1)	Impor	ts (2)	Total
					_		L	Million pounds	<u>Percent</u>	Million pounds	Percent	Million pounds
1978								6,028	52.4	5,481	47.6	11,509
1979								6,267	53.0	5,564	47.0	11,831
1980								6,482	57.1	4,875	42.9	11,357
1981			٠	٠				5,977	52.6	5,376	47.4	11,353
1982								6.367	53.0	5,644	47.0	12,011
1983						٠		6,439	52.1	5,913	47.9	12,352
1984				-				6,438	51.3	6,114	48.7	12,552
1985						•		6,258	41.3	8,892	58.7	15,150
1986						·		6,031	42.2	8,337	57.8	14,368
1987	-	-	_	_	-	-	-	*6,896	43.8	8,848	56.2	15,744

Preliminary.

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, 1978-87 (Round weight)

		,	Υe	ar				Domestic commercia	l landings (1)	Im	ports (2)	Tota1
		_						Million pounds	Percent	Million pounds	Percent	Million pounds
1980 1981	:	•	•	•	•	•	•	3,177 3,318 3,654 3,547 3,285	39.1 40.2 45.6 42.9 41.2	4,958 4,933 4,352 4,720 4,683	60.9 59.8 54.4 57.1 58.8	8,135 8,251 8,006 8,267 7,968
1983 1984 1985 1986	•	•	•				•	3,238 3,320 3,294 3,393 *3,946	38.5 39.1 35.3 35.5 37.4	5,175 5,178 6,043 6,227 *6,615	61.5 60.9 64.7 64.5 62.6	8,413 8,498 9,337 9,620 *10,561

U.S. SUPPLY OF INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1978-87 (Round weight)

Year	Domestic commerc	cial landings (1)	Impo	rts	Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1978	2,851 2,949 2,828 2,430 3,082 *3,201 3,118 2,964 2,638	84.5 82.4 84.4 78.7 76.2 81.3 76.9 51.0	523 631 523 656 961 738 936 2,849 2,110 2,233	15.5 17.6 15.6 21.3 23.8 18.7 23.1 49.0 44.4	3,374 3,580 3,351 3,086 4,043 3,939 4,054 5,183

Records--1968 imports: 9,989 million 1b; 1968 total: 11,802 (1) Preliminary. \*Record. million 1b.

<sup>(1)</sup> (2) (2) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa.
\*Record. Records--1968 imports: 13,221 million lb; 1968 total: 17,381 million lb.

 <sup>(1)</sup> Preliminary.
 (2) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. \*Record.

U.S.	SUPPLY	0F	COMMERCIAL	FINFISH	AND	SHELLFISH.	1986	AND 19	87
------	--------	----	------------	---------	-----	------------	------	--------	----

Item	Domestic landi	commercial ngs	Import	s (1)	To	tal
•	1986	1987	1986	1987	1986	1987
		<u>Mil</u>	lion pounds	, round we	<u> </u>	
Edible fishery products:	0.040	0.760	4 047	F 150	7 007	7 010
Finfish Shellfish	2,240 1,153	2,769 1,177	4,847 1,380	5,150 1,465	7,087 2,533	7,919 2,642
Total	3,393	3,946	6,227	6,615	9,620	10,561
Industrial fishery						
products: Finfish	2,631 7	2,939 11	2,110 (3)	2,233 (3)	4,741 7	5,172 11
Total	2,638	2,950	2,110	2,233	4,748	5,183
Total: Finfish	4,871 1,160	5,708 1,188	6,957 1,380	7,383 1,465	11,828 2,540	13,091 2,653
Total	6,031	6,896	8,337	8,848	14,368	15,744

See footnotes below.

VALUE OF U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1986 AND 1987

Item		c commercial dings	Impor	ts (1)	To	tal
·	1986	1987	1986	1987	1986	1987
			- Million	dollars		
Edible fishery products: Finfish	1,204 1,437	1,502 1,477	2,354 2,409	2,884 2,772	3,558 3,846	4,386 4,249
Total	2,641	2,979	4,763	5,656	7,404	8,635
Industrial fishery products: Finfish	115	127 9	(2)50 (3)	(2)55	165 7	182
Total	122	136	(3)50	55	172	191
Total: Finfish	1,319 1,444 2,763	1,629 1,486 3,115	2,404 2,409 4,813	2,939 2,772 5,711	3,723 3,853 7,576	4,568 4,258 8,826

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

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

<sup>(2)</sup> Includes only quantity and value of fish meal and sea herring for industrial purposes.

<sup>(3)</sup> Not available.

U.S.	SUPPLY	0F	REGULAR	AND	MINCED	BLOCKS,	1978-87
	•		(Edib	le we	ight)		

Year	U.S. pro	oduction	Impo	orts	Total supply
r eur	Quantity	Percentage of total supply	Quantity	Percentage of total supply	Quantity
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds
1978	1,879	0.5	406,286	99.5	408,165
1979	4,857	1.2	*408,152	98.8	* *413,009
1980	1,205	.4	336,117 '	99.6	337,322
1981	1,029	.3	344,111	99.7	345,140
1982	2,766	.9	318,966	99.1	321,732
1983	5,155	1.3	384,458	98.7	389,613
	2,655	.8	316,165	99.2	318,820
1985	2,551	.8	334,060	99.2	336,611
	3,919	1.1	363,897	98.9	367,816
1987	2,850	.7	403,577	99.3	406,427

### U.S. SUPPLY OF ALL FILLETS AND STEAKS, 1978-87 (Edible weight)

V	U.S. pr	oduction (1)	Imp	orts	Total supply
Year	Quantity	Percentage of total supply	Quantity	Perentage of total supply	Quantity
	Thousand pounds	Percent	Thousand pounds	<u>Percent</u>	Thousand pounds
1978	184,356 187,167 202,779 205,225 217,644	30.3 30.4 35.5 33.1 33.0	423,749 427,526 369,161 414,163 440,916	69.7 69.6 64.5 66.9 67.0	608,105 614,693 571,940 619,388 658,560
1982	230,649 252,288 245,525 *279,468 276,923	34.4 34.8 31.4 34.2 30.9	439,716 439,716 473,594 536,725 538,532 *620,985	65.6 65.2 68.6 65.8 69.1	670,365 725,882 782,250 818,000 *897,908

<sup>(1)</sup> Includes fillets used to produce blocks. \*Record.

### U.S. SUPPLY OF GROUNDFISH FILLETS AND STEAKS, 1978-87 (Edible weight)

Year	U.S. pro	duction (1)	Impo	rts	Total supply
	Quantity	Percentage of total supply	Quantity	Percentage of total supply	Quantity
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds
1978	65,573	22.0	233,106	78.0	298,679
	74,568	22.8	252,957	77.2	327,525
	67,221	23.3	220,954	76.7	288,175
1981	77,092	23.1	257,164	76.9	334,256
	70,994	19.4	295,193	80.6	366,187
	81,223	21.4	298,170	78.6	379,393
1984	94,943	23.6	307,852	76.4	402,795
	84,244	21.6	305,690	78.4	389,934
	107,008	27.1	287,099	72.9	394,107
	93,685	22.9	*315,418	77.1	*409,282

<sup>(1)</sup> Includes fillets used to produce blocks. Species include: cod, cusk, haddock, hake, Atlantic pollock, and Atlantic ocean perch. \*Record. Record--1951 U.S. production: 148,786,000 lb.

#### SUPPLY OF FISHERY PRODUCTS

U.S. COMMERCIAL LANDINGS AND IMPORTS OF TUNA, 1978-87

	Domestic	commercial lan	dings		Imports		
Year	Atlantic, Gulf, Pacific Coast States, and	lf, Puerto c Coast Rico (1)		Fresh and frozen including cooked loins	Canned		
	Hawaii			and discs (2)	In oil	Not in oil	
<u></u>		– – <u>Rou</u> nd we	<u>ight</u>	<u> </u>	<u>Produ</u>	ct weight	
			<u>Thousa</u>	nd pounds			
978	408,878	156,813	565,691	*870,259	207	51,574	
979	364,476	143,676	508,152	810,066	627	53,076	
980	399,432	100,606	500,038	770,396	446	63,107	
981	341,149	148,729	489,878	769,675	268	70,583	
982	261,409	211,679	473,088	589,558	213	87,366	
983	278,692	307,298	585,990	533,686	197	122,132	
984	211,830	371,089	582,919	497,079	277	162,036	
985	83.054	433,083	516.137	482,742	303	213,645	
986	87,811	469,034	556.845	567.524	301	*236.320	
987	100,058	526,186	626,244	572,505	329	211,356	

<sup>(1)</sup> Includes a quantity of fish landed in American Samoa and other ports by U.S.-flag vessels. (2) Includes landings in American Samoa of foreign-caught fish. \*Record.



U.S. SUPPLY OF CANNED TUNA, 1978-87

		Domestic	production		Imp	orted	
Year	Alba	core	Lightmeat		Ca	Total supply	
	Thousand pounds	Percent	Thousand pounds	<u>Percent</u>	Thousand pounds	Percent	Thousand pounds
978	146,797 119,517 113,605 120,983 125,113 106,175 136,745 132,001 157,341 139,888	19.4 17.7 17.1 17.3 20.0 14.9 17.6 17.4 18.0	557,996 500,716 488,451 505,986 413,390 484,367 477,536 412,992 479,490 514,095	73.8 74.3 73.4 72.5 66.0 67.9 61.5 54.4 59.4	51,781 53,703 63,553 70,851 87,579 122,329 162,313 213,948 236,621 211,685	6.8 8.0 9.5 10.2 14.0 17.2 20.9 28.2 27.1 24.5	756,574 673,936 665,609 697,820 626,082 712,871 776,594 758,941 873,452 865,668

Year	U.S. pack		Imports		Total	Expo	rts
	-	In oil	Not in oil	Total		Domestic	
	<b></b>		<u>- T</u>	housand po	unds		
1978	25,909 30,030 19,500 30,586 18,003 13,110 14,650 20,016	24,231 22,878 18,218 18,239 14,119 17,151 17,535 23,009	24,486 26,879 32,960 37,034 35,925 18,096 27,216 34,213	48,717 49,757 51,178 55,273 50,044 35,247 44,751 57,222	74,626 79,787 70,678 85,859 68,047 48,357 59,401 77,238	1,555 1,591 1,839 1,731 1,049 1,013 889 529	173 301 78 183 195 920 860 570
1986	15,601 13,116	22,949 27,352	30,315 37,670	53,264 65,022	68,865 78,138	271 999	287 158

U.S. SUPPLY OF CANNED SARDINES, 1978-87 (Canned weight)

\*Record--1974 imports: 69,137,000 lb.

U.S.	SUPPLY	0F	CANNED	SALMON,	1978-87
	(	Car	ined wei	iaht) '	

Year	U.S. pack	.Imports Total		Export	:s 
	·			Domestic	Foreign
			- <u>Thousand pounds</u>		
1978	148,587	325	148,912	32,513	33
1979	148,822	434	149,256	50,907	70
1980	200,003	167	200,170	*74,006	58
1981	214,855	71	214,926	63,494	201
1982	112,100	158	112,258	41,156	111
1983	181,166	277	181,443	54,488	422
1984	198,926	551	199,477	48,963	245
1985	158,943	1,958	160.901	48,240	39
1986	141,756	4,622	146,378	59,434	(1)
1987	112,080	6,652	118,732	35,901	207

(1) Less than 500 lb. \*Record. Records--1936 U.S.pack: 430,328,000 lb; 1959 imports: 31,154,000 lb.

U.S. SUPPLY OF CLAM MEATS, 1978-87 (Meat weight)

		U.S.	commercial	llandings			Total for
Year	Hard	Soft	Surf	Other	Total	Imports (1)	U.S. consumption
	<u> </u>			Thousand	pounds		
1978	13,295	10,091	39,237	25,088	87,711	6,131	93,842
	12,058	8,585	34,912	36,495	92,050	7,273	99,323
1980	13,370	8,948	37,737	35,314	95,369	6,908	102,277
	18,118	8,072	46,100	48,341	120,631	9,520	130,151
1982	12,855	8,021	49,720	37,709	108,305	11,122	119,427
	14,186	8,460	55,938	36,821	115,405	11,006	126,411
1984	14,749	7,919	70,243	40,010	132,921	11,113	1.44,034
	16,697	7,865	72,520	53,469	*150,551	12,979	*163,530
	11,793	5,887	78,749	48,964	145,393	16,880	162,273
1987	11,418	7,469	60,744	54,726	134,357	*17,641	151,998

<sup>(1)</sup> Imports 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. \*Record.

U.S. SUPPLY OF KING CRAB, 1978-87 (Round weight)

														U.S.		orts (1)
	•	,	re:	ar										commercia landings	l Frozen	Canned
															<u>Thousand pounds</u>	
1978									٠		. •			130,238	52,966	2,462
1979					٠									154,589	64,187	4,616
1980							•							*185,624	50,525	1,988
1981						٠		•	٠					88,054	27,704	704
1982								,						38,492	8,958	1,071
1983															2,039	346
1984														17,204	3,521	. 448
1985															4,053	752
1986														25,909	6,941	267
1987										٠	٠		٠	29,065	14,656	336

(1) Domestic merchandise. Converted to round (live) weight by using these conversion factors: 1.75, frozen; and 5.33, canned. \*Record.

U.S. SUPPLY OF SNOW (TANNER) CRABS, 1978-87

(Round weight) U.S. Year commercial Imports Total Exports landings (1) (2) Thousand pounds - - -4,460 1978 . 129,506 133,966 \*131,393 121,684 4,254 3,732 135,647 125,416 1979 . 91,543 1980 71,871 3,460 1981 . 107,474 110,934 68,156 71,902 68,767 61,077 48,765 1982 47,220 3,135 64,439 53,757 1983 3,362 34,415 1984 4,992 31,127 1985 85,742 6,572 92,314 47,436 5,510 1986 110,000 115,510 66,925 1987 113,812 7,706 121,518 92,312

(1) Converted to round (live) weight by multiplying canned weight by 5.00. (2) Domestic merchandise converted to round (live) weight by multiplying frozen weight by 2.13 (believed to be mostly sections). Data for foreign exports not available. ★Record.

U.S. SUPPLY OF CANNED CRABMEAT, 1978-87 (Canned weight)

Year	U.S. pack	Percentage of total	Imports	Percentage of total	Total	Exports (1)
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds	Thousand pounds
1978	3,593	47.0	4,053	53.0	7,646	462
	2,958	36.8	5,073	63.1	8,031	866
	3,916	43.9	5,002	56.1	8,918	373
	1,725	25.6	5,019	74.4	6,744	132
	1,349	19.0	5,737	81.0	7,086	201
	1,435	18.1	6,505	81.9	7,940	65
1984	1,084	14.8	6,233	85.2	7,317	84
	553	6.8	7,584	93.2	8,137	141
	591	6.3	8,778	93.7	9,369	50
	178	2.2	7,967	97.8	8,145	63

(1) Domestic king crab only. (2) Revised. Records--1966 U.S. pack: 11,002,000 lb; 1939 imports: 13,507,000 lb.

U.S. SUPPLY OF AMERICAN LOBSTERS, 1978-87 (Round weight)

	<del></del>	(Kouna	weight)						
		ommercial lings		Imports(1)					
		Percentage		Quantit	Percentage	e Total			
Year	Quantity	of total supply	Fresh and frozen	Canned	Total	of total supply	supply		
	Thousand pounds	Percent	<u>Tho</u> u	ısand pound	<u>s</u>	Percent	Thousand pounds		
1978	34,419 37,184 36,952 37,494 39,445 44,206 43,967	55.9 54.5 53.4 48.2 48.6 47.7 43.9	16,468 22,790 22,503 26,857 26,205 43,439 54,359	10,648 8,307 9,699 13,459 15,480 4,977 1,783	27,116 31,097 32,202 40,316 41,685 48,416 56,142	44.1 45.5 46.6 51.8 51.4 52.3 56.1	61,535 68,281 69,154 77,810 81,130 92,622 100,109		
1985	*46,152 46,053 45,558	42.9 40.8 40.0	57,358 65,276 66,585	4,029 1,633 2,956	61,387 66,909 *69,541	57.1 59.2 60.0	107,539 112,962 115,099		

(1) Imports were converted to round (live) weight by using these conversion factors: 1.00, whole; 4.50, meat; and 4.64, canned. \*Record.



U.S. SUPPLY OF SPINY LOBSTERS, 1978-87

	(Round	1 weight)				<del>,</del>	
		·	Quantity	uantity		Total	
Quantity	of total supply	Fresh and frozen	Canned	Total	of total supply	supply	
Thousand pounds	Percent	<u>Th</u>	ousand pou	nds	Percent	Thousand pounds	
4,629 6,301 6,861	3.1 4.0 5.4	143,945 150,470 119,817	563 604 395	144,508 151,074 120,212	96.9 96.0 94.6	149,137 157,375 127,073	
6,619 6,438 5,218	4.9 5.1 3.8	126,210 120,679 131,102	978 230 588	127,188 120,909 131,690	95.1 94.9 96.2	133,807 127,347 136,908	
6,303 5,311 6,775	4.1 3.5 4.5 3.8	146,990 148,324 144,933	79 253 164	147,069 148,577 145,097 145,706	95.9 96.5 95.5 96.2	153,372 153,888 151,872 151,461	
	Thousand pounds  4,629 6,301 6,861 6,619 6,438 5,218 6,303 5,311	U.S. commercial landings    Percentage of total supply	Percentage   Of total   Fresh and frozen	U.S. commercial   Im   Percentage   Quantity   Of total   Fresh   and frozen	U.S. commercial landings Imports (1)    Percentage	Percentage	

(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. \*Record. Records--1972 landings, 12,215,000 lb.; 1976 imports, 168,095,000; and 1976 total supply, 173,738,000 lb.

U.S. SUPPLY OF OYSTERS, 1978-87 (Meat weight)

						U.S.	commercial lan	dings	Imports	Total for
	Year					Eastern	Pacific (1)	Pacific (1) Total		U.S. consumption
				_		 		Thousand pou	nds	1
1978 .	· • ·					45,183	5.800	50,983	33,843	84,826
1979 .						42,325	5,756	48.081	27,131	75,212
						42,439	6,642	49.081	21,732	70,813
						44,440	5,612	50,052	25.769	75,821
						48.489	5,839	54.328	27,529	81,857
1983 .						44,729	5,431	50.160	30.775	80,935
						41.808	6.479	48,287	36.086	84,373
<del>-</del>						36.578	7.595	44.173	45,926	90,099
1000						35,013	5.531	40.544	50.038	90,582
1987 .					·	29,957	9,850	39,807	*52,085	91,892

(1) Includes Western. (2) Imports were converted to meat weight by using these conversion factors: 0.93, canned; 3.12, canned smoked; and 0.75, other. \*Record. Record - 1908 landings: 152,046,000 lb.

U.S. SUPPLY OF SCALLOP MEATS, 1978-87

Year	) · · · · · · · · · · · · · · · · · · ·	S. commercia		Total for		
Year	Bay	Calico	Sea	Total	Imports	U.S. consumption
		<del>-1</del>	<u>Thous</u>	and pounds		
1978	1,371 1,774 968 670 1,780 2,338 1,728 1,331 735	948 863 14,641 11,010 9,606 39,330 12,513 1,616	30,976 31,466 28,752 30,277 21,325 20,478 18,427 15,829 19,992	33,295 34,103 29,720 45,588 34,115 32,422 *59,485 29,673 22,343	28,367 25,155 20,885 26,227 20,860 34,280 27,270 42,035 *47,916	61,662 59,258 50,605 71,815 54,975 66,702 *86,755 71,708 70,259

<sup>\*</sup>Record.

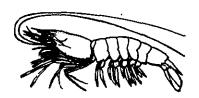


U.S. SUPPLY OF ALL FORMS OF SHRIMP, 1978-87

		(Heads-	off weight	)			
	U.S.				Exp	orts (2)	
Year	Commercial landings	Imports	Total	Fresh an	d frozen	Cann	ed
Tanurings	(1)	· IULAI	Domestic	Foreign	Domestic	Foreign	
			<u>Thousa</u>	nd pounds -			
1978	256,882 205,587 207,869 218,900 175,613	240,414 269,263 258,069 259,112 319,596	497,296 474,850 465,938 478,012 495,209	41,065 34,143 18,777 20,777 18,350	13,308 5,826 9,567 13,687 12,738	12,088 11,047 11,781 9,181 6,064	146 63 *935 78 45
1983	155,591 188,132 207,239 244,409 223,514	421,179 422,340 452,232 492,005 *583,030	576,770 610,472 659,471 736,414 *806,544	21,776 15,961 17,708 23,650 25,938	6,560 5,069 5,735 2,548 2,947	7,573 5,478 3,159 3,967 4,714	28 83 338 285 214

<sup>(1)</sup> Imports were converted to heads-off weight by using these conversion factors: 0.63, breaded; 1.00, shell-on; 1.28, peeled raw; 2.52, canned; and 2.40, other. (2) Exports were converted to heads-off weight by using these conversion factors: domestic--fresh and frozen, 1.18 and canned 2.02; foreign--fresh and frozen, 1.00 and canned, 2.52.

<sup>\*</sup>Record. Records--1973 fresh and frozen domestic exports: 44,172,000 lb; 1970 fresh and frozen foreign exports: 14,699,000 lb; 1973 domestic canned: 20,097,000 lb.



U.S. SUPPLY OF CANNED SHRIMP, 1978-87

	U.3		ned weigh	t)	o /		
Year	v.s.	Percentage of	Imports	Percentage of	Total	Exp	orts .
	pack	total		tota?		Domestic	Foreign
	Thousand pounds	Percent	Thousand pounds	Percent	<u>T</u> I	nousand pou	nds
1978	16,201 11,118 15,289 9,693 6,276 6,723 7,246 4,001 4,596 4,418	78.4 68.9 54.1 33.8 34.8 19.0 22.6	2,739 4,288 4,225 4,383 5,332 13,176 13,580 17,088 15,757 17,132	14.5 27.8 21.6 31.1 45.9 66.2 81.0 77.4 79.5	18,940 15,406 19,514 14,076 11,608 19,899 20,826 21,089 21,089 21,550	5,984 5,469 5,832 4,545 3,002 3,749 2,712 1,564 1,964 2,334	58 25 *371 31 18 11 33 134 113 85

<sup>(1)</sup> Revised. \*Record. Records--1973 U.S. pack: 25,228,000 lb; 1970 total: 29,001,000 lb 1973 domestic exports: 9,949,000 lb.

U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1978-87 (Product weight)

				_					(FIDUACE ME	rgne)	Commence of the Commence of th	
	Year			Domestic production (1)		Imports (2)						
-			-				:	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pound
1978	٠				٠			888.364	91.0	87.802	9.0	976,166
1979								883,514	83.1	179,226	16.9	1,062,740
1980								857,52 <b>6</b>	89.6	99,074	10.4	956,600
1981						٠		765,640	86.6	118.868	13.4	884,508
1982								899.356	84.2	168,654	15.8	1,068,020
1983		٠	٠				•	*922.040	87.2	135,880	12.8	1,057,920
1984								877,566	84.0	166.888	16.0	1.044.454
1985	٠							883,196	63.4	510.654	36.6	1.393,850
1985		٠				٠		799,826	68.3	370.548	31.7	1,170,374
1987								905,996	69.7	393.730	30.3	1,299,726

(1) Includes shellfish meal production plus the production of U.S. solubles. (2) Data do not include imports of fish solubles. \*Record. Records--1968 imports: 1,712,344,000 lb, 1968 total supply: 2,254,450,000 lb.

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

one-half.

U.S. SUPPLY OF FISH MEAL, 1978-87

			(Product wei	ght)		
•	j	Domestic		Total	Expor	ts
Year			Imports	supply	Domestic	Foreign
				- Thousand pounds		
1978		. 725,820	87.802	813,622	101,400	7,866
1979		. 748,586	179,226	927,812	31,402	1,510
1980		. 723,844	99,074	822,918	170,562	2,942
1981		. 637,018	118,868	755,886	94,054	5,384
1982		. 746,854	168,664	915,518	35 880	4,662
1983		. 763,536	135,880	899,416	154,834	6.848
1984		. 751,528	166,888	918.416	40.356	1,234
1985		. 721,682	510.654	1,232,336	69,166	808
1986		. 702,194	370.548	1,072,742	77,020	952
1987		*787,232	393,730	1,180,962	103,422	664
(1) Includes				ls1968 imports:	1,710,570,000,	
total supply 2	180.	842,000 1b.		•		-

U.S SUPPLY OF FISH OILS, 1978-87

Year	Domestic production	Imports (1)	Total supply	Exports	Total for U.S. onsumption
			Thousand pound	<u> s                                    </u>	
1978	296,287	16,040	312,327	222,012	90.315
1979	267,949	14,455	282,404	198.497	83,907
1980	312,511	21,350	333,861	284.009	49,852
1981	184,302	18.255	202.557	238,308	(2)
1982	347,513	12,699	360.212	202.345	157,867
1983	*399,334	15.334	414,668	*404.087	10,581
1984	372,804	13,426	386,230	399,425	(2)
1985	285,077	17,254	302,331	279.080	23,251
1986	336,708	19,212	355,920	192,214	163,706
1987	298,298	25,697	323,995	249,119	74,876
(1) Excludes fish liv	er oils. (2)	The 1981 and	1984 exports,	which included	

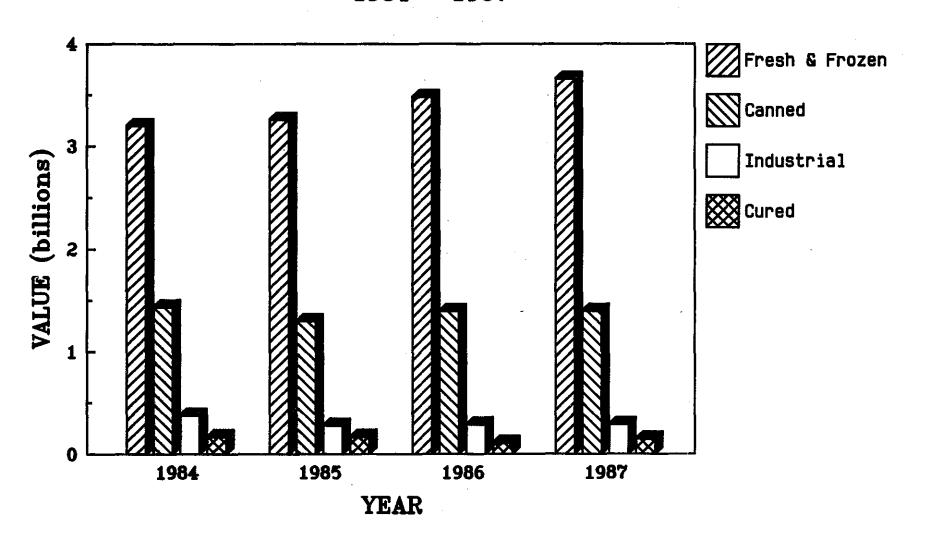
stocks, exceeded domestic production plus imports. \*Record.

Note: -- Does not include exports of foreign merchandise.

### VALUE OF PROCESSED FISHERY PRODUCTS

FROM DOMESTIC CATCH AND IMPORTED PRODUCTS

1984 - 1987



#### **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 reports, divided by the civilian population of the United States as of July 1 of each year.

U.S. ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1909-87

	Civilian	Per capita consumption						
Year	resident population July 1 (1)	Fresh and Frozen (2)	· Canned (3)	Cured (4)	Tota			
	<u>Million</u>							
	persons			s, edible meat				
09 (5)	90.5	4.3	2.7	*4.0	11.			
10	92.2	4.5	2.8	3.9	11.			
11	93.9	4.8	2.8	3.7	11.			
12	95.3	5.0	2.9	3.4	11.			
13	97.2	5.3	2.9	3.3	11.			
114	99.1	5.6	3.0	3.1	11.			
15	100.5	5.8	2.4	3.0	11.			
16	102.0	6.0	2.2	2.8	11.			
17	103.3	6.2	2.0	2.7	10.			
118	103.2	6.4	2.0	2.5	10.			
20	104.5	6.4 6.3	2.8 3.2	2.4	11.			
<del></del>	106.5			2.3	11.			
22	108.5	6.2	2.2 3.2	2.1	10.			
	110.0 111.9	6.1 6.0	2.9	2.0 1.8	11.			
23	111.9	6.1	3.2	1.7	10.			
125	115.8	6.3	3.2	1.6	11. 11.			
126	117.4	6.6	3.4	1.4	11.			
127	119.0	7.0	3.9	1.4	12.			
128	120.5	7.1	3.9	1.1	12.			
129	121.8	6.9	3.9	1.1	11.			
130	122.9	5.8	3.4	1.0	10.			
131	123.9	4.9	3.2	0.7	8.			
32	124.7	4.3	3.4	0.7	8.			
33	125.4	4.2	3.9	0.6	8.			
34	126.2	4.3	4.2	0.7	ě.			
35	127.1	5.1	4.7	0.7	10			
36	127.9	5.2	*5.8	0.7	11.			
137	128.6	5.6	5.3	0.9	11.			
38	129.6	5.2	4.8	0.8	10.			
39	130.7	5.3	4.7	0.7	10.			
40	132.1	5.7	4.6	0.7	11.			
41	132.1	6.3	4.2	0.7	11.			
42	131.4	5.2	2.9	0.6	8.			
143	128.0	5.5	1.8	0.6	7.			
144	127.2	5.5	2.6	0.6	8.			
45	128.1	6.6	2.6	0.7	9.			
146	138.9	5.9	4.2	0.7	10.			
947	143.1	5.8	3.8	0.7	10			
948	145.7	6.0	4.4	0.7	11.			
49	148.2	5.8	4.5	0.6	10.			
950	150.8	6.3	4.9	0.6	11.			
951	151.6	6.3	4.3	0.6	11.			
52	153.9	6.2	4.3	0.7	11.			
953	156.6	6.4	4.3	0.7	11.			
954	159.7	6.2	4.3	0.7	11.			
955	163.0	5.9	3.9	0.7	10			
956	166.1	5.7	4.0	0.7	10.			
957	169.1	5.5	4.0	0.7	10.			
)58	172.2	5.7	4.3	0.6	10.			

See notes at end of table.

(Continued)

#### U.S. CONSUMPTION

U.S. ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1909-87 - Continued

	Civilian		Per capita c	onsumption	
Year	resident population July 1 (1)	Fresh and Frozen (2)	Canned (3)	Cured (4)	Total
	Million				
	persons		Pounds	, edible meat-	
1960	178.1	5.7	4.0	0.6	10.3
961	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
965	191.6	6.0	4.3	0.5	10.8
.966	193.4	6.1	4.3	0.5	10.9
967	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
970	201.9	6.9	4.5	0.4	11.8
971	204.9	5.7	4.3	0.5	11.5
972	207.5	7.1	4.9	0.5	12.5
973	209.6	7.4	5.0	0.4	12.8
974	211.6	6.9	4.7	0.5	12.1
975	213.8	7.5	4.3	0.4	12.2
976	215.9	8.2	4.2	0.5	12.9
977	218.1	7.7	4.6	0.4	12.7
978 (6)	220.5	8.1	5.0	0.3	13.4
979 (6)	223.0	7.8	4.8	0.4	13.0
.980 (6)	225.6	8.0	4.5	0.3	12.8
981 (6)	227.7	7.8	4.8	0.3	12.9
982 (6)	229.9	7.7	4.3	0.3	12.3
983 (6)	232.0	8.0	4.8	0.3	13.1
984 (6)	234.8	8.5	4.9	0.3	13.7
.985 (6)	237.0	9.0	5.1	0.3	14.4
986 (6)	239.4	9.0	5.4	0.3	14.7
1987 (6)	241.5	*10.0	5.1	0.3	*15.4

- (1) Resident population for 1910 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.
- (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 estimated based on the 1908 census and foreign trade data.
- (6) Domestic landings data used in calculating these data are preliminary. \*Record.

Note: -- These consumption figures refer only to consumption of fish and shellfish entering commercial channels, and they do not include data on consumption of recreationally caught fish and shellfish which since 1970 is estimated to be between 3 to 4 pounds (edible meat) per person annually. The figures are calculated on the basis of raw edible meat, i.e. excluding bones, viscera, shells, etc. U.S. Department of Agriculture (USDA) consumption purchased in retail stores. USDA estimates the net edible weight to be about 70-95 percent of the retail weight, depending on the cut and type of meat. From 1970 through 1980 data, were revised to reflect the results of the 1980 census.

#### U.S. CONSUMPTION

U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1968-87

Year	Salmon	Sardines	Tuna	Shellfish	Other	Total
1000				<u>'ounds</u>		
1968	• /_	, 4	2.4	• <u>5</u>	. 3	4,3
1969	.7	. 4	2.4	• 5	• 2	4.2
1970	.7	.4	2.5	. 5	. 4	4.5
1971	.7	. 4	2.4	• 5	.3	4.3
1972	.7	. 4	2.9	. 5	. 4	4.9
1973	Δ	5	3.1	5.	. 5	5.0
1974	• 4	Ã	3 1	Š	Δ	4 7
1975	. 3	• 7	2 0	-	, T	), A 2
	• 3	• 2	2.0	-5	7	4 3
1976	.3	. 3	2.8	• 4	4	4.2
1977	.5	. 3	2.8	• 6	4	4:5
1978 (1)	.6	.3	3.3	• 5	.3	5.0
1979 (1)	.5	.3	3.2	.5	.3	4.8
1980 (1)	.5	. 3	2.9	• 5	.3	4:5
1981 (1)	.5	. 4	3.1	- 5	.3	4.8
1982 (1)	.5	้ จ่	2.7	. 4	. 4	4.3
1983 (1)		• 5	3 1	.6	.4	4.8
	. 5	• 2	2.1		i i	4.9
1984 (1)	, D	+ 4	3.4	- 4	• 5	4.9
1985 (1)	. 5	• 3	3.3	• 5	• 5	5.1
1986 (1)	.5	.3	3.6	. 4	•6	5.4
1987 (1)	. 4	.3	3.5	• 5	. 4	5.1

<sup>(1)</sup> Preliminary. Note: -- From 1970 through 1980, data were revised to reflect the results of the 1980 census.

U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1968-87

Year	Fillets and steaks (1)	Sticks and portions	Shrimp, all preparations
		<u>Pounds (2)</u>	
1968	1.9	1.3	1.4
1969	2.0	1.6	1.3
1970	2.2	1.7	1.5
1971	2.0	1.6	1.4
1972			
	2.3	1.8	1.4
1973	2.5	2.0	1.4
1974	2.1	1.8	1.5
1975	2.4	1.8	1.4
1976	2.5	2.0	1.5
1977	2.5	2.0	1.6
1978 (3)	2.7	2.2	1.5
		#0 0	
1979 (3)	2.7	*2.2	1.3
1980 (3)	2.6	1.9	1.4
1981 (3)	2.7	1.8	1.5
1982 (3)	2.7	1.7	1.5
1983 (3)	2.9	1.8	1.7
1984 (3)	3.0	1.8	1.9
1985 (3)	*3.2	1.8	2.0
1006 (3)		1 0	
1986 (3)	3.2	1.8	2.2
1987 (3)	3.2	1.7	*2.3

Data include groundfish and other species. Data do not include blocks, but fillets could be made into blocks from which sticks and portions could be produced.
 Product weight of fillets and steaks and sticks and portions, edible (meat) weight of

Note: -- From 1970 through 1980, data were revised to reflect the results of the 1980 census.

shrimp.
(3) Domestic landings data used in calculating these data are preliminary.
\*Record.

#### 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 (see page 65).

Per capita use figures are not comparable with per capita consumption data (see page 80). 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, 1954-87

Year	Total population including armed	Total U.S.	Per car	oita utilization	
	forces overseas	supply	Commercial	Imports	Total
	July 1	(1)	landings		
	Million	Million	,		
	persons	pounds		<u>Pounds</u>	
1954	163.0	7,593	29.2	17.4	46.6
1955	165.9	7,121	29.0	13.9	42.9
1956	168.9	7,569	31.2	13.6	44.8
1957	172.0	7,164	27.9	13.8	41.7
1958	174.9	7,526	27.1	15.9	43.0
1959	177.8	8,460	28.8	18.8	47.6
1000	100.7	0.000	07.0	40.0	45.5
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	1 200.7	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 (2)	222.6	11,509	27.1	24.6	51.7
1979 (2)	225.1	11.831	27.9	24.7	52.6
	E.	•			
1980 (2)	227.7	11,357	28.5	21.4	49.9
1981 (2)	229.8	11,353	26.0	23.4	49.4
1982 (2)	232.1	12,011	27.5	24.3	51.8
1983 (2)	234.2	12,352	27.5	25.2	52.7
1984 (2)	237.0	12,552	27.2	25.8	53.0
1985 (2)	239.3	15,061	26.2	36.8	63.0
1986 (2)	241.6	14,368	25.0	34.5	59.5
1987 (2)	243.8	15,744	28.3	36.3	64.6

<sup>(1)</sup> 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.

Note:--From 1970 through 1980, population and per capita utilization data were revised to reflect the results of the 1980 census.

<sup>(2)</sup> Domestic landings data used in calculating these data are preliminary.

#### WORLD CONSUMPTION

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1982-84 AVERAGE

Region and country	Estimated live weight equivalent		Region and country	Estimated live weight equivalent		
	Kilograms	Pounds		Kilograms	Pounds	
North America:			Europe - Continued:			
Canada	20.5	45.2	Iceland		196.0	
United States	19.1	42.1	Ireland		29.1	
			Italy	14.3	31.5	
Caribbean:	25.0		Malta		25.4	
Antigua	26.0	57.3	Netherlands	10.6	23.4	
Bahamas	14.1	31.1	Norway	45.2	99.6	
Barbados	34.0	75.0	Poland		38.4	
British Virgin Islands	25.1	55.3	Portugal		80.5	
Cayman Islands	34.3	75.6	Romania	9.2	20.	
Cuba	20.1	44.3	Spain		73.0	
Dominica	19.2	42.3	Sweden		64.6	
Dominican Republic	6.6	14.6	Switzerland		25.4	
Grenada	16.5	36.4	United Kingdom		39.0	
Guadeloupe	49.2	108.5	Yugoslavia	3.4	7.5	
Haiti	3.4	7.5	USSR	27.2	60.0	
Jamaica	17.0	37.5	None Books			
Martinique	47.5	104.7 23.1	Near East:	0.1		
Montserrat	10.5 18.2	40.1	Afghanistan		0.2	
Netherland Antilles			Bahrain		41.7 22.3	
St. Christopher-Nevis Saint Lucia	33.1 29.9	73.0 65.9	Cyprus		12.1	
	11.2	24.7	Egypt		2.6	
St. Vincent	16.1	35.5	Iran		3.3	
Trinidad-Tobago Turks Caicos		30.0	Iraq		31.	
Turks Calcos	13.6	30.0	Israel		8.8	
otin America.			Jordan	2.7.2	13.2	
Latin America:	5.7	12.6	Kuwait		1.1	
Argentina	7.9	17.4	Lebanon		12.8	
Bolivia	1.8	4.0	Libya		42.3	
Brazil	6.2	13.7	Qatar		27.	
Chile	18.9	41.7	Saudi Arabia		19.6	
Colombia	3.3	7.3	Sudan		3.	
Costa Rica	2.8	6.2	Syria		3.	
Ecuador	13.9	30.6	Turkey		17.0	
El Salvador	1.4	3.1	United Arab Emirates		63.	
French Guiana	36.4	80.1	Yemen Arab Republic	1 2 1	6.8	
Guatemala	0.5	1.1	Yemen (Aden)	2_1_	55.	
Guyana	28.4	62.6	, , , , , , , , , , , , , , , , , , , ,	<b>_</b>		
Honduras	1.0	2.2	Far East:			
Mexico	9.9	21.8	Bangladesh	7.5	16.9	
Nicaragua	1.0	2.2	Brunei		84.	
Panama	14.4	31.7	Burma	14.7	32.4	
Paraguay	1.1	2.4	Cambodia		20.	
Peru	20.5	45.2	China	4.9	10.	
Suriname	20.6	45.4	Hong Kong		117.	
Uruguay	11.3	24.9	India	3.1	6.1	
Venezuela	12.4	27.3	Indonesia	12.6	27.	
			Japan	74.5	164.2	
Europe:			Laos		11.3	
Albania	1.4	3.1	Macao	24.9	54.	
Austria	6.5	14.3	Malaysia	44.1	97.	
Belgium and Luxembourg		41.4	Mongolia		2.	
Bulgaria		19.0	Nepal		0.	
Czechoslovakia		10.1	North Korea		86.0	
Denmark		114.0	Pakistan		4.	
Fed. Republic of Germany		20.5	Philippines		78.	
Finland		76.1	Republic of Korea		97.	
France		54.0	Singapore	. 35.7	78.	
German Democratic Republic	14.3	31.5	Sri Lanka		34.	
Greece		38.4	Thailand		49.	
Hungary	4.7	10.4	Vietnam	12.0	26.	

See note at end of table.

(Continued)

#### WORLD CONSUMPTION

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1982-84 AVERAGE - Continued

Region and country	Estimated live weight equivalent			
Region and Country	Kilograms	Pound		
rica:				
Algeria	3.3	7.		
Angola	8.0	17.		
Benin	7.2	15.		
Botswana	2.5	5.		
Burkina	1.5	3.		
Burundi	2.2	4.		
Cameroon	8.8	19.		
Cape Verde	28.0	61.		
Central African Republic	5.3 16.9	11. 37.		
Comoros	10.4	22.		
Congo (Brazaville)	33.3.	73		
Equatorial Guinea	19.9	43		
Sthiopia	0.1	0.		
Gambia	17.7	39.		
Ghana	18.9	41		
Guinea	4.9	10		
Guinea-Bissau	2.7	6		
Ivory Coast	17.1	37		
Kenya	4.7	10		
Lesotho	2.9	. 6		
Liberia	15.7	34		
Madagascar	5.2	ii		
Malawi	9.2	20		
Mali	8.0	17		
Auritius	14.0	30		
forocco	6.6	14		
Mozambique	4.0	8		
Vamibia	22.5	49		
Niger	1.3	2		
Nigeria	11.5	25		
Republic of South Africa	9.6	21		
Reunion	22.7	50		
Rwanda	0.2	. 0		
Sao Tome	37.0 ·	81		
Senegal	20.3	44		
Sychelles	44.0	97		
Sierra Leone	17.9	39		
Gomalia	2.5	5		
Swaziland	0.1	0		
Tanzania	11.5	25		
rogo	12.0	26		
Tunisia	8.7	19		
Uganda	12.8	28		
Zaire	6.4	14		
Zambia	10.8	23		
Zimbabwe	2.1	4		
eania:				
Australia	16.0	35		
Cook Islands	48.3	106		
Fiji	44.2	. 97		
French Polynesia	33.4	73		
Kirabati	68.9	151		
New Caledonia	23.3	51		
New Zealand	12.3	27		
Paupa New Guinea	15.1	33		
Solomon Islands	60.9	134		
TongaVanuatu	28.0	. 61		
Western Samoa	32.2	71		
Western Samoa	42.6	93		
rld	12.2	26		

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

Source: -- Food and Agriculture Organization of the United Nations (FAO) Yearbook of Fishery Statistics; vol. 62, Rome.

The procedure for calculating the Index of Exvessel Prices for all fish and shellfish was reviewed and modified in 1986. Major changes in the U.S. fishing industry have occurred since the index was originally designed. The result was that the "market basket" or group of species used to calculate the index was no longer representative of the price trends for all fish and shellfish. The index has been recalculated with a new market basket and 1986 as the base year. The result is a recalculated index for 1981-86.

in the table that follows, the exvessel price for any given year was obtained by dividing total value by total quantity as reported in the catch by species or distance from shore tables. The index for each species or group

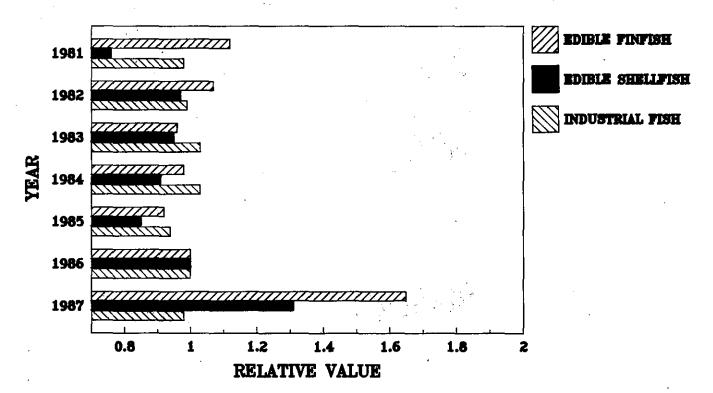
was obtained by multiplying the current annual price by the total quantity caught in 1986 (the base year). That number was then divided by the 1986 value to obtain the final index:

(Current price X 1986 quantity) = Index 1986 Annual Value

Each index number calculated for years other than the base year of 1986 measures price changes from the reference period (1986) which equals 1.00. A species of fish that sold for \$0.75 a pound in 1981 and a \$1.00 a pound in 1986 would have an index of 0.75 in 1981. In 1987, if the price of the same species increases 5 percent to \$1.05, the index in 1987 would be 1.05.

### INDEXES OF EXVESSEL PRICES 1981 - 1987

(1986 = 1.00)



RICES 83

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY YEARS, 1981-87 (1986=100)

GROUNDFISH:  COD.  1.37	SPECIES	1981	1982	1983	1984	1985	1986	1987
### MADDOCK	GROUNDFISH:	<u>.                                    </u>		<u>. L</u> .	<del></del>	<del></del>	<u> </u>	<u> </u>
##IDDOCK	COD	1.37	1.44	1.16	1.11	1.09	1.00	1.65
AMERICA POLLOCK. 0.69 0.87 0.68 0.63 0.62 1.00 ALABKA POLLOCK. 1.140 1.18 0.87 0.90 0.93 1.00 PLOUNDERS. 1.50 1.55 1.53 1.63 1.09 1.00 TOTAL GROUNDFISH. 1.39 1.36 1.20 1.25 1.02 1.00  HALIBUT. 0.75 0.81 0.84 0.50 0.59 1.00  SEA HERRING. 0.53 0.75 1.05 0.62 1.08 1.00  SALMONS. CHINOCK. 1.11 1.11 0.78 1.05 0.97 1.00  CHINOCK. 1.11 1.12 1.08 0.99 0.98 1.00  FINK. 2.10 1.12 1.12 1.08 0.99 0.98 1.00  FINK. 2.10 1.09 1.00 1.00 1.00 1.00 1.00  FORD 1.00 1.00 1.00 1.00 1.00 1.00 1.00  FORD 1.00 1.00 1.00 1.00 1.00 1.00 1.00  SWOODDISH. 0.75 0.87 0.94 0.88 1.00  TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00  TUNA: 0.90 0.87 0.94 0.88 1.00  TUNA: 0.90 0.80 0.87 0.94 0.88 1.00  TUNA: 0.90 0.80 0.80 0.90 0.80 0.90  TUNA: 0.90 0.80 0.80 0.90 0.80 0.90  TUNA: 0.90 0.80 0.90 0.80 0.90  TUNA: 0.90 0.80 0.90 0.80 0.90  TUNA: 0.90 0.90 0.80 0.90 0.90  TUNA: 0.90 0.90 0.80 0.90 0.90 0.90  TUNA: 0.90 0.90 0.80 0.80 0.90 0.90  TUNA: 0.90 0.90 0.80 0.80 0.90 0.90  TUNA: 0.90 0.90 0.80 0.80 0.80 0.80 0.80  TUNA: 0.90 0.90 0.80 0.80 0.80 0.80 0.90  TUNA: 0.90 0.90 0.80 0.80 0.80 0.80 0.90  TUNA: 0.90 0.90 0.80 0.80 0.80 0.80 0.90  TUNA: 0.90 0.90 0.80 0.80 0.80 0.80 0.80  TUNA: 0.90 0.80 0.80 0.80 0.		0.40	0.50	0.59	0.71	0.94	1.00	1.00
### ALBACOR								1.63
#FOUNDERS. 1.50 1.55 1.53 1.63 1.09 1.00  #FOTAL GROUNDFISH. 1.39 1.36 1.20 1.25 1.02 1.00  #ALIBUT. 0.75 0.81 0.84 0.50 0.59 1.00  SEA HERRING. 0.53 0.75 1.05 0.62 1.08 1.00  SALMON. CHINDON. 1.11 1.11 0.78 1.05 0.97 1.00  CHUM. 1.12 1.12 1.08 0.99 0.98 1.00  PINK. 2.10 1.10 1.21 1.22 1.08 0.99 0.98 1.00  PINK. 2.10 1.10 1.21 1.22 1.08 0.99 0.98 1.00  RED. 0.59 0.62 0.49 0.59 0.70 1.00  COHO. 1.19 1.25 0.84 1.14 1.11 1.00  TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00  SWORDFISH. 0.74 0.90 0.87 0.94 0.88 1.00  WHORETON 1.69 1.28 1.14 1.16 1.00 1.00  MULPEIN 1.15 1.25 1.28 1.14 1.16 1.00 1.00  MULPEIN 1.15 1.25 1.28 1.14 1.16 1.00 1.00  MULPEIN 1.15 1.25 1.28 1.14 1.16 1.00 1.00  SKIPDIACK 1.57 1.47 1.22 1.17 0.97 1.00  YELLOWRIN 1.45 1.39 1.28 1.21 1.19 1.05 1.00  TOTAL EDIFLE FINFISH 1.15 1.07 0.96 0.98 0.92 1.00  TOTAL EDIFLE FINFISH 1.15 1.07 0.96 0.98 0.92 1.00  CLAMS: HARD. 0.91 0.90 0.85 0.85 0.77 1.00  GRAD. 0.91 0.90 0.98 0.99 0.99 1.00  TOTAL CLAMS: 0.91 0.90 0.98 0.99 0.99 1.00  TOTAL CLAMS: 0.91 0.90 0.98 0.99 0.99 1.00  TOTAL CLAMS: 0.91 0.90 0.98 0.99 0.99 1.00  CABES: BLUE. 0.76 0.80 0.91 0.88 0.89 0.99 1.00  TOTAL CLAMS: 0.95 0.65 0.79 0.80 0.99 1.00  TOTAL CLAMS: 0.95 0.95 0.99 0.99 0.95 1.00  TOTAL CLAMS: 0.96 0.98 0.99 0.99 0.99 0.99 0.99 1.00  TOTAL CLAMS: 0.96 0.96 0.98 0.99 0.99 0.99 0.99 0.99 0.99 0.99								1.72
TOTAL GROUNDFISH. 1.39 1.36 1.20 1.25 1.02 1.00  BALIBUT. 0.75 0.81 0.84 0.50 0.59 1.00  SEA HERRING. 0.53 0.75 1.05 0.62 1.08 1.00  SEA HERRING. 0.53 0.75 1.05 0.62 1.08 1.00  SEA HERRING. 0.53 0.75 1.05 0.62 1.08 1.00  CCHUM. 1.11 1.11 0.78 1.05 0.97 1.00  CCHUM. 1.12 1.12 1.08 0.99 0.98 1.00  PINK. 2.10 1.10 1.21 1.22 1.15 1.00  RED. 0.59 0.62 0.49 0.59 0.70 1.00  CCHOO. 1.19 1.25 0.84 1.14 1.11 1.00  TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00  SWORDFISH. 0.74 0.90 0.87 0.94 0.88 1.00  TUNA:  ALBACORE. 1.69 1.28 1.14 1.16 1.00 1.00  BUUSFIN. 1.25 1.24 3.15 3.65 1.99 1.00  SKIRDJACK. 1.55 1.44 1.22 1.17 0.99 1.00  SKIRDJACK. 1.55 1.44 1.22 1.17 0.99 1.00  TOTAL TURNA: 1.50 1.41 1.31 1.29 1.05 1.00  TOTAL TURNA 1.50 1.41 1.31 1.29 1.05 1.00  TOTAL EDIPLE FINFISH. 1.12 1.07 0.96 0.98 0.92 1.00  CCLAMS: HARD. 0.71 0.84 0.75 0.85 0.77 1.00  CCFAN CUMHOG 0.81 0.90 0.88 0.88 0.88 1.00  TOTAL CLAMS: 0.76 0.80 0.91 0.88 0.88 0.88 1.00  CCRAES: 0.76 0.80 0.91 0.88 0.88 0.88 1.00  TOTAL CLAMS: 0.76 0.80 0.91 0.88 0.89 1.00  TOTAL CLAMS: 0.76 0.80 0.91 0.80 0.91 0.90  TOTAL CLAMS: 0.76 0.80 0.91 0.80 0.91 0.90  TOTAL CLAMS: 0.79 0.95 0.95 0.90 0.95 1.00  TOTAL CLAMS: 0.79 0.79 0.95 0.91 0.85 1.00  TOTAL SERIMP. 0.80 0.70 0.80 0.91 0.80 0.91 0.80 0.90  TOTAL CLAMS: 0.79 0.95 0.91 0.85 1.00  TOTAL SERIMP. 0.80 0.70 0.80 0.91 0.88 0.89 0.90  TOTAL CLAMS: 0.79 0.79 0.95 0.91 0.85 1.00  TOTAL SERIMP. 0.80 0.70 0.80 0.91 0.80 0.91 0.80 0.90  TOTAL SERIMP. 0.80 0.70 0.90 0.90 0.90 0.90 0.90  TOTAL SERIMP. 0.80 0.70 0.80 0.91 0.80 0.91 0.80 0.90  TOTAL SERIMP. 0.80 0.70 0.90 0.90 0.90 0.90 0.90  TOTAL SERIMP. 0.80 0.70 0.90 0.90 0.90 0.90								3.05
HALIBUT. 0.75 0.81 0.84 0.50 0.59 1.00  SEA HERRING. 0.53 0.75 1.05 0.62 1.08 1.00  SALMON. 1.11 1.11 0.78 1.05 0.97 1.00  CHINOK. 1.12 1.12 1.08 0.99 0.98 1.00  PINK. 1.12 1.12 1.08 0.99 0.98 1.00  RED. 0.59 0.62 0.49 0.59 0.70 1.00  CCHO. 1.19 1.25 0.84 1.14 1.11 1.00  TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00  TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00  EURISTAN 0.74 0.90 0.87 0.94 0.88 1.00  TUNA: 1.50 1.28 1.14 1.16 1.00 1.00  EURISTAN 0.74 0.90 0.87 0.94 0.88 1.00  TUNA: 1.50 1.28 1.14 1.16 1.00 1.00  EURISTAN 0.74 0.74 0.70 0.70 0.87 0.94 0.88 1.00  TOTAL SALMON. 1.50 1.28 1.14 1.16 1.00 1.00  EURISTAN 0.74 0.74 0.70 0.70 0.70 0.70 0.70 0.70	TOTAL GROUNDFISH							2.28
SEA HERRING. 0.53 0.75 1.05 0.62 1.08 1.00  SALMON:  CHINOK. 1.11 1.11 0.78 1.05 0.97 1.00  CHUM. 1.12 1.12 1.08 0.99 0.98 1.00  PINK. 2.10 1.10 1.21 1.22 1.15 1.00  RBD. 0.59 0.62 0.49 0.59 0.70 1.00  CORD. 1.19 1.25 0.84 1.14 1.11 1.00  TOTAL EDIFLE FINFISH 1.12 1.24 3.15 3.65 1.99 1.00  CLAMS:  HARD. 0.71 0.84 0.75 0.86 0.98 0.92 1.00  CLAMS:  HARD. 0.71 0.84 0.75 0.96 0.98 0.92 1.00  CLAMS:  HARD. 0.71 0.84 0.75 0.85 0.89 0.92 1.00  CLAMS:  HARD. 0.71 0.84 0.75 0.85 0.89 0.90  CORAN CUAHOG. 0.81 0.99 0.88 0.88 0.88 1.00  CLAMS:  HARD. 0.71 0.84 0.75 0.85 0.85 0.77 1.00  COEAN CUAHOG. 0.81 0.99 0.88 0.89 1.00  COEAN CUAHOG. 0.80 0.99 0.88 0.99 1.00  COEANS:  BLUE. 0.76 0.80 0.91 0.88 0.89 1.00  COEANS:  BLUE. 0.76 0.86 0.77 0.89 0.79 0.90  TOTAL CLAMS: 0.60 0.60 0.77 0.89 0.70  COEANS: 0.60 0.60 0.77 0.89 0.70  COEANS: 0.78 0.78 0.79 0.89 0.70  TOTAL CLAMS: 0.79 0.88 0.99 0.99 0.95 1.00  COEANS: 0.70 0.70 0.70 0.87 0.82 0.00  TOTAL CLAMS: 0.70 0.70 0.87 0.89 0.70  TOTAL CLAMS: 0.70 0.70 0.70 0.87 0.82 0.00  TOTAL CLAMS: 0.70 0.70 0.70 0.87 0.82 0.00  TOTAL CRABS: 0.70 0.70 0.70 0.87 0.82 0.00  TOTAL CRABS: 0.70 0.70 0.70 0.87 0.89 0.70  TOTAL CRABS: 0.70 0.70 0.70 0.87 0.89 0.70  TOTAL CRABS: 0.70 0.70 0.70 0.87 0.89 0.70  TOTAL CRABS: 0.70 0.70 0.80 0.70 0.80 0.70  TOTAL SHEIMP. 0.80 0.70 0.80 0.70 0.95 0.91 0.88 0.00  TOTAL SHEIMP. 0.80 0.70 0.99 0.95 0.91 0.85 0.00  TOTAL SHEIMP. 0.80 0.70 0.90 0.95 0.91 0.85 0.00				•				
SALMON:  CHINOK.	HALIBUT	0.75	0.81	0.84	0.50	0.59	1.00	1.09
CHINOK. 1.11 1.11 0.78 1.05 0.97 1.00 CHUM. 1.12 1.10 0.78 1.05 0.97 1.00 CHUM. 2.10 1.10 1.21 1.22 1.15 1.00 PINK. 2.10 1.10 1.21 1.22 1.15 1.00 RED. 0.59 0.62 0.49 0.59 0.70 1.00 COHO. 1.19 1.25 0.84 1.14 1.11 1.00 TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00  SWORDFISH. 0.74 0.90 0.87 0.94 0.88 1.00  TUNA:  ALBACORE. 1.69 1.28 1.14 1.16 1.00 1.00 SKIUPPIN. 1.25 1.24 3.15 3.65 1.99 1.00 SKIUPPIN. 1.55 1.24 3.15 3.65 1.99 1.00 SKIUPPIN. 1.55 1.47 1.22 1.17 0.97 1.00 YELLOWPIN. 1.55 1.39 1.28 1.23 1.05 1.00 TOTAL TUNA: 1.50 1.41 1.31 1.29 1.05 1.00  TOTAL EDIFLE FINFISH. 1.12 1.07 0.96 0.98 0.92 1.00  CLAMS: HARD. 0.71 0.84 0.75 0.85 0.77 1.00 CCAMS: HARD. 0.91 0.98 0.88 0.88 1.80 SURF. 0.54 0.96 0.82 0.90 0.99 1.00  CCAMS: 0.50 0.80 0.81 0.90 0.88 0.88 0.88 1.00  CRARS: 0.50 0.76 0.80 0.91 0.88 0.87 0.89 1.00  CCRARS: 0.76 0.80 0.91 0.88 0.89 1.00  CCRARS: 0.76 0.80 0.91 0.88 0.89 1.00  CCRARS: 0.77 0.73 0.79 0.86 0.80 1.00  CCRARS: 0.77 0.73 0.79 0.89 0.99 0.99 1.00  CCRARS: 0.76 0.80 0.91 0.99 0.99 1.00  COTAL CLAMS. 0.58 0.63 0.77 0.68 0.89 1.00  COTAL CLAMS. 0.59 0.79 0.95 0.99 0.99 1.00  COTAL CLAMS. 0.59 0.79 0.99 0.99 1.00  COTAL CLAMS. 0.59 0.79 0.99 0.99 1.00  COTAL CLAMS. 0.59 0.79 0.99 0.95 1.00  COTAL CLAMS. 0.59 0.79 0.99 0.99 0.95 1.00  COTAL CLAMS. 0.59 0.79 0.99 0.99 0.95 1.00  COTAL CLAMS. 0.59 0.79 0.79 0.88 0.89 1.00  COTAL CRABS. 0.60 0.01 0.95 0.86 0.84 0.00  COTAL CRABS. 0.60 0.01 0.95 0.86 0.84 0.00  SCALLOPS: BLUE. 0.76 0.80 0.91 0.85 0.79 0.99 0.99 0.90  COTAL CRABS. 0.60 0.01 0.05 0.99 0.99 0.95 1.00  COTAL CRABS. 0.79 0.79 0.79 0.99 0.99 0.99 0.00  COTAL CRABS. 0.60 0.59 0.79 0.99 0.99 0.90 0.90  COTAL SCALLOPS. 0.79 0.79 0.79 0.99 0.99 0.99 0.90  COTAL SCALLOPS. 0.79 0.79 0.79 0.99 0.99 0.99 0.00  COTAL SCALLOPS. 0.79 0.79 0.99 0.99 0.99 0.99 0.99 0.9	SEA HERRING	0.53	0.75	1.05	0.62	1.08	1.00	1.08
CHUH. 1.12 1.12 1.08 0.99 0.98 1.00 PINK. 2.10 1.10 1.21 1.22 1.15 1.00 RED. 0.59 0.62 0.49 0.59 0.70 1.00 CORGO. 1.19 1.25 0.84 1.14 1.11 1.00 TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00  SWORDFISH. 0.74 0.90 0.87 0.94 0.88 1.00  TUNA:  ALBACORE. 1.69 1.28 1.14 1.16 1.00 1.00 RUUPIN. 1.25 1.24 3.15 3.65 1.99 1.00 SKIPJACK. 1.57 1.47 1.22 1.17 0.97 1.00 YELLOWFIN. 1.45 1.39 1.28 1.23 1.05 1.00 TOTAL TUNA: 1.50 1.41 1.31 1.29 1.05 1.00  TOTAL EDIPLE FINFISH. 1.12 1.07 0.96 0.98 0.92 1.00  CLAMS:  HARD. 0.71 0.84 0.75 0.85 0.77 1.00 COCFAN CUARMOS 0.81 0.99 0.88 0.88 1.00  SURF. 0.95 0.58 0.66 0.80 0.87 1.00 TOTAL CLAMS. 0.78 0.85 0.78 0.87 0.88 1.00  CRABS: BLUE. 0.76 0.80 0.91 0.88 0.88 0.89 1.00  CRABS: BLUE. 0.76 0.80 0.91 0.88 0.89 1.00  CRABS: BLUE. 0.76 0.80 0.91 0.88 0.89 1.00  SORTE. 0.95 0.79 0.95 0.99 0.95 1.00  SCALLOPS: RAY. 0.41 0.44 0.96 0.97 0.99 0.99 0.95 1.00  SCALLOPS: RAY. 0.41 0.44 0.62 0.55 0.50 1.00  TOTAL SCALLOPS: 0.77 0.88 0.88 0.92 1.00  SCALLOPS: RAY. 0.41 0.44 0.62 0.55 0.50 1.00  SCALLOPS: 0.77 0.88 1.24 0.94 0.85 1.00  SCALLOPS: 0.77 0.88 1.24 0.94 0.85 1.00  TOTAL SCALLOPS: 0.77 0.88 1.24 0.94 0.85 1.00								
PINK. 2.10 1.10 1.21 1.22 1.15 1.00 RED. 0.59 0.62 0.49 0.59 0.70 1.00 COHO. 1.19 1.25 0.84 1.14 1.11 1.00 TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00  SWORDFISH. 0.74 0.90 0.87 0.94 0.88 1.00  TUNA:  ALBACORE. 1.69 1.24 3.15 3.65 1.99 1.00 SKIPJACK. 1.57 1.47 1.22 1.17 0.97 1.00 SKIPJACK. 1.57 1.47 1.22 1.17 0.97 1.00 YKLLOWFIN. 1.45 1.39 1.28 1.23 1.05 1.00  TOTAL EDIPLE FINFISH. 1.12 1.07 0.96 0.98 0.92 1.00  CLAMS: HARD. 0.71 0.84 0.75 0.85 0.77 1.00 SOFT. 0.55 0.85 0.80 0.80 0.80 0.80 1.00 SOFT. 0.55 0.85 0.80 0.80 0.80 1.00  TOTAL CLAMS. 0.78 0.85 0.78 0.88 1.00  CCRAS: BLUE. 0.76 0.80 0.91 0.88 0.89 1.00  CCRAS: BLUE. 0.76 0.80 0.91 0.88 0.89 1.00  SCRED. 0.55 0.50 0.85 0.77 0.68 0.70  TOTAL CRABS. 0.65 0.80 0.99 0.99 1.00  CCAMS: CRABS: 0.66 0.80 0.90 0.99 1.00  CCRAS: 0.76 0.80 0.91 0.88 0.89 1.00  DUNGENESS. 0.63 0.77 0.68 0.77 0.68 0.77 1.00  CCRAS: 0.56 0.80 0.91 0.88 0.89 1.00  CCRAS: 0.50 0.85 0.77 0.68 0.80 0.99 1.00  CCRAS: 0.50 0.85 0.77 0.68 0.80 0.99 1.00  CCRAS: 0.50 0.80 0.91 0.88 0.89 1.00  CCRAS: 0.50 0.80 0.91 0.88 0.89 1.00  CCRAS: 0.50 0.50 0.50 0.50 0.50 0.79 0.90  COTOTAL CRABS. 0.60 0.70 0.87 0.88 1.00  CCRAS: 0.77 0.68 0.77 0.68 0.79 0.90  COTOTAL CRABS. 0.60 0.70 0.87 0.89 1.00  COSTERS. 0.50 0.50 0.55 0.50 0.90 0.99 1.00  COSTERS. 0.50 0.50 0.55 0.50 0.99 0.95 1.00  COSTERS. 0.71 0.73 0.70 0.87 0.82 1.00  CCALLODS: 0.75 0.75 0.75 1.12 1.09 0.97 1.00  COSTEL S. ATLANTIC: 0.80 0.77 0.88 1.24 0.94 0.85 1.00  COSTEL S. ATLANTIC: 0.80 0.77 0.88 1.24 0.94 0.85 1.00  TOTAL SCALLOPS: 0.77 0.88 1.24 0.94 0.85 1.00  COTAL EDIBLE SHELLFISH. 0.76 0.97 0.95 0.91 0.85 1.00	CHINOOK	1.11	1.11	0.78		0.97	1.00	1.22
RED. 0.59 0.62 0.49 0.59 0.70 1.00 COHO. 1.19 1.25 0.84 1.14 1.11 1.00 TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00 SWOEDFISH. 0.74 0.90 0.87 0.94 0.88 1.00 TOTAL SALMON. 1.50 1.69 1.28 1.14 1.16 1.00 1.00 ALBACORE. 1.69 1.28 1.14 1.16 1.00 1.00 BLUEFIN. 1.25 1.24 3.15 3.65 1.99 1.00 SKIPJACK. 1.57 1.47 1.22 1.17 0.97 1.00 YELLOWFIN. 1.45 1.39 1.28 1.23 1.05 1.00 TOTAL TUNA. 1.50 1.41 1.31 1.29 1.05 1.00 TOTAL TUNA. 1.50 1.41 1.31 1.29 1.05 1.00 COFAN COMBURE FINFISH. 1.12 1.07 0.96 0.98 0.92 1.00 CLAMS: HARD. 0.71 0.84 0.75 0.85 0.77 1.00 COFAN CUARDG. 0.81 0.90 0.88 0.88 0.88 1.00 SOFT. 0.55 0.55 0.58 0.66 0.80 0.87 1.00 SOFT. 0.55 0.58 0.66 0.80 0.87 1.00 TOTAL CLAMS. 0.78 0.85 0.78 0.87 0.88 1.00 CCANS: BLUE. 0.76 0.80 0.99 1.00 CORRES: BLUE. 0.76 0.80 0.91 0.88 0.89 1.00 CORRES: 0.50 0.63 0.77 0.88 1.00 CORRES: 0.55 0.58 0.66 0.80 0.87 1.00 TOTAL CLAMS. 0.58 0.63 0.77 0.88 1.00 CORRES: 0.50 0.63 0.77 0.88 0.87 0.88 1.00 CORRES: 0.50 0.63 0.77 0.86 0.77 0.88 1.00 CORRES: 0.50 0.63 0.77 0.86 0.77 0.88 1.00 CORRES: 0.50 0.63 0.77 0.86 0.77 0.88 1.00 CORRES: 0.55 0.50 0.63 0.77 0.86 0.77 0.88 1.00 CORRES: 0.55 0.66 0.80 0.87 0.89 1.10 0.00 CORRES: 0.55 0.66 0.80 0.87 0.89 1.00 CORRES: 0.55 0.66 0.80 0.80 0.87 0.89 1.00 CORRES: 0.55 0.66 0.80 0.80 0.80 0.80 0.80 0.80 0.80	CHUM	1.12	1.12	1.08	0.99	0.98	1.00	1.27
CORO. 1.19 1.25 0.84 1.14 1.11 1.00 TOTAL SALMON. 0.91 0.82 0.67 0.79 0.84 1.00  SWORDFISH. 0.74 0.90 0.87 0.94 0.88 1.00  TUNA:  ALBACORE. 1.69 ALBERON. 1.25 1.24 3.15 3.65 1.99 1.00  SKIPJACK. 1.57 1.47 1.22 1.17 0.97 1.00  YRLLOWFIN. 1.45 1.39 1.28 1.29 1.05 1.00  TOTAL TUNA. 1.50 1.41 1.31 1.29 1.05 1.00  TOTAL EDIPLE FINFISH. 1.12 1.07 0.96 0.98 0.92 1.00  CLAMS:  HARD. 0.71 0.84 0.75 0.85 0.77 1.00  SOFT. 0.55 0.58 0.66 0.80 0.88 1.00  SOFT. 0.55 0.58 0.66 0.80 0.89 1.00  TOTAL CLAMS. 0.78 0.85 0.78 0.87 0.88 1.00  CCABS:  BLUE. 0.76 0.80 0.91 0.88 0.89 1.00  CURSES: 0.63 0.73 0.88 1.15 1.07 1.00  CRASS: 0.65 0.77 0.88 1.00  CORRESS 0.65 0.77 0.88 1.00  CORRESS 0.65 0.78 0.87 0.88 1.00  CORRESS 0.66 0.70 0.80 0.89 1.00  CORRESS 0.66 0.77 0.88 1.00  CORRESS 0.65 0.77 0.88 1.00  CORRESS 0.66 0.77 0.88 0.87 0.88 1.00  CORRESS 0.66 0.77 0.88 0.89 1.00  CORRESS 0.65 0.77 0.88 0.87 0.88 1.00  CORRESS 0.65 0.77 0.88 0.89 1.15 1.07 1.00  COYSTERS 0.65 0.55 0.66 0.80 0.99 1.00  COYSTERS 0.65 0.77 0.88 0.99 0.99 0.95 1.00  COYSTERS 0.77 0.73 0.70 0.87 0.82 1.00  COYSTERS 0.77 0.77 0.77 0.77 0.77 0.77 0.77 0.7	PINK	2.10	1.10	1.21	1.22	1.15	1.00	1.62
TOTAL SALMON	RED	0.59	0.62	0.49	0.59	0.70	1.00	1.10
TOTAL SALMON	COHO	1.19	1.25	0.84	1.14	1.11	1.00	1.81
TUNA:  ALBACORE								1.25
ALBACORE 1.69 1.28 1.14 1.16 1.00 1.00 BLUBFIN 1.25 1.24 3.15 3.65 1.99 1.00 SKIPJACK 1.57 1.47 1.22 1.17 0.97 1.00 SKIPJACK 1.57 1.47 1.22 1.17 0.97 1.00 YELLOWFIN 1.45 1.39 1.28 1.23 1.05 1.00 TOTAL TUNA 1.50 1.41 1.31 1.29 1.05 1.00 TOTAL TUNA 1.50 1.41 1.31 1.29 1.05 1.00 TOTAL BLUBFIR SING 1.90 0.91 0.98 0.92 1.00 TOTAL BLUBFIR SING 1.90 0.91 0.98 0.92 1.00 CLAMS:  HARD. 0.71 0.84 0.75 0.85 0.77 1.00 OCEAN OUAHOG 0.81 0.90 0.88 0.88 0.88 0.88 1.00 SOFT 0.55 0.58 0.66 0.80 0.87 1.00 SURF 0.94 0.96 0.82 0.90 0.99 1.00 TOTAL CLAMS. 0.78 0.85 0.78 0.87 0.88 1.00 CRABS:  BLUE 0.70 0.76 0.80 0.91 0.88 0.89 1.00 CRABS:  BLUE 0.70 0.76 0.80 0.91 0.88 0.89 1.00 CRABS:  BLUE 0.70 0.76 0.80 0.91 0.88 0.89 1.00 CRABS:  SNOW 0.58 1.39 1.16 0.94 0.79 1.00 SNOW 0.58 1.39 1.16 0.94 0.79 1.00 TOTAL CRABS 0.60 0.60 1.01 0.95 0.86 0.84 1.00 CYSTERS 0.60 0.80 0.80 0.99 1.00 CYSTERS 0.60 0.60 1.01 0.95 0.86 0.84 1.00 CYSTERS 0.71 0.73 0.70 0.87 0.82 1.00 CYSTERS 0.71 0.73 0.70 0.87 0.82 1.00 CYSTERS 0.75 0.75 1.12 1.09 0.97 1.00 SCALLOPS:  BAY 0.71 0.73 0.70 0.87 0.87 0.82 1.00 CYSTERS 0.75 0.75 1.12 1.09 0.97 1.00 SEALLOPS 0.75 0.75 1.12 1.09 0.97 1.00 SEALLOPS 0.75 0.75 1.12 1.09 0.97 1.00 CYSTERS 0.75 0.75 1.12 0.99 0.95 1.00 CYSTERS 0.75 0.75 0.99 0.99 0.95 1.00 CYSTERS 0.75 0.99 0.99 0.95 1.00 CYSTERS 0.75 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.9	SWORDFISH	0.74	0,90	0.87	0.94	0.88	1.00	1.17
#LUBFIN. 1.25 1.24 3.15 3.65 1.99 1.00 SKIPJACK. 1.57 1.47 1.22 1.17 0.97 1.00 YFLLOWFIN. 1.45 1.39 1.28 1.23 1.05 1.00 TOTAL TUNA. 1.50 1.41 1.31 1.29 1.05 1.00 TOTAL TUNA. 1.50 1.41 1.31 1.29 1.05 1.00 TOTAL EDIPLE FINFISH. 1.12 1.07 0.96 0.98 0.92 1.00 CLAMS: HARD. 0.71 0.84 0.75 0.85 0.77 1.00 OCEAN QUARGO. 0.81 0.90 0.88 0.88 0.88 1.00 SOFT. 0.55 0.58 0.66 0.80 0.87 1.00 SURP. 0.94 0.96 0.82 0.90 0.99 1.00 TOTAL CLAMS. 0.78 0.85 0.78 0.87 0.88 1.00 CRABS: BLUE. 0.76 0.80 0.91 0.88 0.89 1.00 CRABS: 0.66 0.73 0.98 1.15 1.07 1.00 CRABS: 0.63 0.73 0.98 1.15 1.07 1.00 CARDS: 0.63 0.73 0.98 1.15 1.07 1.00 CARDS: 0.63 0.73 0.98 1.15 1.07 1.00 CARDS: 0.60 0.55 0.58 0.99 0.99 1.00 CARDS: 0.60 0.60 1.01 0.95 0.86 0.84 1.00 CARDS: 0.60 0.60 0.60 0.60 0.99 0.99 0.99 0.95 0.00 CARDS: 0.60 0.60 0.60 0.60 0.60 0.99 0.99 0.95 0.00 CARDS: 0.60 0.60 0.60 0.60 0.90 0.99 0.95 0.00 CARDS: 0.60 0.60 0.60 0.60 0.60 0.60 0.90 0.99 0.95 0.00 CARDS: 0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.6	TUNA:		•	-				
#LUBFIN. 1.25 1.24 3.15 3.65 1.99 1.00 SKIPJACK. 1.57 1.47 1.22 1.17 0.97 1.00 YFLLOWFIN. 1.45 1.39 1.28 1.23 1.05 1.00 TOTAL TUNA. 1.50 1.41 1.31 1.29 1.05 1.00 TOTAL TUNA. 1.50 1.41 1.31 1.29 1.05 1.00 TOTAL EDIPLE FINFISH. 1.12 1.07 0.96 0.98 0.92 1.00 CLAMS: HARD. 0.71 0.84 0.75 0.85 0.77 1.00 OCEAN QUARGO. 0.81 0.90 0.88 0.88 0.88 1.00 SOFT. 0.55 0.58 0.66 0.80 0.87 1.00 SURP. 0.94 0.96 0.82 0.90 0.99 1.00 TOTAL CLAMS. 0.78 0.85 0.78 0.87 0.88 1.00 CRABS: BLUE. 0.76 0.80 0.91 0.88 0.89 1.00 CRABS: 0.66 0.73 0.98 1.15 1.07 1.00 CRABS: 0.63 0.73 0.98 1.15 1.07 1.00 CARDS: 0.63 0.73 0.98 1.15 1.07 1.00 CARDS: 0.63 0.73 0.98 1.15 1.07 1.00 CARDS: 0.60 0.55 0.58 0.99 0.99 1.00 CARDS: 0.60 0.60 1.01 0.95 0.86 0.84 1.00 CARDS: 0.60 0.60 0.60 0.60 0.99 0.99 0.99 0.95 0.00 CARDS: 0.60 0.60 0.60 0.60 0.60 0.99 0.99 0.95 0.00 CARDS: 0.60 0.60 0.60 0.60 0.90 0.99 0.95 0.00 CARDS: 0.60 0.60 0.60 0.60 0.60 0.60 0.90 0.99 0.95 0.00 CARDS: 0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.6		1.69	1.28	1.14	1.16	1.00	1.00	1.45
SKIPJACK								5.98
YELLOWPIN								1.67
TOTAL TUNA								1.96
CLAMS: HARD								1.96
CLAMS: HARD	TOTAL EDIRLE FINFISH	1.12	1 - 07	0.96	0.98	0.92	1.00	1.65
HARD		_,						
OCEAN QUAHOG.		0 71	0.04	0.75	0.05	0 77	1 00	1.09
SOFT								
SURF								0.95
TOTAL CLAMS. 0.78 0.85 0.78 0.87 0.88 1.00  CRABS:  BLUE. 0.76 0.80 0.91 0.88 0.89 1.00  DUNGENESS 0.63 0.73 0.98 1.15 1.07 1.00  KING. 0.52 0.86 0.77 0.68 0.76 1.00  SNOW. 0.58 1.39 1.16 0.94 0.79 1.00  TOTAL CRABS. 0.60 1.01 0.95 0.86 0.84 1.00  AMERICAN LOBSTER 0.88 0.88 0.92 0.99 0.95 1.00  OYSTERS. 0.71 0.73 0.70 0.87 0.82 1.00  SCALLOPS:  BAY. 0.41 0.44 0.62 0.55 0.50 1.00  SCALLOPS:  BAY. 0.41 0.44 0.62 0.55 0.50 1.00  CALICO. 0.50 0.54 0.65 0.29 0.52 1.00  SEA. 0.75 0.75 1.12 1.09 0.97 1.00  TOTAL SCALLOPS. 0.73 0.73 1.07 1.03 0.93 1.00  SHRIMP:  GULF & S. ATLANTIC 0.80 1.08 1.14 0.91 0.83 1.00  OTHER. 0.80 1.08 1.14 0.91 0.83 1.00  TOTAL EDIBLE SHELLFISH. 0.76 0.97 0.95 0.91 0.85 1.00								0.85
CRABS: BLUE								0.85
BLUE	TOTAL CLAMS	0.78	0.85	0.78	. 0.87	0.88	1.00	0.96
DUNGENESS.       0.63       0.73       0.98       1.15       1.07       1.00         KING.       0.52       0.86       0.77       0.68       0.76       1.00         SNOW.       0.58       1.39       1.16       0.94       0.79       1.00         TOTAL CRABS.       0.60       1.01       0.95       0.86       0.84       1.00         AMERICAN LOBSTER.       0.88       0.88       0.92       0.99       0.95       1.00         OYSTERS.       0.71       0.73       0.70       0.87       0.82       1.00         SCALLOPS:       8AY       0.41       0.44       0.62       0.55       0.50       1.00         CALICO.       0.50       0.54       0.65       0.29       0.52       1.00         SEA       0.75       0.75       0.75       1.12       1.09       0.97       1.00         TOTAL SCALLOPS.       0.73       0.73       1.07       1.03       0.93       1.00         SHRIMP:       0.80       1.08       1.14       0.91       0.83       1.00         OTHER:       0.77       0.88       1.24       0.94       0.85       1.00	CRABS:		•		•			
KING	BLUE	0.76	0.80	0.91	0.88	0.89	1.00	1.14
SNOW	DUNGENESS	0.63	0.73	0.98	1.15	1.07	1.00	1.01
SNOW	KING	0.52	0.86	0.77	0.68	0.76	1.00	0.99
TOTAL CRABS 0.60 1.01 0.95 0.86 0.84 1.00  AMERICAN LOBSTER 0.88 0.88 0.92 0.99 0.95 1.00  OYSTERS 0.71 0.73 0.70 0.87 0.82 1.00  SCALLOPS:  BAY 0.41 0.44 0.62 0.55 0.50 1.00  CALICO 0.50 0.54 0.65 0.29 0.52 1.00  SEA 0.75 0.75 1.12 1.09 0.97 1.00  TOTAL SCALLOPS 0.73 0.73 1.07 1.03 0.93 1.00  SHRIMP:  GULF & S. ATLANTIC 0.80 1.08 1.14 0.91 0.83 1.00  OTHEP 0.77 0.88 1.24 0.94 0.85 1.00  TOTAL SHRIMP. 0.80 1.07 1.14 0.91 0.83 1.00  TOTAL SHRIMP. 0.80 1.07 1.14 0.91 0.83 1.00  TOTAL EDIBLE SHELLFISH. 0.76 0.97 0.95 0.91 0.85 1.00		0.58	1.39	1.16	0.94	0.79	1.00	1.14
OYSTERS  0.71  0.73  0.70  0.87  0.82  1.00  SCALLOPS:  BAY  0.41  0.44  0.62  0.55  0.50  1.00  CALICO  0.50  0.75  0.75  1.12  1.09  0.97  1.00  TOTAL SCALLOPS  0.80  1.08  1.08  1.08  1.14  0.91  0.83  1.00  OTHER  0.77  0.88  1.24  0.94  0.85  1.00  TOTAL SHRIMP  0.80  1.07  1.08  1.14  0.91  0.83  1.00  TOTAL SHRIMP  0.77  0.88  1.24  0.94  0.85  1.00  TOTAL EDIBLE SHELLFISH  0.76  0.97  0.95  0.91  0.85  1.00								1,07
OYSTERS  0.71  0.73  0.70  0.87  0.82  1.00  SCALLOPS:  BAY  0.41  0.44  0.62  0.55  0.50  1.00  CALICO  0.50  0.54  0.65  0.29  0.52  1.00  SEA  0.75  0.75  1.12  1.09  0.97  1.00  TOTAL SCALLOPS  0.80  1.08  1.08  1.14  0.91  0.83  1.00  OTHEP  0.77  0.88  1.24  0.94  0.85  1.00  TOTAL SHRIMP  0.80  1.07  1.14  0.91  0.83  1.00  TOTAL SHRIMP  0.77  0.88  1.24  0.94  0.85  1.00  TOTAL EDIBLE SHELLFISH  0.76  0.97  0.95  0.91  0.85  1.00	AMEDICAN LODGED	0 66	0 00	0.02		0.05	1 00	1,12
SCALLOPS:  BAY								
BAY	OYSTERS	0.71	0.73	0.70	0.87	0.82	1.00	1.21
CALICO		0 41	0.44	0.60		0.50	1 00	0 61
SEA								0.61
TOTAL SCALLOPS					•			0.57
SHRIMP:  GULF & S. ATLANTIC.:	SEA				1.09			0.85
GULF & S. ATLANTIC 0.80 1.08 1.14 0.91 0.83 1.00 OTHER 0.77 0.88 1.24 0.94 0.85 1.00 TOTAL SHRIMP 0.80 1.07 1.14 0.91 0.83 1.00 TOTAL EDIBLE SHELLFISH 0.76 0.97 0.95 0.91 0.85 1.00	TOTAL SCALLOPS	0.73	0.73	1.07	1.03	0.93	1.00	0.82
OTHER								
TOTAL SHRIMP       0.80       1.07       1.14       0.91       0.83       1.00         TOTAL EDIBLE SHELLFISH       0.76       0.97       0.95       0.91       0.85       1.00								0.97
TOTAL EDIBLE SHELLFISH 0.76 0.97 0.95 0.91 0.85 1.00		0.77	0.88		0.94		1,00	1.36
	TOTAL SHRIMP	0.80	1.07	. 1.14	0.91	0.83	1.00	0.99
πόπαι επτείε εται αμετιεταμών ο ο ο 1 ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο	TOTAL EDIBLE SHELLFISH	0.76	0.97	0.95	0.91	0.85	1.00	1.01
101AB EDIBER F131 & 3REBE131 0.55 1.02 0.50 0.55 1.00	TOTAL EDIBLE FISH & SHELLFISH	0.93	1.02	0.96	0.95	0.89	1.00	1.31
INDUSTRIAL FISH:	INDUSTRIAL FISH:							
MENHADEN 0.98 0.99 1.03 1.03 0.94 1.00		0.98	0.99	1.03	1.03	0.94	1.00	0.98
ALL FISH 0.93 1.02 0.96 0.95 0.89 1.00	BIT BIGU	0.00	7 00	.0.00	0.05	0.00	1 00	1.30

SUMMARY OF 1987 VALUE ADDED, HARGINS, AND CONSUMER EXPENDITURES FOR COMMERCIAL MARINE FISHERY PRODUCTS IN THE UNITED STATES (1)

SECTOR OR TYPE OF ACTIVITY	PURCHASES OF FISHERY INPUTS	MARK-UP OF FISHERY INPUTS	TOTAL MARK-UP WITHIN SECTOR	VALUE ADDED AS % OF TOTAL MARK-UP	VALUE ADDED WITHIN SECTOR	VALUE OF SALES BY SECTOR	VALUE ADDED CONTRIBUTION	OFFSHORE FLEET ( EXPORTED FISHER) PRODUCTS
	Thousand Dollars	Percentage of Fishery Inputs	Thousand Dollars	Percentage	Thousand Dollars	Thousand Dollars	Percentage of GNP Contribution	Thousand Dollars
Domestic Harvest:	Mas	rishery mpacs	witers		MITALS	IOTIAIS	Contribución	DOLLARS
Edible	<del>-</del>	100.0	\$3,013,772	63.03	\$1,899,553	\$3,013,772	11.1	_
Industrial		100.0	\$104,425	59.82	\$62,466	\$104,425	0.4	_
Harvest not landed in U.S		100.0	\$450,471	63.42	\$285,694	\$450,471	1.7	\$450,471
Imports, Unprocessed	. \$1,922,453	-	-	-	-	\$1,922,453	-	-
Exports, Unprocessed		-	-	-	-	-	-	\$897,387
Primary Wholesale and Processing.	. \$4,143,263	101.0	\$4,184,108	57.50	\$2,406,165	\$8,327,371	14.1	-
Imports, Processed	. \$3,860,218	-	-	-	-	\$3,860,218	-	-
exports, Processed		-	-	-	-	-	-	\$762,986
Secondary Wholesale and Processing	g:							
Edible	. \$11,250,043	22.8	\$2,563,583	54.90	\$1,407,416	\$13,813,626	8.3	-
Industrial	. \$174,560	22.8	\$39,778	54.90	\$21,838	\$214,338	0.1	-
Retail Trade from Food Service	. \$7,076,764	177.8	\$12,584,173	73.40	\$9,230,873	\$19,660,936	54.2	-
Retail Trade from Stores	. \$6,736,863	31.9	\$2,149,647	80.50	\$1,729,797	\$8,886,509	10.1	-
TOTAL U.S. VALUE ADDED ACTIVITY:					\$17,043,803		100.0	
CONSUMERS EXPENDITURES (& WHOLESA)	LE PURCHASES OF 1	INDUSTRIAL PRODUCT:	S) FOR FISHERY PR	RODUCTS:		\$28,761,783		

<sup>(1)</sup> Includes industrial products, landings by U.S.-flag vessels at U.S. and foreign ports, and joint ventures.

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.

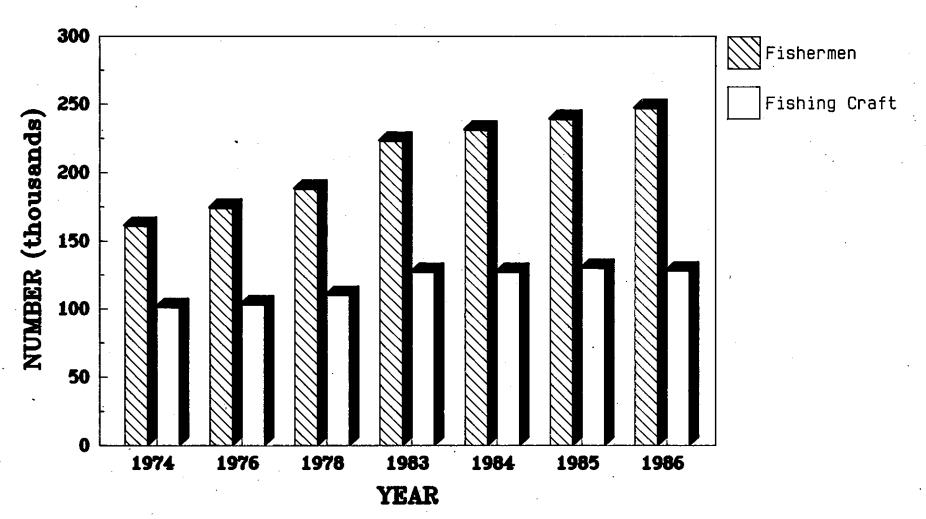
Margin or mark-up is the difference between the price paid for the product by the consumer or wholesale purchaser and the dockside or wholesale value for an equivalent weight of the product. (It is assumed that fishermen catch their fish without paying a purchase price and therefore the entire dockside 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. Value added is thereby a measure of the value of production which eliminates double counting inherent in sales figures of firms active in the marketing channels through which goods are transformed and move to the final consumer. Gross National Product (GIP) is equal to the sum of the value added of all economic entities in the economy. Value added within a sector (e.g. commercial marine fishing) represents that sector's contribution to GIP.

Value added includes wages, salaries, interest, depreciation, rent, taxes and profit. Value added is part of the margin, but margin includes various purchased goods (e.g. containers and non-seafood ingredients) and services (e.g. transportation, insurance, repairs) not included in value added.

Annual sales is the value of seafcod sales at the various maket levels. Consumer expenditures are the final retail value of seafcod products sold through stores and food service outlets.

### NUMBER OF FISHERMEN AND FISHING CRAFT 1974 - 1986



FISHERY EMPLOYMENT, CRAFT, AND ESTABLISHMENTS, VARIOUS YEARS, 1970-86

Item	1970	1972	1974	1976	1978(1)	1986(1)
			<u> </u>	umber		
Persons employed: Fishermen	. 140,538	139,119	161,361	173,610	188,300	247,000
Processing and whole- saling (2)	86,813	91,268	92,118	93,609	99,446	99,956
Total	. 227,351	230,387	253,479	267,219	287,746	346,956
Craft used: Vessels (3) Motor boats	71,570	14,507 69,795 1,570	15,891 83,436 1,907	16,675 84,445 1,501	18,100 90,200 1,600	38,200 88,400 1,600
Total	87,161	85,872	101,234	102,621	109,900	128,200
Processors and wholesalers: New England States Mid-Atlantic States South Atlantic States Gulf Coast States Pacific States Alaska Inland States Other	. 832 . 432 . 817 . 402 . 108	500 793 445 796 223 322 537 47	483 745 433 742 356 239 487 49	503 768 522 726 362 182 511 43	492 763 506 840 437 178 266 42	728 611 668 1,012 399 442 (4) 107 (5) 24
		3,663	3,534	3,617	3,524	3,991

(1) Fishermen and craft estimated. (2) Average for season. (3) Craft 5 net tons and over as documented by U.S. Coast Guard. (4) Data estimated for some Inland States. (5) A partial survey was conducted for other areas or States.



PROCESSORS AND WHOLESALERS: PLANTS AND EMPLOYMENT, 1986

•		PROCESSI		<u> </u>	WHOLESA			TOTAL	lauee :
STATE AND AREA	PLANTS	EMPLOYMENT SEASON	AVERAGE   YEAR	PLANTS	EMPLOYMEN SEASON	T AVERAGE YEAR	PLANTS	EMPLOYMENT SEASON	AVERAGE YEAR
STATE AND AREA	LAMIS	JEASON	'		·		1, 5, 11, 2	SEASON	I ILAK
NEW ENGLAND.					<u>Number</u>				
NEW ENGLAND: MAINE	103	2,274	2,213	169	446	427	272	2,720	2,640
NEW HAMPSHIRE	100	324	267	4	36	36	14	360	303
MASSACHUSSETTS	106	4,018	3,921	187	1,049	1,030	293	5,067	4,951
RHODE ISLAND	36 5	612 51	585 48	77 31	334 135	315	113	946	900
CONNECTICUT						135	36	186	183
TOTAL	260	7,279	7,034	468	2,000	1,943	728 :======	9,279	8,977
MID-ATLANTIC:	· Į				•				
NEW YORK	37 27	499. 1 007	487	166	1,293	1,275	203	1,792	1,762
NEW JERSEY PENNSYLVANIA	13	1,097 1,206	1,071 1,135	57 13	381 210	355 210	84 26	1,478 1,416	1,426 1,345
DELAWARE	4	671	671	6	21	21	īŏ	692	692
DISTRICT OF COLUMBIA			1 004	5	78	78	5	78	78
MARYLANDVIRGINIA	67 95	2,055 3,298	1,924 3,095	68 53	581 395	547 379	135 148	2,636 3,693	2,471 3,474
TOTAL	243	8,826	8,383		2,959	2,865	611	11,785	11,248
·	******				=======	=======	.======:		
SOUTH ATLANTIC:		0 000	0.007		700	co.1			
NORTH CAROLINA SOUTH CAROLINA	106 18	2,283 341	2,067 304	216 82	736 449	634 368	322 100	3,019 790	2,701
GEORGIA	14	1,342	1,321	5 <b>6</b>	128	128	70	1,470	1,449
FLORIDA, EAST COAST	38	1,360	1,355	138	759	752	176	2,119	2,107
TOTAL	176	5,326	5,047	492	2,072	1,882	668	7,398	6,929
GULF: .							:======:		
FLORIDA, WEST COAST	160	3,966	3,899	191	714	646	351	4,680	4,545
ALABAMA	63	1,837	1,814	28	396	396	91	2,233	2,210
MISSISSIPPI	1 44	2,200	1,680	35	172	166	79	2,372	1,846
LOUISIANA	162 39	4,583 1,691	3,920 1,671	167 123	1,027 584	954 563	329 162	5,610 2,275	4,874 2,234
TOTAL	468	14,277	12,984	544	2,893	2,725	1,012	17,170	15,709
			=======						
PACIFIC:	55	2 627	2 610	EO	1 201	1 201	105	E 011	E 000
CALIFORNIAOREGON	35	3,627 1,506	3,619 1,491	50 35	1,384 182	1,381 168	105 70	5,011 1,688	5,000 1,659
WASHINGTON	129	3,322	3,167	95	360	348	224	3,682	3,515
TOTAL	219	8,455	8,277	180	1,926	1,897	399	10,381	10,174
ALACKA (1)	442	24 2 2 2 2 2 2 2 2 2 2 2 3 2 3 2 3 2 3 2	22 000			/2\	449	21 244	22 000
ALASKA (1)	442	31,244	23,000	(2)	(2)	(2)	442	31,244	23,000
INLAND AREAS: (1)									
ARKANSAS, COLORADO,	<b>!</b>								
IDAHO, KANSAS, MISSOURI, NEVADA,									
NORTH DAKOTA,				,	-				
OKLAHOMA, AND	1 ,	20	27	11	20	20	1.4	F0	cc
SOUTH DAKOTA	3	30 52	27 51	11 10	29 115	29 115	14 19	59 167	56 166
INDIANA			-	. 5	32	29	5	32	29
10WA	5	134	134	3		5	. 8	139	139
MICHIGAN	10 7	99 77	92 77	. 8	72	_ 72 _	18 7	171 77	164 77
OHIO	4	24	24	- 6	24	16	10	48	40
WISCONSIN	1.6	152	152	10	44	40	26	196	192
TOTAL	54	568	557	53	. 321	306	107	889	863
OTHER AREAS OR								=========	-=====
STATES: (3)				,	**				
GUAM, HAWAII, AND									
NORTHERN MARIANAS	3.	28	28	14	84	84.	17	112	. 112
AMERICAN SAMOA, AND PUERTO RICO	7	11,698	11,698	(2)	(2)	(2)	7	11,698	11,698
TOTAL	10	11,726	11,726	14	84	84	24	11,810	11,810
IUIAL	10				84 ========				11,810
GRAND TOTAL	1,872	87,701	77,008	2,119	12,255	11,702	3,991	99,956	88,710
	<u> 1</u>	AND STATES							

(1) DATA FOR ALASKA AND SOME INLAND STATES HAVE BEEN ESTIMATED. (2) DATA NOT AVAILABLE. (3) A PARTIAL SURVEY WAS CONDUCTED FOR OTHER AREAS OR STATES.

### EMPLOYMENT, CRAFT, AND PLANTS



### PLANTS PRODUCING CANNED FISHERY PRODUCTS, INDUSTRIAL FISHERY PRODUCTS, AND FISH FILLETS AND STEAKS, 1987

Area and State		Canned fishery products	Industrial fishery products	Fish fillets and steaks	Total plants exclusive of duplication
New England:				<u>Number</u>	
Maine		13	4	32	49
Massachusetts		-	1	60	61
New Hampshire		-	-	3	3
Rhode Island		- 1	_	16 2	16 3
Total		14	. 5 = <b>==</b> =================================	113	132 
Mid-Atlantic:					
New York		. 4	1	22	26
New Jersey	• • •	11 3	2	2	15
Pennsylvania		3 2	<b>-</b>	<u>-</u>	<b>3</b> 2
Maryland		1	1	-	2
Virginia		2	5	1	8
Total		23	9	25	56
South Atlantic and Gulf:					
North Carolina		3	4	19	25
South Carolina		1	-	13	14
Georgia		- ,	. 2 4	1	3
Florida		1 .	4 2	29 1	33 3
Alabama		- 3	2	1	5 6
Louisiana		8	17	11	36
Texas		i			1 <u> </u>
Total		17	31	75	121
Pacific:		========			=======================================
Washington		12	3	20	35
Oregon		3	3	13	18
California	• • •	2	5	17	23
Total		17	11	50	76
Alaska		51	2	4	57
Inland States:					
Iowa			1	3	4
Michigan		1	-	-	1
Minnesota	• • •	- ,	-	2	2
Ohio		<u> </u>	- 1	- 8	1 9
Total		2. /	2	13	17
American Samoa		. 2	2	-	2
uerto Rico		- 5	4	-	5

			Edi	ble fisher;	y products			
Region	Establish	ments (1)			Amount ins	pected		
	SIFE (2)	PUFI (3)	Grade A (4)	PUFI (4)	No mark (5)	Lot (6)	Total	
	<u>Num</u>	Number Thousand pounds						
Northeast	. 2	40	62,303	168,688	7,026	31,650	269,668	
Southeast	. 4	57	18,115	24,969	12,996	12,248	68,328	
West	. з	27	32,623	5,283	13,874	43,257	95,037	
Total, 1987	8	124	113,041	198,941	33,897	87,155	433,034	
Total, 1986	7	120	128,409	192,003	37,656	84,294	442,361	

#### FISHERY PRODUCTS AND ESTABLISHMENTS INSPECTED IN CALENDAR YEAR 1987

- (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.
- (4) Products processed under USDC inspection in inspected establishments and labeled with USDC inspection mark as "Packed Under Federal Inspection" (PUFI) or "U.S. Grade A."
- (5) Products processed under inspection in inspected establishments but bearing no USDC inspection mark.
- (6) Lot inspected 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.

Source: -- NMFS, Office of Trade and Industry Services, F/TS4.



# THE MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT

The Magnuson Fishery Conservation and Management Act (Magnuson Act), Public Law 94-265 as amended, provides for the conservation and management of all fishery resources within the U.S. Exclusive Economic Zone (EEZ) except highly migratory species of tuna. 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 (3 nautical miles from shore for all but two States) to 200 nautical miles from shore. The seaward boundaries of Texas, Puer to Rico, and the Gulf Coast of Florida are 3 marine leagues (9 nautical miles).

#### GOVERNING INTERNATIONAL FISHERY AGREEMENTS

Under the Magnuson Act, the U.S. Department of State, with cooperation from the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce, negotiates Governing International Fishery Agreements (GIFAs) with foreign countries wishing to fish within the EEZ. After a GIFA is signed, it is transmitted by the President to the Congress for review.

#### FOREIGN FISHING PERMITS

Vessels of foreign nations which have GIFAs with the United States may fish in the EEZ for species managed under the Magnuson Act after receiving an allocation of that species and a valid fishing permit. After a GIFA is in force, a foreign nation must submit a permit application to the U.S. Department of State for each vessel to fish in the EEZ. Permit applications must also be made for foreign vessels to receive U.S. harvested fish in the EEZ, and to conduct any other operation in support of the catching, taking, or harvesting of fish in the EEZ. The U.S. Department of State provides copies of the applications to the Congress, the U.S. Coast Guard, the appropriate Regional Fishery Management Councils, and to the Assistant Administrator for Fisheries of the National Marine Fisheries Service (NMFS) with its recommendations. The NMFS also receives recommendations from the Regional Fishery Management Councils and the U.S. Coast Guard, as well as the general public.

The Assistant Administrator for Fisheries reviews recommendations bearing on approval of each application and, after consulting with the U.S. Department of State and the U.S. Coast Guard, may approve an application in whole or in part. Any conditions and restrictions on the approval of an application are sent to the foreign nation through the U.S. Department of State, and must be accepted by the nation before a permit is issued.

#### **FEES**

Foreign nations engaged in fisheries subject to U.S. jurisdiction are charged permit fees, poundage fees, a foreign fee surcharge, and an observer fee. An incremental

fee may also be charged, which is a percentage of the poundage fee from any country found not to be cooperating in the conservation and development of U.S. fishery resources.

The permit fees in 1987 recovered costs of issuing permits, based upon a standard administrative charge of \$184 for each foreign permit application.

Poundage fees are charged for the fish harvested by foreign vessels. Poundage fees vary in relation to the exvessel values of the species harvested by a nation's vessels. Poundage fees are not currently charged for U.S. harvested fish received by foreign vessels. Collections from 1987 poundage fees were expected to continue to decrease as foreign fishing falls to very low levels.

The surcharge is to capitalize a fund to compensate U.S. fishermen operating in the EEZ whose vessels or gear are lost or damaged because of conflicts with foreign vessels. The surcharge on poundage and permit fees was waived in 1987 because the fund was fully capitalized.

The observer fee covers U.S. costs including salary, per diem, transportation, and overhead for U.S. observers on board foreign vessels. The fee is computed on the basis of actual observer trips.

No incremental fees were paid in 1987.

#### FOREIGN ALLOCATIONS

The total allowable level of foreign fishing (TALFF), if any, for any fishery subject to the exclusive fishery management authority of the United States is that portion of the optimum yield (OY) of such fishery that will not be harvested by vessels of the United States

Each assessment of OY and each assessment of the anticipated U.S. harvest is reviewed during each fishing season. Adjustments to TALFFs are based on updated information relating to status of stocks, estimated and actual performance of domestic and foreign fleets, and other relevant factors.

#### FMPs and PMPs

Under the Magnuson 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 develop FMPs which cover domestic and foreign fishing efforts, the FMPs are submitted to the Secretary of Commerce 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 of Commerce is also empowered to prepare plans. 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

### THE MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT

Council has not duly produced. In this latter case, the Secretary's plan covers domestic and foreign fishing.

As of December 31, 1987, six Preliminary Fishery Management Plans (PMPs) were in effect, many of which have been amended since first being implemented.

Atlantic Billfishes and Sharks
Foreign Trawl Fisheries of the Northwest
Atlantic
Hake Fisheries of the Northwestern Atlantic
Pacific Billfishes and Oceanic Sharks
Bering Sea Herring
Bering Sea Snails

#### Fishery Management Plans (FMPs)

Under section 304 of the Magnuson Act, all Cauncil prepared FMPs must be reviewed by the Secretary of Commerce. After FMPs have been approved under section 304 of the Magnuson Act, they are implemented by federal regulations, under section 305 of the Act. During 1987, two new FMPs were adopted by Councils, submitted for Secretarial review and approved. The Tanner Crab FMP was repealed by the Secretary of Commerce. As of December 31, 1987, there are 27 fishery management plans in place. The FMPs are listed below, and those marked with an asterisk (\*) were approved and implemented during 1987, After implementation, many FMPs are amended by the Council and submitted for approval under the same Secretarial review process as new FMPs. Many of the Plans listed have been amended since initial implementation.

American Lobster Northeast Multispecies Atlantic Mackerel, Squid, and Butterfish Atlantic Sea Scallops Atlantic Surf Clams and Ocean Quahogs fisheries Swordfish Gulf and South Atlantic Spiny Lobster Caribbean Shallow Water Reef Fish Gulf and South Atlantic Corals Gulf of Mexico Reef Fish Gulf of Mexico Shrimp Gulf of Mexico Stone Crab Coastal Migratory Pelagics Caribbean Spiny Lobster Snapper/Grouper Northern Anchovy Alaskan King Crab Commercial and Recreational Salmon High Seas Salmon Pacific Groundfish
Gulf of Alaska Groundfish
Bering Sea and Aleutian Islands Groundfish Western Pacific Spiny Lobster
Western Pacific Precious Corals
Western Pacific Bottomfish and Seamount Groundfish Gulf of Mexico Red Drum(\*) Western Pacific Pelagics(\*)

During 1987, 364 regulatory actions were processed via the <u>Federal Register</u> to implement FMP fishery management actions and rules for foreign fishing. This number includes hearing and meeting notices.

#### REGIONAL FISHERY MANAGEMENT COUNCILS

<u>Council</u>	States	<u>Telephone</u> <u>Number</u>	Executive Director
NEW ENGLAND	(Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut)	* 617-231-0422	Douglas G. Marshall Suntaug Office Park 5 Broadway (Rte.1) Saugus, MA 01906
MID-ATLANTIC	(New York, New Jersey, Delaware, Pennsylvania Maryland, and Virginia)	302-674-2331	John C. Bryson, Federal Bldg., Room 2115 300 So. New St. Dover, DE 19901
SOUTH ATLANTIC	(North Carolina, South Carolina, Georgia, and Florida)	803-571-4366	Robert K. Mahood Southpark Bldg., Suite 306 1 Southpark Circle, Charleston, SC 29407
GULF OF MEXICO	(Texas, Louisiana, Mississippi, Alabama, and Florida)	813-228-2815	Wayne E. Swingle Lincoln Center, Suite 881 5401 W. Kennedy Blvd., Tampa, FL 33609
CARIBBEAN	(Virgin Islands and the Commonwealth of Puerto Rico)	809-753-4926	Omar Munoz-Roure, Banco de Ponce Bldg. Suite 1108 Hato Rey, PR 00918
PACIFIC	(California, Washington, Oregon, and Idaho)	503-221-6352	Larence D. Six Metro Center, Suite 420 2000 S.W. First Avenue Portland, OR 97201
NORTH PACIFIC	(Alaska, Washington, and Oregon)	907-271-2809	Clarence G. Pautzke 605 W. 4th Ave., Rm. 306 P.O. Box 103136 Anchorage, AK 99510
WESTERN PACIFIC	(Hawaii, American Samoa, Guam, and the Northern Marianas Islands)	808-523-1368	Kitty M. Simonds 1164 Bishop St., Room 1405 Honolulu, HI 96813

<sup>\*</sup> Area code will change to 508 effective July 16, 1988.

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATION:
BY COUNTRY AND REGION, 1987

	North Atlantic (1), (2)	Washington Oregon, and California (3)	Gulf of Alaska	Eastern Bering Sea and Aleutian Islands (4)	Total Alaska	Grand Total (1)
		Meti	ic tons, round	weight		
Optimum yield (OY) DAH JAP JVP Reserve TALFF	513,780 356,400 263,460 80,340 3,000 152,380	217,000 137,250 16,000 121,250 4,400 75,350	221,277 221,277 165,447 55,830 0	2,003,000 1,820,833 336,723 1,484,110 46,471 135,696	2,224,277 2,042,110 502,170 1,539,940 46,471 135,696	2,955,057 2,535,760 781,630 1,741,530 53,871 363,426
COUNTRY ALLOCATIONS	= # # * # # # # = = = = = =			***************************************		
EEC Italy Netherlands German Democratic	541 10,866	0 0	0 0	·	0	541 10,866
RepublicJapan	21,858 0	0 0	0	0 104,446	0 104,446	21,858 104,446
People's Republic of China Poland Republic of Korea	0 0 0	3,200 53,800 2,500	0 0 0	1,350 0 29,900	1,350 0 29,900	4,550 53,800 32,400
Total	33,265	59,500	0	135,696	135,696	228,461

<sup>(1)</sup> DAH does not equal JVP + DAP. Optimum Yield does not equal DAH+RESERVES+TALFF.

Notes:--DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; JVP=Joint Venture Processing; TALFF=Total Allowable Level of Foreign Fishing.

Pacific Seamount Region closed to Foreign and Domestic Fishing.

Source: -- NMFS, Office of Trade and Industry Services, F/TS2.

<sup>(2)</sup> Optimum Yield includes initial optimum yield for some species-see North Atlantic table.
(3) Optimum Yield includes Pacific whiting, shortbelly rockfish, and jack mackerel; allocations include only Pacific whiting - see Washington, Oregon, and California table.

<sup>(4)</sup> Includes 3,000 mt of snails.

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
NORTH ATLANTIC, BY SPECIES AND COUNTRY, 1987 (1)

Item	Red hake (2)	Silver hake (2)	Sharks, except Dogfish	Loligo Squid(3)	Illex Squid(3)	Atlantic mackerel (3), (4)	Butterfish (3)	River herring	Other finfish	Total
		·		Metric	tons, roun	d weight		<del></del>		<del></del>
fax Optimum			•			·				
_yield (OY)	22,000	43,000	6,150	44,000	30,000	N/A	16,000	8,000	247,000	•
NBC	-	-	₹	37,000	22,500	294,000	16,000	-	-	~
Initial Optimum	22 000	43 000	6 150	10 120	0 720	154,676	13,087	9 000	247,000	513,780
Yield OAH	22,000 11,500	43,000 29,600	6,150 5,000	10,129 10,000	9,738 9,700	69,600	13,000	8,000 7,800	200,200	356,400
DAP	5,500	7,600	5,000	9,010	6,550	29,000	13,000	7,800	180,000	263,460
JVP	6,000	22,000	5,000	990	3,150	28,000	13,000	7,000	20,200	80,340
Reserve	3,000	-	_	-	3,130	20,000	-	_	-	3,000
ALFF	5,500	13,400	1,150	129	38	85,076	87	200	46,800	152,380
:======================================	=======	. = = = = = = = = = = = =	.=======		**=======	.========	=========	========	=======	. = = = = = = :
<u>Country</u> allocations	•			3	<u>.</u>		•			,*
EC:			• •	•			•		•	
Italy	5	10	0 ·	1	1	500	, 2	2	20	541
Netherlands	25	50	0	10	1	10,500	20	60	200	10,866
erman Demo-		-			,		. )			
cratic Republic	25	50	0	10	3	21,500	20	50	200	21,858
Total	55	110	0	21	5	32,500	42	112	420	33,265

<sup>(1)</sup> OY=Optimum Yield; ABC=Allowable Biological Catch; DAH=Domestic Annual Harvest; and TALFF=Total Allowable Level of Foreign Fishing; Initial Optimum Yield = DAH & TALFF or max optimum yield.

NA: -- Not available.

Source: -- NMFS, Office of Trade and Industry Services, F/TS2.

<sup>(2)</sup> DAH does not equal JVP + DAP or Optimum Yield does not equal DAH + JVP + Reserve.
(3) All species based on January 1 to December 31 fishing year.
(4) Includes 12,600 metric tons for recreational catch.

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, FOREIGN FISHING ALLOCATION AND BYCATCH ALLOWANCES WASHINGTON, OREGON, AND CALIFORNIA, BY SPECIES AND COUNTRY, 1987 (1)

	Species Available for Directed Foreign Fishing				Bycatch Allowances (2)					
	Pacific whiting	Short- belly rockfish	Jack mackerel	Total	Pacific ocean perch	Other rockfish (3)	Flat- fish	Sable- fish	Jack mackerel	Other species
				- <u>Metric</u>	tons, rou	nd weight				
Optimum yield (OY)	195,000	10,000	12,000	217,000	-	-	•	_		-
DAH	131,250	6,000	0	137,250	-	-	-	-	-	_
DAP	15,000	1,000	. 0	16,000	-	-	-	-	_	_
JVP	116,250	5,000	0	121,250		_	_	_	-	-
Reserve	0	2,000	2,400	4,400	_	_	_	_	-	-
TALFF	63,750	2,000	9,600	75,350	-	-	-	-	-	-
% BYCATCH LIMITS (2)	-	-	-	-	0.062	0.738	0.100	0.173	3.000	0.500
	=======	=======		=======				=======	========	======:
COUNTRY ALLOCATIONS	• .									
Poland	53,800	n	0	53,800	33	397	54	93	1,614	269
Rep. of Korea		0 0	ŏ	2,500		11	2	33	45	269
People's Republic	-,000	3	•	2,000	_		-	•	+3	203
of China	3,200	0	0	3,200	2	24	3	6	96	8
Total	59,500	0	0	59,500	· .		<del></del>		<del></del>	

<sup>(1)</sup> TALFF = Total Allowance Level of Foreign Fishing; DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; and JVP=Joint Venture Processing.

Source:--NMFS, Office of Trade and Industry Services, F/TS2.

<sup>(2)</sup> Bycatch allowances are the maximum amounts of bycatch that can be taken by foreign vessels and are based on the bycatch limits which are percentages applied to each nation's Pacific whiting allocation.

<sup>(3)</sup> Includes shortbelly rockfish and widow rockfish.

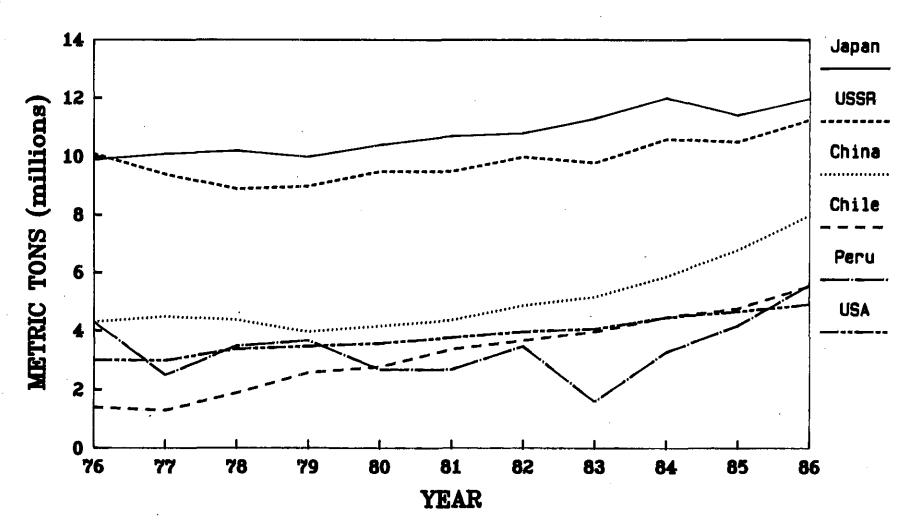
OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS: EASTERN BERING SEA AND ALEUTIAN ISLANDS, BY SPECIES AND COUNTRY, 1987 (1)

Item				Flatfish						
	Alaska pollock	Snail (meats)	Turbot	Arrowtooth flounder	Yellowfin sole	Other	Pacific cod			
TACDAHDAPJVPReserve	1,288,000 1,283,300 193,197 1,089,803	3,000 0 0 0 0 0 0 3,000	20,000 15,280 15,213 67 -	etric tons, round 9,795 4,193 830 3,363 	d weight 187,000 182,000 100 181,900 - 5,000	148,300 89,015 17,043 71,972 37,080	280,000 186,705 91,767 94,938 -73,295			
Country allocations People Republic of China Japan Rep. of Korea	50 3,950 1,000	3,000	1 1,739 10	5 5,497 100	138 1,905 2,957	1,051 11,786 24,243	70 72,225 1,000			
Total	5,000	3,000	1,750	5,602	5,000	37,080	73,295			
Item	Rockfi Pacific ocean perch	shes Other	Sablefish	Atka Mackerel	Squid	Other species	Total			
	<del> </del>		<u> </u>	etric tons, round	l weight					
TACDAHDAHDAP	11,025 9,892 9,209 683 - 17	1,880 1,746 1,383 363	7,700 7,660 7,227 433 -	30,800 30,790 250 30,540 - 10	500 52 4 48 - 393	15,000 10,500 500 10,000 4,500	2,003,000 1,820,833 336,723 1,484,110 46,471 135,696			
Country allocations People Republic of China Japan Rep. of Korea	2 13 2	1 7 1	1 30 9	1 6 3	5 308 80	25 3,980 495	1,350 104,446 29,900			
Total	17	9	40	10	393	4,500	135,696			

<sup>(1)</sup> TAC=Total Allowable Catch; DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; JVP=Joint Venture Processing; and TALFF=Total Allowable Level of Foreign Fishing.
Source:--NMFS, Office of Trade and Industry Services, F/TS2.

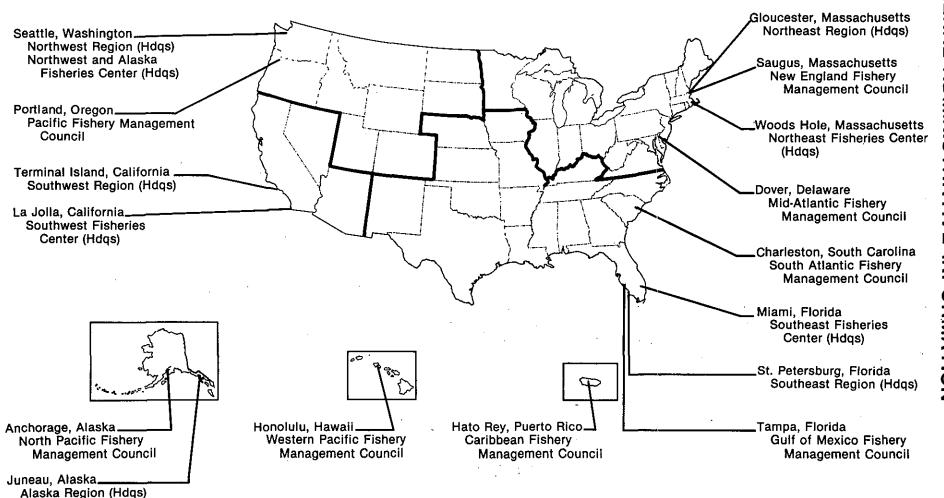
# WORLD COMMERCIAL CATCH BY LEADING COUNTRIES

(LIVE WEIGHT) 1976 - 1986



# NMFS Regional Offices NMFS Fisheries Centers Regional Fishery Management Councils

**HDQS Locations** 



# UNITED STATES DEPARTMENT OF COMMERCE

14th and E Streets, NW Washington, D.C. 20230

Mail routing code		Telephone number
<del></del> .	Secretary of Commerce C. William Verity	202-377-2112
A	National Oceanic and Atmospheric Administration William E. Evans	202-377-3567
	NATIONAL MARINE FISHERIES SERVICE	
	1825 Connecticut Avenue, NW (Universal Building, South) Washington, D.C. 20235	
F	Assistant Administrator for Fisheries James E. Douglas, Jr. (Acting)	202-673-5450
Fx1	Deputy Assistant Administrator for Fisheries	202-673-5450
Fx2	Executive Director	202-673-5450
F/MB	Management and Budget Office	202-673-5455
F/EN	Office of Enforcement	202-673-5295
F/CM	Office of Fisheries Conservation and Management	202-673-5263
F/CM1	Fisheries Regulations Division	202-673-5315
F/CM2	Fisheries Management Coordination Division	202-673-5272
F/CM3	Recreational and Interjurisdictional Fisheries Division	202-673-5263
F/RE	Office of Research and Environmental Information	202-673-5366
F/RE1	Fisheries Statistics Division	202-673-5335
F/RE2	Data Management Division	202-673-5330
F/RE3	Prediction, Analysis and Monitoring Division	202-673-5362
F/PR	Office of Protected Species	202-673-5355
F/PR1	Permits and Documentation Division	202-673-5348
F/PR2	Protected Species Management Division	202-673-5349
F/PR3	Habitat Policy and Conservation Division	202-673-5498
F/PR4	Conservation Science Division	202-673-5362
F/TS	Office of Trade and Industry Services	202-673-5260
F/TS1	Financial Services Division	202-673-5424
F/TS2	Trade Services Division	202-673-5501
F/TS3	Utilization Research and Services Division	202-673-5371
F/TS4	Inspection Services Division	202-673-5875
	(Continued)	

# **GENERAL ADMINISTRATIVE INFORMATION**

# NATIONAL MARINE FISHERIES SERVICE

Washington, D.C. 20235

<u>Mail</u> <u>routing</u> <u>code</u>		<u>Telephone</u> <u>number</u>
F/IA	Office of International Affairs	202-673-5279
F/IAl	Organizations and Agreements Division	202-673-5281
F/IA2	International Science, Development and Polar Affairs Division	202-673-5260
LA3-F	Constituent Affairs Staff - Fisheries	202-673-5429
LA5-F	Office of Congressional Affairs - Fisheries.	202-673-5434
PAF	Office of Public Affairs - Fisheries	202-673-5445
GCF	Office of General Counsel - Fisheries	202-673-5206
CSEP	Estuarine Programs Office (NOAA)	202-673-5243

### REGIONAL OFFICES

Location	<u>Telephone</u> <u>number</u>	
Gloucester, MA	*617-281-3600	Northeast Region, 14, Elm St., Federal Bldg. Gloucester, MA 01930
Woods Hole, MA	*617-548-5123	Northeast Science and Research Woods Hole, MA 02543
Woods Hole, MA	*617-548-5123	Woods Hole Laboratory Woods Hole, MA 02543
Narragansett, RI	401-789-9326	Narragansett Laboratory, Route 7A, P.O. Box 522A Narragansett, RI 02882
Milford, CT	203-878-2459	Milford Laboratory Milford, CT 06460
Highlands, NJ	201-872-0200	Sandy Hook Laboratory, P.O. Box 428 Highlands, NJ 07732
Oxford, MD	301-226-5193	Oxford Laboratory Oxford, MD 21654
Gloucester, MA	617-281-3600 Ext. 237	Gloucester Laboratory, Emerson Ave. Gloucester, MA 01930
Washington, DC	202-357-2550	National Systematics Laboratory 10th and Constitution Ave., N.W. Washington, DC 20560
Narragansett, RI	401-789-9326	Atlantic Environmental Group, Route 7A, P.O. Box 522A Narragansett, RI 02882

<sup>\*</sup>Area code will change to 508 effective July 16, 1988.

(Continued)

# **GENERAL ADMINISTRATIVE INFORMATION**

# NATIONAL MARINE FISHERIES SERVICE

# REGIONAL OFFICES - Continued

Location	<u>Telephone</u> number	
St. Petersburg, FL	813-893-3141	Southeast Region, 9450 Koger Flvd. St. Petersburg, FL 33702
Miami, FL	305-361-4284	Southeast Science and Research, 75 Virginia Beach Dr. Miami, FL 33149
Miami, FL	305-361-4225	Miami Laboratory, 75 Virginia Beach Dr. Miami, FL 33149
Pascagoula, MS	601-762-4591	Mississippi Laboratories, 3209 Frederick St. P.O. Drawer 1207 Pascagula, MS 39567
Panama City, FL	904-234-6541	Panama City Laboratory, 3500 Delwood Beach Rd. Panama City, FL 32407
Galveston, TX	409-766-3500	Galveston Laboratory, 4700 Avenue U Galveston, TX 77550
Charleston, SC	803-762-1200	Charleston Laboratory, 217 Fort Johnson Rd. P.O. Box 12607 Charleston, SC 29412
Beaufort, NC	919-728-4595	Beaufort Laboratory, Pivers Island, P.O. Box 570 Beaufort, NC 28516
Seattle, WA	206-526-6150	Northwest Region, 7600 Sand Point Way, N.E. BIN C15700, Bldg. 1 Seattle, WA 98115
Seattle, WA	206-526-4000	Northwest Science and Research, 7600 Sand Point, N.E. BIN C15700, Bldg. 4 Seattle, WA 98115
Terminal Island, CA	213-514-6196	Southwest Region, 300 South Ferry St. Terminal Island, CA 90731
La Jolla, CA	619-546-7000	Southwest Science and Research 8604 La Jolla Shores Dr., P.O. Box 271 La Jolla, CA 92038
Honolulu, HI	808-943-1221	Honolulu Laboratory, 2570 Dole St., P.O. Box 3830 Honolulu, HI 96812
Tiburon, CA	415-435-3149	Tiburon Laboratory, 3150 Paradise Dr. Tiburon, CA 94920
Monterey, CA	408-646-3311	Pacific Fisheries Environmental Group P.O. Box 831
		Monterey, CA 93942

(Continued)

### NATIONAL MARINE FISHERIES SERVICE

### REGIONAL OFFICES - Continued

Location	<u>Telephone</u> number	
Juneau, AK	907-586-7221	Alaska Region, Federal Bldg., Room 453 709 West Ninth St., P.O. Box 1668 Juneau, AK 99802
Seattle, WA	206-526-4000	Alaska Science and Research, 7600 Sand Point Way, N.E. BIN C15700, Bldg. 4 Seattle, WA 98115
Kodiak, AK	907-487-4961	Kodiak Investigations, P.O. Box 1638 Kodiak, AK 99615
Auke Bay, AK	907-789-6000	Auke Bay Laboratory, P.O. Box 210155 Auke Bay, AK 99821

### REFERRAL DIRECTORY - WASHINGTON, D.C. OFFICES

### FEES AND PERMITS -- 202-673-5319

Foreign fishing Joint ventures

### FINANCIAL SERVICES -- 202-673-5424

Compensation for loss of gear Construction, vessels (Tax Deferral Program) Insurance - vessel seizure by foreign governments Loans and loan guarantees

### FISHERY MANAGEMENT OPERATIONS -- 202-673-5263

Artifical reefs Fishery management plans Fisheries regulations State grants

### INDUSTRY SERVICES -- 202-673-5260

Consumer education and marketing Exports/Imports licenses Saltonstall-Kennedy (S-K) grants Tariffs Trade issues

### INTERNATIONAL FISHERIES -- 202-673-5300

Allocation (foreign fishing catches) Foreign fisheries (general)

### LAW ENFORCEMENT AND FINES -- 202-673-5295

# PROTECTED SPECIES -- 202-673-5348

Lacey Act (general information)
Marine Mammal Protection Act (general)
Permits and regulations

### RESOURCES INVESTIGATIONS -- 202-673-5366

Acid rain and pollution Aquaculture information Diseases of fish Ecology and fish recruitment Fishing methods Resource abundance

# STATISTICAL DATA SERVICES -- 202-673-5335

Commercial fisheries - landings and value Imports and exports
Joint ventures
Market news reports (general)
Operating units (fishermen and vessels)
Processed fishery products
Recreational fisheries

### UTILIZATION RESEARCH -- 202-673-5371

Botulism and ciguatera poisoning Nutrition and quality of fishery products Safety and product standards Seafood inspection and identity

## NATIONAL MARINE FISHERIES SERVICE

## NATIONAL FISHERY STATISTICS OFFICES

<u>City</u>	<u>Telephone</u> <u>number</u>	Name and address	
		NORTHEAST REGION	
NEW ENGLAND			
Portland	207-780-3322	Robert C. Morrill, U.S. Custom House, 312 Fore St., Room 17,	
Rockland	207-594-5969	P.O. Box 425, DTS, Portland, ME 04112 Peter S. Marckoon, Federal Bldg., 21 Limerock St., Room 207, P.O. Box 708, Rockland, ME 04841	
Boston	*617-223-8015	Paul Sheahan 408 Atlantic Ave., Room 141 Boston, MA 02210	
Gloucester	*617-281-3600 Ext. 304	Vito P. Giacalone, Gloucester Lab., Emerson Ave., Gloucester, MA 01930	
New Bedford	*617-999-2452	Dennis E. Main, U.S. Custom House, 2nd and Williams Sts., New Bedford, MA 02740	
New Bedford Provincetown	*617-994-9200 *617-487-0868	Paul O. Swain, Address same as above William D. Spraque, Post Office Bldg., Commercial St.,	
(1)Woods Hole	*617-548-5123	P.O. Box 91, Provincetown, MA 02657 Ronnee L. Schultz, Northeast Fisheries Center, Water St.,	
Newport	Ext. 264 401-847-3115	Woods Hole, MA 02543 Lori Lathan, Post Office Bldg., Thames St.,	
Pt. Judith	401-783-7797	Newport, RÍ 02840 Susan Murphy, 7310 Great Island Rd., Rm. 203, P.O. Box 547,	
MIDDLE ATLANTIC	•	Pt. Judith, RI 02882	
Riverhead	516-727-0707	Emerson C. Hasbrouck, Jr., 518-8 E. Main St., P.O. Box 873,	
Patchogue	516-475-6988	Riverhead, L.I., NY 11901 Fred C. Blossom, 22 W. Main St., P.O. Box 606,	
Toms River	201-349-3533	Patchogue, L.I., NY 11772 Eugene A. LoVerde, 26 Main St., P.O. Box 143,	
Cape May	609-884-2113	Toms River, NJ 08753 Patricia A. Yoos, 1400 Texas Ave., P.O. Box 624, Cape May, NJ 08204	
CHESAPEAKE			
Oxford	301-226-5420	William E. Brey, Oxford Laboratory, P.O. Box 338,	
Greenbackville	804-824-4725	Oxford, MD 21654 George E. Ward, Biological Lab., Franklin City,	
Hampton	804-723-3369	Greenbackville, VA 23356 William N. Kelly, 55-57 West Queensway Mall, P.O. Box 436, Hampton, VA 23669	
	•	SOUTHEAST REGION	
SOUTH ATLANTIC			
Beaufort	919-728-4168	Kenneth C. Harris, Pivers Island, Beaufort Laboratory	
Manteo	919-473-5929	Beaufort, NC 28516 Glenwood P. Montgomery, Marine Resource Center,	
Charleston	803-762-1200	John C. DeVane, Jr., 217 Ft. Johnson Rd., P.O. Box 12607,	
Brunswick	912-265-7080	James Island, SC 29412 Daniel G. Foster, Federal Bldg., 801 Gloucester St.,	
New Smyrna Beach	904-427-6562	Room 104, Brunswick, GA 31520 Claudia Dennis, 200 Canal St., P.O. Box 566,	
(1)Miami	305-361-4462	New Smyrna Beach, FL 32069  J. Ernest Snell, 75 Virginia Beach Dr.,	
West Palm Beach	305-837-5234	Miami, FL 33149 Howard C. Schaefer, 727 Belvedere Road, West Palm Beach, FL 33405	

<sup>\*</sup>Area code will changes to 508 effective July 16, 1988.

(Continued)

<sup>(1)</sup> Regional headquarters for statistics offices.

# NATIONAL MARINE FISHERIES SERVICE

## NATIONAL FISHERY STATISTICS OFFICES - Continued

<u>City</u>	<u>Telephone</u> <u>number</u>	Name and Address
<u>G</u> ULF	•	
Key West	305-294-1921	Edward J. Little, Jr., Office & Custom House Bldg.,
Fort Myers	813-334-4364	P.O. Box 269, Key West, FL 33040 Tom Herbert, Federal Bldg. P.O. Box 217,
_		Fort Myers, FL 33902
St. Petersburg	813-893-3151	Betty J. Guisinger, 9450 Koger Blvd., St. Petersburg, FL 33702 Blobs of December 198
Apalachicola	904-653-9500	Richard Dumas, Post Office Bldg., P.O. Drawer 189, Apalachicola, FL 32320
Panama City	904-234-6541	Deborah Fable, 3500 Delwood Beach Rd., Panama City, FL 32401
Bayou La Batre	205-824-4149	Horace M. Flowers, D&H Furniture BIdg., Second Floor, 93 S. Wintzell Ave., P.O. Box 91, Bayou La Batre, AL 36501
Pascagoula	601-762-4591	Hermes G. Hague, 3209 Frederic St., SEFC Pascagoula Lab., P.O. Drawer 1207, Pascagoula, MS 39567
Cameron	318-762-3887	Vacant, Sabine National Wildlife Refuge, State Highway 27, M.R.H. Box 107, Hackberry, LA 70645
Golden Meadow	504-475-7072	Gary J. Rousse, 1614 So. Bayou Dr., Rm. 211, P.O. Box 623, Golden Meadow, LA 70357
Houma	504-872-3321	Kathleen M. Hebert, Post Office Bldg., 425 Lafayette St., Room 128, Hoúma, LA 70360
New Iberia	318-365-1558	Linda F. Picou, 327 S. Iberia St., Suite 8, New Iberia, LA 70560
New Orleans	504-589-6153	Thomas R. Dawley, World Trade Center, 2 Canal St., Suite 400-H, New Orleans, LA 70130
Aransas Pass	512-758-3787	Mary Magee, Landry Net Shop, Conn Brown Harbor,
Brownsville	512-831-4050	Edie Lopez, Harbor Masters Bidg., Shrimp Basin, P.O. Box 457, Brownsville, TX 78520
Freeport	409-233-4551	Richard A. Allen, Brazosport Savings Center, P.O. Box 2533, Freeport, TX 77541
Galveston	409-766-3705	Margot Hightower, 4700 Avenue U
Port Arthur	409-724-4303	Galveston, TX 77550  Madeline Bailey, Federal Bldg., 2875 75th St., Room 14-C, Room 113, Port Arthur, TX 77640
		SOUTHWEST REGION
(1)Terminal Island	213-514-6674	Patricia J. Donley, 300 S. Ferry St., P.O. Box 3266,
Honolulu	808-955-8831	Terminal Island, CA 90731 Doyle E. Gates, Honolulu Lab., P.O. Box 3830, Honolulu, HI 96822
		MOSTUMEST BESIGN
		NORTHWEST REGION
(1)Seattle	206-526-6128	John K. Bishop, 7600 Sand Point Way, N.E., Bldg., 1, Bin C 15700, Seattle, WA 98115
		ALASKA REGION
(1)Juneau	907-586-7228	Janet E. Smoker, 709 W. Ninth St., Federal Bldg., P.O. Box 1668, Juneau, AK 99801

<sup>(1)</sup> Regional headquarters for statistics offices.

### PUBLICATIONS AVAILABLE FROM NATIONAL MARINE FISHERIES SERVICE, NOAA

### SCIENTIFIC PUBLICATIONS

Information on formal scientific publications by NMFS (such as NMFS journals and Technical Reports) may be obtained from the Scientific Publications Office (F/NWRI), 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 Fishery Statistics (CFS) series. They are statistical bulletins on marine recreational fishing and 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 National Fishery Statistics Program (F/REI) Washington, D.C. 20235 202-673-5335

Marine recreational fishing publications are released annually. If you wish a copy of the following publications, check the designated space ( ) and return to the office shown above.

- () Marine Recreational Fishery Statistics
  Survey, Pacific Coast, 1986
  C.F.S. No. 8393
- () Marine Recreational Fishery Statistics
  Survey, Atlantic and Gulf Coasts,
  1986 C.F.S. No. 8392
- () Marine Recreational Fishery Statistics
  Survey, Pacific Coast, 1985
  C.F.S. No. 8328
- () Marine Recreational Fishery Statistics
  Survey, Atlantic and Gulf Coasts,
  1985 C.F.S. No. 8327
- () Marine Recreational Fishery Statistics
  Survey, Atlantic and Gulf Coasts,
  1983-1984 C.F.S. No. 8326
- () Marine Recreational Fishery Statistics Survey, Pacific Coast, 1983–1984 C.F.S. No. 8325

- () Marine Recreational Fishery Statistics
  Survey, Atlantic and Gulf
  Coasts, 1981-1982
  C.F.S. No. 8324
- () Marine Recreational Fishery Statistics
  Survey, Pacific Coast, 1981-1982
  C.F.S. No. 8323
- () Marine Recreational Fishery Statistics
  Survey, Atlantic and Gulf Coasts,
  1979 (Revised)-1980 C.F.S. No. 8322
- () Marine Recreational Fishery Statistics
  Survey, Pacific Coast, 1979-1980
  C.F.S. No. 8321

The bulletins shown below cover freezings and holdings, the production of various processed products, and the U.S. foreign trade in fishery products. The annual data shown in the publications are later published in <u>Fishery Statistics</u> of the <u>United States</u>. To order <u>Fishery Statistics</u> of the <u>United States</u> from the Government Printing Office (GPO) or the National Technical Information Service (NTIS), see the two pages that follow.

The following are available annually:

- () FF Frozen Fishery Products
- () MF-1 Processed Fishery Products:

  (Includes (MF I-5) Canned Fishery Products;
  Production of Fish Fillets and Steaks; Fish
  Sticks, Fish Portions, and Breaded Shrimp;
  and Industrial Fishery Products.)
- () MF-6 Import and Exports of Fishery Products

The following publication is only available quarterly; monthly data will be available in the annual Processed Fishery Products (MF-I):

() Fish Meal and Oil

### LIBRARY INFORMATION

Library information is available from NOAA's library, 6009 Executive Blvd., Rockville, MD 20852. Telephone: 301-443-8334.



# **PUBLICATIONS**

### PUBLICATIONS AVAILABLE FROM U.S. GOVERNMENT PRINTING OFFICE

	TECHNICAL REPORTS Stock Number		003-020-00055-0	Marine Fishes of the California Current and adjacent waters \$5.50
	003-009-00522-1	International Trade Administration Report, "1987	003-020-00065-7	Marine Fishes of the Gulf and South Atlantic\$5.50
		U.S. Industrial Outlook" - a a one-year forecast on the U.S. fishing industry plus one and	003-020-00069-0	Fishes of the Great Lakes\$5.50
		five-year forecasts on other U.S. industries. January 1988\$24.00	003-020-00087-8	Mollusks and Crustaceans of the Coastal U.S\$5.50
			003-020-00106-8	Marine Mammals of the Western Hemisphere\$7.00
	STATISTICAL REPORT	<u>s</u>		
	003-020-00157-2	Fisheries of the United States, 1987		
			SEAFOOD COOKBOOKS	•
	ANGLER'S GUIDE TO		003-020-00052-5	Fish and Shellfish Over the Coals\$1.75
UNITED STATES PAC 003-020-00113-1	Marine Fish, Fishing Grounds	003-020-00074-6	A Little Fish Goes a Long Way\$1.50	
		and Facilities\$8.50	003-020-00104-1	Seafood Slimmers\$1.25
	MARINE LIFE POSTER	<u> </u>	003-020-00109-2	Nautical Notions for Nibbling\$1.50
		Te non-glare plasticized paper)	003-020-00144-1	Seafoods for Health\$2.00
	003-020-00027-4	Marine Fishes of the North Atlantic\$5.50	003-020-00145-9	Vitalize Your Life - Discover Seafood Your Guide To Nutrition
	003-020-00051-7	Marine Fishes of the North Pacific\$5.50		From The Sea\$1.00 \$10.00/100



To purchase publications listed on this page (Advance Payment Required), call or write:

Superintendent of Documents U.S. Government Printing Office Washington, DC 20402 202-783-3238

# PUBLICATIONS AVAILABLE FROM NATIONAL TECHNICAL INFORMATION SERVICE (NTIS), U.S. DEPARTMENT OF COMMERCE

### 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 Recreational Fishing:
Northeastern United States, 1973-74, COM-75-10655.
Southeastern United States, 1974, PB-273160.

Marine Recreational Fishery Statistics Survey Pacific Coast, 1979-80, PB84-199652

## COMMERCIAL FISHERIES

<u>Fisheries of the United States</u> is a preliminary report with historical comparisons on the Nation's fishing, fish processing, and foreign trade in fishery products.

Year	Accession number	Year	Accession number
1966	COM-75-10662	1977	PB-282741
1967	COM-75-10663	1978	PB-297083
1968	COM-75-10664	1979	PB-80-201593
1969	COM-75-10665	1980	PB-81-241648
1970	COM-71-50081	1981	PB-82-215542
1971	COM-75-10666	1982	PB-83-216473
1972	COM-73-50644	1983	PB-84-195148
1973	COM-74-50546	1984	PB-86-144953
1974	COM-75-10862	1985	PB-87-143145
1975	PB-25-3966	1986	PB-88-164132
1976	PB-268662		

<u>Fishery Statistics of the United States</u> (Statistical Digest) is a final report on the Nation's commercial fisheries showing more detail than <u>Fisheries of the United States</u>.

Year	Accession number	Year	Accession number
1939	COM-75-11265	1959	COM-75-11062
1940	COM-75-11266	1960	COM-75-11063
1941	COM-75-11267	1961	COM-75-11064
1942	COM-75-11268	1962	COM-75-11065
1943	COM-75-11269	1963	COM-75-11066
1944	COM-75-11270	1964	COM-75-11067
1945	COM-75-11271	1965	COM-75-11068
1946	COM-75-11272	1966	PB-246429
1947	COM-75-11273	1967	PB-246430
1948	COM-75-11274	1968	COM-72-50249
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Directory of Aquaculture in the Southeast, 1976, PB-272-1512.

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Economic Impacts of the U.S. Commercial Fishing Industry, COM-75-11354.

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National Marine Fisheries Service: Seafood Consumption, 1973-1974, (a magnetic tape) PB-294725.

National Marine Fisheries Service: Species/Mercury Data (a magnetic tape) PB-283265.

The Maryland Blue Crab and Oyster Processing Industries:
The Effects of Government Regulations, PB-82-159054.

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The National Fisheries Institute, a national trade association of seafood processors, brokers, importers, and buyers, in cooperation with and under contract to the National Marine Fisheries Service, has prepared a series of economic profiles of the U.S. seafood processing industry.

These profiles will serve as a primer for regulatory and policy analysts who may not be familiar with the intricacies of seafood processing and of economic constraints facing seafood processors, who are predominately small businessmen.

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The Maine Sardine Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-165712

The U.S. Menhaden Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-165720

The U.S. Oyster Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-166215

The U.S. Shrimp Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-166233 (includes canned shrimp, breaded shrimp, and headless/peeled shrimp).

The New England Groundfish Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-166231.

Analysis of Seafood Consumption in the U.S. 1970, 1974, 1978, and 1981 PB-86-135043

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Salmon, 1947-72, COM-74-11710
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National Marine Fisheries Service John K. Bishop, Supervisor 7600 Sand Point Way, N.E. BIN C15700, Bldg. #1 Seattle, WA 98115 (206) 526-6128

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# **SERVICES**

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The National Marine Fisheries Service (NMFS) addresses trade problems affecting U.S. fishery exports in coordination with the U.S. Trade Representative, the International Trade Administration and the International Trade Commission. The activities support bilateral and multilateral trade negotiations and actions by U.S. industry under U.S. trade law. Factors affecting international trade in fisheries products are analyzed, and information provided to government and industry. Information is also obtainable on government food purchase programs. In addition, financial services are available to enable capitalization of fishing vessel construction and to compensate for gear damage.

### CENTRAL OFFICE

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<sup>\*</sup>Area code will change to 508 effective July 16, 1988.

ANADROMOUS SPECIES. These are species of fish that mature in the ocean, and then ascend streams to spawn in freshwater. In the MFCMA, these species include, but are not limited to, Atlantic and Pacific salmons, 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).

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.

<u>BREADED FISH PRODUCTS</u>. 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.

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.

<u>BREADED SHRIMP</u>. 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.

<u>CANNED FISHERY PRODUCTS</u>. Fish, shellfish, or other aquatic animals packed in cans, jars, 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 or (b) unable to move except in constant physical contact with the seabed or subsoil of the continental shelf. The MFCMA 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. Do not include 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.

EDIBLE WEIGHT. The edible weight of individual products as

EUROPEAN ECONOMIC COMMUNITY (EEC). Belgium and Luxembourg, Denmark, Federal Republic of Germany, Greece, France, Ireland, Italy, Netherlands, Portugal, Spain, and United Kingdom.

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 any other charges or transportation costs beyond the port of exportation,

EXVESSEL PRICE. Price received by the harvester for fish, shellfish, and other aquatic plants and animals.

"FISH AND CHIPS." This United States fisheries policy links foreign fishing privileges in the U.S. EEZ to foreign country contributions to the development of the U.S. fishing industry. These include reductions of foreign tariff and non-tariff barriers that restrict importation of fishery products, and other cooperation in advancing opportunities for fishery trade. This policy was incorporated into the foreign nation species allocation process as a matter of law by the 1980 amendments to the Magnuson Act.

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 fiesh produced by a meat and bone separating machine.

<u>FISH FILLETS</u>. 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."

<u>FISH MEAL</u>. A high-protein animal feed supplement made by cooking, pressing, drying, and grinding fish or shellfish.

FISH OLL. 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."

<u>FISH STEAK.</u> 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 larger dimension. A fish stick is generally cut from a fish block.

FISHING CRAFT, COMMERCIAL. Boats and vessels engaged in capturing fish, shellfish, and other aquatic plants and animals for sale.

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.

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.

GROSS REGISTERED TONNAGE (GRT). The gross registered tonnage of a vessel is the internal cubic capacity of all space in and on the vessel that is permanently enclosed, with the exception of certain permissible exemptions. GRT is expressed in tons of 100 cubic feet.

GROUNDFISH. 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 import statistics shown in "Fisheries of the United States," the term applies to the following species: cod, cusk, haddock, hake, Atlantic pollock, and Atlantic Ocean perch.

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, export 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 exported, 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.

INTERNATIONAL CONVENTION FOR THE NORTHWEST ATLANTIC FISHERIES (ICNAF). This convention, which entered into force on July 3, 1950, was for the investigation, protection, and conservation of the fishery resources of the Northwest Atlantic Ocean. In 1975, there were 18 member nations. The United States withdrew from ICNAF on December 31, 1976, because continued adherence to the convention was deemed incompatible with the extension of U.S. fishery management jurisdictions to 200 miles under the Magnuson Fishery Conservation and Management Act of 1976. See Northwest Atlantic Fisheries Organization (NAFO).

JOINT VENTURE. An operation authorized under the MFCMA in which a permitted foreign vessel receives fish in the U.S. FCZ from a U.S. vessel. 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, (MFCMA). The 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. The MFCMA 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 all 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 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 CATCH. Quantities of finfish, shellfish, and other living aquatic organisms caught, but not necessarily brought ashore, by marine recreational fishermen.

MARINE RECREATIONAL FISHING. Fishing for pleasure, amusement, relaxation, or home consumption. If part or all of the catch is sold, the monetary returns constitute an insignificant part of the person's income.

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.

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.

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 of the Northwest Atlantic. NAFO will manage 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.

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."

OPTIMUM YIELD (OY). in the MFCMA, 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 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 I 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 whom the United States has made a Governing International Fishery Agreement (GIFA) submits an application to fish in a fishery not managed by a FMP. A PMP is replaced by an FMP as soon as the latter is implemented. A PMP applies only to foreign fishing.

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.

<u>SURIMI.</u> 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, shall be 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>U.S. EXCLUSIVE ECONOMIC ZONE (EEZ).</u> The MFCMA 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>U.S.-FLAG VESSEL LANDINGS</u>. Includes landings by all U.S. fishing vessels regardless of where landed as opposed to landings at ports in the 50 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.

<u>VESSEL</u>. 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. Prices in this report generally are those received at principal fishery markets by primary wholesalers (processors, importers, and brokers) in customary quantities, free on board (f.o.b.) warehouse.



### (Reference gives page numbers)

### AQUACULTURE, cat fish, 18

CLAMS
Canned, 43
Exports, 57
Imports, 50
Landings, 2, 8, 12, 69
Supply, 69
Value of landings, 2, 8, 12

CONSUMPTION
Canned, 76, 78
Cured, 76
Fillets and steaks, 78
Fresh and frozen, 76
Per capita, by country, 80
Per capita, U.S., 76
Salmon, canned, 78
Sardines, canned, 78
Shellfish, canned, 78
Shrimp, 78
Sticks and portions, 78
Tuna, canned, 78

CRABS
Canned, 43, 70
Exports, 57
Frozen holdings, 47
Imports, 50, 70
Landings, 2, 8, 12, 70
Supply, 70
Value of landings, 2, 8, 12

CRAFT, FISHING Motorboats, 86 Vessels, 86

DISPOSITION OF LANDINGS. United States, 3 World, 39

### **DUTIES COLLECTED, 49**

EMPLOYMENT
Establishments, 86
Fishermen, 86
Processing and wholesaling, 87

EXPORTS
All fishery products, 57
Continent and country, by, 58
Cured, 57
Edible, by years, 59
Fish meal, 57, 63, 74
King crab, 57, 70
Nonedible, by years, 59
Oils, 57, 70, 74
Principal items, 57
Salmon, canned, 57, 61, 69
Salmon, fillets, 57, 61
Salmon, whole or eviscerated, 57, 61

EXPORTS – continued Sardines, canned, 57, 69 Seal furs, 57 Shrimp, canned, 57, 60, 73 Shrimp, domestic and foreign products, 60, 73 Shrimp, fresh and frozen, 57, 60, 73 Snow (tanner) crab, 57, 62 Squid, canned, 57 Value, by years, 59 Volume, by years, 59

EXCLUSIVE ECONOMIC ZONE, THE U.S. Foreign catch, by continent and country 27, 28 Foreign catch, by species and area, 29, 30 Foreign catch, by country and species, 31

FLOUNDERS
Fillets, 42
Frozen holdings, 47
Landings, 1, 6, 10
Value of landings, 1, 6, 10
World catch, 39

GROUNDFISH FILLETS AND STEAKS Fillets, supply, 67 Imports, 50, 52

HALIBUT
Fillets, 42
Frozen holdings, 47
Exports, 57
Imports, 50
Landings, 1, 6, 10
Steaks, 42
Value of landings, 1, 6, 10
World catch, 39

HERRING, SEA
Canned (sardines), 43
Consumption (sardines), per
capita, 78
Exports (sardines), 57
Imports (sardines), 50
Landings, 1, 6, 10
Value of landings, 1, 6, 10
World catch, 39

IMPORTS
All fishery products, 49, 50
Abalone, canned, 50
Blocks and slabs, 50, 52, 67
Clams, canned, 50
Continent and country, by, 51

IMPORTS - continued Crabmeat, canned, fresh and frozen, 50, 70 Cured, 50 Duties collected, 49 Edible, 49, 50, 51, 65, 66 Fillets, groundfish, 50 Fillets, other than groundfish and ocean perch, 50 Finfish, 66 Groundfish, 50 Halibut, 50 Herring, canned, 50 Industrial, 65, 66 Lobsters, canned, 50, 71 Lobsters, fresh and frozen, 50, 71 Meal and scrap, 50, 74 Nonedible, 49, 50, 51 Oils, 50, 74 Oysters, canned, 50 Principal items, 50 Quota, canned tuna, not in oil, 53 Salmon, canned, 50, 69 Salmon, fresh and frozen, 50 Sardines, canned, 50, 69 Scallop meats, 50, 72 Shellfish, 66 Shrimp, by country, 54 Shrimp, by products, 55 Tuna, canned, 50, 55, 68 Tuna, fresh and frozen, 50 Value, by years, 49, 50 Volume, by years, 49, 50

INSPECTION
Establishments and amount inspected, 89

#### JOINT VENTURES 17

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
Regions, by, 4
Shrimp historical, 14
Species, by, 1
States, by, 4
U.S., 1, 3
U.S., shores, distance from, 6, 10
World, 36

LOBSTERS, AMERICAN Imports, 50, 71 Landings, 2, 9, 13 Supply, 71 Value of landings, 2, 9, 13 LOBSTERS, SPINY Frozen holdings, 47 Imports, 50, 71 Landings, 2, 9, 13

LOBSTERS, SPINY – continued Supply, 71 Value of landings, 2, 9, 13

### MACKERELS -

Landings, 1, 6, 10 Meal, 46 Value of landings, 1, 6, 10 World catch, 39

MAGNUSON FISHERY
CONSERVATION AND
MANAGEMENT ACT (MFCMA)
Allocations by country
and region, 92
Allocations by species
and country, 93
Fees, foreign fishing, 90
General description, 90
Regional Fishery Management
Councils, 91

MEAL AND SCRAP Exports, 57, 63 Imports, 50, 55, 74 Landings, disposition, 3 Mackerel, 46 Menhaden, 46 Production, U.S., 46 Supply, 74 Tuna, 50 World, disposition, 39

MENHADEN
Landings, 1, 7, 11
Meal, 46
Oil, 46
Value of landings, 1, 7, 11

OIL
Exports, 57, 63, 74
Imports, 50, 74
Menhaden, 46
Production, 46
Supply, 74
World, disposition, 39

OYSTERS
Canned, 43
Imports, 50, 72
Landings, 2, 9, 11
Supply, 72
Value of landings, 2, 9, 11

PLANTS AND FIRMS Employment, 86, 87 Processors and wholesalers, 87 PLANTS AND FIRMS – continued Producing canned, industrial products, and fillets and steaks, 88

**PROCESSING** Animal food and bait, canned, 43 Canned products, 43 Canned, by year, 45 Clams, canned, 43 Crabs, canned, 43, 70 Employment in, 86, 87 Fillets and steaks, fresh and frozen, 42 Frozen holdings, 47 Industrial products, 46 Meal, oil, 46 Oysters, canned, 43 Plants, number of, 86, 87, 88 Salmon, canned, 43, 44, 69 Sardines, canned, 43, 69 Shrimp, breaded, 41 Shrimp, canned, 43, 73 Sticks, portions, and breaded shrimp, 41 Tuna, canned, 43, 44, 68 Value, processed products, 41

### RECREATIONAL FISHERIES, Marine, 20

SALMON
Canned, 43, 44, 69
Consumption, per capita, 78
Exports, 57, 61, 69
Frozen holdings, 47
Imports, 50
Landings, 1, 7, 11
Supply, canned, 69
Value of landings, 1, 7, 11
World catch, 39

SARDINES
Canned, 43, 69
Consumption, per capita, 78
Exports, 57, 69
Imports, 50, 69
Supply, canned, 69
World catch, 39

SCALLOPS
Exports, 57
Imports, 50
Landings, 2, 9, 13
Supply, 72
Value of landings, 2, 9, 13

SHRIMP
Breaded, 41
Canned, 43, 44, 73
Consumption, per capita, 78
Exports, 57, 60, 73
Frozen holdings, 47
Imports, 50, 54, 55, 73
Landings, heads-off, 73
Landings, heads-on, 2, 9, 13

SHRIMP - continued Landings, historical, 14 Supply, canned, 73 Supply, total, 73 Value of landings, 2, 9, 13 SUPPLY All fishery products, 65, 66 Blocks, 67 Clam meats, 69 Crabs, fresh and frozen, canned, 70 Edible fishery products, 65, 66 Fillets and steaks, all, 67 Fillets and steaks, groundfish, 67 Finfish, 66 Industrial fishery products, 65, 66 Lobsters, American, 71 Lobsters, spiny, 71 Meal, 74 Meal and solubles, 74 Oils, 74 Oysters, 72 Salmon, canned, 69 Sardines, canned, 69 Scallop meats, 72 Shellfish, 66 Shrimp, 73 Shrimp, canned, 73 Tuna, canned, 68

TUNA
Canned, 43, 44, 68
Consumption, per capita, 78
Imports, 50, 68
Landings, 2, 8, 12, 68
Meal, 46
Quota, imports, canned, 53
Supply, canned, 68
Value of landings, 2, 8, 12
World catch, 39

USE Per capita, 79 Landings, by month, 3 Valued added, 84

### WHITING

Frozen holdings, 47 Landings, 2, 8, 12 Value of landings, 2, 8, 12

### WORLD FISHERIES

Catch by countries, 37
Catch by continents, 38
Catch by major fishing areas, 38
Catch by species groups, 39
Catch by years, 36
Disposition, 39
Imports and exports value, 40
Per capita consumption, by country, 80

