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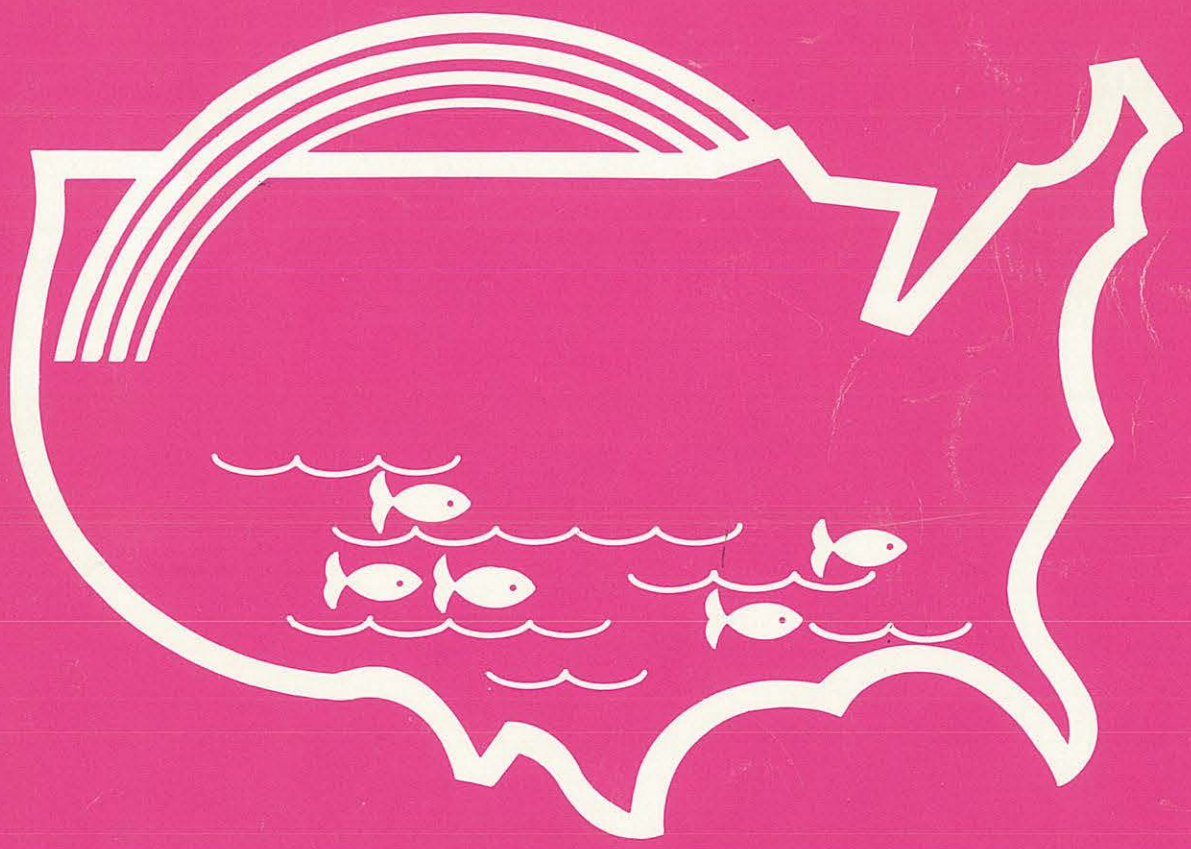
Current Fishery Statistics No. 8800

# Fisheries of the United States 1988

May 1989



U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

National Marine Fisheries Service

Current Fishery Statistics No. 8800

# Fisheries of the United States, 1988

Prepared by:
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Washington, D.C.
May 1989

**U.S. DEPARTMENT OF COMMERCE**
**Robert A. Mosbacher, Secretary**
**National Oceanic and Atmospheric Administration**
William E. Evans, Under Secretary
National Marine Fisheries Service
Fisheries Statistics Division

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# PREFACE

**FISHERIES OF THE UNITED STATES, 1988**

This publication is a preliminary report for 1988 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 compiled data on the foreign catch from reports submitted by designated foreign officials. The NMFS Fisheries Statistics Division in Silver Spring, MD, managed the collection and compilation of recreational statistics, and tabulated and prepared all data for publication. Sources of other data appearing in this publication are: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, U.S. Coast Guard, U.S. Customs Service, U.S. Department of the Interior, 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 1988. Final data will be published in Fishery Statistics of the United States 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 question to:

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# CONTENTS


Page

**PREFACE AND ACKNOWLEDGEMENT** ..... ii

**REVIEW** ..... iv

**U.S. COMMERCIAL FISHERY LANDINGS:**
- Species ..... 1
- Disposition ..... 3
- States ..... 4
- Regions ..... 4
- Ports ..... 5
- Catch by species and distance from shore (thousand pounds) ..... 6
- Catch by species and distance from shore (metric tons) ..... 10
- Historical oyster landings by regions ..... 14

**U.S. JOINT VENTURE CATCHES** ..... 19

**U.S. MARINE RECREATIONAL FISHERIES** ..... 20

**U.S. EXCLUSIVE ECONOMIC ZONE:**
- Foreign catch, by continent and country ..... 29
- Foreign catch, by species and area ..... 31
- Foreign catch, by country and species ..... 33

**WORLD FISHERIES:**
- U.S. and world ..... 37
- Countries ..... 38
- Continents ..... 39
- Fishing areas ..... 39
- Species groups ..... 40
- Disposition ..... 40
- Imports and exports, by leading countries ..... 41

**U.S. PRODUCTION OF PROCESSED FISHERY PRODUCTS:**
- Value ..... 43
- Fish sticks, portions, and breaded shrimp ..... 43
- Fillets and steaks ..... 44
- Canned ..... 45
- Industrial ..... 48

**U.S. COLD STORAGE HOLDINGS** ..... 49

**U.S. IMPORTS:**
- Edible and nonedible ..... 51
- Value and duties ..... 51
- Principal items ..... 52
- Continent and county ..... 53
- Blocks ..... 54
- Groundfish fillets and steaks, by species ..... 54
- Canned tuna and quota ..... 55
- Shrimp ..... 56
- Industrial ..... 57

**U.S. EXPORTS:**
- Principal items ..... 58
- Continent and country ..... 59
- Edible and nonedible ..... 60
- Shrimp ..... 61
- Salmon ..... 62
- King crab ..... 63

Page

**U.S. EXPORTS** - Continued:
- Snow (tanner) crab ..... 63
- Herring ..... 63
- Industrial ..... 64

**U.S. SUPPLY:**
- Edible and industrial ..... 67
- Finfish and shellfish ..... 68
- Blocks ..... 69
- All fillets ..... 69
- Groundfish fillets ..... 69
- Tuna ..... 70
- Canned sardines ..... 71
- Canned salmon ..... 71
- Clam meats ..... 71
- King crab ..... 72
- Snow (tanner) crab ..... 72
- Canned crabmeat ..... 72
- Lobster, American ..... 73
- Lobster, spiny ..... 73
- Oysters ..... 74
- Scallop meats ..... 74
- Shrimp ..... 75
- Industrial ..... 76

**PER CAPITA:**
- U.S. consumption ..... 78
- U.S. use ..... 81
- World consumption by region and country ..... 82

**PRICES, INDEX OF EXVESSEL** ..... 85

**VALUE ADDED** ..... 86

**EMPLOYMENT, CRAFT, AND PLANTS** ..... 87

**FISHERY PRODUCTS INSPECTION** ..... 91

**MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976 (MFCMA):**
- General ..... 92
- Optimum yield, U.S. capacity, reserve, and allocations ..... 94

**GENERAL ADMINISTRATIVE INFORMATION** ..... 97

**PUBLICATIONS:**
- National Marine Fisheries Service ..... 104
- Government Printing Office ..... 105
- National Technical Information Service ..... 106

**SERVICES:**
- Sea Grant Marine Advisory ..... 108
- Trade and Industry Services ..... 110
- Inspection ..... Inside back cover

**GLOSSARY** ..... 111

**INDEX** ..... 115

# REVIEW

## IMPORTANT FACTS

**U.S. LANDINGS.** Commercial landings (edible and industrial) by U.S. fishermen at ports in the 50 states were a record 7.2 billion pounds (3.3 million metric tons) valued at $3.5 billion in 1988--an increase of 296.8 million pounds (134,600 metric tons) in quantity, and an increase of $405.5 million in value compared with 1987. Landings of major finfish species such as Atlantic and Pacific cod, flounders, Alaska pollock, salmon and tuna increased. The 1988 average exvessel price per pound paid to fishermen of 49 cents was slightly above the 45 cents they received in 1987. Finfish accounted for 82 percent of total landings but only 57 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 3.8 billion pounds (1.7 million metric tons) valued at $489.8 million. This was a 5 percent, or 209.2 million pound (94,900 metric tons), decrease in quantity and a $47.6 million (11 percent) increase in value compared with 1987. Most of these landings consisted of tuna landed at canneries in Puerto Rico, American Samoa and other foreign ports and joint venture catches of Alaska pollock.

Edible fish and shellfish landings in the 50 states were 4.6 billion pounds (2.1 million metric tons) in 1988--an increase of 642.0 million pounds (291,200 metric tons) compared with 1987. Landings of shrimp and clams decreased, but there were increases in Alaska pollock, crabs, Atlantic and Pacific cod, flounders, salmon and tuna.

Landings for reduction and other industrial purposes were 2.6 billion pounds (1.2 million metric tons) in 1988--a decrease of 12 percent compared with 1987.

**JOINT VENTURE CATCH IN THE U.S. EEZ.** Joint venture catches by U.S. fishermen unloaded onto foreign vessels were 3.2 billion pounds (1.5 million metric tons) valued at $221.1 million. This was a 3 percent decrease in quantity over 1987, when 3.3 billion pounds (1.5 million metric tons) were caught, valued at $202.1 million. The major species were cod, 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 61,600 metric tons (135.8 million pounds) in 1988, a 59 percent decrease compared with 1987 and 93 percent below the average for the preceding 5 years. The U.S. EEZ catch off the North Atlantic supplied the largest share of foreign catch (70 percent) followed by California, Oregon and Washington (30 percent). There were no foreign catches in the U.S. EEZ off Alaska in 1988.

Atlantic mackerel comprised 70 percent of the foreign catch; Pacific hake, 29 percent; and other fish and shellfish the remainder.

Poland was the leading nation fishing in the U.S. EEZ with a catch of 28.1 thousand metric tons, 46 percent of the total foreign catch. The German Democratic Republic was the second leading nation fishing in the U.S. EEZ, with 21.1 thousand metric tons representing 34 percent of the catch in 1988.

The 1988 foreign catch in the Pacific U.S. EEZ was 18,300 metric tons, 32,100 metric tons (64 percent) less than 1987. Pacific whiting, 18,000 metric tons (98 percent of the total), was the leading species followed by rockfishes, 149.1 metric tons (1 percent). Poland was the only country fishing in the California, Oregon, and Washington area in 1988.

Foreign catches in the North Atlantic U.S. EEZ in 1988 were 43,300 metric tons, 13,700 metric tons (46 percent) more than the 1987 catch of 29,500 metric tons. The German Democratic Republic had the highest catch with 21,100 metric tons (49 percent), followed by the Netherlands with 12,400 metric tons (29 percent). Atlantic mackerel catches amounted to 42,900 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 1988, similar to 1987. However, the U.S. share was 93 percent of the total, down 2 percentage points from 1987.

**WORLD LANDINGS.** In 1987, the most recent year for which data are available, world commercial fishery landings were a record 93.0 million metric tons--an increase of 631,000 metric tons (1 percent) compared with 1986. Japan continued to be the leading nation with 13 percent of the total catch; the USSR, second with 12 percent; China, third with 10 percent; followed by the United States with 6 percent; and Chile with 5 percent.

**PRICES.** The procedure for calculating the index of Exvessel Prices for all fish and shellfish was reviewed and modified in 1986. The index has been recalculated with a new market basket and 1986 as the base year. The 1988 annual exvessel price index for edible fish and shellfish increased 31 percent from 1987. The annual index for industrial fish decreased 2 percent from 1987.

**PROCESSED PRODUCTS.** The 1988 estimated value of the domestic production of edible and nonedible fishery products was $5.4 billion, $582.5 million (10 percent) less than the $6.0 billion in 1987. The value of edible products was $5.0 billion--a decrease of

# REVIEW

## IMPORTANT FACTS

$613.5 million (11 percent) compared with 1987. The value of industrial products was $328.3 million in 1988--an increase of $31.0 million (10 percent) compared with 1987.

**FOREIGN TRADE**. The total import value of edible and nonedible fishery products was a record $8.9 billion in 1988--an increase of $54.3 million (1 percent) compared with 1987. Imports of edible fishery products (product weight) were 3.0 billion pounds (1.3 million metric tons) valued at $5.5 billion in 1988--a decrease of 230.2 million pounds (7 percent) in quantity and $251.8 million (4 percent) in value compared with 1987. Imports of nonedible (industrial) products also set a value record in 1988, with products valued at $3.4 billion--an increase of $306.1 million (10 percent) compared with 1987.

Total export value of edible and nonedible fishery products of domestic origin was a record $2.3 billion in 1988--an increase of $614.2 million (37 percent) compared with 1987. United States firms exported 1.1 billion pounds (482,500 metric tons) of edible products valued at $2.2 billion--an increase of 280.9 million pounds (127,400 metric tons) in quantity and $584.0 million in value compared with 1987. Exports of nonedible products were valued at $113.0 million, $30.2 million more than 1987. The $221.1 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 10.5 billion pounds (4.8 million metric tons) in 1988--a decrease of 56.0 million pounds (1 percent) compared with the record supply in 1987. The change reflects a decrease of 11 percent in imports and an increase of 16 percent in domestic commercial landings. The supply of industrial fishery products was 4.1 billion pounds (1.9 million metric tons) in 1988--a decrease of 1.1 billion pounds (20 percent) compared with 1987. Domestic commercial landings for industrial products of 2.6 billion pounds (1.2 million metric tons) were 597.0 million pounds less than the record of 3.2 billion pounds set in 1983.

**PER CAPITA CONSUMPTION**. U.S. consumption of fishery products was 15.0 pounds of edible meat per person in 1988, down 0.4 pound from 1987.

**CONSUMER EXPENDITURES**. U.S. consumers spent an estimated $28.8 billion for fishery products in 1988. 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 value added) to the U.S. Gross National Product (GNP).

The estimates of consumer expenditures and industry contribution to GNP are derived from a model developed for NMFS. 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 2.1 billion pounds (946.2 million metric tons), was the most important species in quantity in 1988, accounting for 29 percent of the commercial fishery landings in the United States, but was low in value.

Pollock was the second most important species in quantity and low in value.

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

Crabs were fourth in quantity, and third in value.

Cod was the fifth most important in quantity and low in value.

Shrimp were sixth in quantity and second in value.

Lobster and scallops 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 498.0 million pounds. Other species landed at ports outside the United States were Atlantic squid and mackerel, and Pacific groundfish, transferred on to foreign vessels in the U.S. EEZ.

Cameron, Louisiana, was the leading U.S. port in quantity of commercial fishery landings, followed by Dutch Harbor-Unalaska and Kodiak, Alaska; Empire-Venice, Louisiana; Pascagoula-Moss Point, Mississippi; and Dulvac-Chauvin, Louisiana. Menhaden was the principal species landed at Cameron.

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

Alaska led all states in volume with landings of 2.6 billion pounds, followed by Louisiana, 1.4 billion; Virginia, 650.8 million; California, 495.6 million; and Mississippi, 336.4 million pounds.

Alaska led all states in value with $1.3 billion, followed by Louisiana, $317.3 million; Massachusetts, $274.0; California, $199.3; and Texas, $175.7 million.

# REVIEW

## IMPORTANT SPECIES

**ALASKA POLLOCK AND OTHER PACIFIC TRAWL FISH.** U.S. landings of Pacific trawl fish (Pacific cod, flounders, Pacific hake (whiting), Pacific ocean perch, Alaska pollock, and rockfishes) were 1.8 billion pounds valued at $210.1 million--an increase of 80 percent in quantity compared with 1987.

Landings of Alaska pollock increased 128 percent to 1.3 billion pounds, more than seven times higher than the 5-year average. Landings of Pacific cod were 267.2 million pounds -- an increase of 57 percent from 170.6 million pounds in 1987. Pacific hake (whiting) landings were 15.7 million pounds (down 59 percent) valued at $1.2 million (down 39 percent) compared with 1987. The 1988 landings of Pacific hake were well below the 5-year average. Landings of rockfishes were 124.0 million pounds (5 percent lower than 1987) valued at $38.7 million. However, the 1988 landings were 30 percent higher than the 5-year average.

**ANCHOVIES.** U.S. landings of anchovies were 12.4 million pounds--a decrease of 432,000 pounds (3 percent) compared with 1987. Almost all the landings were used for bait, while less than one percent went into animal food.

**HALIBUT.** U.S. landings of Atlantic and Pacific halibut were 81.6 million pounds (round weight) valued at $72.7 million--an increase of 5.5 million pounds (7 percent), but a decrease of $15.5 million (18 percent) in value compared with 1987. The Pacific fishery accounted for all but 173,000 pounds of the 1988 total catch. The average exvessel price per pound in 1988 was 89 cents compared with $1.16 in 1987.

**HERRING, SEA.** U.S. commercial landings of sea herring were 221.8 million pounds valued at $62.7 million--an increase of 14.7 million pounds (7 percent) in quantity and an increase of $10.4 million (20 percent) in value compared with 1987. Landings of Atlantic sea herring increased to 90.4 million pounds valued at $5.2 million--an increase of 5.9 million pounds (7 percent) in quantity and $861,000 (20 percent) in value compared with 1987.

Landings of Pacific sea herring were 131.4 million pounds valued at $57.4 million--an increase of 8.8 million pounds (7 percent) in quantity and an increase of $9.5 million (20 percent) in value compared with 1987. Alaskan landings were 113.8 million pounds valued at $60.0 million --an increase of 11.5 million pounds (11 percent) and $9.2 million (22 percent) compared with 1987.

**JACK MACKEREL.** Landings of jack mackerel in 1988 were 22.5 million pounds valued at $1.7 million--a decrease of 4.1 million pounds (15 percent) in quantity and $146,000 in value compared with 1987. Landings continued to be below the 5-year average. The 1988 average exvessel price per pound was 7 cents.

**MACKEREL, ATLANTIC.** U.S. landings of Atlantic mackerel were 14.8 million pounds valued at $2.0 million--an increase of 4.8 million pounds (49 percent) in quantity and $897,000 in value (84 percent) compared with 1987. New Jersey was the leading state for the eighth consecutive year with 8.2 million pounds (55 percent) of the total catch). The average exvessel price per pound in 1988 was 13 cents, up 2 cents from 1987.

**MACKEREL, PACIFIC.** Landings of Pacific mackerel were 100.3 million pounds valued at $7.5 million--an increase of 6.6 million pounds (7 percent) in quantity and $1.1 million (17 percent) in value compared with 1987. The average exvessel price remained stable at about 7 cents per pound.

**MENHADEN.** The U.S. menhaden landings were 2.1 billion pounds valued at $105.7 million--a decrease of 626.2 million pounds (23 percent) in quantity, but an increase of $1.3 million (1 percent) in value compared with 1987. Landings decreased by 34.5 million pounds (5 percent) in the Atlantic States and 591.7 million pounds (30 percent) in the Gulf States compared with 1987. Landings along the Atlantic coast were 677.9 million pounds valued at $32.4 million. Gulf region landings were 1.4 billion pounds valued at $73.3 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, flounder (blackback, fluke, yellowtail and other), haddock, red and white hake, ocean perch, pollock and whiting (silver hake) were 265.9 million pounds valued at $184.4 million--a decrease of 7.5 million pounds (3 percent) in quantity and a decrease of $29.3 million (14 percent) in value compared with 1987. Of these species, flounders led in value, accounting for 57 percent of the total; followed by Atlantic cod, 23 percent; and pollock, 6 percent.

The 1988 landings of Atlantic cod were 76.1 million pounds valued at $42.9 million--an increase of 17.0 million pounds (29 percent), but a decrease of $1.2 million (3 percent) in value compared with 1987. The exvessel price per pound was 56 cents per pound in 1988 compared with 75 cents per pound in 1987.

Landings of yellowtail flounder declined for the fifth consecutive year to 11.1 million pounds, a

## IMPORTANT SPECIES

decrease of 5.6 million pounds from 1987 and 68 percent below the 5-year average.

Haddock landings are near historic lows, declining in 1988 to 6.4 million pounds (down 4 percent from 1987). Value decreased to $7.0 million (down 18 percent from 1987).

The North Atlantic pollock landings were 33.1 million pounds in 1987 valued at $11.1 million, a decrease of 12.6 million pounds (28 percent) in quantity and $6.8 million (38 percent) in value compared with 1987.

**PACIFIC SALMON**. U.S. commercial landings of salmon were 606.1 million pounds valued at $910.7 million--an increase of 44.1 million pounds (8 percent) in quantity and $314.3 million (53 percent) in value compared with 1987. Alaska accounted for 87 percent of the total landings; Washington, 8 percent; Oregon and California, 5 percent; landings of 93,000 pounds of silver salmon were taken from the Great Lakes. Red salmon landings were 190.0 million pounds valued at $437.6 million, a decrease of 37.4 million pounds (16 percent) in quantity, but an increase of $77.9 million (22 percent) in value compared with 1987. King salmon landings increased to 45.7 million pounds--up 5.7 million pounds (14 percent) from 1987. Pink salmon landings of 176.5 million pounds in 1988 increased by 7.2 million pounds (4 percent); chum salmon, 146.5 million pounds, increased 60.1 million pounds (70 percent); and silver salmon, 47.5 million pounds, increased 8.4 million pounds (22 percent) compared with 1987.

Alaska landings of 526.4 million pounds valued at $744.9 million were an increase of 37.0 million pounds (8 percent) in quantity and an increase of $271.9 million (57 percent) in value compared with 1987. The distribution of Alaska salmon landings by species in 1988 was: sockeye 184.7 million pounds (35 percent); pink, 176.5 million pounds (34 percent); chum, 121.5 million pounds (23 percent), coho, 33.1 million pounds (6 percent), and chinook, 10.6 million pounds (2 percent). The exvessel price per pound for all species in Alaska was $1.41 in 1988, up 44 cents from 1987.

Washington salmon landings were 47.4 million pounds valued at $85.5 million--a decrease of 1.5 million pounds (3 percent) in quantity, but an increase of $14.2 million (20 percent) in value compared with 1987. The biennial fishery for pink salmon went from 9.6 million pounds in 1987 to 1,000 pounds in 1988. Washington landings of chum salmon were 24.9 million pounds--up 17.0 million pounds (213 percent), followed by chinook, 8.9 million pounds (up 17 percent), silver, 8.3 million pounds (down 30 percent), and red, 5.3 million pounds (down 56 percent) compared with 1987. The average exvessel price per pound for all species in Washington went from $1.46 in 1987 to $1.80 in 1988.

Oregon salmon landings were 17.5 million pounds valued at $38.4 million--an increase of 3.1 million pounds (22 percent) in quantity and $11.9 million (45 percent) in value compared with 1987. Landings of chinook salmon increased to 11.7 million pounds (up 5 percent); silver, 5.7 million pounds (up 86 percent); red, 65,000 pounds (down 48 percent); and chum, 14,000 pounds (up 50 percent) compared with 1987. The average exvessel price per pound for all species in Oregon increased from $1.84 in 1987 to $2.20 in 1988.

California salmon landings were 14.7 million pounds valued at $41.9 million--an increase of 5.4 million pounds (58 percent) in quantity and $16.3 million (64 percent) compared with 1987. Chinook salmon landings were 14.4 million pounds valued at $41.2 million--an increase of 5.4 million pounds (60 percent) in quantity and $16.1 million (64 percent in value compared with 1987. Landings of silver salmon increased to 320,000 pounds (up 30 percent) in quantity and $707,000 (up 44 percent) in value compared with 1987. The average exvessel price per pound paid to fishermen for all species in 1988 was $2.84 compared with $2.75 in 1987.

**SABLEFISH**. U.S. commercial landings of sablefish were 107.5 million pounds valued at $91.8 million--an increase of 4.8 million pounds (5 percent) in quantity, and $33.7 million (58 percent) in value compared with 1987. Landings increased in Alaska to 82.8 million pounds (up 12 percent) compared with 1987. Landings decreased in Washington to 7.3 million pounds (down 4 percent), in Oregon to 9.1 million pounds (down 22 percent), and in California to 8.3 million pounds (down 13 percent) compared with 1987. The average exvessel price per pound in 1988 was 85 cents compared with 57 cents in 1987.

**TUNA**. Landings of tuna by U.S. fishermen at ports in the 50 United States, Puerto Rico, American Samoa, other U.S. territories, and foreign ports were 609.3 million pounds valued at $380.5 million--a decrease of 16.9 million pounds (3 percent) in quantity but an increase of $59.1 million (18 percent) in value compared with 1987. The average exvessel price per pound of all species of tuna in 1988 was 62 cents compared with 51 cents in 1987.

Bigeye landings were 5.4 million pounds--an increase of 2.0 million pounds (58 percent) compared with 1987. The average exvessel price per pound was $2.78 in 1988 compared with $2.76 in 1987.

Skipjack landings were 300.0 million pounds--an increase of 69.8 million pounds (30 percent)

compared with 1987. The average exvessel price per pound was 50 cents in 1988 compared with 39 cents in 1987.

Yellowfin landings were 280.3 million pounds--a decrease of 97.2 million pounds (26 percent) compared with 1987. The average exvessel price per pound was 65 cents in 1988 compared with 52 cents in 1987.

Bluefin landings were 3.7 million pounds--a decrease of 600,000 million pounds (14 percent) compared with 1987. The average exvessel price per pound in 1988 was $4.62 compared with $3.80 in 1987.

**CLAMS**. Landings of all species yielded 131.7 million pounds of meats valued at $134.8 million--a decrease of 2.6 million pounds (2 percent) in quantity, but an increase of $1.9 million (1 percent) in value compared with 1987. The average exvessel price per pound increased to $1.02 in 1988 from 99 cents in 1987.

Surf clams yielded 63.5 million pounds of meats valued at $29.2 million--an increase of 2.8 million pounds (5 percent) in quantity, and $1.2 million (4 percent) in value compared with 1987. New Jersey was the leading State with 37.2 million pounds (up 4 percent) from 1987, followed by Virginia, 10.6 million pounds (up 22 percent); Maryland, 6.9 million pounds (down 10 percent); Massachusetts, 4.5 million pounds (up 7 percent); and New York, 2.9 million pounds (up 2 percent). The average exvessel price per pound of meats was 46 cents in 1988, the same as 1987.

The ocean quahog fishery produced 46.3 million pounds of meats valued at $14.9 million--a decrease of 3.9 million pounds (8 percent) in quantity, and $1.7 million (10 percent) in value compared with 1987. New Jersey was the leading producer with 17.5 million pounds of meats accounting for 38 percent of the total ocean quahog landings. The value for New Jersey in 1988 was $5.0 million--a decrease of $1.9 million (27 percent) compared with 1987. Maryland landings were 11.6 million pounds valued at $3.3 million--a decrease of 734,000 pounds (6 percent) in quantity and $369,000 (10 percent) in value compared with 1987. The average exvessel price per pound of meats was 32 cents in 1988, compared with 33 cents in 1987.

The hard clam fishery produced 12.4 million pounds of meats valued at $67.8 million--an increase of 953,000 pounds (8 percent) in quantity and $18.2 million (37 percent) in value compared with 1987. Landings in the New England region were 4.2 million pounds of meats (down 22 percent); Middle Atlantic region, 4.2 million (down 3 percent); Chesapeake region, 1.3 million pounds (up 30 percent); and the South Atlantic region, 1.6 million pounds (down 27 percent). The average exvessel price per pound of meats increased from $4.34 in 1987 to $5.48 in 1988.

Soft clams yielded 6.8 million pounds of meats valued at $18.7 million--a decrease of 655,000 pounds (9 percent) in quantity, and $1.1 million (5 percent) in value compared with 1987. Maryland was the leading State with 3.0 million pounds of meats (down 3 percent from 1987), followed by Maine with 2.3 million pounds (down 14 percent) and Massachusetts with 1.2 million pounds (down 1 percent). The average exvessel price per pound of meats was $2.75 in 1988 compared with $2.65 in 1987.

**CRABS**. Landings of all species of crabs were 455.6 million pounds valued at $383.6 million--an increase of 69.3 million pounds (18 percent) in quantity and $61.7 million (19 percent) in value compared with 1987. Total landings of all crab species, except king crab, increased in 1988.

Hard blue crab landings were 218.7 million pounds valued at $84.4 million--an increase of 20.8 million pounds (11 percent) in quantity and $13.6 million (19 percent) in value compared with 1987. Hard blue crab landings in the Chesapeake region of 77.7 million pounds increased 2.1 million pounds (3 percent), and the South Atlantic region landings of 54.2 million pounds increased by 7.0 million pounds (15 percent). The Gulf region, with 77.8 million pounds, increased 10.2 million pounds (15 percent). The Middle Atlantic region landings of 8.9 million pounds valued at $4.1 million increased 1.6 million pounds (22 percent) in quantity and $1.3 million (49 percent) in value compared with 1987. The average exvessel price per pound of hard blue crabs was 39 cents in 1988 compared with 36 cents in 1987.

Dungeness crab landings were 47.4 million pounds valued at $54.8 million--an increase of 18.0 million pounds (61 percent) in quantity and $16.3 million (42 percent) in value compared with 1987. Washington led all States with landings of 18.1 million pounds (38 percent of the total landings)--an increase of 10.6 million pounds (142 percent) compared with 1987. Alaska increased in landings with 10.3 million pounds, up 10 percent compared with 1987. Oregon landings were 9.4 million pounds, up 57 percent compared with 1987. California increased in landings with 9.7 million pounds (up 45 percent from 1987). The average exvessel price per pound was $1.15 in 1988 compared with $1.31 in 1987.

U.S. landings of king crab were 21.0 million pounds valued at $84.2 million--a decrease of 8.1 million pounds (28 percent) compared with 1987. The average exvessel price per pound in 1988 was $4.01 compared with $3.40 in 1987.

# REVIEW

## IMPORTANT SPECIES

Snow (tanner) crab landings were 146.3 million pounds valued at $137.1 million--an increase of 32.5 million pounds (29 percent) in quantity and $38.4 million (39 percent) in value compared with 1987. The average exvessel price per pound was 94 cents in 1988, up from 87 cents in 1987.

**LOBSTERS, AMERICAN**. American lobster landings were 48.6 million pounds valued at $145.2 million--an increase in quantity of 3.1 million pounds (7 percent) and an increase in value of $11.7 million (9 percent) compared with 1987. Maine led in landings for the seventh consecutive year, with 21.7 million pounds valued at $60.7 million -- up 2.0 million pounds (10 percent) from 1987. Massachusetts, the second leading producer, had landings of 15.5 million pounds valued at $47.3 million, an increase of 380,000 pounds (3 percent) compared with 1987. These two states combined to produce 76 percent of the total national landings. The average exvessel price per pound was $2.99 in 1988 compared with $2.93 in 1987.

**LOBSTERS, SPINY**. U.S. landings of spiny lobster were 7.2 million pounds valued at $23.0 million--an increase of 1.4 million pounds (25 percent) in quantity and $1.7 million (8 percent) in value compared with 1987. Florida, with landings of 5.4 million pounds valued at $15.5 million, accounted for 75 percent of the total catch and 67 percent of the value. This was an increase of 592,000 pounds (12 percent) in quantity, but a decrease of $1.2 million (7 percent) in value compared with 1987. Overall the average exvessel price per pound was $3.21 in 1988 compared with $3.70 in 1987.

**OYSTERS**. U.S. oyster landings yielded 31.9 million pounds of meats valued at $78.5 million--a decrease of 7.9 million pounds (20 percent) in quantity and $13.9 million (15 percent) in value compared with 1987. The Gulf region (principally Louisiana with 80 percent of the region's total volume) led in production with 16.3 million pounds of meats, 51 percent of the national total; followed by the Pacific region with 8.0 million pounds (25 percent), and the Chesapeake region, with 5.0 million pounds (16 percent). The average exvessel price per pound of meats was $2.46 in 1988 compared with $2.32 in 1987.

**SHRIMP**. U.S. landings of shrimp were 330.9 million pounds valued at $506.0 million--a decrease of 32.3 million pounds (9 percent) in quantity, and $72.0 million (12 percent) in value compared with 1987. Shrimp landings decreased in New England (down 54 percent) and the Gulf coast (down 12 percent), but increased in the South Atlantic (up 6 percent) and the Pacific (up 3 percent), when compared with 1987. The average exvessel price per pound of shrimp decreased to $1.53 in 1988 compared with $1.59 in 1987. Gulf region landings were 225.8 million pounds compared with 257.1 million pounds in 1987. Louisiana led all Gulf States with 103.2 million pounds (down 11 percent), followed by Texas, 78.1 million pounds (down 16 percent); Florida (west coast), 15.8 million pounds (down 15 percent); Mississippi, 14.4 million pounds (up 12 percent); and Alabama, 14.3 million pounds (down 16 percent). Oregon was the third leading State with landings of 41.8 million pounds (down 6 percent), and Washington landings were 18.4 million pounds, up 14 percent compared with 1987.

**SCALLOPS**. U.S. landings of all species of scallops were 43.0 million pounds of meats valued at $144.1 million--an increase of 2.2 million pounds (5 percent) in quantity, but a decrease of $192,000 (less than 1 percent) in value compared with 1987. The average exvessel price per pound of meats decreased from $3.54 in 1987 to $3.35 in 1988.

Bay scallop landings were 569,000 pounds of meats valued at $3.4 million--a decrease of 111,000 pounds (2 percent) in quantity, but an increase $225,000 (8 percent) in value compared with 1987. Massachusetts was the leading state with 530,000 pounds of meats, 93 percent of the national total. The average exvessel price per pound of meats was $6.00 in 1988 compared with $5.45 in 1987.

Sea scallop landings were 30.6 million pounds of meats valued at $128.2 million--a decrease of 1.5 million pounds (4 percent) in quantity and $4.0 million (3 percent) in value compared with 1987. Massachusetts was the leading state in landings of sea scallops with 16.7 million pounds of meats, 55 percent of the national total. The average exvessel price per pound of meats in 1988 was $4.20 compared with $4.13 in 1987.

Landings of calico scallops were 11.9 million pounds of meats valued at $12.5 million--an increase of 3.7 million pounds (46 percent) in quantity and $3.6 million (40 percent) in value compared with 1987. Florida (east coast) had 93 percent of the total landings in 1988. The average exvessel price per pound of meats was $1.05 in 1988 compared with $1.09 in 1987.

**SQUID**. U.S. commercial landings of squid were 127.2 million pounds valued at $23.9 million--an increase of 45.1 million pounds (55 percent) and $7.1 million (42 percent) compared with 1987. California was the leading state with 80.4 million pounds, 63 percent of the national total.

The New England region landings were 27.3 million pounds (up 72 percent from 1987). Landings in the Middle Atlantic region were 17.3 million pounds (down 12 percent), and the Chesapeake region, 1.8 million pounds (up 1,277 percent). The average exvessel price per pound for squid was 19 cents in 1988, the same as 1987.

# REVIEW

## PROCESSED FISHERY PRODUCTS

### FRESH AND FROZEN

FISH FILLETS AND STEAKS. In 1988 the U.S. production of raw (uncooked) fish fillets and steaks, including blocks, was 384.3 million pounds--28.2 million pounds more than the 356.1 million pounds in 1987. These fillets and steaks were valued at $776.9 million--$23.9 million more than 1987. Alaska pollock fillets and blocks led all species with 110.0 million pounds--29 percent of the total. Production of groundfish fillets and steaks (cod, cusk, haddock, hake, Atlantic ocean perch, and Atlantic pollock) was 87.9 million pounds compared with 110.7 million in 1987.

FISH STICKS AND PORTIONS. The combined production of fish sticks and portions was 366.9 million pounds valued at $513.4 million compared with the 1987 production of 422.7 million pounds valued at $588.6 million --an increase of 55.8 million pounds and $7.2 million.

The total production of fish sticks amounted to 80.1 million pounds valued at $113.9 million, a decrease of 18.8 million pounds and $29.1 million compared with 1987. The total production of fish portions amounted to 286.7 million pounds valued at $399.5 million--a decrease of 37.0 million pounds in quantity, but an increase of $46.1 million in value compared with 1987.

BREADED SHRIMP. The production of breaded shrimp in 1988 was 80.1 million pounds valued at $245.1 million, compared with the 1987 production of 108.9 million pounds valued at $371.8 million.

FROZEN FISHERY TRADE. In 1988, stocks of frozen fishery products in cold storage were at a low of 349.7 million pounds on May 31 and a high of 407.1 million pounds on January 31. Cold storage holdings of shrimp products were at a high of 73.1 million pounds on January 31 and a low of 43.7 million pounds on May 31. Saltwater fillets and steaks holdings reached a high of 102.4 million pounds on January 31 and were at a low of 82.2 million pounds on November 30. Holdings of blocks and slabs were at a high of 74.7 million pounds on August 31 and at a low of 60.2 million pounds on December 31. King crab holdings were 5.1 million pounds on November 30, but reached a low of 2.1 million pounds on June 30, 1988. Cold storage holdings were higher the first eight months of 1988, when compared with 1987.

### INDUSTRIAL FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS. The value of the domestic production of industrial fishery products was $235.6 million--an increase of $23.7 million compared with the 1987 value of $211.8 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 643.8 million pounds valued at $130.7 million--a decrease of 143.2 million pounds from the 1987 volume but an increase of $9.0 million in value. Menhaden meal production was 504.5 million pounds valued at $114.0 million--a decrease of 164.4 million pounds but an increase of $8.6 million compared to 1987. Menhaden accounted for 78 percent of the 1988 production of fish meal and scrap. Shellfish meal production was 18.8 million pounds--an increase of 2.7 million pounds from the 1987 level. Tuna and mackerel meal production was 75.9 million pounds--a decrease of 8.4 million pounds from 1987. Production of unclassified meal (consisting mainly of alewives, anchovy, carp, sea herring, and unclassified fish) was 44.5 million pounds--an increase of 26.8 million pounds compared with 1987.

FISH SOLUBLES. Domestic production of fish solubles was 223.4 million pounds, 25.8 million pounds less than the 1987 production.

FISH OILS. The domestic production of fish oils was 224.7 million pounds valued at $43.6 million--a decrease of 73.8 million pounds but an increase of $8.1 million compared with 1976 production. The production of menhaden oil was 217.5 million pounds valued at $42.8 million--a decrease of 77.5 million pounds but $7.7 million more in value compared with 1987. Menhaden oil accounted for 97 percent of the volume and 98 percent of the value of the total 1988 fish oil production. Unclassified oil production increased by 3.7 million pounds.

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 $46.7 million, compared with $37.5 million in 1987--an increase of $9.2 million.

# REVIEW

## PROCESSED FISHERY PRODUCTS

### CANNED FISHERY PRODUCTS

**CANNED FISHERY PRODUCTS.** The pack of canned fishery products in the 50 states, American Samoa, and Puerto Rico was 45.2 million standard cases (1.1 billion pounds) valued at $1.5 billion--a decrease of 2.3 million standard cases (55.2 million pounds), and $84.2 million compared with the 1987 pack. The 1988 pack included 40.5 million cases (907.5 million pounds) valued at $1.4 billion for human consumption, and 4.6 million standard cases (222.9 million pounds) valued at $92.7 million for bait and animal food.

**CANNED SALMON.** The 1988 U.S. pack of natural Pacific salmon was 1.8 million standard cases (87.7 million pounds) valued at $216.8 million, compared with 2.2 million standard cases (105.2 million pounds) valued at $261.9 million packed in 1987. Alaskan plants accounted for 93 percent in quantity and 95 percent in value of the salmon pack.

**CANNED SARDINES.** The pack of Maine sardines (sea herring) was 796,200 standard cases (18.6 million pounds) valued at $24.1 million, an increase of 235,700 standard cases (5.5 million pounds) and $1.7 million compared with 1987. An additional 90,000 standard cases (4.3 million pounds) of herring valued at $6.0 million were packed in 1988 -- 66,700 standard cases (3.2 million pounds) and $6.6 million less than the 1987 pack.

**CANNED TUNA.** The U.S. pack of tuna was 30.7 million standard cases (598.2 million pounds) valued at $960.2 million--a decrease of 2.9 million standard cases (55.8 million pounds) in quantity, and $56.2 million in value compared with the 1987 pack. The pack of albacore tuna was 6.7 million standard cases--450,000 standard cases less than the 7.2 million standard cases produced in 1987. Albacore tuna was 22 percent of the tuna pack in 1988. Lightmeat tuna (bigeye, bluefin, skipjack, and yellowfin) comprised the remainder with a pack of 24.0 million standard cases--2.4 million standard cases less than the 26.4 million standard cases packed in 1987.

**CANNED CLAMS.** The U.S. pack of clams (whole, minced, chowder,and juice) was 4.9 million standard cases (118.5 million pounds) valued at $90.6 million, an increase of 621,700 standard cases (10.5 million pounds) in quantity and $9.3 million more in value than the pack in 1987. The pack of whole and minced clams of 1.8 million standard cases (544,600 standard cases more than the 1987 pack) accounted for 38 percent of the total clam pack. Clam chowder and clam juice (3.0 million standard cases) made up the majority of the remaining pack.

**CANNED SHRIMP.** The U.S. pack of natural shrimp was 663,000 standard cases (4.5 million pounds) valued at $24.9 million--an increase of 13,900 standard cases (93,000 pounds) and $2.5 million compared with the 1987 pack.

**OTHER CANNED ITEMS.** The pack of pet food was 4.6 million standard cases valued at $92.2 million--an increase of 47,500 standard cases and $7.6 million compared with the pack in 1987.

# PER CAPITA CONSUMPTION

**PER CAPITA CONSUMPTION.** U.S. per capita consumption of fish and shellfish was 15.0 pounds (edible meat) in 1988. This total was 0.4 pounds less than the 15.4 pounds consumed per capita in 1987.

Per capita consumption of fresh and frozen products registered a total of 9.6 pounds, a decrease of 0.4 pound from the 1987 level. Fresh and frozen finfish consumption was 5.9 pounds per capita in 1988, while fresh and frozen shellfish registered 3.7 pounds per capita. The fresh and frozen finfish consumption includes approximately 0.6 pounds per capita from domestic farm-raised catfish, the same as in 1987.

Consumption of canned fishery products was 5.1 pounds per capita in 1988 the same as in 1987.

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 59.4 pounds (round weight) -- down 5.2 pounds compared with 1987.

## FOREIGN TRADE IN FISHERY PRODUCTS

IMPORTS. U.S. imports of edible fishery products in 1988 were valued at $5.5 billion, $251.8 million lower than the record for value established in 1987. The quantity of edible imports was 3.0 billion pounds, 230.2 million pounds less than the previous record quantity imported in 1987. The quantity of shrimp imported in 1988 established a record with 503.9 million pounds, 25.6 million pounds more than the previous record quantity imported in 1987 and valued at $1.8 billion, $44.5 million more than the 1987 value. Shrimp imports accounted for 32 percent of the value of total edible imports. Imports of fresh and frozen tuna were 550.1 million pounds, 22.4 million pounds less than the 572.5 million pounds imported in 1987. Imports of canned tuna (not in oil) were 244.2 million pounds, 32.8 million pounds more than the 211.4 million pounds imported in 1987. Imports of fresh and frozen fillets and steaks amounted to 517.7 million pounds, a decline of 103.3 million pounds from 1987. Regular and minced block imports were 303.2 million pounds, a decline of 100.3 million pounds from 1987. Edible imports consisted of 2.5 billion pounds of fresh and frozen products valued at $4.7 billion, 428.7 million pounds of canned products valued at $586.9 million, 63.5 million pounds of cured products valued at $89.0 million, and 11.0 million pounds of other products valued at $29.1 million. Analog products (surimi) amounted to 24.5 million pounds valued at $41.6 million in 1988, compared to 30.5 million pounds valued at $51.2 million in 1987.

Imports of nonedible fishery products were valued at a record $3.4 billion -- $306.1 million more than the $3.1 billion imported in 1987. Total value of edible and nonedible products resulted in a record import value of $8.9 billion in 1988 -- $54.3 million more than the previous record in 1987, when $8.8 billion of fishery products were imported.

EXPORTS. U.S. exports of edible fishery products of domestic origin were a record 1.1 billion pounds valued at a record $2.2 billion, compared with 782.9 million pounds at $1.6 billion exported in 1987. The $221.1 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. Fresh and frozen items were 940.3 million pounds valued at $1.8 billion, an increase of 245.6 million pounds and $501.6 million compared with 1987. Fresh and frozen exports consisted principally of 294.1 million pounds of salmon valued at $830.4 million and 94.0 million pounds of herring valued at $94.9 million. Canned items were 62.2 million pounds valued at $142.1 million, up 8.6 million pounds and $21.8 million from 1987 levels. Salmon was the major canned item exported, with 32.9 million pounds valued at $91.6 million. The dramatic increase of canned sardines, 8.6 million pounds valued at $7.9 million in 1988 as compared to the 1987 volume of 999,000 pounds valued at $688,000, is due to an aberration in the methodology of tracking exports to and reentry from a foreign nation. Cured items were 60.7 million pounds valued at $182.8 million, an increase of 26.4 million pounds. Cured exports consisted mainly of salmon and herring roe, which amounted to 36.1 million pounds valued at $124.6 million.

Exports of nonedible products were valued at $113.0 million -- $30.2 million more than the $82.8 million exported in 1987. Exports of fishmeal amounted to 246.3 million pounds valued at $23.4 million, increases of 142.9 million pounds and $10.2 million compared with 1987. Fishmeal exports accounted for 21 percent of the value of total nonedible exports in 1988. The total value of edible and nonedible exports was $2.3 billion -- an increase of $614.2 million compared with 1987.

# U.S. COMMERCIAL LANDINGS

U.S. DOMESTIC LANDINGS, BY SPECIES, 1987 AND 1988 (1)

| Species | 1987 | | 1988 | | (1983-87) |
|---|---|---|---|---|---|
| Fish | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds |
| Alewives: | | | | | |
| Atlantic and Gulf... | 6,145 | 616 | 5,645 | 625 | 9,946 |
| Great Lakes..... | 14,396 | 1,052 | 10,705 | 191 | 21,021 |
| Anchovies..... | 12,857 | 2,706 | 12,425 | 2,615 | 16,192 |
| Bluefish..... | 15,226 | 3,254 | 16,853 | 3,012 | 14,474 |
| Bonito..... | 11,420 | 2,507 | 9,210 | 1,827 | 6,457 |
| Butterfish..... | 10,315 | 6,496 | 5,441 | 3,407 | 13,432 |
| Cod: | | | | | |
| Atlantic..... | 59,100 | 44,179 | 76,073 | 42,941 | 82,461 |
| Pacific..... | 170,611 | 31,443 | 267,205 | 38,429 | 123,985 |
| Croaker..... | 11,044 | 4,396 | 10,604 | 4,596 | 10,692 |
| Cusk..... | 3,064 | 1,649 | 2,363 | 1,021 | 4,127 |
| Flounders: | | | | | |
| Atlantic and Gulf: | | | | | |
| Blackback..... | 19,310 | 22,948 | 18,103 | 21,533 | 24,840 |
| Fluke..... | 30,271 | 41,783 | 36,011 | 44,345 | 34,189 |
| Yellowtail..... | 16,667 | 20,810 | 11,114 | 13,187 | 35,266 |
| Other..... | 27,422 | 30,352 | 25,608 | 27,022 | 39,378 |
| Pacific..... | 106,041 | 29,187 | 137,784 | 34,055 | 73,928 |
| Total..... | 199,711 | 145,080 | 228,620 | 140,142 | 207,600 |
| Grouper..... | 9,494 | 16,058 | 12,228 | 21,703 | 11,550 |
| Haddock..... | 6,673 | 8,522 | 6,429 | 7,030 | 18,123 |
| Hake: | | | | | |
| Pacific (whiting)... | 38,783 | 1,900 | 15,740 | 1,160 | 22,568 |
| Red..... | 4,428 | 866 | 3,834 | 618 | 4,573 |
| White..... | 13,485 | 5,466 | 12,006 | 3,639 | 14,677 |
| Halibut..... | 76,107 | 88,254 | 81,608 | 72,718 | 61,591 |
| Herring, sea: | | | | | |
| Atlantic..... | 84,536 | 4,368 | 90,397 | 5,229 | 69,219 |
| Pacific..... | 122,598 | 47,916 | 131,432 | 57,431 | 125,883 |
| Jack mackerel..... | 26,671 | 1,831 | 22,546 | 1,685 | 26,829 |
| Lingcod..... | 7,027 | 2,603 | 6,536 | 2,385 | 8,078 |
| Mackerel: | | | | | |
| Atlantic..... | 9,933 | 1,065 | 14,753 | 1,962 | 7,814 |
| King..... | 4,577 | 4,981 | 4,308 | 5,043 | 5,465 |
| Pacific..... | 93,755 | 6,433 | 100,342 | 7,498 | 84,195 |
| Spanish..... | 6,838 | 2,249 | 4,237 | 1,479 | 5,884 |
| Menhaden: | | | | | |
| Atlantic..... | 712,454 | 33,901 | 677,928 | 32,445 | 743,950 |
| Gulf..... | 1,999,831 | 70,524 | 1,408,140 | 73,259 | 1,995,438 |
| Total..... | 2,712,285 | 104,425 | 2,086,068 | 105,704 | 2,739,387 |
| Mullets..... | 30,125 | 8,224 | 32,642 | 11,218 | 24,261 |
| Ocean perch: | | | | | |
| Atlantic..... | 4,202 | 2,709 | 2,350 | 1,467 | 9,213 |
| Pacific..... | 19,982 | 4,478 | 11,919 | 2,546 | 11,731 |
| Pollock: | | | | | |
| Atlantic..... | 45,645 | 17,916 | 33,052 | 11,071 | 42,789 |
| Alaska..... | 552,048 | 45,849 | 1,257,251 | 95,252 | 160,473 |
| Rockfishes..... | 117,881 | 38,153 | 124,026 | 38,663 | 95,381 |
| Sablefish..... | 102,698 | 58,107 | 107,511 | 91,779 | 68,226 |
| Salmon, Pacific: | | | | | |
| Chinook or king..... | 39,938 | 80,068 | 45,672 | 117,551 | 28,821 |
| Chum or keta..... | 86,320 | 43,801 | 146,467 | 134,689 | 91,708 |
| Pink..... | 169,308 | 56,459 | 176,487 | 127,297 | 245,370 |
| Red or sockeye..... | 227,411 | 359,767 | 190,036 | 437,630 | 243,102 |
| Silver or coho..... | 39,041 | 56,281 | 47,486 | 93,506 | 46,637 |
| Total..... | 562,018 | 596,376 | 606,148 | 910,673 | 655,637 |
| Scup or porgy..... | 14,295 | 9,810 | 14,358 | 9,572 | 16,752 |
| Sea bass: | | | | | |
| Black..... | 4,967 | 5,094 | 4,824 | 5,144 | 4,521 |
| White..... | 116 | 223 | 107 | 218 | 106 |
| Sea trout: | | | | | |
| Gray..... | 17,927 | 7,499 | 20,533 | 7,948 | 18,440 |
| Spotted..... | 3,395 | 3,181 | 3,094 | 3,169 | 3,244 |
| White..... | 549 | 234 | 371 | 229 | 552 |
| Sharks: | | | | | |
| Dogfish..... | 14,167 | 1,573 | 10,070 | 975 | 11,474 |
| Other..... | 7,665 | 5,338 | 14,598 | 8,454 | 5,802 |

See notes at end of table.

(Continued)

U.S. DOMESTIC LANDINGS, BY SPECIES, 1987 AND 1988 (1) - Continued

| Species | 1987 | | 1988 | | (1983-87) |
|---|---|---|---|---|---|
| Fish -continued | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds |
| Snapper: | | | | | |
| Red | 3,737 | 8,661 | 4,154 | 9,496 | 5,219 |
| Other | 5,171 | 10,034 | 6,796 | 11,319 | 4,154 |
| Striped bass | 431 | 485 | 407 | 517 | 1,269 |
| Swordfish | 9,761 | 34,974 | 12,818 | 42,703 | 11,292 |
| Tilefish | 7,950 | 8,852 | 4,555 | 7,222 | 6,350 |
| Tuna: | | | | | |
| Albacore | 7,728 | 6,037 | 12,303 | 10,598 | 18,047 |
| Bigeye | 3,305 | 9,445 | 4,150 | 14,421 | 1,487 |
| Bluefin | 4,332 | 16,463 | 3,745 | 17,305 | 8,425 |
| Skipjack | 15,919 | 8,700 | 24,395 | 13,796 | 47,488 |
| Yellowfin | 67,572 | 54,152 | 65,975 | 64,324 | 77,380 |
| Unclassified | 1,202 | 1,006 | 781 | 546 | 1,262 |
| Total | 100,058 | 95,803 | 111,349 | 120,990 | 154,089 |
| Whiting | 34,673 | 11,584 | 35,569 | 8,621 | 40,571 |
| Other marine finfishes | 199,795 | 67,731 | 220,194 | 71,360 | - |
| Other freshwater finfishes | 117,880 | 45,838 | 29,257 | 18,534 | - |
| Total | 5,708,215 | 1,629,041 | 5,905,561 | 2,023,230 | - |
| Shellfish et al. | | | | | |
| Clams: | | | | | |
| Hard | 11,418 | 49,593 | 12,371 | 67,818 | 13,769 |
| Ocean quahog | 50,255 | 16,576 | 46,310 | 14,921 | 44,329 |
| Soft | 7,469 | 19,770 | 6,814 | 18,717 | 7,520 |
| Surf | 60,744 | 27,993 | 63,545 | 29,183 | 67,639 |
| Other | 4,471 | 18,929 | 2,700 | 4,142 | 2,469 |
| Total | 134,357 | 132,861 | 131,740 | 134,781 | 135,725 |
| Crabs: | | | | | |
| Blue, hard | 197,826 | 70,776 | 218,663 | 84,357 | 193,230 |
| Dungeness | 29,460 | 38,492 | 47,440 | 54,771 | 26,774 |
| King | 29,065 | 98,929 | 20,973 | 84,153 | 22,624 |
| Snow (tanner) | 113,812 | 98,684 | 146,326 | 137,052 | 83,879 |
| Other | 16,205 | 14,994 | 22,227 | 23,227 | 15,413 |
| Total | 386,368 | 321,875 | 455,629 | 383,560 | 341,921 |
| Lobsters: | | | | | |
| American | 45,558 | 133,554 | 48,643 | 145,236 | 45,187 |
| Spiny | 5,755 | 21,317 | 7,166 | 23,030 | 5,872 |
| Oysters | 39,807 | 92,423 | 31,892 | 78,498 | 44,594 |
| Scallops: | | | | | |
| Bay | 580 | 3,159 | 569 | 3,414 | 1,342 |
| Calico | 8,155 | 8,889 | 11,868 | 12,462 | 14,244 |
| Sea | 32,038 | 132,263 | 30,557 | 128,243 | 21,353 |
| Shrimp: | | | | | |
| New England | 11,081 | 12,158 | 6,786 | 7,497 | 8,248 |
| South Atlantic | 22,905 | 46,396 | 24,244 | 51,667 | 23,958 |
| Gulf | 257,148 | 469,281 | 225,789 | 414,469 | 255,364 |
| Pacific | 72,008 | 50,247 | 74,054 | 32,401 | 42,027 |
| Other | (2) | 2 | - | - | 93 |
| Total | 363,142 | 578,084 | 330,873 | 506,034 | 329,597 |
| Squid: | | | | | |
| Atlantic | 38,883 | 12,493 | 46,739 | 16,220 | 32,604 |
| Pacific | 43,166 | 4,300 | 80,426 | 7,689 | 22,864 |
| Other shellfish | 89,702 | 44,454 | 110,890 | 57,862 | - |
| Total shellfish et al. | 1,187,511 | 1,485,672 | 1,286,992 | 1,497,029 | - |
| Grand total | 6,895,726 | 3,114,713 | 7,192,553 | 3,520,259 | - |

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage Area States are not available for 1988. (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.

DISPOSITION OF U.S. DOMESTIC LANDINGS, 1987 AND 1988 (PRELIMINARY)

| End Use | 1987 | | 1988 | |
|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent |
| Fresh and frozen: | | | | |
| For human food. . . | 2,958 | 42.9 | 3,605 | 50.1 |
| For bait and animal food. . . . | 199 | 2.9 | 208 | 2.9 |
| Total. . . . | 3,157 | 45.8 | 3,813 | 53.0 |
| Canned: | | | | |
| For human food. . . | 899 | 13.0 | 897 | 12.5 |
| For bait and animal food. . . . | 110 | 1.6 | 120 | 1.7 |
| Total. . . . | 1,009 | 14.6 | 1,017 | 14.1 |
| Cured for human food. | 89 | 1.3 | 86 | 1.2 |
| Reduction to meal, oil, etc.. . . . . | 2,641 | 38.3 | 2,276 | 31.6 |
| Grand total. . . | 6,896 | 100.0 | 7,192 | 100.0 |

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

DISPOSITION OF U.S. DOMESTIC LANDINGS, BY MONTH, 1988 (1)

| Month | Landings for Human food | | Landings for Industrial purposes (1) | | Total | |
|---|---|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent | Million pounds | Percent |
| January. . . . . | 224,037 | 4.9 | 44,484 | 1.7 | 268,521 | 3.7 |
| February . . . . . | 253,014 | 5.5 | 40,472 | 1.6 | 293,486 | 4.1 |
| March. . . . . | 278,296 | 6.1 | 39,180 | 1.5 | 317,476 | 4.4 |
| April. . . . . | 362,159 | 7.9 | 133,134 | 5.1 | 495,293 | 6.9 |
| May. . . . . | 376,217 | 8.2 | 293,861 | 11.3 | 670,078 | 9.3 |
| June . . . . . | 435,848 | 9.5 | 420,213 | 16.1 | 856,061 | 11.9 |
| July . . . . . | 662,428 | 14.4 | 396,366 | 15.2 | 1,058,794 | 14.7 |
| August . . . . . | 621,168 | 13.5 | 558,216 | 21.4 | 1,179,384 | 16.4 |
| September. . . . . | 438,261 | 9.6 | 338,005 | 13.0 | 776,266 | 10.8 |
| October. . . . . | 347,362 | 7.6 | 162,315 | 6.2 | 509,677 | 7.1 |
| November . . . . . | 307,566 | 6.7 | 80,693 | 3.1 | 388,259 | 5.4 |
| December . . . . . | 282,014 | 6.1 | 97,244 | 3.7 | 379,258 | 5.3 |
| Total. . . . . | 4,588,370 | 100.0 | 2,604,183 | 100.0 | 7,192,553 | 100.0 |

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

U.S. COMMERCIAL LANDINGS OF FISH AND SHELLFISH, 1979-88 (1)

| Year | Landings for Human Food | | Landings for Industrial Purposes (2) | | Total | |
|---|---|---|---|---|---|---|
| | Million pounds | Million dollars | Million pounds | Million dollars | Million pounds | Million dollars |
| 1979 (3). . . . . | 3,318 | 2,093 | 2,949 | 141 | 6,267 | 2,234 |
| 1980 (3). . . . . | 3,654 | 2,092 | 2,828 | 145 | 6,482 | 2,237 |
| 1981 (3). . . . . | 3,547 | 2,277 | 2,430 | 111 | 5,977 | 2,388 |
| 1982 (3). . . . . | 3,285 | 2,247 | 3,082 | 143 | 6,367 | 2,390 |
| 1983 (3). . . . . | 3,238 | 2,203 | *3,201 | 152 | 6,439 | 2,355 |
| 1984 (3). . . . . | 3,320 | 2,206 | 3,118 | 144 | 6,438 | 2,350 |
| 1985 (3). . . . . | 3,294 | 2,198 | 2,964 | 128 | 6,258 | 2,326 |
| 1986 (3). . . . . | 3,393 | 2,641 | 2,638 | 122 | 6,031 | 2,763 |
| 1987 (3). . . . . | 3,946 | 2,979 | 2,950 | 136 | 6,896 | 3,115 |
| 1988 (3). . . . . | *4,588 | 3,362 | 2,604 | 158 | *7,192 | 3,520 |

(1) Statistics on Landings are shown in round weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are shown in weight of meats (excluding the shell). (2) processed into fish meal, oil, solubles, and shell products, or used as bait or animal food. (3) Data 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. DOMESTIC LANDINGS, BY STATES, 1987 AND 1988 (1)

| States | 1987 | | 1988 | | Record Landings | |
|---|---|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Year | Thousand pounds |
| Alabama | 24,459 | 44,615 | 22,296 | 39,709 | 1973 | 39,749 |
| Alaska | 1,697,547 | 941,690 | 2,639,250 | 1,339,424 | 1988 | 2,639,250 |
| California | 451,663 | 173,234 | 495,577 | 199,316 | 1936 | 1,760,193 |
| Connecticut | 8,562 | 15,974 | 9,133 | 17,444 | 1930 | 88,012 |
| Delaware | 6,022 | 2,308 | 5,536 | 3,161 | 1953 | 367,500 |
| Florida | 172,734 | 156,626 | 182,220 | 169,639 | 1938 | 241,443 |
| Georgia | 14,961 | 19,624 | 16,609 | 21,480 | 1927 | 47,607 |
| Hawaii | 16,088 | 29,056 | 21,131 | 39,749 | 1984 | 34,824 |
| Illinois | 7,081 | 2,348 | 268 | 330 | - | (2) |
| Indiana | 1,399 | 1,863 | 1,301 | 1,677 | - | (2) |
| Louisiana | 1,803,944 | 315,933 | 1,356,466 | 317,297 | 1984 | 1,931,027 |
| Maine | 170,082 | 132,420 | 157,281 | 123,933 | 1950 | 356,266 |
| Maryland | 81,658 | 53,458 | 79,739 | 44,083 | 1890 | 141,607 |
| Massachusetts | 258,066 | 278,913 | 286,476 | 274,030 | 1948 | 649,696 |
| Michigan | 15,072 | 7,647 | 15,965 | 9,566 | 1930 | 35,580 |
| Minnesota | 13,730 | 4,408 | 334 | 97 | - | (2) |
| Mississippi | 436,729 | 48,228 | 336,369 | 61,180 | 1984 | 476,997 |
| New Hampshire | 8,287 | 7,738 | 10,808 | 8,818 | - | (2) |
| New Jersey | 116,141 | 72,643 | 112,617 | 71,863 | 1956 | 540,060 |
| New York | 40,882 | 53,352 | 38,508 | 54,224 | 1880 | 335,000 |
| North Carolina | 156,608 | 63,461 | 191,281 | 75,823 | 1981 | 432,006 |
| Ohio | 3,217 | 843 | 3,438 | 1,062 | 1936 | 31,083 |
| Oregon | 138,545 | 95,293 | 148,601 | 97,695 | 1988 | 148,601 |
| Pennsylvania | 195 | 148 | 380 | 277 | - | (2) |
| Rhode Island | 100,150 | 77,414 | 106,208 | 69,422 | 1889 | 128,056 |
| South Carolina | 15,003 | 22,047 | 16,249 | 21,052 | 1965 | 26,611 |
| Texas | 111,216 | 199,662 | 96,039 | 175,738 | 1960 | 237,684 |
| Virginia | 709,595 | 106,195 | 650,770 | 104,334 | 1983 | 751,069 |
| Washington | 205,073 | 150,181 | 173,553 | 172,274 | 1941 | 197,253 |
| Wisconsin | 38,944 | 8,787 | 18,150 | 5,562 | - | (2) |
| Other | 72,073 | 28,604 | - | - | - | (2) |
| Grand Total | 6,895,726 | 3,114,713 | 7,192,553 | 3,520,259 | 1988 | 7,192,553 |

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage Area States are not available for 1988.
(2) Not available.

NOTE:--Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels 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. DOMESTIC LANDINGS, BY REGIONS, 1987 AND 1988 (1)

| Region | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| New England | 545,147 | 512,459 | 569,906 | 493,647 |
| Middle Atlantic | 162,797 | 128,049 | 156,442 | 129,033 |
| Chesapeake | 791,253 | 159,653 | 730,509 | 148,417 |
| South Atlantic | 235,091 | 150,361 | 280,052 | 173,613 |
| Gulf | 2,500,563 | 719,835 | 1,937,477 | 708,305 |
| Pacific Coast and Alaska | 2,492,828 | 1,360,398 | 3,456,981 | 1,808,709 |
| Great Lakes | 41,788 | 16,940 | 40,055 | 18,786 |
| Hawaii | 16,088 | 29,056 | 21,131 | 39,749 |
| Other | 110,171 | 37,962 | - | - |
| Total | 6,895,726 | 3,114,713 | 7,192,553 | 3,520,259 |

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage Area States are not available for 1988.

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.

COMMERCIAL FISHERY LANDINGS AND VALUE AT MAJOR U.S. PORTS, 1986-88

| Port | Quantity 1986 | Quantity 1987 | Quantity 1988 |
|---|---|---|---|
| | -----Million pounds---- | | |
| Cameron, LA | 616.8 | 672.4 | 438.9 |
| Dutch Harbor-Unalaska, AK | 88.3 | 128.2 | 377.3 |
| Kodiak, AK | 141.2 | 204.1 | 304.6 |
| Empire-Venice, LA | 317.6 | 357.4 | 297.2 |
| Pascagoula-Moss Point, MS | 365.5 | 391.6 | 292.0 |
| Dulac-Chauvin, LA | 294.6 | 331.7 | 244.1 |
| Los Angeles, CA | 187.4 | 203.1 | 232.0 |
| Intercoastal City, LA | 298.9 | 314.3 | 209.7 |
| Beaufort-Morehead City, NC | 98.9 | 85.7 | 110.0 |
| Gloucester, MA | 110.0 | 93.0 | 107.4 |
| New Bedford, MA | 65.8 | 78.7 | 90.3 |
| Port Hueneme-Oxnard-Ventura, CA | 31.0 | 42.3 | 55.0 |
| Petersburg, AK | 85.2 | 42.4 | 50.4 |
| Point Judith, RI | 52.1 | 46.6 | 49.6 |
| Cape May-Wildwood, NJ | 36.6 | 56.8 | 47.9 |
| Kenai, AK | (1) | (1) | 47.4 |
| Astoria, OR | 36.8 | 46.6 | 44.2 |
| Portland, ME | 34.9 | 43.8 | 43.9 |
| Morgan City-Berwick, LA | 17.4 | 27.0 | 43.3 |
| Cordova, AK | (1) | 69.6 | 42.5 |
| Biloxi, MS | 46.7 | 38.2 | 42.3 |
| Rockland, ME | 43.4 | 38.7 | 40.6 |
| Newport, OR | 26.7 | 35.9 | 38.5 |
| Crescent City, CA | 20.9 | 23.1 | 36.0 |
| Bellingham, WA | 45.9 | 47.5 | 35.3 |
| Westport, WA | 22.9 | 26.2 | 34.8 |
| Coos Bay-Charleston, OR | 24.3 | 29.6 | 33.0 |
| Homer, AK | (1) | (1) | 32.1 |
| Wanchese-Stumpy Point, NC | 27.2 | 28.3 | 31.0 |
| Fort Bragg, CA | 17.8 | 25.9 | 31.0 |
| Golden Meadow-Leeville, LA | 25.1 | 27.4 | 30.1 |
| Ketchikan, AK | 42.2 | 27.6 | 28.3 |
| Atlantic City, NJ | 22.0 | 24.9 | 27.7 |
| Sitka, AK | 25.2 | 27.1 | 27.7 |
| Eureka, CA | 19.4 | 28.5 | 27.0 |
| Provincetown-Chatham, MA | 26.6 | 25.3 | 25.2 |
| San Francisco Area, CA | 25.9 | 27.0 | 25.0 |
| Ilwaco-Chinook, WA | 18.3 | 18.8 | 23.2 |
| Seward, AK | (1) | (1) | 23.0 |
| Ocean City, MD | 29.1 | 22.5 | 21.1 |
| Boston, MA | 31.4 | 23.0 | 20.8 |
| Hampton Roads Area, VA | 24.8 | 29.6 | 20.0 |
| Seattle, WA | 38.2 | 22.2 | 17.5 |
| Point Pleasant, NJ | 15.1 | (1) | 17.3 |
| Cape Canaveral, FL | 8.1 | 14.6 | 16.4 |
| Aransas Pass-Rockport, TX | 27.1 | 10.2 | 15.6 |
| Bethel-Aniak, AK | (1) | (1) | 14.6 |
| Everett, WA | 12.8 | 23.5 | 14.5 |
| Bodega Bay, CA | 8.5 | 12.9 | 14.0 |
| Oriental-Vandemere, NC | 10.7 | 10.9 | 14.0 |
| Monterey, CA | 16.4 | 16.1 | 14.0 |
| Brownsville-Port Isabel, TX | 25.5 | 13.4 | 13.8 |
| Tacoma, WA | (1) | (1) | 13.6 |
| Montauk, NY | 11.0 | 14.7 | 13.2 |
| Bayou La Batre, AL | 25.6 | 15.1 | 12.4 |
| Blaine, WA | 14.3 | 17.9 | 11.9 |
| Lafitte-Barataria, LA | 16.8 | 12.7 | 11.9 |
| Delacroix-Yscloskey, LA | 16.3 | 12.5 | 11.1 |
| Grand Isle, LA | 14.0 | 12.3 | 10.8 |
| Delcambre, LA | 18.7 | 13.9 | 10.8 |

| Port | Value 1986 | Value 1987 | Value 1988 |
|---|---|---|---|
| | ----Million dollars---- | | |
| Kodiak, AK | 89.8 | 132.1 | *166.3 |
| New Bedford, MA | 106.0 | 143.7 | 140.9 |
| Dutch Harbor-Unalaska, AK | 37.2 | 62.7 | 100.9 |
| Kenai, AK | (1) | (1) | 99.3 |
| Empire-Venice, LA | 47.1 | 60.1 | 67.7 |
| Petersburg, AK | 38.1 | 36.9 | 58.5 |
| Dulac-Chauvin, LA | 71.0 | 65.6 | 56.5 |
| Cordova, AK | (1) | 41.9 | 46.4 |
| Aransas Pass-Rockport, TX | 60.3 | 36.4 | 45.6 |
| Ketchikan, AK | 20.6 | 22.8 | 43.5 |
| Homer, AK | (1) | (1) | 40.2 |
| Brownsville-Port Isabel, TX | 69.3 | 54.2 | 39.7 |
| Sitka, AK | 21.8 | 33.6 | 37.4 |
| Golden Meadow-Leeville, LA | 40.0 | 36.6 | 37.0 |
| Hampton Roads Area, VA | 23.6 | 46.2 | 34.4 |
| Los Angeles, CA | 29.5 | 55.6 | 34.0 |
| Cameron, LA | 34.8 | 31.9 | 33.2 |
| Gloucester, MA | 37.8 | 34.0 | 30.8 |
| Portland, ME | 22.4 | 35.8 | 30.4 |
| Bellingham, WA | 28.8 | 27.4 | 30.1 |
| Biloxi, MS | 15.2 | 14.2 | 29.5 |
| Cape May-Wildwood, NJ | 20.9 | 30.5 | 28.4 |
| Pascagoula-Moss Point, MS | 20.4 | 20.3 | 28.2 |
| Beaufort-Morehead City, NC | 24.7 | 22.7 | 27.0 |
| Point Judith, RI | 28.5 | 29.5 | 25.4 |
| Cape Canaveral, FL | 15.9 | 21.7 | 24.3 |
| Newport, OR | 13.5 | 21.9 | 24.3 |
| Astoria, OR | 16.4 | 24.6 | 24.3 |
| Bayou La Batre, AL | 43.3 | 29.8 | 23.8 |
| Freeport, TX | 26.7 | 23.6 | 22.6 |
| Coos Bay-Charleston, OR | 11.9 | 19.1 | 21.8 |
| Galveston, TX | 20.9 | 11.4 | 21.4 |
| Westport, WA | 11.3 | 15.8 | 21.2 |
| Fort Bragg, CA | 8.5 | 12.5 | 21.0 |
| Seward, AK | (1) | (1) | 19.5 |
| Seattle, WA | 21.8 | 21.9 | 19.5 |
| Port Arthur, TX | 29.9 | 22.9 | 17.4 |
| Bodega Bay, CA | 6.1 | 13.4 | 17.0 |
| Wanchese-Stumpy Point, NC | 12.3 | 13.9 | 17.0 |
| Key West, FL | 27.4 | 22.4 | 16.8 |
| Morgan City-Berwick, LA | 7.5 | 11.0 | 16.7 |
| Crescent City, CA | 10.6 | 12.1 | 16.0 |
| Lafitte-Barataria, LA | 24.1 | 19.2 | 16.0 |
| San Francisco Area, CA | 11.1 | 12.5 | 15.0 |
| Montauk, NY | 12.8 | 15.9 | 14.7 |
| Intercoastal City, LA | 11.3 | 13.4 | 14.7 |
| Boston, MA | 19.1 | 16.9 | 14.5 |
| Yakutat, AK | (1) | (1) | 14.5 |
| Ilwaco-Chinook, WA | 9.1 | 13.1 | 14.0 |
| Delcambre, LA | 28.4 | 22.1 | 12.7 |
| Fort Myers, FL | 11.5 | 10.4 | 12.7 |
| Atlantic City, NJ | 12.7 | 11.4 | 12.6 |
| Bon Secour-Gulf Shore, AL | 13.5 | 13.0 | 12.5 |
| Eureka, CA | 8.3 | 12.6 | 12.0 |
| Grand Isle, LA | 11.9 | 12.6 | 12.0 |
| Provincetown-Chatham, MA | 11.8 | 12.7 | 11.6 |
| Blaine, WA | 11.1 | 15.2 | 11.2 |
| Delacroix-Yscloskey, LA | 12.5 | 13.1 | 11.0 |
| San Diego, CA | 7.5 | 11.5 | 11.0 |
| Bethel-Aniak, AK | (1) | (1) | 10.3 |

(1) Not available. *Record. Record quantity was 848.2 million lb 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, 1988 (1)

| SPECIES | Distance caught off U.S. shores | | | | International waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Alewives: | | | | | | | | |
| Atlantic and Gulf. | 5,626 | 624 | 19 | 1 | - | - | 5,645 | 625 |
| Great Lakes. . . . | 10,705 | 191 | - | - | - | - | 10,705 | 191 |
| Anchovies. . . . . | 1,321 | 295 | 11,104 | 2,320 | - | - | 12,425 | 2,615 |
| Bluefish . . . . . | 11,135 | 2,065 | 5,718 | 947 | - | - | 16,853 | 3,012 |
| Bonito . . . . . | 371 | 76 | 8,839 | 1,751 | - | - | 9,210 | 1,827 |
| Butterfish . . . . . | 705 | 423 | 4,736 | 2,984 | - | - | 5,441 | 3,407 |
| Cod: | | | | | | | | |
| Atlantic . . . . . | 1,443 | 811 | 74,015 | 41,861 | 615 | 269 | 76,073 | 42,941 |
| Pacific. . . . . | 39,801 | 5,687 | 473,275 | 63,171 | - | - | 513,076 | 68,858 |
| Croaker. . . . . | 9,473 | 4,159 | 1,131 | 437 | - | - | 10,604 | 4,596 |
| Cusk . . . . . | 10 | 2 | 2,339 | 1,013 | 14 | 6 | 2,363 | 1,021 |
| Flounders: | | | | | | | | |
| Atlantic and Gulf: | | | | | | | | |
| Blackback. . . . | 3,090 | 2,821 | 15,011 | 18,710 | 2 | 2 | 18,103 | 21,533 |
| Fluke. . . . . | 10,792 | 13,562 | 25,219 | 30,783 | - | - | 36,011 | 44,345 |
| Yellowtail . . | 583 | 698 | 8,632 | 10,918 | 1,899 | 1,571 | 11,114 | 13,187 |
| Other. . . . . | 1,459 | 1,238 | 20,273 | 22,633 | 3,876 | 3,151 | 25,608 | 27,022 |
| Pacific. . . . . | 83,464 | 14,069 | 782,098 | 73,749 | - | - | 865,562 | 87,818 |
| Total. . . . . | 99,388 | 32,388 | 851,233 | 156,793 | 5,777 | 4,724 | 956,398 | 193,905 |
| Groupers . . . . . | 173 | 318 | 12,055 | 21,385 | - | - | 12,228 | 21,703 |
| Haddock. . . . . | 2 | 3 | 6,423 | 7,022 | 4 | 5 | 6,429 | 7,030 |
| Hake: | | | | | | | | |
| Pacific (whiting). | 760 | 37 | 314,323 | 15,783 | - | - | 315,083 | 15,820 |
| Red. . . . . | 159 | 29 | 3,675 | 589 | - | - | 3,834 | 618 |
| White. . . . . | 41 | 8 | 11,897 | 3,605 | 68 | 26 | 12,006 | 3,639 |
| Halibut. . . . . | 30,166 | 26,169 | 51,346 | 46,356 | 96 | 193 | 81,608 | 72,718 |
| Herring, sea: | | | | | | | | |
| Atlantic . . . . . | 36,803 | 2,420 | 53,588 | 2,809 | 6 | (3) | 90,397 | 5,229 |
| Pacific. . . . . | 131,432 | 57,431 | - | - | - | - | 131,432 | 57,431 |
| Jack mackerel. . . . | - | - | 22,546 | 1,685 | - | - | 22,546 | 1,685 |
| Lingcod. . . . . | 965 | 375 | 5,571 | 2,010 | - | - | 6,536 | 2,385 |
| Mackerel: | | | | | | | | |
| Atlantic . . . . . | 1,244 | 352 | 26,042 | 2,370 | - | - | 27,286 | 2,722 |
| King . . . . . | 840 | 1,019 | 3,468 | 4,024 | - | - | 4,308 | 5,043 |
| Pacific. . . . . | 1 | (1) | 100,341 | 7,498 | - | - | 100,342 | 7,498 |
| Spanish. . . . . | 1,566 | 537 | 2,671 | 942 | - | - | 4,237 | 1,479 |

See footnotes at end of table.

(Continued)

**COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1988 (1) - (Continued)**

| SPECIES | Distance caught off U.S. shores | | | | International waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish - Continued | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Menhaden: | | | | | | | | |
| Atlantic . . . . . | 674,026 | 32,361 | 120,658 | 2,801 | - | - | 794,684 | 35,162 |
| Gulf . . . . . | 1,068,104 | 56,303 | 340,036 | 16,956 | - | - | 1,408,140 | 73,259 |
| Total . . . . . | 1,742,130 | 88,664 | 460,694 | 19,757 | - | - | 2,202,824 | 108,421 |
| Mullet . . . . . | 32,642 | 11,218 | - | - | - | - | 32,642 | 11,218 |
| Ocean perch: | | | | | | | | |
| Atlantic . . . . . | 3 | 1 | 2,324 | 1,453 | 23 | 13 | 2,350 | 1,467 |
| Pacific. . . . . | 5,032 | 666 | 6,887 | 1,880 | | - | 11,919 | 2,546 |
| Pollock: | | | | | | | | |
| Atlantic . . . . . | 53 | 21 | 32,867 | 10,991 | 132 | 59 | 33,052 | 11,071 |
| Alaska . . . . . | 188,579 | 14,287 | 2,890,914 | 197,067 | - | - | 3,079,493 | 211,354 |
| Rockfishes . . . . . | 22,112 | 6,514 | 106,550 | 32,854 | - | - | 128,662 | 39,368 |
| Sablefish. . . . . | 12,370 | 11, 281 | 95,253 | 80,512 | - | - | 107,623 | 91,793 |
| Salmon, Pacific: | | | | | | | | |
| Chinook or king. . | 34,072 | 85,046 | 11,600 | 32,505 | - | - | 45,672 | 117,551 |
| Chum or keta . . . | 146,467 | 134,689 | - | - | - | - | 146,467 | 134,689 |
| Pink . . . . . | 176,487 | 127,297 | - | - | - | - | 176,487 | 127,297 |
| Red or sockeye . . | 190,036 | 437,630 | - | - | - | - | 190,036 | 437,630 |
| Silver or coho . . | 45,263 | 89,049 | 2,223 | 4,457 | - | - | 47,486 | 93,506 |
| Total. . . . . | 592,325 | 873,711 | 13,823 | 36,962 | - | - | 606,148 | 910,673 |
| Scup or porgy. . . . | 4,481 | 2,899 | 9,877 | 6,673 | - | - | 14,358 | 9,572 |
| Sea bass: | | | | | | | | |
| Black. . . . . | 514 | 888 | 4,310 | 4,256 | - | - | 4,824 | 5,144 |
| White. . . . . | 47 | 96 | 60 | 122 | - | - | 107 | 218 |
| Sea trout: | | | | | | | | |
| Gray . . . . . | 12,155 | 5,353 | 8,378 | 2,595 | - | - | 20,533 | 7,948 |
| Spotted. . . . . | 3,010 | 3,075 | 84 | 94 | - | - | 3,094 | 3,169 |
| White. . . . . | 300 | 198 | 71 | 31 | - | - | 371 | 229 |
| Sharks: | | | | | | | | |
| Dogfish. . . . . | 4,396 | 575 | 5,674 | 400 | - | - | 10,070 | 975 |
| Other. . . . . | 1,981 | 1,034 | 12,556 | 7,342 | 61 | 78 | 14,598 | 8,454 |
| Snapper: | | | | | | | | |
| Red. . . . . | 36 | 69 | 4,118 | 9,427 | - | - | 4,154 | 9,496 |
| Other. . . . . | 691 | 1,139 | 6,105 | 10,180 | - | - | 6,796 | 11,319 |
| Striped bass . . . . | 380 | 479 | 27 | 38 | - | - | 407 | 517 |
| Swordfish. . . . . | 32 | 97 | 9,118 | 31,984 | 3,668 | 10,622 | 12,818 | 42,703 |
| Tilefish . . . . . | 29 | 86 | 4,526 | 7,136 | - | - | 4,555 | 7,222 |

See footnotes at end of table.

(Continued)

**COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1988 (1) - (Continued)**

| SPECIES | Distance caught off U.S. shores | | | | International waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish - Continued | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Tuna: | | | | | | | | |
| Albacore . . . . . | 4 | 2 | 8,896 | 7,566 | 10,155 | 8,710 | 19,055 | 16,278 |
| Bigeye . . . . . | 63 | 270 | 3,667 | 12,860 | 1,719 | 2,019 | 5,449 | 15,149 |
| Bluefin. . . . . | 16 | 21 | 2,916 | 16,877 | 813 | 407 | 3,745 | 17,305 |
| Skipjack . . . . . | 1 | 1 | 5,291 | 5,772 | 294,707 | 143,279 | 299,999 | 149,052 |
| Yellowfin. . . . . | 495 | 885 | 25,481 | 39,353 | 254,319 | 141,964 | 280,295 | 182,202 |
| Unclassified . . . | 98 | 9 | 683 | 537 | - | - | 781 | 546 |
| Total . . . . . | 677 | 1,188 | 46,934 | 82,965 | 561,713 | 296,379 | 609,324 | 380,532 |
| Whiting. . . . . | 581 | 186 | 34,988 | 8,435 | - | - | 35,569 | 8,621 |
| Other marine finfishes . . . . . | 137,724 | 43,948 | 125,781 | 30,907 | 382 | 98 | 263,887 | 74,953 |
| Other freshwater finfishes . . . . . | 29,257 | 18,534 | - | - | - | - | 29,257 | 18,534 |
| Total fish. . . . | 3,175,667 | 1,221,626 | 5,928,274 | 971,417 | 572,559 | 312,472 | 9,676,500 | 2,505,515 |
| Shellfish | | | | | | | | |
| Clams: | | | | | | | | |
| Hard . . . . . | 12,371 | 67,818 | - | - | - | - | 12,371 | 67,818 |
| Ocean quahog . . . | 909 | 1,509 | 45,401 | 13,412 | - | - | 46,310 | 14,921 |
| Soft . . . . . | 6,814 | 18,717 | - | - | - | - | 6,814 | 18,717 |
| Surf . . . . . | 10,744 | 4,622 | 52,801 | 24,561 | - | - | 63,545 | 29,183 |
| Other. . . . . | 2,700 | 4,142 | - | - | - | - | 2,700 | 4,142 |
| Total. . . . . | 33,538 | 96,808 | 98,202 | 37,973 | - | - | 131,740 | 134,781 |
| Crabs: | | | | | | | | |
| Blue, hard . . . . | 218,590 | 84,336 | 73 | 21 | - | - | 218,663 | 84,357 |
| Dungeness. . . . . | 35,987 | 41,484 | 11,453 | 13,287 | - | - | 47,440 | 54,771 |
| King . . . . . | 10,815 | 43,207 | 10,158 | 40,946 | - | - | 20,973 | 84,153 |
| Snow (tanner). . . | 8,678 | 19,191 | 137,648 | 117,861 | - | - | 146,326 | 137,052 |
| Other. . . . . | 7,032 | 5,962 | 15,173 | 17,254 | 22 | 11 | 22,227 | 23,227 |
| Total. . . . . | 281,102 | 194,180 | 174,505 | 189,369 | 22 | 11 | 455,629 | 383,560 |
| Lobsters: | | | | | | | | |
| American . . . . . | 41,907 | 121,181 | 6,700 | 23,896 | 36 | 159 | 48,643 | 145,236 |
| Spiny. . . . . | 1,853 | 6,689 | 5,313 | 16,341 | - | - | 7,166 | 23,030 |

See footnotes at end of table.

(Continued)

**COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1988 (1) - (Continued)**

| SPECIES | Distance caught off U.S. shores | | | | International waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Shellfish - Continued | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Oysters. . . . . | 31,892 | 78,498 | - | - | - | - | 31,892 | 78,498 |
| Scallops: | | | | | | | | |
| Bay. . . . . | 569 | 3,414 | - | - | - | - | 569 | 3,414 |
| Calico . . . . . | - | - | 11,868 | 12,462 | - | - | 11,868 | 12,462 |
| Sea. . . . . | 1,213 | 4,748 | 29,344 | 123,495 | - | - | 30,557 | 128,243 |
| Shrimp: | | | | | | | | |
| New England. . . . | 628 | 681 | 6,158 | 6,816 | - | - | 6,786 | 7,497 |
| South Atlantic . . | 21,012 | 45,740 | 3,232 | 5,927 | - | - | 24,244 | 51,667 |
| Gulf . . . . . | 129,870 | 185,518 | 95,919 | 228,951 | - | - | 225,789 | 414,469 |
| Pacific Coast. . . | 11,028 | 4,997 | 63,026 | 27,404 | - | - | 74,054 | 32,401 |
| Total. . . . . | 162,538 | 236,936 | 168,335 | 269,098 | - | - | 330,873 | 506,034 |
| Squid: | | | | | | | | |
| Atlantic . . . . . | 10,612 | 3,493 | 36,127 | 12,727 | - | - | 46,739 | 16,220 |
| Pacific. . . . . | 40,067 | 3,831 | 40,359 | 3,858 | - | - | 80,426 | 7,689 |
| Other shellfish. . . | 103,716 | 54,743 | 11,308 | 10,643 | - | - | 115,024 | 65,386 |
| Total shell-fish et al.. . . | 709,007 | 804,521 | 582,061 | 699,862 | 58 | 170 | 1,291,126 | 1,504,553 |
| Grand total, 1988 . . . . . | 3,884,674 | 2,026,147 | 6,510,335 | 1,671,279 | (572,617) 5% | 312,642 | 7,142,533 10,967,626 | 65% 4,010,068 |
| Grand total, 1987 . . . . . | 4,059,938 | 1,651,965 | 6,215,638 | 1,628,962 | 604,383 | 276,078 | 10,879,959 | 3,556,882 |

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

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

(3) Less than $500.

(4) For individual species breakout see "Fisheries of the United States, 1987" pages 8-11.

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" tables beginning on page one. Data do not include aquaculture products, except oysters and clams.

**COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1988 (1) - Continued**

| Species | Distance caught off U.S. Shores | | | | International waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Alewives: | | | | | | | | |
| Atlantic and Gulf. | 2,552 | 624 | 9 | 1 | - | - | 2,561 | 625 |
| Great Lakes. . . . | 4,856 | 191 | - | - | - | - | 4,856 | 191 |
| Anchovies. . . . . | 599 | 295 | 5,037 | 2,320 | - | - | 5,636 | 2,615 |
| Bluefish . . . . . | 5,051 | 2,065 | 2,593 | 947 | - | - | 7,644 | 3,012 |
| Bonito . . . . . | 168 | 76 | 4,010 | 1,751 | - | - | 4,178 | 1,827 |
| Butterfish . . . . . | 320 | 423 | 2,148 | 2,984 | - | - | 2,468 | 3,407 |
| Cod: | | | | | | | | |
| Atlantic . . . . . | 655 | 811 | 33,572 | 41,861 | 279 | 269 | 34,506 | 42,941 |
| Pacific. . . . . | 18,053 | 5,687 | 214,674 | 63,171 | - | - | 232,727 | 68,858 |
| Croaker. . . . . | 4,297 | 4,159 | 513 | 437 | - | - | 4,810 | 4,596 |
| Cusk . . . . . | 5 | 2 | 1,061 | 1,013 | 6 | 6 | 1,072 | 1,021 |
| Flounders: | | | | | | | | |
| Atlantic and Gulf: | | | | | | | | |
| Blackback. . . . | 1,402 | 2,821 | 6,808 | 18,710 | 1 | 2 | 8,211 | 21,533 |
| Fluke. . . . . | 4,895 | 13,562 | 11,439 | 30,783 | - | - | 16,334 | 44,345 |
| Yellowtail . . . | 264 | 698 | 3,916 | 10,918 | 861 | 1,571 | 5,041 | 13,187 |
| Other. . . . . | 662 | 1,238 | 9,196 | 22,633 | 1,758 | 3,151 | 11,616 | 27,022 |
| Pacific. . . . . | 37,859 | 14,069 | 354,753 | 73,749 | - | - | 392,612 | 87,818 |
| Total . . . . . | 45,082 | 32,388 | 386,112 | 156,793 | 2,620 | 4,724 | 433,814 | 193,905 |
| Groupers . . . . . | 78 | 318 | 5,469 | 21,385 | - | - | 5,547 | 21,703 |
| Haddock. . . . . | 1 | 3 | 2,913 | 7,022 | 2 | 5 | 2,916 | 7,030 |
| Hake: | | | | | | | | |
| Pacific (whiting). | 345 | 37 | 142,574 | 15,783 | - | - | 142,919 | 15,820 |
| Red. . . . . | 72 | 29 | 1,667 | 589 | - | - | 1,739 | 618 |
| White. . . . . | 19 | 8 | 5,396 | 3,605 | 31 | 26 | 5,446 | 3,639 |
| Halibut. . . . . | 13,683 | 26,169 | 23,290 | 46,356 | 44 | 193 | 37,017 | 72,718 |
| Herring, sea: | | | | | | | | |
| Atlantic . . . . . | 16,694 | 2,420 | 24,306 | 2,809 | 3 | (3) | 41,003 | 5,229 |
| Pacific. . . . . | 59,617 | 57,431 | - | - | - | - | 59,617 | 57,431 |
| Jack mackerel. . . . | - | - | 10,227 | 1,685 | - | - | 10,227 | 1,685 |
| Lingcod. . . . . | 438 | 375 | 2,527 | 2,010 | - | - | 2,965 | 2,385 |
| Mackerel: | | | | | | | | |
| Atlantic . . . . . | 564 | 352 | 11,813 | 2,370 | - | - | 12,377 | 2,722 |
| King . . . . . | 381 | 1,019 | 1,573 | 4,024 | - | - | 1,954 | 5,043 |
| Pacific. . . . . | - | - | 45,514 | 7,498 | - | - | 45,514 | 7,498 |
| Spanish. . . . . | 710 | 537 | 1,212 | 942 | - | - | 1,922 | 1,479 |

See footnotes at end of table.

(Continued)

**COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1988 (1) - Continued**

| Species | Distance caught off U.S. Shores | | | | International waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Menhaden | | | | | | | | |
| Atlantic . . . . . | 305,733 | 32,361 | 54,729 | 2,801 | - | - | 360,462 | 35,162 |
| Gulf . . . . . | 484,483 | 56,303 | 154,238 | 16,956 | - | - | 638,721 | 73,259 |
| Total . . . . . | 790,216 | 88,664 | 208,967 | 19,757 | - | - | 999,183 | 108,421 |
| Mullets. . . . . | 14,806 | 11,218 | - | - | - | - | 14,806 | 11,218 |
| Ocean perch: | | | | | | | | |
| Atlantic . . . . . | 1 | 1 | 1,055 | 1,453 | 10 | 13 | 1,066 | 1,467 |
| Pacific. . . . . | 2,282 | 666 | 3,124 | 1,880 | - | - | 5,406 | 2,546 |
| Pollock: | | | | | | | | |
| Atlantic . . . . . | 24 | 21 | 14,908 | 10,991 | 60 | 59 | 14,992 | 11,071 |
| Alaska . . . . . | 85,538 | 14,287 | 1,311,295 | 197,067 | - | - | 1,396,833 | 211,354 |
| Rockfishes . . . . . | 10,030 | 6,514 | 48,330 | 32,854 | - | - | 58,360 | 39,368 |
| Sablefish. . . . . | 5,611 | 11,281 | 43,206 | 80,512 | - | - | 48,817 | 91,793 |
| Salmon, Pacific: | | | | | | | | |
| Chinook or king. . | 15,455 | 85,046 | 5,261 | 32,505 | - | - | 20,716 | 117,551 |
| Chum or keta . . . | 66,436 | 134,689 | - | - | - | - | 66,436 | 134,689 |
| Pink . . . . . | 80,053 | 127,297 | - | - | - | - | 80,053 | 127,297 |
| Red or sockeye . . | 86,199 | 437,630 | - | - | - | - | 86,199 | 437,630 |
| Silver or coho . . | 20,531 | 89,049 | 1,008 | 4,457 | - | - | 21,539 | 93,506 |
| Total . . . . . | 268,674 | 873,711 | 6,269 | 36,962 | - | - | 274,943 | 910,673 |
| Scup or porgy. . . . | 2,033 | 2,899 | 4,480 | 6,673 | - | - | 6,513 | 9,572 |
| Sea bass: | | | | | | | | |
| Black. . . . . | 233 | 888 | 1,955 | 4,256 | - | - | 2,188 | 5,144 |
| White. . . . . | 21 | 96 | 28 | 122 | - | - | 49 | 218 |
| Sea trout: | | | | | | | | |
| Gray . . . . . | 5,513 | 5,353 | 3,801 | 2,595 | - | - | 9,314 | 7,948 |
| Spotted. . . . . | 1,365 | 3,075 | 38 | 94 | - | - | 1,403 | 3,169 |
| White. . . . . | 136 | 198 | 32 | 31 | - | - | 168 | 229 |
| Sharks: | | | | | | | | |
| Dogfish. . . . . | 1,994 | 575 | 2,574 | 400 | - | - | 4,568 | 975 |
| Other. . . . . | 899 | 1,034 | 5,695 | 7,342 | 28 | 78 | 6,622 | 8,454 |
| Snapper: | | | | | | | | |
| Red. . . . . | 16 | 69 | 1,868 | 9,427 | - | - | 1,884 | 9,496 |
| Other. . . . . | 313 | 1,139 | 2,770 | 10,180 | - | - | 3,083 | 11,319 |
| Striped bass . . . . | 172 | 479 | 13 | 38 | - | - | 185 | 517 |
| Swordfish. . . . . | 15 | 97 | 4,135 | 31,984 | 1,664 | 10,622 | 5,814 | 42,703 |
| Tilefish . . . . . | 13 | 86 | 2,053 | 7,136 | - | - | 2,066 | 7,222 |

See footnotes at end of table.

(Continued)

**COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1988 (1) - Continued**

| Species | Distance caught off U.S. Shores | | | | International waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish - Continued: | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Tuna: | | | | | | | | |
| Albacore . . . . . | 2 | 2 | 4,035 | 7,566 | 4,606 | 8,710 | 8,643 | 16,278 |
| Bigeye . . . . . | 29 | 270 | 1,663 | 12,860 | 780 | 2,019 | 2,472 | 15,149 |
| Bluefin. . . . . | 7 | 21 | 1,323 | 16,877 | 369 | 407 | 1,699 | 17,305 |
| Skipjack . . . . . | (2) | 1 | 2,400 | 5,772 | 133,677 | 143,279 | 136,077 | 149,052 |
| Yellowfin. . . . . | 225 | 885 | 11,558 | 39,353 | 115,357 | 141,964 | 127,140 | 182,202 |
| Unclassified . . . | 44 | 9 | 310 | 537 | - | - | 354 | 546 |
| Total . . . . . | 307 | 1,188 | 21,289 | 82,965 | 254,789 | 296,379 | 276,385 | 380,532 |
| Whiting. . . . . | 264 | 186 | 15,870 | 8,435 | - | - | 16,134 | 8,621 |
| Other marine finfishes . . . . . | 62,471 | 43,948 | 57,053 | 30,907 | 173 | 98 | 119,697 | 74,953 |
| Other freshwater; finfishes . . . . . | 13,271 | 18,534 | - | - | - | - | 13,271 | 18,534 |
| Total fish. . . | 1,440,458 | 1,221,626 | 2,689,018 | 971,417 | 259,709 | 312,472 | 4,389,185 | 2,505,515 |
| Shellfish | | | | | | | | |
| Clams: | | | | | | | | |
| Hard . . . . . | 5,611 | 67,818 | - | - | - | - | 5,611 | 67,818 |
| Ocean quahog . . . | 412 | 1,509 | 20,594 | 13,412 | - | - | 21,006 | 14,921 |
| Soft . . . . . | 3,091 | 18,717 | - | - | - | - | 3,091 | 18,717 |
| Surf . . . . . | 4,873 | 4,622 | 23,951 | 24,561 | - | - | 28,824 | 29,183 |
| Other. . . . . | 1,225 | 4,142 | - | - | - | - | 1,225 | 4,142 |
| Total . . . . . | 15,212 | 96,808 | 44,545 | 37,973 | - | - | 59,757 | 134,781 |
| Crabs: | | | | | | | | |
| Blue, hard . . . . | 99,151 | 84,336 | 33 | 21 | - | - | 99,184 | 84,357 |
| Dungeness. . . . . | 16,323 | 41,484 | 5,195 | 13,287 | - | - | 21,518 | 54,771 |
| King . . . . . | 4,906 | 43,207 | 4,607 | 40,946 | - | - | 9,513 | 84,153 |
| Snow (tanner). . . | 3,936 | 19,191 | 62,436 | 117,861 | - | - | 66,372 | 137,052 |
| Other. . . . . | 3,190 | 5,962 | 6,882 | 17,254 | 10 | 11 | 10,082 | 23,227 |
| Total . . . . . | 127,506 | 194,180 | 79,153 | 189,369 | 10 | 11 | 206,669 | 383,560 |
| Lobsters: | | | | | | | | |
| American . . . . . | 19,009 | 121,181 | 3,039 | 23,896 | 16 | 159 | 22,064 | 145,236 |
| Spiny. . . . . | 841 | 6,689 | 2,409 | 16,341 | - | - | 3,250 | 23,030 |
| Oysters. . . . . | 14,466 | 78,498 | - | - | - | - | 14,466 | 78,498 |

See footnotes at end of table.

(Continued)

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1988 (1) - Continued

| Species | Distance caught off U.S. Shores | | | | International waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Shellfish - Continued | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Scallops: | | | | | | | | |
| Bay. . . . . | 258 | 3,414 | - | - | - | - | 258 | 3,414 |
| Calico . . . . . | - | - | 5,383 | 12,462 | - | - | 5,383 | 12,462 |
| Sea. . . . . | 550 | 4,748 | 13,310 | 123,495 | - | - | 13,860 | 128,243 |
| Shrimp: | | | | | | | | |
| New England. . . . | 285 | 681 | 2,793 | 6,816 | - | - | 3,078 | 7,497 |
| South Atlantic . . | 9,531 | 45,740 | 1,466 | 5,927 | - | - | 10,997 | 51,667 |
| Gulf . . . . . | 58,908 | 185,518 | 43,508 | 228,951 | - | - | 102,416 | 414,469 |
| Pacific. . . . . | 5,002 | 4,997 | 28,588 | 27,404 | - | - | 33,590 | 32,401 |
| Total . . . . . | 73,726 | 236,936 | 76,355 | 269,098 | - | - | 150,081 | 506,034 |
| Squid: | | | | | | | | |
| Atlantic . . . . . | 4,814 | 3,493 | 16,386 | 12,727 | - | - | 21,200 | 16,220 |
| Pacific. . . . . | 18,174 | 3,831 | 18,307 | 3,858 | - | - | 36,481 | 7,689 |
| Other shellfish. . . | 47,045 | 54,743 | 5,129 | 10,643 | - | - | 52,174 | 65,386 |
| Total shellfish et al.. . . | 321,601 | 804,521 | 264,016 | 699,862 | 26 | 170 | 585,643 | 1,504,553 |
| Grand total, 1988 . . . . . | 1,762,059 | 2,026,147 | 2,953,034 | 1,671,279 | 259,735 | 312,642 | 4,974,828 | 4,010,068 |
| Grand total, 1987 (4) . . . . | 1,841,557 | 1,651,965 | 2,819,395 | 1,628,962 | 274,144 | 207,882 | 4,935,067 | 3,556,882 |

(1) Landings are reported in round (live) weight for all items, except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). The National Marine Fisheries Service estimated the distance from shore for Texas landings data collected by Texas Parks and Wildlife Department. Data excludes Mississippi River Drainage Area States.

(2) Includes landings from the Great Lakes and other inland waters.

(3) Less than $500.

(4) For individual species breakout see "Fisheries of the United States, 1987" pages 8-11.

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" tables beginning on page one. Data do not include aquaculture products, except oysters and clams.

SUMMARY OF OYSTER LANDINGS, 1929-88 (1)

| YEAR | NEW ENGLAND | | MIDDLE ATLANTIC | | CHESAPEAKE | | SOUTH ATLANTIC | |
|---|---|---|---|---|---|---|---|---|
| | POUNDS | DOLLARS | POUNDS | DOLLARS | POUNDS | DOLLARS | POUNDS | DOLLARS |
| 1929 (3).. | 5,957,262 | 1,204,383 | 29,213,705 | 5,505,293 | 33,138,285 | 4,524,285 | 6,404,204 | 391,164 |
| 1930..... | 9,431,968 | 1,747,100 | 21,516,320 | 4,076,864 | 36,723,800 | 4,351,917 | 5,895,739 | 322,527 |
| 1931..... | 4,066,363 | 820,487 | 21,546,401 | 2,764,913 | 32,310,800 | 2,784,210 | 4,690,762 | 187,349 |
| 1932..... | 7,386,432 | 1,202,327 | 15,026,476 | 1,763,506 | 27,889,600 | 2,015,435 | 4,600,974 | 137,337 |
| 1933..... | 5,157,000 | 747,000 | 13,933,000 | 1,448,000 | 25,153,000 | 1,726,000 | (4) | (4) |
| 1934..... | (4) | (4) | (4) | (4) | 35,786,000 | 2,303,000 | 5,271,000 | 319,000 |
| 1935..... | 10,004,000 | 1,210,000 | 14,811,000 | 1,728,000 | 29,900,000 | 2,020,000 | (4) | (4) |
| 1936..... | (4) | (4) | (4) | (4) | 30,314,000 | 2,464,000 | 6,384,000 | 446,000 |
| 1937..... | 11,415,400 | 1,550,023 | 14,617,400 | 2,370,548 | 31,715,700 | 2,300,624 | 5,454,200 | 251,207 |
| 1938..... | 8,637,300 | 1,554,150 | 16,144,100 | 2,696,183 | 33,412,300 | 2,369,669 | 3,644,700 | 189,069 |
| 1939..... | 7,805,500 | 1,563,432 | 11,653,900 | 1,778,714 | 36,846,600 | 2,725,917 | 3,333,200 | 160,602 |
| 1940..... | 5,990,200 | 1,051,224 | 13,983,200 | 2,181,905 | 37,457,100 | 3,217,247 | 3,366,600 | 162,378 |
| 1941..... | (4) | (4) | (4) | (4) | 35,439,000 | 4,494,000 | (4) | (4) |
| 1942..... | 2,856,000 | 749,000 | 12,106,000 | 3,435,000 | 28,722,000 | 5,221,000 | (4) | (4) |
| 1943..... | 2,808,000 | 938,000 | 12,677,000 | 4,049,000 | (4) | (4) | (4) | (4) |
| 1944..... | 1,856,000 | 816,000 | 13,125,000 | 6,493,000 | 29,847,000 | 9,060,000 | (4) | (4) |
| 1945..... | 2,478,100 | 1,062,912 | 13,553,300 | 5,351,626 | 32,569,900 | 11,621,078 | 2,821,800 | 644,383 |
| 1946..... | 2,050,000 | 939,000 | (4) | (4) | 33,355,000 | 10,283 | (4) | (4) |
| 1947..... | 2,125,000 | 878,000 | 15,744,000 | 7,469,000 | 33,730,000 | 11,824,000 | (4) | (4) |
| 1948..... | 1,652,000 | 882,000 | 15,790,000 | 8,194,000 | 34,403,000 | 11,785,000 | (4) | (4) |
| 1949..... | 4,003,000 | 1,473,000 | 17,412,000 | 9,072,000 | 31,777,000 | 11,374,000 | (4) | (4) |
| 1950..... | 4,727,600 | 1,681,155 | 18,169,600 | 9,608,735 | 29,953,500 | 11,094,772 | 3,033,500 | 981,961 |
| 1951..... | 1,969,500 | 1,015,623 | 17,410,400 | 9,708,611 | 29,598,200 | 11,968,871 | 3,782,900 | 1,201,951 |
| 1952..... | 2,209,300 | 1,053,905 | 16,767,000 | 9,115,404 | 34,417,600 | 14,876,975 | 4,111,600 | 1,243,680 |
| 1953..... | 1,037,700 | 615,390 | 14,461,600 | 7,344,569 | 36,944,900 | 14,726,665 | 4,021,100 | 1,024,839 |
| 1954..... | 734,700 | 481,172 | 13,375,900 | 7,497,323 | 41,587,800 | 18,860,250 | 3,809,900 | 1,025,626 |
| 1955..... | 618,500 | 490,094 | 9,848,600 | 5,281,607 | 39,227,500 | 17,802,245 | 2,261,100 | 676,983 |
| 1956..... | 505,300 | 437,119 | 8,464,800 | 4,807,370 | 37,064,100 | 18,692,542 | 3,656,400 | 1,049,188 |
| 1957..... | 402,700 | 376,787 | 7,981,600 | 5,026,454 | 34,233,900 | 17,191,786 | 3,068,100 | 883,634 |
| 1958..... | 274,400 | 318,850 | 4,295,900 | 3,379,391 | 37,530,400 | 20,793,964 | 2,650,900 | 765,707 |
| 1959..... | 386,100 | 453,628 | 1,390,900 | 1,256,314 | 33,321,100 | 20,608,422 | 3,517,300 | 1,040,034 |
| 1960..... | 498,400 | 623,345 | 1,153,400 | 1,184,834 | 27,110,100 | 19,309,170 | 4,119,700 | 1,552,278 |
| 1961..... | 452,500 | 524,281 | 1,921,100 | 2,020,686 | 27,500,100 | 21,734,499 | 3,984,500 | 1,779,670 |
| 1962..... | 294,100 | 370,801 | 2,362,900 | 2,562,691 | 19,937,500 | 15,956,201 | 3,848,900 | 1,724,669 |
| 1963..... | 453,000 | 533,034 | 950,300 | 1,156,511 | 18,274,300 | 13,728,271 | 4,837,300 | 2,019,830 |
| 1964..... | 194,400 | 326,178 | 1,355,900 | 1,366,431 | 22,097,900 | 15,805,701 | 3,526,900 | 1,507,982 |
| 1965..... | 341,100 | 652,433 | 756,500 | 1,064,117 | 21,188,500 | 16,696,533 | 4,082,400 | 1,512,531 |
| 1966..... | 408,000 | 848,918 | 916,100 | 1,167,419 | 21,231,300 | 14,542,519 | 3,658,200 | 1,576,230 |
| 1967..... | 322,800 | 745,375 | 1,189,700 | 1,164,851 | 25,797,800 | 17,321,862 | 3,160,000 | 1,351,229 |
| 1968..... | 195,000 | 456,000 | 1,538,000 | 1,492,000 | 22,679,000 | 15,260,000 | 2,965,000 | 1,527,000 |
| 1969..... | 152,000 | 358,000 | 1,322,000 | 1,349,000 | 22,157,000 | 13,995,000 | 1,830,000 | 1,077,000 |
| 1970..... | 190,000 | 403,000 | 1,413,000 | 1,764,000 | 24,668,000 | 15,080,000 | 1,626,000 | 974,000 |
| 1971..... | 190,000 | 388,000 | 1,965,000 | 2,593,000 | 25,557,000 | 16,044,000 | 1,846,000 | 1,037,000 |
| 1972..... | 129,000 | 293,000 | 3,335,000 | 4,249,000 | 24,066,000 | 15,317,000 | 1,868,000 | 1,106,000 |
| 1973..... | 181,000 | 396,000 | 3,181,000 | 4,932,000 | 25,400,000 | 16,766,000 | 1,656,000 | 1,114,000 |
| 1974..... | 644,000 | 1,295,000 | 2,739,000 | 4,939,000 | 25,021,000 | 17,552,000 | 1,841,000 | 1,214,000 |
| 1975..... | 600,000 | 1,190,000 | 3,274,000 | 6,306,000 | 22,640,000 | 18,126,000 | 1,585,000 | 1,049,000 |
| 1976..... | 201,000 | 450,000 | 3,566,000 | 6,461,000 | 20,964,000 | 21,748,000 | 1,704,000 | 1,215,000 |
| 1977..... | 905,000 | 230,000 | 2,412,000 | 4,291,000 | 18,014,000 | 19,934,000 | 1,861,000 | 1,438,000 |
| 1978..... | 1,129,500 | 3,254,842 | 2,414,000 | 4,426,408 | 22,460,200 | 24,865,360 | 2,101,612 | 1,821,519 |
| 1979..... | 265,500 | 958,121 | 3,039,800 | 6,708,871 | 21,685,500 | 26,983,088 | 2,448,029 | 2,375,236 |
| 1980..... | 991,000 | 3,589,784 | 2,542,600 | 5,989,693 | 22,791,100 | 29,323,120 | 2,289,672 | 2,376,798 |
| 1981..... | 1,083,100 | 3,815,450 | 2,408,400 | 7,057,722 | 21,606,200 | 29,296,875 | 2,141,709 | 2,264,784 |
| 1982..... | 1,126,100 | 4,814,114 | 2,360,400 | 8,239,321 | 17,524,700 | 25,768,326 | 2,659,460 | 2,312,578 |
| 1983..... | 1,068,200 | 4,659,756 | 2,215,100 | 6,128,998 | 11,637,500 | 19,833,603 | 2,620,196 | 2,314,872 |
| 1984..... | 1,961,700 | 8,903,175 | 1,614,400 | 5,257,527 | 12,364,000 | 26,201,124 | 2,499,049 | 2,636,833 |
| 1985..... | 952,500 | 4,804,213 | 631,300 | 2,363,587 | 13,121,518 | 22,796,898 | 1,870,969 | 2,478,532 |
| 1986..... | 968,000 | 6,939,662 | 369,800 | 1,735,343 | 13,742,039 | 29,122,608 | 1,519,546 | 2,923,004 |
| 1987..... | 876,000 | 4,917,000 | 189,000 | 1,140,000 | 8,738,000 | 22,630,000 | 1,774,000 | 3,603,000 |
| 1988..... | 945,000 | 4,673,000 | 324,000 | 1,752,000 | 4,987,000 | 14,161,000 | 1,391,000 | 3,448,000 |

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED)

SUMMARY OF OYSTER LANDINGS, 1929-88 (1) - CONTINUED

| YEAR | GULF | | PACIFIC COAST (2) | | TOTAL | |
|---|---|---|---|---|---|---|
| | POUNDS | DOLLARS | POUNDS | DOLLARS | POUNDS | DOLLARS |
| 1929 (3)..... | 14,604,653 | 1,280,976 | 745,560 | 417,976 | 90,063,669 | 13,324,077 |
| 1930..... | 12,687,737 | 1,093,580 | 618,869 | 372,749 | 86,874,433 | 11,964,737 |
| 1931..... | 10,184,698 | 607,031 | 1,411,458 | 361,348 | 74,210,482 | 7,525,338 |
| 1932..... | 11,149,036 | 574,095 | 2,414,851 | 281,426 | 68,467,369 | 5,974,126 |
| 1933..... | (4) | (4) | 3,129,000 | 330,000 | 47,372,000 | 4,251,000 |
| 1934..... | 13,556,000 | 822,000 | 5,376,000 | 585,000 | 59,989,000 | 4,029,000 |
| 1935..... | (4) | (4) | 5,592,338 | 683,000 | 60,307,338 | 5,641,000 |
| 1936..... | 14,246,000 | 995,000 | 6,754,000 | 690,000 | 57,698,000 | 4,595,000 |
| 1937..... | 24,184,200 | 1,443,504 | 8,239,900 | 787,548 | 95,626,800 | 8,703,454 |
| 1938..... | 16,036,000 | 880,788 | 9,057,400 | 767,873 | 86,931,800 | 8,457,732 |
| 1939..... | 24,379,500 | 1,279,979 | 8,987,800 | 681,689 | 93,006,500 | 8,190,333 |
| 1940..... | 17,584,100 | 1,100,372 | 11,000,800 | 753,826 | 89,382,000 | 8,466,952 |
| 1941..... | (4) | (4) | 12,591,000 | 1,118,000 | 48,030,000 | 5,612,000 |
| 1942..... | (4) | (4) | 10,780,000 | 1,137,000 | 54,464,000 | 10,542,000 |
| 1943..... | (4) | (4) | 7,982,000 | 3,280,000 | 23,467,000 | 8,267,000 |
| 1944..... | (4) | (4) | 8,878,000 | 1,656,000 | 53,706,000 | 18,025,000 |
| 1945..... | 13,969,600 | 4,601,243 | 10,234,600 | 1,863,928 | 75,627,300 | 25,145,170 |
| 1946..... | (4) | (4) | 13,552,000 | 2,505,000 | 48,957,000 | 3,454,283 |
| 1947..... | (4) | (4) | 11,485,000 | 2,149,000 | 63,084,000 | 22,320,000 |
| 1948..... | (4) | (4) | 9,764,000 | 1,974,000 | 61,609,000 | 22,835,000 |
| 1949..... | 13,211,000 | 4,839,000 | 8,374,000 | 2,132,000 | 74,777,000 | 28,890,000 |
| 1950..... | 12,291,500 | 4,009,217 | 8,239,200 | 2,220,671 | 76,414,900 | 29,596,511 |
| 1951..... | 11,519,000 | 3,181,228 | 8,709,600 | 1,993,484 | 72,989,600 | 29,069,768 |
| 1952..... | 14,636,600 | 4,016,749 | 10,100,243 | 2,032,243 | 82,242,343 | 32,338,956 |
| 1953..... | 12,835,000 | 3,562,036 | 10,417,400 | 1,777,601 | 79,717,700 | 29,051,100 |
| 1954..... | 11,443,500 | 3,055,828 | 10,969,500 | 1,874,525 | 81,921,300 | 32,794,724 |
| 1955..... | 13,880,900 | 3,740,393 | 11,681,400 | 2,483,151 | 77,518,000 | 30,474,473 |
| 1956..... | 13,514,100 | 3,077,162 | 11,927,500 | 2,822,538 | 75,132,200 | 30,885,919 |
| 1957..... | 14,306,000 | 3,691,401 | 11,661,900 | 2,235,202 | 71,654,200 | 29,405,264 |
| 1958..... | 10,407,400 | 2,996,594 | 11,236,000 | 2,186,851 | 66,395,000 | 30,441,357 |
| 1959..... | 13,722,300 | 3,806,707 | 12,371,700 | 2,318,994 | 64,709,400 | 29,484,099 |
| 1960..... | 16,097,900 | 4,293,769 | 11,027,900 | 2,276,707 | 60,007,400 | 29,240,103 |
| 1961..... | 18,238,700 | 5,124,827 | 10,206,600 | 2,020,224 | 62,303,500 | 33,204,187 |
| 1962..... | 18,839,500 | 5,898,453 | 10,753,600 | 2,626,468 | 56,036,500 | 29,139,283 |
| 1963..... | 24,138,100 | 7,186,320 | 9,789,600 | 2,482,030 | 58,442,600 | 27,105,996 |
| 1964..... | 23,384,800 | 6,272,737 | 9,972,900 | 2,644,606 | 60,532,800 | 27,923,635 |
| 1965..... | 19,154,700 | 5,711,158 | 9,163,200 | 2,228,382 | 54,686,400 | 27,865,154 |
| 1966..... | 17,182,000 | 6,493,442 | 7,826,800 | 2,744,760 | 51,222,400 | 27,373,288 |
| 1967..... | 21,747,600 | 8,485,234 | 7,738,800 | 3,171,331 | 59,956,700 | 32,239,882 |
| 1968..... | 26,739,000 | 10,274,000 | 7,770,000 | 3,001,000 | 61,886,000 | 32,010,000 |
| 1969..... | 19,764,400 | 8,145,105 | 6,973,000 | 2,612,000 | 52,198,400 | 27,536,105 |
| 1970..... | 17,714,300 | 7,541,106 | 7,991,000 | 3,722,000 | 53,602,300 | 29,484,106 |
| 1971..... | 20,264,300 | 9,207,384 | 8,114,000 | 4,758,000 | 57,936,300 | 34,027,384 |
| 1972..... | 18,260,500 | 9,755,871 | 8,400,000 | 6,345,000 | 56,058,500 | 37,065,871 |
| 1973..... | 14,914,000 | 9,713,000 | 6,599,000 | 6,066,000 | 51,931,000 | 38,987,000 |
| 1974..... | 14,878,000 | 9,797,000 | 5,053,000 | 6,048,000 | 50,176,000 | 40,845,000 |
| 1975..... | 19,295,000 | 10,860,000 | 5,833,000 | 7,454,000 | 53,227,000 | 44,985,000 |
| 1976..... | 21,569,000 | 16,127,000 | 6,391,000 | 8,362,000 | 54,395,000 | 54,363,000 |
| 1977..... | 19,670,000 | 19,027,000 | 7,226,000 | 10,648,000 | 50,088,000 | 55,568,000 |
| 1978..... | 18,891,422 | 20,449,675 | 7,103,400 | 5,869,304 | 54,100,134 | 60,687,108 |
| 1979..... | 15,460,599 | 17,837,617 | 7,460,900 | 6,878,966 | 50,360,328 | 61,741,899 |
| 1980..... | 15,517,424 | 20,139,154 | 6,693,500 | 5,608,450 | 50,825,296 | 67,026,999 |
| 1981..... | 19,366,484 | 27,706,000 | 6,006,900 | 4,540,186 | 52,612,793 | 74,681,017 |
| 1982..... | 25,149,562 | 31,553,748 | 7,369,400 | 6,176,524 | 56,189,622 | 78,864,611 |
| 1983..... | 29,165,296 | 37,557,336 | 7,341,800 | 6,018,393 | 54,048,092 | 76,512,958 |
| 1984..... | 27,595,759 | 43,318,694 | 8,738,700 | 8,561,777 | 54,773,608 | 94,879,130 |
| 1985..... | 26,509,032 | 40,891,738 | 7,795,600 | 8,820,501 | 50,880,919 | 82,155,469 |
| 1986..... | 22,539,618 | 42,059,316 | 9,629,300 | 13,057,904 | 48,768,303 | 95,837,837 |
| 1987..... | 18,380,000 | 46,035,000 | 9,850,000 | 14,098,000 | 39,807,000 | 92,423,000 |
| 1988..... | 16,269,000 | 39,911,000 | 7,976,000 | 14,553,000 | 31,892,000 | 78,498,000 |

(1) DATA FOR 1978-88 ARE PRELIMINARY AND MAY CHANGE.
(2) DATA EXCLUDES ALASKA.
(3) THE LANDINGS OF OYSTERS ON THE EAST COAST OF FLORIDA HAVE BEEN INCLUDED WITH THE GULF DATA.
(4) DATA NOT AVAILABLE.
NOTE:--TOTAL FOR EARLIER YEARS INCLUDE ONLY AVAILABLE DATA AND THEREFORE MAY NOT BE COMPLETE.

SUMMARY OF OYSTER LANDINGS, BY SPECIES, 1929-88 (1)
(THOUSAND POUNDS)

| YEAR | EASTERN | | | | |
|---|---|---|---|---|---|
| | NEW ENGLAND | MIDDLE ATLANTIC | CHESAPEAKE | SOUTH ATLANTIC | GULF |
| | QUANTITY | QUANTITY | QUANTITY | QUANTITY | QUANTITY |
| 1929 | 5,957 | 29,214 | 33,138 | (2) 6,404 | (2) 14,605 |
| 1930 | 9,432 | 21,516 | 36,724 | 5,895 | 12,688 |
| 1931 | 4,066 | 21,546 | 32,311 | 4,691 | 10,185 |
| 1932 | 7,386 | 15,026 | 27,890 | 4,601 | 11,149 |
| 1933 | 5,157 | 13,933 | 25,153 | (3) | (3) |
| 1934 | (3) | (3) | 35,786 | 5,271 | 13,556 |
| 1935 | 10,004 | 14,811 | 29,900 | (3) | (3) |
| 1936 | (3) | (3) | 30,314 | 6,384 | 14,246 |
| 1937 | 11,416 | 14,617 | 31,716 | 5,454 | 24,184 |
| 1938 | 8,638 | 16,144 | 33,412 | 3,645 | 16,036 |
| 1939 | 7,805 | 11,653 | 36,847 | 3,333 | 24,380 |
| 1940 | 5,991 | 13,984 | 37,457 | 3,367 | 17,584 |
| 1941 | (3) | (3) | 35,439 | (3) | (3) |
| 1942 | 2,856 | 12,106 | 28,722 | (3) | (3) |
| 1943 | 2,808 | 12,677 | (3) | (3) | (3) |
| 1944 | 1,856 | 13,125 | 29,847 | (3) | (3) |
| 1945 | 2,479 | 13,553 | 32,570 | 2,822 | 13,970 |
| 1946 | 2,050 | (3) | 33,355 | (3) | (3) |
| 1947 | 2,125 | 15,744 | 33,730 | (3) | (3) |
| 1948 | 1,652 | 15,790 | 34,403 | (3) | (3) |
| 1949 | 4,003 | 17,412 | 31,777 | (3) | 13,121 |
| 1950 | 4,727 | 18,170 | 29,954 | 3,033 | 12,292 |
| 1951 | 1,970 | 17,410 | 29,598 | 3,783 | 11,519 |
| 1952 | 2,209 | 16,767 | 34,418 | 4,111 | 14,637 |
| 1953 | 1,038 | 14,462 | 36,946 | 4,019 | 12,836 |
| 1954 | 735 | 13,377 | 41,587 | 3,811 | 11,443 |
| 1955 | 619 | 9,848 | 39,227 | 2,260 | 13,881 |
| 1956 | 506 | 8,466 | 37,064 | 3,656 | 13,513 |
| 1957 | 405 | 7,981 | 34,234 | 3,069 | 14,307 |
| 1958 | 276 | 4,296 | 37,530 | 2,651 | 10,408 |
| 1959 | 387 | 1,392 | 33,322 | 3,516 | 13,721 |
| 1960 | 498 | 1,153 | 27,110 | 4,120 | 16,098 |
| 1961 | 453 | 1,921 | 27,500 | 3,984 | 18,240 |
| 1962 | 294 | 2,363 | 19,938 | 3,850 | 18,840 |
| 1963 | 452 | 951 | 18,274 | 4,837 | 24,139 |
| 1964 | 195 | 1,356 | 22,098 | 3,527 | 23,385 |
| 1965 | 340 | 757 | 21,188 | 4,082 | 19,155 |
| 1966 | 408 | 916 | 21,232 | 3,657 | 17,182 |
| 1967 | 323 | 1,190 | 25,798 | 3,160 | 21,748 |
| 1968 | 195 | 1,538 | 22,679 | 2,965 | 26,739 |
| 1969 | 152 | 1,322 | 22,157 | 1,830 | 19,764 |
| 1970 | 190 | 1,413 | 24,668 | 1,626 | 17,714 |
| 1971 | 190 | 1,965 | 25,557 | 1,846 | 20,264 |
| 1972 | 129 | 3,335 | 24,066 | 1,868 | 18,260 |
| 1973 | 181 | 3,181 | 25,400 | 1,656 | 14,914 |
| 1974 | 644 | 2,739 | 25,021 | 1,841 | 14,878 |
| 1975 | 600 | 3,274 | 22,640 | 1,585 | 19,295 |
| 1976 | 201 | 3,566 | 20,964 | 1,704 | 21,569 |
| 1977 | 905 | 2,412 | 18,014 | 1,861 | 19,670 |
| 1978 | 1,130 | 2,414 | 22,460 | 2,102 | 18,891 |
| 1979 | 266 | 3,040 | 21,686 | 2,448 | 15,461 |
| 1980 | 991 | 2,543 | 22,791 | 2,290 | 15,517 |
| 1981 | 1,083 | 2,408 | 21,606 | 2,142 | 19,366 |
| 1982 | 1,126 | 2,360 | 17,525 | 2,659 | 25,150 |
| 1983 | 1,068 | 2,215 | 11,638 | 2,620 | 29,165 |
| 1984 | 1,962 | 1,614 | 12,364 | 2,499 | 27,596 |
| 1985 | 952 | 631 | 13,122 | 1,871 | 26,509 |
| 1986 | 968 | 370 | 13,742 | 1,520 | 22,540 |
| 1987 | 876 | 189 | 8,738 | 1,774 | 18,380 |
| 1988 | 945 | 324 | 4,987 | 1,391 | 16,269 |

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

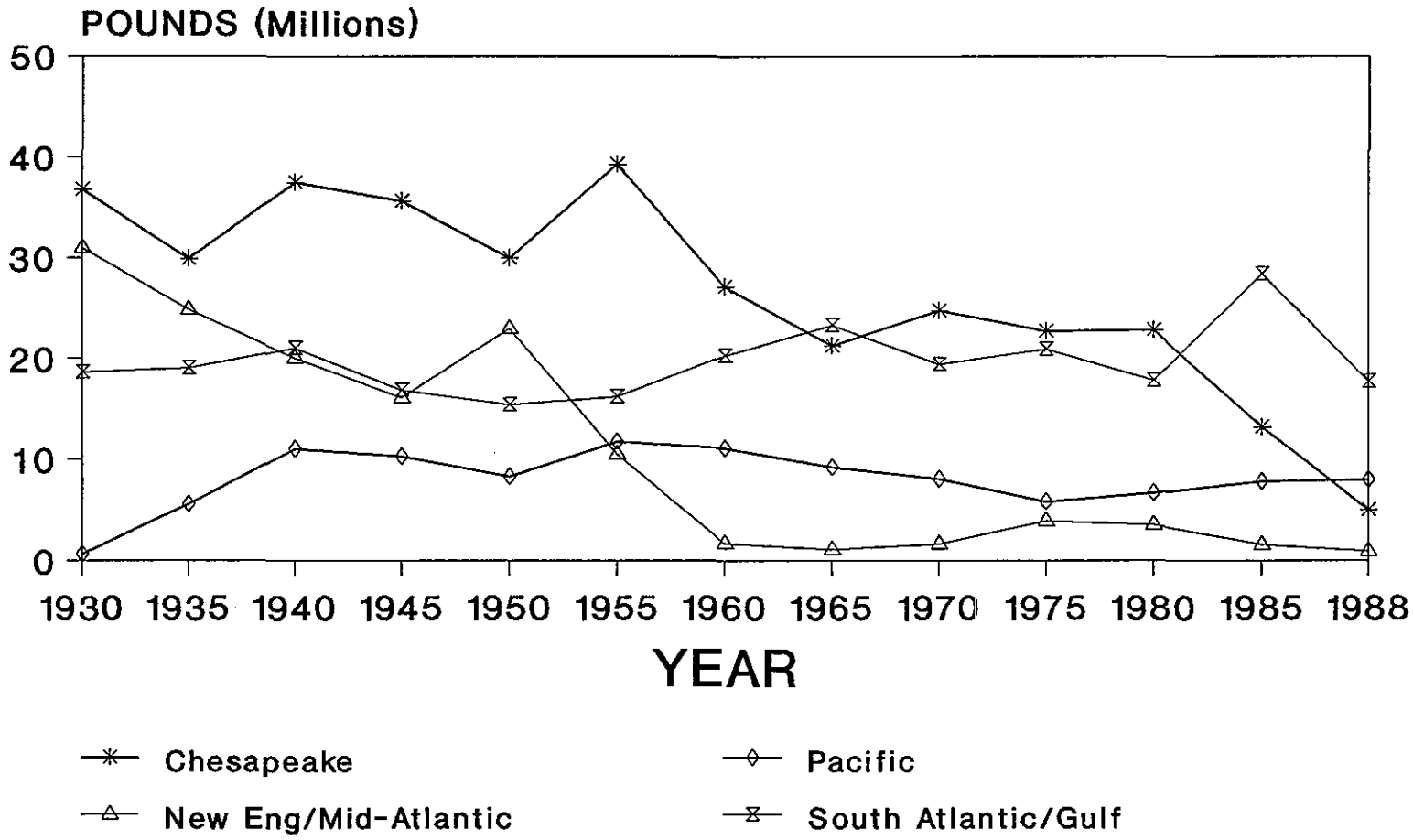
SUMMARY OF OYSTER LANDINGS, BY SPECIES, 1929-88 (1) - CONTINUED
(THOUSAND POUNDS)

| YEAR | EASTERN - CONTINUED | | PACIFIC | WESTERN | GRAND TOTAL |
|---|---|---|---|---|---|
| | WASHINGTON AND CALIFORNIA | TOTAL | WASHINGTON OREGON, AND CALIFORNIA | WASHINGTON OREGON, AND CALIFORNIA | |
| | QUANTITY | QUANTITY | QUANTITY | QUANTITY | QUANTITY |
| 1929..... | 53 | 89,371 | 66 | 627 | 90,064 |
| 1930..... | 75 | 86,330 | 228 | 316 | 86,874 |
| 1931..... | 172 | 72,971 | 1,034 | 205 | 74,210 |
| 1932..... | 42 | 66,094 | 2,103 | 270 | 68,467 |
| 1933..... | 60 | (3) | 2,843 | 226 | 47,372 |
| 1934..... | 90 | (3) | 4,956 | 330 | 59,989 |
| 1935..... | 65 | (3) | 5,527 | 338 | 60,307 |
| 1936..... | 60 | (3) | 6,377 | 317 | 57,698 |
| 1937..... | 68 | 87,455 | 7,891 | 281 | 95,627 |
| 1938..... | 48 | 77,923 | 8,734 | 275 | 86,932 |
| 1939..... | 24 | 84,042 | 8,717 | 247 | 93,005 |
| 1940..... | 18 | 78,400 | 10,756 | 227 | 89,383 |
| 1941..... | 18 | (3) | 12,313 | 260 | 48,030 |
| 1942..... | 12 | (3) | 10,526 | 240 | 54,464 |
| 1943..... | 12 | (3) | 7,791 | 175 | 23,467 |
| 1944..... | 14 | (3) | 8,700 | 159 | 53,706 |
| 1945..... | 9 | 65,403 | 10,074 | 151 | 75,628 |
| 1946..... | 12 | (3) | 13,371 | 169 | 48,957 |
| 1947..... | 19 | (3) | 11,320 | 146 | 63,084 |
| 1948..... | 46 | (3) | 9,564 | 154 | 61,609 |
| 1949..... | 7 | (3) | 8,164 | 203 | 74,777 |
| 1950..... | 16 | 68,192 | 8,080 | 143 | 76,415 |
| 1951..... | 25 | 64,305 | 8,597 | 88 | 72,990 |
| 1952..... | 23 | 72,165 | 9,957 | 120 | 82,242 |
| 1953..... | 18 | 69,319 | 10,283 | 117 | 79,719 |
| 1954..... | 18 | 70,971 | 10,855 | 96 | 81,922 |
| 1955..... | 20 | 65,855 | 11,602 | 58 | 77,515 |
| 1956..... | 20 | 63,225 | 11,881 | 27 | 75,133 |
| 1957..... | 17 | 60,013 | 11,614 | 31 | 71,658 |
| 1958..... | 4 | 55,165 | 11,197 | 34 | 66,396 |
| 1959..... | 1 | 52,339 | 12,328 | 43 | 64,710 |
| 1960..... | (4) | 48,982 | 10,983 | 45 | 60,010 |
| 1961..... | 15 | 52,113 | 10,154 | 38 | 62,305 |
| 1962..... | 14 | 45,297 | 10,714 | 26 | 56,037 |
| 1963..... | 14 | 48,667 | 9,746 | 31 | 58,444 |
| 1964..... | 5 | 50,566 | 9,934 | 34 | 60,534 |
| 1965..... | 8 | 45,531 | 9,115 | 40 | 54,686 |
| 1966..... | 13 | 43,409 | 7,780 | 35 | 51,224 |
| 1967..... | 13 | 52,232 | 7,682 | 44 | 59,958 |
| 1968..... | 16 | 54,132 | 7,696 | 58 | 61,886 |
| 1969..... | 17 | 45,243 | 6,916 | 40 | 52,199 |
| 1970..... | 17 | 45,628 | 7,915 | 59 | 53,602 |
| 1971..... | 14 | 49,838 | 8,048 | 52 | 57,938 |
| 1972..... | 9 | 47,667 | 8,362 | 29 | 56,058 |
| 1973..... | 1 | 45,333 | 6,576 | 22 | 51,931 |
| 1974..... | 2 | 45,125 | 5,030 | 21 | |
| 1975..... | 4 | 47,398 | 5,807 | 22 | 53,227 |
| 1976..... | 6 | 48,010 | 6,354 | 31 | 54,395 |
| 1977..... | 4 | 42,866 | 7,209 | 13 | 50,088 |
| 1978..... | (5) | 46,997 | 7,103 | (5) | 54,100 |
| 1979..... | (5) | 42,901 | 7,461 | (5) | 50,362 |
| 1980..... | (5) | 44,132 | 6,694 | (5) | 50,826 |
| 1981..... | (5) | 46,605 | 6,007 | (5) | 52,612 |
| 1982..... | (5) | 48,820 | 7,369 | (5) | 56,189 |
| 1983..... | (5) | 46,706 | 7,342 | (5) | 54,048 |
| 1984..... | (5) | 46,035 | 8,739 | (5) | 54,774 |
| 1985..... | (5) | 43,085 | 7,796 | (5) | 50,881 |
| 1986..... | (5) | 39,140 | 9,629 | (5) | 48,769 |
| 1987..... | (5) | 29,957 | 9,850 | (5) | 39,807 |
| 1988..... | (5) | 23,916 | 7,976 | (5) | 31,892 |

(1) DATA FOR 1978-88 ARE PRELIMINARY AND MAY CHANGE. (2) THE LANDINGS OF OYSTERS ON THE EAST COAST OF FLORIDA HAVE BEEN INCLUDED WITH THE GULF DATA. (3) DATA NOT AVAILABLE. (4) LESS THAN 500 POUNDS. (5) DATA HAS BEEN INCLUDED WITH PACIFIC OYSTERS.

NOTE:--TOTALS MAY NOT MATCH "SUMMARY OF OYSTER LANDINGS, BY REGIONS, 1929-88" DUE TO ROUNDING. DATA EXCLUDES ALASKA.

# HISTORICAL OYSTER LANDINGS, BY REGIONS
## 1930 - 1988



JOINT VENTURE CATCHES BY U.S.-FLAG VESSELS, BY SPECIES, 1981-88

| SPECIES | 1981 | | 1982 | | 1983 | | 1984 | |
|---|---|---|---|---|---|---|---|---|
| | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Alewives | - | - | - | - | - | - | 9 | 1 |
| Atka mackerel | 1,633 | 216 | 12,475 | 1,926 | 11,302 | 1,514 | 36,493 | 5,632 |
| Cod | 9,277 | 1,943 | 13,786 | 3,044 | 16,749 | 3,474 | 38,512 | 8,546 |
| Flounders | 21,980 | 3,391 | 26,649 | 3,997 | 36,958 | 5,287 | 54,372 | 7,605 |
| Hake, Pacific (whiting) | - | - | (1) | (1) | (1) | (1) | (1) | (1) |
| Ocean perch | - | - | 3 | 1 | 2,114 | 616 | 2,313 | 689 |
| Mackerel, Atlantic | - | - | (1) | (1) | (1) | (1) | 1,423 | 220 |
| Pollock, Alaska | 58,950 | 8,448 | 128,886 | 15,954 | 283,104 | 26,083 | 444,256 | 41,591 |
| Rockfishes | 7 | 1 | 30 | 7 | 311 | 94 | 346 | 105 |
| Sablefish | 180 | 26 | 124 | 4 | 363 | 141 | 871 | 396 |
| Whiting | - | - | (1) | (1) | (1) | (1) | (1) | (1) |
| Squid: | | | | | | | | |
| Illex | (1) | (1) | (1) | (1) | 8,344 | 1,840 | 6,010 | 2,000 |
| Loligo | (1) | (1) | (1) | (1) | 2,332 | 1,646 | 760 | 395 |
| Other fish (2) | 47,598 | 6,980 | 72,691 | 11,468 | 73,371 | 10,555 | 79,192 | 11,862 |
| Total | 139,625 | 21,005 | 254,644 | 36,401 | 434,948 | 51,250 | 664,557 | 79,042 |

| SPECIES | 1985 | | 1986 | | 1987 | | 1988 | |
|---|---|---|---|---|---|---|---|---|
| | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Alewives | - | - | (1) | (1) | 22 | (3) | - | - |
| Atka mackerel | 39,938 | 6,109 | 31,991 | 4,828 | 30,030 | 4,775 | 19,619 | 3,571 |
| Cod | 36,373 | 7,799 | 66,015 | 14,449 | 59,521 | 15,334 | 111,526 | 30,429 |
| Flounders | 179,663 | 24,833 | 215,878 | 28,847 | 224,250 | 33,272 | 330,118 | 53,763 |
| Hake, Pacific (whiting) | (1) | (1) | 81,639 | 8,736 | 105,997 | 11,653 | 135,781 | 14,660 |
| Ocean perch | 281 | 56 | 273 | 72 | 556 | 173 | - | - |
| Mackerel, Atlantic | 3,788 | 584 | (1) | (1) | 8,012 | 1,058 | 5,685 | 760 |
| Pollock, Alaska | 614,337 | 59,730 | 904,111 | 95,294 | 1,057,315 | 134,302 | 826,564 | 116,102 |
| Rockfishes | 70 | 14 | 215 | 57 | 320 | 100 | 2,103 | 705 |
| Sablefish | 94 | 30 | 434 | 137 | 123 | 37 | 51 | 14 |
| Whiting | - | - | 65 | 9 | 5 | (3) | - | - |
| Squid: | | | | | | | | |
| Illex | 2,540 | 595 | (1) | (1) | 3,140 | 628 | (1) | (1) |
| Loligo | 1,082 | 599 | (1) | (1) | 993 | 745 | - | - |
| Other fish (2) | 33,060 | 3,971 | 9,766 | 2,470 | 510 | 56 | 20,738 | 1,086 |
| Total | 911,226 | 104,320 | 1,310,387 | 154,899 | 1,490,794 | 202,133 | 1,452,185 | 221,090 |

(1) Confidential data.
(2) Includes alewives, Atlantic mackerel, butterfish, Pacific and red hakes, menhaden, sea herring, whiting, squid, and other miscellaneous fish unless shown separately.
(3) Less than $500.

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

Atlantic and Gulf, 1979 through 1988
Pacific, mid-1979 through 1988
Western Pacific, 1979 through 1981
Caribbean, 1979, 1981

Preliminary estimates of catch and trips from the MRFSS for the Atlantic, Gulf, and Pacific coast for 1988 are presented in the tables below. Summary graphs for 1979-1988 catch and trips are also shown. The survey is being conducted in 1989 along the Atlantic, Gulf, and Pacific coasts.

These survey 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.

**DATA TABLES.** 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, and inland (sounds, river, bays). However, ocean data for the Gulf coast of Florida are reported as 10 miles or less from land and more than 10 miles from land.

The fishing modes are: shore (man-made structures and beach/bank from previous surveys), party/charter boat, and private/rental boat. However, 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 1988 survey did not include Texas or January and February period for Atlantic coast states north of North Carolina. 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 later this year.

**PRELIMINARY 1988 MRFSS DATA.** The U.S. marine recreational finfish catch in 1988 (excluding Alaska, Hawaii, and Pacific coast salmon) was an estimated 372.0 million fish. These fish weighed approximately 612.8 million pounds and were taken on an estimated 79.7 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 of species used for food in 1988.

The Atlantic and Gulf coasts accounted for approximately 86 percent of the total U.S. marine recreational finfish catch by number. Eighty-four percent of the estimated U.S. trips were made on the Atlantic and Gulf coasts.

Approximately 17 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., red snapper) over 70 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 9 percent of the total.

Atlantic and Gulf. In terms of number of fish, spotted seatrout was the most frequently caught species on the Atlantic and Gulf coasts in 1988. Other frequently caught species in 1988 were summer flounder, Atlantic croaker and bluefish. Top-ranked species in each subregion in 1988 were scup in the North Atlantic, summer flounder in the Mid-Atlantic, spot in the South Atlantic, and spotted seatrout in the Gulf of Mexico. The Gulf (40 percent) and Middle Atlantic (32 percent) subregions accounted for the highest numbers of Atlantic and Gulf coast fishes.

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

Seventy-one percent of the Atlantic and Gulf coast catches was taken in the private/rental boat mode in 1988. However, other modes were important for particular species such as king mackerel from the charter boat mode and kingfishes from the shore mode.

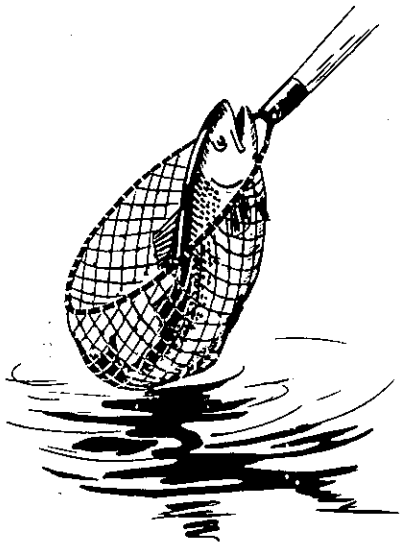
Coastal residents accounted for 73 percent of the Atlantic and Gulf trips made in 1988. Non-residents accounted for an additional 22 percent of the trips. Total trips in the South Atlantic exceeded all other subregions. This distribution of trips was similar to previous years.

Pacific. The catch in number of Pacific mackerel was the highest of any species on the Pacific coast in 1988. Top-ranked species groups in each subregion were Pacific mackerel in Southern California, rockfishes in Northern California and Washington, and black rockfish in Oregon. Southern California accounted for 56 percent of the Pacific coast catch in number.

The ocean 3 miles or less from shore area had the highest catch in number (49 percent) on the Pacific coast in 1988. The Pacific coast portion of the catch in the ocean more than 3 miles from shore (21 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 50 percent for private/rental boats, 27 percent for shore, and 23 percent for party/charter boats.

The percentage of trips by coastal residents (89 percent) was higher on the Pacific coast than the Atlantic and Gulf coasts (73 percent). Forty-eight percent of the Pacific coast trips in 1988 were in the Southern California subregion. Considering that an additional 32 percent of the trips were made in the Northern California subregion, 80 percent of the non-salmon Pacific coast trips in 1988 were made in California.



ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION, ATLANTIC AND GULF COASTS, JANUARY 1988 - DECEMBER 1988

| SPECIES GROUP | NORTH ATLANTIC | MID-ATLANTIC | SOUTH ATLANTIC | GULF OF MEXICO | TOTAL |
|---|---|---|---|---|---|
| | THOUSANDS | | | | |
| HERRINGS | 388 | 1,250 | 808 | 5,754 | 8,201 |
| SALTWATER CATFISHES | * | 40 | 2,582 | 18,474 | 21,096 |
| BLACK SEA BASS | 331 | 10,241 | 2,994 | 5,138 | 18,704 |
| BLUEFISH | 2,996 | 9,215 | 3,567 | 1,081 | 16,858 |
| RED SNAPPER | * | * | 276 | 770 | 1,046 |
| SCUP | 6,620 | 2,672 | | * | 9,293 |
| PINFISH | * | * | 3,83$\bar{5}$ | 10,011 | 13,846 |
| SHEEPSHEAD | * | | 1,041 | 3,553 | 4,596 |
| SPOTTED SEATROUT | * | 63$\bar{4}$ | 2,506 | 20,360 | 23,500 |
| WEAKFISH | | 7,763 | 682 | | 8,447 |
| SAND SEATROUT | $\bar{*}$ | * | | 2,73$\bar{2}$ | 2,734 |
| SPOT | * | 5,900 | 6,39$\bar{1}$ | 161 | 12,451 |
| KINGFISHES | * | 348 | 3,234 | 1,449 | 5,031 |
| ATLANTIC CROAKER | * | 9,324 | 4,301 | 6,684 | 20,309 |
| RED DRUM | * | | 1,293 | 4,995 | 6,296 |
| MULLETS | * | 4$\bar{3}$ | 2,856 | 3,350 | 6,250 |
| KING MACKEREL | * | | 619 | 269 | 908 |
| SUMMER FLOUNDER | 707 | 18,84$\bar{2}$ | 1,357 | * | 20,906 |
| WINTER FLOUNDER | 3,497 | 10,734 | * | * | 14,231 |
| OTHER FISHES | 16,819 | 25,001 | 19,366 | 44,932 | 106,118 |
| TOTAL | 31,360 | 102,036 | 57,710 | 129,716 | 320,822 |

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

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION, PACIFIC COAST, JANUARY 1988 - DECEMBER 1988

| SPECIES GROUP | SOUTHERN CALIFORNIA | NORTHERN CALIFORNIA | OREGON | WASHINGTON | TOTAL |
|---|---|---|---|---|---|
| | THOUSANDS | | | | |
| PACIFIC HERRING | * | * | 219 | 222 | 442 |
| SURF SMELT | * | 241 | 272 | 1,104 | 1,616 |
| SMELTS, OTHER | | | | | 53 |
| WALLEYE POLLOCK | $\bar{*}$ | $\bar{*}$ | $\bar{*}$ | 35$\bar{7}$ | 357 |
| JACKSMELT | 595 | 339 | | * | 935 |
| KELP BASS | 2,163 | | $\bar{*}$ | * | 2,163 |
| BARRED SAND BASS | 4,222 | $\bar{*}$ | * | * | 4,222 |
| WHITE CROAKER | 2,273 | 1,046 | * | * | 3,319 |
| QUEENFISH | 677 | | * | * | 679 |
| WALLEYE SURFPERCH | 244 | 16$\bar{1}$ | 33 | _ | 438 |
| REDTAIL SURFPERCH | * | 143 | 43 | | 207 |
| BARRED SURFPERCH | 214 | 55 | * | $\bar{*}$ | 269 |
| PACIFIC BONITO | 920 | * | * | * | 920 |
| PACIFIC MACKEREL | 5,419 | 76 | * | | 5,495 |
| BLACK ROCKFISH | | 432 | 488 | 16$\bar{5}$ | 1,086 |
| BLUE ROCKFISH | 23$\bar{6}$ | 903 | 49 | _ | 1,208 |
| BOCCACIO | 1,174 | 325 | | | 1,499 |
| OLIVE ROCKFISH | 151 | 43 | $\bar{*}$ | $\bar{*}$ | 194 |
| ROCKFISHES, OTHER | 3,176 | 3,732 | 165 | 1,192 | 8,265 |
| OTHER FISHES | 7,390 | 5,871 | 1,097 | 3,487 | 17,846 |
| TOTAL | 28,878 | 13,391 | 2,373 | 6,573 | 51,215 |

NOTE: AN UNDERSCORE (_) 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, JANUARY 1988 - DECEMBER 1988

| SPECIES GROUP | OCEAN 3 MI OR LESS | OCEAN MORE THAN 3 MI | OCEAN 0-10 MI | OCEAN OVER 10 MI | INLAND | ALL AREAS |
|---|---|---|---|---|---|---|
| | THOUSANDS | | | | | |
| HERRINGS | 827 | 82 | 1,820 | 41 | 5,432 | 8,201 |
| SALTWATER CATFISHES | 4,836 | 867 | 2,350 | 448 | 12,596 | 21,096 |
| BLACK SEA BASS | 2,832 | 5,511 | 2,341 | 2,184 | 5,836 | 18,704 |
| BLUEFISH | 5,526 | 3,352 | 613 | 95 | 7,273 | 16,858 |
| RED SNAPPER | 106 | 522 | 54 | 231 | 133 | 1,046 |
| SCUP | 2,436 | 613 | * | * | 6,244 | 9,293 |
| PINFISH | 1,374 | 216 | 4,827 | 424 | 7,004 | 13,846 |
| SHEEPSHEAD | 758 | 78 | 1,060 | 75 | 2,625 | 4,596 |
| SPOTTED SEATROUT | 2,871 | 1,392 | 5,673 | 595 | 12,970 | 23,500 |
| WEAKFISH | 1,808 | 1,607 | * | * | 5,031 | 8,447 |
| SAND SEATROUT | 543 | 132 | 392 | | 1,667 | 2,734 |
| SPOT | 4,232 | 93 | 106 | * | 8,020 | 12,451 |
| KINGFISHES | 2,537 | | 634 | 53 | 1,780 | 5,031 |
| ATLANTIC CROAKER | 4,233 | 2,341 | 501 | | 13,228 | 20,309 |
| RED DRUM | 575 | 111 | 709 | 32 | 4,868 | 6,296 |
| MULLETS | 897 | | 1,318 | | 3,995 | 6,250 |
| KING MACKEREL | 202 | 486 | 137 | 54 | | 908 |
| SUMMER FLOUNDER | 6,737 | 2,034 | * | * | 12,135 | 20,906 |
| WINTER FLOUNDER | 1,291 | 491 | * | * | 12,450 | 14,231 |
| OTHER FISHES | 20,666 | 17,334 | 18,468 | 10,448 | 39,203 | 106,118 |
| TOTAL | 65,286 | 37,309 | 41,004 | 14,704 | 162,517 | 320,822 |

NOTE: "OCEAN 0-10 MI" 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. AN UNDERSCORE (_) 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 1988 - DECEMBER 1988

| SPECIES GROUP | OCEAN 3 MI OR LESS | OCEAN MORE THAN 3 MI | INLAND | ALL AREAS |
|---|---|---|---|---|
| | THOUSANDS | | | |
| PACIFIC HERRING | | * | 415 | 442 |
| SURF SMELT | 24 | * | 1,375 | 1,616 |
| SMELTS, OTHER | 33 | * | | 53 |
| WALLEYE POLLOCK | | * | 35 | 357 |
| JACKSMELT | 52 | | 408 | 935 |
| KELP BASS | 1,627 | 44 | 91 | 2,163 |
| BARRED SAND BASS | 2,708 | 1,182 | 332 | 4,222 |
| WHITE CROAKER | 1,952 | 613 | 755 | 3,319 |
| QUEENFISH | 534 | | 142 | 679 |
| WALLEYE SURFPERCH | 297 | * | 141 | 438 |
| REDTAIL SURFPERCH | 116 | | 86 | 207 |
| BARRED SURFPERCH | 258 | * | | 269 |
| PACIFIC BONITO | 564 | 325 | 31 | 920 |
| PACIFIC MACKEREL | 3,267 | 1,883 | 346 | 5,495 |
| BLACK ROCKFISH | 734 | 177 | 175 | 1,086 |
| BLUE ROCKFISH | 958 | 215 | 34 | 1,208 |
| BOCCACIO | 1,176 | 104 | 219 | 1,499 |
| OLIVE ROCKFISH | 121 | 68 | | 194 |
| ROCKFISHES, OTHER | 3,251 | 3,725 | 1,289 | 8,265 |
| OTHER FISHES | 6,735 | 1,976 | 9,136 | 17,846 |
| TOTAL | 25,122 | 10,722 | 15,371 | 51,215 |

NOTE: AN UNDERSCORE (_) 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 TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND FISHING MODE, ATLANTIC AND GULF COASTS, JANUARY 1988 - DECEMBER 1988

| SPECIES GROUP | SHORE | PARTY/ CHARTER BOAT | PRIVATE/ RENTAL BOAT | ALL MODES |
|---|---|---|---|---|
| | THOUSANDS | | | |
| HERRINGS | 1,309 | | 6,884 | 8,201 |
| SALTWATER CATFISHES | 5,021 | 13_ | 15,945 | 21,096 |
| BLACK SEA BASS | 3,143 | 2,246 | 13,315 | 18,704 |
| BLUEFISH | 4,016 | 1,683 | 11,158 | 16,858 |
| RED SNAPPER | 95 | 274 | 677 | 1,046 |
| SCUP | 1,136 | 1,601 | 6,556 | 9,293 |
| PINFISH | 6,844 | 30 | 6,971 | 13,846 |
| SHEEPSHEAD | 1,540 | | 3,046 | 4,596 |
| SPOTTED SEATROUT | 1,697 | 65_ | 21,150 | 23,500 |
| WEAKFISH | 208 | 826 | 7,412 | 8,447 |
| SAND SEATROUT | 600 | | 2,128 | 2,734 |
| SPOT | 6,690 | 11_ | 5,643 | 12,451 |
| KINGFISHES | 2,982 | | 2,048 | 5,031 |
| ATLANTIC CROAKER | 3,843 | 37_ | 16,088 | 20,309 |
| RED DRUM | 933 | 99 | 5,263 | 6,296 |
| MULLETS | 2,829 | 33 | 3,388 | 6,250 |
| KING MACKEREL | | 241 | 640 | 908 |
| SUMMER FLOUNDER | 2,28_ | 2,357 | 16,264 | 20,906 |
| WINTER FLOUNDER | 1,567 | 2,856 | 9,808 | 14,231 |
| OTHER FISHES | 25,567 | 8,160 | 72,393 | 106,118 |
| TOTAL | 72,333 | 21,709 | 226,780 | 320,822 |

NOTE: AN UNDERSCORE (_) DENOTES LESS THAN THIRTY THOUSAND. HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS. AN ASTERISK (*) DENOTES NONE REPORTED. PARTY/CHARTER BOAT ESTIMATES DO NOT INCLUDE CATCHES FOR PARTYBOATS IN THE SOUTH ATLANTIC AND GULF. 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 1988 - DECEMBER 1988

| SPECIES GROUP | SHORE | PARTY/ CHARTER BOAT | PRIVATE/ RENTAL BOAT | ALL MODES |
|---|---|---|---|---|
| | THOUSANDS | | | |
| PACIFIC HERRING | 276 | | 165 | 442 |
| SURF SMELT | 1,464 | 15_ | _ | 1,616 |
| SMELTS, OTHER | 46 | | | 53 |
| WALLEYE POLLOCK | | 16_ | 19_ | 357 |
| JACKSMELT | 87_ | | 62 | 935 |
| KELP BASS | 160 | 48_ | 1,516 | 2,163 |
| BARRED SAND BASS | 107 | 2,199 | 1,916 | 4,222 |
| WHITE CROAKER | 711 | 379 | 2,229 | 3,319 |
| QUEENFISH | 668 | | | 679 |
| WALLEYE SURFPERCH | 375 | *_ | 6_ | 438 |
| REDTAIL SURFPERCH | 190 | * | | 207 |
| BARRED SURFPERCH | 268 | * | _ | 269 |
| PACIFIC BONITO | 57 | 258 | 60_ | 920 |
| PACIFIC MACKEREL | 657 | 1,591 | 3,247 | 5,495 |
| BLACK ROCKFISH | 101 | 308 | 677 | 1,086 |
| BLUE ROCKFISH | 105 | 479 | 624 | 1,208 |
| BOCCACIO | 1,365 | 68 | 67 | 1,499 |
| OLIVE ROCKFISH | | 79 | 109 | 194 |
| ROCKFISHES, OTHER | 40_ | 3,849 | 4,009 | 8,265 |
| OTHER FISHES | 5,944 | 1,864 | 10,039 | 17,846 |
| TOTAL | 13,776 | 11,887 | 25,552 | 51,215 |

NOTE: AN UNDERSCORE (_) 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 1988 - DECEMBER 1988

| SUBREGION | TRIPS BY COASTAL RESIDENTS | TRIPS BY NON-COASTAL RESIDENTS | NON-RESIDENT TRIPS | ALL TRIPS |
|---|---|---|---|---|
| | THOUSANDS | | | |
| NORTH ATLANTIC..... | 5,043 | 616 | 1,955 | 7,615 |
| MID-ATLANTIC..... | 14,677 | 617 | 4,208 | 19,502 |
| SOUTH ATLANTIC..... | 14,879 | 1,343 | 4,117 | 20,339 |
| GULF OF MEXICO (1)..... | 14,744 | 588 | 4,498 | 19,829 |
| TOTAL (2)..... | 49,343 | 3,164 | 14,778 | 67,285 |
| SOUTHERN CALIFORNIA..... | 5,424 | 83 | 489 | 5,996 |
| NORTHERN CALIFORNIA..... | 3,506 | 290 | 143 | 3,940 |
| OREGON..... | 863 | 35 | 117 | 1,016 |
| WASHINGTON..... | 1,256 | 89 | 117 | 1,463 |
| TOTAL (3)..... | 11,049 | 497 | 866 | 12,415 |
| GRAND TOTAL ..... | 60,392 | 3,661 | 15,644 | 79,700 |

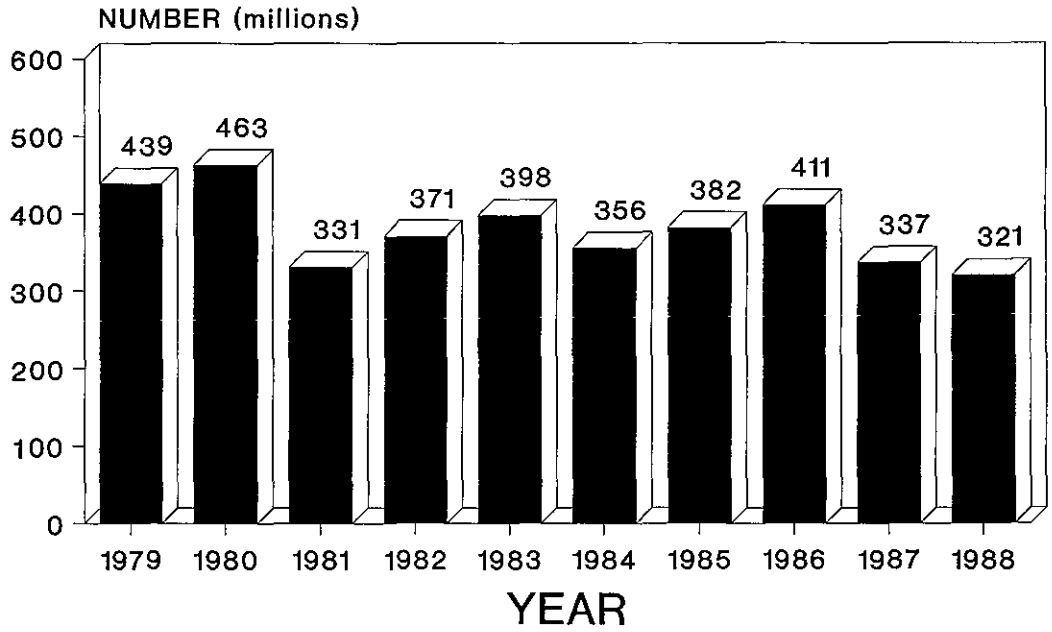
(1) EXCLUDES TEXAS DATA.
(2) EXCLUDES JANUARY/FEBRUARY TRIPS FROM MAINE THRU VIRGINIA AND PARTYBOAT TRIPS FROM THE SOUTH ATLANTIC AND GULF SUBREGIONS.
(3) EXCLUDES PACIFIC COAST SALMON FISHING TRIPS.
NOTE: ROW AND COLUMN TOTALS MAY NOT ADD DUE TO ROUNDING.

ESTIMATED NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL FISHERMEN BY SUBREGION AND MODE OF FISHING, ATLANTIC, GULF AND PACIFIC COASTS, JANUARY 1988 - DECEMBER 1988

| SUBREGION | SHORE | PARTY/ CHARTER BOAT | PRIVATE/ RENTAL BOAT | ALL MODES |
|---|---|---|---|---|
| | THOUSANDS | | | |
| NORTH ATLANTIC..... | 3,483 | 460 | 3,672 | 7,615 |
| MID-ATLANTIC..... | 5,299 | 2,147 | 12,056 | 19,502 |
| SOUTH ATLANTIC..... | 11,116 | 519 | 8,703 | 20,339 |
| GULF OF MEXICO (1)..... | 8,527 | 337 | 10,965 | 19,829 |
| TOTAL (2)..... | 28,425 | 3,463 | 35,396 | 67,285 |
| SOUTHERN CALIFORNIA..... | 2,473 | 1,195 | 2,328 | 5,996 |
| NORTHERN CALIFORNIA..... | 2,066 | 340 | 1,534 | 3,940 |
| OREGON..... | 326 | 50 | 640 | 1,016 |
| WASHINGTON..... | 323 | 74 | 1,066 | 1,463 |
| TOTAL (3)..... | 5,188 | 1,659 | 5,568 | 12,415 |
| GRAND TOTAL ..... | 33,612 | 5,121 | 40,964 | 79,700 |

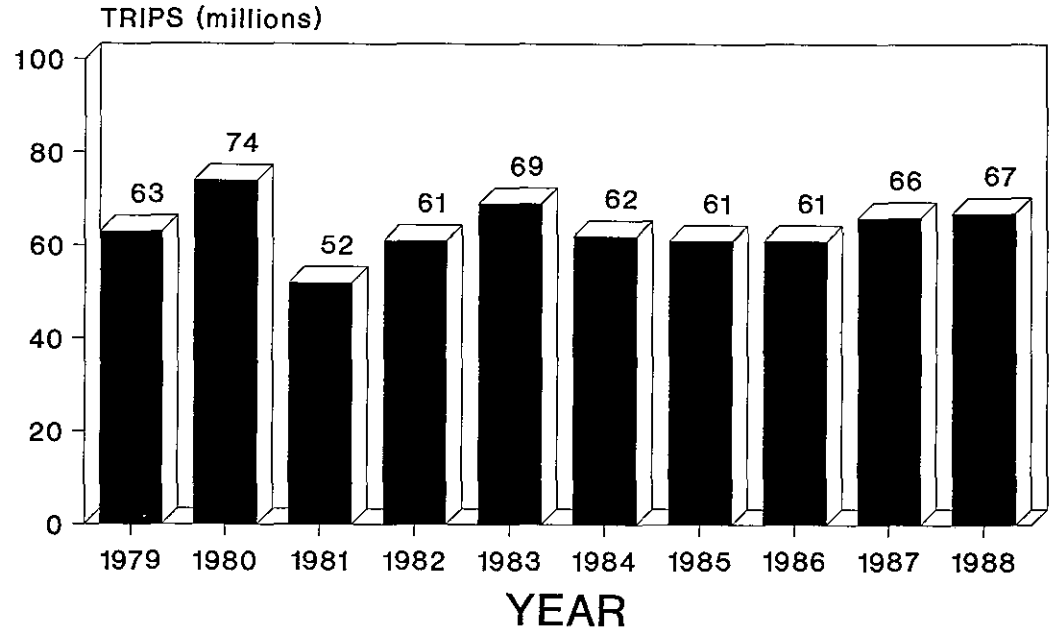
(1) EXCLUDES TEXAS DATA.
(2) EXCLUDES JANUARY/FEBRUARY TRIPS FROM MAINE THRU VIRGINIA AND PARTYBOAT TRIPS FROM THE SOUTH ATLANTIC AND GULF SUBREGIONS.
(3) EXCLUDES PACIFIC COAST SALMON FISHING TRIPS.
NOTE: ROW AND COLUMN TOTALS MAY NOT ADD DUE TO ROUNDING.

## MARINE RECREATIONAL FISHERIES CATCH ATLANTIC AND GULF COASTS 1979 - 1988



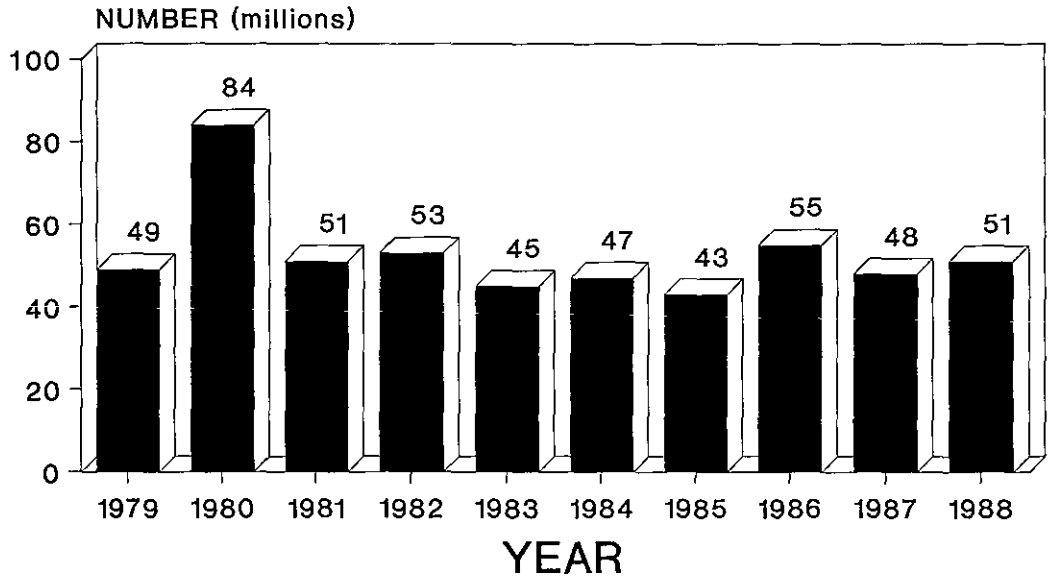

Note: 1987 & 1988 data are preliminary.

## MARINE RECREATIONAL FISHERIES TRIPS ATLANTIC AND GULF COASTS 1979 - 1988



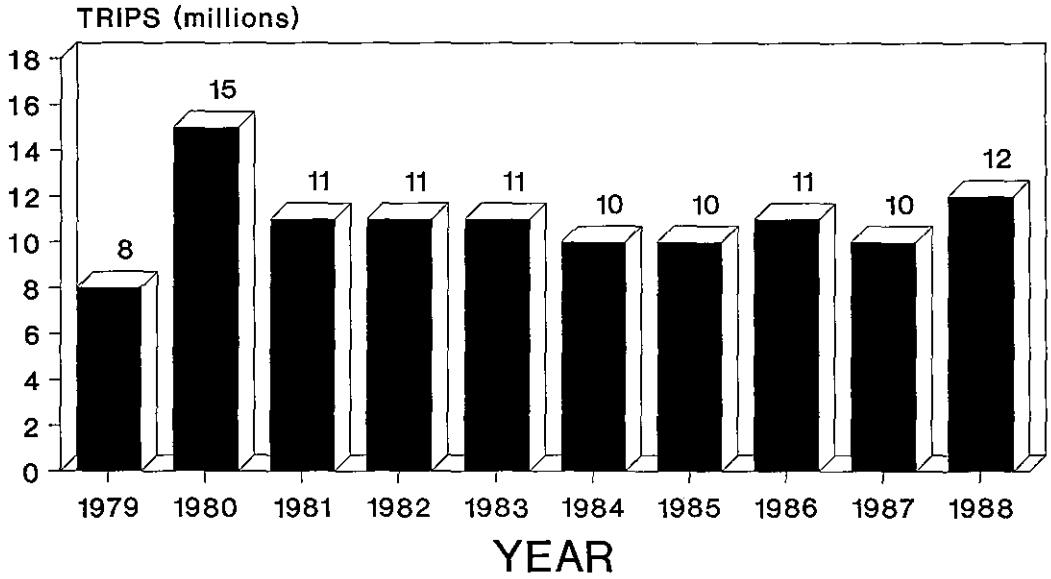

Note: 1987 & 1988 data are preliminary.

# MARINE RECREATIONAL FISHERIES CATCH
# PACIFIC COAST
# 1979 - 1988



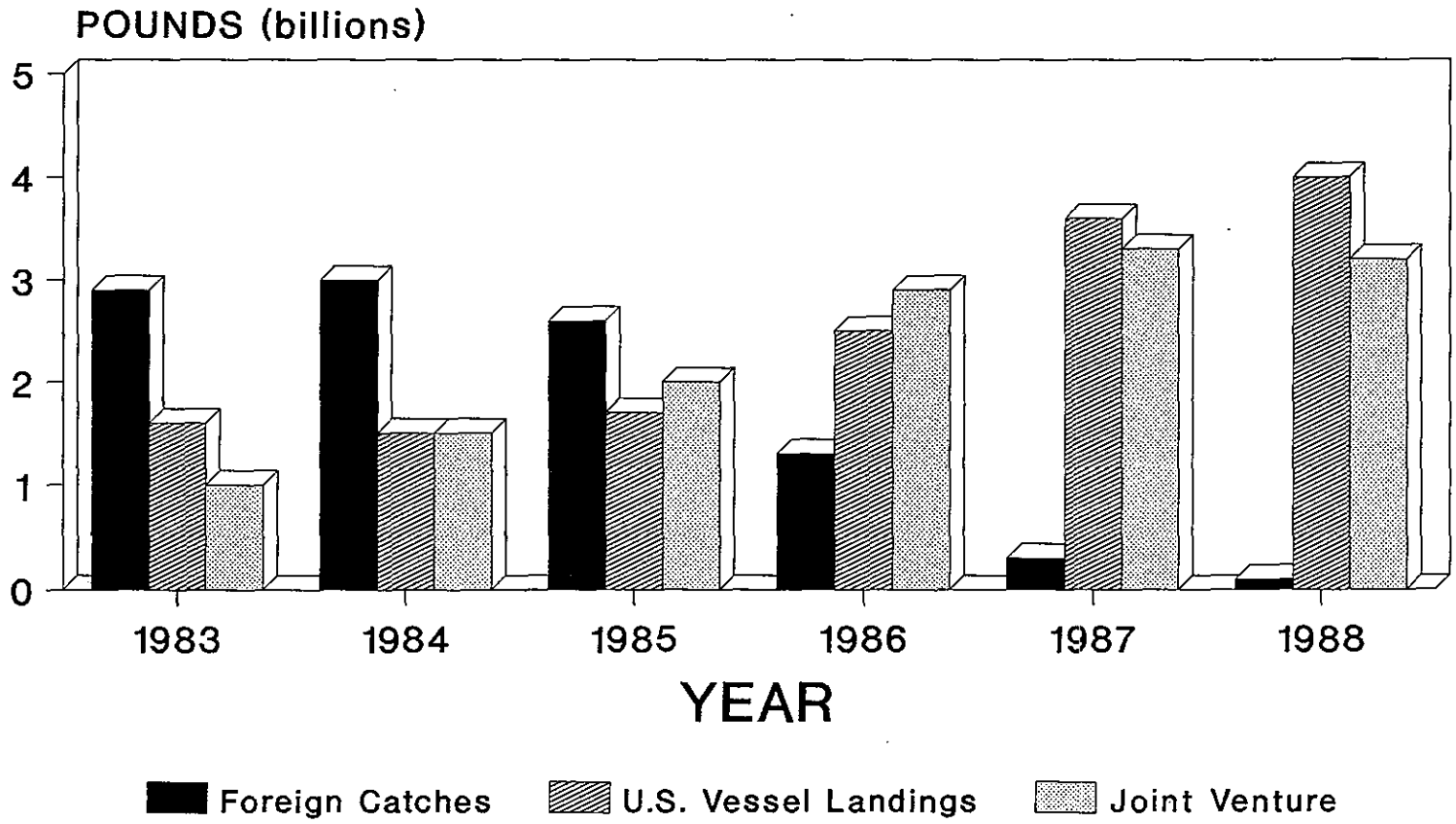

Data for 1979 are for July thru Dec.
Data for 1980-88 are for Jan. thru Dec.
1987 & 1988 data are preliminary.

# MARINE RECREATIONAL FISHING TRIPS
# PACIFIC COAST
# 1979 - 1988




Data for 1979 are for July thru Dec.
Data for 1980-88 are for Jan. thru Dec.
1987 & 1988 data are preliminary.

# COMMERCIAL CATCHES IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ) 1983 - 1988



ALL FOREIGN COUNTRIES: CATCH IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY CONTINENT AND COUNTRY, 1988

| Continent and Country | North Atlantic (1) | Washington, Oregon, and California | Alaska | | | Grand total |
|---|---|---|---|---|---|---|
| | | | Gulf of Alaska | Eastern Bering Sea and Aleutian Islands | Total Alaska | |
| | Metric tons, round weight | | | | | |
| Europe: | | | | | | |
| European Economic Community, Netherlands | 12,381.3 | - | - | - | - | 12,381.3 |
| Other: | | | | | | |
| German Democratic Republic | 21,104.5 | - | - | - | - | 21,104.5 |
| Poland | 9,768.2 | 18,338.2 | - | - | - | 28,106.4 |
| Total | 43,254.0 | 18,338.2 | - | - | - | 61,592.2 |

(1) Cape Hatteras, North Carolina, northward.

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 Atlantic (1) | Washington, Oregon, and California | Alaska | | | Grand total |
|---|---|---|---|---|---|---|
| | | | Gulf of Alaska | Eastern Bering Sea and Aleutian Islands | Total Alaska | |
| | Metric tons, round weight | | | | | |
| Europe: | | | | | | |
| European Economic Community: | | | | | | |
| Italy | 33.2 | - | - | - | - | 33.2 |
| Netherlands | 10,928.4 | - | - | - | - | 10,928.4 |
| Other: | | | | | | |
| German Democratic Republic | 18,553.3 | - | - | - | - | 18,553.3 |
| Poland | - | 48,975.4 | - | - | - | 48,975.4 |
| Asia: | | | | | | |
| China | - | 5.0 | - | - | - | 5.0 |
| Japan | - | - | - | 67,436.5 | 67,436.5 | 67,436.5 |
| Republic of Korea | - | 1,412.7 | - | 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 |

(1) Cape Hatteras, North Carolina, northward.

Note:--Excludes tunas and prohibited species. For further information see text on 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 SPECIES AND AREA, 1988

| Species | North Atlantic (1) | Washington, Oregon, and California | Alaska | | | Grand total |
|---|---|---|---|---|---|---|
| | | | Gulf of Alaska | Eastern Bering Sea and Aleutian Islands | Total Alaska | |
| | Metric tons, round weight | | | | | |
| Finfish | | | | | | |
| Butterfish | (2) | - | - | - | - | (2) |
| Flounders, Pacific (flatfish) | - | 2.5 | - | - | - | 2.5 |
| Hake: | | | | | | |
| Atlantic: | | | | | | |
| Red | (2) | - | - | - | - | (2) |
| Silver (whiting) | 4.5 | - | - | - | - | 4.5 |
| Pacific (whiting) | - | 18,041.0 | - | - | - | 18,041.0 |
| Herrings, river (alewives) | 74.0 | - | - | - | - | 74.0 |
| Jack mackerel | - | 48.5 | - | - | - | 48.5 |
| Mackerel, Atlantic | 42,878.7 | - | - | - | - | 42,878.7 |
| Ocean perch, Pacific | - | 2.5 | - | - | - | 2.5 |
| Rockfishes | - | 149.1 | - | - | - | 149.1 |
| Sablefish | - | 26.9 | - | - | - | 26.9 |
| Other finfish | 293.4 | 67.7 | - | - | - | 361.1 |
| Total fish | 43,250.6 | 18,338.2 | - | - | - | 61,588.8 |
| Shellfish et al. | | | | | | |
| Squid, Atlantic: | | | | | | |
| Short-finned | (2) | - | - | - | - | (2) |
| Long-finned | 3.4 | - | - | - | - | 3.4 |
| | 3.4 | - | - | - | - | 3.4 |
| Grand total | 43,254.0 | 18,338.2 | - | - | - | 61,592.2 |

(1) 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.

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

| Species | North Atlantic (1) | Washington, Oregon, and California | Alaska | | | Grand total |
|---|---|---|---|---|---|---|
| | | | Gulf of Alaska | Eastern Bering Sea and Aleutian Islands | Total Alaska | |
| | Metric tons, round weight | | | | | |
| Finfish | | | | | | |
| Atka mackerel | - | - | - | 0.3 | 0.3 | 0.3 |
| Butterfish | (2) | - | - | - | - | (2) |
| Cod, Pacific | - | - | - | 54,373.8 | 54,373.8 | 54,373.8 |
| Flounders, Pacific (flatfish) | - | 1.6 | - | 7,429.8 | 7,429.8 | 7,431.4 |
| Hake: | | | | | | |
| Atlantic, silver (whiting) | 3.1 | - | - | - | - | 3.1 |
| Pacific (whiting) | - | 49,655.7 | - | - | - | 49,655.7 |
| Herrings, river (alewives) | 81.5 | - | - | - | - | 81.5 |
| Jack mackerel | - | 320.6 | - | - | - | 320.6 |
| Mackerel, Atlantic | 29,293.7 | - | - | - | - | 29,293.7 |
| Ocean perch, Pacific | - | 3.3 | - | 5.2 | 5.2 | 8.5 |
| Pollock, Alaska | - | - | - | 3,595.9 | 3,595.9 | 3,595.9 |
| Rockfishes | - | 218.8 | - | 7.3 | 7.3 | 226.1 |
| Sablefish | - | 29.7 | - | 32.8 | 32.8 | 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 |
| Squid: | | | | | | |
| Atlantic, Long-finned | 0.3 | - | - | - | - | 0.3 |
| Pacific | - | - | - | 94.5 | 94.5 | 94.5 |
| Total shellfish | 0.3 | - | - | 976.1 | 976.1 | 976.4 |
| Grand total | 29,514.9 | 50,393.1 | - | 69,050.9 | 69,050.9 | 148,958.9 |

(1) Cape Hatteras, North Carolina, northward. (2) Included with other finfish.

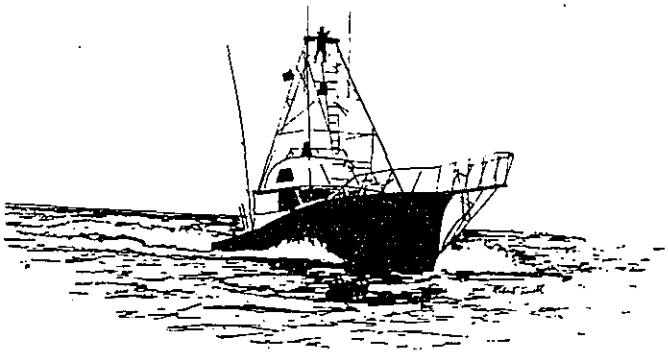
Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1986-88

| Country and species | 1986 | 1987 | 1988 |
|---|---|---|---|
| | Metric tons, round weight | | |
| European Economic Community: | | | |
| Italy: | | | |
| Butterfish | 83.5 | - | - |
| Hake: | | | - |
| Red | (1) | - | - |
| Silver (whiting) | 332.9 | 3.1 | - |
| Mackerel, Atlantic | 232.1 | 15.1 | - |
| Other finfish | 571.0 | 14.7 | - |
| Squid: | | | |
| Short-finned | 79.7 | - | - |
| Long-finned | 2,735.2 | 0.3 | - |
| Total | 4,034.4 | 33.2 | - |
| Netherlands: | | | |
| Butterfish | - | (1) | - |
| Hake, silver (whiting) | - | (1) | - |
| Herring, river (alewives) | - | 55.1 | 5.3 |
| Mackerel, Atlantic | - | 10,789.7 | 12,347.3 |
| Other finfish | - | 83.6 | 27.5 |
| Squid, Long-finned | - | (1) | 1.2 |
| Total | - | 10,928.4 | 12,380.1 |
| Spain: | | | |
| Butterfish | 37.9 | - | - |
| Hake: | | | |
| Red | 0.9 | - | - |
| Silver (whiting) | 200.9 | - | - |
| Herring, river (alewives) | (1) | - | - |
| Mackerel, Atlantic | 15.9 | - | - |
| Other finfish | 174.4 | - | - |
| Squid: | | | |
| Short-finned | 169.0 | - | - |
| Long-finned | 2,126.6 | - | - |
| Total | 2,725.6 | - | - |
| Total, European Economic Community | 6,760.0 | 10,961.6 | 12,380.1 |

See footnotes at end of table.

(Continued)



# U.S. EXCLUSIVE ECONOMIC ZONE

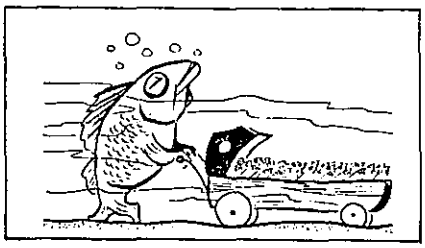
## FOREIGN CATCH

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1986-88 - Continued

| Country and species | 1986 | 1987 | 1988 |
|---|---|---|---|
| | Metric tons, round weight | | |
| German Democratic Republic: | | | |
| Butterfish | 3.7 | (1) | (1) |
| Hake: | | | |
| Red | - | - | (1) |
| Silver (whiting) | 12.9 | (1) | 3.8 |
| Herring, river (alewives) | 14.7 | 26.4 | 28.3 |
| Mackerel, Atlantic | 18,895.5 | 18,488.9 | 20,909.9 |
| Other finfish | 99.1 | 38.0 | 161.1 |
| Squid, Long-finned | (1) | (1) | 1.4 |
| Total | 19,025.9 | 18,553.3 | 21,104.5 |
| Japan: | | | |
| Butterfish | (2) | - | - |
| Hake, Silver (whiting) | (2) | - | - |
| Herring, river (alewives) | (2) | - | - |
| Mackerel, Atlantic | (2) | - | - |
| Other finfish | (2) | - | - |
| Squid: | | | |
| Short-finned | (2) | - | - |
| Long-finned | (2) | - | - |
| Total | (2) | - | - |
| Poland: | | | |
| Butterfish | - | - | (1) |
| Hake, Silver (whiting) | - | - | 0.7 |
| Herring, river (alewives) | - | - | 40.4 |
| Mackerel, Atlantic | - | - | 9,621.5 |
| Other finfish | - | - | 104.8 |
| Squid: | | | |
| Long-finned | - | - | 0.8 |
| Total | - | - | 9,768.2 |
| Grand total | 25,785.9 | 29,514.9 | 43,254.0 |

(1) Included with other finfish. (2) 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.



## FOREIGN CATCH

WASHINGTON, OREGON, AND CALIFORNIA:
FOREIGN CATCH, BY COUNTRY AND SPECIES, 1986-88

| Country and species | 1986 | 1987 | 1988 |
|---|---|---|---|
| | Metric tons, round weight | | |
| China: | | | |
| Hake, Pacific (whiting)..... | - | 4.9 | - |
| Jack mackerel..... | - | 0.1 | - |
| Total..... | - | 5.0 | - |
| Poland: | | | |
| Flounders (flatfish)..... | 1.8 | 1.0 | 2.5 |
| Hake, Pacific (whiting)..... | 69,861.0 | 48,277.6 | 18,041.0 |
| Jack mackerel..... | 549.3 | 308.7 | 48.5 |
| Ocean perch, Pacific..... | 1.4 | 3.3 | 2.5 |
| Rockfishes..... | 193.5 | 202.4 | 149.1 |
| Sablefish..... | 7.4 | 29.7 | 26.9 |
| Other finfishes..... | 138.4 | 152.7 | 67.7 |
| Total..... | 70,752.8 | 48,975.4 | 18,338.2 |
| Republic of Korea: | | | |
| Flounders (flatfish)..... | - | 0.6 | - |
| Hake, Pacific (whiting)..... | - | 1,373.2 | - |
| Jack mackerel..... | - | 11.8 | - |
| Rockfishes..... | - | 16.4 | - |
| Other finfishes..... | - | 10.7 | - |
| Total..... | - | 1,412.7 | |
| Grand total..... | 70,752.8 | 50,393.1 | 18,338.2 |

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

GULF OF ALASKA: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1986-88

| Country and species | 1986 | 1987 | 1988 |
|---|---|---|---|
| | Metric tons, round weight | | |
| Japan: | | | |
| Atka mackerel..... | (1) | - | - |
| Cod, Pacific..... | 15,210.5 | - | - |
| Flounders (flatfish) (2)..... | 70.5 | - | - |
| Ocean perch, Pacific (3)..... | 0.3 | - | - |
| Pollock, Alaska..... | 113.9 | - | - |
| Rockfishes..... | 4.0 | - | - |
| Sablefish (3)..... | 1.4 | - | - |
| Other finfish (4)..... | 450.2 | - | - |
| Total..... | 15,850.8 | - | - |

(1) Less than 0.1 of a metric ton.
(2) May include yellowfin sole.
(3) Became a prohibited species during 1985.
(4) A small catch from the North Atlantic has been included with other finfish.

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

## FOREIGN CATCH

EASTERN BERING SEA AND ALEUTIAN ISLANDS: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1986-88

| Country and species | 1986 | 1987 | 1988 |
|---|---|---|---|
| | -Metric tons, round weight- | | |
| China: | | | |
| Cod, Pacific | 182.5 | - | - |
| Flounders (1) | 363.4 | - | - |
| Pollock, Alaska | 1,443.1 | - | - |
| Rockfishes | 0.4 | - | - |
| Sablefish | 0.1 | - | - |
| Other finfish | 12.2 | - | - |
| Total | 2,001.7 | - | - |
| Japan: | | | |
| Atka mackerel | 1.1 | 0.3 | - |
| Cod, Pacific | 35,616.1 | 54,145.6 | - |
| Flounders (1) | 66,801.3 | 6,407.6 | - |
| Ocean perch, Pacific | 14.3 | 5.1 | - |
| Pollock, Alaska | 262,422.7 | 3,283.2 | - |
| Rockfishes | 13.6 | 7.3 | - |
| Sablefish | 73.1 | 32.7 | - |
| Other finfish | 3,230.1 | 2,578.6 | - |
| Snails (meats) | 493.0 | 881.6 | - |
| Squid, unclassified | 819.2 | 94.5 | - |
| Total | 369,484.5 | 67,436.5 | - |
| Poland: | | | |
| Atka mackerel | 0.1 | - | - |
| Cod, Pacific | 8.4 | - | - |
| Flounders (1) | 4.5 | - | - |
| Ocean perch, Pacific | 0.2 | - | - |
| Pollock, Alaska | 6,831.2 | - | - |
| Rockfishes | 0.1 | - | - |
| Sablefish | (2) | - | - |
| Other finfish | 1.1 | - | - |
| Squid, unclassified | 7.4 | - | - |
| Total | 6,853.0 | - | - |
| Republic of Korea: | | | |
| Atka mackerel | 5.2 | - | - |
| Cod, Pacific | 4,053.1 | 228.2 | - |
| Flounders (1) | 10,796.2 | 1,022.2 | - |
| Ocean perch, Pacific | 3.4 | 0.1 | - |
| Pollock, Alaska | 81,632.4 | 312.7 | - |
| Rockfishes | 3.8 | - | - |
| Sablefish | 35.6 | 0.1 | - |
| Other finfish | 801.2 | 51.1 | - |
| Squid, unclassified | 3.7 | - | - |
| Total | 97,334.6 | 1,614.4 | - |
| Grand total | 475,673.8 | 69,050.9 | - |

(1) May include yellowfin sole. (2) Less than 0.1 metric ton.
Note:--Excludes tunas and prohibited species. Catches are for calendar year only.

U.S. AND WORLD COMMERCIAL FISHERY CATCHES, 1953-87

| Year | U.S. commercial catch and exvessel value | | | World commercial catch | | | | |
|---|---|---|---|---|---|---|---|---|
| | Published by U.S. (excludes weight of mollusk shells) | Published by FAO (1) | Exvessel Value | Fresh-water | Marine | | | Grand total |
| | | | | | Peruvian anchovy | Other (2) | Total | |
| | Million metric ton | | Billion dollars | Million metric tons | | | | |
| | Live weight | | | Live weight | | | | |
| 1953..... | 2.0 | 2.7 | 0.4 | 3.0 | 0.0 | 22.9 | 22.9 | 25.9 |
| 1954..... | 2.2 | 2.8 | 0.4 | 3.2 | 0.0 | 24.4 | 24.4 | 27.6 |
| 1955..... | 2.2 | 2.8 | 0.3 | 3.4 | 0.0 | 25.5 | 25.5 | 28.9 |
| 1956..... | 2.4 | 3.0 | 0.4 | 3.5 | 0.1 | 27.2 | 27.3 | 30.8 |
| 1957..... | 2.2 | 2.8 | 0.4 | 3.9 | 0.3 | 27.5 | 27.8 | 31.7 |
| 1958..... | 2.2 | 2.7 | 0.4 | 4.5 | 0.8 | 28.0 | 28.8 | 33.3 |
| 1959..... | 2.3 | 2.9 | 0.4 | 5.1 | 2.0 | 29.8 | 31.8 | 36.9 |
| 1960..... | 2.2 | 2.8 | 0.4 | 5.6 | 3.5 | 31.1 | 34.6 | 40.2 |
| 1961..... | 2.4 | 2.9 | 0.4 | 5.7 | 5.3 | 32.6 | 37.9 | 43.6 |
| 1962..... | 2.4 | 3.0 | 0.4 | 5.8 | 7.1 | 31.9 | 39.0 | 44.8 |
| 1963..... | 2.2 | 2.8 | 0.4 | 5.9 | 7.2 | 33.5 | 40.7 | 46.6 |
| 1964..... | 2.1 | 2.6 | 0.4 | 6.2 | 9.8 | 35.9 | 45.7 | 51.9 |
| 1965..... | 2.2 | 2.7 | 0.4 | 7.0 | 7.7 | 38.5 | 46.2 | 53.2 |
| 1966..... | 1.9 | 2.5 | 0.5 | 7.3 | 9.6 | 40.4 | 50.0 | 57.3 |
| 1967..... | 1.8 | 2.4 | 0.4 | 7.2 | 10.5 | 42.7 | 53.2 | 60.4 |
| 1968..... | 1.9 | 2.5 | 0.5 | 7.4 | 11.3 | 45.2 | 56.5 | 63.9 |
| 1969..... | 1.9 | 2.5 | 0.5 | 7.6 | 9.7 | 45.4 | 55.1 | 62.7 |
| 1970..... | 2.2 | 2.8 | 0.6 | 8.4 | 13.1 | 46.6 | 59.7 | 65.6 |
| 1971..... | 2.3 | 2.9 | 0.7 | 9.0 | 11.2 | 48.3 | 59.5 | 66.1 |
| 1972..... | 2.2 | 2.8 | 0.7 | 5.7 | 4.8 | 53.7 | 58.5 | 62.0 |
| 1973..... | 2.2 | 2.8 | 0.9 | 5.7 | 1.7 | 55.3 | 57.0 | 62.7 |
| 1974..... | 2.3 | 2.8 | 0.9 | 5.8 | 4.0 | 56.7 | 60.7 | 66.5 |
| 1975..... | 2.2 | 2.8 | 1.0 | 6.2 | 3.3 | 56.9 | 60.2 | 66.4 |
| 1976..... | 2.4 | 3.0 | 1.3 | 5.9 | 4.3 | 59.6 | 63.9 | 69.8 |
| 1977..... | 2.4 | 3.0 | 1.5 | 6.1 | 0.8 | 62.0 | 62.8 | 68.9 |
| 1978..... | 2.7 | 3.4 | 1.9 | 5.8 | 1.2 | 63.6 | 64.8 | 70.6 |
| 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 | 0.7 | 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 | 9.3 | 0.1 | 68.2 | 68.3 | 77.6 |
| 1984..... | 2.9 | 4.8 | 2.3 | 9.9 | 0.1 | 73.7 | 73.8 | 83.7 |
| 1985..... | 2.8 | 4.8 | 2.3 | 10.6 | 1.0 | 74.4 | 75.4 | 86.0 |
| 1986..... | 2.7 | 5.0 | 2.8 | 11.4 | 4.9 | 76.1 | 81.0 | 92.4 |
| 1987..... | 3.1 | 5.8 | 3.1 | 12.5 | 2.1 | 78.4 | 80.5 | 93.0 |

(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.

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 FAO Yearbook of Fishery Statistics, 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.

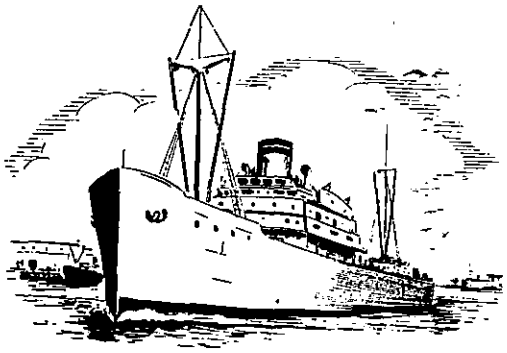
WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY COUNTRIES, 1983-87
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Country | 1983(1) | 1984(1) | 1985(1) | 1986(1) | 1987 |
|---|---|---|---|---|---|
| | Thousand metric tons Live weight | | | | |
| Japan | 11,255 | 12,021 | 11,409 | 11,976 | 11,841 |
| USSR | 9,817 | 10,593 | 10,523 | 11,260 | 11,160 |
| China | 5,213 | 5,927 | 6,779 | 8,000 | 9,346 |
| United States (2) | 4,257 | 4,832 | 4,786 | 4,971 | 5,755 |
| Chile | 3,978 | 4,499 | 4,804 | 5,572 | 4,814 |
| Peru | 1,569 | 3,317 | 4,136 | 5,614 | 4,584 |
| India | 2,507 | 2,862 | 2,824 | 2,922 | 2,893 |
| Republic of Korea | 2,400 | 2,477 | 2,650 | 3,103 | 2,876 |
| Indonesia | 2,205 | 2,276 | 2,345 | 2,457 | 2,630 |
| Thailand | 2,260 | 2,135 | 2,225 | 2,536 | 2,168 |
| Philippines | 1,976 | 1,934 | 1,865 | 1,916 | 1,989 |
| Norway | 2,836 | 2,466 | 2,119 | 1,898 | 1,929 |
| Korea (3) | 1,600 | 1,650 | 1,700 | 1,700 | 1,700 |
| Denmark | 1,863 | 1,846 | 1,762 | 1,848 | 1,696 |
| Iceland | 839 | 1,535 | 1,680 | 1,657 | 1,633 |
| Canada | 1,348 | 1,282 | 1,418 | 1,507 | 1,453 |
| Mexico | 1,064 | 1,104 | 1,226 | 1,305 | 1,419 |
| Spain | 1,413 | 1,440 | 1,483 | 1,434 | 1,393 |
| United Kingdom | 840 | 836 | 891 | 850 | 955 |
| Republic of South Africa | 582 | 554 | 601 | 629 | 902 |
| Vietnam | 757 | 776 | 808 | 825 | 871 |
| France | 782 | 770 | 850 | 870 | 844 |
| Bangladesh | 724 | 754 | 774 | 794 | 815 |
| Brazil | 754 | 835 | 838 | 832 | 793 |
| Burma | 588 | 610 | 644 | 687 | 686 |
| Ecuador | 372 | 883 | 1,087 | 1,003 | 679 |
| Poland | 735 | 719 | 683 | 645 | 671 |
| Turkey | 557 | 567 | 578 | 583 | 626 |
| Malaysia | 741 | 665 | 632 | 616 | 608 |
| Argentina | 416 | 315 | 406 | 420 | 559 |
| Italy | 546 | 573 | 583 | 560 | 554 |
| Namibia | 365 | 187 | 186 | 201 | 520 |
| Morocco | 454 | 467 | 473 | 598 | 491 |
| Venezuela | 231 | 259 | 265 | 314 | 453 |
| Netherlands | 506 | 432 | 504 | 455 | 435 |
| New Zealand | 282 | 295 | 305 | 345 | 431 |
| Pakistan | 343 | 372 | 408 | 416 | 428 |
| All others | 8,641 | 8,691 | 8,782 | 9,084 | 9,434 |
| Total | 77,616 | 83,756 | 86,032 | 92,403 | 93,034 |

(1) Revised.
(2) Includes the weight of clam, oyster, scallop, and other mollusk shells. This weight is not included in U.S. landings statistics shown elsewhere.
(3) Data estimated by FAO.

Note:--Statistics 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) - Yearbook of Fishery Statistics, 1987; Vol. 64, Rome.



WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY CONTINENT, 1983-87
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Contintent | 1983(1) | 1984(1) | 1985(1) | 1986(1) | 1987 |
|---|---|---|---|---|---|
| | Thousand metric tons Live weight | | | | |
| Asia | 35,085 | 37,045 | 37,711 | 40,697 | 41,700 |
| Europe | 12,797 | 13,116 | 12,947 | 12,693 | 12,600 |
| South America | 7,573 | 10,377 | 11,806 | 14,043 | 12,236 |
| USSR | 9,817 | 10,593 | 10,523 | 11,260 | 11,160 |
| North and Central America | 7,268 | 7,776 | 8,158 | 8,396 | 9,261 |
| Africa | 4,481 | 4,227 | 4,257 | 4,605 | 5,253 |
| Oceania | 595 | 622 | 630 | 709 | 824 |
| Total | 77,616 | 83,756 | 86,032 | 92,403 | 93,034 |

(1) Revised.

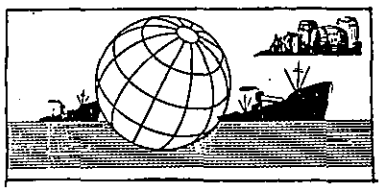
Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1987; Vol. 64, Rome.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY MAJOR FISHING AREAS, 1983-87
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Area | 1983(1) | 1984(1) | 1985(1) | 1986(1) | 1987 |
|---|---|---|---|---|---|
| | Thousand metric tons Live weight | | | | |
| Marine Areas: | | | | | |
| Pacific Ocean and adjacent areas | 38,255 | 43,729 | 45,720 | 51,019 | 49,407 |
| Atlantic Ocean and adjacent areas | 25,611 | 25,348 | 24,921 | 24,974 | 26,084 |
| Indian Ocean and adjacent areas | 4,457 | 4,739 | 4,766 | 4,970 | 5,014 |
| Total | 68,323 | 73,816 | 75,407 | 80,963 | 80,505 |
| Inland waters: | | | | | |
| Asia | 5,884 | 6,391 | 7,106 | 7,714 | 8,381 |
| Africa | 1,556 | 1,612 | 1,553 | 1,676 | 1,738 |
| USSR | 856 | 881 | 906 | 927 | 988 |
| South America | 328 | 337 | 327 | 352 | 581 |
| Europe | 401 | 413 | 429 | 450 | 469 |
| North and Central America | 244 | 274 | 274 | 286 | 335 |
| Oceania | 24 | 32 | 30 | 35 | 37 |
| Total | 9,293 | 9,940 | 10,625 | 11,440 | 12,529 |
| Grand total | 77,616 | 83,756 | 86,032 | 92,403 | 93,034 |

(1) Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1987; Vol. 64, Rome.



WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY SPECIES GROUPS, 1983-87
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Species group | 1983(1) | 1984(1) | 1985(1) | 1986(1) | 1987 |
|---|---|---|---|---|---|
| | Thousand metric tons Live weight | | | | |
| Herring, sardines, anchovies, etc. | 17,503 | 19,620 | 21,100 | 23,967 | 22,226 |
| Cods, hakes, haddocks, etc. | 11,223 | 12,258 | 12,450 | 13,534 | 13,703 |
| Miscellaneous marine and diadromous fishes | 8,761 | 8,972 | 9,281 | 10,025 | 10,167 |
| Freshwater fishes | 7,586 | 8,024 | 8,745 | 9,490 | 10,142 |
| Jacks, mullets, sauries, etc. | 7,967 | 8,562 | 8,013 | 7,182 | 7,866 |
| Mollusks | 5,960 | 6,364 | 6,441 | 6,546 | 7,524 |
| Redfish, basses, congers, etc. | 4,984 | 5,448 | 5,208 | 5,994 | 5,732 |
| Crustaceans | 3,227 | 3,250 | 3,503 | 3,920 | 3,975 |
| Mackerel, snoeks, cutlassfishes, etc. | 3,674 | 4,268 | 3,828 | 4,018 | 3,648 |
| Tunas, bonitos, billfishes, etc. | 2,967 | 3,145 | 3,179 | 3,427 | 3,442 |
| Flounders, halibuts, soles, etc. | 1,125 | 1,191 | 1,348 | 1,315 | 1,279 |
| Salmons, trouts, smelts, etc. | 956 | 914 | 1,121 | 1,045 | 1,033 |
| Shads, milkfishes, etc. | 560 | 739 | 772 | 776 | 826 |
| Sharks, rays, chimaeras, etc. | 585 | 604 | 618 | 637 | 656 |
| River eels | 85 | 98 | 98 | 94 | 92 |
| Sturgeons, paddlefishes, etc. | 28 | 27 | 26 | 25 | 24 |
| Miscellaneous | 425 | 272 | 301 | 408 | 699 |
| Total | 77,616 | 83,756 | 86,032 | 92,403 | 93,034 |

(1) Revised.

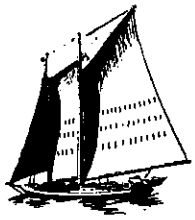
Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1987; Vol. 64, Rome.

DISPOSITION OF WORLD COMMERCIAL CATCH, 1983-1987
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Item | 1983(1) | 1984(1) | 1985(1) | 1986(1) | 1987 |
|---|---|---|---|---|---|
| | Percent of total | | | | |
| Marketed fresh | 19.0 | 18.4 | 18.7 | 20.8 | 21.8 |
| Frozen | 24.3 | 24.1 | 23.7 | 23.6 | 23.8 |
| Canned | 14.3 | 13.9 | 13.4 | 12.4 | 12.6 |
| Cured | 15.2 | 14.6 | 14.8 | 14.1 | 14.2 |
| Reduce to meal and oil (2) | 26.1 | 27.9 | 28.2 | 28.0 | 26.5 |
| Miscellaneous purposes | 1.1 | 1.1 | 1.2 | 1.1 | 1.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

(1) Revised.
(2) 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) -Yearbook of Fishery Statistics, 1987; Vol. 65, Rome.



WORLD IMPORTS AND EXPORTS OF SEVEN FISHERY COMMODITY GROUPS, BY LEADING COUNTRIES, 1984-87

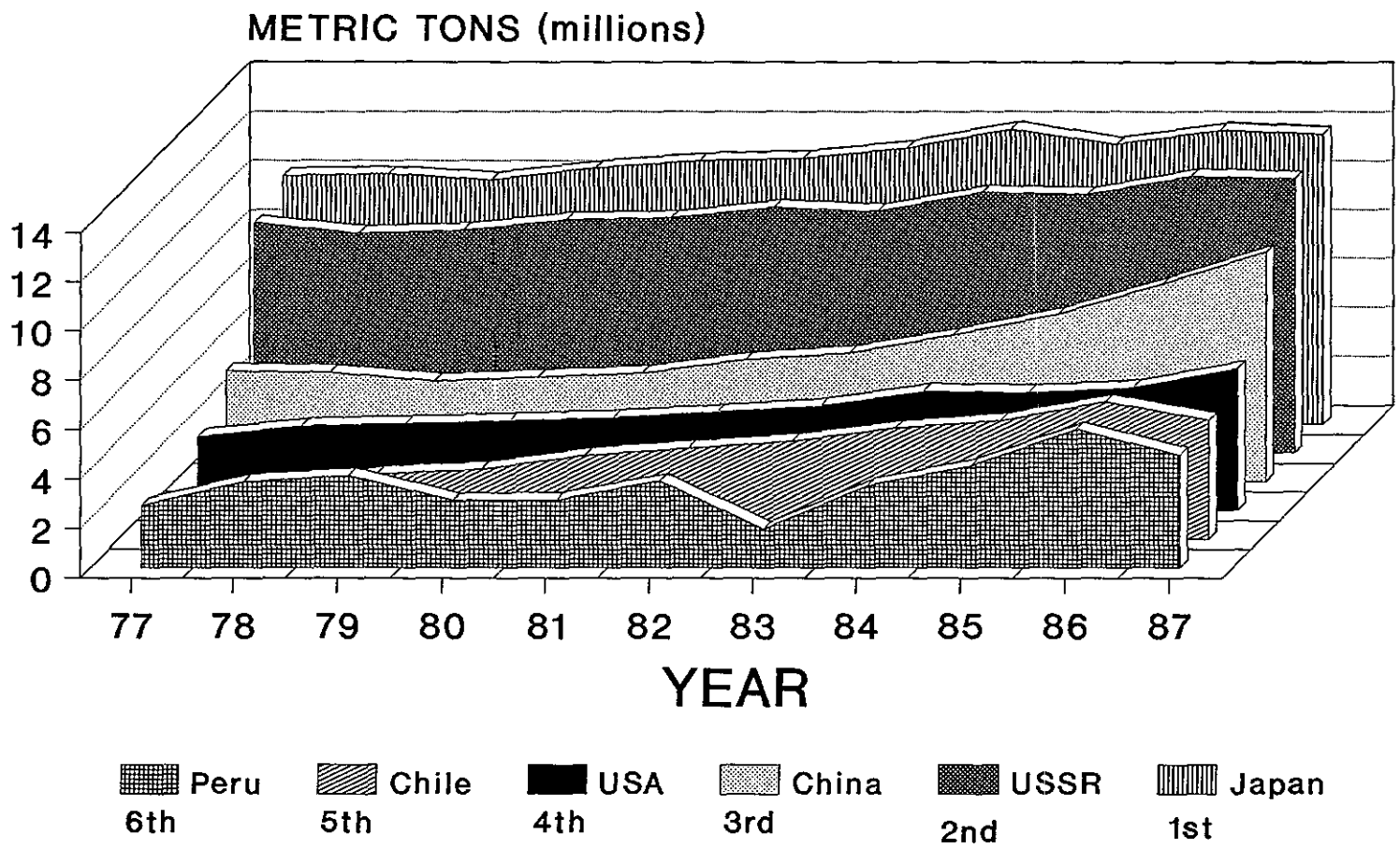
| Country | 1984(1) | 1985(1) | 1986(1) | 1987 |
|---|---|---|---|---|
| | Thousand U.S. dollars | | | |
| IMPORTS | | | | |
| Japan | 4,207,102 | 4,744,277 | 6,593,515 | 8,308,077 |
| United States | 3,702,490 | 4,051,794 | 4,748,692 | 5,662,329 |
| France | 975,596 | 1,039,848 | 1,510,431 | 2,022,470 |
| Italy | 742,066 | 984,990 | 1,264,513 | 1,738,226 |
| United Kingdom | 874,561 | 940,598 | 1,216,053 | 1,386,818 |
| Spain | 389,552 | 412,151 | 721,977 | 1,321,771 |
| Fed. Republic of Germany | 800,608 | 819,555 | 1,113,211 | 1,270,495 |
| Denmark | 326,692 | 370,442 | 596,060 | 842,476 |
| Hong Kong | 439,621 | 471,609 | 624,726 | 794,280 |
| Belgium | 298,778 | 304,024 | 425,923 | 529,941 |
| Canada | 373,051 | 355,939 | 433,087 | 511,901 |
| Netherlands | 288,218 | 308,449 | 387,935 | 509,430 |
| Portugal | 139,282 | 201,976 | 256,373 | 424,716 |
| Sweden | 257,376 | 245,222 | 333,934 | 404,897 |
| Switzerland | 188,971 | 193,346 | 264,921 | 332,827 |
| Singapore | 224,133 | 204,376 | 257,666 | 312,955 |
| Australia | 232,664 | 217,540 | 226,960 | 299,584 |
| Thailand | 85,813 | 138,312 | 283,658 | 267,149 |
| Republic of Korea | 68,044 | 89,775 | 117,079 | 212,497 |
| Other Countries | 2,556,565 | 2,465,008 | 2,817,872 | 3,356,167 |
| Total | 17,171,183 | 18,559,231 | 24,194,586 | 30,509,006 |
| EXPORTS | | | | |
| Canada | 1,271,844 | 1,359,248 | 1,751,809 | 2,092,170 |
| United States | 1,002,932 | 1,162,372 | 1,480,990 | 1,836,451 |
| Denmark | 898,867 | 952,712 | 1,381,460 | 1,750,652 |
| Republic of Korea | 781,784 | 796,878 | 1,171,111 | 1,505,697 |
| Norway | 902,866 | 922,460 | 1,171,170 | 1,474,930 |
| Thailand | 632,940 | 675,063 | 1,011,896 | 1,261,066 |
| Iceland | 509,245 | 617,355 | 857,994 | 1,071,067 |
| Netherlands | 500,543 | 543,666 | 766,379 | 953,177 |
| China (2) | 321,956 | 366,920 | 645,813 | 912,476 |
| Japan | 881,965 | 819,840 | 897,851 | 889,828 |
| United Kingdom | 316,581 | 362,296 | 511,130 | 717,565 |
| France | 293,586 | 359,000 | 501,233 | 654,464 |
| USSR | 369,543 | 383,908 | 587,081 | 637,287 |
| Chile | 419,364 | 438,627 | 516,023 | 635,583 |
| Mexico | 437,371 | 378,299 | 457,410 | 569,914 |
| Hong Kong | 254,006 | 298,950 | 417,868 | 501,815 |
| Ecuador | 216,067 | 260,939 | 383,565 | 481,039 |
| Spain | 306,782 | 353,767 | 398,703 | 474,752 |
| Indonesia | 228,013 | 236,620 | 340,619 | 441,079 |
| Other Countries | 5,663,849 | 6,038,143 | 7,806,442 | 9,214,662 |
| Total | 16,210,104 | 17,327,063 | 23,056,547 | 28,075,674 |

(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, 1987; Vol. 65, Rome.

# WORLD COMMERCIAL CATCH BY LEADING COUNTRIES 1977 - 1987 (LIVE WEIGHT)



# PROCESSED FISHERY PRODUCTS

VALUE OF PROCESSED FISHERY PRODUCTS, 1987 AND 1988
(Processed from domestic catch and imported products)

| Item | 1987(1) | | 1988(2) | |
|---|---|---|---|---|
| | Thousand dollars | Percent of total | Thousand dollars | Percent of total |
| Edible: | | | | |
| Fresh and frozen..... | 4,041,403 | 67.9 | 3,561,876 | 66.3 |
| Canned..... | 1,476,479 | 24.8 | 1,384,992 | 25.8 |
| Cured..... | 136,058 | 2.3 | 93,558 | 1.7 |
| Total edible..... | 5,653,940 | 95.0 | 5,040,426 | 93.9 |
| Industrial: | | | | |
| Bait and animal food (canned)..... | 85,416 | 1.4 | 92,722 | 1.7 |
| Fish meal, oil, and solubles..... | 174,321 | 2.9 | 188,843 | 3.5 |
| Other..... | 37,524 | 0.6 | 46,737 | 0.9 |
| Total industrial..... | 297,261 | 5.0 | 328,302 | 6.1 |
| Grand total..... | 5,951,201 | 100.0 | 5,368,728 | 100.0 |

(1) Revised.
(2) Preliminary. May not add due to rounding.

Note:--Value is based on selling price at the plant. Processed Fishery Products, Annual Summary, 1988, Current Fishery Statistics No. 8803 will provide additional information.

## FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP

U.S. PRODUCTION OF FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 1979-88

| YEAR | Fish sticks | | Fish portions | | Breaded shrimp | |
|---|---|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| 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 | 369,415 |
| 1985..... | 96,239 | 111,265 | 330,362 | 367,734 | 95,734 | 354,808 |
| 1986..... | 87,289 | 94,290 | 341,628 | 393,956 | 107,834 | 358,442 |
| 1987..... | 98,927 | *142,946 | 323,746 | *445,631 | 108,937 | 371,798 |
| 1988..... | 80,148 | 113,868 | 286,733 | 399,521 | 80,086 | 245,131 |

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

Note:--Processed Fishery Products, Annual Summary, 1988, Current Fishery Statistics No. 8803 will provide additional information.

# PROCESSED FISHERY PRODUCTS

## FISH FILLETS AND STEAKS

PRODUCTION OF FRESH AND FROZEN FILLETS AND STEAKS, BY SPECIES, 1987 AND 1988

| Species | 1987 (1) | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Fillets: | | | | |
| Anglerfish | 3,465 | 8,026 | 4,763 | 13,368 |
| Bluefish | 263 | 469 | 371 | 594 |
| Cod | 77,505 | 165,398 | 61,540 | 135,573 |
| Cusk | 1,139 | 2,146 | 911 | 1,669 |
| Dolphin | 975 | 2,973 | 1,295 | 3,729 |
| Flounders | 57,690 | 168,234 | 50,887 | 156,068 |
| Groundfish mixed | 13,313 | 30,362 | 13,873 | 31,757 |
| Groupers | 1,669 | 9,134 | 2,377 | 10,891 |
| Haddock | 8,988 | 32,249 | 8,144 | 30,231 |
| Hake, Atlantic | 1,985 | 4,193 | 1,617 | 3,041 |
| Halibut | 248 | 999 | 529 | 1,749 |
| Lingcod | 669 | 1,058 | 1,260 | 2,102 |
| Ocean perch: | | | | |
| Atlantic | 2,650 | 5,810 | 2,091 | 5,307 |
| Pacific | 1,092 | 1,821 | 2,657 | 3,393 |
| Ocean pout | 963 | 1,154 | 656 | 863 |
| Pollock: | | | | |
| Atlantic | 18,421 | 30,226 | 13,569 | 20,851 |
| Alaska | 74,650 | 81,874 | 109,993 | 110,376 |
| Rockfishes | 17,864 | 27,119 | 31,616 | 45,785 |
| Sablefish | 2,466 | 3,083 | 2,408 | 3,747 |
| Salmon | 6,341 | 23,101 | 3,422 | 15,715 |
| Sea trout | 595 | 1,135 | 704 | 1,352 |
| Shark | 9,896 | 18,267 | 12,446 | 19,381 |
| Snapper: | | | | |
| Red | 417 | 2,412 | 244 | 1,441 |
| Unclassified | 744 | 4,000 | 499 | 2,955 |
| Spanish mackerel | 46 | 71 | 92 | 162 |
| Swordfish | 1,031 | 6,966 | 976 | 5,879 |
| Tuna | 1,893 | 6,991 | 2,998 | 12,544 |
| Whitefish | 368 | 657 | 312 | 1,098 |
| Wolffish | 208 | 379 | 201 | 437 |
| Yellow perch | 822 | 3,126 | 612 | 2,996 |
| Yellow pike | 278 | 1,149 | 213 | 732 |
| Unclassified | 29,578 | 50,956 | 28,991 | 61,360 |
| Total | 338,232 | 695,538 | 362,267 | 707,146 |
| Steaks: | | | | |
| Halibut | 7,932 | 25,587 | 11,216 | 34,605 |
| King mackerel | 40 | 180 | 82 | 229 |
| Salmon | 6,207 | 18,243 | 4,516 | 16,185 |
| Shark | 220 | 469 | 550 | 1,388 |
| Swordfish | 1,328 | 7,144 | 2,074 | 10,096 |
| Unclassified | 2,122 | 5,877 | 3,554 | 7,251 |
| Total | 17,849 | 57,500 | 21,992 | 69,754 |
| Grand total | 356,081 | 753,038 | 384,259 | 776,900 |

(1) Revised.

Note:--The following amounts of frozen fish blocks were produced from the fillets reported above: 13,558,676 lb valued at $21,198,749 in 1987, and 44,601,863 lb valued at $43,982,769 in 1988. Final data for 1988 will be published in Processed Fishery Products, Annual Summary, 1988, Current Fishery Statistics No. 8803.

# PROCESSED FISHERY PRODUCTS

## CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED FISHERY PRODUCTS, BY SPECIES, 1987 AND 1988

| Species | Pounds per case | 1987 Standard cases | 1987 Thousand pounds | 1987 Thousand dollars | 1988 Standard cases | 1988 Thousand pounds | 1988 Thousand dollars |
|---|---|---|---|---|---|---|---|
| For human consumption: | | | | | | | |
| Fish: | | | | | | | |
| Gefiltefish..... | 48 | 491,696 | 23,601 | 20,623 | 509,860 | 24,473 | 19,750 |
| Herring..... | 48 | 156,652 | 7,519 | 12,632 | 89,999 | 4,320 | 6,032 |
| Mackerel..... | 45 | 324,810 | 14,616 | 5,777 | 401,764 | 18,079 | 8,777 |
| Roe and caviar..... | 48 | 10,501 | 504 | 2,730 | 9,886 | 475 | 3,019 |
| Salmon: | | | | | | | |
| Natural..... | 48 | 2,191,787 | 105,206 | 261,924 | 1,826,351 | 87,665 | 216,834 |
| Specialties..... | 48 | 3,318 | 159 | 806 | 2,188 | 105 | 675 |
| Sardines, Maine..... | 23.4 | 560,510 | 13,116 | 22,420 | 796,181 | 18,631 | 24,082 |
| Tuna: | | | | | | | |
| Solid..... | 19.5 | 7,421,969 | 144,728 | 310,861 | 6,336,445 | 123,561 | 293,860 |
| Chunk..... | 19.5 | 26,102,421 | 508,997 | 705,360 | 24,315,070 | 474,144 | 665,906 |
| Flakes and grated.... | 18 | 14,334 | 258 | 222 | 26,456 | 476 | 443 |
| Total tuna..... | -- | 33,538,724 | 653,983 | 1,016,443 | 30,677,971 | 598,181 | 960,209 |
| Specialties..... | 48 | 118 | 5 | 44 | 129 | 6 | 46 |
| Other..... | 48 | 308,002 | 14,784 | 12,896 | 215,506 | 10,344 | 11,259 |
| Total fish..... | -- | 37,586,118 | 833,493 | 1,356,295 | 34,529,835 | 762,279 | 1,250,683 |
| Shellfish: | | | | | | | |
| Clam and clam products: (1) | | | | | | | |
| Whole and minced..... | 15 | 1,282,086 | 19,231 | 35,516 | 1,826,696 | 27,400 | 42,076 |
| Chowder and juice..... | 30 | 2,959,179 | 88,775 | 45,796 | 3,036,222 | 91,087 | 48,506 |
| Specialties..... | 48 | 182,101 | 8,741 | 6,585 | 189,733 | 9,107 | 6,938 |
| Crabs, natural..... | 19.5 | 10,264 | 200 | 936 | 18,270 | 356 | 1,745 |
| Lobster meat and specialties..... | 48 | 17,840 | 856 | 1,030 | 20,590 | 988 | 991 |
| Oyster, specialties..... | 48 | 78,225 | 3,755 | 2,497 | 63,799 | 3,062 | 2,059 |
| Shrimp: | | | | | | | |
| Natural (2)..... | 6.75 | 649,160 | 4,382 | 22,429 | 663,019 | 4,475 | 24,898 |
| Specialties..... | 48 | 19,136 | 919 | 988 | 26,413 | 1,268 | 1,774 |
| Other..... | 48 | 97,314 | 4,671 | 4,407 | 155,659 | 7,472 | 5,322 |
| Total shellfish..... | -- | 5,295,305 | 131,530 | 120,184 | 6,000,401 | 145,215 | 134,309 |
| Total for human consumption..... | -- | 42,881,423 | 965,023 | 1,476,479 | 40,530,236 | 907,494 | 1,384,992 |
| For bait and animal food: | | | | | | | |
| Animal food..... | 48 | 4,593,849 | 220,505 | 84,599 | 4,642,373 | 222,834 | 92,205 |
| Salmon eggs..... | 48 | 2,843 | 136 | 817 | 1,784 | 86 | 517 |
| Total for bait and animal food.... | 48 | 4,596,692 | 220,641 | 85,416 | 4,644,157 | 222,920 | 92,722 |
| Grand total..... | -- | 47,478,115 | 1,185,664 | 1,561,895 | 45,174,393 | 1,130,414 | 1,477,714 |

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

(2) Drained weight.

Note:--Final figures will be published in Processed Fishery Products, Annual Summary, 1988, Current Fishery Statistics No. 8803.

# PROCESSED FISHERY PRODUCTS

## CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED TUNA, 1987-88

| Item | Pounds per case | 1987 | | 1988 | |
|---|---|---|---|---|---|
| | | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Albacore: | | | | | |
| Solid | 19.5 | 6,291 | 277,470 | 5,895 | 278,745 |
| Chunk | 19.5 | 881 | 34,873 | 829 | 38,419 |
| Flakes and grated | 18 | 2 | 52 | (1) | (1) |
| Total | -- | 7,174 | 312,395 | 6,724 | 317,164 |
| Lightmeat: | | | | | |
| Solid | 19.5 | 1,131 | 33,391 | 442 | 15,115 |
| Chunk | 19.5 | 25,222 | 670,487 | 23,486 | 627,487 |
| Flakes and grated | 18 | 12 | 170 | 26 | 443 |
| Total | -- | 26,365 | 704,048 | 23,954 | 643,045 |
| Grand total | -- | 33,539 | 1,016,443 | 30,678 | 960,209 |

(1) Included with lightmeat.

PRODUCTION OF CANNED SHRIMP, BY AREA, 1987-88

| Area | Pounds per case | 1987(1) | | 1988 | |
|---|---|---|---|---|---|
| | | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Gulf States | 6.75 | 552 | 19,338 | 550 | 20,327 |
| Pacific States | 6.75 | 97 | 3,091 | 113 | 4,571 |
| Total | 6.75 | 649 | 22,429 | 663 | 24,898 |

(1) Revised.

PRODUCTION OF CANNED SALMON, 1987-88

| Item | Pounds per case | 1987(1) | | 1988 | |
|---|---|---|---|---|---|
| | | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Chinook | 48 | 4 | 426 | 2 | 319 |
| Chum | 48 | 167 | 13,701 | 184 | 25,650 |
| Pink | 48 | 1,363 | 132,744 | 1,372 | 138,016 |
| Sockeye | 48 | 640 | 112,885 | 230 | 46,381 |
| Coho | 48 | 18 | 2,168 | 38 | 6,468 |
| Total | 48 | 2,192 | 261,924 | 1,826 | 216,834 |

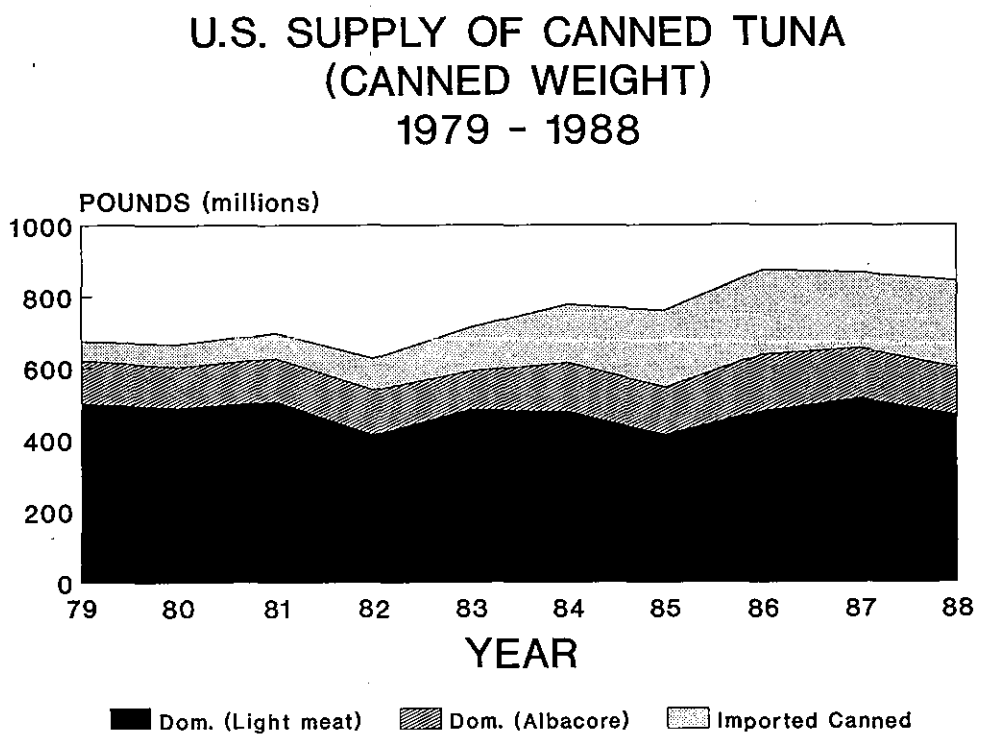
(1) Revised.

## CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED FISHERY PRODUCTS, 1979-88

| Year | For human consumption | | For animal food and bait | | Total | |
|---|---|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| 1979..... | 959,316 | 1,593,015 | 479,764 | 150,316 | 1,439,080 | 1,743,331 |
| 1980..... | 1,009,280 | 1,781,948 | 506,817 | 145,708 | 1,516,097 | 1,927,656 |
| 1981..... | *1,067,415 | *1,819,409 | 408,783 | 134,562 | 1,476,198 | *1,953,971 |
| 1982..... | 876,157 | 1,325,435 | 407,219 | 132,048 | 1,283,376 | 1,457,483 |
| 1983..... | 987,329 | 1,393,604 | 403,466 | 140,874 | 1,390,795 | 1,534,478 |
| 1984..... | 1,041,845 | 1,435,532 | 369,123 | 141,931 | 1,410,968 | 1,577,463 |
| 1985..... | 913,078 | 1,269,311 | 248,068 | 91,003 | 1,161,146 | 1,360,314 |
| 1986..... | 1,011,080 | 1,384,213 | 320,953 | 100,377 | 1,332,033 | 1,484,590 |
| 1987 (1)..... | 965,023 | 1,476,479 | 220,641 | 85,416 | 1,185,664 | 1,561,895 |
| 1988..... | 907,494 | 1,384,992 | 222,920 | 92,722 | 1,130,414 | 1,477,714 |

(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.



# PROCESSED FISHERY PRODUCTS

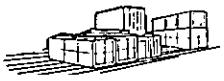
## INDUSTRIAL PRODUCTS

PRODUCTION OF FISH MEAL, OIL, AND SOLUBLES, 1987 AND 1988

| Product | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Dried scrap and meal: | | | | |
| Fish: | | | | |
| Menhaden (1)..... | 668,884 | 105,346 | 504,524 | 113,984 |
| Tuna and mackerel..... | 84,322 | 12,892 | 75,934 | 9,814 |
| Unclassified..... | 17,676 | 2,626 | 44,518 | 5,422 |
| Total..... | 770,882 | 120,864 | 624,976 | 129,220 |
| Shellfish..... | 16,096 | 847 | 18,820 | 1,457 |
| Grand total..... | 786,978 | 121,711 | 643,796 | 130,677 |
| Solubles..... | 249,289 | 17,103 | 223,449 | 14,571 |
| Body oil: | | | | |
| Menhaden (1)..... | 294,964 | 35,086 | 217,493 | 42,776 |
| Unclassified..... | 3,532 | 421 | 7,240 | 819 |
| Total..... | 298,496 | 35,507 | 224,733 | 43,595 |

(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 Fishery Products, Annual Summary, 1988, Current Fisheries Statistics 8803.



PRODUCTION OF INDUSTRIAL PRODUCTS, 1979-88

| Year | Quantity | | | Value | | |
|---|---|---|---|---|---|---|
| | Fish Meal | Fish solubles | Marine animal oil | Fish meal, solubles, and oil | Other industrial products | Grand total |
| | Thousand pounds | | | Thousand dollars | | |
| 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 | 195,148 | 336,708 | 138,765 | 36,825 | 175,590 |
| 1987..... | *786,978 | 249,289 | 298,496 | 174,321 | 37,524 | 211,845 |
| 1988..... | 643,796 | 223,449 | 224,733 | 188,843 | 46,737 | 235,580 |

*Record. Record--1959 fish solubles production: 330,718,000 lb.

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

# U.S. COLD STORAGE HOLDINGS

## FROZEN FISHERY PRODUCTS

U.S. COLD STORAGE HOLDINGS OF FISHERY PRODUCTS, 1988

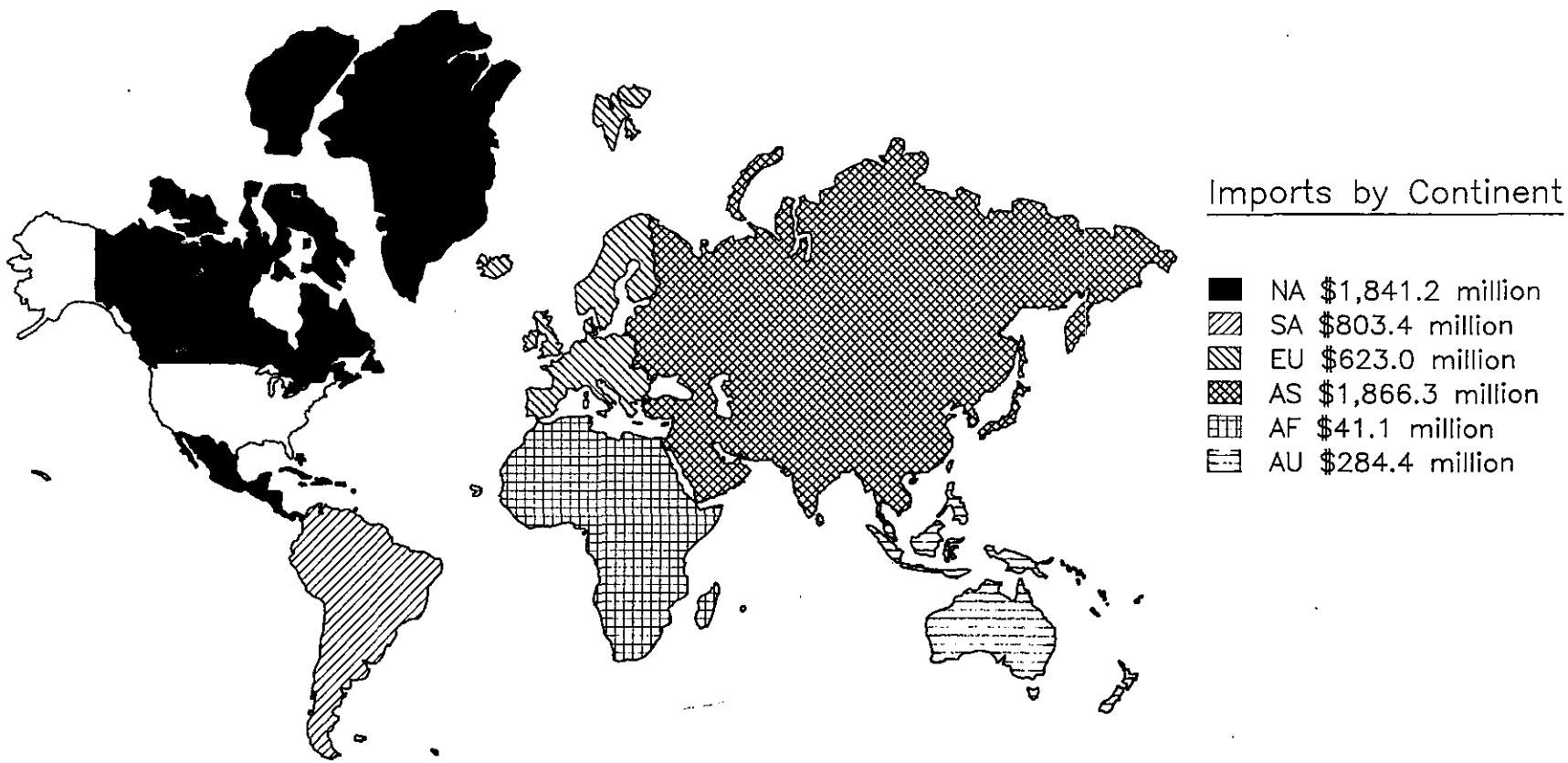
| Item | January 1 | March 31 | June 30 | September 30 | December 31 |
|---|---|---|---|---|---|
| | Thousand pounds | | | | |
| Blocks: | | | | | |
| Cod | 23,645 | 29,770 | 33,108 | 29,148 | 22,335 |
| Flounder | 3,260 | 1,889 | 1,968 | 3,101 | 3,943 |
| Greenland turbot | 978 | 966 | 869 | 866 | 591 |
| Haddock | 4,820 | 4,005 | 3,384 | 2,585 | 2,546 |
| Ocean perch | 1,860 | 1,701 | 1,490 | 1,294 | 1,214 |
| Pollock (Alaska and other) | 15,453 | 13,142 | 12,234 | 16,489 | 19,536 |
| Whiting | 6,212 | 3,972 | 3,673 | 3,426 | 3,149 |
| Minced (grated) all species | 7,998 | 5,566 | 5,883 | 6,776 | 4,109 |
| Unclassified | 4,046 | 2,890 | 1,976 | 2,275 | 2,757 |
| Total blocks | 68,272 | 63,901 | 64,585 | 65,960 | 60,180 |
| Fillets and steaks: | | | | | |
| Cod | 25,667 | 31,803 | 34,710 | 28,210 | 20,582 |
| Flounder | 7,636 | 5,212 | 6,940 | 8,919 | 9,792 |
| Greenland turbot | 4,260 | 3,530 | 2,524 | 2,565 | 1,711 |
| Haddock | 3,498 | 2,837 | 2,702 | 2,667 | 3,554 |
| Halibut | 1,912 | 1,727 | 1,329 | 1,633 | 2,374 |
| Ocean perch | 10,067 | 7,417 | 6,813 | 7,615 | 7,626 |
| Pollock | 23,731 | 21,899 | 20,148 | 18,915 | 20,709 |
| Whiting | 4,286 | 2,424 | 1,897 | 3,311 | 4,227 |
| Unclassified | 21,300 | 18,313 | 19,084 | 17,126 | 14,886 |
| Total fillets and steaks | 102,357 | 95,162 | 96,147 | 90,961 | 85,461 |
| Fish sticks and portions (cooked uncooked, all species) | 33,437 | 32,919 | 40,508 | 30,595 | 34,873 |
| Round, dressed, etc.: | | | | | |
| Catfish | 6,177 | 5,994 | 3,965 | 6,094 | 9,096 |
| Halibut | 14,240 | 6,749 | 14,030 | 22,655 | 20,486 |
| Rainbow trout | 2,040 | 2,030 | 3,210 | 1,899 | 2,129 |
| Salmon | 21,097 | 10,791 | 4,992 | 48,855 | 45,164 |
| Whiting | 1,132 | 1,699 | 3,081 | 1,943 | 1,768 |
| Unclassified | 24,710 | 23,946 | 27,324 | 24,862 | 21,433 |
| Surimi and analog products | 13,163 | 14,676 | 10,798 | 10,393 | 21,259 |
| Crabs: | | | | | |
| King | 4,253 | 3,629 | 2,140 | 1,643 | 2,667 |
| Snow | 5,191 | 8,384 | 10,082 | 13,704 | 11,373 |
| Unclassified | 3,656 | 3,501 | 3,537 | 3,819 | 4,184 |
| Lobsters (spiny and other) | 7,074 | 6,688 | 5,375 | 6,554 | 5,273 |
| Scallops | 6,749 | 4,944 | 3,567 | 4,218 | 4,990 |
| Shrimp: | | | | | |
| Raw, headless | 33,343 | 19,049 | 21,024 | 21,152 | 26,168 |
| Breaded | 6,705 | 5,887 | 5,976 | 6,050 | 8,805 |
| Peeled | 17,701 | 14,439 | 12,237 | 13,484 | 15,651 |
| Unclassified | 15,353 | 12,776 | 10,475 | 9,257 | 7,945 |
| Total shrimp | 73,102 | 52,151 | 49,712 | 49,943 | 58,569 |
| Other shellfish | 25,063 | 23,675 | 23,031 | 15,647 | 19,664 |
| Bait and animal food | 8,539 | 11,669 | 15,875 | 7,589 | 6,368 |
| Total fish and shellfish | 420,252 | 372,508 | 381,959 | 407,334 | 414,937 |

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

Source:--Frozen Fishery Products, Annual Summary, 1988, Current Fishery Statistics No. 8801 will provide additional information.

# U.S. Imports of Edible Fishery Products, 1988

**(Total imports $5,459.4 million)**



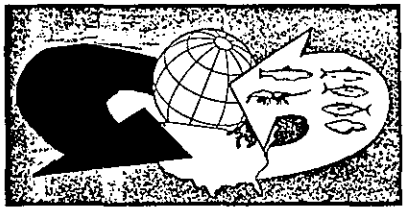
# FOREIGN TRADE

## IMPORTS

EDIBLE AND NONEDIBLE FISHERY PRODUCTS IMPORTS, 1979-88

| Year | Edible | | Nonedible | Total |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | | |
| 1979 | 2,358,920 | 2,671,860 | 1,136,931 | 3,808,791 |
| 1980 | 2,144,928 | 2,686,721 | 961,731 | 3,648,452 |
| 1981 | 2,272,474 | 3,034,206 | 1,171,805 | 4,206,011 |
| 1982 | 2,225,048 | 3,202,408 | 1,321,170 | 4,523,578 |
| 1983 | 2,386,771 | 3,626,704 | 1,502,668 | 5,129,372 |
| 1984 | 2,454,287 | 3,742,333 | 2,141,060 | 5,883,393 |
| 1985 | 2,754,018 | 4,064,334 | 2,614,252 | 6,678,586 |
| 1986 | 2,978,905 | 4,813,488 | 2,812,805 | 7,626,293 |
| 1987 | *3,201,132 | *5,711,233 | 3,106,464 | 8,817,697 |
| 1988 | 2,970,958 | 5,459,383 | *3,412,612 | *8,871,995 |

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



FISHERY PRODUCTS IMPORTS: VALUE, DUTIES COLLECTED, AND AD VALOREM EQUIVALENT, 1979-88

| Year | Value | | Duties collected | | Average ad valorem equivalent | |
|---|---|---|---|---|---|---|
| | Fishery imports | All imports | Fishery imports | All imports | Fishery imports | All imports |
| | Thousand dollars | | | | Percent | |
| 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 | 178,861 | 13,922,567 | 2.0 | 3.5 |
| 1988 | 8,871,995 | 437,140,185 | 206,470 | 15,054,304 | 2.3 | 3.4 |

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

## IMPORTS

FISHERY PRODUCTS IMPORTS, BY PRINCIPAL ITEMS, 1987 AND 1988

| Item | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Edible fishery products: | | | | |
| Fresh and frozen: | | | | |
| Whole or eviscerated: | | | | |
| Cod, cusk, haddock and flounder | 105,158 | 65,198 | 85,139 | 52,717 |
| Halibut | 9,295 | 23,138 | 11,952 | 25,432 |
| Salmon | 41,902 | 113,008 | 50,144 | 155,173 |
| Tuna: | | | | |
| Albacore | 201,988 | 171,988 | 195,991 | 202,967 |
| Other (1) | 370,517 | 158,771 | 354,156 | 169,331 |
| Other | 214,628 | 183,022 | 222,696 | 203,399 |
| Fillets and steaks: | | | | |
| Flounder | 73,003 | 148,734 | 58,534 | 119,996 |
| Groundfish | 315,418 | 570,065 | 253,187 | 431,126 |
| Other | 232,564 | 396,324 | 205,988 | 358,766 |
| Blocks and slabs | 403,577 | 539,358 | 303,237 | 382,482 |
| Shrimp | 461,173 | 1,676,844 | 489,740 | 1,725,971 |
| Crabmeat | 12,571 | 67,427 | 10,821 | 59,639 |
| Lobster: | | | | |
| American (includes fresh-cooked meat) | 38,974 | 178,069 | 39,732 | 183,482 |
| Spiny | 41,949 | 397,854 | 37,806 | 363,195 |
| Scallops (meats) | 39,934 | 162,273 | 32,039 | 115,706 |
| Analog products with shellfish | 30,539 | 51,197 | 24,516 | 41,569 |
| Other fish and shellfish | 98,996 | 169,855 | 92,128 | 163,444 |
| Canned: | | | | |
| Herring, not in oil | 5,617 | 8,726 | 6,541 | 10,264 |
| Sardines: | | | | |
| In oil | 27,352 | 35,106 | 22,813 | 30,824 |
| Not in oil | 37,670 | 25,470 | 30,546 | 23,154 |
| Tuna: | | | | |
| In oil | 329 | 869 | 318 | 744 |
| Not in oil | 211,356 | 206,051 | 244,186 | 297,922 |
| Balls, cakes, and puddings: | | | | |
| Analog products without shellfish | 4,737 | 6,786 | 2,574 | 4,361 |
| Other | 8,797 | 13,130 | 5,650 | 8,376 |
| Abalone | 2,790 | 19,867 | 2,434 | 22,487 |
| Clams | 13,974 | 15,288 | 11,268 | 13,993 |
| Crabmeat | 7,967 | 20,626 | 7,720 | 19,622 |
| Lobsters: | | | | |
| American | 637 | 4,184 | 594 | 5,342 |
| Spiny | 136 | 748 | 52 | 280 |
| Oysters | 32,668 | 36,144 | 27,524 | 39,817 |
| Shrimp | 17,132 | 33,380 | 14,138 | 28,730 |
| Other fish and shellfish | 57,579 | 89,499 | 52,350 | 80,952 |
| Cured: | | | | |
| Pickled or salted: | | | | |
| Cod, haddock, hake, et al | 31,893 | 60,542 | 31,361 | 52,665 |
| Herring | 22,213 | 9,594 | 20,333 | 8,618 |
| Other | 9,991 | 22,792 | 11,784 | 27,718 |
| Other fish and shellfish | 16,108 | 29,306 | 10,966 | 29,119 |
| Total edible fishery products | 3,201,132 | 5,711,233 | 2,970,958 | 5,459,383 |
| Nonedible fishery products: | | | | |
| Meal and scrap | 393,730 | 52,508 | 265,310 | 49,567 |
| Fish oils | 30,509 | 18,930 | 27,688 | 9,666 |
| Other | - | 3,035,026 | - | 3,353,379 |
| Total nonedible fishery products | - | 3,106,464 | - | 3,412,612 |
| Grand total | - | 8,817,697 | - | 8,871,995 |

(1) 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 FISHERY PRODUCTS IMPORTS, 1988

| Continent and country | Edible | | Nonedible | Total |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand dollars | Thousand dollars |
| North America: | | | | |
| Canada | 708,542 | 1,161,741 | 123,788 | 1,285,529 |
| Mexico | 111,337 | 382,056 | 39,016 | 421,072 |
| Panama | 30,292 | 79,742 | 5,049 | 84,791 |
| Honduras | 14,097 | 70,390 | 120 | 70,510 |
| Dominican Republic | 1,440 | 2,801 | 46,799 | 49,600 |
| Other | 50,903 | 144,433 | 24,525 | 168,958 |
| Total | 916,611 | 1,841,163 | 239,297 | 2,080,460 |
| South America: | | | | |
| Ecuador | 146,852 | 420,791 | 1,531 | 422,322 |
| Brazil | 49,686 | 125,510 | 22,186 | 147,696 |
| Chile | 43,693 | 66,693 | 20,967 | 87,660 |
| Peru | 25,596 | 24,042 | 49,665 | 73,707 |
| Argentina | 59,293 | 48,989 | 11,860 | 60,849 |
| Other | 75,356 | 117,411 | 18,905 | 136,316 |
| Total | 400,476 | 803,436 | 125,114 | 928,550 |
| Europe: | | | | |
| European Economic Community: | | | | |
| Italy | 1,012 | 2,418 | 1,088,091 | 1,090,509 |
| France | 29,049 | 12,858 | 230,064 | 242,922 |
| United Kingdom | 7,074 | 24,535 | 107,556 | 132,091 |
| Denmark | 62,102 | 112,858 | 19,181 | 132,039 |
| Federal Republic of Germany | 3,964 | 4,401 | 94,884 | 99,285 |
| Other | 58,500 | 87,012 | 72,962 | 159,974 |
| Total | 161,701 | 244,082 | 1,612,738 | 1,856,820 |
| Other: | | | | |
| Norway | 71,746 | 172,437 | 6,534 | 178,971 |
| Iceland | 88,734 | 164,777 | 840 | 165,617 |
| Switzerland | 511 | 1,091 | 124,971 | 126,062 |
| Yugoslavia | 4,708 | 2,815 | 15,657 | 18,472 |
| Cyprus | 4,318 | 16,064 | 1,789 | 17,853 |
| Other | 15,340 | 21,732 | 20,048 | 41,780 |
| Total | 185,357 | 378,916 | 169,839 | 548,755 |
| Asia: | | | | |
| Thailand | 249,361 | 345,921 | 236,151 | 582,072 |
| Japan | 118,752 | 211,897 | 241,921 | 453,818 |
| Hong Kong | 23,386 | 31,267 | 359,862 | 391,129 |
| Taiwan | 172,513 | 285,299 | 86,870 | 372,169 |
| China | 116,320 | 318,437 | 22,912 | 341,349 |
| Other | 472,436 | 673,409 | 287,199 | 960,608 |
| Total | 1,152,768 | 1,866,230 | 1,234,915 | 3,101,145 |
| Australia and Oceania: | | | | |
| Australia | 12,631 | 130,412 | 14,386 | 144,798 |
| New Zealand | 50,829 | 142,220 | 972 | 143,192 |
| British Pacific Islands | 21,953 | 9,774 | 7 | 9,781 |
| French Pacific Islands | 186 | 441 | 5,630 | 6,071 |
| New Guinea | 66 | 600 | 656 | 1,256 |
| Other | 360 | 980 | 420 | 1,400 |
| Total | 86,025 | 284,427 | 22,071 | 306,498 |
| Africa: | | | | |
| Ghana | 46,818 | 15,583 | 3 | 15,586 |
| Nigeria | 2,981 | 8,339 | 332 | 8,671 |
| Morocco | 2,088 | 3,546 | 3,420 | 6,966 |
| Mauritania | 7,329 | 6,376 | 488 | 6,864 |
| French Indian Ocean | 3,841 | 2,691 | 24 | 2,715 |
| Other | 4,963 | 4,594 | 4,371 | 8,965 |
| Total | 68,020 | 41,129 | 8,638 | 49,767 |
| Grand total | 2,970,958 | 5,459,383 | 3,412,612 | 8,871,995 |

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, 1987 AND 1988

| Species and type | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Regular blocks and slabs: | | | | |
| Cod | 162,910 | 275,031 | 150,220 | 237,317 |
| Flatfish: | | | | |
| Turbot | 2,177 | 3,026 | 738 | 848 |
| Other | 9,142 | 13,698 | 7,303 | 11,207 |
| Haddock | 27,245 | 43,783 | 17,846 | 27,904 |
| Ocean Perch, Atlantic | 2,898 | 4,213 | 1,350 | 1,518 |
| Pollock | 89,216 | 82,165 | 61,518 | 47,647 |
| Whiting | 32,745 | 28,289 | 16,646 | 13,935 |
| Other | 37,356 | 61,887 | 9,507 | 17,179 |
| Total | 363,689 | 512,092 | 265,128 | 357,555 |
| Minced blocks and slabs | 39,888 | 27,266 | 38,109 | 24,927 |
| Grand total | 403,577 | 539,358 | 303,237 | 382,482 |

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

REGULAR AND MINCED FISH BLOCKS AND SLABS IMPORTS, BY COUNTRY OF ORIGIN, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Canada | 130,301 | 188,931 | 126,140 | 171,906 |
| Denmark | 61,513 | 97,748 | 43,394 | 69,144 |
| Republic of Korea | 72,525 | 76,594 | 51,333 | 45,060 |
| Norway | 27,302 | 45,213 | 19,975 | 29,690 |
| Iceland | 26,902 | 39,500 | 20,684 | 28,212 |
| Poland | 28,494 | 26,100 | 12,771 | 10,149 |
| Argentina | 16,811 | 13,710 | 10,008 | 7,556 |
| Japan | 9,757 | 13,732 | 5,276 | 5,618 |
| Other | 29,972 | 37,830 | 13,656 | 15,147 |
| Total | 403,577 | 539,358 | 303,237 | 382,482 |

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

GROUNDFISH FILLET AND STEAK IMPORTS, BY SPECIES, 1987 AND 1988 (1)

| Species | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Cod | 192,791 | 373,547 | 159,188 | 287,555 |
| Haddock (2) | 74,654 | 122,840 | 52,141 | 84,866 |
| Ocean Perch, Atlantic | 47,973 | 73,678 | 41,858 | 58,705 |
| Total | 315,418 | 570,065 | 253,187 | 431,126 |

(1) Does not include data on fish blocks and slabs.
(2) Includes some quantities of cusk, hake, and pollock fillets.

Note:--Imports and Exports of Fishery Products Annual Summary, 1988, Current Fishery Statistics No. 8802 will provide additional information.
Source:--U.S. Department of Commerce, Bureau of the Cenus.

## IMPORTS

CANNED TUNA NOT IN OIL, QUOTA AND IMPORTS, 1979-88

| Year | Quota (1) | Imports | |
|---|---|---|---|
| | | Under quota (2) | Over quota (3) |
| | Thousand pounds | | |
| 1979 | 125,813 | 82,202 | - |
| 1980 | 109,074 | 109,074 | 5,064 |
| 1981 | 104,355 | 76,683 | - |
| 1982 | 109,742 | 92,759 | - |
| 1983 | 91,904 | 91,904 | 28,304 |
| 1984 | 95,587 | 95,587 | 68,328 |
| 1985 | 97,496 | 97,496 | 116,854 |
| 1986 | 81,092 | 81,092 | 153,057 |
| 1987 | 91,539 | 91,539 | 123,364 |
| 1988 | 85,185 | 85,185 | 193,784 |

(1) Imports have been subject to tariff quotas since April 14, 1956, and are based on 20 percent of the previous year's domestic pack, excluding the pack in American Samoa.

(2) 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 1988, 6 percent.

(3) Dutiable in 1958 to 1959 at 25 percent ad valorem; 1970, 17 percent, and 1972 to 1988, 12.5 percent.

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

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

CANNED TUNA, BY COUNTRY OF ORIGIN, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Thailand | 146,928 | 135,368 | 178,941 | 207,538 |
| Taiwan | 25,924 | 34,809 | 24,013 | 41,759 |
| Philippines | 20,858 | 16,577 | 18,505 | 18,629 |
| Ecuador | 5,112 | 4,481 | 8,318 | 9,366 |
| Japan | 4,688 | 7,375 | 3,370 | 6,992 |
| Indonesia | 1,505 | 1,247 | 4,854 | 5,690 |
| Malaysia | 1,573 | 1,985 | 2,824 | 3,964 |
| Other | 5,097 | 5,078 | 3,679 | 4,728 |
| Total | 211,685 | 206,920 | 244,504 | 298,666 |

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

## IMPORTS

SHRIMP IMPORTS, BY COUNTRY OF ORIGIN, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| North America: | | | | |
| Mexico | 86,082 | 400,831 | 63,524 | 310,549 |
| Panama | 16,614 | 69,673 | 14,737 | 57,649 |
| Honduras | 7,928 | 27,977 | 9,137 | 32,289 |
| El Salvador | 7,230 | 21,960 | 8,171 | 26,138 |
| Guatemala | 3,415 | 13,305 | 4,278 | 14,368 |
| Canada | 6,943 | 15,298 | 5,343 | 14,320 |
| Costa Rica | 4,114 | 13,827 | 3,656 | 12,746 |
| Trinidad and Tobago | 643 | 1,871 | 393 | 1,351 |
| Belize | 167 | 599 | 130 | 507 |
| Greenland | 40 | 213 | 83 | 448 |
| Other | 389 | 1,719 | 251 | 885 |
| Total | 133,565 | 567,273 | 109,703 | 471,250 |
| South America: | | | | |
| Ecuador | 101,260 | 378,515 | 103,971 | 382,109 |
| Brazil | 16,610 | 50,880 | 19,934 | 59,109 |
| Venezuela | 6,043 | 18,165 | 8,931 | 28,478 |
| Colombia | 4,321 | 19,738 | 4,194 | 18,585 |
| Peru | 5,891 | 21,387 | 4,083 | 14,011 |
| Guyana | 4,694 | 14,967 | 4,671 | 12,439 |
| French Guiana | 2,305 | 8,951 | 2,636 | 9,536 |
| Chile | 589 | 2,725 | 771 | 2,964 |
| Suriname | 947 | 4,225 | 711 | 2,703 |
| Argentina | 281 | 963 | 496 | 1,447 |
| Other | 7 | 19 | 11 | 31 |
| Total | 142,948 | 520,535 | 150,409 | 531,412 |
| Europe: | | | | |
| European Economic Community: | | | | |
| United Kingdom | 2,575 | 8,857 | 1,200 | 3,732 |
| Denmark | 669 | 2,868 | 276 | 1,349 |
| Belgium | 54 | 135 | 350 | 998 |
| Spain | 407 | 1,090 | 124 | 836 |
| Federal Republic of Germany | 30 | 120 | 95 | 453 |
| Other | 346 | 1,475 | 203 | 693 |
| Total | 4,081 | 14,545 | 2,248 | 8,061 |
| Other: | | | | |
| Norway | 4,521 | 21,357 | 1,245 | 5,225 |
| Iceland | 596 | 2,604 | 120 | 558 |
| Switzerland | 67 | 311 | 183 | 544 |
| Turkey | - | - | 78 | 223 |
| Sweden | 2 | 10 | 22 | 110 |
| Other | 1 | 7 | 54 | 127 |
| Total | 5,187 | 24,289 | 1,702 | 6,787 |
| Asia: | | | | |
| China | 42,417 | 118,916 | 104,316 | 300,042 |
| Thailand | 24,125 | 64,496 | 23,676 | 91,290 |
| Taiwan | 37,051 | 159,617 | 17,365 | 85,633 |
| India | 28,374 | 56,980 | 32,169 | 55,048 |
| Bangladesh | 9,346 | 32,436 | 11,659 | 50,452 |
| Philippines | 5,638 | 26,376 | 7,635 | 37,469 |
| Pakistan | 17,621 | 35,523 | 14,548 | 25,237 |
| Singapore | 7,000 | 20,054 | 5,599 | 19,114 |
| Indonesia | 3,677 | 11,894 | 4,335 | 17,638 |
| Malaysia | 4,400 | 11,926 | 6,073 | 15,093 |
| Other | 9,417 | 30,257 | 8,295 | 25,153 |
| Total | 189,066 | 568,475 | 235,670 | 722,169 |
| Australia and Oceania | 1,300 | 8,678 | 1,009 | 6,005 |
| Africa | 2,158 | 6,429 | 3,137 | 9,017 |
| Grand total | 478,305 | 1,710,224 | 503,878 | 1,754,701 |

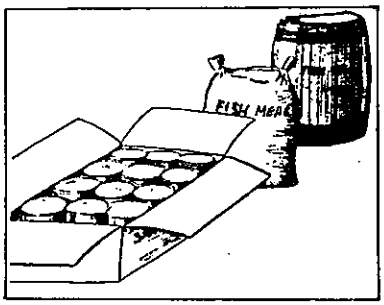
Note:--Statistics on imports are the weights of the individual products as exported, i.e., raw headless, peeled, etc. Source:--U.S. Department of Commerce, Bureau of the Census.

## IMPORTS

SHRIMP IMPORTS, BY TYPE OF PRODUCT, 1987 AND 1988

| Type of product | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Shell-on (head off) | 310,073 | 1,224,234 | 358,765 | 1,337,211 |
| Peeled: | | | | |
| Canned | 17,132 | 33,380 | 14,138 | 28,730 |
| Not breaded: | | | | |
| Raw | 116,708 | 313,521 | 96,520 | 244,016 |
| Other | 33,181 | 136,137 | 33,087 | 142,256 |
| Breaded | 1,211 | 2,952 | 1,368 | 2,488 |
| Total | 478,305 | 1,710,224 | 503,878 | 1,754,701 |

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




FISH MEAL AND SCRAP IMPORTS, BY COUNTRY OF ORIGIN, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Peru | 61,376 | 9,101 | 103,052 | 19,997 |
| Chile | 208,244 | 27,480 | 56,058 | 12,236 |
| Canada | 64,364 | 8,958 | 70,524 | 11,209 |
| Panama | 44,468 | 4,937 | 22,268 | 3,521 |
| Ecuador | 11,890 | 1,446 | 7,284 | 1,203 |
| Taiwan | - | - | 1,366 | 379 |
| Poland | - | - | 1,102 | 313 |
| Other | 3,388 | 586 | 3,656 | 709 |
| Total | 393,730 | 52,508 | 265,310 | 49,567 |

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

## EXPORTS

DOMESTIC FISHERY PRODUCTS EXPORTS, BY PRINCIPAL ITEMS, 1987 AND 1988

| Item | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Edible fishery products: | | | | |
| Eels, live | 5,537 | 5,886 | 3,620 | 5,996 |
| Fresh and frozen: | | | | |
| Whole or eviscerated: | | | | |
| Butterfish | 7,575 | 10,457 | 10,827 | 14,121 |
| Eels | 300 | 461 | 679 | 1,008 |
| Halibut | 7,229 | 14,108 | 6,185 | 11,470 |
| Herring | 92,266 | 81,517 | 74,597 | 76,551 |
| Mackerel | 1,453 | 779 | 3,580 | 1,328 |
| Mullet | 2,654 | 1,689 | 1,465 | 1,074 |
| Pollock | 6,368 | 4,643 | 4,903 | 4,681 |
| Sablefish | 41,889 | 70,057 | 41,804 | 87,794 |
| Salmon | 267,735 | 604,163 | 292,400 | 825,934 |
| Unclassified | 82,491 | 103,627 | 211,991 | 208,284 |
| Fillets, steaks, and portions: | | | | |
| Cod | 11,405 | 16,347 | 11,941 | 18,196 |
| Halibut | 1,212 | 2,230 | 1,797 | 3,099 |
| Herring | 2,751 | 2,512 | 19,391 | 18,393 |
| Salmon | 1,960 | 4,403 | 1,715 | 4,457 |
| Unclassified | 36,983 | 50,241 | 52,508 | 68,299 |
| Fish sticks and portions | 2,200 | 3,684 | 2,150 | 3,348 |
| Clams | 1,232 | 1,933 | 1,558 | 2,540 |
| Crabs: | | | | |
| Dungeness | 691 | 3,133 | 1,052 | 3,576 |
| King | 8,375 | 60,581 | 5,251 | 45,993 |
| Snow | 43,339 | 117,530 | 57,466 | 175,118 |
| Unclassified | 3,741 | 11,897 | 5,181 | 17,696 |
| Lobsters | 3,784 | 14,392 | 8,058 | 36,270 |
| Scallops | 849 | 3,681 | 668 | 2,808 |
| Sea urchins | 2,931 | 25,389 | 3,647 | 30,049 |
| Shrimp | 21,981 | 74,851 | 22,116 | 78,043 |
| Squid | 16,422 | 11,938 | 37,847 | 25,113 |
| Other fish and shellfish | 19,405 | 32,056 | 55,930 | 64,578 |
| Canned: | | | | |
| Salmon | 35,901 | 85,816 | 32,900 | 91,568 |
| Sardines | 999 | 688 | 8,555 | 7,902 |
| Abalone | 1,159 | 12,380 | 1,459 | 17,187 |
| King crab | 63 | 126 | 250 | 564 |
| Shrimp | 2,334 | 8,264 | 2,014 | 7,855 |
| Squid | 4,898 | 1,943 | 6,651 | 2,890 |
| Other fish and shellfish | 8,269 | 11,035 | 10,379 | 14,101 |
| Cured: | | | | |
| Cod | 2,071 | 2,666 | 8,282 | 10,634 |
| Salmon | 266 | 1,071 | 333 | 1,308 |
| Roe: | | | | |
| Herring | 6,810 | 23,125 | 18,494 | 34,479 |
| Salmon | 16,860 | 71,696 | 17,647 | 90,147 |
| Sea urchins | 607 | 2,869 | 2,056 | 12,040 |
| Other | 3,880 | 13,164 | 8,813 | 20,031 |
| Other fish and shellfish | 3,840 | 8,061 | 5,103 | 14,136 |
| Other | 220 | 520 | 541 | 964 |
| Total edible fishery products | 782,935 | 1,577,609 | 1,063,804 | 2,161,623 |
| Nonedible fishery products: | | | | |
| Meal and scrap | 103,422 | 13,245 | 246,306 | 23,447 |
| Fish oils | 249,119 | 23,312 | 149,279 | 21,946 |
| Seal furs | (1) | 399 | (1) | 39 |
| Other | - | 45,808 | - | 67,540 |
| Total nonedible fishery products | - | 82,764 | - | 112,972 |
| Grand total | - | 1,660,373 | - | 2,274,595 |

(1) Number of seal furs was 5,489 in 1987 and 772 in 1988. Note:--Does not include U.S.-flag vessel catches transferred onto foreign vessels in the U.S. EEZ joint venture operations (see page 18).

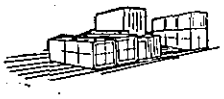
Source:--U.S. Department of Commerce, Bureau of the Census.

## EXPORTS

DOMESTIC FISHERY PRODUCTS EXPORTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1988

| Continent and Country | Edible | | Nonedible | Total |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | | |
| North America: | | | | |
| Canada | 79,400 | 156,199 | 8,307 | 164,506 |
| Mexico | 11,497 | 27,615 | 3,312 | 30,927 |
| Bermuda | 1,208 | 3,916 | 4 | 3,920 |
| Honduras | 2,292 | 2,200 | 307 | 2,507 |
| Netherlands Antilles | 1,073 | 1,802 | 151 | 1,953 |
| Other | 5,833 | 6,699 | 2,245 | 8,944 |
| Total | 101,303 | 198,431 | 14,326 | 212,757 |
| South America: | | | | |
| Venezuela | 22 | 78 | 942 | 1,020 |
| Chile | 42 | 117 | 903 | 1,020 |
| Brazil | 9 | 45 | 899 | 944 |
| Ecuador | 112 | 206 | 689 | 895 |
| Colombia | 57 | 148 | 296 | 444 |
| Other | 54 | 97 | 778 | 875 |
| Total | 296 | 691 | 4,507 | 5,198 |
| Europe: | | | | |
| European Economic Community: | | | | |
| United Kingdom | 34,272 | 80,547 | 1,996 | 82,543 |
| France | 35,300 | 71,744 | 902 | 72,646 |
| Netherlands | 7,858 | 16,609 | 17,428 | 34,037 |
| Italy | 12,908 | 14,807 | 1,518 | 16,325 |
| Federal Republic of Germany | 7,821 | 12,572 | 1,747 | 14,319 |
| Other | 41,115 | 46,358 | 4,517 | 50,875 |
| Total | 139,274 | 242,637 | 28,108 | 270,745 |
| Other: | | | | |
| Sweden | 6,320 | 13,418 | 81 | 13,499 |
| Norway | 923 | 2,153 | 759 | 2,912 |
| Switzerland | 1,127 | 2,713 | 50 | 2,763 |
| Iceland | 1,143 | 958 | 67 | 1,025 |
| Yugoslavia | 2,206 | 993 | 16 | 1,009 |
| Other | 24,648 | 1,428 | 529 | 1,957 |
| Total | 36,367 | 21,663 | 1,502 | 23,165 |
| Asia: | | | | |
| Japan | 712,151 | 1,571,833 | 27,356 | 1,599,189 |
| Republic of Korea | 32,882 | 43,782 | 2,116 | 45,898 |
| Taiwan | 8,007 | 20,316 | 10,169 | 30,485 |
| Hong Kong | 5,338 | 21,419 | 7,995 | 29,414 |
| Thailand | 2,471 | 4,560 | 2,239 | 6,799 |
| Other | 7,705 | 12,849 | 4,955 | 17,804 |
| Total | 768,554 | 1,674,759 | 54,830 | 1,729,589 |

(Continued)



DOMESTIC FISHERY PRODUCTS EXPORTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1988 - Continued

| Continent and Country | Edible | | Nonedible | Total |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | | |
| Australia and Oceania: | | | | |
| Australia | 11,681 | 18,479 | 372 | 18,851 |
| French Pacific Islands | 389 | 896 | 37 | 933 |
| Other Pacific Islands | 2,596 | 896 | - | 896 |
| New Zealand | 167 | 359 | 41 | 400 |
| British Pacific Islands | 10 | 36 | - | 36 |
| Other | 161 | 88 | - | 88 |
| Total | 15,004 | 20,754 | 450 | 21,204 |
| Africa: | | | | |
| Egypt | 1,343 | 668 | 8,730 | 9,398 |
| Republic of South Africa | 1,380 | 1,662 | 353 | 2,015 |
| Tunisia | 14 | 63 | 58 | 121 |
| Nigeria | 89 | 99 | - | 99 |
| Angola | 34 | 67 | - | 67 |
| Other | 146 | 129 | 108 | 237 |
| Total | 3,006 | 2,688 | 9,249 | 11,937 |
| Grand total | 1,063,804 | 2,161,623 | 112,972 | 2,274,595 |

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

DOMESTIC FISHERY PRODUCTS EXPORTS, 1979-88

| Year | Edible | | Nonedible | Total |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | | |
| 1979 | 554,294 | 1,022,335 | 62,162 | 1,084,497 |
| 1980 | 573,896 | 904,363 | 101,791 | 1,006,154 |
| 1981 | 669,272 | 1,072,765 | 84,230 | 1,156,995 |
| 1982 | 657,246 | 998,873 | 60,011 | 1,058,884 |
| 1983 | 601,913 | 907,688 | *113,804 | 1,021,492 |
| 1984 | 574,124 | 842,349 | 106,490 | 948,839 |
| 1985 | 648,146 | 1,010,268 | 73,846 | 1,084,114 |
| 1986 | 735,026 | 1,289,807 | 66,289 | 1,356,096 |
| 1987 | 782,935 | 1,577,609 | 82,764 | 1,660,373 |
| 1988 | *1,063,804 | *2,161,623 | 112,972 | *2,274,595 |

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

## EXPORTS

DOMESTIC AND FOREIGN SHRIMP PRODUCTS EXPORTS, 1987 AND 1988

| ITEM | 1987 | | 1988 | |
|---|---|---|---|---|
| | THOUSAND POUNDS | THOUSAND DOLLARS | THOUSAND POUNDS | THOUSAND DOLLARS |
| Fresh and frozen: | | | | |
| Domestic | 21,981 | 74,851 | 22,116 | 78,043 |
| Foreign | 2,947 | 11,563 | 4,183 | 14,725 |
| Total | 24,928 | 86,414 | 26,299 | 92,768 |
| Canned: | | | | |
| Domestic | 2,334 | 8,264 | 2,014 | 7,855 |
| Foreign | 85 | 152 | 173 | 552 |
| Total | 2,419 | 8,416 | 2,187 | 8,407 |
| Total: | | | | |
| Domestic | 24,315 | 83,115 | 24,130 | 85,898 |
| Foreign | 3,032 | 11,715 | 4,356 | 15,277 |
| Total | 27,347 | 94,830 | 28,486 | 101,175 |

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

DOMESTIC FRESH AND FROZEN SHRIMP EXPORTS, BY COUNTRY OF DESTINATION, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | THOUSAND POUNDS | THOUSAND DOLLARS | THOUSAND POUNDS | THOUSAND DOLLARS |
| Canada | 8,960 | 28,943 | 6,633 | 25,318 |
| Mexico | 4,694 | 14,129 | 6,973 | 21,008 |
| Japan | 5,824 | 21,976 | 3,548 | 14,040 |
| Sweden | 291 | 1,107 | 1,240 | 3,791 |
| United Kingdom | 280 | 1,342 | 992 | 3,708 |
| Norway | 148 | 544 | 438 | 1,574 |
| Netherlands | 70 | 848 | 175 | 1,553 |
| Hong Kong | 101 | 389 | 739 | 1,467 |
| Singapore | 72 | 154 | 270 | 1,288 |
| Other | 1,541 | 5,419 | 1,108 | 4,296 |
| Total | 21,981 | 74,851 | 22,116 | 78,043 |

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

DOMESTIC CANNED SHRIMP EXPORTS, BY COUNTRY OF DESTINATION, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | THOUSAND POUNDS | THOUSAND DOLLARS | THOUSAND POUNDS | THOUSAND DOLLARS |
| Canada | 1,270 | 4,192 | 778 | 3,290 |
| Thailand | 219 | 1,041 | 293 | 1,238 |
| Taiwan | 341 | 1,035 | 239 | 1,021 |
| Switzerland | 103 | 383 | 125 | 444 |
| Japan | 28 | 141 | 103 | 286 |
| Federal Republic of Germany | 57 | 241 | 95 | 248 |
| United Kingdom | 38 | 156 | 58 | 173 |
| Bermuda | 12 | 52 | 26 | 171 |
| Hong Kong | 11 | 26 | 60 | 168 |
| Other | 255 | 997 | 237 | 816 |
| Total | 2,334 | 8,264 | 2,014 | 7,855 |

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, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Japan | 194,140 | 457,153 | 238,273 | 702,199 |
| France | 23,838 | 57,530 | 14,464 | 40,592 |
| Canada | 20,652 | 38,490 | 13,717 | 28,154 |
| United Kingdom | 8,327 | 14,914 | 8,859 | 17,396 |
| Republic of Korea | 5,598 | 5,983 | 5,685 | 9,520 |
| Denmark | 3,390 | 5,905 | 3,573 | 7,597 |
| Belgium and Luxembourg | 2,166 | 6,342 | 1,284 | 4,909 |
| Federal Republic of Germany | 1,901 | 3,858 | 1,713 | 4,246 |
| Sweden | 3,977 | 5,692 | 1,426 | 2,914 |
| Italy | 191 | 569 | 427 | 1,911 |
| Netherlands | 1,576 | 3,672 | 547 | 1,632 |
| Switzerland | 576 | 1,182 | 509 | 1,278 |
| Other | 1,403 | 2,873 | 1,923 | 3,586 |
| Total | 267,735 | 604,163 | 292,400 | 825,934 |

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

DOMESTIC FRESH AND FROZEN SALMON EXPORTS, FILLETS, STEAKS OR PORTIONS, BY COUNTRY OF DESTINATION, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Canada | 410 | 912 | 581 | 1,480 |
| France | 124 | 278 | 319 | 1,204 |
| Japan | 1,169 | 2,593 | 531 | 1,127 |
| Belgium and Luxembourg | - | - | 80 | 218 |
| United Kingdom | 132 | 305 | 65 | 97 |
| Federal Republic of Germany | 75 | 188 | 31 | 92 |
| Sweden | - | - | 22 | 66 |
| Taiwan | 7 | 16 | 43 | 65 |
| Ireland | - | - | 12 | 31 |
| Other | 43 | 111 | 31 | 77 |
| Total | 1,960 | 4,403 | 1,715 | 4,457 |

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

DOMESTIC CANNED SALMON EXPORTS, BY COUNTRY OF DESTINATION, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| United Kingdom | 17,722 | 45,355 | 16,992 | 51,449 |
| Australia | 6,868 | 14,101 | 6,105 | 14,988 |
| Canada | 6,379 | 15,004 | 5,172 | 13,051 |
| Netherlands | 2,107 | 5,788 | 2,548 | 6,882 |
| Belgium and Luxembourg | 1,021 | 1,734 | 761 | 2,030 |
| Japan | 326 | 828 | 573 | 1,636 |
| Italy | 63 | 76 | 224 | 352 |
| French Pacific Islands | 67 | 135 | 108 | 262 |
| New Zealand | 262 | 711 | 90 | 184 |
| Other | 1,086 | 2,084 | 327 | 734 |
| Total | 35,901 | 85,816 | 32,900 | 91,568 |

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

## EXPORTS

DOMESTIC FROZEN KING CRAB EXPORTS, BY COUNTRY OF DESTINATION, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Japan | 7,181 | 54,674 | 4,243 | 39,796 |
| Canada | 1,028 | 4,935 | 850 | 5,485 |
| Bermuda | 20 | 113 | 22 | 130 |
| Singapore | 6 | 48 | 17 | 118 |
| Federal Republic of Germany | 50 | 189 | 40 | 109 |
| Republic of Korea | 5 | 32 | 42 | 97 |
| Other | 85 | 590 | 37 | 258 |
| Total | 8,375 | 60,581 | 5,251 | 45,993 |

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

DOMESTIC FROZEN SNOW CRAB EXPORTS, BY COUNTRY OF DESTINATION, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Japan | 36,564 | 100,599 | 52,760 | 161,303 |
| Republic of Korea | 5,842 | 14,901 | 3,667 | 11,047 |
| Canada | 874 | 1,791 | 785 | 1,891 |
| Belgium and Luxembourg | - | - | 27 | 204 |
| Netherlands | - | - | 44 | 177 |
| Federal Republic of Germany | 20 | 120 | 37 | 150 |
| Other | 39 | 119 | 146 | 346 |
| Total | 43,339 | 117,530 | 57,466 | 175,118 |

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

DOMESTIC FRESH AND FROZEN HERRING EXPORTS, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Japan | 67,622 | 59,398 | 65,660 | 70,431 |
| Republic of Korea | 13,290 | 13,152 | 3,352 | 3,184 |
| Canada | 10,342 | 7,939 | 5,454 | 2,879 |
| Sinagpore | - | - | 29 | 24 |
| Haiti | 23 | 19 | 66 | 23 |
| Mexico | - | - | 6 | 6 |
| Other | 989 | 1,009 | 30 | 4 |
| Total | 92,266 | 81,517 | 74,597 | 76,551 |

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

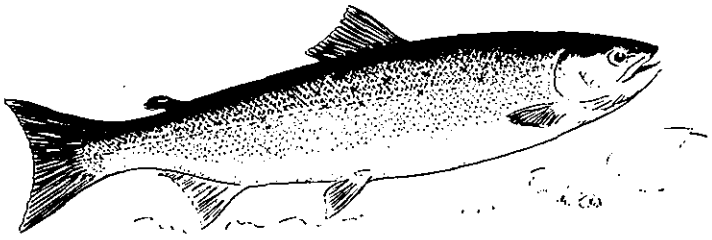
# FOREIGN TRADE

## EXPORTS

DOMESTIC FISH AND MARINE ANIMAL OIL EXPORTS, BY COUNTRY OF DESTINATION, 1987 AND 1988

| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Netherlands | 193,090 | 16,360 | 130,978 | 16,971 |
| United Kingdom | 35,991 | 3,909 | 1,739 | 1,054 |
| Spain | 7,697 | 720 | 6,500 | 1,000 |
| Canada | 598 | 307 | 1,660 | 552 |
| Norway | 218 | 640 | 152 | 516 |
| Federal Republic of Germany | 2,035 | 220 | 2,421 | 425 |
| Republic of South Africa | - | - | 2,202 | 302 |
| Japan | 13 | 32 | 111 | 234 |
| Belgium and Luxembourg | 8,957 | 670 | 2,183 | 224 |
| Other | 520 | 454 | 1,333 | 668 |
| Total | 249,119 | 23,312 | 149,279 | 21,946 |

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

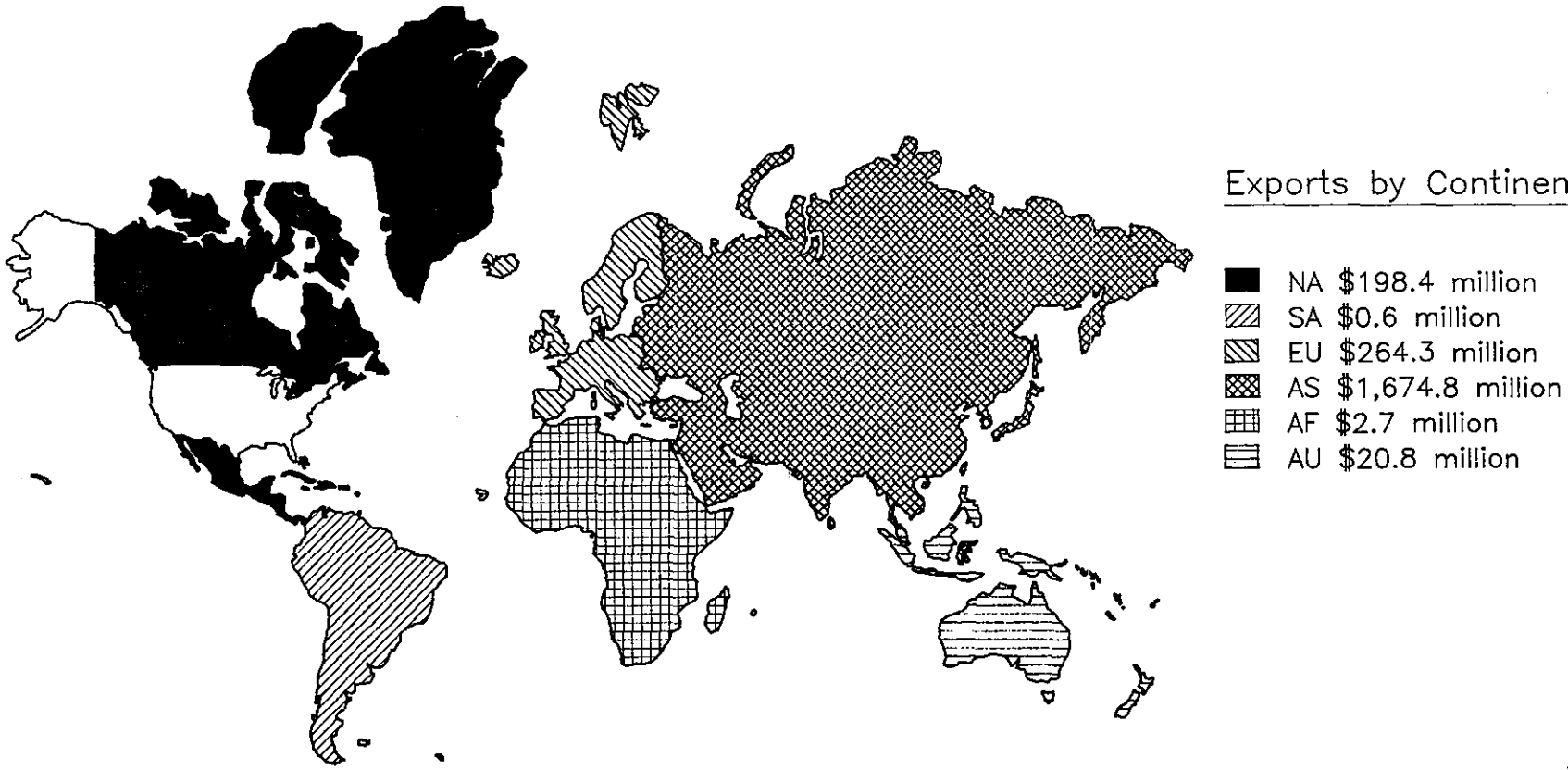


DOMESTIC FISH MEAL EXPORTS, BY COUNTRY OF DESTINATION, 1987 AND 1988

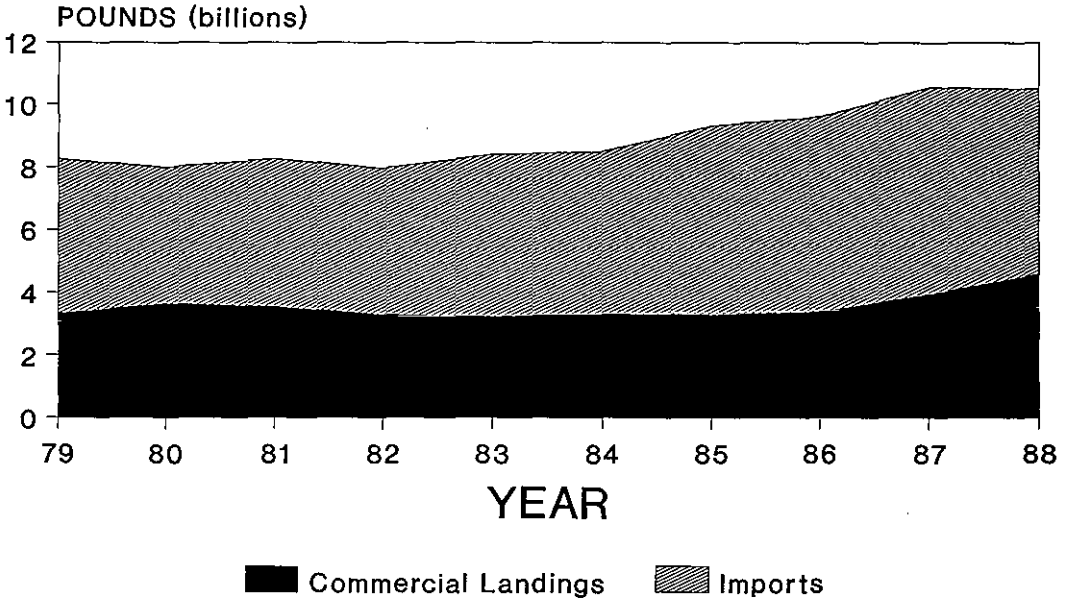
| Country | 1987 | | 1988 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Egypt | 36,800 | 6,019 | 27,960 | 8,726 |
| Taiwan | 17,008 | 2,399 | 32,876 | 5,475 |
| Canada | 19,404 | 1,491 | 24,734 | 3,466 |
| Japan | 3,692 | 691 | 102,300 | 1,010 |
| Dominican Republic | 2,230 | 294 | 3,474 | 626 |
| Saudi Arabia | - | - | 2,208 | 557 |
| French Guiana | 208 | 12 | 4,012 | 492 |
| Sri Lanka | - | - | 2,932 | 409 |
| USSR | - | - | 21,888 | 377 |
| Other | 24,080 | 2,339 | 23,922 | 2,309 |
| Total | 103,422 | 13,245 | 246,306 | 23,447 |

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

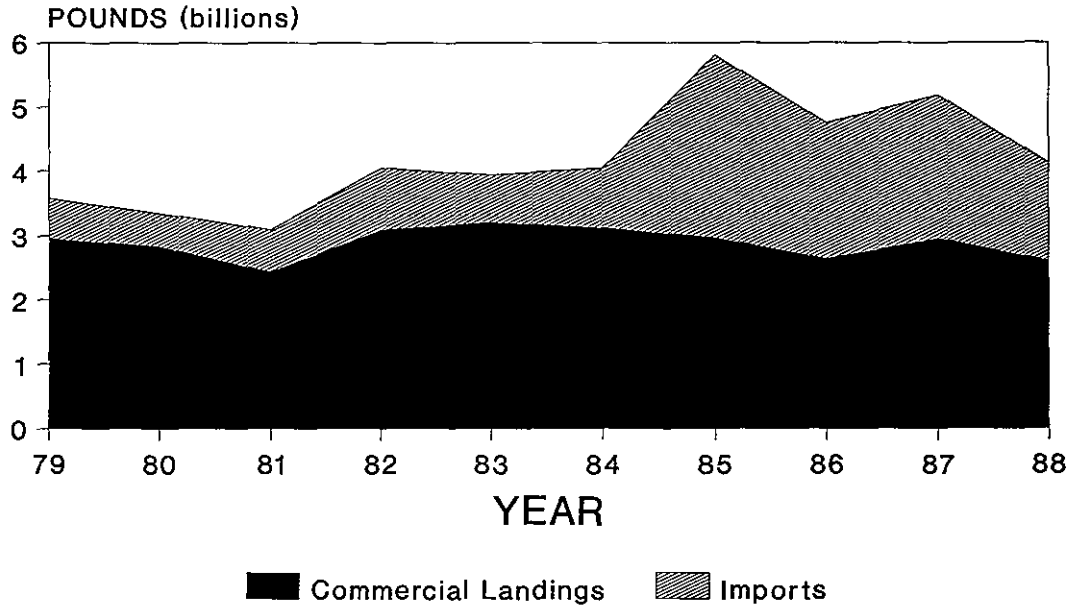
# U.S. Exports of Edible Fishery Products, 1988
## (Total exports $2,161.6 million)



## U.S. SUPPLY OF EDIBLE FISHERY PRODUCTS (ROUND WEIGHT) 1979 - 1988




## SUPPLY OF INDUSTRIAL FISHERY PRODUCTS (U.S., ROUND WEIGHT) 1979 - 1988



U.S. SUPPLY OF EDIBLE AND INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1979-88
(Round weight)

| Year | Domestic commercial landings (1) | | Imports (2) | | Total |
|---|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent | Million pounds |
| 1979 | 6,267 | 53.0 | 5,564 | 47.0 | 11,831 |
| 1980 | 6,482 | 57.1 | 4,875 | 42.9 | 11,357 |
| 1981 | 5,977 | 52.6 | 5,376 | 47.4 | 11,353 |
| 1982 | 6,367 | 53.0 | 5,644 | 47.0 | 12,011 |
| 1983 | 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 | 42.0 | 8,337 | 58.0 | 14,368 |
| 1987 | 6,896 | 43.8 | 8,848 | 56.2 | 15,744 |
| 1988 | *7,192 | 49.2 | 7,436 | 50.8 | 14,628 |

(1) Preliminary.
(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.

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, 1979-88
(Round weight)

| Year | Domestic commercial landings (1) | | Imports (2) | | Total |
|---|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent | Million pounds |
| 1979 | 3,318 | 40.2 | 4,933 | 59.8 | 8,251 |
| 1980 | 3,654 | 45.6 | 4,352 | 54.4 | 8,006 |
| 1981 | 3,547 | 42.9 | 4,720 | 57.1 | 8,267 |
| 1982 | 3,285 | 41.2 | 4,683 | 58.8 | 7,968 |
| 1983 | 3,238 | 38.5 | 5,175 | 61.5 | 8,413 |
| 1984 | 3,320 | 39.1 | 5,178 | 60.9 | 8,498 |
| 1985 | 3,294 | 35.3 | 6,043 | 64.7 | 9,337 |
| 1986 | 3,393 | 35.3 | 6,227 | 64.7 | 9,620 |
| 1987 | 3,946 | 37.4 | *6,615 | 62.6 | *10,561 |
| 1988 | *4,588 | 43.7 | 5,917 | 56.3 | 10,505 |

(1) 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 OF INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1979-88
(Round weight)

| Year | Domestic commercial landings (1) | | Imports (2) | | Total |
|---|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent | Million pounds |
| 1979 | 2,949 | 82.4 | 631 | 17.6 | 3,580 |
| 1980 | 2,828 | 84.4 | 523 | 15.6 | 3,351 |
| 1981 | 2,430 | 78.7 | 656 | 21.3 | 3,086 |
| 1982 | 3,082 | 76.2 | 961 | 23.8 | 4,043 |
| 1983 | *3,201 | 81.3 | 738 | 18.7 | 3,939 |
| 1984 | 3,118 | 76.9 | 936 | 23.1 | 4,054 |
| 1985 | 2,964 | 51.0 | 2,849 | 49.0 | 5,813 |
| 1986 | 2,638 | 55.6 | 2,110 | 44.4 | 4,748 |
| 1987 | 2,950 | 56.9 | 2,233 | 43.1 | 5,183 |
| 1988 | 2,604 | 63.2 | 1,519 | 36.8 | 4,123 |

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

U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1987 AND 1988

| Item | Domestic commercial landings | | Imports (1) | | Total | |
|---|---|---|---|---|---|---|
| | 1987 | 1988 | 1987 | 1988 | 1987 | 1988 |
| | Million pounds, round weight | | | | | |
| Edible fishery products: | | | | | | |
| Finfish | 2,769 | 3,306 | 5,150 | 4,480 | 7,919 | 7,786 |
| Shellfish | 1,177 | 1,282 | 1,465 | 1,437 | 2,642 | 2,719 |
| Total | 3,946 | 4,588 | 6,615 | 5,917 | 10,561 | 10,505 |
| Industrial fishery products: | | | | | | |
| Finfish | 2,939 | 2,599 | 2,233 | 1,519 | 5,172 | 4,118 |
| Shellfish | 11 | 5 | (3) | (3) | 11 | 5 |
| Total | 2,950 | 2,604 | 2,233 | 1,519 | 5,183 | 4,123 |
| Total: | | | | | | |
| Finfish | 5,708 | 5,905 | 7,383 | 5,999 | 13,091 | 11,904 |
| Shellfish | 1,188 | 1,287 | 1,465 | 1,437 | 2,653 | 2,724 |
| Total | 6,896 | 7,192 | 8,848 | 7,436 | 15,744 | 14,628 |

See footnotes below.

VALUE OF U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1987 AND 1988

| Item | Domestic commercial landings | | Imports (1) | | Total | |
|---|---|---|---|---|---|---|
| | 1987 | 1988 | 1987 | 1988 | 1987 | 1988 |
| | Million dollars | | | | | |
| Edible fishery products: | | | | | | |
| Finfish | 1,502 | 1,873 | 2,884 | 2,676 | 4,386 | 4,549 |
| Shellfish | 1,477 | 1,490 | 2,772 | 2,730 | 4,249 | 4,220 |
| Total | 2,979 | 3,363 | 5,656 | 5,406 | 8,635 | 8,769 |
| Industrial fishery products: | | | | | | |
| Finfish | 127 | 150 | (2)55 | (2)53 | 182 | 203 |
| Shellfish | 9 | 7 | (3) | (3) | 9 | 7 |
| Total | 136 | 157 | 55 | 53 | 191 | 210 |
| Total: | | | | | | |
| Finfish | 1,629 | 2,023 | 2,939 | 2,729 | 4,568 | 4,752 |
| Shellfish | 1,486 | 1,497 | 2,772 | 2,730 | 4,258 | 4,227 |
| Total | 3,115 | 3,520 | 5,711 | 5,459 | 8,826 | 8,979 |

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa.
(2) Includes only quantity and value of fish meal and sea herring for industrial purposes.
(3) Not available.

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

U.S. SUPPLY OF REGULAR AND MINCED BLOCKS, 1979-88
(Edible weight)

| Year | U.S. production | | Imports | | Total supply |
|---|---|---|---|---|---|
| | Quantity | Precentage of total supply | Quantity | Precentage of total supply | Quantity |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1979 | 4,857 | 1.2 | *408,152 | 98.8 | *413,009 |
| 1980 | 1,205 | 0.4 | 336,117 | 99.6 | 337,322 |
| 1981 | 1,029 | 0.3 | 344,111 | 99.7 | 345,140 |
| 1982 | 2,766 | 0.9 | 318,966 | 99.1 | 321,732 |
| 1983 | 5,155 | 1.3 | 384,458 | 98.7 | 389,613 |
| 1984 | 2,655 | 0.8 | 316,165 | 99.2 | 318,820 |
| 1985 | 2,551 | 0.8 | 334,060 | 99.2 | 336,611 |
| 1986 | 3,919 | 1.1 | 363,897 | 98.9 | 367,816 |
| 1987 (1) | 13,559 | 3.3 | 403,577 | 96.7 | 417,136 |
| 1988 | *44,602 | 12.8 | 303,237 | 87.2 | 347,839 |

(1) Revised. *Record.

U.S. SUPPLY OF ALL FILLETS AND STEAKS, 1979-88
(Edible weight)

| Year | U.S. production (1) | | Imports | | Total supply |
|---|---|---|---|---|---|
| | Quantity | Precentage of total supply | Quantity | Precentage of total supply | Quantity |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1979 | 187,167 | 30.4 | 427,526 | 69.6 | 614,693 |
| 1980 | 202,779 | 35.5 | 369,161 | 64.5 | 571,940 |
| 1981 | 205,225 | 33.1 | 414,163 | 66.9 | 619,388 |
| 1982 | 217,644 | 33.0 | 440,916 | 67.0 | 658,560 |
| 1983 | 230,649 | 34.4 | 439,716 | 65.6 | 670,365 |
| 1984 | 252,288 | 34.8 | 473,594 | 65.2 | 725,882 |
| 1985 | 245,525 | 31.4 | 536,725 | 68.6 | 782,250 |
| 1986 | 279,468 | 34.2 | 538,532 | 65.8 | 818,000 |
| 1987 (2) | 356,081 | 36.4 | *620,985 | 63.6 | *977,066 |
| 1988 | *384,259 | 42.6 | 517,709 | 57.4 | 901,968 |

(1) Includes fillets used to produce blocks. (2) Revised. *Record.

U.S. SUPPLY OF GROUNDFISH FILLETS AND STEAKS, 1979-88
(Edible weight)

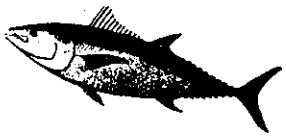
| Year | U.S. production (1) | | Imports | | Total supply |
|---|---|---|---|---|---|
| | Quantity | Precentage of total supply | Quantity | Precentage of total supply | Quantity |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1979 | 74,568 | 22.8 | 252,957 | 77.2 | 327,525 |
| 1980 | 67,221 | 23.3 | 220,954 | 76.7 | 288,175 |
| 1981 | 77,092 | 23.1 | 257,164 | 76.9 | 334,256 |
| 1982 | 70,994 | 19.4 | 295,193 | 80.6 | 366,187 |
| 1983 | 81,223 | 21.4 | 298,170 | 78.6 | 379,393 |
| 1984 | 94,943 | 23.6 | 307,852 | 76.4 | 402,795 |
| 1985 | 84,244 | 21.6 | 305,690 | 78.4 | 389,934 |
| 1986 | 107,008 | 27.2 | 287,099 | 72.8 | 394,107 |
| 1987 (2) | 110,688 | 26.0 | *315,418 | 74.0 | *426,106 |
| 1988 | 87,872 | 25.8 | 253,187 | 74.2 | 341,059 |

(1) Includes fillets used to produce blocks. Species include: cod, cusk, haddock, hake, Atlantic pollock, and Atlantic ocean perch. *Record. (2) Revised.
Record--1951 U.S. production: 148,786,000 lb.

U.S. COMMERCIAL LANDINGS AND IMPORTS OF TUNA, 1979-88
(Thousand pounds)

| Year | Domestic commercial landings | | | | Imports | |
|---|---|---|---|---|---|---|
| | Atlantic, Gulf Pacific Coast States, and Hawaii | Puerto Rico and American Samoa (1) | Total | Fresh and frozen including cooked loins and discs (2) | Canned | |
| | | | | | In oil | Not in oil |
| | Round weight | | | | Product weight | |
| 1979 | 364,476 | 143,676 | 508,152 | 810,066 | 627 | 53,076 |
| 1980 | 399,432 | 100,606 | 500,038 | 770,396 | 446 | 63,107 |
| 1981 | 341,149 | 148,729 | 489,878 | 769,675 | 268 | 70,583 |
| 1982 | 261,409 | 211,679 | 473,088 | 589,558 | 213 | 87,366 |
| 1983 | 278,692 | 307,298 | 585,990 | 533,686 | 197 | 122,132 |
| 1984 | 211,830 | 371,089 | 582,919 | 497,079 | 277 | 162,036 |
| 1985 | 83,054 | 433,083 | 516,137 | 482,742 | 303 | 213,645 |
| 1986 | 87,811 | 469,034 | 556,845 | 567,524 | 301 | 236,320 |
| 1987 | 100,058 | 526,186 | 626,244 | 572,505 | 329 | 211,356 |
| 1988 | 111,349 | 497,975 | 609,324 | 550,147 | 318 | *244,186 |

(1) Includes a quantity of fish landed at other ports by U.S.-flag vessels.
(2) Includes landings in American Samoa of foreign-caught fish.
*Record.



U.S. SUPPLY OF CANNED TUNA, 1979-88
(Canned weight)

| Year | Domestic production | | | | Imported Canned | | Total supply |
|---|---|---|---|---|---|---|---|
| | Albacore | | Lightmeat | | | | |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1979 | 119,517 | 17.7 | 500,716 | 74.3 | 53,703 | 8.0 | 673,936 |
| 1980 | 113,605 | 17.1 | 488,451 | 73.4 | 63,553 | 9.5 | 665,609 |
| 1981 | 120,983 | 17.3 | 505,986 | 72.5 | 70,851 | 10.2 | 697,820 |
| 1982 | 125,113 | 20.0 | 413,390 | 66.0 | 87,579 | 14.0 | 626,082 |
| 1983 | 106,175 | 14.9 | 484,367 | 67.9 | 122,329 | 17.2 | 712,871 |
| 1984 | 136,745 | 17.6 | 477,536 | 61.5 | 162,313 | 20.9 | 776,594 |
| 1985 | 132,001 | 17.4 | 412,992 | 54.4 | 213,948 | 28.2 | 758,941 |
| 1986 | 157,341 | 18.0 | 479,490 | 54.9 | 236,621 | 27.1 | 873,452 |
| 1987 | 139,888 | 16.2 | 514,095 | 59.4 | 211,685 | 24.5 | 865,668 |
| 1988 | 131,114 | 15.6 | 467,067 | 55.4 | 244,504 | 29.0 | 842,685 |

# SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF CANNED SARDINES, 1979-88
(Canned weight)

| Year | U.S. pack | Imports | | | Total | Exports | | Total supply |
|---|---|---|---|---|---|---|---|---|
| | | In oil | Not in oil | Total | | Domestic | Foreign | |
| | Thousand pounds | | | | | | | |
| 1979..... | 30,030 | 22,878 | 26,879 | 49,757 | 79,787 | 1,591 | 301 | 77,895 |
| 1980..... | 19,500 | 18,218 | 32,960 | 51,178 | 70,678 | 1,839 | 78 | 68,761 |
| 1981..... | 30,586 | 18,239 | 37,034 | 55,273 | 85,859 | 1,731 | 183 | 83,945 |
| 1982..... | 18,003 | 14,119 | 35,925 | 50,044 | 68,047 | 1,049 | 195 | 66,803 |
| 1983..... | 13,110 | 17,151 | 18,096 | 35,247 | 48,357 | 1,013 | 920 | 46,424 |
| 1984..... | 14,650 | 17,535 | 27,216 | 44,751 | 59,401 | 889 | 860 | 57,652 |
| 1985..... | 20,016 | 23,009 | 34,213 | 57,222 | 77,238 | 529 | 570 | 76,139 |
| 1986..... | 15,601 | 22,949 | 30,315 | 53,264 | 68,865 | 271 | 287 | 68,307 |
| 1987..... | 13,116 | 27,352 | 37,670 | 65,022 | 78,138 | 999 | 158 | 76,981 |
| 1988..... | 18,631 | 22,813 | 30,546 | 53,359 | 71,990 | 8,555 | 162 | 63,273 |

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

U.S. SUPPLY OF CANNED SALMON, 1979-88
(Canned weight)

| Year | U.S. pack | Imports | Total | Exports | | Total supply |
|---|---|---|---|---|---|---|
| | | | | Domestic | Foreign | |
| | Thousand pounds | | | | | |
| 1979..... | 148,822 | 434 | 149,256 | 50,907 | 70 | 98,279 |
| 1980..... | 200,003 | 167 | 200,170 | *74,006 | 58 | 126,106 |
| 1981..... | 214,855 | 71 | 214,926 | 63,494 | 201 | 151,231 |
| 1982..... | 112,100 | 158 | 112,258 | 41,156 | 111 | 70,991 |
| 1983..... | 181,166 | 277 | 181,443 | 54,488 | 422 | 126,533 |
| 1984..... | 198,926 | 551 | 199,477 | 48,963 | 245 | 150,269 |
| 1985..... | 158,943 | 1,958 | 160,901 | 48,240 | 39 | 112,622 |
| 1986..... | 141,756 | 4,622 | 146,378 | 59,434 | (1) | 86,944 |
| 1987..... | 105,206 | 6,652 | 111,858 | 35,901 | 207 | 75,750 |
| 1988..... | 87,665 | 3,528 | 91,193 | 32,900 | 93 | 58,200 |

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

U.S. SUPPLY OF CLAM MEATS, 1979-88
(Meat weight)

| Year | U.S. commercial landings | | | | | Imports (1) | Exports | | Total supply |
|---|---|---|---|---|---|---|---|---|---|
| | Hard | Soft | Surf | Other | Total | | Domestic | Foreign | |
| | Thousand pounds | | | | | | | | |
| 1979..... | 12,058 | 8,585 | 34,912 | 36,495 | 92,050 | 7,273 | (2) | (2) | 99,323 |
| 1980..... | 13,370 | 8,948 | 37,737 | 35,314 | 95,369 | 6,908 | (2) | (2) | 102,277 |
| 1981..... | 18,118 | 8,072 | 46,100 | 48,341 | 120,631 | 9,520 | (2) | (2) | 130,151 |
| 1982..... | 12,855 | 8,021 | 49,720 | 37,709 | 108,305 | 11,122 | (2) | (2) | 119,427 |
| 1983..... | 14,186 | 8,460 | 55,938 | 36,821 | 115,405 | 11,006 | (2) | (2) | 126,411 |
| 1984..... | 14,749 | 7,919 | 70,243 | 40,010 | 132,921 | 11,113 | (2) | (2) | 144,034 |
| 1985..... | 16,697 | 7,865 | 72,520 | 53,469 | *150,551 | 12,979 | 931 | 40 | *162,559 |
| 1986..... | 11,793 | 5,887 | 78,749 | 48,964 | 145,393 | 16,880 | 1,227 | 16 | 161,030 |
| 1987..... | 11,418 | 7,469 | 60,744 | 54,726 | 134,357 | *17,641 | 1,146 | 11 | 150,841 |
| 1988..... | 12,371 | 6,814 | 63,545 | 49,010 | 131,740 | 14,872 | 1,449 | 9 | 145,154 |

(1) Imports and exports were converted to meat weight by using these conversion factors: 0.40, in shell or shucked; 0.30 canned chowder and juice; and 0.93, other. (2) Not reported. *Record.

U.S SUPPLY OF KING CRAB, 1979-88
(Round weight)

| Year | U.S. commercial landings | Exports (1) | | Total supply |
|---|---|---|---|---|
| | | Frozen | Canned | |
| | Thousand pounds | | | |
| 1979 | 154,589 | 64,187 | 4,616 | 85,786 |
| 1980 | *185,624 | 50,525 | 1,988 | *133,111 |
| 1981 | 88,054 | 27,704 | 704 | 59,646 |
| 1982 | 38,492 | 8,958 | 1,071 | 28,463 |
| 1983 | 25,581 | 2,039 | 346 | 23,196 |
| 1984 | 17,204 | 3,521 | 448 | 13,235 |
| 1985 | 15,363 | 4,053 | 752 | 10,558 |
| 1986 | 25,909 | 6,941 | 267 | 18,701 |
| 1987 | 29,065 | 14,656 | 336 | 14,073 |
| 1988 | 20,973 | 9,189 | 1,332 | 10,452 |

(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, 1979-88
(Round weight)

| Year | U.S. commercial landings | Imports (1) | Total | Exports (2) | Total supply |
|---|---|---|---|---|---|
| | Thousand pounds | | | | |
| 1979 | 131,393 | 4,254 | 135,647 | 91,543 | 44,104 |
| 1980 | 121,684 | 3,732 | 125,416 | 71,871 | *53,545 |
| 1981 | 107,474 | 3,460 | 110,934 | 68,156 | 42,778 |
| 1982 | 68,767 | 3,135 | 71,902 | 47,220 | 24,682 |
| 1983 | 61,077 | 3,362 | 64,439 | 34,415 | 30,024 |
| 1984 | 48,765 | 4,992 | 53,757 | 31,127 | 22,630 |
| 1985 | 85,742 | 6,572 | 92,314 | 47,436 | 44,878 |
| 1986 | 110,000 | 5,510 | 115,510 | 66,925 | 48,585 |
| 1987 | 113,812 | 7,706 | 121,518 | 92,312 | 29,206 |
| 1988 | *146,326 | 6,765 | *153,091 | *122,402 | 30,689 |

(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, 1979-88
(Canned weight)

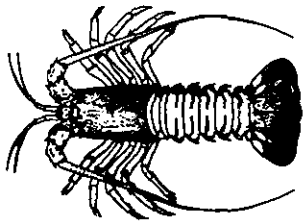
| Year | U.S. pack | Percentage of total | Imports | Percentage of total | Total | Exports (1) | Total supply |
|---|---|---|---|---|---|---|---|
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds | | |
| 1979 | 2,958 | 36.8 | 5,073 | 63.2 | 8,031 | 866 | 7,165 |
| 1980 | 3,916 | 43.9 | 5,002 | 56.1 | 8,918 | 373 | 8,545 |
| 1981 | 1,725 | 25.6 | 5,019 | 74.4 | 6,744 | 132 | 6,612 |
| 1982 | 1,349 | 19.0 | 5,737 | 81.0 | 7,086 | 201 | 6,885 |
| 1983 | 1,435 | 18.1 | 6,505 | 81.9 | 7,940 | 65 | 7,875 |
| 1984 | 1,084 | 14.8 | 6,233 | 85.2 | 7,317 | 84 | 7,233 |
| 1985 | 553 | 6.8 | 7,584 | 93.2 | 8,137 | 141 | 7,996 |
| 1986 | 591 | 6.3 | 8,778 | 93.7 | 9,369 | 50 | 9,319 |
| 1987 (2) | 200 | 2.4 | 7,967 | 97.6 | 8,167 | 63 | 8,104 |
| 1988 | 356 | 4.4 | 7,720 | 95.6 | 8,076 | 250 | 7,826 |

(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,1979-88
(Round weight)

| Year | U.S. commercial landings | | Imports (1) | | | | Total supply |
|---|---|---|---|---|---|---|---|
| | Quantity | Percentage of total supply | Quantity | | | Percentage of total supply | |
| | | | Fresh and frozen | Canned | Total | | |
| | Thousand pounds | Percent | ----------Thousand pounds--------- | | | Percent | Thousand pounds |
| 1979..... | 37,184 | 54.5 | 22,790 | 8,307 | 31,097 | 45.5 | 68,281 |
| 1980..... | 36,952 | 53.4 | 22,503 | 9,699 | 32,202 | 46.6 | 69,154 |
| 1981..... | 37,494 | 48.2 | 26,857 | 13,459 | 40,316 | 51.8 | 77,810 |
| 1982..... | 39,445 | 48.6 | 26,205 | 15,480 | 41,685 | 51.4 | 81,130 |
| 1983..... | 44,206 | 47.7 | 43,439 | 4,977 | 48,416 | 52.3 | 92,622 |
| 1984..... | 43,967 | 43.9 | 54,359 | 1,783 | 56,142 | 56.1 | 100,109 |
| 1985..... | 46,152 | 42.9 | 57,358 | 4,029 | 61,387 | 57.1 | 107,539 |
| 1986..... | 46,053 | 40.8 | 65,276 | 1,633 | 66,909 | 59.2 | 112,962 |
| 1987..... | 45,558 | 40.0 | 66,585 | 2,956 | 69,541 | 60.0 | 115,099 |
| 1988..... | *48,643 | 40.1 | 69,790 | 2,756 | *72,546 | 59.9 | *121,189 |

(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,1979-88
(Round weight)

| Year | U.S. commercial landings | | Imports (1) | | | | Total supply |
|---|---|---|---|---|---|---|---|
| | Quantity | Percentage of total supply | Quantity | | | Percentage of total supply | |
| | | | Fresh and frozen | Canned | Total | | |
| | Thousand pounds | Percent | ----------Thousand pounds--------- | | | Percent | Thousand pounds |
| 1979..... | 6,301 | 4.0 | 150,470 | 604 | 151,074 | 96.0 | 157,375 |
| 1980..... | 6,861 | 5.4 | 119,817 | 395 | 120,212 | 94.6 | 127,073 |
| 1981..... | 6,619 | 4.9 | 126,210 | 978 | 127,188 | 95.1 | 133,807 |
| 1982..... | 6,438 | 5.1 | 120,679 | 230 | 120,909 | 94.9 | 127,347 |
| 1983..... | 5,218 | 3.8 | 131,102 | 588 | 131,690 | 96.2 | 136,908 |
| 1984..... | 6,303 | 4.1 | 146,990 | 79 | 147,069 | 95.9 | 153,372 |
| 1985..... | 5,311 | 3.5 | 148,324 | 253 | 148,577 | 96.5 | 153,888 |
| 1986..... | 6,775 | 4.5 | 144,933 | 164 | 145,097 | 95.5 | 151,872 |
| 1987..... | 5,755 | 3.8 | 145,093 | 613 | 145,706 | 96.2 | 151,461 |
| 1988..... | 7,166 | 5.1 | 131,837 | 234 | 132,071 | 94.9 | 139,237 |

(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. *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, 1979-88
(Meat weight)

| Year | U.S. commercial landings | | | Imports (2) | Total supply |
|---|---|---|---|---|---|
| | Eastern | Pacific (1) | Total | | |
| | Thousand pounds | | | | |
| 1979 | 42,901 | 7,461 | 50,362 | 27,131 | 77,493 |
| 1980 | 44,132 | 6,694 | 50,826 | 21,732 | 72,558 |
| 1981 | 46,605 | 6,007 | 52,612 | 25,769 | 78,381 |
| 1982 | 48,820 | 7,369 | 56,189 | 27,529 | 83,718 |
| 1983 | 46,706 | 7,342 | 54,048 | 30,775 | 84,823 |
| 1984 | 46,035 | 8,739 | 54,774 | 36,086 | 90,860 |
| 1985 | 43,085 | 7,796 | 50,881 | 45,926 | 96,807 |
| 1986 | 39,140 | 9,629 | 48,769 | 50,038 | 98,807 |
| 1987 | 29,957 | 9,850 | 39,807 | *52,085 | 91,892 |
| 1988 | 23,916 | 7,976 | 31,892 | 46,414 | 78,306 |

(1) Includes Western and Eastern oyster landings for Washington and California. (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, 1979-88
(Meat weight)

| Year | U.S. commercial landings | | | | Imports | Total supply |
|---|---|---|---|---|---|---|
| | Bay | Calico | Sea | Total | | |
| | Thousand pounds | | | | | |
| 1979 | 1,774 | 863 | 31,466 | 34,103 | 25,155 | 59,258 |
| 1980 | 968 | - | 28,752 | 29,720 | 20,885 | 50,605 |
| 1981 | 670 | 14,641 | 30,277 | 45,588 | 26,227 | 71,815 |
| 1982 | 1,780 | 11,010 | 21,325 | 34,115 | 20,860 | 54,975 |
| 1983 | 2,338 | 9,606 | 20,478 | 32,422 | 34,280 | 66,702 |
| 1984 | 1,728 | 39,330 | 18,427 | *59,485 | 27,270 | *86,755 |
| 1985 | 1,331 | 12,513 | 15,829 | 29,673 | 42,035 | 71,708 |
| 1986 | 735 | 1,616 | 19,992 | 22,343 | *47,916 | 70,259 |
| 1987 | 580 | 8,155 | 32,038 | 40,773 | 39,934 | 80,707 |
| 1988 | 569 | 11,868 | 30,557 | 42,994 | 32,039 | 75,033 |

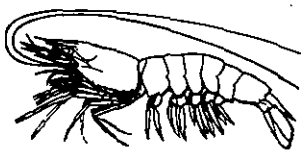
*Record.

U.S. SUPPLY OF ALL FORMS OF SHRIMP, 1979-88
(Heads-off weight)

| Year | U.S. Commercial landings | Imports (1) | Total | Exports (2) | | | | Total supply |
|---|---|---|---|---|---|---|---|---|
| | | | | Fresh and frozen | | Canned | | |
| | | | | Domestic | Foreign | Domestic | Foreign | |
| | Thousand pounds | | | | | | | |
| 1979..... | 205,587 | 269,263 | 474,850 | 34,143 | 5,826 | 11,047 | 63 | 423,771 |
| 1980..... | 207,869 | 258,069 | 465,938 | 18,777 | 9,567 | 11,781 | *935 | 424,878 |
| 1981..... | 218,900 | 259,112 | 478,012 | 20,777 | 13,687 | 9,181 | 78 | 434,289 |
| 1982..... | 175,613 | 319,596 | 495,209 | 18,350 | 12,738 | 6,064 | 45 | 458,012 |
| 1983..... | 155,591 | 421,179 | 576,770 | 21,776 | 6,560 | 7,573 | 28 | 540,833 |
| 1984..... | 188,132 | 422,340 | 610,472 | 15,961 | 5,069 | 5,478 | 83 | 583,881 |
| 1985..... | 207,239 | 452,232 | 659,471 | 17,708 | 5,735 | 3,159 | 338 | 632,531 |
| 1986..... | 244,409 | 492,005 | 736,414 | 23,650 | 2,548 | 3,967 | 285 | 705,964 |
| 1987..... | 223,514 | 583,030 | *806,544 | 25,938 | 2,947 | 4,714 | 214 | *772,731 |
| 1988..... | 203,350 | *598,210 | 801,560 | 26,097 | 4,183 | 4,068 | 436 | 766,776 |

(1) 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.

*Record. Records--1977 U.S. commercial landings: 288,443,000 lb heads-off weight; 1973 fresh and frozen domestic exports: 44,172,000 lb; 1970 fresh and frozen foreign exports: 14,699,000 lb; and 1973 domestic canned: 20,097,000 lb.



U.S. SUPPLY OF CANNED SHRIMP, 1979-88
(Canned weight)

| Year | U.S. pack | Percentage of total | Imports | Percentage of total | Total | Exports | | Total supply |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Domestic | Foreign | |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds | | | |
| 1979..... | 11,118 | 72.2 | 4,288 | 27.8 | 15,406 | 5,469 | 25 | 9,912 |
| 1980..... | 15,289 | 78.3 | 4,225 | 21.7 | 19,514 | 5,832 | *371 | 13,311 |
| 1981..... | 9,693 | 68.9 | 4,383 | 31.1 | 14,076 | 4,545 | 31 | 9,500 |
| 1982..... | 6,276 | 54.1 | 5,332 | 45.9 | 11,608 | 3,002 | 18 | 8,588 |
| 1983..... | 6,723 | 33.8 | 13,176 | 66.2 | 19,899 | 3,749 | 11 | 16,139 |
| 1984..... | 7,246 | 34.8 | 13,580 | 65.2 | 20,826 | 2,712 | 33 | 18,081 |
| 1985..... | 4,001 | 19.0 | 17,088 | 81.0 | 21,089 | 1,564 | 134 | 19,391 |
| 1986..... | 4,596 | 22.6 | 15,757 | 77.4 | 20,353 | 1,964 | 113 | 18,276 |
| 1987..... | 4,382 | 20.4 | 17,132 | 79.6 | 21,514 | 2,334 | 85 | 19,095 |
| 1988..... | 4,475 | 24.0 | 14,138 | 76.0 | 18,613 | 2,014 | 173 | 16,426 |

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

# SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1979-88
(Product weight)

| Year | Domestic production (1) | | Imports (2) | | Total |
|---|---|---|---|---|---|
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1979 | 883,514 | 83.1 | 179,226 | 16.9 | 1,062,740 |
| 1980 | 857,526 | 89.6 | 99,074 | 10.4 | 956,600 |
| 1981 | 765,640 | 86.6 | 118,868 | 13.4 | 884,508 |
| 1982 | 899,356 | 84.2 | 168,664 | 15.8 | 1,068,020 |
| 1983 | *922,040 | 87.2 | 135,880 | 12.8 | 1,057,920 |
| 1984 | 877,566 | 84.0 | 166,888 | 16.0 | 1,044,454 |
| 1985 | 883,196 | 63.4 | 510,654 | 36.6 | 1,393,850 |
| 1986 | 799,826 | 68.3 | 370,548 | 31.7 | 1,170,374 |
| 1987 | 911,622 | 69.8 | 393,730 | 30.2 | 1,305,352 |
| 1988 | 755,520 | 74.0 | 265,310 | 26.0 | 1,020,830 |

(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, 1979-88
(Product weight)

| Year | Domestic production (1) | Imports | Total | Exports | |
|---|---|---|---|---|---|
| | | | | Domestic | Foreign |
| | Thousand pounds | | | | |
| 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 | *786,978 | 393,730 | 1,180,962 | 103,422 | 664 |
| 1988 | 643,796 | 265,310 | 909,106 | 246,306 | 3,684 |

(1) Includes shellfish meal. *Record. Records--1968 imports: 1,710,570,000 lb; 1968 total supply 2,180,842,000 lb.

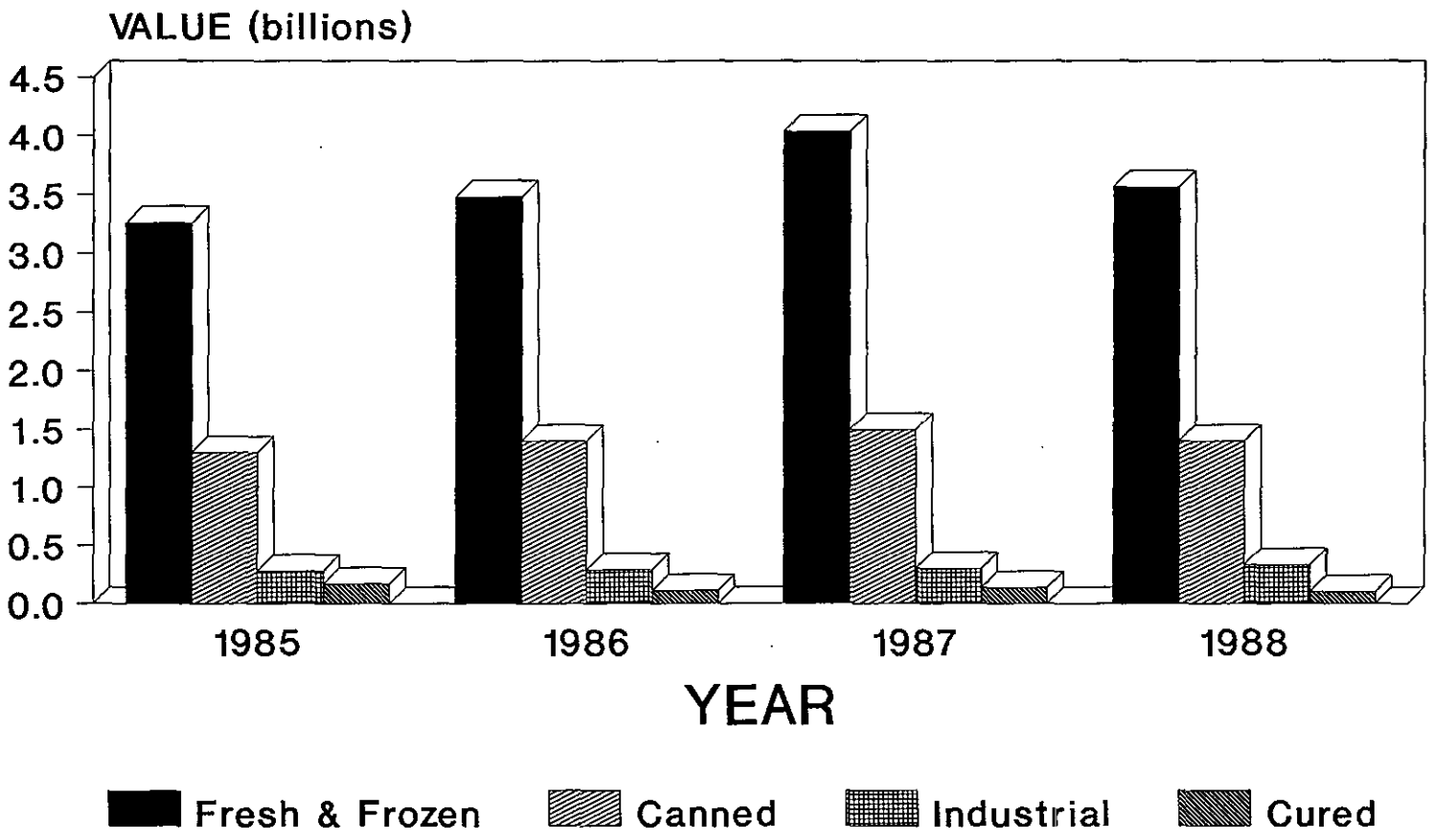
U.S. SUPPLY OF FISH OILS, 1979-88

| Year | Domestic production | Imports (1) | Total | Exports | Total supply |
|---|---|---|---|---|---|
| | Thousand pounds | | | | |
| 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 | 298,496 | 25,697 | 324,193 | 249,119 | 75,074 |
| 1988 | 224,733 | 24,005 | 248,738 | 149,279 | 99,459 |

(1) Excludes fish liver oils. (2) The 1981 and 1984 exports, which included prior year stocks, exceeded domestic production plus imports. *Record.

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

# VALUE OF PROCESSED FISHERY PRODUCTS
## FROM DOMESTIC CATCH & IMPORTED PRODUCTS
## 1985 - 1988



# PER CAPITA

## U.S. CONSUMPTION

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

U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-88

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

See footnotes at end of table.

(Continued)

# PER CAPITA

## U.S. CONSUMPTION

U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-88

| Year | Civilian resident population July 1 (1) | Per capita consumption | | | |
|---|---|---|---|---|---|
| | | 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 |
| 1961 | 181.1 | 5.9 | 4.3 | 0.5 | 10.7 |
| 1962 | 183.7 | 5.8 | 4.3 | 0.5 | 10.6 |
| 1963 | 186.5 | 5.8 | 4.4 | 0.5 | 10.7 |
| 1964 | 189.1 | 5.9 | 4.1 | 0.5 | 10.5 |
| 1965 | 191.6 | 6.0 | 4.3 | 0.5 | 10.8 |
| 1966 | 193.4 | 6.1 | 4.3 | 0.5 | 10.9 |
| 1967 | 195.3 | 5.8 | 4.3 | 0.5 | 10.6 |
| 1968 | 197.1 | 6.2 | 4.3 | 0.5 | 11.0 |
| 1969 | 199.1 | 6.6 | 4.2 | 0.4 | 11.2 |
| 1970 | 201.9 | 6.9 | 4.5 | 0.4 | 11.8 |
| 1971 | 204.9 | 6.7 | 4.3 | 0.5 | 11.5 |
| 1972 | 207.5 | 7.1 | 4.9 | 0.5 | 12.5 |
| 1973 | 209.6 | 7.4 | 5.0 | 0.4 | 12.8 |
| 1974 | 211.6 | 6.9 | 4.7 | 0.5 | 12.1 |
| 1975 | 213.8 | 7.5 | 4.3 | 0.4 | 12.2 |
| 1976 | 215.9 | 8.2 | 4.2 | 0.5 | 12.9 |
| 1977 | 218.1 | 7.7 | 4.6 | 0.4 | 12.7 |
| 1978 (6) | 220.5 | 8.1 | 5.0 | 0.3 | 13.4 |
| 1979 (6) | 223.0 | 7.8 | 4.8 | 0.4 | 13.0 |
| 1980 (6) | 225.6 | 8.0 | 4.5 | 0.3 | 12.8 |
| 1981 (6) | 227.7 | 7.8 | 4.8 | 0.3 | 12.9 |
| 1982 (6) | 229.9 | 7.7 | 4.3 | 0.3 | 12.3 |
| 1983 (6) | 232.0 | 8.0 | 4.8 | 0.3 | 13.1 |
| 1984 (6) | 234.8 | 8.5 | 4.9 | 0.3 | 13.7 |
| 1985 (6) | 237.0 | 9.0 | 5.1 | 0.3 | 14.4 |
| 1986 (6) | 239.4 | 9.0 | 5.4 | 0.3 | 14.7 |
| 1987 (6) | 241.5 | *10.0 | 5.1 | 0.3 | *15.4 |
| 1988 (6) | 243.9 | 9.6 | 5.1 | 0.3 | 15.0 |

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

(2) Fresh and frozen fish consumption from 1910 to 1928 is estimated. Beginning in 1973, data include consumption of artificially cultivated catfish.

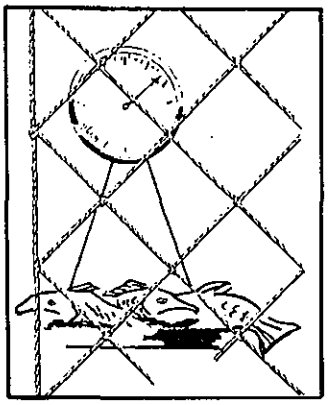
(3) Canned fish consumption for 1911 to 1920 is estimated. Beginning in 1921, it is based on production reports, packer stocks, and foreign trade statistics for individual years.

(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. From 1970 through 1980 data, were revised to reflect the results of the 1980 census.



# PER CAPITA

## U.S. CONSUMPTION

U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1968-88

| Year | Salmon | Sardines | Tuna | Shellfish | Other | Total |
|---|---|---|---|---|---|---|
| | Pounds | | | | | |
| 1968 | 0.7 | 0.4 | 2.4 | 0.5 | 0.3 | 4.3 |
| 1969 | 0.7 | 0.4 | 2.4 | 0.5 | 0.2 | 4.2 |
| 1970 | 0.7 | 0.4 | 2.5 | 0.5 | 0.4 | 4.5 |
| 1971 | 0.7 | 0.4 | 2.4 | 0.5 | 0.3 | 4.3 |
| 1972 | 0.7 | 0.4 | 2.9 | 0.5 | 0.4 | 4.9 |
| 1973 | 0.4 | 0.5 | 3.1 | 0.5 | 0.5 | 5.0 |
| 1974 | 0.3 | 0.4 | 3.1 | 0.5 | 0.4 | 4.7 |
| 1975 | 0.3 | 0.2 | 2.9 | 0.5 | 0.4 | 4.3 |
| 1976 | 0.3 | 0.3 | 2.8 | 0.4 | 0.4 | 4.2 |
| 1977 | 0.5 | 0.3 | 2.8 | 0.6 | 0.4 | 4.6 |
| 1978 (1) | 0.6 | 0.3 | 3.3 | 0.5 | 0.3 | 5.0 |
| 1979 (1) | 0.5 | 0.3 | 3.2 | 0.5 | 0.3 | 4.8 |
| 1980 (1) | 0.5 | 0.3 | 2.9 | 0.5 | 0.3 | 4.5 |
| 1981 (1) | 0.5 | 0.4 | 3.1 | 0.5 | 0.3 | 4.8 |
| 1982 (1) | 0.5 | 0.3 | 2.7 | 0.4 | 0.4 | 4.3 |
| 1983 (1) | 0.5 | 0.2 | 3.1 | 0.6 | 0.4 | 4.8 |
| 1984 (1) | 0.6 | 0.2 | 3.2 | 0.4 | 0.5 | 4.9 |
| 1985 (1) | 0.5 | 0.3 | 3.3 | 0.5 | 0.5 | 5.1 |
| 1986 (1) | 0.5 | 0.3 | 3.6 | 0.4 | 0.6 | 5.4 |
| 1987 (1) | 0.4 | 0.3 | 3.5 | 0.5 | 0.4 | 5.1 |
| 1988 (1) | 0.3 | 0.3 | 3.6 | 0.4 | 0.5 | 5.1 |

(1) Preliminary. Note:--From 1970 through 1980, data were revised to reflect the results or the 1980 census.

U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1968-88

| Year | Fillets and steaks (1) | Sticks and portions | Shrimp all Preparation |
|---|---|---|---|
| | Pounds (2) | | |
| 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 |
| 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 |
| 1986 (3) | 3.2 | 1.8 | 2.2 |
| 1987 (3) | 3.2 | 1.7 | 2.3 |
| 1988 (3) | 3.0 | 1.5 | *2.4 |

(1) 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.
(2) Product weight of fillets and steaks and sticks and portions, edible (meat) weight of shrimp.
(3) Domestic landings data used in calculating these data are preliminary. *Record.

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

# PER CAPITA

## 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 67).

Per capita use figures are not comparable with per capita consumption data (see page 77). 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 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 CAPITAL USE OF COMMERCIAL FISH AND SHELLFISH, 1954-88

| Year | Total population including armed forces overseas July 1 | Total U.S. supply (1) | Per capita utilization | | |
|---|---|---|---|---|---|
| | | | Commercial landings | Imports | Total |
| | Million persons | Million pounds | Pounds | | |
| 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 |
| 1960 | 180.7 | 8,223 | 27.3 | 18.2 | 45.5 |
| 1961 | 183.7 | 9,570 | 28.2 | 23.9 | 52.1 |
| 1962 | 186.5 | 10,408 | 28.7 | 27.1 | 55.8 |
| 1963 | 189.2 | 11,434 | 25.6 | 34.8 | 60.4 |
| 1964 | 191.9 | 12,031 | 23.7 | 39.0 | 62.7 |
| 1965 | 194.3 | 10,535 | 24.6 | 29.6 | 54.2 |
| 1966 | 196.6 | 12,469 | 22.2 | 41.2 | 63.4 |
| 1967 | 198.7 | 13,991 | 20.4 | 50.0 | 70.4 |
| 1968 | 200.7 | 17,381 | 20.7 | 65.9 | 86.6 |
| 1969 | 202.7 | 11,847 | 21.4 | 37.0 | 58.4 |
| 1970 | 205.1 | 11,474 | 24.0 | 31.9 | 55.9 |
| 1971 | 207.7 | 11,804 | 24.1 | 32.7 | 56.8 |
| 1972 | 209.9 | 13,849 | 22.9 | 43.1 | 66.0 |
| 1973 | 211.9 | 10,378 | 22.9 | 26.1 | 49.0 |
| 1974 | 213.9 | 9,875 | 23.2 | 23.0 | 46.2 |
| 1975 | 216.0 | 10,164 | 22.6 | 24.5 | 47.1 |
| 1976 | 218.0 | 11,593 | 24.7 | 28.5 | 53.2 |
| 1977 | 220.2 | 10,652 | 23.9 | 24.4 | 48.3 |
| 1978 (2) | 222.6 | 11,509 | 27.1 | 24.6 | 51.7 |
| 1979 (2) | 225.1 | 11,831 | 27.9 | 24.7 | 52.6 |
| 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 |
| 1988 (2) | 246.1 | 14,628 | 29.2 | 30.2 | 59.4 |

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

(2) Domestic landings data used in calculating these data are preliminary.

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

# PER CAPITA

## 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 | |
|---|---|---|
| | Kilograms | Pounds |
| North America: | | |
| Canada | 21.4 | 47.2 |
| United States | 17.4 | 38.4 |
| Caribbean: | | |
| Antigua | 26.0 | 57.3 |
| Bahamas | 14.1 | 31.1 |
| Barbados | 33.6 | 74.1 |
| British Virgin Islands | 25.1 | 55.3 |
| Cayman Islands | 33.6 | 74.1 |
| Cuba | 20.1 | 44.3 |
| Dominica | 19.6 | 43.2 |
| Dominican Republic | 6.8 | 15.0 |
| Grenada | 19.4 | 42.8 |
| Guadeloupe | 49.2 | 108.5 |
| Haiti | 3.7 | 8.2 |
| Jamaica | 17.0 | 37.5 |
| Martinique | 47.6 | 104.9 |
| Montserrat | 9.3 | 20.5 |
| Netherland Antilles | 15.2 | 33.5 |
| St. Christopher-Nevis | 33.8 | 74.5 |
| Saint Lucia | 16.9 | 37.3 |
| St. Vincent | 11.2 | 24.7 |
| Trinidad-Tobago | 16.2 | 35.7 |
| Latin America: | | |
| Argentina | 5.7 | 12.6 |
| Belize | 7.0 | 15.4 |
| Bolivia | 1.6 | 3.5 |
| Brazil | 6.2 | 13.7 |
| Chile | 18.7 | 41.2 |
| Colombia | 3.3 | 7.3 |
| Costa Rica | 2.8 | 6.2 |
| Ecuador | 14.2 | 31.3 |
| El Salvador | 1.4 | 3.1 |
| French Guiana | 37.0 | 81.6 |
| Guatemala | 0.5 | 1.1 |
| Guyana | 28.4 | 62.6 |
| Honduras | 1.0 | 2.2 |
| Mexico | 9.9 | 21.8 |
| Nicaragua | 1.0 | 2.2 |
| Panama | 14.4 | 31.7 |
| Paraguay | 1.1 | 2.4 |
| Peru | 20.0 | 44.1 |
| Suriname | 14.1 | 31.1 |
| Uruguay | 11.3 | 24.9 |
| Venezuela | 11.8 | 26.0 |
| Europe: | | |
| Albania | 4.7 | 10.4 |
| Austria | 6.5 | 14.3 |
| Belgium and Luxembourg | 18.8 | 41.4 |
| Bulgaria | 8.6 | 19.0 |
| Czechoslovakia | 4.6 | 10.1 |
| Denmark | 22.0 | 48.5 |
| Fed. Republic of Germany | 9.3 | 20.5 |
| Finland | 34.3 | 75.6 |
| France | 24.8 | 54.7 |
| German Democratic Republic | 14.4 | 31.7 |
| Greece | 17.8 | 39.2 |
| Hungary | 4.7 | 10.4 |
| Iceland | 88.4 | 194.9 |
| Europe - Continued: | | |
| Ireland | 13.2 | 29.1 |
| Italy | 15.4 | 34.0 |
| Malta | 11.5 | 25.4 |
| Netherlands | 9.6 | 21.2 |
| Norway | 46.0 | 101.4 |
| Poland | 17.4 | 38.4 |
| Portugal | 36.6 | 80.7 |
| Romania | 9.2 | 20.3 |
| Spain | 34.2 | 75.4 |
| Sweden | 29.4 | 64.8 |
| Switzerland | 11.6 | 25.6 |
| United Kingdom | 17.7 | 39.0 |
| Yugoslavia | 3.4 | 7.5 |
| USSR | 27.3 | 60.2 |
| Near East: | | |
| Afghanistan | 0.1 | 0.2 |
| Bahrain | 18.5 | 40.8 |
| Cyprus | 10.1 | 22.3 |
| Egypt | 5.5 | 12.1 |
| Iran | 2.9 | 6.4 |
| Iraq | 1.5 | 3.3 |
| Israel | 14.2 | 31.3 |
| Jordan | 4.0 | 8.8 |
| Kuwait | 5.9 | 13.0 |
| Lebanon | 0.5 | 1.1 |
| Libya | 5.8 | 12.8 |
| Oman | 35.5 | 78.3 |
| Qatar | 12.4 | 27.3 |
| Saudi Arabia | 9.9 | 21.8 |
| Sudan | 1.4 | 3.1 |
| Syria | 1.6 | 3.5 |
| Turkey | 7.6 | 16.8 |
| United Arab Emirates | 28.8 | 63.5 |
| Yemen Arab Republic | 3.4 | 7.5 |
| Yemen (Aden) | 25.1 | 55.3 |
| Far East: | | |
| Bangladesh | 7.4 | 16.3 |
| Brunei | 37.7 | 83.1 |
| Burma | 14.7 | 32.4 |
| Cambodia | 9.1 | 20.1 |
| China | 4.9 | 10.8 |
| Hong Kong | 45.0 | 99.2 |
| India | 3.1 | 6.8 |
| Indonesia | 12.6 | 27.8 |
| Japan | 74.5 | 164.2 |
| Laos | 5.1 | 11.2 |
| Macao | 31.6 | 69.7 |
| Maldives | 44.4 | 97.9 |
| Malaysia | 44.1 | 97.2 |
| Mongolia | 1.0 | 2.2 |
| Nepal | 0.3 | 0.7 |
| North Korea | 39.3 | 86.6 |
| Pakistan | 1.7 | 3.7 |
| Philippines | 35.7 | 78.7 |
| Republic of Korea | 44.4 | 97.9 |
| Singapore | 35.7 | 78.7 |
| Sri Lanka | 15.5 | 34.2 |
| Thailand | 21.6 | 47.6 |
| Vietnam | 12.0 | 26.5 |

See note at end of table.

(Continued)

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 | |
|---|---|---|
| | Kilograms | Pounds |
| Africa: | | |
| Algeria | 3.4 | 7.5 |
| Angola | 8.0 | 17.6 |
| Benin | 7.2 | 15.9 |
| Botswana | 2.5 | 5.5 |
| Burkina | 1.5 | 3.3 |
| Burundi | 2.9 | 6.4 |
| Cameroon | 12.6 | 27.8 |
| Cape Verde | 30.4 | 67.0 |
| Central African Republic | 5.3 | 11.7 |
| Chad | 16.9 | 37.3 |
| Comoros | 12.3 | 27.1 |
| Congo (Brazaville) | 33.4 | 73.6 |
| Equatorial Guinea | 19.9 | 43.9 |
| Ethiopia | 0.1 | 0.2 |
| Gabon | 24.3 | 53.6 |
| Gambia | 17.7 | 39.0 |
| Ghana | 19.4 | 42.8 |
| Guinea | 6.2 | 13.7 |
| Guinea-Bissau | 2.7 | 6.0 |
| Ivory Coast | 16.9 | 37.3 |
| Kenya | 4.7 | 10.4 |
| Lesotho | 2.9 | 6.4 |
| Liberia | 15.7 | 34.6 |
| Madagascar | 5.2 | 11.5 |
| Malawi | 9.2 | 20.3 |
| Mali | 8.0 | 17.6 |
| Mauritania | 15.2 | 33.5 |
| Mauritius | 14.3 | 31.5 |
| Morocco | 6.6 | 14.6 |
| Mozambique | 3.9 | 8.6 |
| Namibia | 22.5 | 49.6 |
| Niger | 0.9 | 2.0 |
| Nigeria | 11.5 | 25.4 |
| Republic of South Africa | 9.6 | 21.2 |
| Reunion | 22.6 | 49.8 |
| Rwanda | 0.2 | 0.4 |
| Sao Tome | 37.6 | 82.9 |
| Senegal | 22.6 | 49.8 |
| Seychelles | 47.5 | 104.7 |
| Sierra Leone | 17.9 | 39.5 |
| Somalia | 2.0 | 4.4 |
| Swaziland | 0.1 | 0.2 |
| Tanzania | 11.8 | 26.0 |
| Togo | 11.9 | 26.2 |
| Tunisia | 8.7 | 19.2 |
| Uganda | 12.8 | 28.2 |
| Zaire | 6.4 | 14.1 |
| Zambia | 10.8 | 23.8 |
| Zimbabwe | 2.1 | 4.6 |
| Oceania: | | |
| Australia | 16.0 | 35.3 |
| Fiji | 41.8 | 92.2 |
| French Polynesia | 33.4 | 73.6 |
| New Caledonia | 21.7 | 47.8 |
| New Zealand | 12.2 | 26.9 |
| Paupa New Guinea | 15.1 | 33.3 |
| Tonga | 28.0 | 61.7 |
| Vanuatu | 26.2 | 57.8 |
| Western Samoa | 42.4 | 93.5 |
| World | 12.1 | 26.7 |

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

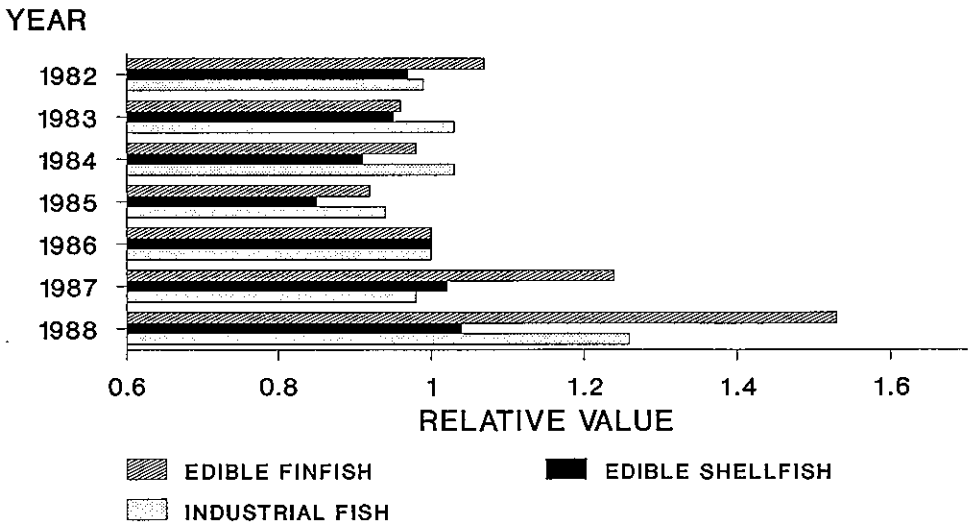
Source:--Food and Agriculture Organization of the United Nations (FAO) Yearbook of Fishery Statistics, 1986 vol. 63, Rome.

The procedures 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 had 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 trends for all fish and shellfish. The index has been recalculated with a new market basket and 1986 as the base year.

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 in the 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:

$$\frac{\text{(Current price X 1986 quantity)}}{\text{1986 Annual Value}} = \text{Index}$$

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 1982 and a $1.00 a pound in 1986 would have an index of 0.75 in 1982. In 1988, if the price of the same species increases 5 percent to $1.05, the index in 1988 would be 1.05.



INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY YEARS, 1982-88
(1986=1.00)

| Species | 1982(1) | 1983(1) | 1984(1) | 1985(1) | 1986(1) | 1987(1) | 1988 |
|---|---|---|---|---|---|---|---|
| GROUNDFISH: | | | | | | | |
| COD | 1.44 | 1.16 | 1.11 | 1.09 | 1.00 | 1.27 | 0.95 |
| HADDOCK | 0.50 | 0.59 | 0.71 | 0.94 | 1.00 | 1.28 | 1.10 |
| ATLANTIC POLLOCK | 0.87 | 0.68 | 0.63 | 0.62 | 1.00 | 1.52 | 1.30 |
| ALASKA POLLOCK | 1.17 | 0.87 | 0.90 | 0.93 | 1.00 | 1.30 | 1.42 |
| FLOUNDERS | 1.55 | 1.53 | 1.63 | 1.09 | 1.00 | 1.08 | 0.85 |
| TOTAL GROUNDFISH | 1.36 | 1.20 | 1.25 | 1.02 | 1.00 | 1.20 | 1.07 |
| HALIBUT | 0.81 | 0.84 | 0.50 | 0.59 | 1.00 | 1.09 | 0.83 |
| SEA HERRING | 0.75 | 1.05 | 0.62 | 1.08 | 1.00 | 1.08 | 1.21 |
| SALMON: | | | | | | | |
| CHINOOK | 1.11 | 0.78 | 1.05 | 0.97 | 1.00 | 1.22 | 1.57 |
| CHUM | 1.12 | 1.08 | 0.99 | 0.98 | 1.00 | 1.27 | 2.30 |
| PINK | 1.10 | 1.21 | 1.22 | 1.15 | 1.00 | 1.62 | 3.50 |
| SOCKEYE | 0.62 | 0.49 | 0.59 | 0.70 | 1.00 | 1.10 | 1.60 |
| COHO | 1.25 | 0.84 | 1.14 | 1.11 | 1.00 | 1.81 | 2.48 |
| TOTAL SALMON | 0.82 | 0.67 | 0.79 | 0.84 | 1.00 | 1.25 | 1.94 |
| SWORDFISH | 0.87 | 0.85 | 0.92 | 0.86 | 1.00 | 1.14 | 1.06 |
| TUNA: | | | | | | | |
| ALBACORE | 1.28 | 1.14 | 1.16 | 1.00 | 1.00 | 1.43 | 1.58 |
| BLUEFIN | 1.24 | 3.15 | 3.65 | 1.99 | 1.00 | 5.98 | 7.27 |
| SKIPJACK | 1.47 | 1.22 | 1.17 | 0.97 | 1.00 | 1.18 | 1.51 |
| YELLOWFIN | 1.39 | 1.28 | 1.23 | 1.05 | 1.00 | 1.28 | 1.59 |
| TOTAL TUNA | 1.41 | 1.31 | 1.29 | 1.05 | 1.00 | 1.40 | 1.74 |
| TOTAL EDIBLE FINFISH | 1.07 | 0.96 | 0.98 | 0.92 | 1.00 | 1.24 | 1.53 |
| CLAMS: | | | | | | | |
| HARD | 0.84 | 0.75 | 0.85 | 0.77 | 1.00 | 1.09 | 1.38 |
| OCEAN QUAHOG | 0.90 | 0.88 | 0.88 | 0.88 | 1.00 | 0.95 | 0.93 |
| SOFT | 0.58 | 0.66 | 0.80 | 0.87 | 1.00 | 0.85 | 0.88 |
| SURF | 0.96 | 0.82 | 0.90 | 0.99 | 1.00 | 0.85 | 0.85 |
| TOTAL CLAMS | 0.85 | 0.78 | 0.87 | 0.88 | 1.00 | 0.96 | 1.07 |
| CRABS: | | | | | | | |
| BLUE | 0.80 | 0.91 | 0.88 | 0.89 | 1.00 | 1.14 | 1.23 |
| DUNGENESS | 0.73 | 0.98 | 1.15 | 1.07 | 1.00 | 1.01 | 0.89 |
| KING | 0.88 | 0.78 | 0.69 | 0.77 | 1.00 | 1.01 | 1.19 |
| SNOW | 1.39 | 1.16 | 0.94 | 0.79 | 1.00 | 1.14 | 1.24 |
| TOTAL CRABS | 1.01 | 0.96 | 0.87 | 0.84 | 1.00 | 1.08 | 1.18 |
| AMERICAN LOBSTER | 0.88 | 0.92 | 0.99 | 0.95 | 1.00 | 1.12 | 1.14 |
| OYSTERS | 0.73 | 0.70 | 0.87 | 0.82 | 1.00 | 1.21 | 1.28 |
| SCALLOPS: | | | | | | | |
| BAY | 0.44 | 0.62 | 0.55 | 0.50 | 1.00 | 0.61 | 0.68 |
| CALICO | 0.54 | 0.65 | 0.29 | 0.52 | 1.00 | 0.57 | 0.55 |
| SEA | 0.75 | 1.12 | 1.09 | 0.97 | 1.00 | 0.85 | 0.86 |
| TOTAL SCALLOPS | 0.73 | 1.07 | 1.03 | 0.93 | 1.00 | 0.82 | 0.84 |
| SHRIMP: | | | | | | | |
| GULF AND SOUTH ATLANTIC | 1.08 | 1.14 | 0.91 | 0.83 | 1.00 | 0.97 | 0.98 |
| OTHER | 0.88 | 1.24 | 0.94 | 0.84 | 1.00 | 1.36 | 0.90 |
| TOTAL SHRIMP | 1.07 | 1.14 | 0.91 | 0.83 | 1.00 | 0.99 | 0.97 |
| TOTAL EDIBLE SHELLFISH | 0.98 | 0.95 | 0.91 | 0.85 | 1.00 | 1.02 | 1.04 |
| TOTAL EDIBLE FISH AND SHELLFISH | 1.02 | 0.96 | 0.95 | 0.89 | 1.00 | 1.12 | 1.27 |
| INDUSTRIAL FISH: | | | | | | | |
| MENHADEN | 0.99 | 1.03 | 1.03 | 0.94 | 1.00 | 0.98 | 1.26 |
| ALL FISH | 1.02 | 0.96 | 0.95 | 0.89 | 1.00 | 1.12 | 1.27 |

(1) Revised.

# VALUE ADDED

SUMMARY OF 1988 VALUE ADDED, MARGINS, 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 FISHERY PRODUCTS |
|---|---|---|---|---|---|---|---|---|
| | Thousand Dollars | Percentage of Fishery Inputs | Thousand Dollars | Percentage | Thousand Dollars | Thousand Dollars | Percentage of GNP Contribution | Thousand Dollars |
| Domestic Harvest: | | | | | | | | |
| Edible | - | 100.0 | $3,414,555 | 62.89 | $2,147,477 | $3,414,555 | 13.1 | - |
| Industrial | - | 100.0 | $105,704 | 59.63 | $63,027 | $105,704 | 0.4 | - |
| Harvest not landed in U.S. | - | 100.0 | $489,809 | 63.80 | $312,523 | $489,809 | 1.9 | $489,809 |
| Imports, Unprocessed | $2,051,718 | - | - | - | - | $2,051,718 | - | - |
| Exports, Unprocessed | - | - | - | - | - | - | - | $1,238,241 |
| Primary Wholesale and Processing | $4,333,736 | 90.7 | $3,932,448 | 57.50 | $2,262,144 | $8,266,184 | 13.8 | - |
| Imports, Processed | $3,466,898 | - | - | - | - | $3,466,898 | - | - |
| Exports, Processed | - | - | - | - | - | - | - | $1,036,354 |
| Secondary Wholesale and Processing: | | | | | | | | |
| Edible | $10,562,304 | 22.8 | $2,406,866 | 54.90 | $1,321,378 | $12,969,170 | 8.1 | - |
| Industrial | $134,424 | 22.8 | $30,632 | 54.90 | $16,817 | $165,055 | 0.1 | - |
| Retail Trade from Food Service | $6,596,342 | 177.8 | $11,729,869 | 73.40 | $8,604,215 | $18,326,211 | 52.6 | - |
| Retail Trade from Stores | $6,372,828 | 31.9 | $2,033,488 | 80.50 | $1,636,325 | $8,406,316 | 10.0 | - |
| TOTAL U.S. VALUE ADDED ACTIVITY: | | | | | $16,363,905 | | 100.0 | |
| CONSUMERS EXPENDITURES (& WHOLESALE PURCHASES OF INDUSTRIAL PRODUCTS) FOR FISHERY PRODUCTS: | | | | | | $26,897,582 | | |

(1) 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 (GNP) 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 GNP.

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.

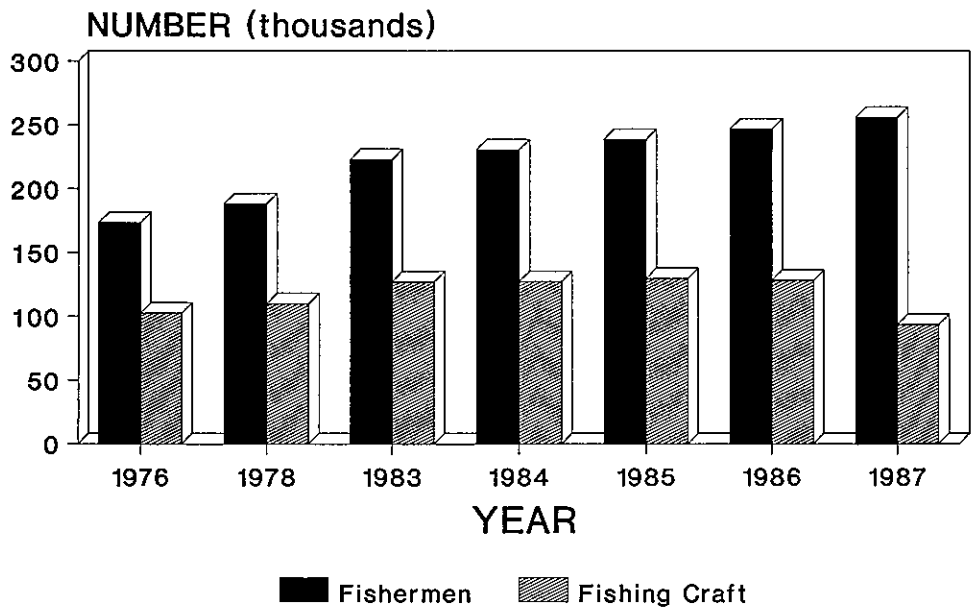
Annual sales is the value of seafood sales at the various maket levels. Consumer expenditures are the final retail value of seafood products sold through stores and food service outlets.

FISHERY EMPLOYMENT, CRAFT, AND ESTABLISHMENTS, VARIOUS YEARS, 1970-87(1)

| Item | 1970 | 1972 | 1974 | 1976 | 1978(1) | 1987(1) |
|---|---|---|---|---|---|---|
| | Number | | | | | |
| Persons employed: | | | | | | |
| Fishermen | 140,538 | 139,119 | 161,361 | 173,610 | 188,300 | 256,000 |
| Processing and wholesaling (2) | 86,813 | 91,268 | 92,118 | 93,609 | 99,446 | 103,072 |
| Total | 227,351 | 230,387 | 253,479 | 267,219 | 287,746 | 359,072 |
| Craft used: | | | | | | |
| Vessels (3) | 13,591 | 14,507 | 15,891 | 16,675 | 18,100 | 23,400 |
| Motor boats | 71,570 | 69,795 | 83,436 | 84,445 | 90,200 | 68,400 |
| Other boats | 2,000 | 1,570 | 1,907 | 1,501 | 1,600 | 1,600 |
| Total | 87,161 | 85,872 | 101,234 | 102,621 | 109,900 | 93,400 |
| Processors and wholesalers: | | | | | | |
| New England States | 537 | 500 | 483 | 503 | 492 | 893 |
| Mid-Atlantic States | 832 | 793 | 745 | 768 | 763 | 603 |
| South Atlantic States | 432 | 445 | 433 | 522 | 506 | 637 |
| Gulf Coast States | 817 | 796 | 742 | 726 | 840 | 1,080 |
| Pacific States | 402 | 223 | 356 | 362 | 437 | 372 |
| Alaska | 108 | 322 | 239 | 182 | 178 | 442 |
| Inland States (4) | 564 | 537 | 487 | 511 | 266 | 87 |
| Other (5) | 43 | 47 | 49 | 43 | 42 | 65 |
| Total | 3,735 | 3,663 | 3,534 | 3,617 | 3,524 | 4,179 |

(1) Fishermen and craft estimated. Chesapeake Region not available for craft used in 1987. (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.

## NUMBER OF FISHERMEN AND FISHING CRAFT 1976 - 1987



PLANTS PRODUCING CANNED FISHERY PRODUCTS, INDUSTRIAL FISHERY PRODUCTS, AND FISH FILLETS AND STEAKS, 1988

| Area and State | Canned fishery products | Industrial fishery products | Fish fillets and steaks | Total plants exclusive of duplication |
|---|---|---|---|---|
| | Number | | | |
| New England: | | | | |
| Maine | 11 | 4 | 30 | 44 |
| Massachusetts | - | - | 68 | 68 |
| New Hampshire | - | - | 3 | 3 |
| Rhode Island | - | - | 17 | 17 |
| Connecticut | - | - | 2 | 2 |
| Total | 11 | 4 | 120 | 134 |
| Mid-Atlantic: | | | | |
| New York | 4 | 1 | 19 | 24 |
| New Jersey | 11 | - | 2 | 13 |
| Pennsylvania | 2 | - | - | 2 |
| Delaware | 2 | - | - | 2 |
| Maryland | 1 | 1 | 1 | 1 |
| Virginia | 2 | 5 | 5 | 12 |
| Total | 22 | 7 | 27 | 54 |
| South Atlantic and Gulf: | | | | |
| North Carolina | 2 | 4 | 20 | 26 |
| South Carolina | 1 | - | 9 | 10 |
| Georgia | - | 2 | 3 | 5 |
| Florida | 1 | 2 | 51 | 54 |
| Alabama | - | 1 | 2 | 3 |
| Mississippi | 3 | 2 | 1 | 6 |
| Louisiana | 7 | 17 | 19 | 43 |
| Total | 14 | 28 | 105 | 147 |
| Pacific: | | | | |
| Alaska | 51 | 8 | 34 | 85 |
| Washington | 14 | 2 | 25 | 40 |
| Oregon | 3 | - | 15 | 18 |
| California | 6 | 6 | 27 | 37 |
| Total | 74 | 16 | 101 | 180 |
| Hawaii | - | - | 3 | 3 |
| Inland States | 1 | 1 | 17 | 19 |
| American Samoa | 2 | 2 | - | 2 |
| Puerto Rico | 5 | 4 | - | 5 |
| Grand total | 129 | 62 | 373 | 544 |

PROCESSORS AND WHOLESALERS: PLANTS AND EMPLOYMENT, 1987

| STATE AND AREA | PROCESSING | | | WHOLESALE | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | PLANTS | EMPLOYMENT SEASON | AVERAGE YEAR | PLANTS | EMPLOYMENT SEASON | AVERAGE YEAR | PLANTS | EMPLOYMENT SEASON | AVERAGE YEAR |
| | NUMBER | | | | | | | | |
| NEW ENGLAND: | | | | | | | | | |
| MAINE..... | 117 | 2,488 | 2,291 | 260 | 709 | 662 | 377 | 3,197 | 2,953 |
| NEW HAMPSHIRE... | 13 | 474 | 413 | 7 | 46 | 45 | 20 | 520 | 458 |
| MASSACHUSETTS... | 108 | 3,707 | 3,680 | 219 | 1,357 | 1,327 | 327 | 5,064 | 5,007 |
| RHODE ISLAND.... | 33 | 556 | 534 | 81 | 356 | 332 | 114 | 912 | 866 |
| CONNECTICUT..... | 5 | 49 | 45 | 50 | 215 | 214 | 55 | 264 | 259 |
| TOTAL..... | 276 | 7,274 | 6,963 | 617 | 2,683 | 2,580 | 893 | 9,957 | 9,543 |
| MID-ATLANTIC: | | | | | | | | | |
| NEW YORK..... | 36 | 481 | 479 | 170 | 1,297 | 1,285 | 206 | 1,778 | 1,764 |
| NEW JERSEY..... | 26 | 1,078 | 1,002 | 57 | 346 | 342 | 83 | 1,424 | 1,344 |
| PENNSYLVANIA.... | 13 | 1,195 | 1,138 | 13 | 210 | 210 | 26 | 1,405 | 1,348 |
| DELAWARE..... | 3 | 432 | 432 | 7 | 25 | 25 | 10 | 457 | 457 |
| DISTRICT OF COLUMBIA..... | - | - | - | 5 | 81 | 81 | 5 | 81 | 81 |
| MARYLAND..... | 66 | 2,079 | 1,911 | 65 | 548 | 511 | 131 | 2,627 | 2,422 |
| VIRGINIA..... | 89 | 2,951 | 2,818 | 53 | 528 | 504 | 142 | 3,479 | 3,322 |
| TOTAL..... | 233 | 8,216 | 7,780 | 370 | 3,035 | 2,958 | 603 | 11,251 | 10,738 |
| SOUTH ATLANTIC: | | | | | | | | | |
| NORTH CAROLINA.. | 101 | 2,038 | 1,879 | 201 | 736 | 621 | 302 | 2,774 | 2,500 |
| SOUTH CAROLINA.. | 22 | 308 | 299 | 81 | 488 | 383 | 103 | 796 | 682 |
| GEORGIA..... | 12 | 1,394 | 1,383 | 57 | 206 | 190 | 69 | 1,600 | 1,573 |
| FLORIDA, EAST COAST..... | 38 | 1,375 | 1,369 | 125 | 753 | 751 | 163 | 2,128 | 2,120 |
| TOTAL..... | 173 | 5,115 | 4,930 | 464 | 2,183 | 1,945 | 637 | 7,298 | 6,875 |
| GULF: | | | | | | | | | |
| FLORIDA, WEST COAST..... | 148 | 3,584 | 2,008 | 195 | 871 | 868 | 343 | 4,455 | 2,876 |
| ALABAMA..... | 68 | 2,150 | 1,818 | 24 | 145 | 138 | 92 | 2,295 | 1,956 |
| MISSISSIPPI..... | 44 | 5,047 | 5,034 | 31 | 195 | 190 | 75 | 5,242 | 5,224 |
| LOUISIANA..... | 181 | 4,626 | 3,720 | 226 | 969 | 853 | 407 | 5,595 | 4,573 |
| TEXAS..... | 35 | 1,634 | 1,389 | 128 | 792 | 753 | 163 | 2,426 | 2,142 |
| TOTAL..... | 476 | 17,041 | 13,969 | 604 | 2,972 | 2,802 | 1,080 | 20,013 | 16,771 |

PROCESSORS AND WHOLESALERS: PLANTS AND EMPLOYMENT, 1987 - Continued

| STATE AND AREA | PROCESSING | | | WHOLESALE | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | PLANTS | EMPLOYMENT SEASON | AVERAGE YEAR | PLANTS | EMPLOYMENT SEASON | AVERAGE YEAR | PLANTS | EMPLOYMENT SEASON | AVERAGE YEAR |
| | NUMBER | | | | | | | | |
| PACIFIC: | | | | | | | | | |
| CALIFORNIA..... | 53 | 3,720 | 3,668 | 51 | 1,474 | 1,482 | 104 | 5,194 | 5,150 |
| OREGON..... | 32 | 1,430 | 1,412 | 28 | 270 | 255 | 60 | 1,700 | 1,667 |
| WASHINGTON..... | 122 | 3,344 | 3,237 | 86 | 671 | 655 | 208 | 4,015 | 3,892 |
| TOTAL..... | 207 | 8,494 | 8,317 | 165 | 2,415 | 2,392 | 372 | 10,909 | 10,709 |
| ALASKA (1)..... | 442 | 31,244 | 23,000 | (2) | (2) | (2) | 442 | 31,244 | 23,000 |
| INLAND AREAS (1) -- (ARKANSAS, COLORADO, ILLINOIS, INDIANA, IOWA, KANSAS, MICHIGAN, MINNESOTA, MISSOURI, NEVADA, OHIO, OKLAHOMA, SOUTH DAKOTA, AND WISCONSIN) | | | | | | | | | |
| TOTAL..... | 48 | 647 | 552 | 39 | 222 | 215 | 87 | 869 | 767 |
| OTHER AREAS OR STATES: (3) | | | | | | | | | |
| GUAM, HAWAII, AND NORTHERN MARIANAS..... | 16 | 199 | 199 | 42 | 158 | 152 | 58 | 357 | 351 |
| AMERICAN SAMOA, AND PUERTO RICO..... | 7 | 11,174 | 11,174 | (2) | (2) | (2) | 7 | 11,174 | 11,174 |
| TOTAL..... | 23 | 11,373 | 11,373 | 42 | 158 | 152 | 65 | 11,531 | 11,525 |
| GRAND TOTAL... | 1,878 | 89,404 | 76,884 | 2,301 | 13,668 | 13,044 | 4,179 | 103,072 | 89,928 |

(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.

FISHERY PRODUCTS AND ESTABLISHMENT INSPECTED IN CALENDAR YEAR, 1988

| Region | Edible fishery products | | | | | | |
|---|---|---|---|---|---|---|---|
| | Establishments (1) | | Amount inspected | | | | |
| | SIFE (2) | PUFI (3) | Grade A (4) | PUFI (4) | No mark (5) | Lot (6) | Total |
| | ----Number---- | | ----Thousand pounds---- | | | | |
| Northeast..... | 2 | 33 | 58,195 | 175,148 | 26,095 | 50,195 | 309,633 |
| Southeast..... | 0 | 62 | 16,678 | 17,705 | 15,050 | 15,676 | 65,109 |
| West..... | 5 | 31 | 31,354 | 5,089 | [illegible] | 7,718 | 120,744 |
| Total, 1988..... | 7 | 126 | 106,227 | 197,942 | [illegible] | 589 | 495,486 |
| Total, 1987..... | 9 | 124 | 113,041 | 198,9[illegible] | [illegible] | 55 | 433,032 |

(1) These establishments are inspected under contract and certified [illegible] of Commerce (USDC) regulations for construction and maintenance of facilities and [illegible] niques, and employment practices.

(2) Fish processing establishments approved for sanitation under the Sa[illegible] lishment Service (SIFE). Products are not processed under inspection.

(3) Sanitarily inspected fish establishments processing fishery products u[illegible].

(4) Products processed under USDC inspection in inspected establishments and [illegible] 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.

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

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

# THE MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT

The Magnuson Fishery Conservation and Management 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 (generally 3 nautical miles from shore for all but two States) to 200 nautical miles from shore. The seaward boundaries of Texas, Puerto Rico, and the Gulf coast of Florida are 3 marine leagues (9 nautical miles).

## GOVERNING INTERNATIONAL FISHERY AGREEMENTS

Under the Magnuson 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 1988 recovered costs of issuing permits, based upon a standard administrative charge of $354 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 1988 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 1988 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 1988.

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

As of December 31, 1988, 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

# THE MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT

## FISHERY MANAGEMENT PLANS (FMPs)

Under section 304 of the Magnuson Act, all Council 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 1988, three new FMPs were adopted by Councils, submitted for Secretarial review and approved. As of December 31, 1988, there are 30 fishery management plans in place. The FMPs are listed below, and those marked with an asterisk (*) were approved and implemented during 1988. 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. Those marked with a double asterisk (**) were amended in 1988.

American Lobster
Northeast Multispecies
Atlantic Billfishes (*)
Atlantic Mackerel, Squid, and Butterfish
Atlantic Salmon (*)
Atlantic Sea Scallops (**)
Atlantic Surf Clams and Ocean Quahogs fisheries
Summer Flounder (*)
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
Alaska King Crab
Commercial and Recreational Salmon
High Seas Salmon (**)
Pacific Groundfish
Gulf of Alaska Groundfish (**)
Bering Sea and Aleutian Islands Groundfish (**)
Western Pacific Crustaceans
Western Pacific Precious Corals (**)
Western Pacific Bottomfish and Seamount Groundfish (**)
Gulf of Mexico Red Drum (**)
Western Pacific Pelagics

During 1988, 360 regulatory actions were processed via the Federal Register to implement FMP fishery management actions and rules for foreign fishing. This number includes hearing, meeting, and correction notices.

## REGIONAL FISHERY MANAGEMENT COUNCILS

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

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN ALLOCATION: BY COUNTRY AND REGION, 1988

| Item | North Atlantic (1) | Washington Oregon, and California (2) | Gulf of Alaska (3) | Eastern Bering Sea and Aleutian Islands (4) | Total Alaska | Grand Total (1) |
|---|---|---|---|---|---|---|
| | Metric tons, round weight | | | | | |
| Optimum yield (OY)..... | 503,258 | 254,000 | 260,936 | 2,003,000 | 2,263,936 | 3,021,194 |
| DAH..... | 341,100 | 189,000 | 260,936 | 2,000,000 | 2,260,936 | 2,791,036 |
| DAP..... | 255,900 | 19,000 | 233,186 | 698,366 | 931,552 | 1,206,452 |
| JVP..... | 71,200 | 170,000 | 20,150 | 1,301,634 | 1,321,784 | 1,562,984 |
| Reserve..... | 5,000 | 4,400 | 0 | 0 | 0 | 9,400 |
| TALFF..... | 157,158 | 60,600 | 7,600 | 3,000 | 10,600 | 228,358 |
| COUNTRY ALLOCATIONS | | | | | | |
| EEC, Netherlands..... | 12,192 | 0 | 0 | 0 | 0 | 12,192 |
| German Democratic Republic..... | 22,304 | 0 | 0 | 0 | 0 | 22,304 |
| People's Republic of China..... | 0 | 3,700 | 0 | 0 | 0 | 3,700 |
| Poland..... | 17,043 | 36,500 | 0 | 0 | 0 | 53,543 |
| Republic of Korea..... | 0 | 5,300 | 0 | 0 | 0 | 5,300 |
| Total..... | 51,539 | 45,500 | 0 | 0 | 0 | 97,039 |

(1) Optimum Yield includes initial optimum yield for some species-see North Atlantic table.
(2) Optimum Yield includes Pacific whiting, shortbelly rockfish, and jack mackerel; allocations include only Pacific whiting - see Washington, Oregon, and California table.
(3) Includes 7,600 mt TALFF for Pacific cod.
(4) Includes 3,000 mt TALFF for snails.

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.

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS: NORTH ATLANTIC, BY SPECIES AND COUNTRY, 1988 (1)

| Item | Red hake | Silver hake | Sharks, except Dogfish | Loligo Squid | Illex Squid | Atlantic mackerel (2) | Butter-fish | River herring | Other finfish | Total (2) |
|---|---|---|---|---|---|---|---|---|---|---|
| | Metric tons, round weight | | | | | | | | | |
| Max Optimum yield (OY)..... | 22,000 | 43,000 | 6,150 | 44,000 | 30,000 | N/A | 16,000 | 8,000 | 247,000 | - |
| ABC..... | - | - | - | 37,000 | 22,500 | 323,000 | 16,000 | - | - | - |
| Initial Optimum yield..... | 22,000 | 43,000 | 6,150 | 14,036 | 17,000 | 136,000 | 10,072 | 8,000 | 247,000 | 503,258 |
| DAH..... | 11,500 | 29,600 | 5,000 | 14,000 | 17,000 | 46,000 | 10,000 | 7,800 | 200,200 | 341,100 |
| DAP..... | 5,500 | 7,600 | 5,000 | 14,000 | 14,000 | 12,000 | 10,000 | 7,800 | 180,000 | 255,900 |
| JVP..... | 6,000 | 22,000 | - | 0 | 3,000 | 20,000 | 0 | - | 20,200 | 71,200 |
| Reserve..... | 5,000 | - | - | - | - | - | - | - | - | 5,000 |
| TALFF..... | 5,500 | 13,400 | 1,150 | 36 | 0 | 90,000 | 72 | 200 | 46,800 | 157,158 |
| Country Allocations | | | | | | | | | | |
| EEC, Netherlands. | 5 | 5 | 0 | 2 | 0 | 12,000 | 5 | 25 | 150 | 12,192 |
| German Democratic Republic. | 5 | 5 | 0 | 4 | 0 | 22,000 | 5 | 35 | 250 | 22,304 |
| Poland..... | 5 | 10 | 0 | 3 | 0 | 16,700 | 5 | 60 | 260 | 17,043 |
| Total..... | 15 | 20 | 0 | 9 | 0 | 50,700 | 15 | 120 | 660 | 51,539 |

(1) 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.
(2) DAH includes 14,000 metric tons for recreational catch.
NA:--Not applicable.

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

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, FOREIGN FISHING ALLOCATION AND BYCATCH ALLOWANCES WASHINGTON, OREGON, AND CALIFORNIA, BY SPECIES AND COUNTRY, 1988 (1)

| Item | 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 |
| | Metric tons, round weight | | | | | | | | | |
| Optimum yield (OY)..... | 232,000 | 10,000 | 12,000 | 254,000 | - | - | - | - | - | - |
| DAH..... | 183,000 | 6,000 | 0 | 189,000 | - | - | - | - | - | - |
| DAP..... | 18,000 | 1,000 | 0 | 19,000 | - | - | - | - | - | - |
| JVP..... | 165,000 | 5,000 | 0 | 170,000 | - | - | - | - | - | - |
| Reserve..... | 0 | 2,000 | 2,400 | 4,400 | - | - | - | - | - | - |
| TALFF..... | 49,000 | 2,000 | 9,600 | 60,600 | - | - | - | - | - | - |
| % BYCATCH LIMITS (2)..... | - | - | - | - | 0.062 | 0.738 | 0.100 | 0.173 | 3.000 | 0.500 |
| Country Allocations | | | | | | | | | | |
| Poland..... | 36,500 | 0 | 0 | 36,500 | 23 | 269 | 37 | 63 | 1,095 | 183 |
| Rep. of Korea.... | 5,300 | 0 | 0 | 5,300 | 3 | 39 | 5 | 9 | 159 | 27 |
| People'S Republic of China..... | 3,700 | 0 | 0 | 3,700 | 2 | 27 | 4 | 6 | 111 | 19 |
| Total..... | 45,500 | 0 | 0 | 45,500 | - | - | - | - | - | - |

(1) TALFF=Total Allowable Level of Foreign Fishing; DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; JVP=Joint Venture Processing.

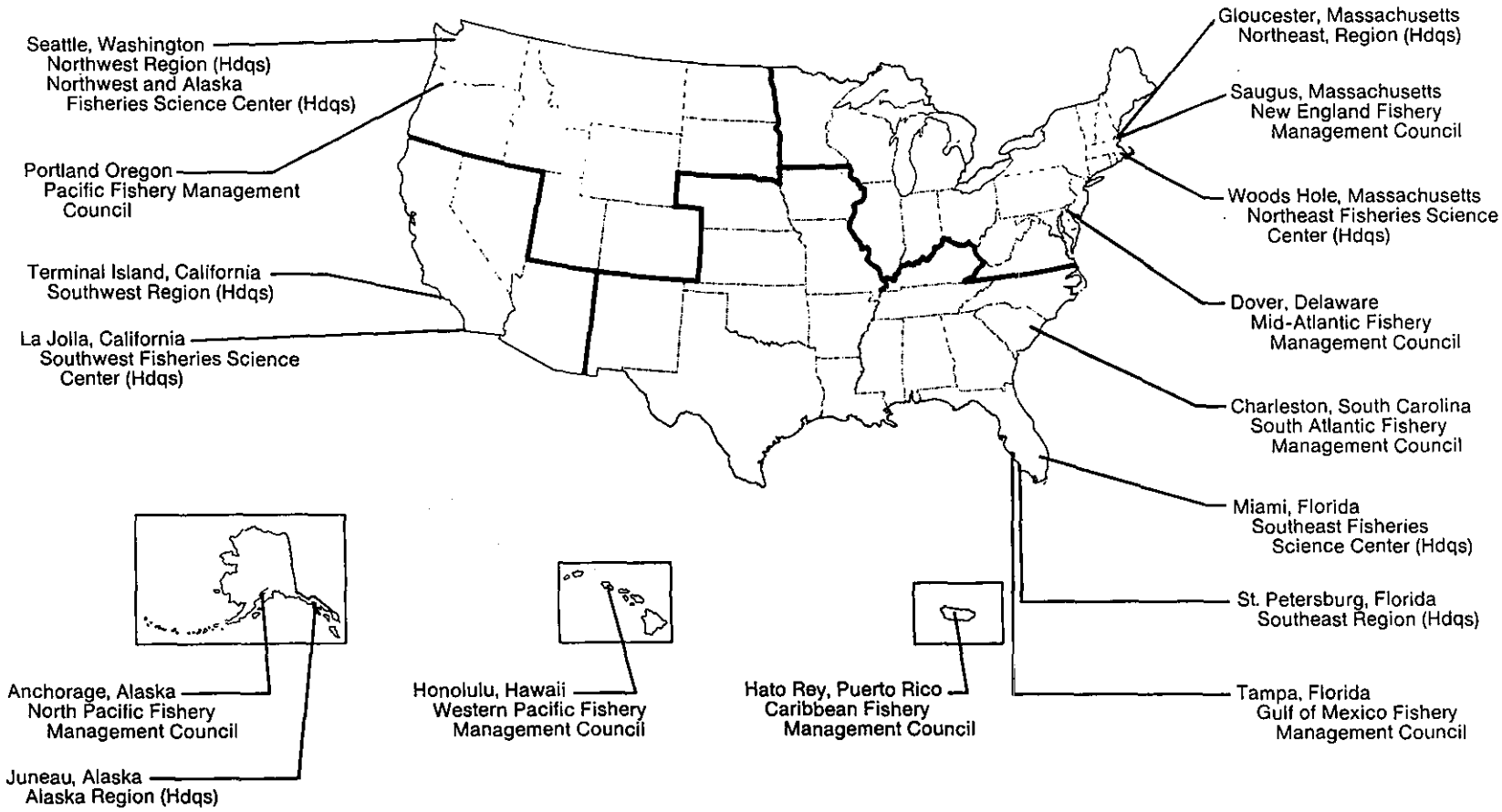
(2) Bycatch allowances are the maximum amounts of bycatch that can be taken by foreign vessels and are based on the bycatch limits which are percentages applied to each nation's Pacific whiting allocation.

(3) Includes shortbelly rockfish and widow rockfish.

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

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

# NMFS Regional Offices
# NMFS Fisheries Science 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 |
|---|---|---|
| -- | Secretary of Commerce<br>Robert A. Mosbacher | 202-377-2112 |
| A | National Oceanic and Atmospheric Administration<br>William E. Evans | 202-377-3436 |

### NATIONAL MARINE FISHERIES SERVICE

1335 East-West Highway
(Silver Spring Metro Center #1)
Silver Spring, MD 20910

| | | |
|---|---|---|
| F | Assistant Administrator for Fisheries<br>James W. Brennan | 301-427-2239 |
| Fx1 | Deputy Assistant Administrator for Fisheries | 301-427-2239 |
| Fx2 | Executive Director | 301-427-2239 |
| Fx3 | Senior Scientist for Fisheries | 301-427-2239 |
| F/MB | Management and Budget Office | 301-427-2245 |
| F/SC | National Seafood Marketing Council (*) | 202-673-5237 |
| F/EN | Office of Enforcement | 301-427-2300 |
| F/CM | Office of Fisheries Conservation and Management | 301-427-2334 |
| F/CM1 | Operations Support and Analysis Division | 301-427-2353 |
| F/CM2 | Plans and Regulations Division | 301-427-2343 |
| F/CM3 | Recreational and Interjurisdictional Fisheries Division | 301-427-2325 |
| F/RE | Office of Research and Environmental Information | 301-427-2367 |
| F/RE1 | Fisheries Statistics Division | 301-427-2328 |
| F/RE2 | Data Management Division | 301-427-2372 |
| F/RE3 | Prediction, Analysis and Monitoring Division | 301-427-2363 |
| F/PR | Office of Protected Species | 301-427-2332 |
| F/PR1 | Permits and Documentation Division | 301-427-2289 |
| F/PR2 | Protected Species Management Division | 301-427-2322 |
| F/PR3 | Habitat Policy and Conservation Division | 301-427-2347 |
| F/PR4 | Conservation Science Division | 301-427-2319 |
| F/TS | Office of Trade and Industry Services | 301-427-2351 |
| F/TS1 | Financial Services Division | 301-427-2390 |
| F/TS2 | Trade Services Division | 301-427-2379 |

(Continued)

(*) Office is located at 1825 Connecticut Ave., NW (Universal Bldg., South) Room 618, Washington, DC 20235.

## NATIONAL MARINE FISHERIES SERVICE

***SILVER SPRING, MD. 20910***

| Mail routing code | | Telephone number |
|---|---|---|
| F/TS3 | Utilization Research and Services Division | 301-427-2358 |
| F/TS4 | Inspection Services Division | 301-427-2355 |
| F/IA | Office of International Affairs | 301-427-2272 |
| F/IA1 | Organizations and Agreements Division | 301-427-2276 |
| F/IA2 | International Science, Development and Polar Affairs Division | 301-427-2288 |
| LA3-F | Constituent Affairs Staff - Fisheries | 301-427-2259 |
| LA5-F | Office of Congressional Affairs - Fisheries | 301-427-2263 |
| PAF | Office of Public Affairs - Fisheries | 301-427-2370 |
| GCF | Office of General Counsel - Fisheries | 301-427-2231 |

### *REGIONAL FACILITIES*

| Location | Telephone number | |
|---|---|---|
| Gloucester, MA | 508-281-9300 | Northeast Region, One Blackburn Drive<br>Gloucester, MA 01930 |
| Woods Hole, MA | 508-548-5123 | Northeast Fisheries Science Center<br>Woods Hole, MA 02543 |
| Woods Hole, MA | 508-548-5123 | Woods Hole Laboratory<br>Woods Hole, MA 02543 |
| Narragansett, RI | 401-789-9326 | Narragansett Laboratory, Route 7A, P.O. Box 522A<br>Narragansett, RI 02882 |
| Milford, CT | 203-878-2459 | Milford Laboratory<br>Milford, CT 06460 |
| Highlands, NJ | 201-872-0200 | Sandy Hook Laboratory, P.O. Box 428<br>Highlands, NJ 07732 |
| Oxford, MD | 301-226-5193 | Oxford Laboratory<br>Oxford, MD 21654 |
| Gloucester, MA | 508-281-3600<br>Ext. 237 | Gloucester Laboratory, Emerson Ave.<br>Gloucester, MA 01930 |
| Washington, DC | 202-357-2550 | National Systematics Laboratory<br>10th and Constitution Ave., N.W.<br>Washington, DC 20560 |

(Continued)

## NATIONAL MARINE FISHERIES SERVICE

***REGIONAL FACILITIES - CONTINUED***

| Location | Telephone number | |
|---|---|---|
| St. Petersburg, FL | 813-893-3141 | Southeast Region, 9450 Koger Blvd.<br>St. Petersburg, FL 33702 |
| Miami, FL | 305-361-4284 | Southeast Fisheries Science Center, 75 Virginia Beach Dr.<br>Miami, FL 33149 |
| Miami, FL | 305-361-4225 | Miami Laboratory, 75 Virginia Beach Dr.<br>Miami, FL 33149 |
| Pascagoula, MS | 601-762-4591 | Mississippi Laboratories, 3209 Frederick St.<br>P.O. Drawer 1207<br>Pascagula, MS 39567 |
| Panama City, FL | 904-234-6541 | Panama City Laboratory, 3500 Delwood Beach Rd.<br>Panama City, FL 32407 |
| Galveston, TX | 409-766-3500 | Galveston Laboratory, 4700 Avenue U<br>Galveston, TX 77550 |
| Charleston, SC | 803-762-1200 | Charleston Laboratory, 217 Fort Johnson Rd.<br>P.O. Box 12607<br>Charleston, SC 29412 |
| Beaufort, NC | 919-728-3595 | Beaufort Laboratory, Pivers Island<br>Beaufort, NC 28516 |
| Seattle, WA | 206-526-6150 | Northwest Region, 7600 Sand Point Way, N.E.<br>BIN C15700, Bldg. 1<br>Seattle, WA 98115 |
| Seattle, WA | 206-442-1872 | Northwest Fisheries Science Center<br>2725 Montlake Boulevard, East<br>Seattle, WA 98112 |
| Terminal Island, CA | 213-514-6196 | Southwest Region, 300 South Ferry St.<br>Terminal Island, CA 90731 |
| La Jolla, CA | 619-546-7000 | Southwest Fisheries Science Center<br>8604 La Jolla Shores Dr., P.O. Box 271<br>La Jolla, CA 92038 |
| Honolulu, HI | 808-943-1221 | Honolulu Laboratory, 2570 Dole St., P.O. Box 3830<br>Honolulu, HI 96812 |
| Tiburon, CA | 415-435-3149 | Tiburon Laboratory, 3150 Paradise Dr.<br>Tiburon, CA 94920 |
| Monterey, CA | 408-646-3311 | Pacific Fisheries Environmental Group<br>P.O. Box 831<br>Monterey, CA 93942 |

(Continued)

## NATIONAL MARINE FISHERIES SERVICE

### REGIONAL FACILITIES - Continued

| Location | Telephone number | |
|---|---|---|
| Juneau, AK | 907-586-7221 | Alaska Region, Federal Bldg., Room 453<br>709 West Ninth St., P.O. Box 21668<br>Juneau, AK 99802 |
| Seattle, WA | 206-526-4000 | Alaska Fisheries Science Center,<br>7600 Sand Point Way, N.E.<br>BIN C15700, Bldg. 4<br>Seattle, WA 98115 |
| Kodiak, AK | 907-487-4961 | Kodiak Investigations, P.O. Box 1638<br>Kodiak, AK 99615 |
| Auke Bay, AK | 907-789-6000 | Auke Bay Laboratory, P.O. Box 210155<br>Auke Bay, AK 99821 |

### REFERRAL DIRECTORY - SILVER SPRING, MARYLAND OFFICES

FEES AND PERMITS -- 301-427-2339

Foreign fishing
Joint ventures

FINANCIAL SERVICES -- 301-427-2390

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

FISHERY MANAGEMENT OPERATIONS -- 301-427-2343

Artifical reefs
Fishery management plans
Fisheries regulations
State grants

INDUSTRY SERVICES -- 301-427-2351

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

INTERNATIONAL FISHERIES -- 301-427-2272

Allocation (foreign fishing catches)
Foreign fisheries (general)

LAW ENFORCEMENT AND FINES -- 301-427-2300

PROTECTED SPECIES -- 301-427-2332

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

RESOURCES INVESTIGATIONS -- 301-427-2367

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

STATISTICAL DATA SERVICES -- 301-427-2328

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 -- 301-427-2358

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

# GENERAL ADMINISTRATIVE INFORMATION

## NATIONAL MARINE FISHERIES SERVICE

### *NATIONAL FISHERIES STATISTICS OFFICES*

| City | Telephone number | Name and address |
|---|---|---|
| | | ***NORTHEAST REGION*** |
| NEW ENGLAND | | |
| Portland | 207-780-3322 | Robert C. Morrill or Bill Trusewich, U.S. Custom House 312 Fore St., Room 17, P.O. Box 425, DTS, Portland, ME 04112 |
| Rockland | 207-594-5969 | 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 | 508-281-9304 | Vito P. Giacalone, Room 107, 1 Blackburn Dr. Gloucester, MA 01930 |
| New Bedford | 508-999-2452 | Dennis E. Main, U.S. Custom House, 2nd and Williams Sts., New Bedford, MA 02740 |
| New Bedford | 508-994-9200 | Paul O. Swain, Address same as above |
| Provincetown | 508-487-0868 | William D. Sprague, Post Office Bldg., Commercial St., P.O. Box 91, Provincetown, MA 02657 |
| (1)Woods Hole | 508-548-5123 Ext. 264 | Ronnee L. Schultz, Northeast Fisheries Center, Water St., Woods Hole, MA 02543 |
| Newport | 401-847-3115 | Lori Lathan, Post Office Bldg., Thames St., Newport, RI 02840 |
| Pt. Judith | 401-783-7797 | Susan Murphy, 310 Great Island Rd., Rm. 203, P.O. Box 547, Pt. Judith, RI 02882 |
| MIDDLE ATLANTIC | | |
| Riverhead | 516-727-0707 | Scott Basil, 518-B E. Main St., P.O. Box 873, Riverhead, L.I., NY 11901 |
| Patchhogue | 516-475-6988 | Fred C. Blossom, 22 W. Main St., P.O. Box 606, Patchoque, L.I., NY 11772 |
| Toms River | 201-349-3533 | Eugene A. LoVerde, 26 Main St., P.O. Box 143, Toms River, NJ 08753 |
| Cape May | 609-884-2113 | Patricia A. Yoos, 1382 Lafayette St., Cape May, NJ 08204 |
| CHEAPEAKE | | |
| Oxford | 301-226-5420 | William E. Brey, Oxford Laboratory, P.O. Box 338, Oxford, MD 21654 |
| Greenbackville | 804-824-4725 | George E. Ward, Biological Lab., Franklin City, Greenbackville, VA 23356 |
| Hampton | 804-723-3369 | Anthony Silvia, 55-57 West Queenway Mall, P.O. Box 436, Hampton, VA 23669 |
| | | ***SOUTHEAST REGION*** |
| SOUTH ATLANTIC | | |
| Beaufort | 919-728-4168 | Kenneth C. Harris, Pivers Island, Beaufort Laboratory, Box 500, Beaufort, NC 28516 |
| Manteo | 919-473-5929 | Glenwood P. Montgomery, Marine Resource Center, P.O. Box 967, Manteo, NC 27954 |
| Charleston | 803-762-1200 | John C. DeVane, Jr., 217 Ft. Johnson Rd., P.O. Box 12607, James Island, SC 29412 |
| Brunswick | 912-265-7080 | Daniel G. Foster, Federal Bldg., 801 Gloucester St., Room 104, Brunswick, GA 31520 |
| New Smyrna Beach | 904-427-6562 | Claudia Dennis, 200 Canal St., Room 200 New Smyrna Beach, FL 32069 |
| (1)Miami | 305-361-4462 | J. Ernest Snell, 75 Virginia Beach Dr., Miami, FL 33149 |
| Tequesta | 407-575-5407 | Howard C. Schaefer, 19100 S.E. Federal Highway Tequesta, FL 33469 |

(1) Regional headquarters for statistics offices.

(Continued)

## NATIONAL MARINE FISHERIES SERVICE

***NATIONAL FISHERIES STATISTICS OFFICES - Continued***

| City | Telephone number | Name and address |
|---|---|---|
| GULF | | |
| Key West | 305-294-1921 | Edward J. Little, Jr., Post Office & Custom House Bldg., P.O. Box 269, Key West, FL 33040 |
| Fort Myers | 813-334-4364 | 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 |
| 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 Bldg., Second Floor 93 S. Wintzell Ave., P.O. Box 591, Bayou La Batre, AL 36501 |
| Pascagoula | 601-762-4591 | Hermes G. Hague, 3209 Frederic St., SEFC Pascagoula Lab., P.O. Box Drawer 1207, Pascagoula, MS 39567 |
| Cameron | 318-762-3887 | Vacant, Sabine National Wildlife Refuge, Highway 27 South, 3000 Main Street, 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, Houma, 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 | Leryes "Lee" Usie, World Trade Center, 2 Canal St., Suite 400-H, New Orleans, LA 70130 |
| Aranas Pass | 512-758-3787 | Mary Magee, Landry Net Shop, Conn Brown Harbor, P.O. Box 1776, Aransas Pass., TX 78336 |
| Brownsville | 512-831-4050 | Edie Lopez, Harbor Masters Bldg., Shrimp Basin, P.O. Box 467, Brownsville, TX 78520 |
| Freeport | 409-233-4551 | Richard A. Allen, 307 East Park, P.O. Box 2533, Freeport, TX 77541 |
| Galveston | 409-766-3705 | Margot Hightower, 4700 Avenue U, Bldg. 308, Galveston, TX 77551 |
| Port Arthur | 409-724-4303 | Madeline Bailey, Federal Bldg., 2875 75th St., Room 113, Port Arthur, TX 77640 |
| | | ***SOUTHWEST REGION*** |
| (1)Terminal Island, CA or Honolulu, HI | 213-514-6674 | Patricia J. Donley, 300 S. Ferry St., P.O. Box 3266, Terminal Island, CA 90731 |
| | | ***NORTHWEST REGION*** |
| (1)Seattle | 206-526-6128 | John K. Bishop, 7600 Sand Point Way, N.E., Bldg., 1, BIN C15700, Seattle, WA 98115 |
| | | ***ALASKA REGION*** |
| (1)Juneau | 907-586-7228 | Janet E. Smoker, 709 W. Ninth St., Federal Bldg., P.O. Box 21668, Juneau, AK 99802 |

(1) 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/NWR1), 7600 Sand Point Way N.E., BIN C-15700, Seattle WA 98115. Telephone: 206-526-6107.

CURRENT FISHERY STATISTICS (CFS) SERIES

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

NOAA, National Marine Fisheries Service
Fisheries Statistics Division (F/RE1)
1335 East-West Highway
Silver Spring, MD 20910
Telephone: 301-427-2328

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 Coast, 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 Fishery Statistics of the United States. To order Fishery Statistics of the United States 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 Processed Fishery Products:
(Includes (MF 1-5) Canned Fishery Products; Production of Fish Fillets and Steaks; Fish Sticks, Fish Portions, and Breaded Shrimp; and Industrial Fishery Products.)

() MF-6 Imports and Exports of Fishery Products

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() Fish Meal and Oil

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## COMMERCIAL FISHERIES

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

| 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-253966 | 1986 | PB-88-164132 |
| 1976 | PB-268662 | 1987 | PB-88-215173 |

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

| 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 |
| 1949 | COM-75-11275 | 1969 | COM-75-10887 |
| 1950 | COM-75-11056 | 1970 | COM-75-10643 |
| 1951 | COM-75-11053 | 1971 | COM-74-51227 |
| 1952 | COM-75-11054 | 1972 | COM-75-11430 |
| 1953 | COM-75-11055 | 1973 | PB-262058 |
| 1954 | COM-75-11057 | 1974 | PB-277796 |
| 1955 | COM-75-11058 | 1975 | PB-300625 |
| 1956 | COM-75-11059 | 1976 | PB-81-163438 |
| 1957 | COM-75-11060 | 1977 | PB-84-192038 |
| 1958 | COM-75-11061 | | |

## STATE LANDINGS

Maine, 1946-76, PB-271296/1977-79, PB-81-128258.
Massachusetts, 1943-76, PB-275866/1977-79, PB-81-143182.
Rhode Island, 1954-77, PB-287627/1978-79, PB-81-157158.
New York, 1954-76, PB-275449/1977-79, PB-81-134546.

## STATE LANDINGS - CONTINUED

New Jersey, 1952-76, PB-275696/1977-79, PB-81-159048.
Maryland, 1960-76, PB-300636/1977-79, PB-81-159003.
Virginia, 1960-76, PB-300637/1977-79, PB-82-151960.
North Carolina, 1955-76, PB-288928/1977-79, PB-82-151978.
South Carolina, 1957-76, PB-289405/1977-79, PB-81-163198.
Georgia, 1956-77, PB-289814/1977-78, PB-81-157166.
Florida, 1950-76, PB-292068.
Alabama, 1950.-77, PB-80-121262/1978, PB-82-168071.
Mississippi, 1951-77, PB-80-121270/1978, PB-82-169079.
Louisiana, 1957-77, PB-300583/1978, PB-82-168063.
Texas, 1949-77, PB-300603/1978-79, PB-82-169004.
Shrimp, 1956-76, PB-80-124696/1977-78, PB-82-156183.
Gulf Coast Shrimp Data, 1958-76, PB-80-126899/1977, PB-82-170390.

## MARINE RECREATIONAL FISHING

1970 Salt-Water Angling Survey, PB-265416.

Determination of the Number of Commercial and Non-Commercial Recreational Boats in the United States, Their Use, and Selected Characteristics, COM-74-11186.

Participation in Marine Fishing:
Northeastern United States, 1973-74, COM-75-10655.
Southeastern United States, 1974, PB-273160.

Marine Recreational Fishery Statistics Survey:

Atlantic and Gulf Coasts:

| | |
|---|---|
| 1979-80 | PB-84-199652 |
| 1979 (Revised)-1980 | PB-89-102552 |
| 1981-1982 | PB-89-102560 |
| 1983-1984 | PB-89-102628 |
| 1985 | PB-89-102669 |
| 1986 | PB-89-102701 |

Pacific Coast:

| | |
|---|---|
| 1981-1982 | PB-89-102925/AS |
| 1983-1984 | PB-89-102933/AS |
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## OTHER PUBLICATIONS

Processors and Wholesale Dealers of Fishery Products in U.S. (excludes Alaska) 1987 (shows firm name, address, and major products), PB-89-152326/AS

Processors and Wholesalers of Alaska Fishery Products, 1978, PB-299246.

Directory of Aquaculture in the Southeast, 1976, PB-2721512.

Aquaculture and Capture Fisheries: Impacts in U.S. Seafood Markets, PB-88-204185/GBA.

Revenues, Costs, and Returns from Vessel Operation in Major U.S. Fisheries, PB-265275.

Development of Value Added, Margin and Expenditures for Marine Fishery Products, PB-89-125108.

Seafood Plant Sanitation, PB-271161.

List of Fishery Cooperatives in U.S. 1980-81, PB-82-107830.

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

A Survey of Fish Purchases by Socio-Economic Characteristics - Annual Report, COM-71-00647.

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 an under contract to the National Marine Fisheries Service, has prepared a series of economic profiles of the U.S. seafood processing industry.

The U.S. Blue Crab Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-165704.

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, 1979, 1978, and 1981, PB-86-135043.

The U.S. Seafood Processing Industry: An Economic Profile for Policy and Regulatory Analysis, PB-83-199265.

## BASIC ECONOMIC INDICATORS

American and Spiny Lobster, 1947-73, COM-47-11587
Atlantic and Pacific Groundfish, 1932-72, COM-74-11638.
Blue Crab, 1947-72, COM-74-11585.
Clams, 1947-74, COM-75-11089.
Halibut, 1929-72, COM-74-11583.
King and Dungeness Crabs, 1947-72, COM-74-11586.
Menhaden, 1946-72, COM-74-11581.
Oyster, 1947-72, COM-75-10384.
Salmon, 1947-72, COM-74-11710.
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# GLOSSARY

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

**BREADED FISH PRODUCTS**. Sticks and portions or other forms of fish or shellfish coated with a non-leavened mixture containing cereal products, flavorings, and other ingredients. Breaded products are sold raw or partially cooked.

**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.

**BREADED SHRIMP**. Peeled shrimp coated with breading. The product may be identified as fantail (butterfly) and round, with or without tail fins and last shell segment; also known as portions, sticks, steaks, etc., when prepared from a composite unit of two or more shrimp pieces whole shrimp or a combination of both without fins or shells.

**BUTTERFLY FILLET**. Two skin-on fillets of a fish joined together by the belly skin. See fillets.

**CANNED FISHERY PRODUCTS**. Fish, shellfish, or other aquatic animals packed in cans, or other containers, which are hermetically sealed and heat-sterilized. Canned fishery products may include milk, vegetables, or other products. Most, but not all, canned fishery products can be stored at room temperature for an indefinite time without spoiling.

**COMMERCIAL FISHERMAN**. An individual who derives income from catching and selling living resources taken from inland or marine waters.

**CONSUMPTION OF EDIBLE FISHERY PRODUCTS**. Estimated amount of commercially landed fish, shellfish, and other aquatic animals consumed by the civilian population of the United States. Estimates are on an edible-weight basis and have been adjusted for beginning and ending inventories of edible fishery products. Consumption includes U.S. production of fishery products from both domestically caught and imported fish, shellfish, other edible aquatic plants, animals, and imported products; and excludes exports and purchases by the U.S. Armed Forces.

**CONTINENTAL SHELF FISHERY RESOURCES**. These are living organisms of any sedentary species that at the harvestable stage are either (a) immobile on or under the seabed (b) unable to move except in constant physical contact with the seabed or subsoil of the continental shelf. The Magnuson Act now lists them as certain abalones, surf clam and ocean quahog, queen conch, Atlantic deep-sea red crab, dungeness crab, stone crab, king crabs, snow (tanner) crabs, American lobster, certain corals, and sponges.

**CURED FISHERY PRODUCTS**. Products preserved by drying, pickling, salting, or smoking; not including canned, frozen, irradiated, or pasteurized products. Dried products are cured by sun or air-drying; pickled or salted products are those products preserved by applying salt, or by pickling (immersing in brine or in a vinegar or other preservative solution); smoked products are cured with smoke or a combination of smoking and drying or salting.

**EDIBLE WEIGHT**. The edible weight of individual products as consumed.

**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 other charges or transportation cost 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 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 flesh produced by a meat and bone separating machine.

**FISH FILLETS**. The sides of fish that are either skinned or have the skin on, cut lengthwise from the backbone. Most types of fillets are boneless or virtually boneless; some may be labeled as "boneless fillets."

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

**FISH OIL**. An oil extracted from body (body oil) or liver (liver oil) of fish and marine mammals; mostly a byproduct of fish meal production.

**FISH PORTION**. A piece of fish flesh that is generally of uniform size with thickness of 3/8 of an inch or more and differs from a fish stick in being wider or a different shape. A fish portion is generally cut from a fish block.

**FISH SOLUBLES**. A water-soluble protein byproduct of fish meal production. Fish solubles are generally condensed to 50 percent solids and marketed as "condensed fish solubles."

**FISH STEAK**. A cross-section slice cut from a large dressed fish. A steak is usually about 3/4 of an inch thick.

**FISH STICK**. An elongated piece of breaded fish flesh weighing not less than 3/4 of an ounce and not more than 1-1/2 ounces with the largest dimension at least three times that of the next 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 (Magnuson Act).

**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, 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 jurisdiction to 200 miles under the Magnuson Fishery Conservation and Management Act of 1976 (MFCMA). See Northwest Atlantic Fisheries Organization (NAFO).

**JOINT VENTURE**. An operation authorized under the MFCMA (Magnuson Act) in which a permitted foreign vessel receives fish in the U.S. EEZ 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**. The Magnuson Act provides a national program for

the conservation and management of fisheries to allow for an optimum yield (OY) on a continuing basis and to realize the full potential of the Nation's fishery resources. It established the U.S. Exclusive Economics Zone (EEZ) (formerly the FCZ - fishery conservation zone) and a means to control foreign and certain domestic fisheries through PMPs and FMPs. Within the U.S. EEZ, the United States has exclusive management authority over fish (meaning finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals, birds, and highly migratory species of tuna). The Magnuson Act provides further exclusive management authority beyond the U.S. EEZ for all continental shelf fishery resources and all anadromous species throughout the migratory range of each such species, except during the time they are found within any foreign nation's territorial sea or fishery conservation zone (or the equivalent), to the extent that such a sea or zone is recognized by the United States.

**MARINE RECREATIONAL CATCH**. Quantities of finfish, shellfish and other living aquatic organisms caught, but not necessarily brought ashore, by marine recreational fisherman.

**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 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 (Magnuson Act), OY with respect to the yield from a fishery, is the amount of fish that (1) will provide the greatest overall benefit to the United States, with particular reference to food production and recreational opportunities; and (2) is prescribed as such on the basis of maximum sustainable yield from such fishery, as modified by any relevant ecological, economic, or social factors.

**PACKAGED FISH**. A term used in NMFS publications prior to 1972 to designate fresh or frozen raw fish fillets and steaks.

**PART-TIME COMMERCIAL FISHERMAN**. An individual who receives less than 50 percent of their annual income from commercial fishing activities.

**PER CAPITA CONSUMPTION**. Consumption of edible fishery products in the United States divided by the total civilian population. In calculating annual per capita consumption, estimates of the civilian resident population of the United States on July 1 of each year are used. These estimates are taken from current population reports, series P-25, published by the U.S. Bureau of the Census.

**PER CAPITA USE**. The use of all fishery products, both edible and nonedible, in the United States divided by the total population of the United States.

**PRELIMINARY FISHERY MANAGEMENT PLAN (PMP)**. The Secretary of Commerce prepares a PMP whenever a foreign nation with which the United States has made a Governing International Fishery Agreement (GIFA) submits an application to fish in a fishery not managed by an FMP. A PMP is replaced by an FMP as soon as the latter is implemented. A PMP applies only to foreign fishing.

**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.

**SURIMI**. Minced fish meat (usually Alaska pollock) which has been washed to remove fat and undesirable matters (such as blood, pigments, and

odorous substances), and mixed with cryoprotectants, such as sugar and/or sorbitol, for a good frozen shelf life..

**TOTAL ALLOWABLE LEVEL OF FOREIGN FISHING (TALFF).** The TALFF, if any, with respect to any fishery subject to the exclusive fishery management authority of the United States, is that portion of the optimum yield of such fishery which will not be harvested by vessels of the United States, as determined by provisions of the MFCMA.

**U.S. EXCLUSIVE ECONOMIC ZONE (EEZ).** The MFCMA (Magnuson Act) defines this zone as contiguous to the territorial sea of the United States and extending seaward 200 nautical miles measured from the baseline from which the territorial sea is measured. This was formerly referred to as the FCZ (Fishery Conservation Zone).

**U.S.-FLAG VESSEL LANDINGS.** Includes landings by all U.S. fishing vessels regardless of where landed as opposed to landings at ports in the 50 United States. These include landings at foreign ports, U.S. territories, and foreign vessels in the U.S. FCZ under joint venture agreements. U.S. law prohibits vessels constructed or registered in foreign countries to land fish catches at U.S. ports.

**U.S. TERRITORIAL SEA.** A zone extending 3 nautical miles from shore for all states except Texas and the Gulf Coast of Florida where the seaward boundary is 3 marine leagues (9 nautical miles).

**USE OF FISHERY PRODUCTS.** Estimated disappearance of the total supply of fishery products both edible and nonedible on a round-weight basis without considering beginning or ending stocks, exports, military purchases, or shipments to U.S. territories.

**VESSEL.** A commercial fishing craft having a capacity of 5 net tons or more. These craft are either enrolled or documented by the U.S. Coast Guard and have an official number assigned by that agency.

**WHOLESALE FISH AND SHELLFISH PRICES.** Those prices received at principal fishery markets by primary wholesalers (processors, importers, and brokers) for customary quantities, free on board (f.o.b.) warehouse.

# SUBJECT INDEX



(Reference gives page number)


CLAMS
Canned, 45
Exports, 58
Imports, 52
Landings, 2, 8, 12, 71
Supply, 71
Value of landings, 2, 8, 12

CONSUMPTION
Canned, 78, 80
Cured, 78
Fillets and steaks, 80
Fresh and frozen, 78
Per capita, by country, 82
Per capita, U.S., 78
Salmon, canned, 80
Sardines, canned, 80
Shellfish, canned, 80
Shrimp, 80
Sticks and portions, 80
Tuna, canned, 80

CRABS
Canned, 45, 72
Exports, 58, 63
Frozen holdings, 49
Imports, 52, 72
Landings, 2, 8, 12, 72
Supply, 72
Value of landings, 2, 8, 12

CRAFT, FISHING
Motorboats, 87
Vessels, 87

DISPOSITION OF LANDINGS
United States, 3
World, 40

DUTIES COLLECTED, 51

EMPLOYMENT
Establishments, 87
Fishermen, 87
Processing and wholesaling, 89

EXPORTS
All fishery products, 58
Continent and country, by, 59
Cured, 58
Edible, by year, 60
Fish meal, 58, 64, 76
King crab, 58, 63
Nonedible, by year, 60
Oils, 58, 76
Principal items, 58
Salmon, canned, 58, 62, 71
Salmon, fillets, 58, 62
Salmon, whole or eviscerated, 58, 62
Sardines, canned, 58, 71
Seal furs, 58
Shrimp, canned, 58, 61, 75

EXPORTS - continued
Shrimp, domestic and foreign products, 61, 75
Shrimp, fresh and frozen, 58, 61, 75
Snow (Tanner) crab, 58, 63
Squid, canned, 58
Value, by year, 60
Volume, by year, 60
World, 41

EXCLUSIVE ECONOMIC ZONE, THE U.S.
Foreign catch, by continent and country, 29, 30
Foreign catch, by species and area, 31, 32
Foreign catch, by country and species, 33

FLOUNDERS
Fillets, 44
Frozen holdings, 49
Landings, 1, 6, 10
Value of landings, 1, 6, 10
World catch, 40

GROUNDFISH FILLETS AND STEAKS
Fillets, supply, 69
Imports, 52, 54

HALIBUT
Fillets, 44
Frozen holdings, 49
Exports, 58
Imports, 52
Landings, 1, 6,10
Steaks, 44
Value of landings, 1, 6, 10
World catch, 40

HERRING, SEA
Canned (sardines), 45
Consumption (sardines), per capita, 80
Exports (sardines), 58
Imports (sardines), 52
Landings, 1, 6, 10
Value of landings, 1, 6, 10
World catch, 40

IMPORTS
All fishery products, 51, 52
Abalone, canned, 52
Blocks and slabs, 52, 54, 69
Clams, canned, 52
Continent and country, by, 53
Crabmeat, canned, fresh and frozen, 52, 72
Cured, 52
Duties collected, 51
Edible, 51, 52, 53, 67, 68
Fillets, groundfish, 52
Fillets, other than groundfish and ocean perch, 52

IMPORTS - continued
Finfish, 68
Groundfish, 52
Halibut, 52
Herring, canned, 52
Industrial, 67, 68
Lobsters, canned, 52, 73
Lobsters, fresh and frozen, 52, 73
Meal and scrap, 52, 76
Nonedible, 51, 52
Oils, 52, 76
Oysters, canned, 52
Principal items, 52
Quota, canned tuna, not in oil, 55
Salmon, canned, 52, 71
Salmon, fresh and frozen, 52
Sardines, canned, 52, 71
Scallop meats, 52, 74
Shellfish, 68
Shrimp, by country, 56
Shrimp, by products, 57
Tuna, canned, 52, 55, 70
Tuna, fresh and frozen, 52
Value, by year, 51, 52
Volume, by year, 51, 52
World, 41

INSPECTION
Establishments and amount inspected, 91

JOINT VENTURES, 19

LANDINGS
Disposition, 3
Foreign shores, off, 6, 10
Human food (edible), 3
Industrial, 3
Month, by, 3
Oyster, historical, 14
Ports, major U.S., 5
Record year, by States, 4
Regions, by, 4
Species, by 1
States, by, 4
U.S., 1, 3
U.S., Shores, distance from, 6, 10
World, 37

LOBSTERS, AMERICAN
Imports, 52, 73
Landings, 2, 8, 12
Supply, 73
Value of landings, 2, 8, 12

LOBSTERS, SPINY
Frozen holdings, 49
Imports, 52, 73
Landings, 2, 8, 12
Supply, 73
Value of landings, 2, 8, 12

# SUBJECT INDEX

(Reference gives page number)


MACKERELS
Canned, 45
Landings, 1, 6, 10
Meal, 48
Value of landings, 1, 6, 10
World catch, 40

MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT (MFCMA)
Allocations by country and region, 94
Allocations by species and country,95
Fees, foreign fishing, 92
General description, 92
Reginal Fishery Management Councils, 93

MEAL AND SCRAP
Exports, 58, 64, 76
Imports, 52, 57, 76
Landings, disposition, 3
Mackerel, 48
Menhaden, 48
Production, U.S., 48
Supply, 76
Tuna, 48
World, dispostion, 40

MENHADEN
Landings, 1, 7, 11
Meal, 48
Oil, 48
Value of landings, 1, 7, 11

OIL
Exports, 58, 64, 76
Imports, 52, 76
Menhaden, 48
Production, 48
Supply, 76
World, disposition, 40

OYSTERS
Canned, 45
Imports, 52, 74
Landings, 2, 9, 12
Landings, historical, 14
Supply, 74
Value of landings, 2, 9, 12

PLANTS AND FIRMS
Employment, 87, 88
Processors and wholesalers, 89
Producing canned, industrial products, and fillets and steaks, 88

PROCESSING
Animal food and bait, canned, 45
Canned products, 45
Canned, by year, 47
Clams, canned 45
Crabs, canned, 45, 72
Employment in, 87, 89

PROCESSING - continued
Fillets and steaks, fresh and frozen, 44
Frozen holdings, 49
Industrial products, 48
Meal, oil, 48
Oysters, canned, 45
Plants, number of, 87, 88, 89
Salmon, canned, 45, 46, 71
Sardines, canned, 45, 71
Shrimp, breaded, 43
Shrimp, canned, 45, 75
Sticks, portions, and breaded shrimp, 43
Tuna, canned, 45, 46, 70
Value, processed products, 43

RECREATIONAL FISHERIES,
Marine, 20

SALMON
Canned, 45, 46, 71
Consumption, per capita, 80
Exports, 58, 62, 71
Frozen holdings, 49
Imports, 52
Landings, 1, 7, 11
Supply, canned, 71
Value of landings, 1, 7, 11
World catch, 40

SARDINES
Canned, 45, 71
Consumption, per capita, 80
Exports, 58, 71
Imports, 52, 71
Supply, canned, 71
World catch, 40

SCALLOPS
Exports, 58
Imports, 52
Landings, 2, 9, 13
Supply, 74
Value of landings, 2, 9, 13

SHRIMP
Breaded, 43
Canned, 45, 46, 75
Consumption, per capita, 80
Exports, 58, 61, 75
Frozen holdings, 49
Imports, 52, 56, 57
Landings, head-off, 75
Landings, head-on, 2, 9, 13
Supply, canned, 75
Supply, total, 75
Value of landings, 2, 9, 13

SUPPLY
All fishery products, 67, 68
Blocks, 69
Clam meats, 71
Crabs, fresh and frozen, canned, 72

SUPPLY - continued
Edible fishery products, 67, 68
Fillets and steaks, all, 69
Fillets and steaks, groundfish, 69
Finfish, 68
Industrial fishery products, 67, 68
Lobsters, American, 73
Lobsters, spiny, 73
Meal, 76
Meal and solubles, 76
Oils, 76
Oysters, 74
Salmon, canned, 71
Sardines, canned, 71
Scallop meats, 74
Shellfish, 68
Shrimp, 75
Shrimp, canned, 75
Tuna, canned, 70

TUNA
Canned, 45, 46, 70
Consumption, per capita, 80
Imports, 52, 55
Landings, 2, 8, 12, 70
Meal, 48
Quota, imports, canned, 55
Supply, canned, 70
Value of landings, 2, 8, 12
World catch, 40

USE
Per capita, 81
Landings, by month, 3
Value added, 86

WHITING
Frozen holdings, 49
Landings, 2, 8, 12
Value of landings, 2, 8, 12

WORLD FISHERIES
Catch by countries, 38
Catch by continent, 39
Catch by major fishing areas, 39
Catch by species groups, 40
Catch by years, 37
Disposition, 40
Imports and exports value, 41
Per capita consumption, by country, 82


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