Current Fishery Statistics No. 7500

## Fisheries of the United States, 1977



April 1978

## Milion Metric Tons



National Oceanic and
Atmospheric Administration

National Marine
Fisheries Service

## CHART

The chart on the cover represents total landings by U.S. commercial fishermen at U.S. ports, and catches off U.S. shores by foreign fishermen, round weight, shells of mollusks excluded.


First printing, 1978

U.S. DEPARTMENT OF COMMERCE Juanita M. Kreps, Secretary<br>National Oceanic and Atmospheric Administration<br>Richard A. Frank, Administrator<br>National Marine Fisheries Service<br>Terry L. Leitzell, Assistant Administrator for Fisheries (Acting)

## PREFACE

HERIES OF THE UNITED STATES. This is a reliminary report for 1977 on the recreational and ommercial fisheries of the United States and the foreign atches in the U.S. Fishery Conservation Zone (FCZ). he report is a continuation of similar annual reports esigned to provide timely answers to frequently asked uestions for the year just ended. All data appearing in his publication are consistent with the provisions of the iederal Reports Act of 1942.

REATIONAL MAn.NE FISHING. A section of this ublication shows selected data from the 1970 zlt-Water Angling Survey and from other reports.

TRCES OF DATA. Information presented in this report ame from many sources. Regional offices of the Cational Marine Fisheries Service (NMFS), in roperation with various States, compiled and collected ata on U.S. commercial landings and processed fishery roducts. The NMFS Regional Offices compiled data on 1e foreign catch from reports by designated foreign fficials. The Washington office of the Data lanagement and Statistics Division tabulated and repared the data for publication. Sources of other data ?pearing in this publication are: U.S. Bureau of the ensus, U.S. Bureau of Labor Statistics, U.S. Coast uard, U.S. Customs Service, U.S. Department of efense, U.S. Department of the Interior, U.S. General avices Administration, the Food and Agriculture rganization (FAO) of the United Nations, and the zuntries fishing in the U.S. FCZ.

PRELIMINARY AND FINAL DATA. Data on U.S commercial landings are preliminary for 1975,1976 , and 1977. All data on foreign catches are preliminary. Data on U.S. cold storage holdings, employment, prices, and production of processed products are preliminary for 1977. Final data on these subjects will be published in annual summaries (see section on publications, p. 94) and later in the Fishery Statistics of the United States.

UNITS OF QUANTITY AND VALUE. As in past issues of this report, 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 Bureau of the Census, unless otherwise noted; the value of the U.S. domestic catch is exvessel (see glossary); the value for U.S. imports generally is 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 generally is the value at the U.S. port of export, based on the selling price, including inland freight, insurance, and other charges.

SUGGESTIONS. Because the Data Management and Statistics Division wishes to provide the kinds of data wanted by users of fishery statistics, the Division welcomes any comments or suggestions that will improve this report.

Address all comments or questions to:
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## CONTENTS

PREFACE AND ACKNOWLEDGMENIS. ..... ii
REVIEW ..... iv
ACT OF 1976 ..... xv
U.S. COMMERCIAL FISHERY LANDINGS: species ..... 1
Regions ..... 3
States ..... 4
Disposition ..... 6
Sealskins. ..... 7
Catch by species and distance from shore ..... 8
D.S. FISHERY CONSERVATION ZONE Foreign catch, by country and area ..... 12
Allocations and foreign catch, by country and species ..... 14
U.S. MARINE RECREATTONAL FISHERIES:
Narrative. ..... 20
Fishermen, expenditures, and catch ..... 21
Catch, by species and regions, 1970. ..... 22
Participation. ..... 24
25
Catch, by species group, 1974-75 ..... 26
WORLD FISHERIES:
U.S. and world, 1950-76. ..... 7
Countries. ..... 28
Continents ..... 29
Fishing areas. ..... 30
Species group ..... 30
Imports and exports, by leading countries. ..... 31
U.S. PRODUCTION OF PROCESSED FISHERY PRODUCTS: Value. ..... 32
Fillets and steaks ..... 33
Fish sticks, portions, and breaded shrimp. ..... 33
Industrial ..... 36
U.S. COLD STORAGE HOLDINGS ..... 37
U.S. IMPORTS:
Edible and nonedible ..... 38
Value and duties ..... 38
Principal items ..... 39
Continent and country. ..... 40
Groundfish fillets and quota ..... 41
Canned tuna and quota. ..... 42
Shrimp ..... 43
Industrial ..... 44
U.S. EXPORTS:
Principal items ..... 45
Edible and nonedible ..... 45
Continent and country. ..... 46
Shrimp ..... 48
, EXPORTS - Continued: King crab ..... 50
Squid. ..... 50
Industrial ..... 50
.S. SUPPLY:
Edible and industrial. ..... 52
Finfish and shellfish ..... 53
Blocks ..... 54
All fillets ..... 54
Groundfish fillets ..... 54
tuna ..... 55
Bonito and yellowtail ..... 55
Canned sardines. ..... 56
Canned salmon ..... 56
Clam meats ..... 56
Shrimp ..... 57
Scallop meats ..... 57
Spiny lobsters ..... 58
American lobsters ..... 58
Canned crab meat ..... 58
Industrial ..... 59
MILITARY PURCHASES ..... 61
PRICES:
Exvessel index ..... 62
Wholesale index ..... 65
Wholesale ..... 66
Retail ..... 68
VALUE ADDED. ..... 69
PER CAPITA:
U.S. utilization ..... 70
U.S. consumption ..... 71
U.S. and foreign countries ..... 74
World economic class and region. ..... 76
EMPLOYMENT, CRAFT, AND PLANTS. ..... 77
FISHERY PRODUCTS INSPECTION. ..... 83
FISHERY COOPERATIVES ..... 84
GENERAL ADMINISTRATIVE INFORMATION ..... 85
PUBLICATIONS:
National Marine Fisheries Service. ..... 92 ..... 94
Government Printing Office ..... 97
SERVICES:
Industry and Consumer Services ..... 98
Sea Grant. ..... 99
Inspection . Inside back cover
FEDERAL REGISTER NOIICES ..... 101
GLOSSARY ..... 106
INDEX. ..... 108
Page Page

## REVIEW

MARINE CATCHES OFF U.S. SHORES. Total marine catches of fish and shellfish, et al. in the waters off the United States by foreign fishermen and domestic commercial fishermen were 4.0 million metric tons ( 8.8 billion pounds) in 1977, the first year that foreign fisheries were controlled under the Fisheries Conservation and Management Act of 1976 (FCMA). Although the total catch was down 15 percent in 1977, the U.S. share rose from 50 percent in 1976 to 58 percent in 1977. If the catch by U.S. recreational fishermen were taken into account, the U.S. share of the total marine catch would have been larger.
U.S. COMMERCIAL LANDINGS. Commercial freshwater and marine fishery landings by domestic fishermen at ports in the United States were 5.2 billion pounds (round weight) valued at a record $\$ 1.5$ billion in 1977. The quantity landed in 1977 was 3 percent less than that in 1976; the value, however, was 12 percent more. The principal reason for the decrease in quantity was a decline in landings for industrial purposes.
U.S. flag vessels also landed tuna and bonito, and shrimp at ports outside the United States. These landings in 1977 consisted of 123.8 million pounds of tuna and bonito valued at $\$ 45.9$ million, landed principally in Puerto Rico; and 15.4 million pounds of shrimp valued at $\$ 26.9$ million, landed at Caribbean ports.

Commercial landings of edible species in the United States were 2.9 billion pounds valued at a record $\$ 1.4$ billion in 1977, up 5 percent in quantity and 11 percent in value over 1976. The quantity of edible fish and shellfish landed was the largest since 1951. The principal increase was in various shellfish landings. Shrimp landings were a record. Clam landings were up 19 percent. Crab landings were up 16 percent and established a new record. Total landings of edible finfish declined slightly. Landings of tuna at U.S. ports were down about 140 million pounds (almost 30 percent); landings of tuna by U.S. fishermen at ports outside the United States also were down almost 30 percent. There were noticeable increases in landings of some species, but not enough to offset lower tuna landings. Landings of Atlantic cod were up 35 percent; haddock, up 122 percent; Atlantic pollock, up 33 percent; Atlantic ocean perch, up 9 percent; and salmon, up 7 percent.

Commercial landings at U.S. ports of fish used for reduction to meal and for other industrial purposes were 2.3 billion pounds valued at $\$ 111$ million in 1977, down 11 percent in quantity, but up 25 percent in value compared with 1976. The decline was due to smaller landings of menhaden and anchovies.

FOREIGN CATCH IN FCZ. In 1977, the foreign catch of fish (excluding tunas) and shellfish in the FCZ was 1.7 million metric tons, about 414 thousand tons short of allocations granted by the United States. The 1977 total catch was down 27 percent from the 2.3 million metric tons taken by foreign nations from waters off U.S. shores in 1976. The Alaska FCZ was by far the most important source of foreign catch and Alaska pollock was the single most important species. Pollocks and other fishes accounted for 96 percent of the total foreign catch; squids and other shellfishes accounted for the remainder. Japan was by far the most important catching nation, accounting for 66 percent of the total; U.S.S.R. caught 22 percent; and Republic of Korea, 5 percent. In all, 12 foreign nations reported catches in the FCZ in 1977.

MARINE RECREATIONAL LANDINGS. The most recent year that data are available for the United States is 1970 . In that year, U.S. marine recreational fishermen caught an estimated 1.6 billion pounds of marine (saltwater) finfish, or about the same as the average amount of edible finfish landed by commercial fishermen in recent years.

WORLD LANDINGS. In 1976, the most recent year for which data are available, world landings were a record 73.5 million metric tons (about 160 billion pounds), up 5 percent over 1975. Japan was the leading nation with slightly over 14 percent of the total. The U.S.S.R. was a close second with almost 14 percent; China (Peking) accounted for 9 percent; Peru, 6 percent; Norway, 5 percent; and the United States, 4 percent.

PRICES. During 1977 U.S. exvessel prices (prices received by fishermen for their landings) for most species moved upward. These included menhaden, salmon, tuna, clams, and crabs. Prices for New England finfish, however, declined and the monthly average index of prices of shrimp in December 1977 was 25 percent lower than in January 1977.

PROCESSED PRODUCTS. The total value of domestic production of processed fishery products was $\$ 3.9$ billion in 1977 slightly over 11 percent above 1976. The value of edible products increased to $\$ 3.5$ billion, up 13 percent over 1976. The value of all categories of edible products increased including fresh and frozen, canned, and cured. The value of industrial products, on the other hand, declined to $\$ 372$ million in 1977, down 5 percent compared with 1976. The cause of this decline was a sharp reduction in the value of production of canned animal food.

FOREIGN TRADE. The total value of U.S. imports of edible and industrial fishery products was a record $\$ 2.6$ billion in 1977, up 12 percent over 1976. The value of imports of edible products, which comprised 80 percent of the total, rose slightly. The quantity of edible products, however, declined to 2.2 billion pounds, down 2 percent from 1976.

Imports of fresh and frozen fillets, fresh and frozen tuna, and canned tuna declined, but imports of blocks and slabs, scallop meats, and oysters increased. Imports of fish meal were 163.0 million pounds valued at $\$ 26.5$ million in 1977 , down 42 percent in quantity and 19 percent in value compared with 1976.

Total U.S. exports of domestic products were a record $\$ 520.5$ million, up 35 percent over 1976. All the increase was in exports of edible products which reached 331.1 million pounds valued at $\$ 473.4$ million, up 37 percent in quantity and 43 percent in value over 1976.

SUPPLY. The U.S. supply of commercial fishery products (domestic landings plus imports, round weight equivalent) was 10.6 billion pounds in 1977-a decrease of 8 percent compared with 1976. Because of near record domestic landings of edible fish and shellfish together with continued high imports, the supply of edible products was a record 7.4 billion pounds. The supply of industrial products was 3.2 billion pounds, the lowest since 1957.

PER CAPITA CONSUMPTION. In 1977, U.S. per capita consumption of fishery products was 12.8 pounds of edible meat per person, down slightly from the record 13.0 pounds in 1976.

## REVIEW

## RECORDS ESTABLISHED

## U.S. COMMERCIAL LANDINGS

Value of all U.S. commercial landings $-\$ 1,515$ million. . . (previous high, $1976-\$ 1,353$ million).
Salmon value - $\$ 221.9$ million pounds. . . (previous high, 1976 - $\$ 196.5$ million).
Dungeness crabs - 60.4 million pounds. . . (previous high, $1970-58.5$ million pounds).
Sharks - 8.2 million pounds. . . (previous high, 1976-7.3 million pounds).
Shrimp - 476.7 million pounds (heads-on). . . (previous high, 1976-403.6 million pounds).
Snow crabs - 98.3 million pounds. . . (previous high, 1976-80.7 million pounds).

## U.S. PRODUCTION OF PROCESSED FISHERY PRODUCTS

Fish portions - 350.8 million pounds. . . (previous high, 1976-344.8 million pounds).

## U.S. IMPORTS

Value of all U.S. imports - $\$ 2,621.4$ million. . . (previous high, $1976-\$ 2,332.3$ million).
Blocks, regular and minced - 385.1 million pounds. . . (previous high, 1976-378.7 million pounds).
Edible fishery products $-\$ 2,078.5$ million. . . (previous high, $1976-\$ 1,916.8$ million).
Scallop meats, fresh and frozen -29.8 million pounds. . . (previous high, $1976-25.3$ million pounds).
U.S. SUPPLY (Domestic production plus imports)

Blocks, regular and minced -387.1 million pounds. . . (previous high, 1976-380.4 million pounds).
Groundfish fillets and steaks - 275.3 million pounds. . . (previous high, $1976-268.9$ million pounds).
Shrimp, all (heads-off) - 558.8 million pounds. . . (previous high, 1976-514.7 million pounds).
Scallod meats, fresh and frozen - 57.6 million pounds. . . .(previous high, $1976-49.5$ million pounds).

## OTHER IMPORTANT FACTS

Menhaden landings of 1,796 million pounds ( 815,000 metric tons) accounted for 35 percent of the total commercial landings in the United States.
Shrimp was the second most important species in quantity landed in the United States and first in value.

Salmon was the second most important species in terms of value of landings in the United States.

Tuna landings of 123.7 million pounds in Puerto Rico and American Samoa accounted for 89 percent of all landings made by U.S. craft at ports outside the United States. Landings of shrimp by U.S. fishing vessels at Central and South American ports and a small amount of bonito landed in Puerto Rico accounted for the rest.

San Pedro, California led all other U.S. ports in both quantity and value of commercial fishery landings. In terms of quantity, the second most important port was Cameron, Louisiana, followed by Empire, Louisiana; Kodiak, Alaska; and Dulac-Chauvin, Louisiana. Principal species landed were tuna at San Pedro; halibut, salmon, crab, and shrimp at Kodiak; and menhaden at the remaining ports.
Kodiak, Alaska was the second ranking U.S. port in terms of value, followed by Dutch Harbor, Alaska; San Diego, California; and New Bedford, Massachusetts.
Louisiana led all States in volume of landings with 917.5 million pounds, followed by California with 874.4 million pounds; Alaska, 644.0 million pounds; Virginia, 608.4 million pounds; and Massachusetts, 319.3 million pounds.

Alaska led all States in value of landings with $\$ 326.2$ million, followed by California, $\$ 195.0$ million; Louisiana, $\$ 137.9$ million; Texas, $\$ 134.2$ million; and-Massachusetts, $\$ 114.0$ million.
The total annual foreign catch off U.S. shores exceeded landings by domestic fishermen at U.S. ports from 1967 through 1975. In 1976, the total foreign catch was 2.34 million metric tons, 4 percent less than domestic landings. In 1977, the foreign catch was 1.70 million metric tons, 28 percent less than domestic landings at U.S. ports.

The catch of all foreign nations except Canada in the U.S. FCZ declined in 1977 compared with 1976. Japan's catch declined by less than 1 percent. The U.S.S.R. catch declined 53 percent in 1977.

In the U.S. FCZ, the foreign catch of Alaska pollock of 1.0 million metric tons ( 2.2 billion pounds) in 1977 was 59 percent of the total foreign catch.

Pacific flounders (including yellowfin sole) were the second most important species in the 1977 foreign catch.

The foreign catch (exluding that of Canada) of all species declined, except for the catch of jack mackerel and snow tanner) crab.

The Alaska area of the FCZ furnished 1.4 million metric tons or 81 percent of the total foreign catch in 1977; the North Atlantic area of the FCZ, 11 percent; and the California, Oregon, and Washington area of the FCZ, 8 percent.

V

## REVIEW

## IMPORTANT SPECIES

ANCHOVY. Total U.S. landings of anchovy were 231.9 million pounds, down 10 percent from 1976. About 220 million pounds ( 95 percent) of this amount was caught by purse seine fishermen and was reduced to fish meal, oil, and solubles. About 12 million pounds were caught by fishermen who sell live anchovies for bait. In 1977, the exvessel value of the anchovies landed by the purse seine reduction vessels was $\$ 4.9$ million; the exvessel value of the live anchovies used for bait was $\$ 13$ million.

The basis for the 10 -percent decline in the reduction fishery was two-fold. First, the anchovy fleet began fishing for bluefin tuna prior to the closure of the reduction season in May; and second, the fleet tied up over a price dispute when the season reopened in September.

ATLANTIC GROUNDFISH, FLOUNDERS, AND OTHER TRAWL FISH. In 1977 U.S. commercial landings of Atlantic flounders and groundfish (cod, cusk, haddock, hakes, Atlantic ocean perch, pollock, and whiting, were 339.8 million pounds valued at $\$ 86.4$ million, up 20 percent in quantity and 21 percent in value over 1976.

Under the FCMA the U.S. fishery for cod, haddock, and yellowtail flounder was under an FMP in 1977. Fishing for these species by foreign vessels was prohibited, except for Canadian vessels. There were no FMPs for U.S. fishermen for other groundfish.

Domestic landings of cod were 75.5 million pounds in 1977, up 35 percent over 1976, and the largest since 1946. The value of the 1977 catch of cod was $\$ 17.1$ million, up 19 percent over 1976. U.S. fishermen took 69.5 million pounds of cod from the FCZ, 4.4 million pounds from the Territorial Sea ( $0-3$ miles), and 1.7 million pounds from waters beyond the FCZ. Canadian fishermen caught 13.5 million pounds ( 6,100 metric tons) of cod from the FCZ in 1977, up 21 percent over 1976.

Domestic landings of haddock were 28.4 million pounds in 1977, over double the amount landed in 1976, and the largest since 1969. The value of the 1977 landings was $\$ 9.3$ million, 67 percent over 1976. U.S. fishermen caught 24.5 million pounds of haddock in the FCZ. The Canadian catch in the FCZ was 6.4 million pounds ( 2,900 metric tons), up sharply from the 3.2 million pounds ( 1,500 metric tons) caught in 1976.

Yellowtail flounder landings by U.S. fishermen were 36.5 million pounds valued at $\$ 17.1$ million, down 4 percent in quantity., but up 10 percent in value. U.S. landings of catch from the FCZ were 35.1 million pounds in 1977 down from 36.0 million pounds in 1976. The Canadian FCZ catch was negligible.

The foreign trawl fisheries were subject to 2 PMPs in 1977-Hake Fisheries of the Northwestern Atlantic and Finfish Caught Incidental to the Foreign Trawl Fisheries in the Northwestern Atlantic. Trawl fishing for species not authorized in these PMPs was prohibited to all nations except Canada. Foreign groundfish and other finfish catches (excluding mackerel and sea herring covered in other PMPs) were 83,000 metric tons in 1977, down 38 percent from 1976.

Foreign catches of all major species declined in 1977 compared with 1976. Foreign catches of silver hake (whiting) were 47,800 metric tons, down 19 percent; red hake catches were 4,500 metric tons, down 81 percent; butterfish catches were 2,100 metric tons, down 80 percent; and catches of other finfish were 15,500 metric tons, down 46 percent.

PACIFIC GROUNDFISH, FLOUNDERS, AND OTHER TRAWL FISH. Commercial landings by U.S. fishermen in California, Oregon, and Washington of groundfish and similar species (cod, hakes, Pacific ocean perch, Alaska pollock, and rockfishes) were 63.1 million pounds valued at $\$ 7.0$ million. Sarger landings of rockfishes (up 3.8 million pounds) was the major reason for the 5 percent increase in volume compared with 1976. Landings of Pacific hake, Pacific ocean perch, and Alaska pollock also increased. Landings of Pacific flounders ( 51.0 million pounds) were down 12 percent this year due to smaller catches off Oregon (down 20 percent) and Califomia (down 9 percent) compared with 1976. Landings of jack mackerel were 110.2 million pounds in 1977, up 186 percent compared with 1976 and the largest catch since 1952.

The foreign catch in the FCZ off California, Oregon, and Washington was 134,000 metric tons ( 295.5 million pounds) in 1977, down 35 percent compared with 1976. The catching nations were the U.S.S.R. with 85 percent of the total; Poland, 14 percent, and Canada, the remainder. The catch of Pacific hake, which accounted for most of the total, was 129,000 metric tons, down 27 percent. Sablefish catches dropped from 15,400 metric tons in 1976 to 269 tons in 1977. The foreign catch of jack mackerel rose from 800 tons in 1976 to 2,800 tons in 1977.

HALIBUT. U.S. landings of Pacific halibut were 17.7 million pounds (dressed weight) valued at $\$ 17.3$ million in 1977, down 2.9 million pounds and $\$ 2.1$ million compared with 1976. Management of this fishery by the Intemational Pacific Halibut Commission (IPHC) reduced the U.S. and Canadian catch quota to 22 million pounds (round weight). The reduction of the quota in 1977 from the 25 million pounds set for 1976 was deemed necessary for conservation of the resource.

HERRING, SEA. U.S. landings of Atlantic and Pacific sea herring were 155.8 million pounds valued at $\$ 11.6$ million in 1977, up 3 percent in quantity and 9 percent in value compared with 1976. Landings of Atlantic sea herring of 111.6 million pounds were slightly above those of 1976 , and were the largest since 1963. Landings of Pacific sea herring were 44.2 million pounds in 1977 , up 10 percent over 1976. Although the quantity of Pacific sea herring landings was less than half those of the Atlantic, the value of Pacific landings was $\$ 6.6$ million in 1977 compared with $\$ 5.0$ million for Atlantic sea herring. The foreign catch of sea herring was 20.3 thousand metric tons ( 44.9 million pounds) in 1977, down 70 percent from 1976. Principal reason for the decline was a scarcity of sea herring in the Atlantic FCZ, which caused a virtual failure in the foreign fishery-for Atlantic sea herring.

MACKEREL, ATLANTIC. U.S. commercial landings of Atlantic mackerel were 3.0 million pounds valued at $\$ 525,000$ in 1977 , down 50 percent in quantity and 25 percent in value compared with 1976. The foreign FCZ catch of Atlantic mackerel was 53 thousand metric tons ( 117.1 million pounds) in 1977, down from 206 thousand metric tons ( 454.2 million pounds) in 1976.

## REVIEW

## IMPORTANT SPECIES

MENHADEN. Landings of Atlantic and Gulf menhaden were $1,796.1$ million pounds valued at $\$ 68.1$ million, a decrease of 243.4 million pounds, but an increase of $\$ 950,000$ compared with 1976 . Ninety-seven percent of the landings was reduced into meal, oil, and solubles. The rest was used for bait or canned for pet food. Louisiana was the principal State using menhaden for reduction, followed by Virginia, Mississippi, and North Carolina.

Landings of Gulf menhaden were 986.5 million pounds valued at $\$ 39.2$ million, a decrease of 251.3 million pounds and $\$ 4.8$ million compared with 1976. Landings were the smallest since 1969 and 17 percent below the previous 5 -year average. Poor weather in the early part of the season and a poor showing of fish in late summer held down landings in the Gulf States. Fishing effort in the purse seine fishery decreased, with 80 vessels participating, two less than in 1976. Age-1 menhaden dominated the landings ( 80 to 90 percent) to a greater extent than they did in 1975 and 1976. If fishing effort increases slightly ( 6 percent), as expected, chances are 4 out of 5 that Gulf landings will be between 1.0 billion pounds and 1.2 billion pounds in 1978.

Landings along the Atlantic Coast were 809.6 million pounds worth $\$ 29.0$ million, an increase of 7.9 million pounds and $\$ 5.8$ million over 1976 . Of the 809.6 million pounds landed, 93 percent was used by plants processing menhaden into meal and oil. The strong showing of fish in Chesapeake Bay and South Atlantic waters in 1977 was in contrast to less than average abundance of menhaden in the Middle and North Atlantic areas in 1976, although about the same number of vessels were active. Age-2 menhaden were about 51 percent of the landings along most of the coast, but in the Chesapeake Bay, age-1 fish were about 75 percent of the landings. Age-2 fish were about half the landings in the South Atlantic area. Landings in the North Carolina fall fishery increased over the relatively poor catches in 1976. If fishing effort increases slightly (3 percent), as expected; chances are 4 out of 5 that Atlantic landings will be between 560 million pounds and 960 million pounds in 1978.

There is no foreign fishing for menhaden under the provisions of the FCMA.
ALASKA POLLOCK AND OTHER ALASKA TRAWL FISH. U.S. landings at Alaskan ports of fish caught primarily by otter trawls were 2.9 million pounds ( 1,300 metric tons) valued at $\$ 360,000$ in 1977, over double the quantity taken in 1976 of 1.2 million pounds ( 500 metric tons), and up 51 percent in value. In both 1976 and 1977, all or virtually all U.S. landings of fish by Alaska trawl vessels were caught in the Gulf of Alaska.

Otter trawl fish, also called bottomfish or groundfish, include Pacific cod, Alaska (walleye) pollock, flounders, and rockfishes. Because of large foreign harvests of these fish, U.S. interest in these resources has increased. Millions of dollars have been invested in groundfish processing facilities. According to a recent report, eight U.S. processing firms operating 16 Alaska plants have plans to process bottomfish.

The total foreign catch of trawl fish in the Alaska FCZ was 1.3 million metric tons ( 2.9 billion pounds) in 1977. The 1977 catch was down 23 percent from 1976 and far under the record 2.1 million metric tons in 1971. In 1977 almost 85 percent of the total came from the Bering Sea and Aleutian Islands FCZ; the remainder was caught in the Gulf of Alaska FCZ. Alaska pollock was by far the most important species, comprising 77 percent of the 1977 total. Other species, in the foreign trawl catch were Atka mackerel, Pacific cod, yellowfin sole and other flounders, and ocean perch and other rockfishes. Japan was the principal trawl fishing country in 1977 followed by the U.S.S.R., Republic of Korea, and Republic of China (Taiwan).

The foreign catch of Alaska pollock in the Alaska FCZ was slightly over 1.0 million metric tons in 1977, 89 thousand tons less than allocated. Compared with 1976, the 1977 catch was down 18 percent. The Alaska pollock catch by foreign nations accounted for 59 percent of the total foreign catch in the entire FCZ of all species in 1977 compared with 47 percent for 1970-76.

SABLEFISH. U.S. landings of sablefish were 25.4 million pounds valued at $\$ 4.7$ million in 1977. This was a 46 -percent increase in volume and 51 -percent increase in value compared with 1976. California landings ( 79 percent of the total) were 20.0 million pounds; Alaska ( 10 percent), 2.5 million pounds; and Washington and Oregon (11 percent), 2.8 million pounds. The price increase was largely owing to foreign market demand.

Of the 22.7 thousand metric tons of sablefish allocated to foreign nations in 1977, 20.4 thousand metric tons (45.0 million pounds) were caught, down 51 percent from 1976. Japan took 90 percent of the catch, and Korea accounted for 8 percent.

PACIFIC SALMON. U.S. Pacific salmon landings were 335.6 million pounds valued at a record $\$ 221.9$ million, a gain of 26.4 million pounds and $\$ 25.4$ million compared with 1976. Landings were the best since 1970 and 44 percent above the previous 5 -year average. Alaska accounted for 82 percent of the total landings, Washington, 13 percent; Oregon, 4 percent; and California, 1 percent. The value of landings declined in all States except Alaska. However, fishermen in the the four States received higher prices for all species of salmon except chinook in Washington and Oregon, and pink and red in Washington.

Landings in Alaska ( 275.3 million pounds) were up 14 percent compared with 1976. Pink salmon landings ( 113.1 million pounds) increased 13 percent; red salmon (79.5 million pounds), up 5 percent; chum salmon ( 55.5 million pounds), up 22 percent; silver salmon ( 16.2 million pounds), up 22 percent; and chinook salmon ( 11.0 million pounds), up 21 percent. The increase in landings resulted from good climatic conditions that increased salmon survival at sea, an excellent pink salmon run in southern southeast Alaska that was earlier than expected, and excellent catches for all species in Cook Inlet.

Washington landings of salmon were 43.6 million pounds, an increase of 7 percent compared with 1976. Sharp increases in landings of pink salmon and red salmon offset the marked declines in chinook, chum, and silver salmon.

Oregon landings were 12.3 million pounds, a decline of 32 percent compared with 1976. The principal reason for the decline in harvest was a 68 percent decline in landings of silver salmon which were the lowest since 1963. Landings of chinook salmon ( 9.0 million pounds) increased 19 percent.

California landings of salmon ( 4.5 million pounds) were the lowest since 1958. Chinook landings increased slightly in 1977, but silver salmon declined from 3.6 million pounds in 1976 to 235,000 pounds in 1977.

Foreign fishermen, except Canadian, are prohibited from fishing for salmon in the U.S. FCZ. The commercial and recreational salmon fishery off the coasts of California, Oregon, and Washington is subject to a FMP.

## REVIEW

## IMPORTANT SPECIES

TUNA. Landings of tuna in the United States, Puerto Rico, and American Samoa were 468.9 million pounds valued at $\$ 181.6$ million in 1977. This was a decline of 191.0 million pounds ( 29 percent) and $\$ 18.2$ million ( 11 percent) compared with 1976. Yellowfin landings were 286.4 million pounds in 1977, down 25 percent compared with 1976; skipjack landings were 131.1 million pounds, down 37 percent; albacore landings were 31.7 million pounds, down 24 percent; and bluefin landings were 17.4 million pounds, down 25 percent. Landings of bigeye, little, and other tunas in 1977 were 2.3 million pounds.

The principal reason for the decline in landings of skipjack and yellowfin tuna in 1977 was the virtual cessation in the early part of the year of fishing by tuna seining vessels because of court litigation over the incidental catch of porpoises. The seiners returned to sea in mid-May after a compromise quota was established. The interruption reduced cannery receipts of domestic-caught tuna to 84,634 short tons in the first half of 1977, down by 52 percent compared with 1976.

About 74 percent of the landings made by the U.S. fleet were at ports in the continental United States. The remainder was delivered to American Samoa, Hawaii, and Puerto Rico tuna processing plants.

Landings in Puerto Rico of 123.7 million pounds were 50.6 million pounds less than in 1976. Atlantic-caught tuna comprised 19 percent of the total unloaded in Puerto Rico.

NMFS and the U.S. Coast Guard closely regulate yellowfin tuna fishing by U.S. fishermen in a major producing area of the eastern Pacific Ocean. The regulation is in response to recommendations of the Inter-American Tropical Tuna Commission (IATTC). In the Commission's Yellowfin Regulatory Area (CYRA), the total yellowfin quota for member nations in 1977 was 210,000 short tons. In 1977, the CYRA season on yellowfin opened on January 1, and closed July 7,1977.

Shown below are preliminary data of the yellowfin catch by the international tuna fleet taken in the CYRA. The U.S. share decreased from 70 percent of the 1976 catch to 60 percent of the 1977 catch.

Country
1976
1977 (1)
Short tons

| United States | 145,198 | 121,000 |
| :---: | :---: | :---: |
| Mexico | 14,407 | 18,400 |
| Ecuador | 5,494 | 6;800 |
| Canada | 4,256 | 4,900 |
| Panama | 13,064 | 15,400 |
| Other | 23,602 | 34,900 |
| Total | 206,021 | 201,400 |

## (1) Preliminary.

In the Atlantic Ocean, NMFS and the U.S. Coast Guard closely control fishing for bluefin tuna by U.S. anglers and commercial fishermen in response to recommendations of the International Commission for the Conservation of Atlantic Tuna (ICCAT). Regulations are designed to protect undersize fish (under 14 pounds) and the prime spawning size fish (115-299 pounds). The catch of other sizes is restricted to amounts taken in recent years. Commercial fishing for yellowfin tuna of less than 7 pounds ( 3.2 kilograms) is prohibited.

Foreign nations are allowed to catch and retain tunas in the FCZ. No data are yet available on this catch, but it is known that Japan conducted a major longline fishery in the FCZ, and that there was a small Canadian fishery.

CLAMS. U.S. landings of hard, soft, surf, ocean quahog, and other clams were 96.2 million pounds of meats worth a record $\$ 74.3$ million. Landings increased 19 percent in volume and 18 percent in value compared with 1976, but were still below the 1972 to 1976 average of 102.3 million pounds. All species except hard clams showed increases over 1976.

Surf clam landings were 51.0 million pounds of meats, up 4 percent from the 49.1 million pounds landed in 1976, but far below record landings of 107.5 million pounds. Landings in New Jersey were 23.1 million pounds in 1977 down 5 percent from 1976. Landings in the Chesapeake States increased slightly from 21.2 million pounds in 1976 to 24.2 million pounds in 1977.

In recent years, the U.S. surf clam resource showed the classical signs of stress - increased fishing effort by the fleet but declining yields per day's fishing. In August, NMFS classified the surf clam fishery as "conditional," making it ineligible for financial assistance to add vessels to the existing fleet. This was followed in November by action by the Secretary of Commerce on recommendation from the Mid-Atlantic Fishery Council which put the fishery under a Fishery Management Plan entitled 'Surf Clam and Ocean Quahog Fisheries." Ocean quahogs were included in the plan because fishermen faced with declining surf clam yields were increasingly tuming to ocean quahogs. Landings of ocean quahogs increased from an estimated 5.5 million pounds in 1976 to 18.5 million pounds valued at $\$ 5.5$ million in 1977. One of the stated objectives of the plan is to prevent the harvest of the ocean quahog from exceeding biologically sound sustainable yield levels, and to direct the fishery toward maintaining optimum yield.

Landings of hard clams yielded 15.4 million pounds of meats, about the same as the 1976 landings of 15.6 million pounds. New York landings were 8.5 million pounds; followed by Rhode Island, 1.6 million pounds; and New Jersey, 1.1 million pounds.

Soft clam landings were 10.7 million pounds of meats, 143,000 pounds more than landed in 1976. Maine landings were 7.8 million pounds, up slightly from the 7.4 million pounds landed in 1976. Landings in Maryland ( 1.6 million pounds) were down slightly from the 1976 harvest of 1.7 million pounds.

CRABS. Total U.S. landings of all specles of crabs were 398.5 million pounds valued at a record $\$ 202.5$ million, an increase of 53.7 million pounds and $\$ 65.6$ million compared with 1976. Landings were up for all species except king crabs.

Landings of hard blue crabs were 128.9 million pounds, an increase of 15.7 million pounds over 1976. The Chesapeake States led in production with 56.4 million pounds, followed by Gulf States, 40.4 million pounds; South Atlantic, 30.8 million pounds; and Middle Atlantic, 1.3 million pounds. Despite the severe winter cold and prediction of high mortality rates among hibernating crabs in the Chesapeake Bay, landings were 11.4 million pounds more than in 1976. However, Chesapeake Bay landings were poor until August when they improved markedly as the previous year's hatch reached market size.

Dungeness crab landings were a record 60.4 million pounds worth $\$ 25.8$ million, an increase of 24.6 million pounds over 1976 and 1.9 million pounds more than the record landings in 1970. Califorinia landings were 27.0 million pounds, an increase of 10.9 million pounds ( 68 percent) over 1976. Landings in Oregon continued to increase this year with 19.2 million pounds harvested. The season was extended 1 month in 1977 to accomodate the market demand for this species. Dungeness crab landings in Washington ( 13.0 million pounds) were 4.0 million pounds more than in 1976.

## REVIEW <br> IMPORTANT SPECIES

King crab landings ( 99.4 million pounds) were 6.4 million pounds less than 1976. However the average price of this species increased from $\$ 0.66$ per pound in 1976 (exvessel) to $\$ 1.12$ per pound in 1977. Bering Sea catches of 78.9 million pounds were at record levels, but were not enough to offset the declining catches from the Aleutian area and Gulf of Alaska.
U.S. landings of snow (tanner) crab were a record 98.3 million pounds valued at $\$ 30.8$ million, an increase of 22 percent in volume and 91 percent in value compared with 1976. Landings of catch from the Bering Sea were 51.9 million pounds in 1977, over double the landings of 22.3 million pounds in 1976. Landings at Kodiak and other Gulf of Alaska areas were 45.2 million pounds, down from 56.3 million pounds in 1976. Landing from the Aleutian area were 1.3 million pounds, up from 597,000 pounds in 1976. About 99 percent of the domestic landings were Chionecetes bairdi.

Foreign catches of snow (tanner) crab in the FCZ were 12,471 metric tons ( 27.5 million pounds) in 1977 compared with 10,200 metric tons ( 22.5 million pounds) in 1976. Japan was the only country taking snow crabs in both years. About 37 percent of the 1977 foreign catch was Chionoecetes bairdi, and the rest, Chionoecetes opilio.

LOBSTER, AMERICAN. U.S. landings of American lobsters were 31.7 million pounds worth a record $\$ 57.7$ million, a 33,000 -pound decrease in volume and $\$ 5.0$ million increase in value. Maine landings were 18.5 million pounds ( 58 percent of the total), a decrease of 500,000 poưnds compared with 1976. Slight increases were recorded in the Massachusetts and Rhode Island landings.
LOBSTER, SPINY. The U.S. spiny lobster harvest was 5.5 million pounds worth $\$ 9.6$ million, a gain of 12 percent in volume and 28 percent in value compared with 1976. Fishermen received an average price of $\$ 1.75$ per pound, about 22 cents more than in 1976. The Florida harvest ( 5.1 million pounds) increased 10 percent this year. California landings of 325,000 pounds were 25 percent larger than in 1976.

OYSTERS. U.S. commercial landings yielded 46.0 million pounds of meats worth $\$ 52.5$ million, a decrease of 15 percent in volume and 1 percent in value compared with 1976. The harvest was 12 percent below the 5 -year average (1972-76). The production declined in all regions except the South Atlantic. The Gulf States led in production with 18.1 million pounds of meats, followed by the Chesapeake States with 17.9 million pounds. Severe weather conditions in January 1977 hampered the Chesapeake fishery; beds froze owing to exposure from extremely low tides or were damaged by ice floes. The Maryland production (12.9 million pounds) was down 18 percent from 1976. For the second consecutive year, oystering was banned in the James River in Virginia because of kepone pesticide pollution. Pacific Coast landings were 5.6 million pounds valued at $\$ 8.9$ million with 89 percent of the production occurring in Washington.

SCALLOPS. U.S. landings of all species yielded 27.8 million pounds of meats worth a record $\$ 46.0$ million, a gain of 15 percent in volume and 11 percent in value compared with 1976 . Foreign catches are confined to Canadian catches of Atlantic sea scallops.

Sea scallops landings by U.S. fishermen of 25.0 million pounds of meats worth a record $\$ 40.6$ million increased 26 percent in volume and 16 percent in value compared with 1976. In 1977, scallop fishermen were paid $\$ 1.62$ per
pound, a decrease of 15 cents per pound compared with the 1976 average price. The sea scallop industry of New Bedford, Mass., continued to expand this year with excellent production from scallop beds off the coasts of New Jersey, New York, and Massachusetts.

Canadian catches of Atlantic sea scallops in the FCZ were 11,795 metric tons of meats ( 26.0 million pounds) in 1977, up 21 percent over 1976.

Bay scallop landings yielded 1.7 million pounds valued at $\$ 4.4$ million, a decrease of 20 percent in volume and 5 percent in value. The average price per pound increased from $\$ 2.20$ in 1976 to $\$ 2.60$ in 1977.

The calico scallop harvest ( 1.1 million pounds) declined 51 percent in 1977. Florida was the only State reporting landings of this. species in 1977. Good production was reported from a newly discovered bed off Tampa Bay, but predicted heavier landings failed to materialize from beds off Cape Canaveral.

SHRIMP. U.S. landings were a record 476.7 million pounds (heads on) worth $\$ 355.2$ million. This was 73.1 million pounds and $\$ 23.8$ million more than was landed in 1976, the previous record year, probably as a result of good white and brown shrimp recruitment in the Gulf States, coupled with above-average water temperatures.

Gulf landings were 265.9 million pounds, almost 27 percent greater than in 1976. The Louisiana harvest ( 104.0 million pounds) increased 26 percent, and the Texas harvest ( 91.5 million pounds) was 22 percent more than in 1976. Landings of brown shrimp in Louisiana were so great that processors were unable to handle the volume, and as a result quantities of shrimp were lost owing to spoilage.

Alaska was the leading State in production with 116.9 million pounds, a decrease of 11 percent compared with 1976. The State of Alaska closed the shrimp season in the Kodiak area in early December because of indications of falling stocks. An 11-day strike by shrimp trawlers in the fall in the Kodiak area also held down landings for this port.

Landings in Oregon increased substantially in 1977, 48.6 million pounds harvested in 1977 compared with 25.4 million pounds in 1976.

New England landings were very small in 1977 with only 840,000 pounds landed compared with 2.3 million pounds in 1976 and 28.3 million pounds in 1969, the peak year. Because stocks of shrimp in New England waters declined markedly in recent years, the States of Maine, New Hampshire, and Massachusetts have imposed closed seasons for this fishery.

There are no foreign fisheries for shrimp in the FCZ.

SQUID. U.S. landings of Atlantic and Pacific squids were 24.9 million pounds valued at $\$ 2.1$ million, a decrease of 4.0 million pounds compared with 1976 . California squid landings ( 19.4 million pounds) were 947,000 pounds less than in 1976. Atlantic coast landings were 5.5 million pounds, a decrease of 36 percent compared with 1976. Foreign catches in the FCZ of Atlantic and Pacific squid .were 45,612 metric tons ( 100.6 million pounds) in 1977, up 2 percent compared with 1976. Japan caught all the Pacific catch of 8,316 metric tons (allocation, 10,000 tons). The Atlantic catch by all countries was 37,296 metric tons (allocation, 69,000 tons); Spain was the leading country with 10,771 tons; followed by Japan, 7,500 tons; and the U.S.S.R. with 6,000 tons.

## REVIEW

## PER CAPITA CONSUMPTION

PER CAPITA CONSUMPTION. U.S. per capita consumption of edible fish and shellfish et al. was 12.8 pounds in 1977, down almost 2 percent from the record 13.0 pounds in 1976 . Per capita consumption is based on the consumption by the U.S. civilian resident population on July 1 of edible meat, exclusive of bones, heads, and other offal. Although the 1977 consumption was down slightly from the record established in 1976, it was the third highest since records were begun in 1909, and it continued the trend of the 1970s for Americans to eat more fishery products.

Consumption of fresh and frozen products was 7.8 pounds in 1977, down from the record 8.2 pounds in 1976, but still the second highest on record. A significant portion of the 1977 decrease was due to increased U.S. exports of fresh and frozen products to foreign cquntries.

Per capita consumption of canned products was 4.6 pounds in 1977, up from 4.3 pounds in 1976. This increase was in canned shellfish and miscellaneous canned fishery products. Per capita consumption of canned salmon, sardines, and tuna was about the same in 1977 as in 1976.

PER CAPITA UTILIZATION. In terms of whole fish, the U.S. per capita utilization of all fishery products was 48.8 pounds in 1977, down almost 5 pounds from 1976. The principal reason for the decline was a drop in imports of fish meal, which together with a slight drop in edible imports, caused the per capita utilization of imported products to drop from 28.8 pounds in 1976 to 24.8 pounds in 1977. The slight decline in total U.S. landings was reflected in a drop in per capita utilization of commercial landings from 24.9 pounds in 1976 to 24.0 pounds in 1977.

## PROCESSED FISHERY PRODUCTS

## FRESH AND FROZEN

FISH FIILETS AND STEAKS. In 1977, the U.S. production of raw (uncooked) fish fillets and steaks was 150.0 million pounds valued at $\$ 180.4$ million, up 5 percent in quantity and 8 percent in value over 1976. Production of flounder fillets, 43.2 million pounds, led all species produced in 1977. Total production of groundfish fillets and steaks (cod, cusk, haddock, hake, pollock, and Atlantic ocean perch) was 57.9 million pounds compared with 40.6 million pounds produced in 1976 , and was the highest produced since 1968 . Landings of all groundfish species were higher than in 1976.
FISH BLOCKS. The U.S. production of blocks is not reported by species, but is included with production data on fillets in order not to disclose individual operations. Total U.S. production of blocks was 2.0 million pounds valued at $\$ 1.5$ million in 1977, up 310,000 pounds and $\$ 476,000$ from the 1976 production.
FISH STICKS AND PORTIONS. Combined production of fish sticks and portions was 437.8 million pounds valued at $\$ 412.2$ million in 1977. Production declined 685,000 pounds, but increased $\$ 52.8$ million in value compared with 1976. The production of fish portions of 350.8 million pounds valued at $\$ 343.5$ million set new records in 1977. Fish stick production of 87.0 million pounds valued at $\$ 68.8$ million was 7.2 million pounds and $\$ 4.4$ million less than 1976.

BREADED SHRIMP. Data for 1977 are not available for all plants that produced breaded shrimp. The 44 plants reporting to NMFS on a quarterly basis produced 94.1 million pounds valued at a record $\$ 205.3$ million. In 1976 , these same plants produced 88.3 million pounds valued at $\$ 179.7$ million. In 1976,21 additional firms, which report on an annual basis, produced 7.6 million pounds valued at $\$ 23.3$ million.

FROZEN FISHERY TRADE. In 1977, total end-of-month holdings of frozen fish and shellfish by firms reporting to NMFS were at a seasonal low in May with 301.2 million pounds and a seasonal high in November with 426.5 million pounds. The seasonal high in 1977, although larger than in 1975 and 1976, was less than the record high of 452.9 million pounds in 1973. All major categories of frozen products in November 1977 were above 1976 levels, frozen shrimp holdings were 95.9 million pounds, up 17 percent; frozen fillet holdings were 91.2 million pounds, up 14 percent; frozen block holdings were 70.0 million pounds, up 10 percent; and frozen crab products were 28.0 million pounds, up 30 percent.

## REVIEW

## PROCESSED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS. The 1977 pack of canned fishery products in American Samoa, Puerto Rico and the United States, was 51.8 million standard cases ( 1.4 billion pounds) valued at a record $\$ 1.6$ billion, a decrease of 3.2 million standard cases ( 6 percent), but an increase of $\$ 127.9$ million ( 9 percent) over the 1976 pack. The 1977 pack included 41.2 million standard cases ( 921.9 million pounds) for human consumption and 10.6 million standard cases ( 511.1 million pounds) for bait and animal food. The packs of jack mackerel, salmon, tunalike fishes, clams and clam products, shrimp, and crab increased in 1977, but tuna, Maine sardines, gefiltefish, and oysters declined.

CANNED SALMON. The 1977 U.S. pack of Pacific salmon was 2.9 million standard cases valued at $\$ 202.4$ million, an increase of 227,400 standard cases or 9 percent in volume compared with 1976. The Alaska pack, the largest since 1970, contributed 92 percent of the total Pacific salmon pack, and was 133,900 standard cases more than the 1976 pack. The Washington pack also increased while the pack in Oregon remained about the same as 1976.

CANNED SARDINES. The pack of Maine sardines (sea herring) was 1.0 million standard cases valued at a record $\$ 27.2$ million, 63,000 standard cases less, but $\$ 2.7$ million more than the 1976 pack. Herring specialties packed in 1977 were 138,900 standard cases, almost the same amount packed in 1976. However, the 1977 value of these specialties, $\$ 7.1$ million, increased $\$ 641,000$ compared to the $\$ 6.5$ million value in 1976 .

CANNED TUNA. The 1977 U.S. pack of tuna was 28.3 million standard cases ( 559.8 million pounds) valued at a record $\$ 931.2$ million. The pack was 2.0 million standard cases less than the 1976 pack of 30.3 million standard cases, but was valued at $\$ 77.8$ million more than the 1976 value of $\$ 853.5$ million. The pack of albacore (white meat tuna), 6.2 million standard. cases, was 22 percent of the 1977 pack and 235,000 standard cases more than the 6.0 million cases packed in 1976. Lightmeat tuna (bigeye, blufin, skipjack, and yellowfin) comprised the remaining 22.1 million standard cases. Plants in the continental United States packed about 46 percent of the total, American Samoa, Hawaii, and Puerto Rico the rest.

Canned tuna packed from landings by U.S. fishermen was 210.7 million pounds, 74.4 million pounds less than the record year of 1976 , when 285.0 million pounds were
packed. Over 670.1 million pounds (round weight) of fresh and frozen tuna was imported in 1977 compared with 641.1 million pounds in 1976.

CANNED CLAMS. The U.S. pack of clams and clam products, excluding clam specialties, was 2.8 million standard cases valued at a record $\$ 64.5$ million in 1977, an increase of 436,000 standard cases and $\$ 25.2$ million over the 1976 pack. This increase can be attributed to larger landings of ocean quahog, 18.5 million pounds in 1977 compared with about 5.5 million pounds in 1976. Whole and minced clams, 775,400 standard cases, was 27 percent of the pack in 1977, and chowder and juice the rest.

CANNED SHRIMP. The U.S. 1977 pack of shrimp was 3.5 million standard cases valued at $\$ 69.7$ million, up 18 percent in quantity and 43 percent in value over 1976. This pack was 213,000 standard cases less than the record pack of 3.7 million in 1973. Of the 3.5 million standard cases packed, 2.1 million were canned in plants in Louisiana and Mississippi, the rest in plants in Oregon, Washington, and Alaska. Landings of shrimp, 476.7 million pounds (heads-on weight), set a record in 1977, with 60 percent coming from the South Atlantic and Gulf States, and the rest from New England and the Pacific Coast States.

OTHER CANNED ITEMS. The U.S. pack of jack mackerel was 724,900 standard cases valued at $\$ 17.5$ million in 1977 compared to 147,600 standard cases valued at $\$ 2.1$ million in 1976. Near record landings of jack mackerel of 110.2 million pounds, the largest since 1952, caused this increase.

The pack of tunalike fish (bonito) was 337,300 standard cases valued at $\$ 7.7$ million, more than double the 1976 production of 163,400 standard cases valued at $\$ 2.9$ million. Landings of bonito increased from 8.8 million pounds in 1976 to 23.2 million pounds in 1977. The pack of crabmeat was 289,100 standard cases valued at $\$ 23.0$ million, 106,800 standard cases and $\$ 9.7$ million more than the 1976 pack.

CANNED PET FOOD. In 1977, the pack of pet food (10 pounds of fish per standard case of 48 one-pound cans) was 10.6 million standard cases valued at $\$ 161.4$ million, a decrease of 3.1 million standard cases and $\$ 34.5$ million from the 1976 pack. This decrease was primarily caused by a smaller pack of tuna pet food.

## REVIEW <br> PROCESSED FISHERY PRODUCTS

## INDUSTRIAL FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS. The value of the 1977 production of industrial fishery products in American Samoa, Puerto Rico, and the United States was $\$ 199.0$ million, $\$ 14.2$ million more than that produced in 1976. In terms of value, the leading State was Louisiana ( $\$ 49.0$ million); followed by Maine ( $\$ 32.7$ million), and Virginia ( $\$ 27.7$ million).

FISH MEAL AND SCRAP. Domestic production in 1977, including shellfish meal, was 283,075 short tons - 26,600 tons less than the 309,694 short tons produced in 1976. Menhaden meal ( 193,268 short tons) accounted for 68 percent of the total fish meal production, and was 19,285 short tons less than the 212,553 tons produced in 1976. Production of anchovy meal, tuna and mackerel meal, and unclassified meal declined in 1977. The production of tuna and mackerel meal in 1977 was 309 short tons; anchovy, 3,028 short tons; and other meal, 2,568 short tons.

FISH SOLUBLES. Domestic production of fish solubles was 122,286 short tons valued at $\$ 23.7$ million in 1977. This was a decrease of 10,821 short tons in production, but an increase in value of $\$ 9.5$ million when compared with
1976. Menhaden solubles accounted for 71 percent of the total fish soluble production.

FISH OILS. The domestic production of fish oils declined drastically from 204.6 million pounds produced in 1976 to only 133.7 million pounds in 1977. The production of menhaden oil and tuna and mackerel oil registered the largest declines with menhaden oil ( 116.1 million pounds) down 70.3 million pounds compared with 1976, and tuna and mackerel oil ( 4.1 million pounds) down 2.2 million pounds compared with 1976. Imports of fish oils declined from 20.9 million pounds in 1976 to 13.7 million pounds in 1977.

OTHER INDUSTRIAL PRODUCTS. Oyster shell products (grit and lime) were valued at $\$ 6.7$ million in 1977 compared with $\$ 6.1$ million in 1976 . The value of other industrial products, including agar-agar, animal feeds, crab and clam shells processed for food serving, fish pellets, irish moss extract, kelp products, shark leathers, liquid fertilizer, and pearl essence, was $\$ 42.6$ million in 1977 compared with \$36.4 in 1976.

## FOREIGN TRADE IN FISHERY PRODUCTS

IMPORTS. Total U.S. imports of edible and nonedible fishery products were a record $\$ 2,621$ million in 1977, an increase of $\$ 289$ million or 12 percent over 1976. The value of edible imports increased to a record $\$ 2,078$ million in 1977 compared with $\$ 1,917$ million in 1976. The quantity of imported edible products declined by 52 million pounds to 2,176 million pounds in 1977 compared with 2,228 million pounds in 1976. A record was established in 1977 for imports of regular and minced blocks and slabs of 385 million pounds compared with 379 million pounds a year earlier. Imports of scallop meats were a record 29.8 million pounds in 1977, up 18 percent over 1976. Imports of fresh and frozen tuna were 633 million pounds in 1977, up 4 percent over 1976. Most other major items registered declines in the quantity.
imported in 1977, including fish fillets and canned tuna: Imports of nonedible fishery products were a record $\$ 543$ million, $\$ 128$ million or 31 percent more than in 1976.
EXPORTS. Total domestic exports were valued at $\$ 520$ million in 1977, $\$ 135$ million or 35 percent more than the $\$ 385$ million exported in 1976. Exports of edible fishery products were 331 million pounds valued at $\$ 473$ million in 1977, compared with 241 million pounds valued at $\$ 330$ million in 1976. Fresh and frozen exports of salmon, whole or eviscerated and other fish were primarily responsible forr this increased activity in exports.

Exports of nonedible products were $\$ 47$ million in 1977 compared with $\$ 55$ million in 1976. Smaller quantities of fish oil valued at $\$ 18$ million were exported in 1977, compared with $\$ 30$ million in 1976.

## THE FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976

The Fishery Conservation and Management Act of 1976 (FCMA), Public Law 94-265, which became law on April 13, 1976, provides for a national program for the conservation and management of fishery resources within a declared Fishery Conservation Zone (FCZ), contiguous to the Territorial Sea of the United States. The Act gives the United States exclusive management of all fish in the FCZ, except highly migratory tuna, and provides for exclusive management authority over fishery resources of the continental shelf and authority over anadromous species beyond the FCZ, 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 the United States recognizes such sea or zone.

The Act established eight Regional Fishery Management Councils. Telephone and address information for each Council is shown in the Administrative Information section of this publication.

FISHERY MANAGEMENT PLANS (FMPs). The Act requires the Regional Fishery Management Councils (and in certain cases the Secretary of Commerce) to prepare FMPs and for the Secretary of Commerce to approve and implement these plans. Each Council is authorized to prepare FMPs on fisheries within its geographical area of authority.

The Secretary of Commerce has the general responsibility under the Act to implement any FMP or amendment approved or prepared by the Secretary. The Secretary may promulgate such regulations as may be necessary to implement any approved FMP. Enforcement of the Act, including the provisions of approved management plans and regulations, is a joint responsibility of the Secretary of Commerce and the Secretary of the department in which the U.S. Coast Guard is operating.
As of March 28, 1978, the FMPs listed below have gone into effect. These plans apply mainly to domestic recreational and commercial fisheries. Foreign fishing for the species covered by these plans, or the retention of fish caught, is prohibited except for temporary reciprocal fishing privileges accorded Canadian vessels.

## Atlantic

Atlantic Groundfish Plan for Haddock, Cod, and Yellowtail Flounder (42 FR 13998, Mar. 14, 1977)
Surf Clam and Ocean Quahog Fisheries (42 FR 60438, Nov. 25, 1978)

> California, Oregon, and Washington

Commercial and Recreational Salmon Fisheries off the Coasts of California, Oregon, and Washington (42 FR 2142, April 26,1977)

PRELIMINARY FISHERY MANAGEMENT PLANS (PMPs) or (PFMPs). If a foreign nation, which has entered into a Governing Intemational Fishery Agreement (GIFA) with the United States, applies for permission to fish within the 200 -mile zone, the Secretary of Commerce is empowered to prepare and implement a PMP. PMPs apply only to foreign fishermen, and generally remain in effect until a FMP
prepared by the appropriate Regional Fishery Management Council goes into effect. As of March 28, 1978, the following PMPs have gone into effect:

Atlantic
Atlantic Billfishes and Sharks (43 FR 3818, Jan. 27,1978)
Atlantic Herring Fishery of the Northwestern Atlantic (42 FR 10496, Feb. 22, 1977)
Hake Fisheries of the Northwestem Atlantic ( 42 FR 10146, Feb. 18, 1977)
Finfish Caught Incidental to the Foreign Trawl Fisheries of the Northwestem Atlantic ( 42 FR 9950, Feb. 17, 1977)
Mackerel Fishery of the Northwestern Atlantic (42 FR 9552, Feb. 16, 1977)
Squid Fisheries of the Northwestern Atlantic (42 FR 9596, Feb. 16, 1977)

California, Oregon, and Washington
Trawl Fisheries of California, Oregon, and Washington (42 FR 8578, Feb. 10,1977)
Alaska
Sablefish Fishery of the Eastern Bering Sea and the
Northeastern Pacific (42 FR 8534, Feb. 10, 1977)
Trawl Fishery of the Gulf of Alaska ( 42 FR 8782, Feb. 11,
197)
Trawl Fisheries and Herring Gillnet Fishery of the Eastern
Bering Sea and Northeast Pacific ( 42 FR 9298 , Feb. 15 ,
1977)
Shrimp of the Eastern Bering Sea and Gulf of Alaska ( 42
FR 12386, Mar. 3, 1977)
King and Tanner Crab Fisheries of the Eastern Bering Sea
( 42 FR 9520, Feb. 16, 1977)
Sail Fishery of the Eastern Bering Sea (42 FR 9334, Feb.
15, 1977).
Western Pacific
Seamount Groundfish Fishery of the Pacific (42 FR 8568,
Feb. 10, 1977)

## FOREIGN ALLOCATIONS

The total allowable level of foreign fishing (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 (OY) of such fishery which will not be harvested by vessels of the United States.

Each assessment of OY will be reviewed not later than May 1978. Each assessment of U.S. harvesting capacity will be reviewed during the 1978 season as soon as possible after the specified review date. Adjustments in OY, U.S. estimated harvest, and initial TALFFs will be considered, based on updated information relating to status of stocks, estimated and actual performance of domestic and foreign fleets in current and prior years, and other relevant data.
The following tables list the initial TALFFs by species, ocean areas, and country for 1978.

NORTH ATLANTIC INITIAL FOREIGN FISHING ALLOCATIONS BY NATION, 1978

| Nation and TALFE | Silver hake | $\begin{aligned} & \text { Red } \\ & \text { hake } \end{aligned}$ | Shortfinned squid | long- finned squid | Atlantic mackerel | River herring <br> (1) | Butterfish (2) | Other finfish (3) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bulgaria. | --830 | ---- | $-\overline{196}$ | $10$ | - Metric | $---5$ | $--\frac{-}{2}$ | $---$ | $1,504$ |
| Canada. - | No allo | ns have | made to |  |  |  |  |  |  |
| Cuba. | 4,530 | 2,080. | 10 | 190 | 70 | 30 | 40 | 2,765 | 9,715 |
| EEC: |  |  |  |  |  |  |  |  |  |
| FRG . | 20 | 20 | 10 | 500 | 6 | 2 | 105 | 225 | 888 |
| France. | 20 | 20 | 1,000 | 10 | 11 | 5 | 2 | 425 | 1,493 |
| Italy . | 20 | 20 | 980 | 1,640 | 28 | 12 | 345 | 1,080 | 4,125 |
| Japan . | 20 | 20 | 2,357 | 2,950 | 56 | 23 | 622 | 2,172 | 8,220 |
| Mexico. . | 20 | 20 | (4) 4,000 | (4) 6,000 | 105 | 44 | 1,263 | 4,076 | 15,528 |
| Poland. | 20 | 20 | 3,275 | 320 | 38 | 16 | 67 | 1,474 | 5,230 |
| Spain . | 20 | 20 | 7,000 | 5,000 | 125 | 52 | 1,053 | 4,886 | 18,156 |
| USSR. . . | 37,390 | 23,160 | 3,672 | 380 | 672 | 279 | 80 | 26,220 | 91,853 |
| Reserved. . | 2,510 | 2,000 | 1,000 | 2,000 | 78 | 32 | 421 | 3,047 | 11,088 |
| Initial taLfF | 45,400 | 27,400 | 23,500 | 19,000 | 1,200 | 500 | 4,000 | 46,800 | 167,800 |

(1) Includes alewife, blueback herring, and hickory shad.
(2) Allocated by country in
(3) Incidental catch only

Note:--U.S. capacity review date is June 15, 1978 for the North Atlantic.

WASHINGION, OREGON, AND CALIFORNIA TRANL FISHERY:
INITIAL FOREIGN FISHING ALLOCATIONS BY NATION, 1978

| Nation and Talff | Pacific hake | Jack mackerel | Flounders <br> (1) | Rockfishes and pacific Ocean perch (2) | Sablefish <br> (1) | Other species (3) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - --------- |  |  | Metric tons - | - | $\overline{144}$ | $\overline{-\overline{15,534}}$ |
| Mexico. |  |  |  | 330 |  |  |  |
| Poland. | 8,700 | 1,950 | 10 | 80 | 10 | 51 | 10,801 |
| USSR. | 50,300 | 1,950 | 50 | 400 | 50 | 250 | 53,000 |
| Reserved. - | 15,000 | - | - | - | - | - | 15,000 |
| Initial TALFF | 89,000 | 4,000 | 90 | 710 | 90 | 445 | 94,335 |

(1) Unavoidable incidental catch only ( 0.18 of hake TALFF).
(2) Unavoidable incidental catch only ( $0.8 \%$ of hake TALFF).
(3) Unavoidable incidental catch only ( 0.58 of hake TALFF).

Note:--U.S. capacity review date is July 31, 1978 for the Washington, Oregon, and California trawl fishery.

INITIAL FOREIGN FISHING ALLLCATIONS BY NATION, 1978

| Nation and TALFF | Pollock | Pacific ocean perch | $\begin{aligned} & \text { Other } \\ & \text { rockfishes } \end{aligned}$ | Flounders | Sablefish <br> (1) | $\begin{gathered} \text { Atka } \\ \text { mackerel } \end{gathered}$ | $\begin{gathered} \text { Pacific } \\ \text { cod } \end{gathered}$ | Squid | Other species | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Japan. | ---70 | 4,650 | ---7, | ---7, | $\begin{aligned} & \text { - Metric } \\ & 6,950 \end{aligned}$ | $\overline{S-0}{ }_{2,000}$ | 6,200 | $--\overline{30}$ | 4,030 | -69,460 |
| Korea. | 19,870 | 3,203 | 675 | 100 | 800 | 100 | 100 | 20 | 1,535 | 26,403 |
| Mexico | 20,000 | 3,192 | 744 | 100 | 100 | 100 | 8,000 | 1,490 | 2,000 | 35,726 |
| Poland | 3,900 | 630 | 126 | 100 | 50 | 1,030 | 350 | 10 | 395 | 6,591 |
| USSR . . . . . | 44,770 | 7,225 | 1,535 | 1,500 | 100 | 21,570 | 2,330 | 50 | 5,000 | 84,080 |
| Initial TALPF | 117,340 | 18,900 | 4,080 | 17,600 | 8,000 | 24,800 | 16,980 | 1,600 | 12,960 | 222,260 |

(1) Incidental catch only (1.58 of total trawl NALFF). TALFF

Not?:-U.S. capacity review dates are Mar. 31, June 30, Aug. 31, and Oct. 31 for the Gulf of Alaska trawl fishery.

BERING SEA AND ALEUTIAN ISLANDS TRAWL AND HERRING GILLLNET FISHERY: INITIAL FOREIGN FISHING ALLOCARIONS BY NATION, 1978

(1) For trawl, long.line and trap gear, collectively.

Note:--U.S. capacity review dates are March 31, June 30, August 31, and October 31 for the Bering Sea and Aleutian Islands trawl and herring gill net fishery.

## FCMA

WESIERN PACIFIC OCEAN SEAMOUNT GROUNDFISH FISHERY: INITIAL FOREIGN FISHING ALLOCATIONS BY NATION, 1978

U. S. SUPPLY OF EDIBLE AND INDUSTRIAL FISHERY PRODUCTS, 1968-77
(Round weight)

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1976 AND 1977 (1)

| Species | 1976 |  | 1977 |  | $\begin{aligned} & \text { 5-year aver- } \\ & \text { age ( } 1972-76 \text { ) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Fish | Thousand | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars | pounds |
| Alewives: |  |  |  |  |  |
| Atlantic and Gulf | 14,367 | 625 | 13,816 | 627 | 22,896 |
| Great Lakes | 39,845 | 477 | 39,246 | 409 | 37,490 |
| Anchovies . | 257,073 | 5,676 | 231,932 | 17,683 | 253,773 |
| Bluefish. | 10,387 | 1,091 | 11,320 | 1,315 | 10,030 |
| Bonito. . | 8,847 | 1,253 | 23,245 | 3,734 | 22,454 |
| Butterfish. | 3,074 | 867 | 3,043 | 864 | 3,281 |
| Cod: |  |  |  |  |  |
| Atlantic. | 55,845 | 14,350 | 75,533 | 17,095 | 53,515 |
| Pacific | 11,944 | 1,527 | 10,948 | 1,781 | 10,340 |
| Croaker . | 31,594 | 3,821 | 34,401 | 3,891 | 24,583 |
| Cusk. - | 2,831 | 504 | 2,728 | 462 | 2,794 |
| Flounders: |  |  |  |  |  |
| Atlantic and Gulf: |  |  |  |  |  |
| Blackback | 20,868 | 7,303 | 34,932 | 12,542 | 19,663 |
| Fluke . . | 23,714 | 10,696 | 19,562 | 10,170 | 13,988 |
| Yellowtail. | 37,828 | 15,521 | 36,457 | 17,092 | 54,789 |
| Other | 24,179 | 8,282 | 26,180 | 9,988 | 21,898 |
| Pacific | 58,093 | 10,205 | 52,472 | 9,685 | 52,575 |
| Total | 164,682 | 52,007 | 169,603 | 59,477 | 162,913 |
| Groupers. | 9,242 | 4,303 | 6,856 | 3,955 | 8,996 |
| Haddock . | 12,761 | 5,551 | 28,430 | 9,270 | 14,507 |
| Hake: |  |  |  |  |  |
| Pacific | 3,124 | 46 | 3,600 | 70 | 4,099 |
| Red. | 4,972 | 417 | 3,866 | 349 | 3,244 |
| White . | 9,081 | 1,208 | 10,894 | 1,394 | 8,734 |
| Halibut . . . | 20,614 | 19,418 | 17,688 | 17,340 | 22,580 |
| Herring, sea: |  |  |  |  |  |
| Atlantic. | 110,524 | 4,363 | 111,612 | 4,967 | 81,706 |
| Pacific . . | 40,392 | 6,297 | 44,235 | 6,642 | 38,378 |
| Jack mackerel | 38,519 | 1,925 | 110,246 | 5,512 | 32,403 |
| Lingcod . . | 7,484 | 1,280 | 7,545 | 1,252 | 7,484 |
| Mackerel: |  |  |  |  |  |
| Atlantic. | 5,976 | 703 | 3,003 | 525 | 4,612 |
| King. - | 8,936 | 3,886 | 8,460 | 3,654 | 6,519 |
| Spanish . | 14,077 | 3,208 | 12,021 | 2,559 | 11,204 |
| Menhaden: |  |  |  |  |  |
| Atlantic. | 801,698 | 23,212 | 809,641 | 28,974 | 747,562 |
| Gulf. . . | 1,237,779 | 43,967 | 986,474 | 39,155 | 1,182,315 |
| Total | 2,039,477 | 67,179 | 1,796,115 | 68,129 | 1,929,877 |
| Mullet. | 30,495 | 4,536 | 21,884 | 4,010 | 33,888 |
| Ocean perch: . . 3,536 21,884 3,010 |  |  |  |  |  |
| Atlantic. | 32,139 | 4,395 | 35,028 | 5,355 | 43,632 |
| Pacific. | 5,658 | 719 | 5,695 | 781 | 6,157 |
|  |  |  |  |  |  |
| Atlantic. | 23,946 | 3,188 | 28,772 | 4,080 | 18,295 |
| Alaska. . | 338 | 62 | 712 | 57 | 149 |
| Rockfishes. | 39,683 | 5,360 | 43,512 | 7,462 | 35,514 |
| Sablefish | 17,406 | 3,151 | 25,376 | 4,747 | 15,617 |
| Salmon, Pacific: |  |  |  |  |  |
| Chinook or king . | 34,511 | 51,422 | 32,676 | 44,961 | 31,089 |
| Chum or keta. . . | 52,645 | 20,577 | 57,398 | 24,103 | 50,859 |

See footnotes at end of table.
(Continued on next page)
U.S. COMMERCIAL LANDINGS, BY SPECIES, 1976 AND 1977 (1) - Continued

| Species | 1976 |  | 1977 |  | 5-year aver- |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fish - continued | Thousand | Thousand | Thousand | Thousand | $\frac{\text { (1972-76 }}{}$ |
|  | pounds | dollars | pounds | dollars | pounds |
| Salmon, Pacific - Cont.: |  |  |  |  |  |
| Pink . . . . | 99,237 | 28,393 | 125,644 | 50,790 | 58,441 |
| Red or sockeye | 83,159 | 51,445 | 89,932 | 69,808 | 57,844 |
| Silver or coho | 39,690 | 44,659 | 29,992 | 32,201 | 33,987 |
| Total. | 309,242 | 196,496 | 335,642 | 221,863 | 232,220 |
| Scup or porgy. | 15,998 | 3,403 | 19,112 | 3,819 | 13,718 |
| Sea bass: |  |  |  |  |  |
| Black | 4,296 | 1,528 | 5,861 | 2,026 | 4,097 |
| White. | 949 | 617 | 964 | 820 | 867 |
| Sea trout: |  |  |  |  |  |
| Gray . . | 20,881 | 2,619 | 18,695 | 2,868 | 17,267 |
| Spotted. | 7,072 | 3,073 | 3,694 | 1,769 | 7,777 |
| White. | 1,805 | 231 | 767 | 116 | 2,022 |
| Sharks: |  |  |  |  |  |
| Dogfish. | (2) | (2) | 6,928 | 477 | (2) |
| Other. | 7,252 | 629 | 1,262 | 189 | (2) |
| Snapper: |  |  |  |  |  |
| Red. . | 9,216 | 8,024 | 6,411 | 7,067 | 8,712 |
| Other. | 2,486 | 1,593 | 1,777 | 1,289 | 2,603 |
| Striped bass | 5,838 | 3,189 | 5,140 | 3,460 | 10,120 |
| Tuna: |  |  |  |  |  |
| Albacore | 41,931 | 19,810 | 31,687 | 18,598 | 48,970 |
| Bigeye . | 2,286 | 1,389 | 1,280 | 1,046 | (2) |
| Bluefin. | 22,930 | 7,135 | 16,969 | 6,602 | 22,303 |
| Little . | 78 | 18 | 115 | 27 | 53 |
| Skipjack . | 142,132 | 39,593 | 91,403 | 33,006 | 76,654 |
| Yellowfin. | 276,060 | 81,793 | 202,834 | 76,393 | 250,832 |
| Unclassified | 89 | 27 | 941 | 113 | 19 |
| Total. | 485,506 | 149,765 | 345,229 | 135,785 | 399,289 |
| Warsaw . | 190 | 53 | 235 | 82 | 183 |
| Whiting. . . . . . . . . | 47,666 | 3,973 | 45,316 | 4,224 | 35,673 |
| Wolffish . . . . . . . . | 1,048 | 99 | 997 | 88 | 810 |
| Other marine finfishes: |  |  |  |  |  |
| Atlantic and Gulf. | 244,408 | 28,868 | 203,864 | 33,755 | - |
| Pacific. | 21,271 | 5,331 | 37,399 | 7,714 | - |
| Other freshwater |  |  |  |  |  |
| finfishes . | 89,554 | 23,443 | 81,423 | 19,628 | - |
| Total. | 4,350,011 | 656,327 | 4,062,081 | 706,487 | - |
| Shellfish et al. |  |  |  |  |  |
| Clams: |  |  |  |  |  |
| Hard . . . | 15,600 | 25,437 | 15,433 | 28,234 | 15,219 |
| Ocean quahog | (2) | (2) | 18,549 | 5,524 | (2) |
| Soft . . . . | i0,540 | 12,213 | 10,683 | 14,009 | 9,120 |
| Surf . | 49,133 | 23,344 | 51,036 | 26,442 | 75,601 |
| Other. | 5,728 | 1,715 | 459 | 74 | 2,346 |
| Total. | 81,001 | 62,709 | 96,160 | 74,283 | 102,286 |
| Crabs: |  |  |  |  |  |
| Blue, hard . | 113,152 | 22,966 | 128,860 | 27,454 | 134,091 |
| Dungeness. | 35,804 | 22,568 | 60,375 | 25,790 | 22,099 |
| King . . . | 105,825 | 70,072 | 99,449 | 111,742 | 94,906 |
| Snow (tanner). | 80,712 | 16,142 | 98,329 | 30,823 | 59,751 |
| Other. . . . | 9,317 | 5,207 | 11,526 | 6,698 | 8,217 |
| Total. | 344,810 | 136,955 | 398,539 | 202,507 | 319,064 |

See footnotes at end of table.
(Continued on next page)
U.S. COMMERCIAL LANDINGS, BY SPECIES, 1976 AND 1977 (1) - Continued

| Species, | 1976 |  | 1977 |  | 5-year aver- |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shellfish et al.-- | Thousand | Thousand | Thousand | Thousand | Thousand |
| continued | pounds | dollars | pounds | dollars | pounds |
| Lobsters: |  |  |  |  |  |
| American. | 31,741 | 52,684 | 31,708 | 57,715 | 30,056 |
| Spiny . | 4,889 | 7,491 | 5,483 | 9,607 | 9,809 |
| Oysters . | 54,391 | 53,098 | 46,026 | 52,537 | 52,083 |
| Scallops: |  |  |  |  |  |
| Bay . . | 2,131 | 4,682 | 1,703 | 4,426 | 1,836 |
| Calico. | 2,261 | 1,582 | 1,111 | 1,026 | 1,239 |
| Sea | 19,840 | 35,061 | 25,012 | 40,584 | 9,903 |
| Shrimp: |  |  |  |  |  |
| New England . | 2,254 | 765 | 840 | 459 | 15,340 |
| South Atlantic. | 26,121 | 35,014 | 17,997 | 24,852 | 25,545 |
| Gulf. | 210,078 | 275,187 | 265,903 | 296,785 | 195,389 |
| Pacific | 165,114 | 20,379 | 191,905 | 33,031 | 140,512 |
| Other | 10 | 30 | 9 | 31 | 6 |
| Total | 403,577 | 331,375 | 476,654 | 355,158 | 376,792 |
| Squid: |  |  |  |  |  |
| Atlantic. | 8,481 | 1,593 | 5,469 | 1,426 | 4,916 |
| Pacific | 20,357 | 509 | 19,410 | 679 | 19,754 |
| Other shellfish | 26,910 | 8,634 | 28,744 | 8,665 | - |
| Total shellfish | 1,000,389 | 696,373 | 1,136,019 | 808,613 | - |
| Grand total . | 5,350,400 | 1,352,700 | 5,198,100 | 1,515,100 | - |

(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) Data not available.

Note:-Data are preliminary. Data do not include landings by U.S. Elag vessels at Puerto Rico or other ports outside the 50 States. Data do not include production of artificially cultivated fish and shellfish.
U.S. COMMERCIAL LANDINGS, BY REGIONS, 1976 AND 1977 (1)

| Region | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| New England. | 544,119 | 175,436 | 581,247 | 202,786 |
| Middle Atlantic. | 265,942 | 68,477 | 213,387 | 69,797 |
| Chesapeake . . | 588,002 | 74,394 | 668,843 | 86,138 |
| South Atlantic | 315,032 | 71,794 | 345,315 | 71,726 |
| Gulf . | 1,752,663 | 388,669 | 1,476,392 | 404,685 |
| Pacific Coast. | 1,743,372 | 542,524 | 1,776,968 | 650,519 |
| Great Lakes and other inland waters. | 129,399 | 23,920 | 120,669 | 20,037 |
| Hawaii . . . . . . | 11,871 | 7,486 | 15,279 | 9,412 |
| Total | 5,350,400 | 1,352,700 | 5,198,100 | 1,515,100 |

(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.
Note:--Data are preliminary. Data do not include landings by U.S. flag vessels at Puerto Rico or other ports outside the 50 States. Data do not include production of artificially cultivated fish and shellfish.

## U.S. COMMERCIAL LANDINGS

U.S. COMMERCLAL LANDINGS, BY STATES, 1976 AND 1977 (1)

| State | 1976 |  | 1977 |  | Record landings |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand | Thousand |  | Thousand |
|  | pounds | dollars | pounds | dollars | Year | pounds |
| Alabama (2). | 34,953 | 34,370 | 36,158 | 37,244 | 1973 | 39,749 |
| Alaska . | 616,351 | 227,208 | 644,014 | 326,245 | 1936 | 932,341 |
| Arkansas (3) | 10,300 | 3,850 | 6,423 | 1,999 | - | (4) |
| California . | 896,858 | 185,647 | 874,376 | 194,957 | 1936 | 1,760,183 |
| Connecticut. | 2,674 | 2,525 | 3,694 | 2,379 | 1930 | 88,012 |
| Delaware . | 4,795 | 1,788 | 2,020 | 778 | 1953 | 367,500 |
| Florida. | 164,955 | 88,316 | 167,827 | 95,485 | 1938 | 241,443 |
| Georgia. | 14,524 | 12,375 | 13,270 | 9,096 | 1927 | 47,607 |
| Hawaii . | 11,871 | 7,486 | 15,279 | 9,412 | 1954 | 20,610 |
| Idaho. . | 400 | 34 | 391 | 38 | - | (4) |
| Illinois | 5,165 | 860 | 5,293 | 931 | - | (4) |
| Indiana. | 200 | 90 | 225 | 118 | - | (4) |
| Iowa . | 5,626 | 836 | 5,288 | 891 | - | (4) |
| Kansas . | 34 | 10 | 29 | 8 | - | (4) |
| Kentucky (3) | 2,945 | 919 | 2,742 | 820 | - | (4) |
| Louisiana. - | 1,227,958 | 136,971 | 917,523 | 137,936 | 1971 | 1,401,252 |
| Maine. | 177,827 | 53,813 | 182,187 | 61,997 | 1950 | 356,266 |
| Maryland | 59,572 | 31,303 | 60,399 | 30,787 | 1890 | 141,607 |
| Massachusetts. | 288,518 | 97,605 | 319,292 | 114,017 | 1948 | 649,696 |
| Michigan | 14,438 | 4,145 | 11,626 | 3,275 | 1930 | 35,580 |
| Minnesota. | 9,606 | 1,249 | 9,136 | 1,283 | - | (4) |
| Mississippi. | 291,904 | 22,006 | 316,627 | 26,341 | 1971 | 400,576 |
| Missouri . | 847 | 149 | 846 | 149 | - | (4) |
| Nebraska | 143 | 19 | 124 | 21 | - | (4) |
| New Hampshire. | 3,468 | 1,083 | 4,001 | 1,473 | - | (4) |
| New Jersey . | 226,987 | 34,546 | 178,637 | 38,480 | 1956 | 540,060 |
| New York . | 34,720 | 32,403 | 33,242 | 30,790 | 1880 | 335,000 |
| North Carolina | 226,065 | 27,465 | 251,258 | 28,855 | 1959 | 342,612 |
| North Dakota | 421 | 45 | 723 | 79 | - | (4) |
| Ohio . | 7,801 | 2,208 | 7,740 | 1,978 | 1936 | 31,083 |
| Oklahoma (3) | 575 | 201 | 2,153 | 503 | - | (4) |
| Oregon . . . | 98,853 | 48,727 | 112,503 | 48,532 | 1977 | 112,503 |
| Pennsylvania | 355 | 263 | 403 | 246 | - | (4) |
| Rhode Island | 71,632 | 20,410 | 72,073 | 22,920 | 1889 | 128,056 |
| South Carolina | 21,481 | 14,070 | 16,318 | 9,497 | 1965 | 26,611 |
| South Dakota . | 2,795 | 277 | 2,686 | 288 | - | (4) |
| Tennessee (3). | 6,800 | 1,768 | 5,384 | 1,249 | - | (4) |
| Texas. . . | 96,305 | 127,574 | 111,898 | 134,237 | 1960 | 237,684 |
| Virginia . | 528,430 | 43,091 | 608,444 | 55,351 | 1972 | 666,180 |
| Washington | 131,310 | 80,942 | 146,075 | 80,785 | 1941 | 197,253 |
| West Virginia. | 10 | 3 | 23 | 7 | - | (4) |
| Wisconsin. | 49,928 | 4,050 | 49,750 | 3,623 | - | (4) |
| Total . | 5,350،400 | 1,352,700 | 5,198,100 | 1,515,100 | 1962 | 5,354,000 |

(1) Statistics on landings are shown in round (live) 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) Landings in interior waters estimated.
(3) Estimated.
(4) Not determined.

Note:--Data are preliminary. Data do not include landings by U.S. flag vessels at Puerto Rico or other ports outside the 50 States. Data do not include production of artificially cultivated fish and shellfish.

## U.S. COMMERCIAL LANDINGS

## QUANTITY AND VALUE OF COMMERCIAL FISHERY LANDINGS AT CERTAIN U.S. PORTS, 1977

| Port | Million pounds | Port | Million dollars |
| :---: | :---: | :---: | :---: |
| San Pedro, Calif. | 519.5 | San Pedro, Calif. | 109.1 |
| Cameron, La. | 306.7 | Kodiak, Alaska | 72.5 |
| Pascagoula-Moss Point, Miss. | 272.2 | Dutch Harbor, Alaska | 61.4 |
| Empire, La. . . . . . . | 190.5 | San Diego, Calif. . . | 43.4 |
| Kodiak, Alaska | 179.6 | New Bedford, Mass. | 43.2 |
| Dulac-Chauvin, La. | 153.7 | Brownsville-Port Isabel, Tex. | 42.0 |
| Gloucester, Mass. | 150.9 | Aransas Pass-Rockport, Tex. | 39.0 |
| San Diego, Calif. | 124.1 | Dulac-Chauvin, La. . . . | 33.1 |
| Beaufort-Morehead City, N.C. | 100.7 | Freeport, Tex. | 26.0 |
| Dutch Harbor, Alaska | 100.5 | Bayou La Batre, Ala. | 25.7 |
| Morgan City, La. | 95.2 | Gloucester, Mass. | 21.5 |
| New Bedford, Mass. | 75.5 | Cape May-Wildwood, N.J. | 20.7 |
| Eureka, Calif. | 48.7 | Petersburg, Alaska | 20.0 |
| Cape May-Wildwood, N.J. | 48.6 | Cameron, La. - | 18.9 |
| Point Judith, R.I. | 43.7 | Golden Meadow-Leeville, La. | 18.5 |
| Biloxi, Miss. | 42.1 | Empire, La. | 18.0 |
| Petersburg, Alaska | 33.6 | Key West, Fla. | 18.0 |
| Bellingham, Wash. | 33.0 | Pascagoula-Moss Point, Miss. | 17.6 |
| Portland, Maine | 30.4 | Eureka, Calif. | 17.0 |
| Astoria, Oreg. | 28.5 | Akutan, Alaska | 15.9 |
| Brownsville-Port Isabel, Tex. | 28.0 | Bellingham, Wash. | 14.5 |
| Westport, Wash. | 27.0 | Westport, Wash. | 13.0 |
| Bayou La Batre, Ala. | 25.1 | Lafitte-Barataria, La. | 12.7 |
| Aransas Pass-Rockport, Tex. | 25.0 | Delcambre, La. | 10.7 |
| Golden Meadow-Leeville, La. | 23.5 | Bon Secour-Gulf Shores, Ala. | 10.1 |
| Coos Bay, Oreg. | 23.4 | Astoria, Oreg. | 10.0 |
| Newport, Oreg. | 23.3 | Morgan City, La. | 9.4 |
| Boston, Mass. | 22.2 | Coos Bay, Oreg. | 9.4 |
| Akutan, Alaska | 20.8 | Newport, Oreg. | 9.3 |
| Hampton-Norfolk, Va. | 18.7 | Newport, R.I. |  |
| Newport, R.I. | 18.4 | Hampton-Norfolk, Va. | 9.1 |
| Lafitte-Barataria, La. | 18.3 | Ketchikan, Alaska | 8.0 |
| Provincetown, Mass. | 17.9 | Fort Myers, Fla. | 8.0 |
| Freeport, Tex. . . | 17.0 | Provincetown, Mass. | 6.9 |
| Sandwich, Mass. | 15.3 | Biloxi, Miss. . . | 6.7 |
| Seattle, Wash. . | 15.3 | Point Judith, R.I. | 6.7 |
| Key West, Fla. | 15.0 | Seattle, Wash. | 6.2 |
| Point Pleasant, N.J. | 14.1 | Boston, Mass. | 6.0 |
| Ocean City, Md. | 12.0 | Ocean City, Md. | 5.9 |
| Delcambre, La. | 11.4 | Apalachicola, Fla. | 5.5 |
| Cape Charles-Oyster, Va. | 10.8 | Cape-Charles-Oyster, Va. | 5.2 |
| Ketchikan, Alaska . . | 10.7 | Point Pleasant, N.J. . | 5.1 |
| Bon Secour-Gulf Shores, Ala. | 8.2 | Sandwich, Mass. | 5.0 |
| Fort Myers, Fla. | 6.0 | Portland, Maine | 4.7 |
| Apalachicola, Fla. | 5.7 | Beaufort-Morehead City, N.C. | 4.5 |

Record quantity was 848.2 million lb landed in San Pedro, Calif. in 1950. Record value was $\$ 117.1$ million in San Pedro in 1976.

Note:-Data for some ports are estimated. To avoid disclosure of private enterprise the following ports were not included: Intercoastal City, La., Port Monmouth-Belford, N.J., Reedville, Va., and Southport, N.C.
U.S. COMMERCIAL LANDINGS OF FISH AND SHELLFISH, 1968-77 (1)

| Year | Landings for <br> human food |  |  | Landings for <br> industrial <br> products (2) |  | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: |

(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 meal, oil, fish solubles, and shell products, and used as bait or animal food.
(3) Data are preliminary.

Note:--Data do not include landings by U.S. flag vessels at Puerto Rico or other ports outside the 50 States. Data do not include production of artificially cultivated fish and shellfish. Record landings for human food, 3,307 million 1 lb in 1950; record landings for industrial products, 2,814 million lb in 1962; and record total, 5,354 million lb in 1962.

DISPOSITION OF U.S. COMMERCIAL LANDINGS, 1976 AND 1977

| End Use | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Million }}{\text { pounds }}$ | Percent | $\frac{\text { Million }}{\text { pounds }}$ | Percent |
| Fresh and frozen: |  |  |  |  |
| For human food. | 1,743 | 32.6 | 1,888 | 36.3 |
| For bait and animal food. | 112 | 2.1 | 137 | 2.7 |
| Total. . | 1,855 | 34.7 | 2,025 | 39.0 |
| Canned: |  |  |  |  |
| For human food. | 964 | 18.0 | 957 | 18.4 |
| For bait and animal food. | 130 | 2.4 | 121 | 2.3 |
| Total. . . . | 1,094 | 20.4 | 1,078 | 20.7 |
| Cured for human food. . | 53 | 1.0 | 55 | 1.1 |
| Reduction to meal, oil, etc.. | 2,348 | 43.9 | 2,040 | 39.2 |
| Grand total. | 5,350 | 100.0 | 5,198 | 100.0 |

[^0]DISPOSITIION OF U.S. COMMERCIAL LANDINGS, BY MONTHS, 1977

| Month | Landings for human food |  | Landings for industrial products (1) |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million | Percent | $\frac{\text { Million }}{\text { pounds }}$ | Percent | $\frac{\text { Million }}{\text { pounds }}$ | Percent |
| January. | 114 | 3.9 | 61 | 2.7 | 175 | 3.4 |
| February | 129 | 4.4 | 11 | . 5 | 140 | 2.7 |
| March. | 229 | 7.9 | 34 | 1.5 | 263 | 5.1 |
| April. | 206 | 7.1 | 127 | 5.5 | 333 | 6.4 |
| May. - | 260 | 9.0 | 235 | 10.2 | 495 | 9.5 |
| June . | 273 | 9.4 | 416 | 18.1 | 689 | 13.2 |
| July . | 346 | 11.9 | 393 | 17.1 | 739 | 14.2 |
| August . | 418 | 14.4 | 337 | 14.7 | 755 | 14.5 |
| September. | 321 | 11.1 | 325 | 14.1 | 646 | 12.4 |
| October. . | 255 | 8.8 | 143 | 6.2 | 398 | 7.7 |
| November . | 196 | 6.8 | 106 | 4.6 | 302 | 5.8 |
| December . | 153 | 5.3 | 110 | 4.8 | 263 | 5.1 |
| Total . | 2,900 | 100.0 | 2,298 | 100.0 | 5,198 | 100.0 |

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

TAKE OF PRIBILOF ISLANDS SEALSKINS, 1966-77


Note:--Until 1973 includes harvest fran St. Paul and St. George Islands. Commercial harvesting ceased on St. George Island beginning in 1973. Includes 200 seals harvested on St. George Island in 1976 for subsistence purposes.

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT
OFF U.S. SHORES, AND CAUGHT IN INTERNATIONAL WATERS, 1977 (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 | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | Thousand pounds | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Alewives: |  |  |  |  |  |  |  |  |
| Atlantic and Gulf. | 13,784 | 626 | 32 | 1 | - | - | 13,816 | 627 |
| Great Lakes. | 39,246 | 409 | - | - | - | - | 39,246 | 409 |
| Anchovies. . | 11,540 | 6,372 | 220,392 | 11,311 | - | - | 231,932 | 17,683 |
| Bluefish . | 9,423 | 1,095 | 1,897 | 220 | - | - | 11,320 | 1,315 |
| Bonito . . | 2,427 | 424 | 9,270 | 1,463 | 11,678 | 1,872 | 23,375 | 3,759 |
| Butterfish | 983 | 322 | 2,060 | 542 | - | - | 3,043 | 864 |
| Cod: |  |  |  |  |  |  |  |  |
| Atlantic . | 4,366 | 1,143 | 69,487 | 15,489 | 1,680 | 463 | 75,533 | 17,095 |
| Pacific. | 3,971 | 630 | 3,462 | 589 | 3,515 | 562 | 10,948 | 1,781 |
| Croaker. . | 24,379 | 2,625 | 10,022 | 1,266 | - | - | 34,401 | 3,891 |
| Cusk . | 246 | 40 | 2,400 | 409 | 82 | 13 | 2,728 | 462 |
| Flounders: |  |  |  |  |  |  |  |  |
| Atlantic and Gulf: |  |  |  |  |  |  |  |  |
| Blackback. | 4,622 | 1,293 | 30,207 | 11,209 | 103 | 40 | 34,932 | 12,542 |
| Fluke. | 4,012 | 2,390 | 15,550 | 7,780 | - | - | 19,562 | 10,170 |
| Yellowtail | 1,290 | 588 | 35,138 | 16,492 | 29 | 12 | 36,457 | 17,092 |
| Other. . | 6,031 | 2,550 | 20,119 | 7,422 | 30 | 16 | 26,180 | 9,988 |
| Pacific. . . . | 8,490 | 1,500 | 40,980 | 7,794 | 3,002 | 39.1 | 52,472 | 9,685 |
| Total. . . | 24,445 | 8,321 | 141,994 | 50,697 | 3,164 | 459 | 169,603 | 59,477 |
| Groupers . | 251 | 149 | 6,270 | 3,595 | 335 | 211 | 6,856 | 3,955 |
| Haddock. | 238 | 78 | 24,526 | 7,997 | 3,666 | 1,195 | 28,430 | 9,270 |
| Hake: |  |  |  |  |  |  |  |  |
| Pacific. | 2,940 | 59 | . 660 | 11 | - | - | 3,600 | 70 |
| Red. . | 483 | 40 | 3,375 | 308 | 8 | 1 | 3,866 | 349 |
| White. . | 807 | 79 | 9,795 | 1,275 | 292 | 40 | 10,894 | 1,394 |
| Halibut. | 2,230 | 2,188 | 15,452 | 15,143 | 6 | 9 | 17,688 | 17,340 |
| Herring, sea: |  |  |  |  |  |  |  |  |
| Atlantic . | 99,756 | 4,469 | 11,856 | 498 | - | - | 111,612 | 4,967 |
| Pacific. | 44,235 | 6,642 | - | - | - | - | 44,235 | 6,642 |
| Jack mackerel. | 12,218 | 611 | 98,028 | 4,901 | - | - | 110,246 | 5,512 |
| Lingcod. . | 489 | 71 | 5,201 | 884 | 1,855 | 297 | 7,545 | 1,252 |
| Mackerel: ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |
| Atlantic . | 1,640 | 328 | 1,363 | 197 | - | - | 3,003 | 525 |
| King . . . . . . - | 2,022 | 960 | 6,438 | 2,694 | - | - | 8,460 | 3,654 |
| Spanish. . . . . . | 7,756 | 1,650 | 4,265 | 909 | - | - | 12,021 | 2,559 |

See footnotes at end of table.
(Continued on next page)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES, AND CAUGHT IN INLERNATIONAL WATERS, 1977 (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: | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Menhaden: |  |  |  |  |  |  |  |  |
| Atlantic | 780,566 | 28,182 | 29,075 | 792 | - | - | 809,641 | 28,974 |
| Gulf . | 950,565 | 37.847 | 35,909 | 1,308 | - | - | 986,474 | 39,155 |
| Total | 1,731,131 | 66,029 | 64,984 | 2,100 | - | - | 1,796,115 | 68,129 |
| Mullet | 21,674 | 3,966 | 208 | 43 | 2 | 1 | 21,884 | 4,010 |
| Ocean perch: |  |  |  |  |  |  |  |  |
| Atlantic . | 23 | 2 | 28,666 | 4,365 | 6,339 | 988 | 35,028 | 5,355 |
| Pacific. | 37 | 5 | 3,978 | 537 | 1,680 | 239 | 5,695 | 781 |
| Pollock: |  |  |  |  |  |  |  |  |
| Atlantic | 1,087 | 122 | 26,978 | 3,829 | 707 | 129 | 28,772 | 4,080 |
| Alaska . | 503 | 26 | 97 | 24 | 112 | 7 | 712 | 57 |
| Rockfishes | 3,630 | 625 | 33,224 | 5,883 | 6,658 | 954 | 43,512 | 7,462 |
| Sablefish. . . . . | 5,775 | 1,599 | 19,370 | 3,090 | 231 | 58 | 25,376 | 4,747 |
| Salmon, Pacific: |  |  |  |  |  |  |  |  |
| Chinook or king. | 24,309 | 28,628 | 8,367 | 16,333 | - | - | 32,676 | 44,961 |
| Chum or keta. . | 57,398 | 24,103 |  | - | - | - | 57,398 | 24,103 |
| Pink . . . . . | 125,644 | 50,790 | - | - | - | - | 125,644 | 50,790 |
| Red or sockeye | 89,932 | 69,808 | - | - | - | - | 89,932 | 69,808 |
| Silver or coho. | 21,650 | 20,644 | 8,291 | 11,486 | 51 | 71 | 29,992 | 32,201 |
| Total . . | 318,933 | 193,973 | 16,658 | 27,819 | 51 | 71 | 335,642 | 221,863 |
| Scup or porgy. . . . | 9,157 | 1.796 | 9,955 | 2,023 | - | - | 19,112 | 3,819 |
| Sea bass: |  |  |  |  |  |  |  |  |
| Black. . | 438 | 213 | 5,423 | 1,813 | - | - | 5,861 | 2,026 |
| White. . | 176 | 150 | 65 | 55 | 723 | 615 | 964 | 820 |
| Sea trout: |  |  |  |  |  |  |  |  |
| Gray . . . . . . | 13,417 | 2,155 | 5,278 | 713 | - | - | 18,695 | 2,868 |
| Spotted. . . . . | 3,633 | 1,738 | . 61 | 31 | - | - | 3,694 | I,769 |
| White. - | 273 | 51 | 494 | 65 | - | - | 767 | 116 |
| Sharks: |  |  |  |  |  |  |  |  |
| Dogfish. | 4,901 | 363 | 1,979 | 111 | 48 | 3 | 6,928 | 477 |
| Other. . | 505 | 78 | 684 | 98 | 73 | 13 | 1,262 | 189 |
| Snapper: |  |  |  |  |  |  |  |  |
| Red. | 197 | 275 | 5,748 | 6,411 | 466 | 381 | 6,411 | 7,067 |
| Other. . . . | 314 | 207 | 1,303 | 954 | 160 | 128 | 1,777 | 1,289 |
| Striped bass . . . . | 4,995 | 3,356 | 145 | 104 | - |  | 5,140 | 3,460 |

See footnotes at end of table.

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT
OFF U.S. SHORES, AND CAJGHT IN INTERNATIONAL WATERS, 1977 (1) - Continued


COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES, AND CAJGHT IN INIERNATIONAL WATERS, 1977 (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 et al. - | Thousand | Thousand | Thousand | Thousand | Thousand | Thousand | Thousand | Thousand |
| continued: | pounds | dollars | pounds | dollars | pounds | dollars | pounds | dollars |
| Lobsters: |  |  |  |  |  |  |  |  |
| American | 25,066 | 44,553 | 6,642 | 13,162 | - | - | 31,708 | 57,715 |
| Spiny. . | 1,279 | 2,433 | 3,079 | 5,217 | 1,125 | 1,957 | 5,483 | 9,607 |
| Oysters. . | 46,026 | 52,537 | - | - | - | - | 46,026 | 52,537 |
| Scallops: |  |  |  |  |  |  |  |  |
| Bay. | 1,703 | 4,426 | - | - | - | - | 1,703 | 4,426 |
| Calico . . . . | - | - | 1,111 | 1,026 | - | - | 1,111 | 1,026 |
| Sea. | 485 | 909 | 24;527 | 39,675 | - | - | 25,012 | 40,584 |
| Shrimp: |  |  |  |  |  |  |  |  |
| New England. . | 58 | 31 | 782 | 428 | - | - | 840 | 459 |
| South Atlantic. | 15,092 | 21,391 | 2,905 | 3,461 | - | - | 17,997 | 24,852 |
| Gulf (4) . . . . | 99,935 | 96,093 | 161,053 | 194,395 | 20,275 | 33,177 | 281,263 | 323,665 |
| Pacific Coast. | 122,662 | 17,660 | 69,243 | 15,371 | - | - | 191,905 | 33,031 |
| Other. . . . | $9^{9}$ | 31 | - | - | - | - | 9 | 31 |
| Total | 237,756 | 135,206 | 233,983 | 213,655 | 20,275 | 33,177 | 492,014 | 382,038 |
| Squid: |  |  |  |  |  |  |  |  |
| Atlantic | 1,828 | 652 | 3,632 | 773 | 9 | 1 | 5,469 | 1,426 |
| Pacific. | 18,439 | 645 | 971 | 34 | - | - | 19,410 | 679 |
| Other. . | 28,503 | 8,549 | 241 | 116 | - | - | 28,744 | 8,665 |
| fish et al. . | 622,059 | 377,171 | 507,911 | 423,187 | 21,409 | 35,135 | 1,151,379 | 835,493 |
| Grand total | 3,283,895 | 740,671 | 1,555,642 | 641,259 | 497,719 | 205,926 | 5,337,256 | 1,587,856 |

(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) Includes all landings in Great Lakes and other inland waters. (3) Less than $\$ 500$. (4) Includes shrimp landed at Gulf Coast and foreign ports.

Note:--Data are preliminary. Data include landings by U.S. flag vessels at Puerto Rico and other ports outside the 50 States -- therefore will not agree with tables or data entitled "U.S. Commercial Landings." Data do not include production of artificially cultivated fish and shellfish.

ALL FOREIGN COUNTRIES: CATCH IN U.S. FISHERY CONSERVATION ZONE (FCZ), BY COUNTRY AND.AREA, 1977

| Country and area | $\qquad$ | $\begin{aligned} & \text { Midale } \\ & \text { Atlantic } \\ & \text { (2) } \end{aligned}$ | Total <br> Atlantic | California Oregon, and Washington | Gulf of Alaska (3) | Bering Sea and Aleutian Islands | Total Alaska | Hawaii and Pacific Islands | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North America: |  |  |  |  |  |  |  |  |  |
| Canada. . | 25,100 | 94 | 25,194 | 921 | 4,812 | 221 | 5,033 | - | 31,148 |
| Cuba. | - | 1,573 | 1,573 | - | - | - | - | - | 1,573 |
| Europe: |  |  |  |  |  |  |  |  |  |
| Bulgaria. . | 1,033 | 3,715 | 4,748 | - | - | - | - | - | 4,748 |
| German Denocratic |  |  |  |  |  |  |  |  |  |
| Republic | 2 | 8,056 | 8,058 | - | - | - | - | - | 8,058 |
| Italy . . | . - | 5,356 | 5,356 | - | - | - | - | - | 5,356 |
| Poland. . | 38 | 19,916 | 19,954 | 18,910 | 1,465 | - | 1,465 | - | 40,329 |
| Romania . | - | 900 | 900 | - | - | - | - | - | 900 |
| Spain . | 692 | 13,897 | 14,589 | - | - . | - | - | - | 14,589 |
| U.S.S.R. . | 40,774 | 50,548 | 91,322 | 114,202 | 65,185 | 112,041 | 177,226 | 22 | 382,772 |
| Asia: |  |  |  |  |  |  |  |  |  |
| Japan . | 716 | 14,242 | 14,958 | - | 100,836 | 1,012,499 | 1,113,335 | - | 1,128,293 |
| Korea, Republic of. | - | - | - | - | 38,314 | .41,843 | 80,157 | - | 80,157 |
| China, Republic of (Taiwan) . . . . . | - | - | - | - | - | 1,502 | 1,502 | - | 1,502 |
| Grand total | 68,355 | 118,297 | 186,652 | 134,033 | 210,612 | 1,168,106 | 1,378,718 | 22 | 1,699,425 |

(1) FCZ from long. $70^{\circ} \mathrm{W}$ (Cape Cod) to the north and east. Includes catch from March-December 1977 as defined in 1977 regulations as Hake B, Herring 1, and Squid 5.
(2) FCZ fram Virginia Capes north and east to long. 70 w (Cape Cod). Includes fishing areas of the northwest Atlantic as defined in 1977 regulations Mackerel 1, Hake A, and Squid 1-4. Data include all foreign catches for January and February 1977.
(3) FCZ from Alaska-Canada boundary westwand to long. $170^{\circ} \mathrm{w}$.

Note:--Excludes tunas.
Source:--See tables that follow.

ALL FOREIGN COUNTRIES: CATCH IN U.S. FISHERY CONSERVATION ZONE (FCZ), BY SPECIES AND AREA, 1977


# U.S. FISHERY CONSERVATION ZONE FOREIGN CATCH 

NORTH ATLANTIC: ALLOCATIONS AND FOREIGN CATCH<br>(EXCLUDING CANADA), BY COUNTRY AND SPECIES, 1977<br>(Preliminary)

| Country and Species | Allocation | Catch |
| :---: | :---: | :---: |
| Bulgaria: - - - - - Metric tons- - - |  |  |
| Hake, red. . | Incidental | 22 |
| Hake, silver (whiting) | 1,570 | 1,052 |
| Herring, sea . . . . | 100 | 1 |
| Mackerel, Atlantic | 4,000 | 3,112 |
| Other finfish. . . . | 2,000 | 514 |
| Squid, short-finned. | 400 | 47 |
| Total | 8,070 | 4,748 |
| Cuba: |  |  |
| Butterfish . | Incidental | 111 |
| Hake, red. . . . . | 2,680 | 38 |
| Hake, silver (whiting) | 8,745 | 269 |
| Herring, sea . . . . . | 700 | 199 |
| Mackerel, Atlantic . | 2,000 | 683 |
| Other finfish. . . . | 2,500 | 241 |
| Squid, short-finned. | Incidental | 4 |
| Squid, long-finned | 1,094 | 28 |
| Total . | 17,719 | 1,573 |
| Mexico: |  |  |
| Squid, short-finned. | 100 | - |
| Squid, long-finned | 1,000 | - |
| Total . | 1,100 | - |
| European Economic Community: |  |  |
| Germany, Federal Republic of : |  |  |
| Herring, sea . . . | 4,725 | - |
| Mackerel, Atlantic | 1,100 | - |
| Other finfish. . . | 200 | - |
| Squid, long-finned | 500 | - |
| Total . . . . . . | 6,525 | - |
| France: |  |  |
| Herring, sea . | 1,000 | - |
| Other finfish. | 200 | - |
| Total | 1,200 | $\checkmark$ |
| Italy: |  |  |
| Butterfish . | 400 | 102 |
| Hake, red. . . . . . | Incidental | 4 |
| Hake, silver (whiting) | Incidental | 48 |
| Mackerel, Atlantic | 300 | 384 |
| Other finfish. . . . | 900 | 644 |
| Squid, short-finned. | 1,703 | 1,947 |
| Squid, long-finned | 3,570 | 2,227 |
| Total • - . . - | 6,873 | 5,356 |
| German Democratic Republic: |  |  |
| Herring, sea . - | 4,825 | - |
| Mackerel, Atlantic | 12,400 | 7,981 |
| Other finfish. | 3,000 | 77 |
| Total . | 20,225 | 8,058 |

 (Preliminary)


WASHINGTON, OREGON, CALIFORNIA, AND WESTERN PACIFIC: ALLOCATION AND FOREIGN CATCH (EXCLUDING CANADA), BY COUNTRY AND SPECIES, 1977 (Preliminary)

| Country and species | Allocation | Catch |
| :---: | :---: | :---: |
| Japan, seamount groundfish, |  |  |
| total. . . . . . . . . . . | 1,000 | - |
| Poland: |  |  |
| Flounders, other. | Incidental | 1 |
| Hake, Pacific | 18,000 | 18,212 |
| Jack mackerel | 2,000 | 365 |
| Rockfishes. | Incidental | 290 |
| Sablefish . | Incidental | 7 |
| Other finfish | Incidental | 35 |
| Total. | 20,000 | 18,910 |
| U.S.S.R.: |  |  |
| Flounders, other. | Incidental | 11 |
| Hake, Pacific | 105,200 | 110,691 |
| Jack mackerel | 2,000 | 2,432 |
| Rockfishes. | Incidental | 520 |
| Sablefish . . . . | Incidental | 262 |
| Seamount groundfish | 1,000 | 22 |
| Other finfish . . . | Incidental | 286 |
| Total. . - | 108,200 | 114,224 |
| Grand total. . | 129,200 | 133,134 |

## U.S. FISHERY CONSERVATION ZONE

## FOREIGN CATCH



FOREIGN CATCH
BERING SEA AND ALEUTIAN ISLANDS: ALLOCATION AND FOREIGN CATCH (EXCLUDING CANADA), BY COUNTRY AND BY SPECIES, 1977
(Preliminary)

| Country and species | Allocation | Catch |
| :---: | :---: | :---: |
|  |  | S--- |
| Japan: |  |  |
| Cod, Pacific. | 38,100 | 36,188 |
| Flounders (including yellowfin |  |  |
| sole). . . . . . . . . . . | 123,600 | 115,442 |
| Herring, sea. | 5,800 | 5,592 |
| Ocean perch, Pacific. | 9,300 | (1)7,250 |
| Pollock, Alaska . - | 792,300 | 782,419 |
| Sablefish . . . . | 5,600 | 4,491 |
| Other finfish. | 63,500 | 39,926 |
| Crabs, snow (tanner). | 12,500 | (2) 12,471 |
| Snails. . . . . | 2,70.0 | 404 |
| Squid . - . | 10,000 | 8,316 |
| Total. | 1,063,400 | 1,012,499 |
| Republic of China (Taiwan): |  |  |
| Pollock, Alaska . . . | 5,000 | 1,346 |
| Sablefish . . | 200 | 53 |
| Other finfish | 310 | 103 |
| Total. | 5,510 | 1,502 |
| Republic of Korea: |  |  |
| Pollock, Alaska | 40,000 | 39,785 |
| Sablefish. - | 600 | 90 |
| Other finfish | 2,490 | 1,968 |
| Total. | 43,090 | 41,843 |
| U.S.S.R.: |  |  |
| Cod, Pacific. . . . | 17,200 | 278 |
| Flounder, yellowfin sole. | 40,800 | 284 |
| Flounders, other. . . . . | 40,400 | 6,211 |
| Herring, sea. . | 13,600 | 13,144 |
| Ocean perch, Pacific. | 11,600 | (1) 876 |
| Pollock, Alaska . . | 112,700 | 65,002 |
| Sablefish . . . | 800 | - |
| Other finfish | 27,300 | 26,246 |
| Total. . | 264,400 | 112,041 |
| Grand total. | 1,376,400 | 1,167,885 |

(1) Includes other rockfishes.
(2) Includes 4,637 tons of C. bairdi and 7,834 tons of C . opilio. Species composition received from mothership fleets only. The hybrid tanner was divided $50 / 50$ between C. bairdi and C. opilio. All of independent fleet catch included with C. opilio.

Source:--Allocation: 42 FR 12176, March 3, 1977; 42 FR 18607, April 8, 1977.

CANADA: RECIPROCAL FISHERY PRIVILEGES, ALLOCATIONS, AND IANDINGS OF CATCH FROM U.S. FISHERIES CONSERVATION ZONE, BY AREA AND SPECIES, 1977

| Area and species | Reciprocal Fishing Privileges, (RFP) or Allocations | Landings |
| :---: | :---: | :---: |
| Atlantic: |  |  |
|  |  |  |
| Butterfish. . | 100 | - |
| Cod, Atlantic . | 3,430 | 6,118 |
| Flounder, yellowtail. | 90 | 38 |
| Flounders, other. | 200 | 109 |
| Haddock . . | 1,260 | 2,881 |
| Hake, red . . | 2,000 | - |
| Hake, silver (whiting). | 2,500 | - |
| Herring, Atlantic . | 1,990 | 90 |
| Mackerel, Atlantic. . . . . . . | 5,000 | 3 |
| Ocean perch, Atlantic (redfish) | 90 | 204 |
| Other finfish . . . . . | 2,500 | 438 |
| Pollock . . . . | (1) | 3,321 |
| Lobster, American | RFP | 195 |
| Scallops, sea . - | RFP | 11,795 |
| Squid, short-finned | 1,000 | 2 |
| Squid, long-finned. | 2,000 | , |
| Total. - | 22,160 | 25,194 |
| Washington, Oregon, and |  |  |
| California: |  |  |
| Rockfishes. | (2) | 18 |
| Sablefish . . | RFP | (3) |
| Salmon (troll). | RFP | 880 |
| Other fish. . . | RFP | 23 |
| Total. - | - | 921 |
| Gulf of Alaska: |  |  |
| Cod, Pacific. . . . | RFP | (3) |
| Flounders, Pacific, other | RFP | 2 |
| Halibut . . . | (4) | 4,797 |
| Rockfishes. . . | RFP | 2 |
| Salmon (troll). | RFP | 2 |
| Other fish. . . | RFP | 9 |
| Total. . | - | 4,812 |
| Bering, Sea and Aleutian Islands, |  |  |
| halibut, total . . . . . . . | (4) | 221 |
| Total, all areas. . . . . . . . . | 22,160 | 31,148 |

(1) Quota was an amount undivided of 20,975 tons set by the International commission for the Northwest Atlantic Fisheries (ICNAF) for Subareas 4VWX (Canadian waters) and Subarea 5 (U.S. waters) (2) Quota was an amount undivided between the U.S. and Canada for Pacific Marine Fisheries Commission Groundfish Statistical Areas 3C and 3D. (3) Less than 500 kilos. (4) Quota was an amount undivided between the U.S. and Canada determined by the International Pacific Halibut Comnission (IPHC).

Source:--Atlantic allocations:--Day, L.R., 1977. The 1977 Total Allowable Catches (TAC's) and national allocations for the Convention Area and Statistical Areas 0 and 6. International Commission for the Northwest Atlantic Fisheries (ICNAF). Circular letter 77/9 of January 27, 1977.

Pacific allocations:--Shown in footnotes above.
Note:--Excludes tunas.

The Fishery Conservation and Management Act of 1976 makes it mandatory to collect catch statistics and obtain relevant economic, social, and ecological information on marine recreational fisheries. Most species of finfish, such as cod, mackerels, salmon, seatrouts, and striped bass, are now harvested by both recreational and commercial fishermen in inshore, estuarine, and open-ocean areas. Recent data indicate that recreational fishermen now catch nearly one-half of the total edible finfish harvest. The Fishery Conservation and Management Act of 1976 authorizes the preparation of Fishery Management Plans to regulate the harvest of marine species of finfish and shellfish. Fishery Manc.gement Plans exist for several species including Atlaitic cod and Pacific salmon. Many other species of recreational interest, including black sea bass, king and Spanish mackerel, scup, snappers and groupers will be put under Fishery Management Plans in the next few years. Information on the quantities taken, effort expended, and seasonal and geographical distribution of the recreational catch of these species is required to develop these management plans. Accurate annual catch statistics, coupled with other studies, will facilitate management planning for optimum yield of fishery resources.

In 1960, 1965, and 1970, NMFS conducted salt-water angling surveys through the Bureau of the Census as supplements to the national surveys of fishing and hunting. Page 21 . summarizes data on participation and expenditures for marine recreational fishing and the catch of finfish from these surveys; pages 22 and 23 show the recreational catches of finfish by species for 1970 . However, the catch data from the Salt-Water Angling Surveys are less than adequate, because precise information on the areas of capture necessary for effective stock assessment programs was not provided, recreational catches of shellfish were not included, and the 1 -year recall period introduced memory bias errors. In addition, for effective management of fisheries, data collected every 5 years are inadequate.

In 1974, a regional survey was conducted in the Northeastern Coastal United States. In 1975, a second regional survey included the South Atlantic and Gulf States. The data collection approach involved a multistage sampling plan. The target population of recreational fishing
households was considered as a subset of the households with telephones. A stratified (by population and distance from shore) random sample of households was telephoned to identify households containing marine recreational fishermen and to obtain data on participation. A sample of the identified recreational fishing households was mailed a detailed questionnaire each 2 months, and a telephone followup of nonrespondents was conducted. Pages 24-26 show the results of these regional surveys, including participation and expenditures by State of residence and catches of finfish and shellfish. These regional surveys were not entirely satisfactory; several areas of weakness in the procedure were evident, indicating the need for an improved methodological approach.
A methodology study began in August 1976, under contract with a private firm. A literature search was conducted, questionnaires were developed and tested in the field, then a telephone-screening process was carried out to identify a sampling frame. Several data collection approaches were compared on the Pacific Coast, and one was chosen as most cost-effective. This approach was also tested on the Atlantic and Gulf Coasts. The methodology studies were completed in December 1977. An optimal survey approach was recommended which includes a combined telephone and onsite intercept survey-a random digit telephone survey to obtain participation and effort data, and an intercept (creel) survey to obtain the distribution of the total catch at the species level.

NMFS is now launching a new marine recreational fisheries survey using the new methodology. The combination telephone and intercept survey approach will be used to collect data by State for 10 specified geographical areas of the United States. The survey will obtain detailed data on participation, catches of finfish, and catches of selected species of shellfish. This survey, the first in a series of planned annual surveys of the marine recreational fishery, is scheduled to begin (under contract) June 1, 1978, and continue for a 12 -month period.

Several publications on marine recreational fishery statistics are available as indicated in the Publications Section.

U.S. MARINE RECREATIONAL CATCH OF FINFISH: ESTIMATED WEIGHT(1) by SPECIES AND bY REGION, 1970

| Species | Region(2) |  |  |  |  |  |  | $\begin{aligned} & \text { All } \\ & \text { regions } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | North Atlantic | Middle <br> Atlantic | South Atlantic | East Gulf of Mexico | West Gulf of Mexico | South Pacific | $\begin{gathered} \text { North } \\ \text { Pacific } \end{gathered}$ |  |
|  | - - - - - - - - - - - - - - - Thousand pounds |  |  |  |  |  |  |  |
| Barracudas |  |  |  |  |  |  |  |  |
| Basses, black sea. . . . . . | 615 | 6,710 | 12,381 | 1,762 |  | - | - | 21,492 |
| Basses, Pacific. . | - 717 |  | - | - 551 |  | 18,917 | - | $\begin{aligned} & 18,917 \\ & 15,118 \end{aligned}$ |
| Billfishes . . . |  |  | $\begin{aligned} & 12,489 \\ & 19,271 \end{aligned}$ |  | - | 1,361 | - |  |
| Bluefish . | $50,161$ | 717 49,720 |  | 351 | 1,30837 |  | - | 120,811 |
| Bonitos. . . . | 282 |  | 2,295 | 2,955 |  | 15,659 | - | 21,228 |
| California corbina . . . . . | - - |  | - | - | $17,800$ | 7,450 |  | $\begin{array}{r} 7,450 \\ 72,510 \end{array}$ |
| Catfishes. . | 6,151 |  | 16,570 | 31,989 |  |  | - |  |
| Cods . . | $35,688$ | 230 | $5,947$ | $48,051$ | 14,743 | - | 990610 | $\begin{aligned} & 72,510 \\ & 36,908 \end{aligned}$ |
| Croakers |  | 3,831 |  |  |  | 2,254 |  | 75,436 |
| Dolphins . | 419 |  | 27,806 | 2,133 | - |  | 610 | $\begin{aligned} & 30,358 \\ & 42,677 \end{aligned}$ |
| Drum, black. . . | 1,45483 |  | 12,123 | $\begin{aligned} & 16,096 \\ & 27,525 \end{aligned}$ | $\begin{aligned} & 13,004 \\ & 25,520 \end{aligned}$ |  | - |  |
| Drum, red. . . . |  |  | 13,358122 |  |  | - | - | $66,486$ |
| Eel, American. . . | 3,166 740 |  |  | $\begin{array}{r} 27,525 \\ 76 \end{array}$ | $\begin{array}{r} 25,520 \\ 19 \end{array}$ | $1,113$ | , | 4,123 |
| Flatfishes, Pacific. . . . . | , |  | -8,938 | $8,042$ | . ${ }^{-}, 985$ |  | 3,058 | 4,171 |
| Flounders, summer. . |  |  |  |  |  |  |  |  |
| Flounder, winter (blackback) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Groupers . . . . . . . . . . | 24,684 12,881 |  | $\begin{aligned} & 24,121 \\ & 25,962 \end{aligned}$ | $\begin{array}{r} 15,934 \\ 7,114 \end{array}$ | 9224,316 | - | - | 40,977 |
| Grunts . | - - |  |  |  |  | - | - | 37,392 |
| Haddock. . | 2,528 - |  | 25,962 | - | - | - | - | 2,528 |
| Hake, red. . . . . . . . . . . | $659 \quad \begin{array}{r}904 \\ 1,436\end{array}$ |  |  | $\cdots$ | - | - | - | 904 |
| Hake, silver (whiting) . . . . |  |  | - | - | - | $9,243$ | -173 | $\begin{aligned} & 2,095 \\ & 9,416 \end{aligned}$ |
| Halibut, California. . | 659 1,436 |  | - | - | " |  |  |  |
| Halibut, Pacific. . | - - |  | $33,149$ | - | 1 | - | 2,815 | 2,815 |
| Jacks. . . . . | - - |  |  | $3,369$ | 1,223 | - 887 | - 337 | $\begin{array}{r} 37,741 \\ 1,224 \end{array}$ |
| Jack mackerel. | 3,457 2,402 |  | - |  | 3,107 |  |  |  |
| Kingfishes . . . |  |  | 14,533 | $12,678$ |  | - | - | 36,177 |
| Mackerels, Atlantic. | 41,482 29,250 - - - - - 70,732 <br> - 225 34,942 24,481 2,978 - - 62,626 |  |  |  |  |  |  |  |
| Mackerel, king . . . . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mackerel, Pacific. . . . . |  |  | - | $\begin{aligned} & 7,200 \\ & 1,845 \end{aligned}$ | $2,978$ | 530 | - | 53023,377 |
| Mackerels, Spanish . . . . | 946 |  | 14,623 |  | 608 | - | - |  |
| Mullets. . . . . . | - - |  | $\begin{aligned} & 341 \\ & 226 \end{aligned}$ |  |  | - | - | 2,281. |
| Perches. . | 32 12,592 |  |  | 1,809 | 584 | - | - | $\begin{array}{r} 14,243 \\ 5,584 \end{array}$ |
| Pollock. | 5,584 | - | - | $21,320$ | 5,675 | - | - |  |
| Porgies. | 2,296 | 2,127 | $\begin{array}{r} 24,059 \\ 4,440 \end{array}$ |  |  | - | - | 55,477 |
| Puffers . . | 7,899 | 16,568 |  | $\begin{array}{r} 21,320 \\ 99 \end{array}$ | 8 | - | - | 29,014 |
| Rockfishes . . . | - | - | - | - | - | 6,519 | 7,238 | 13,757 |
| Salmon, chinook. | - | - | - | - | - | , | 15,171 | 15,171 |
| Salmon, coho . . | - | - | - | - | - | - | 14,356 | 14,356 |
| Salmon, pink . . . . . . . . | - | - | - | - | - | - | 1,188 | 1,188 |
| See footnotes at end of table. |  |  | tinued on | t page) |  |  |  |  |

U.S. MARINE RECREATIONAL CATGH OF FINFISH: ESTTMATED WEIGHT(1)BY SPECIES AND BY REGION, 1970 - continued

| Species | Region(2) |  |  |  |  |  |  | $\begin{aligned} & \text { All } \\ & \text { regions } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { North } \\ & \text { Atlantic } \end{aligned}$ | Middle Atlantic | South Atlantic | East Gulf of Mexico | West Gulf of Mexico | South <br> Pacific | $\begin{aligned} & \text { North } \\ & \text { Pacific } \end{aligned}$ |  |
|  | - - - - - - - - - - - Thousand pounds - - - - - - - - - - - - - - - |  |  |  |  |  |  |  |
| Sea bass, white. . . . . . . | - | - | - | - | - | 1,009 | 7 | 1,016 |
| Sea robins . | 2,343 | 6,741 | 4 | 10 | 1 | - | - | 9,099 |
| Sea trout, gray (weakfish) . . | 1,645 | 14,039 | - | - | - | - | - | 15,684 |
| Sea trout, sand (white). . . . | - | - | 23 | 21,124 | 9,345 | - | - | 30,492 |
| Sea trout, spotted . . . . . . | - | - ${ }^{-680}$ | 25,040 | 40,869 | 40,487 | - | - | 106,396 |
| Sharks . . . | 5,263 | 1,680 | 883 | 14,452 | 1,221 | 1,205 | 662 | 25,366 |
| Snapper, red . . . . | - | - | 5,682 | 11,360 | 278 | - | - | 17,320 |
| Snapper, yellowtail. | - | - | 20,163 | 814 | - | - | - | 20,977 |
| Snappers, other. . . | - | - | 735 | 90 | 2,554 | - | - | 3,379 |
| Snook. . . . . . . . . . . . | - | - | 17,957 | 3,487 | - | - | - | 21,444 |
| Spot . . . . . | - | 21,573 | 9,840 | - | - | - | - | 31,413 |
| Steelhead trout . . . . . . | - | - | - | $\cdots$ | - | - | 4,441 | 4,441 |
| Striped bass | 45,844 | 27,262 | 189 | - | - | - | 10,488 | 83,783 |
| Surfperches . . . . . . . . . | - |  | - | - | - | 5,092 | 2,738 | 7,830 |
| Tautog . | 15,629 | 1,619 | - | - | - | - | - | 17,248 |
| Tunas. . . . . | 3,711 | 886 | 5,943 | 827 | - | 7,346. | 660 | 19,373 |
| Wahoo. . . . | - | 3,985 | 1,571 | - | - | - | - | 5,556 |
| Yellowtail, California . | - | - | - | - | - | 5,629 | - | 5,629 |
| Other fish. | 3,154 | 11,072 | 4,441 | 6,595 | 2,766 | 4,496 | 1.4,298 | 46,822 |
| Total. . | 267,451 | 246,267 | 403,913 | 334,120 | 151,608 | 94,234 | 79,230 | 1,576,823 |

(1) Weight of fish caught, but not necessarily brought ashore, by recreational marine fishermen. These weight estimates contain errors due to both sampling and nonsampling sources. Data do not include crustaceans, mollusks, and other invertebrates. In some coastal areas, recreational marine fishermen harvest significant quantities of these animals.
(2) The regions are defined as follows:

North Atlantic
South Atlantic
East Gulf of Mexico
West Gulf of Mexico
South Pacific
South Pacific
North Pacific
Atlantic coast from Maine to and including New York
Atlantic coast from New Jersey to Cape Hatteras, N.C.
Atlantic coast from Cape Hatteras, N.C., to southern Florida including the Florida Keys
Gulf coast from the Florida Keys to and including the Mississippi River delta
Gulf coast from the Mississippi River delta to the Mexican border
Pacific coast from the Mexican border to Point Conception, Calif.
Pacific coast from Point Conception, Calif., north to Washington and including Alaska
Note:-Excludes catch by persons less than 12 years old, and excludes catch by persons fishing during parts of less than 3 days in 1970 . Also excludes those who spent less than $\$ 7.50$ on fishing in 1970.
Source:--Deuel, David G., 1970 Salt-Water Angling. Survey. U.S. Department of Gomerce, National Marine Fisheries Service, Gurrent Fishery Statistics No. 6200, 1973, 54 pp.

## U.S. MARINE RECREATIONAL FISHERIES

> HORTHEASTERH U.S. (MAINE THROUGH VIRGIMIA) MARIHE RECREATIONAL FISHERY: ESTIMATED WUIEER OF PARTICIPANTS AIID EXPEMDITURES, BY STATE OF RESIDENCE: HID-JUHE 1973 TO MID-JUHE 1974

| State of residence | Fishing louseholds (1) | Participants (1) | Expenditures |
| :---: | :---: | :---: | :---: |
|  | - - - - - -Thous | ands. - - - - - | Thousand |
| laine. . . . . . . . . . . | 79 | 187 | 4,844 |
| Hew Hanpshire. . . . . . . . | 55 | 116 | 3,471 |
| Vermont. . . . . . . . . . | 15 | 33 | +780 |
| llassachusetts. . . . | 520 | 1,187 | 34,307 |
| Rhode Island . . . . | 115 | 265 | 7,232 |
| Connecticut. | 305 | 655 | 18,584 |
| New York . . . | 1,153 | 2,532 | 91,211 |
| l'ew Jersey . . . . . . . . . | 701 | 1,473 | 99,022 |
| Delaware . . . . . . . . . | 62 | 138 | 6,689 |
| Pennsylvania . . . | 498 | 1,053 | 39,811 |
| West Virginia. . . | 72 | 152 | 2,680 |
| District of Colunbia . . . . | 46 | 93 | 5,061 |
| laryland . . . . . . . . . . | 389 | 852 | 47,043 |
| Virginia . . . . . . . . . | 388 | 839 | 17,380 |
| Total. . . . . . . | 4,398 | 9,575 | 378,115 |

(1) Decause of differences in methodology, the figures appearing in this table are slightly different from and supersede those shown in the Fisheries of the United States, 1976, Current Fishery Statistics No. 7200, and Participation in Marine Recreational Fishing, Northeastern Inited States, 1973-74, by John E. Ridgely, and David G. Deuel, Current Fishery Statistics No. 6236, U.S. Department of Commerce, National Harine Fisheries Service.

- Hote:-Includes persons of all ages who fished for fish or shellfish at least once during the 12 -month period. Totals shown for participants are exclusive of dupication.

Source:--Unpublished data from the Northeastern Regional Survey of Recreational fishing in Salt Water, 1973-1974, U.S. Department of Commerce, National llarine Fisheries Service.

SOUTHEASTERN U.S. (MORTH CAROLINA THROUGH TEYAS) HARINE RECREATIOMAL FISHERY: ESTIIATED HUMBER OF PARTICIPANTS AND EXPENDITURES, BY STATE OF RESIDENCE, FEBRUARY 1974 THROUGHI IARCH 1975

| State of residence | Fishing households | Participants | Expenditures (1) |
| :---: | :---: | :---: | :---: |
|  | - - - - - Tho | nds- - - - - | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| North Carolina. | 533 | 1,206 | 57,588 |
| South Carolina. | 228 | 504 | 14,817 |
| Georgia . | 303 | 683 | 21,821 |
| Florida | 1,074 | 2,379 | 114,848 |
| Alabama . . | 216 | 506 | 20,877 |
| Mississippi | 135 | 337 | 12,321 |
| Louisiana | 319 | 851 | 40,151 |
| Texas | 797 | 2,057 | 65,666 |
| Total | 3,605 | 8,523 | 348,089 | 1974-1975, U.S. Department of Commerce, National Marine Fisheries Service.

Note:--Includes persons of all ages who fished for finfish or shellfish at least once during the 12 -month period. Totals shown for participants are exclusive of duplication.

Source:--Mabrey, Ernest L., David G. Deuel, and Arthur Kirsch, Participation in Marine Recreational Fishing, Southeastern, United States, 1974, U.S: Department of Commerce, National Marine Fisheries Service, Current Fishery Statistics No. 7333, 1977, 13 pp., except as noted.

HORTHEASTERN U.S. (MAINE THROUGH VIRGIMIA) MARIIIE RECREATIONAL FISHERY: ESTIMATED CATCH OF FINFISII AND SHELLFISH, BY STATE OF LAMDING, 1974

| State | Finfish (1) | Shellfish (2) |
| :---: | :---: | :---: |
|  | $\cdots-\cdots-\cdots$ |  |
| Maine | 6,942 | 3,744 |
| Hew Hampshire | 1,423 | 1,474 |
| Massachusetts | 30,992 | 23,732 |
| Rhode Isl and. | 18,725 | 5,726 |
| Connecticut | 31,191 | 2,379 |
| New York. - | 101,256 | 23,061 |
| Hew Jersey. | 92,777 | 12,344 |
| Delaware. | 6,378 | 4,001 |
| Maryland. . | 49,835 | 8,392 |
| Virginia. . | 17,609 | 4,285 |
| Total . | 357,128 | 89,138 |

(1) Quantities of fish are in terms of round (live) weight of fish caught, but not necessarily brought ashore. (2) Shellfish are in terms of live weight including shells.

Source:--Unpublished data from the flortheastern Regional Survey of Recreational Fishing in Salt Kater, 1973-1974, U.S. Department of Commerce, National Marine Fisheries Service.

SOUTHEASTERH U.S. (MORTH CAROLIHA THROUGH TEXAS) IARIME RECREATIONAL FISHERY: estimated catch of finfish and shellfish, by state of landing, 1975

| State | Finfish (1) | Shellfish (2) |
| :---: | :---: | :---: |
|  | $\ldots$-.......... |  |
| North Carolina. | 26,753 | 7,641 |
| South Carolina. | 17,793 | 6,441 |
| Georgia . . . . . . | 9,601 | 1,165 |
| Florida East Coast. | 66,457 | 32,047 |
| Florida Hest Coast. | 97,778 | 26,557 |
| Alabama . . . . | 10,756 | 1,039 |
| ;lississippi . | 9,883 | 1,447 |
| Louisiana. | 61,541 | 17,409 |
| Texas . . | 51,936 | 9,725 |
| Total . | 352,498 | 103,471 |

(1) Quantities of fish are in terms of round (live) weight of fish caught, but not necessarily brought ashore. (2) Shellfish are in terms of live weight including shells.

Source:--Unpublished data from the Southeastern Regional Survey of Recreational Fishing in Salt Water, 1974-1975. U.S. Department of Commerce, National Farine Fisheries Service.

NORTHEASTERN U.S. (MAINE THROUGH VIRGINIA) MARIHE RECREATIONAL FISHERY: ESTIMATED CATCH OF FINFISH AND SHELLFISH, BY SPECIES GROUP, 1974

| Species group | Quantity (1) | Species group | Quantity (1) |
| :---: | :---: | :---: | :---: |
| Finfish | Thousand pounds | Finfish - continued | Thousand pounds |
| Bass, black sea. | 3,535 | Tautog. | 10,803 |
| Bluefish . . . | 127,763 | Other | 24,001 |
| Cod, Atlantic. | 27,266 2,272 | Total |  |
| Eel, American. . . | 2,220 | Total | 357,128 |
| Flounders, summer. | 34,900 | Shellfish |  |
| Flounder, winter ${ }^{\text {lackerels, }}$ Atlantic | 18,884 |  |  |
| laackerels, Atlantic. Perches. | 16,846 | Clams, hardshell. | 38,547 |
| Perches. - | 7,821 | Clams, softshell. | 7,396 |
| Pollock. | 1,094 | Crabs . | 28,570 |
| Scup Searobins | 6,121 | Lobsters. | 5,286 |
| Searobins. | 3,235 | Mussels | 5,872 |
| Seatrout | 20,148 | Other (2) | 3,467 |
| Sharks . . . | 6,374 |  |  |
| Spot . . . . . . . . . . | 4,025 39 | Total | 89,138 |

(1) Quantities of fish are in terms of round (live) weight of fish caught, but not necessarily brought ashore. Shellfish are in terms of live weight including shells. (2) Includes oysters, scallops, and shrimp.
Source:--Unpublished data from the Northeastern Regional Survey of Recreational Fishing in Salt Water, 1973-1974, U.S. Department of Conmerce, National Marine Fisheries Service.

SOUTHEASTERN U.S. (NORTH CAROLINA THROUGH TEXAS) MARINE RECREATIONAL FISHERY: ESTIMATED CATCH OF FINFISH AND SHELLFISH, BY SPECIES GROUP, 1975

| Species group | Quantity (1) | Species group | Quantity (1) |
| :---: | :---: | :---: | :---: |
| Finfish | Thousand pounds | Finfish - continued | Thousand pounds |
| Bluefish. | 8,557 | Snappers, other. | 17,713 |
| Catfishes | 10,019 | Snook. | 6,967 |
| Croakers. | 17,193 | Spot . | 5,933 |
| Dolphins. | 7,547 | 0ther. | 61,609 |
| Drum, black | 6,173 |  |  |
| Drum, red. | 33,503 | Total. | 352,498 |
| Flounders | 6,304 |  |  |
| Groupers. . | 26,624 11,368 | Shellfish |  |
| Mackere1, king. . | 11,942 | Clams. | 22,472 |
| Mackerels, Spanish. | 9,878 | Crabs. . | 26,483 |
| mullet. . . . . . | 6,739 | Oysters. . | 26,244 |
| Seatrout, sand. . | 9,704 | Shrimp | 23,008 |
| Seatrout, spotted | 57,474 | Other (2). | 5,264 |
| Sharks. . . - | 15,444 10,448 | Total. | 103,471 |
| Snappers, red | 11,359 | Total. . . . |  |

(1) Quantities of fish are in terms of round (live) weight of fish caught, but not necessarily brought ashore. Shellfish are in terms of live weight including shells. (2) Includes conchs, lobsters, mussels, and scallops.

Source:--Unpublished data from the Southeastern Regional Survey of Recreational Fishing in Salt Water, 1974-1975, U.S. Department of Commerce, National Marine Fisheries Service.
U.S. AND WORLD COMMERCIAL FISHERY CAICHES, 1950-76

(1) Includes diadromous (salmon and other anadromous fishes, catadromous fishes such as eels). There are 2,204.6 pounds in a metric ton.

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.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, MOLLUSKS, AND OTHER AQUATIC PLANTS AND ANIMALS (EXCEPT WHALES AND SEALS), BY COUNTRIES, 1972-76

| Country | 1972 | 1973 | 1974 | 1975 (1) | 1976 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | -------- Thousand metric tons - - - - - - - - |  |  |  |  |
|  |  |  | Live |  |  |
| Japan. . . . . . . . - | 10,272 | 10,748 | 10,805 | 10,524 | 10,620 |
| U.S.S.R. . . . . | 7,757 | 8,619 | 9,236 | 9,936 | 10,134 |
| China (Peking) . | (2) 6,880 | (2)6,880 | (2)6,880 | (2) 6,880 | (2) 6,880 |
| Peru . . . . | 4,725 | 2,328 | 4,145 | 3,447 | 4,343 |
| Norway . . . . | 3,186 | 2,987 | 2,645 | 2,550 | 3,435 |
| United States. | (3) 2,695 | (3)2,719 | (3)2,744 | (3) 2,743 | (3)3,004 |
| Korea, South | - 1,341 | 1,684 | 2,023 | 2,133 | 2,407 |
| India. . . . | 1,637 | 1,958 | 2,255 | 2,328 | 2,400 |
| Denmark. | 1,443 | 1,465 | 1,835 | 1,767 | 1,912 |
| Thailand . | 1,679 | 1,679 | 1,516 | 1,553 | 1,640 |
| Spain. - | 1,536 | 1,578 | 1,510 | 1,523 | (2) 1,483 |
| Indonesia. | 1,270 | 1,265 | 1,336 | 1,382 | 1,448 |
| Philippines. | 1,128 | 1,251 | 1,298 | 1,366 | 1,430 |
| Chile. . . | 818 | 691 | 1,158 | 929 | 1,264 |
| Canada . . | 1,169 | 1,157 | 1,037 | 1,029 | 1,136 |
| Vietnam, South | (2)978 | (2)1,014 | (2)1,014 | (2) 1,014 | (2) 1,014 |
| Iceland. . . . | 726 | 902 | 945 | (2) 995 | (2) 986 |
| Brazil . . . . . . . . . | 602 | 704 | 765 | (2) 836 | (2) 950 |
| France . | 797 | 823 | 808 | 806 | 806 |
| Korea, North | (2)800 | (2) 800 | (2) 800 | (2) 800 | (2) 800 |
| Poland . . . | 544 | 580 | 679 | 801 | 750 |
| Bangladesh . . . | (2) 640 | (2) 640 | (2) 640 | (2) 640 | (2) 640 |
| South Africa, Republic | 664 | 710 | 648 | 636 | 638 |
| Namibia (S.W., Africa) . . | (2)527 | (2) 710 | (2) 840 | (2) 761 | (2) 574 |
| Mexico . . . . . . . . | 459 | 479 | 442 | 499 | 572 |
| England and Wales. | 539 | 557 | 534 | 497 | 520 |
| Malaysia . . . . . . . | 359 | 445 | 526 | 474 | 517 |
| Scotland . . . . . . . | 530 | 562 | 538 | 468 | 514 |
| Burma. - | 453 | 463 | 434 | 485 | 502 |
| Nigeria. . . . . . . . . | 446 | 466 | 473 | 478 | 495 |
| Germany, Fed. Republic of. | 419 | 478 | 526 | 442 | 454 |
| Italy. . . . . . . . . | 430 | 399 | 431 | 417 | 420 |
| Senegal. . . . . . . . | 294 | 316 | 357 | 363 | 361 |
| Faeroe Islands . . . . . | 208 | 246 | 247 | 286 | 342 |
| Portugal . | 452 | 482 | 436 | 375 | 339 |
| Netherlands. . . . . . . | 348 | 344 | 326 | 351 | 284 |
| Argentina. | 238 | 302 | 296 | 229 | 282 |
| All others . . . . . . . | 7,132 | 7,377 | 7,172 | 7,150 | 7,171 |
| Total . . . . . . | 66,121 | 66,808 | 70,300 | 69,893 | 73,467 |

(1) Revised.
(2) Data estimated by FAO.
(3) Includes the weight of clams, oysters, scallops, and other mollusk shells. This weight is not included in other U.S. catch statistics.

Source:-Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1976, Vol. 42.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, MOLLUSKS, AND OTHER AQUATIC PLANTS AND ANIMALS (EXCEPT WHALES AND SEALS), BY CONTINENTS, 1973-76


Source:--Food and Agriculture Onganization of the United Nations (FAO), Yearbook of Fishery Statistics, 1976, Vol. 42

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, MOLLUSKS, AND OTHER AQUATIC PLANTS AND ANIMALS (EXCEPT WHALES AND SEALS), BY MAJOR FISHING AREAS, 1973-76

| Area | 1973 | 1974 | 1975 | 1976 |
| :---: | :---: | :---: | :---: | :---: |
|  | ------ Thousand metric tons - - - - - - |  |  |  |
|  | Live weight |  |  |  |
| Marine areas: |  |  |  |  |
| Pacific Ocean and adjacent areas. | 28,130 | 30,941 | 30,423 | 32,560 |
| Atlantic Ocean and adjacent areas. | 25,741 | 26,047 | 25,853 | 27,268 |
| Indian Ocean and adjacent areas. | 2,844 | 3,259 | 3,205 | 3,289 |
| Total (1). | 56,715 | 60,247 | 59,481 | 63,118 |
| Inland waters: |  |  |  |  |
| Asia. . . | 7,206 | 7,274 | 7,390 | 7,462 |
| Africa. . . | 1,432 | 1,414 | 1,461 | 1,468 |
| U.S.S.R. . . . | 850 | 773 | 944 | 770 |
| Europe. . . . . . | 258 | 265 | 282 | 291 |
| South America . . . . . . | 184 | 161 | 179 | 194 |
| North and Central America | 150 | 154 | 142 | 149 |
| Oceania . . . | 12 | 13 | 14 | 15 |
| Total (1). . | 10,093 | 10,053 | 10,412 | 10,349 |
| Grand total. | 66,808 | 70,300 | 69,893 | 73,467 |

(1) Columns may not add to totals because of rounding.

Source:-Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1976, Vol. 42

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, MOLLUSKS, AND OTHER AQUATIC PLANIS AND ANIMALS (EXCEPT WHALES AND SEALS), BY SPECIES GROUPS, 1973-76

| Species group | 1973 | 1974 | 1975 | 1976 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |

(1) Figures may not add to total because of rounding.

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1976, Vol. 42.

ESTIMATED DISPOSITION OF WORLD COMMERCIAL CATCH (EXCEPT WHALES AND SEALS), 1975 AND 1976


WORLD IMPORTS AND EXPORTS OF SEVEN FISHERY COMMODITY GROUPS, BY LEADING COUNTRIES, 1972-76

| Country | 1972 | 1973 | 1974 | 1975 | 1976 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - | - | - | - | - |

IMPORTS

| United States. | 1,262,990 | 1,392,328 | 1,518,599 | 1,381,271 | 1,890,869 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Japan. | 579,634 | 1,019,427 | 1,050,306 | 1,218,062 | 1,783,926 |
| France | 299,633 | 368,813 | 404,968 | 489,030 | 540,895 |
| Germany, Federal * 40, ${ }^{\text {a }}$ |  |  |  |  |  |
| Republic of . | 306,776 | 430,142 | 513,809 | 490,344 | 535,598 |
| United Kingdom | 336,063 | 504,998 | 446,655 | 434,354 | 511,907 |
| Italy. . . . . | 213,953 | 282,222 | 306,239 | 310,673 | 387,828 |
| Belgium. | 117,148 | 155,419 | 175,245 | 177,762 | 217,156 |
| Netherlands. | 106,827 | 135,599 | 161,741 | 172,477 | 202,395 |
| Sweden | 116,868 | 160,078 | 174,857 | 168,605 | 195,555 |
| Canada | 81,199 | 109,233 | 120,135 | 130,812 | 183,618 |
| Hong Kong. | 84,853 | 123,321 | 128,664 | 135,808 | 182,458 |
| Spain. - | 93,853 | 111,450 | 183,097 | 151,707 | 152,576 |
| Denmark. | 49,050 | 87,844 | 118,391 | 115,935 | 132,122 |
| Switzerland. | 62,017 | 91,708 | 98,319 | 96,103 | 107,997 |
| Portugal | 61,225 | 67,859 | 105,513 | 104,750 | 100,462 |
| Australia. | 54,950 | 70,176 | 105,475 | 100,380 | 91,844 |
| Singapore. | 39,226 | 53,761 | 60,865 | 72,141 | 68,704 |
| Austria. | 33,444 | 44,248 | 49,092 | 45,087 | 57,620 |
| Other countries. | 645,471 | 830,284 | 1,108,740 | 1,118,219 | 1,138,920 |
| Total | 4,545,180 | 6,038,910 | 6,830,710 | 6,913,520 | 8,482,450 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Norway | 362,097 | 514,072 | 517,162 | 515,440 | 654,577 |
| Japan. | 467,015 | 553,928 | 609,112 | 489,958 | 649,373 |
| Canada. | 342,968 | 490,696 | 433,360 | 441,928 | 598,796 |
| Denmark. | 242,285 | 381,910 | 439,834 | 426,772 | 586,282 |
| United States. | 151,695 | 285,192 | 252,64I | 298,034 | 371,899 |
| Iceland. | 140,289 | 212,205 | 248,275 | 243,530 | 290,703 |
| Netherlands. | 161,859 | 207,881 | 215,839 | 258,036 | 279,790 |
| Spain. | 150,596 | 169,207 | 208,560 | 181,914 | 244,969 |
| U.S.S.R. | 95,508 | 122,675 | 162,058 | 212,159 | 198,448 |
| Peru | 281,143 | 155,135 | 255,911 | 212,586 | 194,691 |
| Germany, Federaj - 281,143 155,135 212,586 19,691 |  |  |  |  |  |
| Republic of. | 98,515 | 139,278 | 157,500 | 139,039 | 181,250 |
| Mexico . . . . | 90,376 | 116,686 | 102,745 | 151,347 | 159,088 |
| United Kingdom | 74,103 | 113,863 | 138,272 | 134,207 | 152,977 |
| France . . . . | 64,515 | 102,131 | 109,959 | 110,593 | 136,796 |
| Indonesia. | 32,351 | 62,224 | 89,160 | 83,318 | 124,224 |
|  |  |  |  |  |  |
| Republic of | 63,077 | 84,362 | 129,604 | 123,112 | 121,557 |
| Hong Korg. . | 29,225 | 44,438 | 50,125 | 66,635 | 117,727 |
| Australia. . | 89,488 | 104,068 | 96,789 | 95,733 | 103,599 |
| Other countries. | 1,177,025 | 1,681,259 | 1,760,574 | 2,032,759 | 2,303,754 |
| Total | 4,114,130 | 5,541,210 | 5,977,480 | 6,217,100 | 7,470,500 |

Note: - 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, 1976, Vol. 43.

PROCESSED FISHERY PRODUCTS

VALUE OF PROCESSED FISHERY PRODUCTS, 1976 AND 1977 (Processed from domestic catch and imported products)

| Item | 1976 |  | 1977 (1) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { dollars }}$ | $\begin{aligned} & \text { Percent } \\ & \text { of total } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Percent }}{\text { of total }}$ |
| Edible: |  |  |  |  |
| Fresh and frozen: |  |  |  |  |
| Fillets and steaks, raw. | 167,101 | 4.8 | 180,404 | 4.7 |
| Sticks . | 73,182 | 2.1 | 68,776 | 1.8 |
| Portions | 286,240 | 8.2 | 343,474 | 8.9 |
| Breaded shrimp . | 202,972 | 5.8 | 205,259 | 5.3 |
| Other. . | 1,009,040 | 29.1 | 1,189,737 | 30.7 |
| Total. | 1,738,535 | 50.0 | 1,987,650 | 51.4 |
| Canned | 1,231,738 | 35.5 | 1,392,492 | 36.0 |
| Cured. | 112,243 | 3.2 | 116,000 | 3.0 |
| Total edible . | 3,082,516 | 88.7 | 3,496,142 | 90.4 |
| Industrial: |  |  |  |  |
| Bait and animal food (canned). | 197,955 | 5.7 | 165,106 | 4.2 |
| Fish meal, oil, and solubles. | 142,228 | 4.1 | 149,685 | 3.9 |
| Other. | 50,702 | 1.5 | 57,540 | 1.5 |
| Total industrial . | 390,885 | 11.3 | 372,331 | 9.6 |
| Grand total. . | 3,473,401 | 100.0 | 3,868,473 | 100.0 |

(1) Preliminary.

Note:--Includes value of sealskins and the value of imported fish meal that has been further processed. Value is based on selling price at plant. Includes products made from domestic landings and imported products.

FISH FILLETS AND STEAKS
U.S. PRODUCTION OF FRESH AND FROZEN FILLETS AND STEAKS, BY SPECIES, 1976 AND 1977

| Species | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars |
| Fillets: |  |  |  |  |
| Buffalofish. | 60 | 30 | 92 | 50 |
| Carp | 2,234 | 954 | 2,564 | 1,222 |
| cod. | 16,578 | 19,023 | 22,399 | 25,880 |
| Cusk | 1,789 | 1,791 | 2,008 | 1,962 |
| Flounders. | 48,227 | 72,466 | 43,168 | 67,609 |
| Groupers . | 367 | 637 | 278 | 598 |
| Haddock. | 4,664 | 8,293 | 14,713 | 21,434 |
| Hake . . | 1,428 | 1,062 | 1,576 | 1,375 |
| Halibut. . . | 365 | 766 | 97 | 163 |
| Herring, sea | 14,174 | 3,695 | 8,549 | 2,992 |
| Lingcod. . . | 1,584 | 1,243 | 1,317 | 1,161 |
| Ocean perch: |  |  |  |  |
| Atlantic . | 9,437 | 8,086 | 10,440 | 10,098 |
| Pacific. | 1,667 | 1,432 | 3,718 | 2,887 |
| Pollock. | 6,539 | 4,477 | 6,778 | 5,245 |
| Rockfishes | 7,695 | 5,354 | 8,731 | 6,648 |
| Sablefish. | 599 | 348 | 998 | 585 |
| Salmon : | 994 | 1,594 | 51 | 125 |
| Snapper, red | 676 | 1,644 | 339 | 1,039 |
| Spanish mackerel | 1,078 | 754 | 3,327 | 2,716 |
| Whitefish. . . | 1,022 | 1,823 | 813 | 1,756 |
| Whiting. . | 988 | 613 | 868 | 545 |
| Yellow perch | 2,123 | 5,181 | 2,537 | 6,364 |
| Yellow pike. | 647 | 1,197 | 673 | 1,139 |
| Unclassified . | 10,565 | 8,893 | 9,973 | 8,034 |
| Total. | 135,500 | 151,356 | 146,007 | 171,627 |
| Steaks: |  |  |  |  |
| cod. . . | 129 | 104 | (1) | (1) |
| Halibut. | 3,030 | 7,118 | 1,932 | 4,579 |
| Salmon . . | 3,273 | 7,012 | 1,661 | 3,625 |
| Swordfish. - | 476 | 1,225 | 225 | 443 |
| Unclassified | 177 | 286 | 128 | 130 |
| Total. . | 7,085 | 15,745 | 3,946 | 8,777 |
| Grand total. | 142,585 | 167,101 | 149,953 | 180,404 |

(1) Included with cod fillets.

Note:--The following amounts of frozen fish blocks were produced from the fillets above: 1.7 million lb valued at $\$ 1.0$ million in 1976 and 2.0 million $1 b$ valued at $\$ 1.5$ million in 1977. Final data for 1977 will be published in U.S. Production of Fish Fillets and Steaks, Annual Sumnary, 1977, Current Fishery Statistics No. 7508.

FISH STICKS, FISH PORTIONS, AND BREADẸD SHRIMP
U.S. PRODUCTION OF FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 1968-77

| Year | Fish Sticks |  | Fish Portions |  | Breaded shrimp |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars | pounds | dollars |
| 1968. | 91,695 | 41,454 | 182,771 | 68,620 | 102,964 | 101,681 |
| 1969. | 113,369 | 51,242 | 217,071 | 83,719 | 105,627 | 111,960 |
| 1970. | 115,924 | 57,722 | 234,247 | 97,930 | 104,953 | 112,166 |
| 1971. | 97,777 | 56,807 | 240,196 | 123,136 | 104,588 | 121,213 |
| 1972. | 114,493 | 61,491 | 269,204 | 149,148 | 107,375 | 140,933 |
| 1973. | *127,156 | *79,818 | 298,396 | 198,984 | *111,922 | 176,793 |
| 1974. | 103,059 | 64,599 | 276,226 | 193,830 | 91,778 | 142,559 |
| 1975. | 91,166 | 62,182 | 295,613 | 216,253 | 97,694 | 176,742 |
| 1976. | 94,169 | 73,182 | 344,284 | 286,240 | 95,923 | 202,972 |
| 1977. . | 86,991 | 68,776 | *350,777 | *343,474 | 94,133 | *205,259 |

*Record. Note:--Data for 1968-76 include all finms reporting on annual and quarterly basis. Data for 1977 include only those firms reporting on a quarterly basis. Fish Sticks, Fish Portions, and Breaded Shrimp, Annual Summary, 1977, Current Fishery Statistics No. 7504 will give additional information.

## PROCESSED FISHERY PRODUCTS

## CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED FISHERY PRODUCTS, BY SPECIES, 1975 AND 1977

| Species | 1976 |  |  | 1977 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard cases | Thousand pounds | Thousand dollars | $\begin{gathered} \text { Standard } \\ \text { cases } \\ \hline \end{gathered}$ | Thousand pounds | Thousand dollars |
| For human consumption: Fish: |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Gefiltefish. . . . . . 48 | 306,215 | 14,698 | 8,234 | 268,515 | 12,889 | 7,531 |
| Herring specialties. . 48 | 138,859 | 6,665 | 6,473 | 138,862 | 6,665 | 7,114 |
| Jack mackerel. . . . 45 | 147,629 | 6,643 | 2,085 | 724,891 | 32,620 | 17,496 |
| Roe and caviar . . . . 48 | 17,344 | 833 | 3,515 | 17,939 | 862 | 6,038 |
| Salmon: |  |  |  |  |  |  |
| Natural. . . . . . . 48 | 2,658,570 | 127,611 | 205,318 | 2,885,998 | 138,528 | 202,446 |
| Specialties. . . . . 48 | 2,625 | 126 | 501 | 2,082 | 100 | 436 |
| Sardines, Maine. . . . 23.4 | 1,067,146 | 24,971 | 24,478 | 1,004,108 | 23,496 | 27,205 |
| Tuna: |  |  |  |  |  |  |
| Solia. . . . . . . . 21 | 6,253,012 | 131,313 | 213,363 | 6,342,090 | 133,184 | 246,434 |
| Chunk. . . . . . . . 19.5 | 23,300,778 | 454,365 | 624,609 | 21,360,164 | 416,523 | 671,238 |
| Flakes and grated. . 18 | 750,699 | 13,513 | 15,491 | 560,326 | 10,086 | 13,557 |
| Total tuna . . . . -- | 30,304,489 | 599,191 | 853,463 | 28,262,580 | 559,793 | 931,229 |
| Specialties. . . . . 48 | 5,615 | 270 | 172 | 4,176 | 200 | 159 |
| Tunalike fish. . . . . (1) | 163,355 | 3,314 | 2,941 | 337,303 | 7,116 | 7,733 |
| Other. . . . . . . . . -- | 108,047 | 5,173 | 2,790 | 137,868 | 6,606 | 4,688 |
| Total fish . . . . -- | 34,919,894 | 789,495 | 1,109,970 | 33,784,322 | 788,875 | 1,212,075 |
| Shellfish: |  |  |  |  |  |  |
| Clams: |  |  |  |  |  |  |
| Whole and minced (2) 15 | 517,180 | 7,757 | 14,815 | 775,427 | 11,631 | 26,168 |
| Chowder and juice (2) 30 | 1,888,859 | 56,665 | 24,483 | 2,066,591 | 61,998 | 38,298 |
| Specialties. . . . . 48 | 113,589 | 5,452 | 5,634 | 143,677 | 6,896 | 6,977 |
| Crabs: |  |  |  |  |  |  |
| Natural. . . . . . . 19.5 | 182,283 | 3,555 | 13,331 | 289,082 | 5,637 | 22,982 |
| Specialties. . . . . 48 | 6,273 | 301 | 228 | 7,016 | 337 | 320 |
| Oysters: |  |  |  |  |  |  |
| Natural (3). . . . . 7 | 165,577 | 1,159 | 2,548 | 155,759 | 1,090 | 2,608 |
| Specialties. . . . . 48 | 253,506 | 12,168 | 7,356 | 188,062 | 9,027 | 6,452 |
| Shrimp: |  |  |  |  |  |  |
| Natural (3). . . . . 6.75 | 2,966,095 | 20,021 | 48,815 | 3,509,175 | 23,687 | 69,671 |
| Specialties. . . . . 48 | 34,466 | 1,654 | 1,382 | 45,862 | 2,201 | 1,952 |
| Squid. . . . . . . . . 48 | 151,333 | 7,264 | 1,725 | 149,997 | 7,200 | 2,323 |
| Other. . . . . . . . . -- | 33,965 | 1,630 | 1,451 | -69,917 | 3,356 | 2,666 |
| Total shellfish. . -- | 6,313,126 | 117,626 | 121,768 | 7,400,565 | 133,060 | 180,417 |
| Total for human consumption. | 41,233,020 | 907,121 | 1,231,738 | 41,184,887 | 921,935 | 1,392,492 |
| For bait and animal food: |  |  |  |  |  |  |
| Animal food. . . . . . . 48 | 13,751,919 | 660,092 | 195,839 | 10,640,597 | 510,749 | 161,357 |
| Salmon eggs for bait . . 48 | 11,813 | 567 | 2,116 | 7,869 | 378 | 3,749 |
| Total for bait and animal food. 48 | 13,763,732 | 660,659 | 197,955 | 10,648,466 | 511,127 | 165,106 |
| Grand total . . . -- | 54,996,752 | 1,567,780 | 1,429,693 | 51,833,353 | ,433,062 | 1,557,598 |

(1) Standard cases 48 cans, solid pack ( 7 oz net each) contains 21 lb ; chunk ( 6.50 oz net each) 19.5 lb ; and flakes and grated ( 6 oz net each) 18 lb . (2) "Cut out" or "drained" weight of can contents are given for whole or minced clams, and net contents for other clam products. (3) Drained weight.
Note:-- Final figures will be published in Canned Fishery Products, Annual Summary, 1977, Current Fishery Statistics No. 7501.

## CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED TUNA, 1975-77

| Item | $\begin{aligned} & \text { Pounds } \\ & \text { per } \\ & \text { case } \end{aligned}$ | 1975 |  | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Albacore: . |  |  |  |  |  |  |  |
| Solid. | 21 | 3,894 | 108,924 | 4,757 | 172,680 | 4,723 | 188,840 |
| Chunk. | 19.5 | 885 | 23,687 | 950 | 34,789 | 1,258 | 47,282 |
| Flakes and grated. | 18 | 235 | 4,067 | 258 | 5,400 | 218 | 5,20.1 |
| Total | -- | 5,014 | 136,678 | 5,965 | 212,869 | 6,200 | 241,323 |
| Lightmeat: |  |  |  |  |  |  |  |
| Solid. . | 21 | 1,335 | 33,477 | 1,496 | 40,683 | 1,619 | 57,594 |
| Chunk. | 19.5 | 19,971 | 473,871 | 22,350 | 589,820 | 20,102 | 623,956 |
| Flakes and grated. | 18 | 482 | 8,609 | 493 | 10,091 | 342 | 8,356 |
| Total | -- | 21,788 | 515,957 | 24,339 | 640,594 | 22,063 | 689,906 |
| Grand total . | -- | 26,802 | 652,635 | 30,304 | 853,463 | 28,263 | 931,229 |

PRODUCTION OF CANNED SHRIMP, BY AREA, 1975-77

| Area | Poundspercase | 1975 |  | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Gulf States. | 6.75 | 1,044 | 17,486 | 1,651 | 32,606 | 2,130 | 48,271 |
| Pacific States | 6.75 | 794 | 10,164 | 1,315 | 16,209 | 1,379 | 21,400 |
| Total | 6.75 | 1,838 | 27,650 | 2,966 | 48,815 | 3,509 | 69,671 |

PRODUCTION OF CANNED FISHERY PRODUCTS, 1968-77

| Year | Forhuman consumption |  | For food and bait |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars | pounds | dollars |
| 1968. | 782,102 | 499,287 | 484,923 | 84,621 | 1,267,025 | 583,908 |
| 1969. | 716,335 | 493,059 | 451,946 | 82,474 | 1,168,281 | 575,533 |
| 1970. | 805,178 | 632,625 | 540,713 | 109,135 | 1,345,891 | 741,760 |
| 1971. | 816,227 | 666,239 | 512,589 | 104,358 | 1,328,816 | 770,597 |
| 1972. | 930,232 | 853,495 | 666,598 | 141,427 | 1,596,830 | 994,922 |
| 1973. | 951,000 | 996,302 | *696,357 | 170,858 | *1,647,357 | 1,167,160 |
| 1974. | *963,232 | 1,127,416 | 590,774 | 178,431 | 1,554,006 | 1,305,847 |
| 1975. | 802,112 | 919,692 | 583,751 | 152,253 | 1,385,863 | 1,071,945 |
| 1976. | 907,121 | 1,231,738 | 660,659 | *197,955 | 1,567,780 | 1,429,693 |
| 1977. | 921,935 | *1,392,492 | 511,127 | 165,106 | 1,433,062 | *1,557,598 |

*Record.

## PROCESSED FISHERY PRODUCTS

## INDUSTRIAL PRODUCTS

PRODUCTION OF FISH MEAL, OIL, AND SOLUBLES, 1976 AND 1977

| Product | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Short | Thousand | Short | Thousand |
|  | tons | dollars | tons | dollars |
| Dried scrap and meal: - |  |  |  |  |
|  |  |  |  |  |
| Anchovy - - | 22,164 | 6,080 | 19,136 | 6,573 |
| Menhaden (1). - | 212,553 | 72,746 | 193,268 | 71,785 |
| Tuna and me kerel | 40,059 | 8,820 | 39,750 | 10,711 |
| Unclassified. | 24,234 | 8,036 | 21,666 | 7,439 |
| Total . | 299,010 | 95,682 | 273,820 | 96,508 |
| Shellfish . | 10,684 | 1,133 | 9,255 | 1,063 |
| Grand total | 309,694 | 96,815 | 283,075 | 97,571 |
| Solubles: |  |  |  |  |
| Menhaden (1). | 95,313 | 10,927 | 87,390 | 9,806 |
| Unclassified. | 37,794 | 3,330 | 34,896 | 13,933 |
| Total | 133,107 | 14,257 | 122,286 | 23,739 |
|  | Thousand | Thousand | Thousand | Thousand |
| Body oil: b pounds pands |  |  |  |  |
|  |  |  |  |  |
| Anchovy . | 5,334 | 643 | 6,187 | 847 |
| Menhaden (1). . | 186,400 | 28,910 | 116,149 | 25,132 |
| Tuna and mackerel | 6,340 | 554 | 4,105 | 411 |
| Unclassified (2). | 6,507 | 1,049 | 7,277 | 1,985 |
| Total . | 204,581 | 31,156 | 133,718 | 28,375 |

(1) May include small quantities made from other species. (2) Includes a small amount of liver oils. 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 Industrial Fishery Products, Annual Summary, 1977 Current Fisheries StatistiICS No. 7502.

PRODUCTION OF INDUSTRIAL PRODUCTS, 1968-77

| Year | Quantity |  |  | Value |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fish meal | $\begin{gathered} \text { Fish } \\ \text { solubles } \end{gathered}$ | Marine animal oil | Fish meal, oil, and solubles | Shell products <br> (1) | Other industrial products | Grand total |
|  | Short | Short | Thousand | ---- - Thousand dollars - - - - - |  |  |  |
|  | tons | tons | pounds |  |  |  |  |
| 1968. | 235,136 | 71,833 | 174,072 | 41,295 | 4,651 | 24,182 | 70,127 |
| 1969. | 252,664 | 81,692 | 169,785 | 53,272 | 4,170 | 25,562 | 83,005 |
| 1970. | 269,197 | 94,968 | 206,084 | 69,484 | 3,409 | 26,646 | 99,540 |
| 1971. | 292,812 | 111,188 | 265,450 | 70,377 | 4,128 | 32,046 | 106,551 |
| 1972. | 285,506 | 134,395 | 188,445 | 67,133 | 4,210 | 84,639 | 155,982 |
| 1973. | 287,517 | 137,435 | 224,634 | 160,914 | 4,015 | 37,899 | *202,828 |
| 1974. | 300,714 | 137,259 | 237,980 | 145,325 | 4,651 | 48,858 | 198,834 |
| 1975. | 290,431 | 127,850 | 245,653 | 106,901 | 5,847 | 49,550 | 162,297 |
| 1976. | 309,694 | 133,107 | 204,581 | 142,228 | 6,085 | 36,437 | 184,750 |
| 1977. | 283,075 | 122,286 | 133,718 | 149,685 | 6,708 | 42,559 | 198,952 |

(1) Beginning in 1970 data include only the value of oyster shell products. Data for marine shell and mussel shell products are included with "other industrial products." *Record. Record fish meal production, 312,259 short tons in 1962; fish solubles production, 165,359 short tons in 1959; marine animal oil production, 299.3 million lb in 1936; and shell products, $\$ 17.3$ million in 1950.

Note:--Does not include the value of imported itens that may be further processed, or the value of sealskins. Table may not add because of rounding.

## FROZEN FISHERY PRODUCTS

U.S. OOLD STORAGE HOLDINGS OF FISHERY PRODUCTS, 1977

| Item | January 1 | $\begin{gathered} \text { March } \\ 31 \end{gathered}$ | June 30 | $\begin{aligned} & \text { September } \\ & 30 \end{aligned}$ | $\begin{aligned} & \text { Decenber } \\ & 31 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Blocks: |  |  |  |  |  |
| cod. | 14,525 | 8,540 | 21,605 | 51,652 | 36,480 |
| Flounder. | 4,697 | 3,109 | 3,059 | 3,014 | 2,810 |
| Greenland turbot. | 4,005 | 2,821 | 1,288 | 1,419 | 1,014 |
| Haddock | 2,438 | 2,549 | 2,644 | 6,165 | 7,961 |
| Ocean perch | 3,572 | 1,698 | 691 | 941 | 655 |
| Pollock (Alaska and other). | 15,729 | 12,960 | 10,769 | 14,284 | 11,096 |
| Whiting . | 5,567 | 2,434 | 1,494 | 2,074 | 3,257 |
| Minced (grated) all species | 7,939 | 4,370 | 5,525 | 4,942 | 4,744 |
| Unclassified. | 2,611 | 2,158 | 1,324 | 2,191 | 5,157 |
| Total blocks | 61,083 | 40,639 | 48,399 | 86,682 | 73,174 |
| Fillets and steaks: |  |  |  |  |  |
| cod. | 16,151 | 10,025 | 16,023 | 29,469 | 27,202 |
| Flounder. | 9,133 | 4,671 | 5,440 | 8,752 | 8,997 |
| Greenland turbot. | 8,544 | 3,300 | 3,927 | 8,117 | 9,882 |
| Haddock . | 5,073 | 4,124 | 4,599 | 6,130 | 7,727 |
| Ocean perch | 14,266 | 6,524 | 3,663 | 8,472 | 9,458 |
| Whiting . . | 6,076 | 3,167 | 3,696 | 4,632 | 3,842 |
| Unclassified. | 21,429 | 16,192 | 16,207 | 23,369 | 20,945 |
| Total fillets and steaks | 80,672 | 48,003 | 53,555 | 88,941 | 88,053 |
| Fish sticks and portions (cooked and uncooked, all species) . . . | 31,036 | 29,479 | 32,756 | 29,399 | 30;484 |
| Round, dressed, etc: |  |  |  |  |  |
| Catfish . | 1,606 | 1,163 | 2,832 | 3,058 | 2,295 |
| Halibut. | 4,499 | 2,912 | 3,446 | 4,908 | 3,758 |
| Rainbow trout | 1,161 | 1,662 | 1,690 | 1,674 | 2,267 |
| Salmon. | 23,899 | 13,586 | 11,029 | 41,657 | 28,365 |
| Whiting . | 4,805 | 2,836 | 2,763 | 2,945 | 1,818 |
| Unclassified fish | 29,273 | 44,766 | 26,474 | 20,603 | 21,740 |
| Crabs: |  |  |  |  |  |
| King. | 18,442 | 18,268 | 8,469 | 4,135 | 23,701 |
| Snow. . . . | 2,934 | 5,731 | 11,603 | 7,787 | 3,684 |
| Unclassified. | 5,108 | 5,328 | 5,501 | 3,978 | 5,191 |
| Lobsters (spiny and other). | 8,325 | 7,844 | 7,839 | 7,122 | 6,788 |
| Shrimp: |  |  |  |  |  |
| Raw, headless | 39,159 | 33,073 | 35,597 | 44,269 | 50,347 |
| Breaded . | 6,906 | 6,218 | 5,500 | 5,258 | 7,089 |
| Peeled. | 12,578 | 12,564 | 17,963 | 19,557 | 18,317 |
| Unclassified. | 14,220 | 11,824 | 13,377 | 19,717 | 18,460 |
| Total shrimp . . . . | 72,863 | 63,679 | 72,437 | 88,801 | 94,213 |
| Other shellfish | 14,410 | 13,944 | 16,526 | 20,481 | 21,268 |
| Bait and animal food. | 11,057 | 12,561 | 17,993 | 11,636 | 13,496 |
| Total fish and shellfish | 371,173 | 312,401 | 323,312 | 423,807 | 420,295 |

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

## U.S. IMPORTS

IMPORTS OF EDIBLE AND NONEDIBLE FISHERY PRODUCTS, 1968-77

| Year | Edible |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | - - - Thou | llars - - - |
| 1968. . . | 1,741,365 | 643,165 | 179,504 | 822,669 |
| 1969. | 1,706,571 | 704,809 | 139,484 | 844,293 |
| 1970. | 1,873,300 | 812,530 | 224,880 | 1,037,410 |
| 1971. | 1,785,470 | 887,070 | 187,131 | 1,074,201 |
| 1972. | 2,341,138 | 1,233,292 | 261,119 | 1,494,411 |
| 1973. | *2,416,193 | 1,398,484 | 184,649 | 1,583,133 |
| 1974. | 2,266,880 | 1,495,380 | 215,498 | 1,710,878 |
| 1975. | 1,913,089 | 1,367,180 | 269,919 | 1,637,099 |
| 1976. | 2,228,475 | 1,916,848 | 415,497 | 2,332,345 |
| 1977. . . . . . . . | 2,176,192 | *2,078,492 | *542,937 | *2,621,429 |

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

IMPORTS OF FISHERY PRODUCTS: VALUE, DUTIES COLLECTED, AND AD VALOREM EQUIVALENT, 1968-77

| Year | Value |  | Duties collected |  | Average ad valorem equivalent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fishery | All | Fishery | All | Fishery | All |
|  | imports | imports | imports | imports | imports | imports |
|  | ---- | - - Thousand | Ilars - | --- | Percent |  |
| 1968. | 822,669 | 32,991,700 | 25,455 | 2,341,100 | 3.1 | 7.1 |
| 1969. | 844,293 | 35,870,400 | 25,421 | 2,551,200 | 3.0 | 7.1 |
| 1970. | 1,037,410 | 39,767,700 | 25,175 | 2,584,100 | 2.4 | 6.5 |
| 1971. | 1,074,201 | 45,545,900 | (1) 22,455 | (1)2,768,000 | 2.1 | 6.1 |
| 1972. | 1,494,411 | 55,555,300 | 24,292 | 3,124,000 | 1.6 | 5.6 |
| 1973. | 1,583,133 | 68,655,100 | 25,835 | 3,459,000 | 1.6 | 5.0 |
| 1974. | 1,710,878 | 100,125,800 | 29,815 | 3,772,000 | 1.7 | 3.8 |
| 1975. | 1,637,099 | 96,515,102 | 26,675 | 3,780,000 | 1.6 | 3.9 |
| 1976. | 2,332,345 | 121,120,869 | 43,293 | 4,674,700 | 1.3 | 3.9 |
| 1977. | 2,621,429 | 147,075,300 | 58,252 | 5,484,800 | 2.7 | 3.7 |

(1) These calculated duties do not include the temporary surcharge imposed by the President under Proclamation No. 4074, effective August 16, 1971, and terminating December 20, 1971. Source:--U.S. Department of Commerce, Bureau of the Census.

## U.S. IMPORTS

IMPORTS OF FISHERY PRODUCTS, BY PRINCIPAL ITEMS, 1976 AND 1977

| Item | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Edible fishery products: |  |  |  |  |
|  |  |  |  |  |
| Fillets: |  |  |  |  |
| Groundfish. | 228,287 | 187,467 | 217,422 | 210,478 |
| Other . | 185,020 | 149,406 | 180,687 | 160,908 |
| Total | 413,307 | 336,873 | 398,109 | 371,386 |
| Blocks and slabs. | 378,742 | 211,121 | 385,138 | 291,694 |
| Halibut . | 7,400 | 9,920 | 6,510 | 9,086 |
| Salmon. | 7,742 | 13,645 | 5,708 | 10,794 |
| Tuna: 10,704 |  |  |  |  |
| Albacore. | 199,587 | 116,050 | 178,298 | 107,736 |
| Other | 404,206 | 130,414 | 451,078 | 142,716 |
| Loins and discs | 3,596 | 2,913 | 3,927 | 4,871 |
| Crabmeat. . . . | 3,963 | 7,421 | 4,283 | 8,936 |
| Scallops (meat) | 25,253 | 53,016 | 29,786 | 53,040 |
| Lobsters: |  |  |  |  |
| American (includes fresh-cooked meat) | 15,856 | 36,217 | 14,992 | 33,897 |
| Spiny . . . . . . . | 48,495 | 204,520 | 45,027 | 216,405 |
| Shrimp. | 227,460 | 460,698 | 225,208 | 488,326 |
| Other. | 189,120 | 70,524 | 179,947 | 76,014 |
| Canned: 10, 10, |  |  |  |  |
| Herring, not in oil | 12,118 | 8,199 | 10,841 | 8,380 |
| Salmon. . | 2,521 | 2,994 | 586 | 1,171 |
| Sardines: |  |  |  |  |
| In oil. . ${ }^{\text {. }}$ | 26,891 | 23,725 | 25,748 | 25,031 |
| Not in oil. | 26,982 | 13,092 | 24,288 | 12,430 |
| Tuna: |  |  |  |  |
| In oil. . . | 288 | 417 | 178 | 311 |
| Not in oil. . . . | 58,605 | 67,085 | 34,453 | 44,347 |
| Bonito and yellowtail: |  |  |  |  |
| In oil. . . . . . | 64 | 73 | 17 | 25 |
| Not in oil. | 57 | 52 | 1,358 | 1,007 |
| Abalone . - | 4,845 | 15,645 | 4,994 | 17,975 |
| Clams . - | 6,302 | 6,552 | 7,799 | 9,184 |
| Crabmeat. . . . . . . | 2,054 | 4,597 | 3,463 | 7,957 |
| Lobsters: |  |  |  |  |
| American. - | 2,146 | 10,930 | 2,547 | 14,225 |
| Spiny . . | 719 | 2,968 | 337 | 1,371 |
| Oysters . | 14,425 | 10,745 | 19,159 | 17,908 |
| Shrimp. . - | 2,350 | 2,646 | 2,809 | 3,203 |
|  |  |  |  |  |
|  |  |  |  |  |
| Pickled or salted: |  |  |  |  |
| Cod, haddock, hake, etc.. | 36,501 | 31,441 | 35,727 | 33,449 |
| Herring . . . . | 30,942 | 9,986 | 19,475 | 6,924 |
| Other . | 8,434 | 7,744 | 6,814 | 8,574 |
| Other fish and shellfish. | 3,641 | 1,651 | 4,510 | 4,142 |
| Total edible fishery products . . . . . . | 2,228,475. | 1,916,848 | 2,176,192 | $2,078,492$ |
| Nonedible fishery products: |  |  |  |  |
| Scrap and meal. - | 280,754 | 32,872 | 162,982 | 26,488 |
| Solubles. | 2,614 | 59 | 1,952 | 101 |
| Other . - | - | 382,566 | - | 516,348 |
| Total nonedible fishery products . . . . . . . | - | 415,497 | - | 542,937 |
| Grand total . . . . . . | - | 2,332,345 | - | 2,621,429 |

Note:--Data include imports into the United States and Puerto Rico and include landings of tuna by foreign vessels in American Samoa.

## U.S. IMPORTS

IMPORTS OF EDIBLE FISHERY PRODUCTS, BY CONIINENI AND COUNIRY OF ORIGIN, 1976 AND 1977

| Continent and country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars |
| North America: |  |  |  |  |
| Canada. | 474,015 | 374,532 | 478,470 | 417,799 |
| Mexico. | 122,151 | 200,024 | 134,214 | 236,260 |
| Panama. | 66,060 | 48,158 | 40,640 | 39,256 |
| Nicaragua | 10,441 | 25,606 | 14,009 | 34,019 |
| Greenland . | 9,286 | 5,663 | 21,161 | 17.150 |
| Honduras. | 6,260 | 17,547 | 6,701 | 17,396 |
| Other . | 47,901 | 53,685 | 60,542 | 56,399 |
| Total | 736,114 | 725,215 | 755,737 | 818,279 |
| South America: |  |  |  |  |
| Brazil. | 27.520 | 42,715 | 35,026 | 52,753 |
| Ecuador . . . . . | 41,566 | 34,652 | 35,852 | 36,036 |
| Colombia. . . . . | 6,500 | 16,109 | 5,852 | 14,910 |
| Venezuela . | 13,052 | 23,931 | 10,809 | 13,675 |
| Surinam . | 1,397 | 2,641 | 3,652 | 13,245 |
| Other . | 69,947 | 52,528 | 61,819 | 44,035 |
| Total . | 159,982 | 172,576 | 153,010 | 174,654 |
| Europe: |  |  |  |  |
| European Economic Commanity: |  |  |  |  |
| Denmark . . . . . . . . | 83,654 | 60,250 | 95,830 | 86,752 |
| United Kingdom. | 23,352 | 22,126 | 21,769 | 21,145 |
| France. . . . . | 25,361 | 6,843 | 36,487 | 15,558 |
| Netherlands | 5,947 | 9,612 | 6,814 | 9,859 |
| Other - | 20,888 | 9,326 | 5,820 | 5,295 |
| Total . | 159,202 | 108,157 | 166,720 | 138,609 |
| Other: |  |  |  |  |
| Iceland | - 143,006 | 112,051 | 154,225 | 148,502 |
| Norway. | 94,794 | 70,870 | 92,082 | 88,064 |
| Spain . | 32,532 | 19,384 | 39,065 | 23,637 |
| Poland. . | 16,459 | 8,786 | 16,565 | 11,169 |
| Other . . . | 20,060 | 24,690 | 12,286 | 12,645 |
| Total . . | 306,851 | 235,781 | 314,223 | 284,017 |
| Asia: |  |  |  |  |
| Japan . . . . . . . . . . - | 360,415 | 212,426 | 290,413 | 185,695 |
| India . . . . . . . . . . . . | 65,032 | 62,566 | 89,860 | 84,131 |
| Korea, Republic of. | 129,133 | 70,553 | 105,193 | 60,175 |
| China, Republic of (Taiwan) | 77,600 | 58,963 | 78,164 | 51;248 |
| Thailand. . . . . . . . | 9,419 | 12,026 | 19,617 | 18,079 |
| Hong Kong . | 12,820 | 17,467 | 9,011 | 14,722 |
| other . . . . . | 41,780 | 72,555 | 58,760 | 66,052 |
| Total . . | 696,199 | 506,556 | 651,018 | 480,102 |
| Australia and Oceania: |  |  |  |  |
| Australia . | 10,906 | 56,172 | 11,036 | 63,743 |
| New Zealand | 3,970 | 15,692 | 4,096 | 17,152 |
| British Pacific Islands | 15,298 | 6,922 | 22,376 | 12,730 |
| Other . . | 63,873 | 19,021 | 42,241 | 18,818 |
| Total | 94,047 | 97,807 | 79,749 | 112,443 |
| Africa: |  |  |  |  |
| South Africa, Republic of . | 41,189 | 50,888 | 27,051 | 49,142 |
| Mauritania. . . . . . . | 3,519 | 2,495 | 4,481 | 2,772 |
| Liberia . . . . . | 1,139 | 3,670 | 924 | 2,604 |
| Ivory Coast . . . . | 4,390 | 2,472 | 5,132 | 2,602 |
| Other . . | 25,843 | 11,231 | 18,147 | 13,268 |
| Total . . . . . . . . | 76,080 | 70,756 | 55,735 | 70,388 |
| Grand total . . . . . . | 2,228,475 | 1,916,848 | 2,176,192 | 2,078,492 |

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

## U.S. IMPORTS

IMPORTS OF REGULAR AND MINCED FISH BLOCKS AND SLABS, BY SPECIES AND TYPE, 1976 AND 1977

(1) Most of the shipments were from Canada, Denmark, and Iceland. Source:--U.S. Department of Commerce, Bureau of the Census.

IMPORTS OF REGULAR AND MINCED FISH BLOCKS AND SLABS, BY COUNTRY OF ORIGIN, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| Canada. | 50,920 | 33,561 | 80,283 | 67,917 |
| Denmark | 48,803 | 30,960 | 69,152 | 57,846 |
| Iceland | 67,272 | 41,682 | 62,927 | 51,668 |
| Norway. | 46,348 | 26,048 | 47,163 | 38,133 |
| Korea, Republic of. | 59,741 | 20,235 | 43,744 | 20,684 |
| Japan . . . . . | 26,113 | 15,232 | 23,383 | 17,055. |
| Greenland | 3,528 | 1,917 | 14,500 | 11,906 |
| Poland. | 14,186 | 7,254 | 10,792 | 6,905 |
| Other . | 61,831. | 34,232 | 33,194 | 19,580 |
| Total. . | 378,742 | 211,121 | 385,138 | 291,694 |

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

IMPORTS OF GROUNDFISH FILIETS AND STEAKS, BY SPECIES, 1976 AND 1977 (I)

| Species | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { poundss }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| cod | 118,447 | 102,419 | 122,267 | 126,343 |
| Haddock (2) | 49,494 | 38,470 | 49,916 | 45,171 |
| Ocean perch, Atlantic . | 60,346 | 46,578 | 45,239 | 38,964 |
| Total. . . . | 228,287 | 187,467 | 217,422 | 210,478 |

(1) Does not include data on fish blocks and slabs.
(2) Includes some quantities of cusk, hake, and pollock fillets. Source:--J.S. Department of Commerce, Bureau of the Census.

## U.S. IMPORTS

UNDER QUOTA AND OVER QUOTA IMPORTS OF GROUNDFISH FILIETS AND STEAKS, 1968-77 (1)

| Year | Imports |  |  |
| :---: | :---: | :---: | :---: |
|  | Under quota (2) | Over quota (3) | Total |
|  | -------- Thousand pounds --------- |  |  |
| 1968. | 24,895 | 104,255 | 129,150 |
| 1969. | 26,466 | 133,514 | 159,980 |
| 1970. | 27,401 | 158,706 | 186,107 |
| 1971. | 30,329 | 141,123 | 171,452 |
| 1972. | 31,832 | 181,423 | 213,255 |
| 1973. | 34,125 | 185,971 | 220,096 |
| 1974. | 35,456 | 129,895 | 165,351 |
| 1975. | 35,695 | 164,661 | 200,356 |
| 1976. | 36,149 | 192,138 | 228,287 |
| 1977. | 35,437 | 181,985 | 217,422 |

(1) Includes Atlantic ocean perch.
(2) Dutiable at 1.875 cents per lb. Quota was filled in all years.
(3) Dutiable at 2.5 cents per 1b.

Source:--Data on imports under quota from U.S. Department of the Treasury, Bureau of Customs.
Imports over quota calculated from imports reported by U.S. Department of Comnerce, Bureau of the Census.

QUOTA AND IMPORTS OF CANNED IUNA NOT IN OIL, 1968-77

| Year | Quota <br> (I) | Imports |  |
| :---: | :---: | :---: | :---: |
|  |  | Under quota (2) | Over quota (3) |
|  | --- | Thousand pounds | ------- |
| 1968. | 66,985 | 64,907 | - |
| 1969. | 71,703 | 71,333 | - |
| 1970. | 70,146 | 70,146 | 902 |
| 1971. | 77,296 | 55,638 | - |
| 1972. | 78,532 | 54,474 | - |
| 1973. | 109,809 | 36,973 | - |
| 1974. . | 112,176 | 52,172 | - |
| 1975. . | 120,740 | 48,847 | - |
| 1976. . | 98,125 | 56,409 | - |
| 1977. . | 111,246 | 33,913 | - |

(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 American Samoa.
(2) Dutiable in 1956-67 at 12.5 percent ad valorem; 1968, 11 percent; 1969, 10 percent; 1970, 8.5 percent; 1971, 7 percent; and in 1972-77, 6 percent.
(3) Dutiable in 1970 at 17 percent ad valorem; 1971, 15 percent; and 1972-77, 12.5 percent ad valorem.
Source:-U.S. Department of the Treasury, Bureau of Customs. Data in this table will not agree with tuna import data released by the U.S. Department of Commerce, Bureau of the Census.

## U.S. IMPORTS

IMPORTS OF SHRIMP, BY COUNTRY OF ORIGIN, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars |
| North America: |  |  |  |  |
| Mexico. | 80,398 | 163,177 | 76,252 | 187,922 |
| Panama. | 11,617 | 33,383 | 10,069 | 27,551 |
| Nicaragua | 6,517 | 15,906 | 7,387 | 19,392 |
| El Salvador | 5,565 | 1.2,531 | 5,376 | 12,033 |
| Honduras. | 3,912 | 8,971 | 4,718 | 10,263 |
| Guatemala | 2,671 | 7,141 | 3,752 | 8,663 |
| Greenland . | 125 | 84 | 5,383 | 4,188 |
| Trinidad. . | 888 | 2,625 | 1,246 | 3,651 |
| Costa Rica. | 2,093 | 3,887 | 1,307 | 2,825 |
| Canal zone. | 154 | 489 | 793 | 2,198 |
| Other | 1,684 | 2,336 | 2,155 | 3,246 |
| Total. | 115,624 | 250,530 | 118,438 | 281,932 |
| South America: |  |  |  |  |
| Ecuador . | 9,354 | 25,627 | 8,613 | 23,996 |
| Colombia. | 6,310 | 15,679 | 5,666 | 14,481 |
| Surinam . | 3,802 | 12,556 | 3,652 | 13,246 |
| Guyana. . | 4,162 | 8,603 | 4,647 | 9,468 |
| Venezuela | 5,841 | 17,911 | 2,825 | 8,300 |
| Brazil. - | 1,975 | 4,364 | 3,538 | 7,170 |
| French Guiana | 1,383 | 2,630 | 1,560 | 4,778 |
| Peru. . | 1,057 | 1,774 | 772 | 911 |
| Chile . . | 120 | 244 | 163 | 330 |
| Argentina . | - | - | 3 | 6 |
| Total. | 34,004 | 89,388 | 31,439 | 82,686 |
| Europe: |  |  |  |  |
| European Economic Community: |  |  |  |  |
| United Kingdom. . | 596 | 1,061 | 405 | 958 |
| Denmark . | 8 | 17 | 770 | 718 |
| France. . . | 67 | 259 | 211 | 631 |
| Netherlands . | 23. | 386 | 351 | 464 |
| Other . . | 34 | 44 | - | - |
| Total. | 936 | 1,767 | 1,737 | 2,771 |
| Other: |  |  |  |  |
| Spain. | 483 | 2,078 | 299 | 1,387 |
| Romania | - | - | 71 | 85 |
| Iceland . | 18 | 46 | 24 | 37 |
| Norway. | 8 | 38 | 9 | 31 |
| Sweden. | 3 | 14 | 14 | 22 |
| Other. | 5 | 15 | - | - |
| Total. | 517 | 2,191 | 417 | 1,562 |
| Asia: |  |  |  |  |
| India . | 41,622 | 45,542 | 41,111 | 49,775 |
| Hong Kong | 5,066 | 11,966 | 3,881 | 8,827 |
| Thailand. | 3,229 | 6,534 | 4,207 | 8,523 |
| Indonesia | 4,598 | 8,447 | 4,571 | 7,954 |
| Iran. . . | 876 | 1,777 | 2,953 | 7,501 |
| China, Republic of (Taiwan) | 5,139 | 7,598 | 3,592 | 5,759 |
| Malaysia. . . . . . . . . . | 2,344 | 2,810 | 2,246 | 3,701 |
| Other . . . | 12,354 | 25,510 | 10,070 | 22,214 |
| Total. . | 75,228 | 110,184 | 72,631 | 114,254 |
| Australia and Oceania . . . . | 768 | 3,013 | 832 | 3,094 |
| Africa. . . . . . . . . . | 2,733 | 6,271 | 2,523 | 5,230 |
| Grand total. . . . | 229,810 | 463,344 | 228,017 | 491,529 |

## U.S. IMPORTS

IMPORTS OF SHRIMP, BY TYPE OF PRODUCT, 1976 AND 1977

| Type of product | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Shell-on (headless) . | 129,741 | 293,542 | 125,805 | 295,898 |
| Peeled: |  |  |  |  |
| Canned. . . | 2,350 | 2,646 | 2,809 | 3,203 |
| Not breaded: |  |  |  |  |
| Raw . | 86,448 | 150,142 | 87,818 | 173,744 |
| Other . | 10,440 | 15,243 | 10,860 | 17,291 |
| Breaded . | 831 | 1,771 | 725 | 1,393 |
| Total. . . . $\cdot$ | 229,810 | 463,344 | 228,017 | 491,529 |

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

IMPORTS OF FISH MEAL AND SCRAP, BY COUNTRY OF ORIGIN, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Short | Thousand | Short | Thousand |
| Norway. | 15,930 | 4,251 | 23,607 | 9,422 |
| Canada. | 34,015 | 7,483 | 24,811 | 7,340 |
| Peru. | 79,378 | 18,380 | 15,578 | 4,102 |
| Panama. | 9,325 | 2,238 | .13,628 | 3,944 |
| Other . | 1,729 | 520 | 3,867 | 1,680 |
| Total. | 140,377 | 32,872 | 81,491 | 26,488 |

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

IMPORTS OF FISH SOLUBLES, BY COUNTRY OF ORIGIN, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Short }}{\text { tons }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\begin{aligned} & \text { Short } \\ & \text { tons } \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| Canada. . . . . . . . . . . | $\begin{array}{r} 1,286 \\ 21 \\ \hline \end{array}$ | $\begin{array}{r}56 \\ 3 \\ \hline\end{array}$ | $\begin{gathered} 965 \\ 11 \end{gathered}$ | 95 6 |
| Total. . | 1,307 | 59 | 976 | 101 |

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

## U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, BY PRINCIPAL ITEMS, 1976 AND 1977

| Item | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars |
| Edible fishery products: |  |  |  |  |
| Fresh and frozen: |  |  |  |  |
| Whole or eviscerated: |  |  |  |  |
| Salmon. | 38,418 | 69,277 | 65,559 | 117,504 |
| Other . | 65,559 | 22,740 | 85,559 | 36,942 |
| Fillets: |  |  |  |  |
| Salmon. . | 3,504 | 6,368 | 4,285 | 7,892 |
| Other. . | 13,583 | 13,136 | 25,265 | 17,262 |
| Shellfish: |  |  |  |  |
| Shrimp. . | 23,296 | 57,023 | 26,089 | 60,731 |
| King crab | 4,099 | 11,898 | 10,182 | 28,984 |
| Other . . | 26,221 | 32,242 | 38,182 | 52,341 |
| cured . . | 13,343 | 45,586 | 23,407 | 74,614* |
| Canned: |  |  |  |  |
| Salmon. . | 19,588 | 33,865 | 21,275 | 34,031 |
| Sardines. | 1,829 | 1,556 | 1,186 | 855 |
| King crab . | 4,200 | 7,133 | 3,815 | 7,912 |
| Shrimp. . | 7,769 | 14,685 | 8,966 | 18,066 |
| Squid. | 7,914 | 2,095 | 5,045 | 1,411 |
| Other. | 11,543 | 12,206 | 12,244 | 14,830 |
| Total edible fishery products . . . . . . | 240,866 | 329,810 | 331,059 | 473,375 |
| Nonedible fishery products: |  |  |  |  |
| Fish meal . . . . . . . | 66,282 | 10,423 | 72,206 | 12,584 |
| Fish oils . | 179,235 | 29,946 | 90,633 | 18,107 |
| Seal furs . | (1) | 5,107 | (1) | 2,833 |
| Other . - | - | (2)9,404 | - | (2) 13,597 |
| Total nonedible fishery products . . . . . . . | - | 54,880 | - | 47,121 |
| Grand total . . . . . . | - | 384,690 | - | 520,496 |

(1) Number of seal furs was 67,000 in 1976 and 32,000 in 1977.
(2) Includes the value of whale and sperm oil.

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

EXPORTS OF DCMESTIC FISHERY PRODUCTS, 1968-77

| Year | Edible |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | ---.- | usand dolla | ---- |
| 1968. | 90,808 | 56,845 | 10,912 | 67,757 |
| 1969. | 140,646 | 86,474 | 18,059 | 104,533 |
| 1970. | 140,375 | 93,878 | 23,606 | 117,484 |
| 1971. | 171,816 | 113,637 | 25,608 | 139,245 |
| 1972. | 171,642 | 134,188 | 23,700 | 157,888 |
| 1973. | 238,942 | 241,866 | 57,302 | 299,168 |
| 1974. | 178,010 | 194,966 | *67,166 | 262,132 |
| 1975. | 218,152 | 267,360 | 37,369 | 304,729 |
| 1976. | 240,866 | 329,810 | 54,880 | 384,690 |
| 1977. | 331,059 | *473,375 | 47,121 | *520,496 |

## *Record.

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

## U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1977

| Country | Edible |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | ---- | sand doll | ---- |
| North America: |  |  |  |  |
| Canada . | 77,750 | 79,044 | 4,046 | 83,090 |
| Mexico . | 10,207 | 19,972 | 443 | 20,415 |
| Netherlands Antilles | 1,027 | 1,690 | 6 | 1,696 |
| Bahamas. . | 1,170 | 1,592 | 17 | 1,609 |
| Bermuda. | 769 | 1,402 | 94 | 1,496 |
| Panama . | 422 | 580 | 22 | 602 |
| French West Indies | 823 | 392 | 10 | 402 |
| Honduras | 1,432 | 359 | 28 | 387 |
| Dominican Republic | 132 | 247 | 13 | 260 |
| Jamaica. . | 362 | 238 | 18 | 256 |
| Barbados | 156 | 189 | 8 | 197 |
| Leeward and Windward Islands | 135 | 152 | - | 152 |
| Trinidad . . | 110 | 151 | 1 | 152 |
| Nicaragua. | 331 | 107 | 6 | 113 |
| Cayman . - | 115 | 108 | 4 | 112 |
| Belize. | 21 | 51 | 9 | 60 |
| Guatemala. | 68 | 45 | 2 | 47 |
| Haiti. . . . | 36 | 45 | 1 | 46 |
| Costa Rica. | 15 | 22 | 5 | 27 |
| El Salvador. . . | 3 | 7 | - | 7 |
| Turks and Caicos Islands | 6 | 4 | - | 4 |
| Total . | 95,090 | 106,397 | 4,733 | 111,130 |
| South America: |  |  |  |  |
| Colombia . . | 108 | 127 | 1,101 | 1,228 |
| Venezuela. . | 636 | 910 | 129 | 1,039 |
| Argentina. | 79 | 78 | 87 | 165 |
| Brazil . . | 60 | 115 | 15 | 130 |
| Chile. . | 59 | 101 | 17 | 118 |
| Surinam. | 42 | 50 | 2 | 52 |
| Ecuador. | 19 | 15 | 4 | 19 |
| Guyana . . | - | - | 15 | 15 |
| Bolivia. . | 5 | 14 | - | 14 |
| Paraguay | 4 | 8 | - | 8 |
| Peru . . | $-$ | 1 | , | 1 |
| Total- | 1,012 | 1,419 | 1,370 | 2,789 |
| Europe: |  |  |  |  |
| European Economic Community: |  |  |  |  |
| France . . . . . . . . . . | 19,956 | 38,012 | 700 | 38,712 |
| Germany, Federal Republic of | 22,870 | 13,465 | 13,976 | 27,441 |
| United Kingdom . . . | 14,802 | 21,837 | 2,001 | 23,838 |
| Netherlands. . | 7,829 | 12,336 | 10,644 | 22,980 |
| Belgium. . | 6,265 | 12,660 | 299 | 12,959 |
| Denmark. . | 2,887 | 4,744 | 2 | 4,746 |
| Italy. . | 1,926 | 3,303 | 1,039 | 4,342 |
| Iceland. . | 11 | 12 | - | 12 |
| Total . | 76,546 | 106,369 | 28,661 | 135,030 |
| Other: |  |  |  |  |
| Sweden . | 8,926 | 14,508 | 750 | 15,258 |
| Switzerland. | 956 | 2,131 | 530 | 2,661 |
| Norway . | 614 | 748 | 1,621 | 2,369 |
| Greece . | 3,194 | 1,354 | 137 | 1,491 |
| Spain. - | 1,558 | 1,003 | 165 | 1,168 |
| Portugal . . . . . . . . . . | 1,886 | 648 | 1 | 649 |
| Austria. . . . . . . . . . . | 8 | 14 | 177 | 191 |

U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, bY CONIINENT AND COUNIRY OF DESTINATION, 1977 - Continued

| Country | Edible |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | ---- | sand dolla | ---- |
| Europe - continued: |  |  |  |  |
| Other - continued: |  |  |  |  |
| Finland. | 80 | 97 | - | 97 |
| Malta. - | 30 | 22 | - | 22 |
| Cyprus. | 5 | 4 | - | 4 |
| Total. | 17,257 | 20,529 | 3,381 | 23,910 |
| Asia: |  |  |  |  |
| Japan. . - | 116,252 | 215,106 | 3,928 | 219,034 |
| Korea, Republic of | 6,871 | 3,611 | 229 | 3,840 |
| China, Republic of (Taiwan). | 2,592 | 1,566 | 1,012 | 2,578 |
| Hong Kong. . . . . . . | 1,180 | 1,756 | 418 | 2,174 |
| Israel . . | 1,107 | 1,105 | 33 | 1,138 |
| Singapore. . | 344 | 899 | 92 | 991 |
| Philippines. . | 2,565 | 683 | 21 | 704 |
| Saudi Arabia . | 542 | 517 | 113 | 630 |
| Lebanon. . | 52 | 182 | 79 | 261 |
| Iran . . . . . . | 91 | 122 | 107 | 229 |
| United Arab Emirates | 76 | 137 | - | 137 |
| Malaysia . . . | 30 | 104 | 26 | 130 |
| Thailand. | 59 | 83 | 19 | 102 |
| Indonesia. | 53 | 87 | - | 87 |
| Bahrain. . | 19 | 43 | - | 43 |
| Kuwait . | 18 | 36 | - | 36 |
| Oman . | 18 | 26 | - | 26 |
| Qatar. . | 6 | 12 | - | 12 |
| China, Peoples Republic of (Peking). | - | - | 10 | 10 |
| Pakistan . . . . | 1 | 1 | 2 | 3 |
| Jordan . | 1 | 2 | - | 2 |
| India. . . | 1 | 2 | - | 2 |
| Burma. . . . | 2 | 1 | - | 1 |
| Bangladesh . | 1 | 1 | - | 1 |
| Total. . | 131,881 | 226,082 | 6,089 | 232,171 |
| Australia and Oceanic: |  |  |  |  |
| Australia. . . . | 6,214 | 9,656 | 89 | 9,745 |
| New Zealand. - . . . - | 453 | 811 | 4 | 815 |
| French Pacific Islands | 265 | 487 | 8 | 495 |
| New Guinea . . . . . . | 714 | 334 | - | 334 |
| Trust Territory of the |  |  |  |  |
| Pacific Islands . . . | 96 | 141 | 1 | 142 |
| Other Pacific Islands. | 17 | 24 | - | 24 |
| West Samoa . . . . . | 4 | 6 | - | 6 |
| Total. . . . | 7,763 | 11,459 | 102 | 11,561 |
| Africa: |  |  |  |  |
| Egypt. . . . . . | 13 | 19 | 2,508 | 2,527 |
| South Africa, Republic of. | 269 | 459 | 8 | 467 |
| Canary Islands . . . | 505 | 395 | - | 395 |
| Ghana. . - | 1 | 1 | 260 | 261 |
| Nigeria. . . | 372 | 133 | - | 133 |
| Ivory Coast. | 317 | 41 | - | 41 |
| Zaire. . | 15 | 27 | - | 27 |
| Guinea . | 6 | 22 | - | 22 |
| Liberia. | 7 | 13 | - | 13 |
| Morocco. . | - | - | 8 | 8 |
| Angola . | 3 | 8 | - | 8 |
| Kenya. . | 1 | 1 | 1 | 2 |
| Cameroon . | 1 | 1 | - | 1 |
| Total. . | 1,510 | 1,120 | 2,785 | 3,905 |
| Grand total. . . . . . . | 331,059 | 473,375 | 47,121 | 520,496 |

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

## FOREIGN TRADE

## U.S. EXPORTS

EXPORTS OF DOMESTIC AND FOREIGN SHRIMP PRODUCTS, 1976 AND 1977

| Item | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Fresh and frozen: |  |  |  |  |
| Domestic . | 23,296 | 57,023 | 26,089 | 60,731 |
| Foreign. | 9,138 | 30,491 | 8,902 | 26,643 |
| Total | 32,434 | 87,514 | 34,991 | 87,374 |
| Canned: |  |  |  |  |
| Domestic . | 7,769 | 14,685 | 8,966 | 18,066 |
| Foreign. . . . . . | 72 | 146 | 48 | 144 |
| Total . . . . | 7,841 | 14,831 | 9,014 | 18,210 |
| Total: |  |  |  |  |
| Domestic . | 31,065 | 71,708 | 35,055 | 78,797 |
| Foreign. . . . . . | 9,210 | 30,637 | 8,950 | 26,787 |
| Total . . . . . | 40,275 | 102,345 | 44,005 | 105,584 |

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

EXPORTS OF DCMESTIC FRESH AND FROZEN SHRIMP, BY COUNTRY OF DESTINATION, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Canada . | 8,743 | 20,707 | 8,634 | 20,610 |
| Mexico . . | 6,919 | 16,151 | 8,811 | 19,003 |
| Japan. . | 3,762 | 12,837 | 4,718 | 11,957 |
| Sweden . . . . | 1,202 | 1,992 | 1,734 | 3,815 |
| United Kingdom | 374 | 663 | 630 | 1,474 |
| Denmark. . | 380 | 639 | 428 | 941 |
| Bermuda. . . . | 140 | 500 | 115 | 412 |
| New Zealand. | 450 | 853 | 176 | 363 |
| Netherlands. | 63 | 173 | 124 | 312 |
| Other. . | 1,263 | 2,508 | 719 | 1,844 |
| Total . . . . . . . | 23,296 | 57,023. | 26,089 | 60,731 |

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

EXPORTS OF DOMESTIC CANNED SHRIMP, BY COUNTRY OF DESTINATION, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Canada . | 5,303 | 10,434 | 6,340 | 13,076 |
| Sweden . . . . . . . | 465 | 992 | 493 | 1,205 |
| United Kingdom | 719 | 984 | 542 | 845 |
| Switzerland. . | 245 | 439 | 293 | 582 |
| Australia. . . . . . . . | 444 | 651 | 368 | 536 |
| Japan. . . . . . . . . . | 40 | 99 | 345 | 526 |
| France . . | 121 | 268 | 169 | 417 |
| New Zealand. . . . . . . | 133 | 223 | 82 | 151 |
| Other. . . . . . . . . . | 299 | 595 | 334 | 728 |
| Total . . . . . | 7,769 | 14,685 | 8,966 | 18,066 |

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

## U.S. EXPORTS

EXPORTS OF DOMESTIC FRESH AND FROZEN SALMON, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Japan. | 4,275 | 6,791 | 31,854 | 57,422 |
| France | 14,100 | 27,368 | 12,883 | 27,634 |
| Sweden | 3,807 | 5,978 | 3,934 | 5,767 |
| Canada . | 2,277 | 3,417 | 5,466 | 5,355 |
| United Kingdom . | 5,422 | 8,463 | 3,622 | 5,145 |
| Germany, Federal Republic of | 1,714 | 3,859 | 1,810 | 4,281 |
| Belgium. . . . . . . . | 2,288 | 4,660 | 1,783. | 3,959 |
| Denmark. | 1,703 | 2,600 | 1,772 | 2,827 |
| Netherlands. | 1,721 | 3,614 | 1,172 | 2,368 |
| Italy. | 400 | 1,107 | 434 | 1,381 |
| Switzerland. | 108 | 200 | 252 | 398 |
| South Africa, Republic of. | 49 | 74 | 110 | 181 |
| Other. . . . . | 554 | 1,146 | 467 | 786 |
| Total | 38,418 | 69,277 | 65,559 | 117,504 |

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

EXPORTS OF DOMESTIC FRESH AND FROZEN SALMON FILLETS, STEAKS OR PORTIONS, BY COUNTRY OF DESTINATION, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| Japan. | 872 | 1,743 | 1,809 | 3,171 |
| France. | 954 | 1,984 | 1,167 | 2,740 |
| Canada . | 501 | 644 | 380 | 500 |
| Belgíum. | 346 | 709 | 165 | 324 |
| Sweden . . | 213 | 356 | 187 | 301 |
| United Kingdom | 133 | 221 | 162 | 227 |
| Other. . . . . | 485 | 711 | 415 | 629 |
| Total . | 3,504 | 6,368 | 4,285 | 7,892 |

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

EXPORTS OF DOMESTIC CANNED SALMON, BY COUNTRY
Of DESTINATION, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| United Kingdom | 9,353 | 17,184 | 8,174 | 13,139 |
| Australia. | 2,218 | 4,065 | 3,457 | 5,815 |
| Canada . | 3,263 | 4,653 | 3,413 | 4,775 |
| Netherlands. | 2,406 | 4,132 | 2,537 | 4,192 |
| Belgium. | 1,345 | 1,973 | 1,190 | 1,655 |
| Japan. - | 201 | 321 | 717 | 1,453 |
| France . | 149 | 363 | 555 | 1,136 |
| Other. . - | 653 | 1,174 | 1,232 | 1,866 |
| Total | 19,588 | 33,865 | 21,275 | 34,03I |

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

## U.S. EXPORTS

EXPORTS OF DOMESTIC FRESH OR FROZEN KING CRAB, BY COUNTRY OF DESTINATION, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Japan. | 1,730 | 3,502 | 7,499 | 17,595 |
| Belgium. | 410 | 1,718 | 495 | 2,873 |
| Canada . | 630 | 1,455 | 951 | 2,485 |
| Netherlands. | 577 | 2,835 | 401 | 2,218 |
| Australia. | 176 | 695 | 210 | 1,090 |
| France . | 70 | 229 | 131 | 652 |
| Other. | 506 | 1,464 | 495 | 2,071 |
| Total . | 4,099 | 11,898 | 10,182 | 28,984 |

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

EXPORTS OF DOMESTIC CANNED SQUID,
BY COUNTRY OF DESTINATION, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Greece: . | 4,214 | 1,180 | 2,154 | 668 |
| Philippines . . . . . . . . | 3,237 | 801 | 2,528 | 664 |
| Germany, Federal Republic of | 204 | 59 | 230 | 36 |
| Australia . . . . . . . . | 41 | 9 | 68 | 31 |
| Malta . | 11 | 3 | 17 | 5 |
| Canada. | 49 | 7 | 34 | 4 |
| Other . | 158 | 36 | 14 | 3 |
| Total. . | 7,914 | 2,095 | 5,045 | 1,411 |

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

EXPORTS OF DCMESTIC FISH MEAL, BY COUNIRY OF DESTINATION, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Short } \\ & \text { tons } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\begin{aligned} & \text { Short } \\ & \text { tons } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Germany, Federal Republic of | 17,217 | 5,859 | 22,832 | 7,996 |
| Egypt . . . . . . . . . . . | 11,530 | 3,524 | 6,120 | 2,507 |
| China, Republic of (Taiwan) | 15 | 5 | 1,781 | 708 |
| Canada. . | 1,817 | 312 | 2,076 | 366 |
| Mexico. | 43 | 4 | 1,064 | 283 |
| Ghana . | 782 | 130 | 711 | 259 |
| Other . | 1,737 | 589 | 1,519 | 465 |
| Total. | 33,141 | 10,423 | 36,103 | 12,584 |

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

## U.S. EXPORTS

EXPORTS OF DQMESTIC FISH AND FISH LIVER OILS, BY COUNTRY OF DESTINATION, 1976 AND 1977

| Country | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Netherlands | 82,905 | 13,600 | 52,554 | 10,379 |
| Germany, Federal Republic of | 13,855 | 2,198 | 13,968 | 2,632 |
| United Kingdom. | 34,091 | 5,873 | 7,943 | 1,597 |
| Colombia. . . . | 26,600 | 4,211 | 5,588 | 1,071 |
| Norway. | 1,323 | 231 | 3,272 | 746 |
| Sweden. | 2,212 | 400 | 2,200 | 440 |
| Other . | 18,249 | 3,433 | 5,108 | 1,242 |
| Total. . . | 179,235 | 29,946 | 90,633 | 18,107 |

Note:--Does not include whale and sperm oil.
Source:--U.S. Department of Commerce, Bureau of the Census.

VALUE OF U.S. EXPORTS OF DOMESTIC FISHERY PRODUCTS, 1968-77


## SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF EDIBLE AND INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1968-77
(Round weight basis)

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. (2) Preliminary. *Record. Record domestic commercial landings amounting to 5,354 million 1 b were made in 1962 .
U.S. SUPPLY OF EDIBLE COMMERCIAL FISHERY PRODUCTS, 1968-77
(Round weight basis)

| Year | Domestic com | al landings | Imports (1) |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million |  | Million |  | Mitlion |
| 1968 | $\frac{\text { pounds }}{2,347}$ | $\frac{\text { Percent }}{42.1}$ | $\frac{\text { pounds }}{3,232}$ | $\frac{\text { Percent }}{57.9}$ | $\frac{\text { pounds }}{5,579}$ |
| 1969 | 2,321 | 40.9 | 3,353 | 59.1 | 5,674 |
| 1970 | 2,537 | 40.8 | 3,676 | 59.2 | 6,213 |
| 1971 | 2,441 | 40.5 | 3,582 | 59.5 | 6,023 |
| 1972 | 2,435 | 35.3 | 4,454 | 64.7 | 6,889 |
| 1973 | 2,398 | 33.7 | *4,709 | 66.3 | 7,107 |
| 1974 | 2,496 | 37.6 | 4,142 | 62.4 | 6,638 |
| 1975 (2) | 2,430 | 38.2 | 3,929 | 61.8 | 6,359 |
| 1976 (2) | 2,760 | 37.4 | 4,629 | 62.6 | 7,389 |
| 1977 (2) | 2,900 | 39.1 | 4,514 | 60.9 | *7,414 |

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. (2) Preliminary. *Record. Record U.S. landings of edible fishery products amounting to 3,307 million lb were made in 1950.

## U.S. SUPPLY OF INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1968-77 <br> (Round weight basis)

| Year | Domestic commercial landings |  | Imports |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million ${ }^{\text {c }}$ |  | Million |  | Million |
|  | pounds | Percent | pounds | Percent | pounds |
| 1968 | 1,813 | 15.4 | *9,989 | 84.6 | *11,802 |
| 1969 | 2,015 | 32.7 | 4,157 | 67.3 | 6,173 |
| 1970 | 2,380 | 45.2 | 2,881 | 54.8 | 5,261 |
| 1971 | 2,577 | 44.6 | 3,204 | 55.4 | 5,781 |
| 1972 | 2,371 | 34.1 | 4,589 | 65.9 | 6,960 |
| 1973 | 2,460 | 75.2 | 811 | 24.8 | 3,271 |
| 1974 | 2,471 | 76.3 | 766 | 23.7 | 3,237 |
| 1975 (1) | 2,412 | 64.0 | 1,358 | 36.0 | 3,770 |
| 1976 (1) | 2,590 | 62.2 | 1,576 | 37.8 | 4,166 |
| 1977 (1) | 2,298 | 72.6 | 867 | 27.4 | 3,165 |

(1) Preliminary. *Record. Record U.S. landings of industrial fishery products amounting to 2,814 million lb were made in 1962.
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 COMMERCIAL FINFISH AND SHELLFISH, 1976 AND 1977

| Item | Domestic Commercial landings |  | Imports (1) |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1976 | 1977 | 1976 | 1977 | 1976 | 1977 |
|  | -- | $-\rightarrow \mathrm{Mi}$ | ion pound | round we | --- | --- |
| Edible fishery products: |  |  |  |  |  |  |
| Finfish . . . . | 1,774 | 1,781 | 3,881 | 3,808 | 5,655 | 5,589 |
| Shellfish . | 986 | 1,119 | 748 | 706 | 1,734 | 1,825 |
| Total. . . | 2,760 | 2,900 | 4,629 | 4,514 | 7,389 | 7,414 |
| Industrial fishery <br> products: |  |  |  |  |  |  |
| Finfish . . . . . . | 2,576 14 | 2,281 17 | ${ }_{\substack{(2) 1,576 \\(3)}}$ | (2) 867 (3) | 4,152 14 | $\begin{array}{r}3,148 \\ \hline 17 \\ \hline\end{array}$ |
| Total. | 2,590 | 2,298 | (2)1,576 | (2) 867 | 4,166 | 3,165 |
| Total: |  |  |  |  |  |  |
| Finfish | 4,350 | 4,062 | 5,457 | 4,675 | 9,807 | 8,737 |
| Shellfish | 1,000 | 1,136 | 748 | 706 | 1,748 | 1,842 |
| Total. | 5,350 | 5,198 | 6,205 | 5,381 | 11,555 | 10,579 |
| Item | Domestic commercial landings |  | Imports (1) |  | Total |  |
|  | 1976 | 1977 | 1976 | 1977 | 1976 | 1977 |


| Edible fishery products: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Finfish . . . . . . . | 573 | 602 | 975 | 1,149 | 1,548 | 1,751 |
| Shellfish | 691 | 802 | 835 | 783 | 1,526 | 1,585 |
| Total. | 1,264 | 1,404 | 1,810 | 1,932 | 3,074 | 3,336 |


| Industrial fishery products: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Finfish . . . . | 83 | 104 | (2) 415 | (2)543 | 498 | 647 |
| Shellfish | 6 | 7 | (3) | (3) | 6 | 7 |
| Total. | 89 | 111 | (2) 415 | (2)543 | 504 | 654 |
| Total: |  |  |  |  |  |  |
| Finfish | 656 | 706 | 1,390 | 1,692 | 2,046 | 2,398 |
| Shellfish | 697 | 809 | 835 | 783 | 1,532 | 1,592 |
| Total. . | 1,353 | 1,515 | 2,225 | 2,475 | 3,578 | 3,990 |

(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. Value of imports generally is export value, packed ready for shipment to the United States.
U.S. SUPPLY OF REGULAR AND MINCED BLOCKS, 1968-77
(Edible weight)

| Year | U.S. production |  | Imports |  | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | $\begin{aligned} & \text { Percentage of } \\ & \text { total supply } \end{aligned}$ | Quantity | $\begin{aligned} & \text { Percentage of } \\ & \text { total supply } \end{aligned}$ | Quantity |
|  | Thousand |  | Thousand |  | Thousand |
|  | pounds | Percent | pounds | Percent | pounds |
| 1968. | 4,235 | 1.6 | 261,086 | 98.4 | 265,321 |
| 1969. | 3,497 | 1.3 | 266,748 | 98.7 | 270,245 |
| 1970. | 3,892 | 1.4 | 272,655 | 98.6 | 276,547 |
| 1971. | 6,186 | 1.9 | 311,166 | 98.1 | 317,352 |
| 1972. | 3,508 | 1.0 | 355,459 | 99.0 | 358,967 |
| 1973. | 9,865 | 2.7 | 358,730 | 97.3 | 368,595 |
| 1974. | 4,417 | 1.6 | 266,073 | 98.4 | 270,490 |
| 1975. | 2,357 | . 7 | 313,479 | 99.3 | 315,836 |
| 1976. | 1,697 | . 4 | 378,742 | 99.6 | 380,439 |
| 1977. | 2,007 | . 5 | *385,138 | 99.5 | *387,145 |

*Record.
U.S. SUPPLY OF $\underset{\text { (Edible weight) }}{\text { ALL }}$ FILLETS AND STEAKS, 1968-77

| Year | U.S. production (1) |  | Imports |  | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | $\begin{aligned} & \text { Percentage of } \\ & \text { total supply } \end{aligned}$ | Quantity | $\begin{aligned} & \text { Percentage of } \\ & \text { total supply } \end{aligned}$ | Quantity |
|  | Thousand |  | Thousand |  | Thousand |
|  | pounds | Percent | pounds | Percent | pounds |
| 1968 . | 135,512 | 36.3 | $238,313$ | $63.7$ | $373,825$ |
| 1969. | 137,613 | 32.9 | 280,414 | 67.1 | 418,027 |
| 1970. | 133,508 | 29.3 | 322,209 | 70.7 | 455,717 |
| 1971. | 128,392 | 31.0 | 285,741 | 69.0 | 414,133 |
| 1972. | 126,643 | 24.7 | 385,127 | 75.3 | 511,770 |
| 1973. | 133,359 | 24.1 | *419,663 | 75.9 | 553,022 |
| 1974. | 132,337 | 29.6 | 315,275 | 70.4 | 447,612 |
| 1975. | 128,923 | 25.9 | 367,948 | 74.1 | 496,871 |
| 1976. | 142,585 | 25.6 | 413,307 | 74.4 | *555,892 |
| 1977. | 149,953 | 27.4 | 398,109 | 72.6 | 548,062 |

*Record. Record U.S. production was $205,486,000 \mathrm{lb}$ in 1951. (1) Includes fillets used to produce blocks.
U.S. SUPPLY OF GROUNDFISH FILLETS AND STEAKS, 1968-77
(Edible weight)

| Year | U.S. production (1) |  | Imports |  | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Percentage of total supply | Quantity | $\begin{aligned} & \text { Percentage of } \\ & \text { total supply } \end{aligned}$ | Quantity |
|  | Thousand |  | Thousand |  | Thousand |
|  | pounds | Percent | pounds | Percent | pounds |
| 1968. | 55,349 | 30.0 | 129,150 | 70.0 | $184,499$ |
| 1969. | 47,269 | 22.8 | 159,980 | 77.2 | 207,249 |
| 1970. | 42,894 | 18.7 | 186,107. | 81.3 | 229,001 |
| 1971. | 43,808 | 20.4 | 171,452 | 79.6 | 215,260 |
| 1972. | 39,266 | 15.6 | 213,255 | 84.4 | 252,521 |
| 1973. | 46,974 | 17.6 | 220,096 | 82.4 | 267,070 |
| 1974. | 45,337 | 21.5 | 165,351 | 78.5 | 210,688 |
| 1975. | 36,822 | 15.5 | 200,356 | 84.5 | 237,178 |
| 1976. | 40,564 | 15.1 | *228,287 | 84.9 | 268,851 |
| 1977. | 57,914 | 21.0 | 217,422 | 79.0 | *275,336 |

*Record. Record U.S. production was $148,786,000 \mathrm{lb}$ in 1951. (1) Includes fillets used to produce blocks. Species include: cod, cusk, haddock, hake, pollock, and Atlantic ocean perch.
U.S. COMMERCIAL LANDINGS AND IMPORTS OF TUNA, 1968-77

U.S. SUPPLY OF CANNED TUNA, 1968-77
(Canned weight)

| Year | $\begin{aligned} & \text { U.S. pack from } \\ & \text { domestic commercial } \\ & \text { landings (1) } \end{aligned}$ |  | $\begin{aligned} & \text { U.S. pack from } \\ & \text { imported fresh and } \\ & \text { frozen tuna (2) } \end{aligned}$ |  | Total | Imported canned |  | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Percent | Thousand pounds Percent |  |  |  |  | Thousand |
|  | pounds |  |  |  | -Thousand pounds- |  | Percent | pounds |
| 1968: | 176,524 | 38.1 | 219,433 | 47.4 | 395,957 | 67,173 | 14.5 | 463,130 |
| 1969. | 181,786 | 38.6 | 216,651. | 45.9 | 398,437 | 73,116 | 15.5 | 471,553 |
| 1970. | 203,531 | 39.9 | 234,109 | 45.9 | 437,640 | 72,262 | 14.2 | 509,902 |
| 1971. | 194,468 | 39.0 | 244,273 | 49.0 | 438,741 | 59,842 | 12.0 | 498,583 |
| 1972. | 234,000 | 34.6 | 385,796 | 57.0 | 619,796 | 56,513 | 8.4 | 676,309 |
| 1973. | 224,130 | 33.2 | *411,719 | 61.1 | 635,849 | 38,626 | 5.7 | 674,475 |
| 1974. | 249,803 | 35.0 | 410,542 | 57.6 | *660,345 | 52,746 | 7.4 | *713,091 |
| 1975. | 260,957 | 44.9 | 268,446 | 46.2 | 529,403 | 51,671 | 8.9 | 581,074 |
| 1976. | *285,049 | 43.4 | 314,142 | 47.7 | 599,191 | 58,893 | 8.9 | 658,084 |
| 1977. | 210,691 | 35.5 | 349,102 | 58.7 | 559,793 | 34,631 | 5.8 | 594,424 |

(1) Includes pack from landings in Puerto Rico and American Samoa by U.S. vessels. (2) Includes tuna canned in American Samoa from foreign-caught fish. *Record.
U.S. SUPPLY OF CANNED BONITO AND YELLOWTAIL, 1968-77
(Canned weight)

| Year | U.S. pack |  | Imports |  |  |  | $\begin{aligned} & \text { Total } \\ & \text { supply } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | In $0 i 1$ | Not in oil | Tot |  |  |
| Thousand |  |  |  |  |  |  | Thousand |
|  | pounds | Percent | --- | Thousand poun |  | Percent | pounds |
| 1968. | 4,202 | 82.5 | 547 | 346 | 893 | 17.5 | 5,095 |
| 1969. | 4,948 | 87.3 | 354 | 364 | 718 | 12.7 | 5,666 |
| 1970. | 2,815 | 69.6 | 830 | 402 | 1,232 | 30.4 | 4,047 |
| 1971. | 5,553 | 68.7 | 1,858 | 667 | 2,525 | 31.3 | 8,078 |
| 1972. | 6,633 | 64.0 | 2,638 | 1,094 | 3,732 | 36.0 | 10,365 |
| 1973. | 10,572 | 88.0 | 544 | 895 | 1,439 | 12.0 | 12,011 |
| 1974. | 7,789 | 95.8 | 282 | 59 | 341 | 4.2 | 8,130 |
| 1975. | 13,088 | 99.2 | 68 | 43 | 111 | . 8 | 13,199 |
| 1976. | 3,314 | 96.5 | 64 | 57 | 121 | 3.5 | 3,435 |
| 1977. | 7,116 | 83.8 | 17 | 1,358 | 1,375 | 16.2 | 8,491 |

U.S. SUPPLY OF CANNED SARDINES, 1968-77
(Canned weight)

| Year | U.S. pack, Maine sardines |  | Imports |  |  |  | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | $\begin{gathered} \text { Percentage } \\ \text { of } \\ \text { total } \\ \text { supply } \end{gathered}$ | Quantity |  |  | ```Percentage of total supply``` |  |
|  |  |  | In oil | Not in oil | Total |  |  |
| 1968. | Thousand | $\frac{\text { Percent }}{40.8}$ | ---- Thousand pounds ---- |  |  | Percent | $\frac{\text { Thousand }}{\text { pounds }}$ |
|  | pounds |  |  |  |  |  |  |
|  |  |  | 28,436 | 30,431 | 58,867 | 59.2 |  |
| 1969. | 24,402 | 35.0 | 27,220 | 18,147 | 45,367 | 65.0 | 69,769 |
| 1970. | 18,872 | 28.7 | 34,070 | 12,838 | 46,908 | 71.3 | 65,780 |
| 1971. | 22,249 | 30.8 | 31,034 | 18,985 | 50,019 | 69.2 | 72,268 |
| 1972. | 36,540 | 34.2 | 41,544 | 28,671 | 70,215 | 65.8 | 106,755 |
| 1973. | 23,284 | 25.7 | 36,089 | 31,330 | 67,419 | 74.3 | 90,703 |
| 1974. | 25,131 | 26.7 | 29,408 | 39,729 | 69,137 | 73.3 | 94,268 |
| 1975. | 26,008 | 45.5 | -18,513 | 12,593 | 31,106 | 54.5 | 57,114 |
| 1976. | 24,971 | 31.7 | 26,891 | 26,982 | 53,873 | 68.3 | 78,844 |
| 1977. | 23,496 | 32.0 | 25,748 | 24,288 | 50,036 | 68.0 | 73,532 |

U.S. SUPPLY OF CANNED SALMON, 1968-77
(Canned weight)

| Year | U.S. pack (1) |  | Imports |  | Total supply | Exports | Total for U.S. consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | ```Percentage of total supply``` | Quantity | ```Percentage of total supply``` |  |  |  |
|  |  | Percent | Thousand |  | --- - - Thousand pounds- .-- |  |  |
| 1968. | $165,490$ | 97.1 | 4,955 | 2.9 | 170,445 | 5,726 | 164,719 |
| 1969. | 122,444 | 98.2 | 2,217 | 1.8 | 124,661 | 15,536 | 109,125 |
| 1970. | 183,466 | 98.7 | 2,441 | 1.3 | 185,907 | 16,811 | 169,096 |
| 1971. | 168,452 | 99.1 | 1,551 | . 9 | 170,003 | 18,232 | 151,771 |
| 1972. | 92,858 | 88.9 | 11,647 | 11.1 | 104,505 | 21,358 | 83,147 |
| 1973. | 71,772 | 90.1 | 7,859 | 9.9 | 79,631 | 16,941 | 62,690 |
| 1974. | 87,791 | 91.1 | 8,553 | 8.9 | 96,344 | 8,320 | 88,024 |
| 1975. | 78,086 | 96.0 | 3,265 | 4.0 | 81,351 | 22,504 | 58,847 |
| 1976. | 127,611 | 98.1 | 2,521 | 1.9 | 130,132 | 19,588 | 110,544 |
| 1977. | 138,528 | 99.6 | 586 | . 4 | 139,114 | 21,275 | 117,839 |

(1) Record pack, $430,328,000 \mathrm{lb}$ in 1936. Note:--Does not include re-exports of canned salmon produced in a foreign country.
U.S. SUPPLY OF FRESH AND FROZEN CLAM MEATS, 1968-77
(Meat weight, except as noted)

| Year | U.S. commercial landings |  |  |  |  | Imports (1) | Total for U.S. consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hard | Soft | Surf | Other | Total |  |  |
|  |  |  |  |  |  |  |  |
| 1968. | 15,426 | 10,368 | 40,552 | 900 | 67,246 | 749 | 67,995 |
| 1969. | 16,154 | 13,481 | 49,575 | 1,535 | 80,745 | 1,087 | 81,832 |
| 1970. | 16,015 | 12,908 | 67,318 | 2,963 | 99,204 | 1,720 | 100,924 |
| 1971. | 16,666 | 12,652 | 52,535 | 2,636 | 84,489 | 3,072 | 87,561 |
| 1972. | 16,153 | 9,078 | 63,471 | 1,987 | 90,689 | 2,994 | 93,683 |
| 1973. | 14,505 | 8,627 | 82,370 | 2,038 | 107,540 | 2,167 | 109,707 |
| 1974. | 14,665 | 9,590 | 96,110 | 1,328 | 121,693 | 1,602 | 123,295 |
| 1975. | 14,827 | 8,759 | 86,919 | 1,779 | 112,284 | 1,436 | 113,720 |
| 1976. | 15,600 | 10,540 | 49,133 | 5,728 | 81,001 | 2,132 | 83,133 |
| 1977. | 15,433 | 10,683 | 51,036 | 19,008 | 96,160 | 2,989 | 99,149 |

[^1]U.S. SUPPLY OF SHRIMP, 1968-77

| Year | U.S. commercial landings |  |  | Imports in all forms (1) |  |  | $\begin{aligned} & \text { Total } \\ & \text { supply, } \\ & \text { heads-off } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Heads-on | Heads-off | Percentage of total | Import weight | Heads-off | Percentage of total |  |
| Thousand pounds |  |  |  | Thousand pounds |  | Percent | $\frac{\text { Thousand }}{\text { pounds }}$ |
| 1968. | 299,289 | 184,065 | 46.7 | 189,455 | 210,063 | 53.3 | 394,128 |
| 1969. | 318,537 | 195,002 | 47.0 | 193,741 | 220,131 | 53.0 | 415,133 |
| 1970. | 367,468 | 224,272 | 47.6 | 218,715 | 247,130 | 52.4 | 471,402 |
| 1971. | 390,907 | 238,073 | 52.5 | 191,295 | 215,073 | 47.5 | 453,146 |
| 1972. | 387,465 | 235,852 | 48.1 | 223,226 | 254,534 | 51.9 | 490,386 |
| 1973. | 379,727 | 228,643 | 49.8 | 202,562 | 230,780 | 50.2 | 459,423 |
| 1974. | 373,587 | 224,677 | 45.7 | 228,911 | 267,462 | 54.3 | 492,139 |
| 1975. | 343,586 | 207,346 | 47.3 | 201,457 | 230,963 | 52.7 | 438,309 |
| 1976. | 403,577 | 243,975 | 47.4 | *229,810 | *270,720 | 52.6 | 514,695 |
| 1977. | *476,654 | *288,443 | 51.6 | 228,017 | 270,406 | 48.4 | *558,849 | shell on; 1.28, peeled raw; 2.02, canned; and 2.40 for other. *Record.

U.S. SUPPLY OF CANNED SHRIMP, 1968-77
(Canned weight)

| Year | U.S. pack | Imports | Exports |  | Total for U.S. consumption |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Domestic | Foreign |  |
|  | - - | - | nd pounds | -- | ---- |
| 1968. | 18,967 | 4,307 | 4,467 | 20 | 18,787 |
| 1969. | 20,729 | 3,583 | 5,682 | 39 | 18,591 |
| 1970. | 25,125 | 3,876 | 6,076 | 50 | *22,875 |
| 1971. | 22,345 | 2,742 | 8,334 | - | 16,753 |
| 1972. | 23,795 | 1,123 | 8,450 | 8 | 16,460 |
| 1973. | *25,228 | 3,027 | *9,949 | 42 | 18,264 |
| 1974. | 22,121 | *6,107 | 6,885 | 36 | 21,307 |
| 1975. | 12,407 | 1,118 | 6,223 | 4 | 7,298 |
| 1976. | 20,021 | 2,350 | 7,769 | *72 | 14,530 |
| 1977. | 23,687 | 2,809 | 8,966 | 48 | 17,482 |

*Record.
U.S. SUPPLY OF FRESH AND FROZEN SCALLOP MEATS, 1968-77
(Edible weight)

| Year | U.S. commercial landings |  |  |  | Imports (1) | Total for U.S. consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bay | Calico | Sea | Total |  |  |
|  |  | - | -1 | ounds- | ---- | - - |
| 1968. | 1,491 | 89 | 13,818 | 15,398 | 14,581 | 29,979 |
| 1969. | 2,114 | 199 | 9,312 | 11,625 | 14,322 | 25,947 |
| 1970. | 1,700 | 1,833 | 7,304 | 10,837 | 16,830 | 27,667 |
| 1971. | 2,315 | 1,574 | 6,337 | 10,226 | 17,389 | 27,615 |
| 1972. | 2,032 | 1,352 | 7,017 | 10,401 | 20,820 | 31,221 |
| 1973. | 1,014 | 558 | 6,400 | 7,972 | 19,833 | 27,805 |
| 1974. | 1,499 | 1,131 | 6,444 | 9,074 | 18,100 | 27,174 |
| 1975. | 1,949 | 1,400 | 9,735 | 13,084 | 19,737 | 32,821 |
| 1976. | 2,131 | 2,261 | 19,840 | 24,232 | 25,253 | 49,485 |
| 1977. | 1,703 | 1,111 | 25,012 | 27,826 | *29,786 | *57,612 |

(1) May include small amounts of canned or cured scallops. *Record. Record landings were 29,195,000 lb in 1961.

## SUPPLY OF FISHERY PRODUCTS

## U.S. SUPPLY OF FRESH AND FROZEN SPINY LOBSTERS, 1968-77

 tails; and 4.35, other. *Record.
U.S. SUPPL.Y OF FRESH AND FROZEN AMERICAN LOBSTERS, 1968-77

(1) Imports were converted to round (live) weight by using these factors: 1.00 , whole; and 4.50 ,
meat. *Record. Record imports, $23,558,0001 \mathrm{lb}$ product weight in 1951 , and total supply, $59,523,000$ lb round weight in 1960.
U.S. SUPPLY OF CANNED CRAB MEAT, 1968-77
(Canned weight)


Record production was 11,002,000 lb in 1966; record imports, 13,507,000 1b in 1939.

# SUPPLY OF FISHERY PRODUCTS 

U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1968-77

(1) Includes shelifish meal production.

Note:--Wet weight of solubles has been converted to dry weight by reducing its poundage by onehalf. *Record. Record U.S. production, 389,231 tons in 1959.

## U.S. SUPPLY OF FISH MEAL, 1968-77


(1) Includes shellfish meal. (2) Data not available. *Record. Record U.S. production, 312,259 tons in 1962. Note:--Does not include re-exports of fish meal produced in a foreign country.
U.S. SUPPLY OF FISH SOLUBLES, 1968-77

| Year | U.S. production |  | Imports (1) |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Short tons | Percent | Short tons | Percent | Short tons |
| 1968. | 71,833 | 97.6 | 1,773 | 2.4 | 73,606 |
| 1969. | 81,692 | 99.8 | 161 | . 2 | 81,853 |
| 1970. | 94,968 | 99.5 | 474 | . 5 | 95,442 |
| 1971. | 111,188 | 99.9 | 56 | . 1 | 111,244 |
| 1972. | 134,395 | 99.9 | 85 | . 1 | 134,480 |
| 1973. | 137,435 | 99.8 | 309 | . 2 | 137,744 |
| 1974. | 137,259 | 99.9 | 19 | (2) | 137,278 |
| 1975. | 127,850 | 99.9 | 48 | (2) | 127,898 |
| 1976. | 133,107 | 99.1 | 1,221 | . 9 | 134,328 |
| 1977. | 122,286 | 99.3 | 820 | . 7 | 123,106 |

(1) Includes only fish solubles and will not check with other tables that show total imports of fish solubles and cod-liver solubles. (2) Less than one-tenth of 1 percent. Record: U.S. production was 165,359 short tons; imports, 26,630 short tons; and total supply, 191,989 short tons in 1959.
U.S. SUPPLY OF FISH OILS, 1968-77


Mote:--Excludes whale, sperm and liver oils. Does not include exports of foreign merchàndise. Record U.S. production, 299.3 million lb in 1936.

## U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1968-77



PURCHASES OF FRESH, FROZEN, AND CANNED FISHERY PRODUCTS, By defense subsistence supply Centers, 1967-77


Note:-Armed Forces installations generally make some local purchases not included in the above data.
Source:--U.S. Department of Defense.

PURCHASES OF PRINCIPAL FRESH AND FROZEN FISHERY PRODUCTS, BY DEFENSE SUBSISTENCE SUPPLY CENTERS, 1976 AND 1977

| Product | 1976 | 1977 |
| :---: | :---: | :---: |
| Shrimp: |  |  |
| Raw headless. . . . | 127 | 159 |
| Peeled and deveined | 534 | 756 |
| Breaded . . . . . . | 2,405 | 2,882 |
| Total. . . . . . | 3,066 | 3,797 |
| Scallops. . . . . | 342 | 374 |
| Spiny lobster tails . | 456 | 234 |
| Oysters: |  |  |
| Eastern . | 411 | 323 |
| Pacific . | 113 | 48 |
| Total. | 524 | 371 |
| Fillets: |  |  |
| Cod . . | 186 | 151 |
| Flounder. . | 680 | 664 |
| Ocean perch . | 879 | 973 |
| Haddock . | 173 | 140 |
| Fish sticks . | 569 | 458 |
| Portions: |  |  |
| Haddock-cod . | 1,178 | 1,099 |
| Flounder-ocean perch. . | 1,370 | 1,724 |
| Steaks: |  |  |
| Halibut. | 255 | 251 |
| Salmon. . . . . . . . . | 81 | 40 |

$\overline{\text { Note:-Armed Forces installations generally make some local purchases not included in the above }}$ data.
Source:--U.S. Department of Defense.

## EXVESSEL PRICES

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY MONTHS, 1977 (1967=100)

| Species or group | Jan. | Feb. | Mar. | Apr. | May | June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England finfish: |  |  |  |  |  |  |
| Cod. | 389.4 | 324.9 | 310.9 | 244.0 | 179.5 | 186.5 |
| Haddock. | 312.1 | 245.1 | 306.4 | 231.4 | 187.0 | 193.5 |
| Yellowtail flounder. | 499.9 | 499.0 | 468.3 | 396.1 | 355.5 | 408.7 |
| Other flounders. | 293.5 | 276.1 | 273.9 | 210.9 | 175.4 | 282.6 |
| Ocean perch. | 382.1 | 394.9 | 387.2 | 412.7 | 382.1 | 384.7 |
| pollock. . . | 230.2 | 429.7 | 404.4 | 287.7 | 194.7 | 209.7 |
| Whiting. | 190.8 | 345.6 | 250.2 | 159.0 | 171.8 | 262.9 |
| New England finfish | 345.9 | 328.3 | 334.0 | 269.0 | 229.8 | 267.5 |
| Red snapper. | 316.6 | 311.1 | 311.1 | 327.7 | 347.2 | 347.2 |
| Pacific halibut. | 502.5 | 502.5 | 502.5 | 502.5 | 495.4 | 495.4 |
| Salmon: |  |  |  |  |  |  |
| Chinook - troll. . | 371.2 | 371.2 | 371.2 | 318.1 | 325.1 | 381.8 |
| Chinook - nontroll | 498.1 | 498.1 | 498.1 | 498.1 | 498.1 | 498.1 |
| Chum . | 786.1 | 786.1 | 786.1 | 786.1 | 786.1 | 786.1 |
| Coho - troll | 306.1 | 306.1 | 306.1 | 306.1 | 306.1 | 391.9 |
| Coho - nontroll. | 483.5 | 483.5 | 483.5 | 483.5 | 483.5 | 483.5 |
| Pink . | 275.1 | 275.1 | 275.1 | 275.1 | 275.1 | 471.6 |
| Sockeye. . | 447.8 | 447.8 | 447.8 | 447.8 | 447.8 | 447.8 |
| Salmon. | 427.4 | 427.4 | 427.4 | 422.3 | 423.0 | 471.4 |
| Tuna: |  |  |  |  |  |  |
| Albacore | 264.3 | 264.3 | 264.3 | 264.3 | 264.3 | 264.3 |
| Skipjack | 270.9 | 278.0 | 278.0 | 278.0 | 315.7 | 333.6 |
| Bluefin. | 230.2 | 230.2 | 230.2 | 230.2 | 303.2 | 305.7 |
| Yellowfin. | 229.9 | 235.6 | 235.6 | 235.6 | 268.2 | 281.7 |
| Tuna. . | 249.0 | 253.6 | 253.6 | 253.6 | 282.4 | 293.9 |
| Edible finfish. | 356.5 | 354.0 | 355.2 | 339.3 | 339.9 | 371.5 |
| Shrimp . . . . . | 330.1 | 365.6 | 383.1 | 350.8 | 308.0 | 316.3 |
| Other shellfish: |  |  |  |  |  |  |
| Hard clams . | 346.0 | 293.0 | 212.4 | 180.4 | 181.5 | 192.9 |
| Soft clams | 345.4 | 342.4 | 290.2 | 306.0 | 272.8 | 297.8 |
| Surf clams . . | 531.7 | 527.6 | 559.4 | 555.3 | 643.6 | 604.6 |
| Hard blue crabs. | 514.5 | 578.8 | 592.4 | 737.9 | 614.4 | 472.2 |
| King crabs . . - | 834.2 | 834.2 | 834.2 | 834.2 | 816.2 | 816.2 |
| American lobsters. | 345.0 | 353.6 | 342.9 | 221.4 | 207.1 | 222.8 |
| Eastern oysters. | 210.9 | 195.7 | 157.4 | 144.3 | 129.8 | 168.7 |
| Sea scallops. | 246.9 | 220.1 | 210.3 | 187.9 | 176.1 | 173.2 |
| Other shellfish | 380.9 | 373.5 | 348.2 | 325.2 | 307.7 | 312.9 |
| Edible shellfish. | 356.0 | 369.6 | 365.3 | 337.7 | 307.8 | 314.6 |
| Edible fish. . . | 356.2 | 362.2 | 360.5 | 338.5 | 323.0 | 341.5 |
| Industrial . | 246.0 | 246.0 | 246.0 | 373.0 | 364.9 | 355.2 |
| Menhaden . . . . . . . | 246.0 | 246.0 | 246.0 | 373.0 | 364.9 | 355.2 |
| All fish . | 348.6 | 354.2 | 352.6 | 340.9 | 325.9 | 342.4 |

(Continued on next page)

## eXVeSSEL PRICES

INDEXES OF EXVESSEL PRICES FOR FTSH AND SHELLFISH, BY MONTHS, 1977 - Continued (1967=100)

| Species or group | July | Aug. | Sept. | Oct. | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England finfish: |  |  |  |  |  |  |
| cod. | 201.8 | 253.4 | 384.7 | 363.6 | 281.5 | 295.6 |
| Haddock. | 195.2 | 248.7 | 243.0 | 246.3 | 270.1 | 282.5 |
| Yellowtail flounder. | 408.7 | 371.7 | 417.8 | 454.8 | 461.1 | 446.6 |
| Other flounders. | 328.3 | 323.2 | 321.8 | 303.6 | 273.9 | 276.1 |
| Ocean perch. | 384.7 | 387.2 | 389.8 | 400.0 | 387.2 | 405.1 |
| Pollock. | 199.8 | 231.8 | 281.0 | 287.7 | 226.7 | 231.8 |
| Whiting. | 195.1 | 156.9 | 171.8 | 178.1 | 235.4 | 246.0 |
| New England finfish | 271.0 | 286.5 | 309.5 | 313.6 | 312.5 | 318.9 |
| Red snapper. . . | 338.8 | 319.4 | 319.4 | 319.4 | 319.4 | 316.6 |
| Pacific halibut. | 530.8 | 495.4 | 477.7 | 477.7 | 477.7 | 477.7 |
| Salmon: |  |  |  |  |  |  |
| Chinook - troll. | 451.8 | 439.0 | 456.0 | 456.0 | 456.0 | 456.0 |
| Chinook - nontroll | 645.7 | 553.5 | 645.7 | 645.7 | 645.7 | 645.7 |
| Chum . . . . | 637.6 | 524.1 | 524.1 | 524.1 | 524.1 | 524.1 |
| Coho - troll | 323.3 | 367.4 | 337.2 | 337.2 | 337.2 | 337.2 |
| Coho - nontroll. | 373.6 | 351.7 | 527.5 | 527.5 | 527.5 | 527.5 |
| Pink . | 534.4 | 275.1 | 471.6 | 471.6 | 471.6 | 471.6 |
| Sockeye. | 533.0 | 533.0 | 533.0 | 533.0 | 533.0 | 533.0 |
| Salmon. | 496.0 | 445.7 | 491.8 | 491.8 | 491.8 | 491.8 |
| Tuna: |  |  |  |  |  |  |
| Albacore | 307.7 | 307.7 | 307.7 | 307.7 | 307.7 | 307.7 |
| Skipjack | 335.4 | 335.4 | 342.6 | 342.6 | 343.5 | 348.0 |
| Bluefin. | 308.1 | 317.6 | 317.6 | 317.6 | 317.6 | 320.0 |
| Yellowfin. | 284.6 | 284.6 | 291.0 | 291.0 | 291.7 | 293.8 |
| Tuna. | 305.0 | 305.6 | 310.4 | 310.4 | 311.0 | 313.3 |
| Edible finfish. | 387.1 | 367.9 | 392.5 | 393.4 | 393.3 | 395.4 |
| Shrimp | 285.5 | 273.2 | 252.5 | 254.8 | 255.4 | 242.6 |
| Other shellfish: 273.2 252.5 254.8 |  |  |  |  |  |  |
| Hard clams. | 216.8 | 248.9 | 249.9 | 208.6 | 223.4 | 228.0 |
| Soft clams . | 386.2 | 391.6 | 388.3 | 372.6 | 338.3 | 369.6 |
| Surf clams | 480.4 | 453.7 | 455.8 | 456.8 | 461.9 | 488.6 |
| Hard blue crabs. | 363.9 | 402.8 | 296.2 | 252.2 | 247.1 | 289.4 |
| King crabs . | 816.2 | 816.2 | 859.8 | 1,128.3 | 1,222:2 | 1,264.9 |
| American lobsters. | 186.1 | 192.6 | 172.4 | 181.1 | 214.9 | 301.0 |
| Eastern oysters. | 162.7 | 178.9 | 141.3 | 150.9 | 151.5 | 166.5 |
| Sea scallops . . | 180.6 | 206.1 | 221.6 | 251.1 | 255.8 | 262.5 |
| Other shellfish | 297.1 | 311.7 | 294.7 | 327.8 | 348.3 | 382.4 |
| Edible shellfish. | 291.4 | 292.8 | 274.0 | 292.0 | 302.8 | 313.9 |
| Edible fish. | 336.7 | 328.3 | 330.1 | 340.0 | 345.6 | 352.4 |
| Industrial fish. | 278.3 | 258.1 | 287.2 | 309.1 | 290.5 | 257.3 |
| Menhaden | 278.3 | 258.1 | 287.2 | 309.1 | 290.5 | 257.3 |
| All fish . | 332.7 | 323.5 | 327.1 | 337.9 | 341.8 | 345.8 |

Note:--Data are preliminary. Monthly prices for species representing about 70 percent of the landed value of all fish and shellfish during recent years have been combined into index groups to indicate movement of prices received by fishermen.

## EXVESSEL PRICES

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY YEARS, 1972-77 (1967=100)

| Species or group | 1972 | 1973 | 1974 | 1975 | 1976 (1) | 1977 (2) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England Finfish: |  |  |  |  |  |  |
| Cod. . - | 209.0 | 224.5 | 228.6 | 285.2 | 312.5 | 284.6 |
| Haddock. | 250.0 | 256.7 | 248.8 | 232.5 | 290.2 | 246.8 |
| Yellowtail flounder. | 185.0 | 217.2 | 251.1 | 339.8 | 399.3 | 432.4 |
| Other flounders. | 182.8 | 201.8 | 210.3 | 254.2 | 281.0 | 278.3 |
| Ocean perch. | 144.6 | 206.6 | 209.3 | 263.0 | 347.1 | 391.5 |
| Pollock. | 181.5 | 210.1 | 201.4 | 227.7 | 255.9 | 267.9 |
| Whiting. | 174.6 | 146.7 | 166.3 | 193.3 | 180.8 | 213.6 |
| New England finfish | 206.9 | 223.0 | 229.7 | 260.2 | 305.7 | 298.9 |
| Red snapper. | 193.5 | 209.6 | 213.5 | 237.3 | 275.5 | 324.5 |
| Pacific halibut. | 235.0 | 295.5 | 286.8 | 332.6 | 463.3 | 494.8 |
| Salmon: |  |  |  |  |  |  |
| Chinook - troll. | 133.5 | 195.2 | 217.0 | 210.6 | 312.7 | 404.4 |
| Chinoak - nontroll | 214.9 | 300.7 | 295.2 | 203.0 | 369.0 | 564.2 |
| Chum . . . | 195.2 | 471.6 | 553.2 | 436.8 | 564.2 | 664.6 |
| Coho - troll | 124.6 | 206.5 | 227.6 | 214.9 | 287.1 | 330.2 |
| Coho - nontroll. | 208.0 | 326.4 | 348.7 | 292.3 | 370.0 | 478.0 |
| Pink | 176.6 | 347.2 | 432.3 | 353.7 | 275.1 | 378.6 |
| Sockeye. | 166.5 | 329.4 | 447.8 | 447.8 | 452.4 | 490.4 |
| Salmon | 167.4 | 307.2 | 373.2 | 336.6 | 380.9 | 459.0 |
| Tuna: |  |  |  |  |  |  |
| Albacore | 177.5 | 196.2 | 218.1 | 197.8 | 246.0 | 286.0 |
| Skipjack | 181.2 | 204.0 | 241.2 | 220.1 | 246.6 | 316.8 |
| Bluefin. | 166.8 | 183.6 | 206.9 | 203.2 | 225.6 | 285.7 |
| Yellowfin. | 156.8 | 171.1 | 202.2 | 189.5 | 209.5 | 268.6 |
| Tuna | 168.6 | 186.4 | 216.9 | 200.5 | 228.6 | 286.8 |
| Edible finfish | 180.1 | 249.5 | 287.0 | 276.3 | 319.7 | 370.5 |
| Shrimp . | 152.9 | 195.6 | 172.5 | 218.5 | 298.0 | 301.5 |
| Other shellfish: |  |  |  |  |  |  |
| Hard clams | 161.2 | 156.4 | 173.8 | 171.6 | 204.5 | 231.8 |
| Soft clams | 159.8 | 217.3 | 212.3 | 236.4 | 310.2 | 341.8 |
| Surf clams . . | 135.3 | 129.4 | 136.8 | 136.7 | 482.6 | 518.3 |
| Hard blue crabs. | 152.9 | 231.0 | 215.5 | 291.4 | 383.9 | 446.8 |
| King crabs . | 312.7 | 550.6 | 573.4 | 340.2 | 659.6 | 923.1 |
| American lobsters. | 159.7 | 173.3 | 182.6 | 206.0 | 216.3 | 245.1 |
| Eastern oysters. | 94.2 | 96.8 | 109.0 | 119.8 | 152.5 | 163.2 |
| Sea scallops . | 253.3 | 231.6 | 200.5 | 239.4 | 247.2 | 216.0 |
| Other shellfish. | 164.8 | 205.4 | 213.0 | 199.3 | 281.6 | 334.2 |
| Edible shellfish. | 159.0 | 200.6 | 193.2 | 208.7 | 289.7 | 318.2 |
| Edible fish. | 168.9 | 223.8 | 237.5 | 240.7 | 303.9 | 342.9 |
| Industrial fish. | 123.5 | 276.4 | 255.7 | 224.4 | 234.8 | 292.6 |
| Menhaden . | 123.5 | 276.4 | 255.7 | 224.4 | 234.8 | 292.6 |
| All fish . | 165.8 | 227.4 | 238.7 | 239.6 | 299.1 | 339.4 |

(1) Revised.
(2) Preliminary.

Note:--Simple averages of the 12 monthly indexes. Upward or downward changes in this index will not necessarily agree with changes in unit values shown in landings tables.

## WHOLESALE PRICES

WHOLESALE PRICE INDEXES FOR EDIBLE FISH AND SHELLFISH, BY MONIHS, 1977

| Group | Jan. | Feb. | Mar. | Apr. | May | June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Source:--U.S. Department of Labor, Bureau of Labor Statistics.

PRICES

## WHOLESALE PRICES

AVERAGE WHOLESALE PRICES FOR EDIBLE FISH AND SHELLFISH, BY MONTHS, 1977

| Group, subgroup, and item specification | Point of pricing | Unit | Jan. | Feb. | Mar. | Apr. | May | June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FRESH AND FROZEN FISHERY PRODUCTS: |  |  |  |  |  |  |  |  |
| Haddock, large, offshore, drawn, fresh. | Boston | lb | 1.20 | . 55 | . 55 | . 85 | . 55 | . 64 |
| Halibut, west., 20-80 lbs., dressed, fresh and frozen. . . . | New York | 1 b | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.73 |
| Salmon, king, large and medium, dressed, fresh and frozen. | New York | lb | 3.63 | 3.63 | 3.25 | 3.25 | 3.25 | 3.30 |
| Whitefish, L. Superior, drawn, fresh. | Chicago | 1b | 1.40 | 1.50 | 1.48 | 1.75 | 1.15 | 1.03 |
| Yellow pike, L. Michigan \& Huron, round fresh. | New York | 1 b | 1.25 | 1.45 | 1.45 | 1.30 | 1.45 | 1.25 |
| PROCESSED, FRESH (Fish \& shellfish): |  |  |  |  |  |  |  |  |
| Fillets, haddock, small, skin on, 20-1b tins . . . . . . . . . | Boston | lb | 2.65 | 1.50 | 1.75 | 2.50 | 1.25 | 1.30 |
| Shrimp, large (26-30 count), headless, fresh. | New York | 1 b | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.10 |
| Oysters, shucked, standards | Norfolk | gal | 14.75 | 16.50 | 14.50 | 15.75 | 15.75 | 16.50 |
| PROCESSED, FROZEN (Fish \& shellfish): |  |  |  |  |  |  |  |  |
| Fillets: Cod, skinless, Canadian, l-1b package | Boston | 1 b | . 89 | . 89 | . 92 | . 95 | . 99 | . 99 |
| Flounder, skinless, | Boston |  | .89 | . 89 | . 92 | . 95 | . 99 | . 99 |
| l-lb package. . . | Boston | lb | 1.15 | 1.15 | 1.15 | 1.18 | 1.18 | 1.18 |
| Ocean perch, large skin on, l-lb package | Boston | lb | . 95 | . 95 | . 95 | . 95 | . 95 | . 95 |
| Shrimp, large ( $26-30$ count), brown, 5-1b package. | Chicago | lb | 3.85 | 4.04 | 4.07 | 3.98 | 3.70 | 3.25 |
| Shrimp, raw, breaded, (15-20 count), 4-1b pkg . . . . . . | Selected areas | lb | 2.82 | 2.88 | 2.94 | 2.99 | 3.04 | 2.95 |
| Fish blocks, cod, raw, 13-161b ctn. | Selected areas | lb | . 92 | . 95 | . 96 | . 96 | . 99 | 1.03 |
| Fish sticks, cod, precooked, breaded, l/2-1-lb pkg. . . . | Selected areas | 1b | . 98 | - | . 98 | - | 1.01 | - |
| Fish portions, cod, raw, breaded, 6-1b pkg. . . . . . . | Selected areas | 1b | 1.02 | 1.05 | 1.06 | 1.08 | 1.08 | 1.13 |
| CANNED FISHERY PRODUCIS: |  |  |  |  |  |  |  |  |
| Salmon, pink, No. l tall, (16oz) 48 cans/cs . . . . . . . . . | Seattle | cs | 69.00 | 69.00 | 69.00 | 69.00 | 69.00 | 69.00 |
| Tuna, light meat, chunk, No. 1/2 (6-1/2-oz) 48 cans/cs. . . . . . |  |  |  |  |  |  |  |  |
|  | Angeles | cs. | 26.00 | 26.00 | 26.00 | 28.00 | 28.50 | 31.25 |
| Sardines, Maine, keyless, oil, 1/4 drawn (3-3/4-oz) 100 | New York | cs. | 23.10 | 23.10 | 23.10 | 24.10 | 24.10 | 24.10 |

(Continued on next page)

## WHOLESALE PRICES

AVERAGE WHOLESALE PRICES FOR EDIBLE FISH AND SHELLFISH, BY MONTHS, 1977 - Continued

| Group, subgroup, and item specification | Point of pricing | Unit | July | Aug. | Sept. | Oct. | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FRESH AND FROZEN FISHERY PRODUCTS: --- - - - - - - - - - |  |  |  |  |  |  |  |  |
| Haddock, large, offshore, drawn, fresh. | Boston | 1b | . 50 | . 55 | . 55 | . 60 | 70 | 1.02 |
| Halibut, west., $20-80$ lbs., dressed, fresh or frozen | New York | lb | 1.74 | 1.75 | 1.75 | 1.80 | 1.80 | 1.80 |
| Salmon, king, large \& medium, dressed, fresh or frozen . . | New York | lb | 3.30 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 |
| Whitefish, L. Superior, drawn, fresh. | Chicago | lb | . 95 | 1.00 | 1.48 | . 98 | . 88 | 1.25 |
| Yellow pike, L. Michigan \& Huron, round, fresh | New York | 16 | 1.35 | 1.35 | 1.35 | 1.05 | 1.25 | 1.25 |
| PROCESSED, FRESH (Fish \& shellfish): |  |  |  |  |  |  |  |  |
| Fillets, haddock, small, skin on, 20-1b tins . . . . . . . . . . . | Boston | lb | 1.05 | 1.05 | 1.65 | 1.13 | 1.25 | 2.33 |
| Shrimp, large (26-30 count), headless, fresh. . . . . . | New York | lb | 4.00 | 3.10 | 3.15 | 3.10 | 3.15 | 3.18 |
| Oysters, shucked, standards | Norfolk | gal | 16.50 | 17.00 | 17.00 | 16.75 | 16.50 | 16.25 |
| PROCESSED, FROZEN (Fish \& shellfish): |  |  |  |  |  |  |  |  |
| Fillets: Cod, skinless, |  |  |  |  |  |  |  |  |
| l-lb package . . . Flounder, skinless, | Boston | 1b | . 99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| l-1b package . . . | Boston | lb | 1.21 | 1.21 | 1.21 | 1.21 | 1.21 | 1.21 |
| Ocean perch, large, skin on, l-lb package. . . . . . . . . | Boston | 1b | . 95 | . 95 | . 97 | . 95 | . 97 | . 97 |
| Shrimp, large ( $26-30$ count), brown, 5-1b package. | Chicago | lb | 3.60 | 2.95 | 3.18 | 3.05 | 3.18 | 3.13 |
| Shrimp, raw, breaded (15-20 count), 4-1b pkg . . . . . . | Selected areas | lb | 2.92 | 2.77 | 2.74 | 2.69 | 2.67 | 2.66 |
| Fish blocks, cod, raw, 13-1/2-16-1b ctn. | Selected areas | 1b | 1.02 | 1.02 | 1.01 | 1.01 | 1.02 | 1.01 |
| Fish sticks, cod, precooked, breaded, 1/2-1-1b pkg. | Selected areas | 1b | 1.06 | 1.07 | 1.07 | 1.12 | 1.13 | - |
| Fish portions, cod, raw, breaded, 6-1b pkg | Selected areas | lb | 1.15 | 1.16 | 1.15 | 1.15 | 1.15 | 1.15 |
| CANNED FISHERY PRODUCTS: |  |  |  |  |  |  |  |  |
| Salmon, pink, No. 1 tall ( $16-0 z$ ) 48 cans/cs | Seattle | cs | 69.00 | 69.00 | 69.00 | 67.00 | 67.00 | 67.00 |
| Tuna, light meat, chunk, No. 1/2 (6-1/2-oz) 48 cans/cs. |  |  |  |  |  |  |  |  |
|  | Angeles | cs | 31.25 | 31.25 | 31.25 | 31.25 | 31.75 | 31.75 |
| Sardines, Maine, keyless, oil, $1 / 4$ drawn ( $3-3 / 4-\mathrm{oz}$ ) 100 cans/cs | New York | cs | 24.10 | 24.10 | 25.10 | 25.10 | 25.10 | 27.10 |

Note:-These are average prices for one day (Monday, Tuesday, or Wednesday) during the week in which
the 13th of the month occurs. These prices are published as indicators of movement and not necessarily absolute level. Fishery Market News Reports should be referred to for actual prices. (See page 92 for information on these reports and how they can be obtained.)

Source:--U.S. Department of Labor, Bureau of Labor Statistics.

## PRICES

## RETAIL PRICES

Estimated retail prices of fishery products are collected by the Bureau of Labor Statistics, Department of Labor, for use in the food component of the Consumer Price Index (CPI).

The CPI is based on prices from a sample of 39 standard metropolitian statistical areas and 17 small cities collected to represent all urban areas of the United States, ranging in size from cities with a population of 2,500 to New York City.

Agents collect monthly food prices from chain and independent retail food stores that voluntarily report their selling prices. Prices are those in effect on the day of the agent's visit and include any sale or weekend special prices which are offered on that day.

The Bureau's agents use a description defining the quality or grade and size range for each food item for which prices are collected. All prices are converted to a standard unit and population weights are employed in obtaining U.S. average prices for all areas combined.

REIAIL PRICES OF FISHERY PRODUCTS, BY MONTHS, 1976 AND 1977

| Iten | Year | Jan. | Feb. | Mar. | Apr. | May | June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| CONSUMER PRICE INDEX FOR |  | 1976 | 216.1 | 219.2 | 219.3 | 222.3 | 225.1 |
| FISH (1967=100) . . . . | 1977 | 238.0 | 241.1 | 241.5 | 244.0 | 248.8 | 250.8 |
|  |  |  |  |  |  |  |  |

ESTIMATED VALUE OF U.S. FISHERY PRODUCTS AT VARIOUS LevELS, 1976 and 1977

|  | 1976 (I) |  |  | 1977 (2) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Domestic | Imports | Total | Domestic | Imports | Total |
|  | - -------------- Million dollars |  |  |  |  |  |
| Level |  |  |  |  |  |  |
| 1. Value of domestic landings. | 1,353 | - | 1,353 1,089 | 1,515 1,219 | - | 1,515 1,219 |
| b. Sold directly into trade channels (3) . . . . . . . | 264 | - | 264 | 296 | - | 296 |
| 2. Value of imports (c.i.f.) | - | 2,332 | 2,332 | - | 2,621 | 2,621 |
| a. To be reprocessed (4) . . | - | 604 | 604 | - | 679 | 679 |
| b. Sold directly into trade channels <br> (4) . . . . . . . | - | 1,728 | 1,728 | - | 1,942 | 1,942 |
| 3. Value at processor stage in U.S. (5). . . . . . . . | 2,129 | 1,344 | 3,473 | 2,367 | 1,5̣01 | 3,868 |
| 4. Value at wholesale stage (processed plus items sold directly into trade channels) <br> (6). . . . . . . | 3,033 | 4,033 | 7,066 | 3,364 | 4,504 | 7,868 |
| 5. Value at retail stage (processed plus items sold directly into trade channels) (7). . . . . . . | 3,943 | 5,452 | 9,395 | 4,389 | 6,115 | 10,504 |
| Marketing margins |  |  |  |  |  |  |
| 6. Processor (8) - | 1,040 | 740 | 1,780 | 1,148 | 822 | 1,970 |
| 7. Wholesale (9) | 640 | 2,689 | 3,329 | 701 | 3,003 | 3,704 |
| 8. Retail (10) | 910 | 1,419 | 2,329 | 1,025 | 1,611 | 2,636 |
| 9. Total markup over "domestic landings" or imports "to be reprocessed". . . . . | 2,590 | 4,848 | 7,438 | 2,874 | 5,436 | 8,310 |

(1) Revised. (2) Preliminary. (3) Excludes transportation, wholesale, and retail costs. Estimate is constructed using the 1973 U.S. Input-Output table (from "Economic Impacts of the U.S. Commercial Fishing Industry" published by NMFS) for the proportion of 1973 cash value sold directly into trade channels. This is adjusted to current cash value levels. (4) Value is c.i.f. (cost, insurance, freight included) at dock, and is an estimate constructed by using the 1973 U.S. Input-Output table for the ratio of reprocessed to products sold directly into trade channels. This is adjusted to the current value of imports. (5) Includes processed fish exported and goods processed domestically with imported inputs, but excludes fish sold directly into trade channels. Estimate derived from the 1973 U.S. Input-Output table for the ratio of domestic to imported raw materials. This is adjusted to the value of the total processed. (6) Includes fish sold directly into trade channels, but excludes U.S. exports of foreign fishery products. Estimate constructed using U.S. ratio of wholesale to retail output, all industries, to determine the markup between wholesale and retail levels (the division between wholesale and retail is not broken out in U.S. Input-Output tables.) (7) Includes fish sold directly into trade channels but data exclude U.S. exports of foreign fishery products. Estimate is constructed using the 1973 U.S. Input-Output table for the ratio of retail value to the value of processed fish and fish sold directly into trade channels. This ratio is adjusted to the current value of processed including items sold directly into trade channels. (8) Value is arrived at by subtracting line la from line 3, for domestic; and by subtracting line $2 a$ from line 3 for imports. (9) Value is arrived at by subtracting lines 3 and lb from line 4 for domestic; and by subtracting line 3 from line 4 for imports. (10) Value is arrived at by subtracting line 4 from line 5 for both domestic and imports.

Per capita utilization of commercial fish and shellfish is based on the total supply of fishery products, both edible and industrial, on a round-weight equivalent basis, without taking into consideration beginning or ending stocks, exports, or defense purchases (see p. 52).

Per capita utilization figures are not comparable with per capita consumption data (see p. 71). Per capita consumption figures represent edible (for human use) meat-weight consumption rather than round-weight consumption. In addition, the determination of per capita consumption includes allowances for beginning and ending stocks, exports, and defense purchases, whereas the determination of utilization does not include such allowances.

Per capita utilization is derived by using total population including armed forces overseas. The per capita consumption is derived by using civilian resident population.
U.S. PER CAPITA UTILIZATION OF COMMERCIAL FISH AND SHELLFISH, 1950-77

| Year | Total population including armed forces overseas July 1 | Total U.S. supply <br> (1) | Per capita utilization |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Commercial landings | Imports | Total |
|  | Million | Million |  |  |  |
|  | persons | pounds | ----- | ounds - - | - - - |
| 1950. | 152.3 | 6,547 | 32.2 | 10.8 | 43.0 |
| 1951. | 154.9 | 6,757 | 28.6 | 15.0 | 43.6 |
| 1952. | 157.6 | 7,636 | 28.1 | 20.4 | 48.5 |
| 1953. | 160.2 | 7,015 | 28.0 | 15.8 | 43.8 |
| 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. | 204.9 | 11,474 | 24.0 | 32.0 | 56.0 |
| 1971. | 207.1 | 11,804 | 24.2 | 32.8 | 57.0 |
| 1972. | 208.8 | 13,849 | 23.0 | 43.3 | 66.3 |
| 1973. | 210.4 | 10,378 | 23.1 | 26.2 | 49.3 |
| 1974. | 211.9 | 9,875 | 23.4 | 23.2 | 46.6 |
| 1975. - | 213.6 | 10,129 | 22.7 | 24.7 | 47.4 |
| 1976 (2). | 215.1 | 11,555 | 24.9 | 28.8 | 53.7 |
| 1977 (2). | 216.8 | 10,579 | 24.0 | 24.8 | 48.8 |

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

Per capita consumption represents the pounds consumed of edible fishery products both domestically-caught and imported fish and shellfish adjusted for beginning and ending inventories, imports, exports, and military purchases, divided by the civilian resident population of the United States on July 1 of each year.
U.S. PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-77

| Year | CivilianresidentpopulationJuly 1 (1)Miliionpersons | Per capita consumption |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Fresh and (2) frozen (2) | Canined (3) | Cured (4) | Total |
|  |  |  |  |  |  |
|  |  | - - - - - Pounds, edible meat $\sim$ - - - - - |  |  |  |
| 1909 (5). . . . . . | 90.5 | 4.3 | 2.7 | *4.0 | 11.0 |
| 1910. . . . . . . | 92.4 | 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 | . 7 | 8.8 |
| 1932. . . . . . . - | 124.7 | 4.3 | 3.4 | . 7 | 8.4 |
| 1933. . . . . . . . | 125.4 | 4.2 | 3.9 | . 6 | 8.7 |
| 1934. . . . - | 126.2 | 4.3 | 4.2 | . 7 | 9.2 |
| 1935. . . . . . . . | 127.1 | 5.1 | 4.7 | . 7 | 10.5 |
| 1936. . . . . . . . . | 127.9 | 5.2 | *5.8 | . 7 | 11.7 |
| 1937. . . . . . . . | 128.6 | 5.6 | 5.3 | . 9 | 11.8 |
| 1938. . . . | 129.6 | 5.2 | 4.8 | . 8 | 10.8 |
| 1939. . . . . . . | 130.7 | 5.3 | 4.7 | . 7 | 10.7 |
| 1940. . . . . . . | 132.1 | 5.7 | 4.6 | . 7 | 11.0 |
| 1941. . . . . . . . | 132.1 | 6.3 | 4.2 | . 7 | 11.2 |
| 1942. . . . . . | 131.4 | 5.2 | 2.9 | . 6 | 8.7 |
| 1943. . . . . . . | 128.0 | 5.5 | 1.8 | . 6 | 7.9 |
| 1944. . . . . . . . | 127.2 | 5.5 | 2.6 | . 6 | 8.7 |
| 1945. . . . | 128.1 | 6.6 | 2.6 | . 7 | 9.9 |
| 1946. . . . . . . . | 138.9 | 5.9 | 4.2 | . 7 | 10.8 |
| 1947. . . . . . . . | 143.1 | 5.8 | 3.8 | . 7 | 10.3 |
| 1948. . . . . . . . | 145.7 | 6.0 | 4.4 | . 7 | 11.1 |
| 1949. . . . . . . . | 148.2 | 5.8 | 4.5 | . 6 | 10.9 |
| 1950. . . . . . . . | 150.8 | 6.3 | 4.9 | . 6 | 11.8 |
| 1951. . . . . . . . . | 151.6 | 6.3 | 4.3 | . 6 | 11.2 |
| 1952. | 153.9 | 6.2 | 4.3 | . 7 | 11.2 |
| 1953. . . . . . . . | 156.6 | 6.4 | 4.3 | . 7 | 11.4 |
| 1954. . . . . . . . | 159.7 | 6.2 | 4.3 | . 7 | 11.2 |
| 1955. . . . . . . . . | 163.0 | 5.9 | 3.9 | . 7 | 10.5 |
| 1956. . . . . . . | 166.1 | 5.7 | 4.0 | .7 | 10.4 |
| 1957. . . . . . . . | 169.1 | 5.5 | 4.0 | . 7 | 10.2 |
| 1958. . . . . . . . . | 172.2 | 5.7 | 4.3 | . 6 | 10.6 |
| 1959. . . . . . . - | 175.3 | 5.9 | 4.4 | . 6 | 10.9 |

U.S. PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-77 - Continued

| Year | Civilian | Per capita consumption |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | resident population July 1 (1) | $\begin{aligned} & \text { Fresh } \\ & \text { and } \\ & \text { frozen (2) } \end{aligned}$ | Canned (3) | Cured (4) | Total |
|  | Million | - - - - - Pounds, edible meat - - - - - - |  |  |  |
|  | persons |  |  |  |  |
| 1960. . . . . . . . | 178.1 | 5.7 | 4.0 | 0.6 | 10.3 |
| 1961. . . . . . . | 181.1 | 5.9 | 4.3 | . 5 | 10.7 |
| 1962. . . . . . | $183.7^{*}$ | 5.8 | 4.3 | . 5 | 10.6 |
| 1963. . . . . . | 186.5 | 5.8 | 4.4 | . 5 | 10.7 |
| 1964. . . . . . | 189.1 | 5.9 | 4.1 | . 5 | 10.5 |
| 1965. . | 191.6 | 6.0 | 4.3 | . 5 | 10.8 |
| 1966. . . . . . . . | 193.4 | 6.1 | 4.3 | . 5 | 10.9 |
| 1967. . . . . . . . . | 195.3 | 5.8 | 4.3 | . 5 | 10.6 |
| 1968. . . . | 197.1 | 6.2 | 4.3 | . 5 | 11.0 |
| 1969. . . . . . . . | 199.1 | 6.6 | 4.2 | . 4 | 11.2 |
| 1970. . . . . . . . | 201.7 | 6.9 | 4.5 | . 4 | 11.8 |
| 1971. . . . . . . . | 204.3 | 6.7 | 4.3 | . 5 | 11.5 |
| 1972. . . . . . - | 206.5 | 7.2 | 4.9 | . 4 | 12.5 |
| 1973. . . . . . . . . | 208.1 | 7.5 | 5.0 | . 4 | 12.9 |
| 1974. . . . . . . . . | 209.7 | 7.0 | 4.8 | . 4 | 12.2 |
| 1975. . . . . . . . | 211.4 | 7.4 | 4.3 | . 4 | 12.1 |
| 1976 (6). . . . . . . | 213.0 | *8.2 | 4.3 | . 5 | *13.0 |
| 1977 (6). . . . . . . . | 214.7 | 7.8 | 4.6 | . 4 | 12.8 |

(1) Resident population for 1909-29 and civilian resident population for 1930 to date. (2) Fresh and frozen fish consumption in the period 1910-28 is estimated. Beginning in 1973, data include consumption of artificially cultivated catfish. (3) Canned fish consumption for 191020 is estimated. Beginning in 1921 based on production reports, packer stocks, and foreign trade statistics for individual years. (4) Cured fish consumption for $1910-28$ is estimated. (5) Data for 1909 estimate based on the 1908 census and foreign trade data. (6) Preliminary. *Record.

Note:--These consumption figures refer only to consumption of fish and shellfish entering commercial channels and they do not include amounts harvested and consumed by recreational fishermen.
U.S. PER CAPITA CONSUMPIION OF CANNED FISHERY PRODUCTS, 1960-77

| Year | Salmon | Sardines | Tuna | Shellfish | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 1960. | 0.7 | 0.4 | 2.0 | 0.4 | 0.5 | 4.0 |
| 1961. | . 8 | . 5 | 2.1 | . 4 | . 5 | 4.3 |
| 1962. | . 9 | . 3 | 2.1 | . 4 | . 6 | 4.3 |
| 1963. | . 9 | . 4 | 2.0 | . 5 | . 6 | 4.4 |
| 1964. | . 7 | . 3 | 2.0 | . 5 | . 6 | 4.1 |
| 1965. | . 9 | . 3 | 2.3 | . 5 | . 3 | 4.3 |
| 1966. | . 8 | . 4 | 2.3 | . 4 | . 4 | 4.3 |
| 1967. | . 7 | . 4 | 2.4 | . 5 | . 3 | 4.3 |
| 1968. | . 7 | . 4 | 2.4 | . 5 | . 3 | 4.3 |
| 1969. | . 7 | . 4 | 2.4 | . 5 | . 2 | 4.2 |
| 1970. . . . | . 7 | . 4 | 2.5 | . 5 | . 4 | 4.5 |
| 1971. | . 7 | . 4 | 2.4 | . 5 | . 3 | 4.3 |
| 1972. . . . | . 7 | . 4 | 2.9 | . 5 | . 4 | 4.9 |
| 1973. | . 4 | . 5 | 3.1 | . 5 | . 5 | 5.0 |
| 1974. | . 3 | . 4 | 3.1 | . 6 | . 4 | 4.8 |
| 1975. . . . | . 4 | . 2 | 2.9 | . 4 | . 4 | 4.3 |
| 1976 (1). . | . 4 | . 3 | 2.9 | . 4 | . 3 | 4.3 |
| 1977 (1). . | . 4 | . 3 | 2.9 | . 6 | . 4 | 4.6 |

(1) Preliminary.
U.S. PER CAPITA CONSUMPTON OF CERTAIN FISHERY ITEEMS, 1960-77

| Year | $\begin{gathered} \text { Fillets } \\ \text { and } \\ \text { steaks (1) } \end{gathered}$ | $\begin{gathered} \text { Sticks } \\ \text { and } \\ \text { portions } \end{gathered}$ | Shrimp, all preparations |
| :---: | :---: | :---: | :---: |
| ---------- Pounds (2) - - - - - - - - - |  |  |  |
| 1960. | 1.64 | 0.63 | 1.08 |
| 1961. | 1.67 | . 71 | 1.01 |
| 1962. | 1.77 | . 82 | 1.02 |
| 1963. | 1.60 | . 92 | 1.17 |
| 1964. | 1.62 | . 98 | 1.16 |
| 1965. | 1.68 | 1.12 | 1.24 |
| 1966. | 1.74 | 1.14 | 1.21 |
| 1967. | 1.64 | 1.21 | 1.29 |
| 1968. | 1.86 | 1.32 | 1.37 |
| 1969. | 2.01 | 1.63 | 1.31 |
| 1970. | 2.17 | 1.73 | 1.44 |
| 1971. | 2.04 | 1.63 | 1.39 |
| 1972. | 2.29 | 1.79 | 1.44 |
| 1973. | 2.54 | 2.00 | 1.36 |
| 1974. | 2.14 | 1.84 | 1.51 |
| 1975. | 2.42 | 1.80 | 1.41 |
| 1976 (3). | *2.55 | *2.07 | 1.50 |
| 1977 (3). | 2.51 | 2.03 | *1.59 |

(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 weight of shrimp.
(3) Preliminary.
*Record.

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH, BY REGION AND COUNTRY, 1972-74 AVERAGE

| Region and country | Estimated live weight equivalent |  | Region and country | Estimated live weight equivalent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kilograms | Pounds |  | Kilograms | Pounds |
| North America: |  |  | Europe - Continued: |  |  |
| United States | 15.7 | 34.6 | Sweden. | 31.0 | 68.3 |
| Canada. | 16.3 | 35.9 | Switzerland | 10.7 | 23.6 |
|  |  |  | United Kingdom. | 18.9 | 41.7 |
| Latin America: |  |  | Yugoslavia. - | 3.2 | 7.1 |
|  |  |  | U.S.S.R. . | 26.6 | 58.6 |
| Argentina | 6.1 | 13.4 |  |  |  |
| Barbados. | 28.9 | 63.7 | Near East: |  |  |
| Bolivia . | 1.4 | 3.1 |  |  |  |
| Brazil. | 6.7 | 14.8 | Afghanistan | . 1 | . 2 |
| Chile | 16.9 | 37.3 | Cyprus. . . | 6.1 | 13.4 |
| Columbia. | 4.1 | 9.0 | Egypt. | 3.2 | 7.1 |
| Costa Rica. | 4.2 | 9.3 | Iran. . | . 5 | 1.1 |
| Cuba. | 19.5 | 43.0 | Iraq. . | 2.5 | 5.5 |
| Dominican Republic. | 5.2 | 11.5 | Israel. | 15.3 | 33.1 |
| Ecuador . . - | 7.2 | 15.9 | Jordan. | 2.2 | 4.9 |
| El Salvador | 3.1 | 6.8 | Lebanon | 3.3 | 7.3 |
| Guatemala | 1.0 | 2.2 | Libya | 4.9 | 40.8 |
| Guyana. | 18.5 | 40.8 | Saudi Arabia. | 6.4 | 14.1 |
| Haiti. | 1.4 | 3.1 | Sudan . | 1.3 | 2.9 |
| Honduras. | 1.1 | 2.4 | Syria . | 1.3 | 2.9 |
| Jamaica | 29.5 | 65.0 | Turkey. . . . . | 4.7 | 10.4 |
| Mexico. | 4.6 | 10.1 | Yemen Arab Republic | 1.4 | 3.1 |
| Nicaragua | 3.7 | 8.2 | Yemen (Aden). . | 23.6 | 52.0 |
| Panama. . | 11.3 | 24.9 |  |  |  |
| Paraguay. | 1.2 | 2.6 | Far East: |  |  |
| Peru. . . | 15.6 | 34.4 |  |  |  |
| Puerto Rico | 25.4 | 56.0 | Bangladesh. | 11.6 | 25.6 |
| Surinam . | 22.6 | 49.8 | Burma . . . - | 13.0 | 28.7 |
| Trinidad and Tobago | 10.1 | 22.3 | Sri Lanka (Ceylon). | 8.7 | 19.2 |
| Uruguay . . . . | 5.3 | 11.7 | China, (Peking) | 8.3 | 18.3 |
| Venezuela | 11.5 | 25.4 | Hong Kong . . | 50.6 | 111.6 |
| , |  |  | India . . | 2.9 | 6.4 |
| Europe: |  |  | Indonesia | 9.6 | 21.2 |
|  |  |  | Japan . . . . . | 68.8 | 151.7 |
| Albania | 1.7 | 3.7 | Cambodia (Kampuchea, |  |  |
| Austria . . . . | 7.6 | 16.8 | Democratic). . . . | 11.2 | 24.7 |
| Belgium and Luxembourg. | 18.3 | 40.3 | Korea, North. | 28.6 | 63.1 |
| Bulgaria. . . . . . . . | 7.7 | 17.0 | Korea, South. | 34.2 | 75.4 |
| Czechoslovakia. | 7.7 | 17.0 | Laos. . . . | 6.3 | 13.9 |
| Denmark | 34.7 | 76.5 | Malaysia: |  |  |
| Finland . | 22.1 | 48.7 | Sabah. | 41.3 | 91.1 |
| France. . . - | 21.5 | 47.4 | Sarawak . . . | 31.3 | 69.0 |
| German Democratic Rep. . | 19.4 | 42.8 | West Malaysia | 22.5 | 49.6 |
| Germany, Republic of. | 11.5 | 25.4 | Nepal . . . . . | . 2 | . 4 |
| Greece. . . . . . . | 15.2 | 33.5 | Pakistan. . | 1.1 | 2.4 |
| Hungary. | 4.5 | 9.9 | Philippines | 30.3 | 66.8 |
| Iceland | 66.0 | 145.5 | Singapore . | 48.1 | 106.0 |
| Ireland | 11.2 | 24.7 | Thailand. . | 22.0 | 48.5 |
| Italy. | 12.6 | 27.8 | Vietnam . | 25.2 | 55.6 |
| Malta . . - | 12.4 | 27.3 |  |  |  |
| Netherlands | 13.2 | 29.1 | Africa: |  |  |
| Norway. - | 47.3 | 103.6 |  |  |  |
| poland. . | 16.3 | 35.9 | Algeria . | 2.0 | 4.4 |
| Portugal. | 58.5 | 129.0 | Angola. - | 7.4 | 16.3 |
| Romania . | 6.3 | 13.9 | Benin . | 12.7 | 28.0 |
| Spain . | 38.5 | 84.9 | Burundi . . | 3.1 | 6.8 |

See footnote at end of table.
(Continued on next page)

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELIFISH, BY REGION AND COUNTRX, 1972-74 AVERAGE - Continued

| Region and country | Estimated live weight equivalent |  |
| :---: | :---: | :---: |
|  | Kilograms | Pounds |
| Africa - Continued: |  |  |
| Cameroon. - | 13.6 | 30.0 |
| Central African Empire. | 6.4 | 14.1 |
| Chad. . . . . . . . . | 15.8 | 34.8 |
| Congo (Brazzaville) . | 23.4 | 51.6 |
| Ethiopia. . . . . . | . 6 | 1.3 |
| Gabon . . . . . . | 13.6 | 30.0 |
| Gambia. . . . | 24.5 | 54.0 |
| Ghana . . . . | 28.1 | 61.9 |
| Guinea. . . | 2.9 | 6.4 |
| Ivory Coast . . . . | 25.4 | 56.0 |
| Kenya . . . . . | 2.6 | 5.7 |
| Liberia . . | 16.6 | 36.6 |
| Madagascar. | 6.2 | 13.7 |
| Malawi. . . | 8.3 | 18.3 |
| Mali. . . - | 9.6 | . 2 |
| Mauritania. | 21.9 | . 3 |
| Mauritius . | 16.1 | . 5 |
| Morocco . . | 4.8 | 10.6 |
| Mozambique. | 3.1 | 6.8 |
| Niger . . . | 2.1 | 4.6 |
| Nigeria . . | 6.8 | 15.0 |
| Rhodesia. | 2.9 | 6.4 |
| Senegal . . | 33.8 | 74.5 |
| Sierra Leone. | 24.6 | 54.2 |
| Somalia . . . | . 3 | . 7 |
| South Africa, Republic of | 9.4 | 20.7 |
| Tanzania. . . . . . . | 11.4 | 25.1 |
| Togo. . . . | 11.3 | 24.9 |
| Tunisia . | 5.8 | 12.8 |
| Uganda. . . | 15.7 | 34.6 |
| Upper Volta | 1.1 | 2.4 |
| Zaire . . . | 9.0 | 19.8 |
| Zambia. . . . . | 13.1 | 28.9 |
| Oceania: |  |  |
| Australia . | 14.1 | 31.1 |
| New Zealand . . . . | 15.9 | 35.1 |

Note:--Data for most countries are tentative.
Source:--Food and Aqriculture Orqanization of the United Nations (FAO).

|  |  | Estimated live-weight equivalent |
| :--- | :--- | :--- |
| Economic class and region | Kilograns | Pounds |

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

PLANTS PRODUCING CANNED FISHERY PRODUCTS, INDUSTRIAL FISHERY PRODUCTS, AND FISH FILLETS AND STEAKS, 1977

| Area and State | Canned fishery products | Industrial fishery products | Fish fillets and steaks | Total plants, exclusive of duplication |
| :---: | :---: | :---: | :---: | :---: |
| New England: |  |  |  |  |
|  |  |  |  |  |
| Maine. . . . | 18 | 7 | 18 | 41 |
| Massachusetts. | 2 | 3 | 52 | 57 |
| Rhode Island . | - | 1 | 1 | 2 |
| Total . . | 20 | 11 | 71 | 100 |
| Middle Atlantic: |  |  |  |  |
| New York . . | 5 | 2. | 14 | 20 |
| New Jersey . | 12 | 4 | 4 | 20 |
| Pennsylvania . | 3 | 1 | - | 4 |
| Delaware . . | 2 | - | - | 2 |
| Total . . . . . . . . | 22 | 7 | 18 | 46 |
| Chesapeake: |  |  |  |  |
| Maryland . | 1 | 4 | - | 5 |
| Virginia . . . . . | 3 | 9 | 5 | 15 |
| Total . . . . . . . | 4 | 13 | 5 | 20 |
| South Atlantic and Gulf: |  |  |  |  |
| North Carolina . | 3 | 9 | 9 | 19 |
| South Carolina | 2 | - | 3 | 5 |
| Georgia. . | - | 2 | - | 2 |
| Florida. . | 1 | 3 | 19 | 23 |
| Alabama. . . | - | 1 | 2 | 3 |
| Mississippi. . | 7 | 4 | - | 11 |
| Louisiana. . | 12 | 24 | - | 34 |
| Texas. . . . . . | - | 1 | - | 1 |
| Total . . . . . . . . . | 25 | 44 | 33 | 98 |
| Great Lakes and Mississippi River: |  |  |  |  |
| Illinois . . . . . . . . . . . | 1 | - | 9 | 10 |
| Iоwа . - | - | 1 | 3 | 4 |
| Kansas . | 1 | - | - | 1 |
| Michigan . | 2 | 1 | 10 | 13 |
| Minnesota. | - | 1 | 2 | 3 |
| New York . . | - | - | 2 | 2 |
| North Dakota . | - | - | 1 | 1 |
| Ohio . . . . | 1 | - | 8 | 9 |
| Pennsylvania . | - | - | 2 | 2 |
| Wisconsin. . | 3 | 1 | 15 | 19 |
| Total . . . . . . | 8 | 4 | 52 | 64 |
| Pacific: |  |  |  |  |
| Alaska . | 65 | 3 | - | 68 |
| Washington . | 36 | 7 | 15 | 56 |
| Oregon . . . | 16 | 5 | 12 | 31 |
| California . | 17 | 15 | 20 | 42 |
| Total . . . . | 134 | 30 | 47 | 197 |
| Hawaii . . . . . . . | 1 | 1 | - | 1 |
| American Samoa . . . . . | 2 | 2 | - | 2 |
| Puerto Rico. . . . . . | 5 | 4 | - | 5 |
| Grand Total . . . . . . . . . | 221 | 116 | 226 | 533 |

VESSELS CONSTRUCTED IN 1976 FOR THE UNITED STATES AND PUERTO RICO FISHING FLEETS

| Gross tonnage | By tonnage groups |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | New England | Middle Atlantic | Chesapeake | South Atlantic | Gulf | Pacific Coast | Great Lakes | Hawaii | $\begin{gathered} \text { Puerto } \\ \text { Rico } \end{gathered}$ | Total |
|  |  |  |  |  |  |  |  |  |  |  |
| $5-9$ | 9 | 2 | 20 | 24 | 30 | 31 | 2 | - | 3 | 121 |
| 10-19 | 28 | 9 | 22 | 17 | 63 | 103 | - | - | 3 | 245 |
| 20-29 | 3 | 1 | 1 | 11 | 27 | 36 | - | 1 | 1 | 81 |
| $30-39$ | 5 | 1 | - | 4 | 18 | 23 | - | - | - | 51 |
| $40-49$ | 3 | 2 | - | 5 | 6 | 10 | - | - | - | 26 |
| 50-59 | 1 | 2 | - | 4 | 8 | 8 | - | - | - | 23 |
| $60-69$ | 2 | - | $\sim$ | 6 | 4 | 5 | - | - | - | 17 |
| $70-79$ | - | 1 | - | 2 | 3 | 4 | - | - | - | 10 |
| $80-89$ | - | - | - | 5 | 13 | 2 | - | - | - | 20 |
| 90-99 | - | 1 | - | 5 | 23 | - | - | - | - | 29 |
| 100-109 | - | - | - | 1 | 32 | - | - | - | - | 33 |
| 110-119 | - | 1 | - | 1 | 5 | - | - | - | - | 7 |
| 120-129 | - | - | - | 2 | 7 | 1 | - | - | - | 10 |
| 130-139 | 3 | - | 1 | 1 | 3 | - | - | - | - | 8 |
| 140-149 | 3 | 1 | - | - | 4 | - | - | - | - | 8 |
| 150-159 | 1 | 2 | - | - | - | 1 | - | - | - | 4 |
| 160-169 | - | 1 | - | - | - | - | - | - | - | 1 |
| $170-179$ | - | 1 | - | - | - | - | - | - | - | 1 |
| 190-199 | - | - | _ | - | - | 3 | - | _ | - | 3 |
| 460-469 | - | - | - | - | 1 | - | - | - | - | 1 |
| $530-539$ | - | - | - | - | 1 | - | - | - | - | 1 |
| $970-979$ | - | - | - | - | 1 | - | - | - | - | 1 |
| $980-989$ | $\cdots$ | - | - | - | - | 1 | - | - | - | 1 |
| 1150-1159 | - | - | - | -. | - | I | - | - | - | 1 |
| 1180-1189 | - | - | - | - | - | 1 | - | - | - | 1 |
| 1490-1499 | - | - | - | - | - | - | - | - | 2 | 2 |
| Total vessels | 58 | 25 | 44 | 88 | 249 | 230 | 2 | 1 | 9 | 706 |
| Length | By length distribution |  |  |  |  |  |  |  |  |  |
| in feet | New England | Middle Atlantic | Chesapeake | South Atlantic | Gulf | $\begin{gathered} \text { Pacific } \\ \text { Coast } \end{gathered}$ | Great Lakes | Hawaii | $\begin{gathered} \text { Puerto } \\ \text { Rico } \end{gathered}$ | Total |
|  |  |  |  |  |  |  |  |  |  |  |
| 20-29 | 9 | 2 | 5 | 20 | 14 | 54 | 1 | - | 3 | 108 |
| $30-39$ | 27 | 8 | 27 | 22 | 81 | 103 | 1 | - | 3 | 272 |
| $40-49$ | 10 | 4 | 11 | 17 | 49 | 51 | - | 1 | 1 | 144 |
| $50-59$ | 4 | 4 | - | 9 | 12 | 12 | - | - | - | 41 |
| $60-69$ | 2 | 1 | 1 | 17 | 77 | 3 | - | - | - | 101 |
| 70-79 | 6 | 3 | - | 3 | 14 | 1 | - | - | - | 27 |
| $80-89$ | - | 3 | - | - | - | - | - | - | - | 3 |
| $90-99$ | - | - | - | - | - | 1 | - | - | - | 1 |
| 100-109 | - | - | _ | - | - | 1 | - | - | - | 1 |
| $110-119$ | - | - | - | - | - | 1 | - | - | - | 1 |
| 160-169 | - | - | - | - | 2 | - | - | - | - | 2 |
| 190-199 | - | - | - | - | - | 1 | - | - | - | 1 |
| 200-209 | - | - | - | _ | - | 2 | - | _ | - | 2 |
| $220-229$ | - | - | - | - | - | - | - | - | 2 | 2 |
| Total vessels | 58 | 25 | 44 | 88 | 249 | 230 | 2 | 1 | 9 | 706 |

See note at end of table.
(Continued on next page)

VESSELS CONSTRUCTED IN 1976 FOR THE UNITED STATES AND PUERTO RICO FISHING FLEETS - Continued

| Horse power | By horsepower distribution |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { New } \\ \text { England } \end{gathered}$ | $\begin{gathered} \text { Middle } \\ \text { Atlantic } \\ \hline \end{gathered}$ | Chesapeake | $\begin{gathered} \text { South } \\ \text { Atlantic } \end{gathered}$ | Gulf | $\begin{gathered} \text { Pacific } \\ \text { Coast } \end{gathered}$ | Great Lakes | Hawaii | Puerto Rico | Total |
| Under 100 | 1 | - | 1 | 3 | 5 | 20 | - | - | - | 30 |
| $100-199$ | 21 | 4 | 14 | 17 | 66 | 55 | 1 | - | 2 | 180 |
| 200-299 | 18 | 6 | 13 | 29 | 55 | 81 | - | 1 | 4 | 207 |
| $300-399$ | 9 | 8 | 11 | 33 | 104 | 39 | - | - | 1 | 205 |
| 400 - 499 | 5 | 1 | 3 | 3 | 9. | 18 | 1 | - | - | 40 |
| $500-599$ | 3 | 1 | - | 2 | 4 | 3 | - | - | - | 13 |
| $600-699$ | - | 1 | 2 | - | 3 | 2 | - | - | - | 8 |
| 700-799 | 1 | 4. | - | 1 | 1 | 4 | - | - | - | 11 |
| 800 - 899 | - | - | - | - | - | 3 | - | - | - | 3 |
| 1000-1099 | - | - | - | - | - | 1 | - | - | - | 1 |
| 1100-1199 | - | - | - | - | - | 1 | - | - | - | 1 |
| 1800-1899 | - | - | - | - | 2 | - | - | - | - | 2 |
| 3600-3699 | - | - | - | _ | - | 3 | - | - | - | 3 |
| 5700-5799 | - | - | - | - | - | - | - | - | 2 | 2 |
| Total vessels | 58 | 25 | 44 | 88 | 249 | 230 | 2 | 1 | 9 | 706 |

Note:-The above data represent the number of vessels documented by the U.S. Coast Guard as being constructed in 1976 for commercial fishing. It is possible that not all of the above vessels actually engaged in fishing. Data on commercial fishing vessels that were redocumented or that received first documentation are not readily available.


| Area and State | 1976 |  |  |  |  |  |  |  |  | 1975 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Processing |  |  | Wholesale |  |  | Total |  |  | Total |  |  |
|  | Plants | Employment average |  | Plants | Employment average |  | Plants | Employment average |  | Plants | Employment average |  |
|  |  | Seas on | Year |  | Season | Year |  | Seas on | Year |  | Seas on | Year |
| New England: Maine. New Hampshire. Massachusetts. Rhode Is land Connecticut. Total | - - - - - - - - - - - - - - - - - Number - - - - - - - - - - - - - - - - - - - |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{array}{r}85 \\ 10 \\ 114 \\ 17 \\ 4 \\ \hline\end{array}$ | $-7-7$  <br> 4,021 2,767 <br> 569 491 <br> 4,370 3,637 <br> 284 241 <br> 47 39 |  | --154396155 | $\begin{array}{r} 474 \\ 14 \\ 1,019 \\ 69 \\ 29 \end{array}$ | --N347108685725 | 239 | $\begin{array}{r} --- \\ 4,495 \\ 583 \\ 5,389 \\ 353 \\ 76 \end{array}$ | $\begin{array}{r} 3,114 \\ 501 \\ 4,505 \\ 298 \\ 64 \end{array}$ | $\begin{array}{r} --- \\ 246 \\ 11 \\ 211 \\ 31 \\ 10 \end{array}$ | $\begin{array}{r} --7 \\ 4,563 \\ 559 \\ 5,523 \\ 375 \\ 69 \end{array}$ | $\begin{array}{r} -7,210 \\ 394 \\ 4,632 \\ 317 \\ 58 \end{array}$ |
|  |  |  |  | 13 |  |  |  |  |  |  |  |  |
|  |  |  |  | 210 |  |  |  |  |  |  |  |  |
|  |  |  |  | 32 |  |  |  |  |  |  |  |  |
|  |  |  |  | 9 |  |  |  |  |  |  |  |  |
|  | 230 | 9,291 | 7,175 |  | 273 | 1,605 | 1,307 | 503 | 10,896 | 8,482 | 509 | 11,089 | 8,611 |
| Middle Atlantic: <br> New York . . . . . . <br> New Jersey Pennsylvania Delaware Tota1 | 33 | 904 | 829 |  | 208 | 1,866 | 1,627 | 241 | 2,770 | 2,456 | 230 | 2,654 | 2,390 |
|  | 43 | 1,924 | 1,599 |  | 63 | 321 | 290 | 106 | 2,245 | 1,889 | 101 | 2,366 | 2,024 |
|  | 15 | 936 | 865 |  | 21 | 253 | 253 | 36 | 1,189 | 1,118 | 37 | 1,459 | 1,320 |
|  | 4 | 488 | 374 | 8 | 25 | 22 | 12 | 513 | 396 | 12 | 459 | - 410 |
|  | 95 | 4,252 | 3,667 | 300 | 2,465 | 2,192 | 395 | 6,717 | 5,859 | 380 | 6,938 | 6,144 |
| Chesapeake: <br> District of Columbia <br> Maryland <br> Virginia <br> Total. | - | - | - | 6 | 83 | 83 | 6 | 83 | 83 | 6 | 83 | 83 |
|  | 95 | 3,785 | 2,901 | 79 | 378 | 305 | 174 | 4,163 | 3,206 | 175 | 4,264 | 3,395 |
|  | 1.32 | 5,558 | 4,128 | 61 | 380 | 319 | 193 | 5,938 | 4,447 | 186 | 6,048 | 4,513 |
|  | 227 | 9,343 | 7,029 | 146 | 841 | 707 | 373 | 10,184 | 7,736 | 367 | 10,395 | 7,991 |
| South Atlantic: <br> North Carolina South Carolina Georgia. Florida, East Coast. Tota1 | 78 | 1,816 |  | 173 | 627 | 443 | 251 |  |  | 254 |  |  |
|  | 20 | 1,816 | 1,298 528 | 77 | 444 | 279 | 97 | 1,123 | 1,741 | 90 | 1,203 | - 802 |
|  | 15 | 2,015 | 1,674 | 43 | 395 | 237 | 58 | 2,410 | 1,911 | 56 | 2,531 | 2,080 |
|  | 42 | 1,251 | 1,019 | 74 | 228 | 217 | 116 | 1,479 | 1,236 | 120 | 1,649 | 1,415 |
|  | 155 | 5,761 | 4,519 | 367 | 1,694 | 1,176 | 522 | 7,455 | 5,695 | 520 | 8,093 | 6,138 |
| Gulf: <br> Florida, West Coast. <br> Alabama. <br> . . . . . . <br> Mississippi. . . . . <br> Louisiana. <br> Texas. <br> Tota1 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 114 | 4,032 | 3,411 | 164 | 570 | 501 | 278 | 4,602 | 3,912 | 266 | 3,877 | 3,377 |
|  | 43 | 1,839 | 1,297 | 14 | 187 | 108 | 57 | 2,026 | 1,405 | 58 | 1,586 | 1,100 |
|  | 36 | 1,530 | 1,124 | 16 | 130 | 79 | 52 | 1,660 | 1,203 | 51 | 1,578 | 1,115 |
|  | 109 | 3,958 | 2,865 | 91 | 503 | 397 | 200 | 4,461 | 3,262 | 205 | 4,240 | 3,129 |
|  | 55 | 2,249 | 1,720 | 84 | 1,011 | 643 | 139 | 3,260 | 2,363 | 143 | 3,509 | 2,313 |
|  | 357 | 13,608 | 10,417 | 369 | 2,401 | 1,728 | 726 | 16,009 | 12,145 | 723 | 14,790 | 11,034 |
| Pacific: <br> Alaska (1) . . . . . <br> Washington Oregon California <br> Tota 1 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 225 88 | 9,500 | 6,200 | 42 | 1,163 | 835 | 225 130 | 9,500 | 6,200 | 134 | $\begin{aligned} & 9,947 \\ & 3,476 \end{aligned}$ | 6,000 |
|  | 51 | 2,525 | 1,709 | 21 | 122 | 77 | 72 | 2,647 | 1,786 | 84 | 2,418 | 1,551 |
|  | 77 | 9,508 | 8,037 | 83 | 970 | 799 | 160 | 10,478 | 8,836 | 148 | 9,825 | 8,317 |
|  | 441 | 24,242 | 17,723 | 146 | 2,255 | 1,711 | 587 | 26,497 | 19,434 | 587 | 25,666 | 18,235 |

See footnote at end of table.
(Continued on next page)

PROCESSING AND WHOLESALE ESTABLISHMENTS AND EMPLOYMENT, 1976 AND 1975 - Continued

(1) Data are estimated for Alaska.

FISHERIES EMPLOYMENT, CRAFT, AND ESTABLISIMENTS, VARTOUS YEARS, 1955-74

| Item | 1955 | 1960 | 1965 | 1970 | 1973 | 1974 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Persons employed: |  |  |  |  |  |  |
| Fishermen. . . . | 144,359 | 130,431 | 128,565 | 140,538 | 148,884 | 161,361 |
| Processing and wholesaling (I). . . . . . | 97,825 | 93,625 | 86,864 | 86,813 | 93,792 | 92,118 |
| Total . | 242,184 | 224,056 | 215,429 | 227,351 | 242,676 | 253,479 |
| Craft used: |  |  |  |  |  |  |
| Vessels (2). | 11,796 | 12,018 | 12,311 | 13,591 | 15,396 | 15,891 |
| Motor boats. | 58,218 | 56,889 | 63,828 | 71,570 | 72,362 | 83,438 |
| Other boats. | 13,278 | 8,150 | 3,393 | 2,000 | 2,259 | 1,907 |
| Total . | 83,292 | 77,057 | 79,532 | 87,161 | 90,017 | 101,236 |
| Shore establishments: |  |  |  |  |  |  |
| Pacific Coast States . - | 600 | 515 | 557 | 510 | 520 | 595 |
| Atlantic Coast and Gulf |  |  |  |  |  |  |
| States. . . . - | 2,853 | 2,898 | 2,931 | 2,618 | 2,464 | 2,403 |
| Great Lakes and |  |  |  |  |  |  |
| Mississippi River States. | 671 | 772 | 673 | 564 | 520 | 487 |
| Other areas. . | (3) | (4)22 | (4) 24 | (5) 43 | (5)48 | (5)49 |
| Total . | 4,124 | 4,207 | 4,185 | 3,735 | 3,552 | 3,534 |

(1) Average for season.
(2) Craft 5 net tons and over as documented by U.S. Coast Guard.
(3) Not available.
(4) Hawaii only.
(5) Hawaii, American Samoa, and Puerto Rico.

FISHERY PRODUCTS AND ESTABLISHMENTS INSPECTED IN CALENDAR YEAR, 1977

| Region | Edible fishery products |  |  |  |  |  |  |  | Fish meal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Establishments (1) |  |  |  | Amount inspected |  |  |  | Estab-lishments | Amount inspected <br> (8) |
|  | $\begin{gathered} \text { SIFE } \\ (2) \end{gathered}$ | $\begin{aligned} & \text { PUFI } \\ & \text { (3) } \end{aligned}$ | $\begin{gathered} M P \\ (4) \end{gathered}$ | Grade A <br> (5) | $\begin{gathered} \text { PUFI } \\ (5) \end{gathered}$ | No mark <br> (6) | $\begin{aligned} & \text { Lot } \\ & \text { (7) } \end{aligned}$ | Total |  |  |
|  | --- Number - - - - - Thousand pounds - - - - - Number |  |  |  |  |  |  |  |  | Tons |
| Northeast. |  |  | 1 | 129,077 | 119,196 |  |  |  |  |  |
| Southeast. | 9 | 15 | 2 | 8,424 | -99,337 | 5,435 | 8,655 | 121,851 | 15 | 122,000 |
| West . - | 1 |  | 2 | 8,110 | 135,695 | 9,699 | 28,196 | 181,700 | - | - |
| $\begin{gathered} \text { Total, } \\ 1977 . \end{gathered}$ | 14 | 70 | 5 | 145,611 | 354,228 | 39,823 | 60,813 | 600,476 | - | 186,600 |
| $\begin{gathered} \text { Total, } \\ 1976 . \end{gathered}$ | 15 | 53 | - | 147,586 | 508,644 | 108,159 | 45,085 | 809,474 | 18 | 200,000 |

(1) These establishments are inspected under contract and certified as meeting U.S. Department of Commerce (USDC) regulations for construction and maintenance of facilities and equipment, processing techniques, and employment practice. (2) Fish processing establishments approved for sanitation under the Sanitarily Inspected Fish Establishment Service. Products are not processed under inspection. (3) Sanitarily inspected fish establishments processing fishery products under USDA inspection. (4) Plants under inspection for military purchase products only. (5) Products processed under inspection in inspected establishments and labeled with USDC inspection mark as "Packed Under Federal Inspection" (PUFI) or "U.S. Grade A." (6) Products processed under inspection in inspected establishments but bearing no USDC inspection mark. (7) Lot inspected products checked for quantity and condition at the time of examination and located in processing plants, warehouses, cold storage facilities, or terminal markets anywhere in the United States. (8) This product is under the USDC Salmonella Control Inspection Service.

Source:--NMFS, Seafood Quality and Inspection Division.

FISHERY COOPERATIVES IN THE UNITED STATES, PUERTO RICO, AND VIRGIN ISLANDS, 1977 (1)

| Region and State or area | Total cooperatives | Menbers | Fishing craft | Functions performed by cooperatives |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Marketing and purchasing | Marketing exclusively | Purchasing exclusively | Collective bargaining | Marketing, purchasing, and $\qquad$ | Other |
|  |  |  |  |  |  |  |  |  |  |
| Maine. . . . . | 16 | 745 | 554 | 14 | - | - | 1 | - | 1 |
| Massachusetts. | 6 | 995 | 701 | 6 | - | - | - | - | - |
| Rhode Island . | 2 | 165 | 85 | 1 | 1 | - | - | - | - |
| Connecticut. | 1 | 60 | 33 | - | 1 | - | - | - |  |
| Total . | 25 | 1,965 | 1,373 | 21 | 2 | - | 1 | - | 1 |
| Middle Atlantic: |  |  |  |  |  |  |  |  |  |
| New Jersey. | 3 | 112 | 44 | 1 | 2 | - | - | - |  |
| Total . . . . . . . | 5 | 237 | 119 | 2 | 2 | 1 | - | - | - |
| South Atlantic and Gulf: |  |  |  |  |  |  |  |  |  |
| Florida. . . . . . . . | 5 1 | 440 | 190 | 1 | - | - | - | - | - |
| Louisiana. . . . . . . | 1 | 8 | 7 | 1 | - | - | - | - | - |
| North Carolina . | - 1 | 356 | 200 | - | 1 | - | - | - | - |
| South Carolina . | 2 | 30 | 25 | 1 | 1 | - | - | - | - |
| Texas. . . . . . | 4 | 306 | 243 | $-$ | 4 | - |  |  |  |
| Total . - | 14 | 1,314 | 1,066 | 5 | 9 | - | - | - | - |
| Great Lakes and inland: |  |  |  |  |  |  |  |  |  |
| Minnesota. . . | $\frac{1}{2}$ | 220 | 120 | 1 | 1 | - | - | - | - |
| Ohio . . . . | 1 | 5 | 5 | - | 1 | $-$ |  |  |  |
| Total . . . . . . . | 4 | 259 | 125 | 1 | 3 | - | - | - | - |
| Pacific Coast: |  |  |  |  |  |  |  |  |  |
| California . | 18 | 2,215 | 1,676 | - | 9 | - | 1 | 5 | 3 |
| Oregon . . | 1 | 350 | 350 | - | 1 | - | - | - | - |
| Washington - | 4 | 933 | 933 | 1 | 3 | - | - | - | - |
| Total . . | 23 | 3,498 | 2,959 | 1 | 13 | - | 1 | 5 | 3 |
| Alaska . . . . . | 23 | 1,443 | 1,438 | 9 | 11 | - | 3 | - | - |
| Puerto Rico. . . . . . | 1 | 16 | 3 | - | 1 | - | - | - | - |
| Virgin Islands . . . . - | 1 | - |  | - | - | - | - | - | 1 |
| Grand total . . . . | 96 | 8,732 | 7,083 | 39 | 41 | 1 | 5 | 5 | 5 |

[^2]UNITED STATES DEPARTMENT OF COMMERCE

WASHINGTON, D.C. 20235

Mai1 routing code
$\qquad$

National Oceanic and Atmospheric Administration
Administrator, Richard A. Frank
14 th and E Streets, N.W.
Washington, D.C. 20230
National Marine Fisheries Services---CENTRAL OFFICE

Assistant Administrator for Fisheries, Terry L. Leftzell (Acting)
Deputy Assistant Administrator, Robert W. Schoning (Acting)
Deputy Director, NMFS,
Jack W. Gehringer
Associate Director, NMFS, Winfred H. Meibohm Office of Policy Development and Long Range Planning, Brian J. Rothschild
Office of Information Systems, Hoyt A. Wheeland
Office of Executive and Administrative Support, Robert K. Croweli
Office of Marine Recreational Fisheries, Robert J. Ayers
Office of Program Planning, Budget and Evaluation, Leonard A. Pass (Acting).

Office of Public Affairs, Public AfEairs Officer, Gerald D. Hill, Jr. Office of General Counsel, Assistant General Counsel, James S.W. Drewry (Acting)

Office of Fisheries Development, Assistant Director, Joseph W. Slavin Industry and Consumer Services Division, John T. Everett Seafood Quality and Inspection Division, Thomas J. Billy Financial Assistance Division, Michael L. Grable
National Fishery Education Center, Bob E. Finley, Rm. 526
100 East Ohio St., Chicago, IL 60611 National Seafood Quality and Inspection Laboratory, E. Spencer Garrett P.O. Drawer 1207 Pascagoula, MS 39567 601-762-4591

Office of Fisheries Management, Assistant Director, Roland F. Smith (Acting)

- Fishery Management Operations Division, Richard H. Schaefer
(Continued on next page)

202-377-3567
Telephone number Location

Washington, D.C. Commerce

Commerce

Page 2 Bldg.
Page 2 Bldg.
Page 2 BIdg.
Page 2 Bldg.

Page 1 Bldg.
Page 2 Bldg.
Page 2 Bldg.
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Page 2 Bldg.

Page 2 Bldg.

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Page 2 Bldg.
Page 2 Bldg.
Page 2 Bldg.
Page 2 Bldg.

Chicago, IL

Pascagoula, MS
Washington, D.C.
Page 2 Bldg.
Page 2 Bldg.

202-634-7218 | 202-634-7454 | Page 2 Bldg. |
| :--- | :--- |

| $\begin{aligned} & \text { Mail } \\ & \text { routing } \\ & \text { code } \end{aligned}$ |  | Telephone number | Location |
| :---: | :---: | :---: | :---: |
| CENTRAL OFFICE - Continued |  |  |  |
| F33 | Marine Mammals and Endangered Species Division, Richard B. Roe (Acting) | 202-634-7461 | Washington, D.C. Page 2 B1dg. |
| F35 | Enforcement Division, <br> Morris M. Pallozzi | 202-634-7265 | Page 2 Bldg. |
| F4 | Offlce of International Fisheries, Assistant Director, Carmen J. Blondin | 202-634-7267 | Page 2 B1dg. |
| F41 | International Analysis and Services Division, Edmund p. Loughlin | 202-634-7267 | Page 2 Bldg. |
| F42 | International Negotiations Division, Henry R. Beasley | 202-634-7267 | Page 2 B1dg, |
| F5 | Office of Scientific and Technical Services Asslstant Director, Robert F. Scott, (Actling) | 202-634-7469 | Page 2 Eldg. |
| F51 | Data Management and Statistics Division, John P. Wise | 202-634-7366 | Page 2 B1dg. |
| F52 | Fisherles Assessment Division, Lamarr B. Trott | 202-634-7466 | Page 2 Bldg. |
| F53 | Environmental Assessment Division, Kenneth R. Roberts | 202-634-7490 | Page 2 B1dg. |
| REGIONAL OFFICES |  |  |  |
| FNE | Northeast Region <br> Director, William G. Gordon <br> Federal Building, 14 Elm Street <br> Gloucester, MA 01930 | $\begin{gathered} \text { 617-281-3600 } \\ \text { Ext. } 250 \end{gathered}$ | Gloucester, MA |
| FSE | Southeast Region Director, William H. Stevenson Duval B1dg., 9450 Koger BIvd. St. Petersburg, FL 33702 | 813-893-3142 | St. Petersburg, FL |
| FSW | Southwest Region <br> Director, Gerald V. Howard 300 South Ferry Street Terminal Island, CA 90731 | 213-548-2575 | Terminal Island, CA |
| FNW | Northwest Region <br> Director, Donald R. Johnson 1700 Westlake Ave., North <br> Seattle, WA 98109 | 206-442-7575 | Seattle, WA |
| FNW5 | Dale R. Fvans, Chief Environmental and Technical Services Division <br> 811 N.E. Oregon St., P.O. Box 4332 Portland, OR 97208 | $\begin{gathered} 503-234-3361 \\ \text { Ext. } 4301 \end{gathered}$ | Portland, OR |
| FAK | Alaska Region <br> Director, Harry L. Rfetze <br> Federal Bldg., Room 453 <br> 709 West Ninth St., P.O. Box 1668 <br> Juneau, AK 99802 | 907-586-7221 | Juneau, AK |


| $\begin{aligned} & \text { Mail } \\ & \text { routing } \\ & \text { code } \end{aligned}$ |  | Telephone number | Location |
| :---: | :---: | :---: | :---: |
| FISHERIES CENTERS AND LABORATORIES |  |  |  |
| Fll | Northwest and Alaska Fisheries Center Dayton L. Alverson, Director 2725 Montlake Blvd., East Seattle, WA 98112 | $206-442-4760$ | Seattle, WA |
| Fl1x9 | Auke Bay Laboratory <br> WIlliam Smoker, DIrector <br> P.O. Box 155 <br> Auke, Bay, AK 99615 | 907-789-7231 | Auke Bay, AK |
| F1181 | ```Kodlak Laboratory Jefferson Collins, Director P.0. hox 1638 Kodlak, AK 99615``` | 907-487-4961 | Kodiak, AK. |
| F12 | Southeast Fisheries Center <br> Richard J. Berry, Acting Director <br> 75 Virginia Beach Dr. <br> Mlami, FL 33149 | 305-361-5761 | Miami, FL |
| F121 | Miami Laboratory <br> William J. Richards, Director Address same as above | Same as above |  |
| F123 | Pascagoula Laboratory <br> Robert Cummins, Jr., Director <br> 3209 Frederlck St., P.O. Drawer 1207 <br> Pascagoula, MS 39567 | 601-762-4591 | Pascagoula, MS |
| F124 | Natlonal Fisherfes Engineering Lab. <br> Andrew J. Kemmerer, Director <br> National Space Technology Labs <br> NSTL Station, MS 39529 | 601-688-3650 | NSTL Station, MS |
| F125 | Panama City Laboratory <br> Eugene L. Nakamura, Director <br> P.O. Box 4218 <br> Panama City, FL 3240J. | 904-234-6541 | Panama City, FL |
| F126 | Galveston Laboratory <br> Edward J. Klima, Director <br> 4700 Avenue U <br> Galveston, TX 77550 | $\begin{gathered} 713-763-1211 \\ \text { Ext. } 501 \end{gathered}$ | Galveston, TX |
| F127 | Port Aransas Laboratory Allyn G. Johnson, Acting Director Port Aransas, TX 78373 | 512-749-6251 | Port Aransas, TX |
| F128 | Southeast Utillzation Research Center <br> Harry L. Seagran, Director <br> Regents Drive <br> College Park, MD 20740 <br> After June 10, 1978, F128 will be at the following address: <br> Southeast Utillzation Research Center Harry L. Seagran, Director P.O. Box 12607 <br> Charleston, SC 29412 | $301-344-4175$ $803-795-8530$ | College Park, MD Charleston, SC |
| Fl 29 | ```Beaufort Laboratory Theodore Rice, Director P.O. Box 570 Beaufort, NC }2851``` | 919-728-4595 | Beaufort, NC |
| F13 | Northeast Fisherles Center Robert L. Edwards, Director Woods Hole, MA 02543 | 617-548-5123 | Woods Hole, MA |



Continued:


NATIONAL MARLNE FISHERIES SERVICE
DATA MANAGEMENT AND STATISTICS OFFICES

CITY | TELEPHONE | NUMMBER |
| :--- | :--- |
| NORTHEAST REGION AND ADDRESS |  |

NEW ENGLAND

| Eastport | 207-853-4386 | J. Phil Wentworth, 27 Washington St., Eastport, ME 04631 |
| :---: | :---: | :---: |
| Portland | 207-780-3322 | Robert C. Morrill, U.S. Custom House, Rm. 16, Portland, ME 04101 |
| Rockland | 207-594-5969 | Richard C. Barnard, Rm. 217, Federal Bldg., Rockland, ME 04841 |
| (1) Gloucester | $\begin{gathered} 617-281-3600 \\ \text { Ext. } 267 \end{gathered}$ | Frank Riley, 7 Pleasant St., Gloucester, MA 01930 |
| Gloucester | $\begin{gathered} 617-28 \mathrm{I}-3600 \\ \text { Ext. } 304 \end{gathered}$ | Vito P. Giacalone. Jones-Hunt Bldg., Emerson Ave. Gloucester. MA 01930 |
| New Bedford | $\begin{gathered} \text { 617-997-0721 } \\ \text { Ext. } 256 \end{gathered}$ | Dennis E. Main, U.S. Custom House, 2nd and Williams Sts.. New Bedford, MA 02740 |
| Plymouth | 617-746-6700 | Paul 0. Swain, Rm. 203, Post Office B1dg., Plymouth, MA 02360 |
| Provincetown | 617-487-0868 | William D. Sprague, Post Office Bldg., P.O. Box 91. Provincetown, MA 02657 |
| Woods Hole | 617-548-5123 | Ronnee L. Schultz, Northeast Fisheries Center, Woods Hole, MA 02543 |
| Narragansett | 401-789-9326 | David G. Deue1, R.F.D. \#2, P.O. Box 522-A, Narragansett, RI 02882 |
| Newport | 401-847-3115 | William J. Murphy, Rm. 254, Post Office B1dg., Newport. RI 02840 |
| Pt. Judith | 401-783-7797 | Steven J. Cluett, P.0. Box 547, Pt. Judith, RI 02882 |
| MIDDLE ATLANTIC |  |  |
| Greenport | 516-477-2425 | Emerson C. Hasbrouck, Jr., 41 Front St., P.O. Box 408, Greenport, L. I., NY 11944 |
| Patchogue | 516-475-6988 | Fred C. Blossom, P.O. Box 606, Patchogue, L.I., NY 11772 |
| Pt. Pleasant | 201-349-3533 | Eugene Steady, 26 Main St., P.0. Box 143, Toms River, NJ 08753 |
| Toms River | 201-349-3533 | Eugene A. LoVerde, P.O. Box 143, Toms River, NJ 08753 |
| Cape May | 609-884-2113 | Robert Bailey, P.0. Box 624. Cape May. NJ 08204 |

CHESAPEAKE

| Easton | $301-822-6976$ | William E. Brey, P.O. Box 356, Easton, MD 21601 |
| :--- | :--- | :--- |
| Greenbackville | $804-824-4725$ | George Ward. Biological Lab., Franklin City <br> Greenbackville, VA 23356 |
| Hampton | $804-723-3360$ | William N. Kelly, P.O. Box 447. Hampton, VA 23669 |

GREAT LAKES and NORTHERN MISSISSIPPI RIVER AREA
Ann Arbor
313-668-2206
Vacant, IST Bldg., 2200 Bonisteel B1vd., Ann Arbor, MI 48109

SOUTHEAST REGION
South Atlantic

| Beaufort | $919-728-4595$ | Kenneth C. Harris, Pivers Island, P.0. Box 500, |
| :---: | :---: | :---: |
| Savannah | Beaufort, NC 28516 |  |
|  | $912-232-4321$ | Ted M. Flowers, Rm. 202, Post Office B1dg., |
|  | Ext. 367 | P.O. Box 8143, Savannah, GA 31402 |

(1) Regional headquarters for statistics offices.
NATIONAL MARINE FISHERIES SERVICE
CITY
DATA MANAGEMENT AND STATISTICS OFFICES - Continued
$\frac{\text { TELEPHONE }}{\text { NUMBER }} \quad$ NAME AND ADDRESS
SOUTHEAST REGION - Continued

GULE

| Apalachicola | 904-653-9500 | Percy E. Thompson, Post Office Bldg., P.0. Drawer 189, Apalachicola, FL 32302 |
| :---: | :---: | :---: |
| Fort Myers | 81 3-334-4364 | James E. Naughton, Rm, 108, P.0. Box 217, Federal Bldg., Fort Myers, FL 33902 |
| Key West | 305-294-1921 | Peter W. Maley, Post Office \& Custom House Bldg., P.O. Box 269, Key West, FL 33040 |
| Miami | 305-361-576I | J. Ernest Snell, 75 Virginia Beach Dr. Miami, FL 33149 |
| (1)Miami | 813-893-3151 | Edward E. Burgess, Address same as above |
| St. Petersburg | 813-893-3151 | Betty J. Guisinger, 9450 Koger Blvd. St. Petersburg, FL 33702 |
| Bayou La Batre | 205-824-4149 | Donnie J. Bond. P.0. 591, D\&H Furniture Bldg. Bayou La Batre, AL 36509 |
| Ocean Springs | 601-875-5345 | Hermes G. Hague, Gulf Coast Research Lab.. P.0. Drawer AG, Ocean Springs, MS 39564 |
| Galiano | 504-475-7072 | Morrison P. Duet, P.O. Box 162, Gallano, LA 70354 |
| Houma | 504-872-3321 | Leryes J. Usie, Rm. 208, Federal BIdg., 423 Lafayette St., Houma, LA 70360 |
| Morgan City | 504-385-2067 | Dunbar P. Delaune, P.O. Box 1817. Morgan City. LA 70380 |
| New Orleans | 504-5,89-6151 | Orville M. Allen, Rm. 412, 546 Carondelet St., New Orleans, LA 70130 |
| Aransas Pass | 512-758-3787 | Vacant. Coastal Net \& Supply Bldg., Conn Brown Harbor. P.O. Drawer EE, Aransas Pass. TX 78336 |
| Brownsville | 512-831-4050 | Thomas N. Scott, Harbor Masters BIdg. . Shrimp Basin. P.O. Box 467, Brownsville, TX 78520 |
| Freeport | 713-233-4551 | Richard A. Allen. Brazosport Savings Center, P.0. Box 2533, Freeport', TX 77541 |
| Galveston | $\begin{gathered} 713-763-1211 \\ \text { Ext. } 106 \end{gathered}$ | Orman H. Farley, Bldg. 306, Fort Crockett, Galveston, TX 77550 |
| Galveston | $\begin{gathered} 713-763-1211 \\ \text { Ext. } 106 \end{gathered}$ | James Morgan, Address same as above |
| Port Arthur | 713-985-7871 | Madeline M. Bailey, Rm. I4C, Federal Office Bldg., Port Arthur, TX 77640 |


| MISSISSIPPI RIVER AREA |  |
| :---: | :---: |
| Little Rock | $501-378-5888$ |

## SOUTHWEST REGION

(I) Termfnal Islan
$213-548-2571$
$808-946-2181$

James R. Bybee, Rm. 2016, Customs House, Box 3266 300 S. Ferry St., Terminal Island, CA 90731 Doyle E. Gates, Honolulu Lab., P.O. Box 3830. Honolulu, HI 96812
(1)Seattle

206-442-5230
John K. Bishop. Rm. 732, 1700 Westlake Ave., North Seattle, WA 98109

## ALASKA REGION

(1) Juneau

907-586-7228
Kaysa A. Stutte, P.O. Box 1668, Juneau, AK 99801
(1) Regional headquarters for statistics offices.

## PUBLICATIONS

## FISHERY MARKET NEWS REPORTS

## MARKET NEWS REPORTS

Fishery Market News reports give landings, market receipts, weekly and monthly cold-storage holdings, exvessel prices, wholesale prices of fresh and frozen products, foreign trade data, current market developments, and other information for major fishery trading centers in the United States. The reports are issued from Boston, New York, New Orleans, Terminal Island, and Seattle.

You can order either the full service report (includes the weekly summary), or order only the weekly summary. The full service report is issued Monday, Wednesday, and Friday. The weekly summary is issued on Friday. The full service costs $\$ 35$ a year. The Friday weekly summary costs $\$ 15$ a year. The subscription period is 1 year beginning the first of the month following receipt of the order. For more information contact the nearest market news office. Free samples are available on request.

## DIRECTORY

GLOUCESTER (Issues no printed report)

## Robert A. Hall, Chief

Northeast Region Market News Branch
Post Office Blidg. - Room 204
P.O. Box 1109, Dale Ave.

Gloucester, MA 01930
617-281-3600, Ext. 225

## BOSTON BLUE SHEET

Louis R. O'Donnell, Supervisor
Commonwealth Pier - Room 10
Boston, MA 02210
617-542-6070
NEW YORK GREEN SHEET
Joseph Ledner, Supervisor
201 Varick Street - Room 951
New York, NY 10014
212-620-3405

DIRECTORY - Continued
BALTIMORE (Issues no printed report)
Edward A. Hardy, Reporter
40 South Gay Street - Room 421
Baltimore, MD 21202
301-962-4272
HAMPTON (Issues no printed report)
Carolyn S. Gearhart, Reporter
P.O. Box 447

57-AW. Queens Way Mall
Hampton, VA 23669
804-723-3369
BEAUFORT (Issues no printed report)
Diane E. Natale, Reporter
Pivers Island
Beaufort, NC 28516
191-728-2056

## NEW ORLEANS GOLDENROD SHEET

Edward J. Barry, Supervisor
546 Carondelet Street - Room 412
New Orleans, LA 70130
504-589-6151
TERMINAL ISLAND YELLOW SHEET
James R. Bybee, Supervisor
U.S. Custom House - Room 2016

300 South Ferry Street
Terminal Island, CA 90731
213-548-2572

## SEATTLE PINK SHEET

John K. Bishop, Supervisor
1700 Westlake Ave., North - Room 732
Seattle, WA 98109
206-442-5230
CHICAGO (Issues no printed report)
Alphonse A. Autin, Reporter
816 South Canal Street
Chicago, IL 60607
312-353-5772

## MESSAGE CENTERS

Recorded current market information is available around the clock at the following message centers:

Boston, Mass. 617-542-7878
Landings and exvessel prices at Boston, Gloucester, and New Bedford, Mass.

Chicago, Ill. 312-353-2260 Wholesale prices for sales of shrimp in Chicago.

Gloucester, Mass. 617-283-1101 Boston landings and exvessel prices, New Bedford sea scallop and yellowtail flounder landings and prices, and Gloucester landings.

New Bedford, Mass. 617-997-6565 Landings and exvessel prices at New Bedford.

Hampton, Va. 804-723-0303
Landings and exvessel prices for New Bedford and Boston, Mass., and landings at Fulton Market in New York, announced from 10:30 a.m. to $3: 00 \mathrm{p} . \mathrm{m}$., Monday through Friday. Wholesale prices at Baltimore, Md., and New York Fulton Market announced 3:30 p.m. until 10:00 a.m. the following day, Monday through Thursday. Friday only, weekly summary of landings in the Hampton Roads area.

New York, N.Y. 212-620-3577
Landings and exvessel prices at New York City; Boston, Gloucester, and New Bedford, Mass. announced 10:15 a.m. to 3:00 p.m. Wholesale prices for sales at New York Fulton Market announced 3:15 p.m. to 10:00 a.m. the following day.

New York, N.Y. 212-620-3244
Frozen seafood wholesale selling prices.

FISHERY MARKET NEWS REPORTS: INDEX

| MONDAY, WEDNESDAY, AND FRIDAY |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | BOSTON BLUE SHEET | NEW YORK GREEN SHEET | NEW ORLEANS GOLDENROD SHEET | TERMINAL ISLAND <br> YELLOW SHEET | $\begin{aligned} & \text { SEATTLEE } \\ & \text { PNK SHEET } \end{aligned}$ |
| RECEIPTS: |  |  |  |  |  |
| Landings | New England Major Ports New York City | New England Major Ports <br> New York City <br> Gulf Area Finfish and Shrimp | Gulf Finfish, Shrimp, and Shellfish, by Area North Carolina, by District Florida Spiny Lobster Alaska Shrimp | U.S. Tuna and California Anchovy, Bonito, Mackerel, and Squid San Pedro Market Fish | Seattle Otter Trawl Kodiak, all Fisheries Oregon, all Fisheries Northwest Halibut - and Salmon |
| Market <br> (truck, air, rail vessel) | Boston Shippers' Market and Live Lobsters | New York Fulton Market <br> Baltimore Wholesale Market | New York Fulton Market, Selected Shellifish Chicago Shrimp Shellish | San Pedro Market Fish | Seattle (except carned) Washington Oysters Alaska Coastwise Vessels |
| Canser | - | - | Shrimp Receipts at Canning Plants | U.S. Tuna and California, Mackerel, and Squid | - |
| Imports | New England <br> Chicago <br> Detroit, Mich. <br> Pembina, N.D. <br> U.S. Frozen Blocks by Species and Country U.S. Selected Products by Country | New York City Customs District <br> U.S. Shrimp by Country <br> U.S. Shrimp by Size | Gulf Area U.S. Shrimp by Country U.S. Shrimp by Size | Tuna and Bonito by Species, Classification and Country. <br> Arizona and Calif. <br> Mexican Shrimp <br> U.S. Shrimp by Size <br> U.S. Selected Products <br> by Country | Washington and Oregon U.S. Selected Products by Country |
| STOCKS: |  |  |  |  |  |
| Cold Storage Holdings | New England (Weekly) <br> National (Monthly) | National (Monthly) | National (Monthly) | $\overline{\text { National (Monthly) }}$ | Northwest (Monthly) <br> National (Monthly) |
| Canned Pack | - | - | - | U.S. Tuna and Bonito | - |
| PRICES: |  |  |  |  |  |
| Exvessel | Boston and New Bedford Auction Sales Live Lobsters (Mass.) | Boston and New Bedford Auction Sales | - | U.S. Tuna <br> Eureka-Crescent City Otter Trawl Fishery | Seattle Otter Trawl Kodiak, all Fisheries Oregon, all Fisheries Northwest Halibut and Salmon |
| Wholesale (Fresh and frozen) | Boston Shellfish (Wed.) Live Lobsters (Bought by Wholesaler) Chicago Freshwater | New York and Baltimore Finfish, Shellfish, and Freshwater | New Orlears <br> Baltimore Oysters and <br> Softshell Crabs <br> Chicago Shrimp <br> New York Sheilfish | $\cdots$ | New York Halibut and Salmon |
| Processors, Importers, and Brokers | Frozen Blocks, Fillets, Shellfish Speciality Items, etc. (Chicago, Boston, New Bedford and Gloucester) | Frozen Shrimp, Lobster Tails, Other Shellfish, fillets Speciality Items, etc. | New York Frozen Shrimp, and Lobster Tails <br> Fish Meal, Oll, and Solubles | Canned Tuna and Bonito <br> New England Frozen <br> Blocks <br> Fish Meal, Oil, and Solubles | Canned Salmon, Crab, and Shrimp <br> Frozen Shrimp and Crab <br> Washington Oysters <br> Fislı Meal, Oil, and Solubles |
|  | OTHER INFORMATION, ALL OFFICES: News Releases, NMFS and Council Notices. Export Opportunity. Selected Export Data, Situation and Outlook Reports, Selected Air and Rail Shipments, Foreign Fishing Off U.S. Coasts, International News (IFR) |  |  |  |  |
|  | FRIDAY WEEKLY SUMMARY |  |  |  |  |
| RECEIPTS: |  |  |  |  |  |
| Landings | New England Ports | Chesapeake and North Carolina Areas | Gulf Finfish, <br> Shrimp and Shellfish by Area <br> North Carolina by District | California Tuna, Mackerel, and Anchovy Fisheries San Pedro Market | Seattle Otter Trawl Kodiak, all Fisheries Oregon, all Fisheries Northwest Halibut and Salmon |
| Market | Chicago Freshwater | New York Fulton Market Baltimore Market | - | San Pedro Market | Coastwise Vessels from Alaska Washington Oysters |
| Canner | - | - | Gulf Oyster, and Shrimp Pack | California Tuna, Bonito, Mackerel, and Anchovy | Alaska canned Salmon Pack (Weekly) |
| Imports | - | - | - | Arizona and California | Oregon and Washington |
| PRICES: |  |  |  |  |  |
| Exvessel | Boston and New Bedford | $\cdots$ | Weighted Average Shrimp by Area and Size | Tuna <br> Eureka-Crescent City Otter Trawl Fishery | Seattle Otter Trawl Kodiak, all Fisheries Oregon, Selected Species Northwest Halibut and Salmon |
| Wholesale | Live Lobster Market Chicago Freshwater | New York Fulton Market Baltimore, Md. Market | New Orleans Fresh Fish | Canned Tuna and Bonito | Canned Salmon, Crab, and Shrimp Frozen Shrimp and Crab |

PUBLICATIONS AVAILABLE FROM NATIONAL MARINE FISHERIES SERVICE, NOAA

MARKET REVIEW AND OUTLOOK REPORTS
SHELLFISH MARKET REVIEW AND OUTLOOK
FOOD FISH MARKET REVIEW AND OUTLOOK
INDUSTRIAL FISHERY PRODUCTS MARKET REVIEW AND OUTLOOK

Each report is published three times per year. The reports provide description and analysis of those economic factors affecting markets for fishery products. The narrative includes a review of market trends, both historical and recent, and an outlook for the near future. Statistical tables are presented for landings, production, imports, inventories, supplies, apparent consumption, and prices (exvessel, wholesale and retail).

## OPERATION PRICE WATCH (RETAIL PRICES)

OPERATION PRICE WATCH is based on an informal, monthly NMFS survey of retail prices of fish and other items. The reports include prices of surveyed items in each of 10 cities, 10 -city average prices, and 3 price indexes (fish, meat, and poultry). Since prices of some items, notably fresh fish, are not regularly available, they are not included in the 10 -city averages, nor in the indexes. The three indexes differ from those published by the Bureau of Labor Statistics (BLS), which conducts separate formal surveys of retail prices for Consumer Price Index (CPI).

Summaries of the MARKET REVIEW AND OUTLOOK reports and the OPERATION PRICE WATCH reports are published in the NMFS FISHERY MARKET NEWS REPORTS (see page 93).

Further information may be obtained from:


## PUBLICATIONS AVAILABLE FROM NATIONAL MARINE FISHERIES SERVICE, NOAA

A partial list of National Marine Fisheries Service (NMFS) publications is shown on this page. Information on other publications produced by NMFS may be obtained by calling 301-443-8330 or writing:

## Services Branch, D825

Environmental Data Service, NOAA
Rockville, MD 20852

## CURRENT FISHERY STATISTICS (CFS) SERIES

The reports listed below are in the CFS (Current Fishery Statistics) series. They are statistical bulletins on marine recreational fishing and commercial fishing, and on the manufacture and commerce of fishery products. To obtain a subscription to these publications, check in the designated space () and return to the originating office:

NOAA, National Marine Fisheries Service
Data Management and Statistics Division (F51) Washington, D.C. 20235

Marine recreational fishing publications are released irregularly. If you wish a copy of the following publications, check in the designated space () and return to the originating office shown above.
() 1970 Salt-Water Angling Survey
() Participation in Marine Recreational Fishing, Northeastern United States, 1973-74
() Participation in Marine Recreational Fishing, Southeastern United States, 1.974

The following are preliminary bulletins on commercial landings by species. They are issued monthly and annually.
() NA-1
() Mainc Landings
() NA-2
MAssachusetts Landings
() Rhode Island Landings
() NA-4 New York Landings

The bulletins listed below show annual data on U.S. commercial landings, fishermen and operating unit data, and the production of processed products, by States. Statistics published in these sectional summary bulletins are published later in Fishery Statistics of the United States (Statistical Digest) together with text and more detailed information on landings and operating units.

## New England Fisheries <br> Middle Atlantic Fisheries <br> ,Chesapeake Fisheries <br> () SR <br> South Atlantic Fisheries Gulf Fisheries <br> Hawail Fisheries <br> Great Lakes Fisheries <br> Mississippi River Fisheries

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 issued as monthly and annual bulletins:

## () FF Frozen Fishery Products <br> () FM Fish Meal and Oil

The following, with one exception, are issued annually:

| () $\mathrm{MF}-1$ | Canned Fishery Products |
| :--- | :--- |
| () $\mathrm{MF}-2$ | Industrial Fishery Products |
| () $\mathrm{MF}-3$ | U.S. Production of Fish Fillets |
| and Staks |  |
| () MF-4 | Processed Fishery Products |
| () MF-5 | Fish Sticks, Fish Portions, and |
| Braded Shrimp (Quarterly and |  |
| () MF-6 | Annually) |
| Imports and Exports of Fishery |  |
| Products |  |

## HISTORICAL STATISTICS

The report shown below is the latest in this series. If you wish a copy, check in the space provided.
() Prices received by Fishermen, 1939-74

## LIBRARY INFORMATION

Library information is available from NOAA's Georgetown Information Center (D822), Page Building 2, Room 193, 3300 Whitehaven Street, NW., Washington, D.C. 20235. Telephone 202-634-7346. .•

## PUBLICATIONS AVAILABLE FROM NATIONAL TECHNICAL INFORMATION SERVICE

## HOW TO ORDER

The National Marine Fisheries Service has placed the following reports for sale with the National Technical Information Service (NTIS), U.S. Department of Commerce. To purchase these reports, call 703-557-4650 or write:

NTIS
ATTN: Order Desk
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Springfield, Virginia 22161
Rush order service ( 24 hours) is available at an extra charge. Call 703-557-4700. Customer must have approved credit card or an account with National Technical Information Service.
If your request is not a rush order, and if you want airmail delivery, include $\$ 2.00$ per copy.

## PRICES

Prices of publications are subject to change. Contact NTIS for price quotations for paper copies. Price for any publication listed here in microfiche is $\$ 3.00$.

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

Participation in Marine Recreational Fishing, Northeastern United States, 1973-74, COM-75-10655.
Participation in Marine Recreational Fishing, Southeastern United States, 1974, PB-273-160.

## 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 | 1971 | COM-75-10666 |
| 1967 | COM-75-10663 | 1972 | COM-73-50644 |
| 1968 | COM-75-10664 | 1973 | COM-74-50546 |
| 1969 | COM-75-10665 | 1974 | COM-75-10862 |
| 1970 | COM-71-50081 | 1975 | PB-25-3966 |

Processors of Fishery Products in U.S., 1976, PB-276-577. Shows firm name, address, and major products.

Paper copy $\$ 8.00$
Wholesale Dealers of Fishery Products in U.S., 1976, PB-276-578. Shows firm name, address and major products.

Paper copy $\$ 10.75$
Maine Landings, 1946-1976, PB-271-296.
Massachusetts Landings, 1943-1976, PB-275-866.
New York Landings, 1954-1976, PB-275-449.

Directory of Aquaculture in the Southeast, 1976, PB-272-1512GA.
List of Fishery Cooperatives in the United States, 1976, PB-272-202
Revenues, Costs, and Returns from Vessel Operation in Major U.S. Fisheries, PB-265-275.
Seafood Plant Sanitation, PB-271-161.
Fishery Statistics of the United States (Statistical Digest) is a final report on the Nation's commercial fisheries showing more detail than the preceeding report.

| Year | Accession number | Year | Accession number |
| :--- | ---: | :---: | :---: |
| 1939 | COM-75-11265 | 1956 | COM-75-11059 |
| 1940 | COM-75-11266 | 1957 | COM-75-11060 |
| 1941 | COM-75-11267 | 1958 | COM-75-11061 |
| 1942 | COM-75-11268 | 1959 | COM-75-11062 |
| 1943 | COM-75-11269 | 1960 | COM-75-11063 |
| 1944 | COM-75-11270 | 1961 | COM-75-11064 |
| 1945 | COM-75-11271 | 1962 | COM-75-11065 |
| 1946 | COM-75-11272 | 1963 | COM-75-11066 |
| 1947 | COM-75-11273 | 1964 | COM-75-11067 |
| 1948 | COM-75-11274 | 1965 | COM-75-11068 |
| 1949 | COM-75-11275 | 1966 | PB-246-430 |
| 1950 | COM-75-11056 | 1967 | PB-246430 |
| 1951 | COM-75-11053 | 1968 | COM-72-50249 |
| 1952 | COM-75-11054 | 1969 | COM-75-10887 |
| 1953 | COM-75-11055 | 1970 | COM-75-10643 |
| 1954 | COM-75-11057 | 1971 | COM-74-51227 |
| 1955 | COM-75-11058 | 1972 | COM-75-11430 |
|  |  | 1973 | PB-262-058 |
|  |  | 1974 |  |

The following statistical reports, known as Basic Economic Indicators, present demand indicators and projections, U.S. production, employment, fishing effort, biological stock assessment, U.S. trade, and other economic indicators.

American and Spiny Lobster, 1947-73, COM-74-11587
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
Oysters, 1947-73, COM-75-10384
Salmon, 1947-72, COM-74-11710
Scallops, 1930-72, COM-74-11582
Shrimp, 1947-72, COM-74-11709
Tuna, 1947-72, COM-74-11584
Baseline Economic Forecast of the U.S. Fishing Industry to 1985, COM-75-11156.

Economic Impacts of the U.S. Commercial Fishing Industry, COM-75-111354.

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

Future Investment in U.S. Fish Harvesting and Processing: A Discussion of Possible Alternative Requirement Through 1985, PB-249-591.

## PUBLICATIONS

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

A limited number of the publications shown on this page are made available for free distribution to Government agencies, research organizations, State fishery departments, and other groups having special interests in fishery statistics. Persons or organizations not meeting these qualifications can purchase copies by calling 202-783-3238 or writing:

Superintendent of Documents
U.S. Government Printing Office

Washington, D.C. 20402

## FISHERIES OF THE UNITED STATES

Preliminary review of annual commercial fishery statistics. It includes data on U.S. commercial landings and the marine recreational fisheries catch, production of processed products, foreign trade, supply, prices, per capita consumption, and employment.

| Year | Stock number | Price <br> (per copy) |
| :---: | :--- | :---: |
| 1971 | $003-020-00049-5$ | $\$ 1.35$ |
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| 1974 | $003-020-00093-2$ | $\$ 1.70$ |
| 1975 | $003-020-00114-9$ | $\$ 2.20$ |

## FISHER Y STATISTICS OF THE UNITED STATES

 (Statistical Digest)A final report on the commercial fisheries showing more detailed data than in the foregoing publication.

| 1971 | $003-020-00081-9$ |
| :--- | :--- |
| 1972 | $003-020-00102-5$ |
| 1973 | $003-020-00120-3$ |

A Marine Fisheries Program for the Nation

1976
003-020-00123-8

## ANGLER'S GUIDE TO THE

 UNITED STATES ATLANTIC COAST| Section I - Passamaquoddy Bay, <br> Maine, to Cape Cod <br> Stock No. 0320-00068 | $\$ 1.60$ |
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Marine Mammals of the Western
Hemisphere $\$ \$ 2.20$

## NMFS INDUSTRY AND CONSUMER SERVICES

| The National Marine Fisheries Service (NMFS). provides a broad range of services to fishermen, dealers, processors, wholesalers, retailers; food service firms, consumer groups, and other users of fishery products. These services include sources of supplies and sources of outlets for fishery products -- both domestic and foreign. Additional services include literature, displays, films, fish cookery demonstrations, and market research information. Consult the specialists in your area for more information. |  |  |
| :---: | :---: | :---: |
| CITY | TELEPHONE | NAMES AND ADDRESSES |
| CENTRAL OFFICE |  |  |
| Washington | 202-634-7451. | John Everett, Chief, Industry and Consumer Services Division, NOAA-NMFS, F21, Rm. 328, 3300 Whitehaven St., NW., Page 2 B1dg., Washington, D.C. 20235 <br> EDUCATIONAL CENTER |
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| Chicago | 312-353-5989 | Robert P。Rubin, Fishery Marketing Specialist, U.S. Customs House, 610 South Canal St., Rm. 816, Chicago, IL 60607 <br> SOUTHEAST REGION |
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| Seattle | 206-442-5336 | Kotere 1 hevic, Ghief, Fishery Deve loment Divisien, Lake Union Bldg., 1700 Westlake Ave., North, Seattle, WA 98109 Raymond Kraatz, Fishery Marketing Specialist |
| San Francisco | 415-556-8636 | Bob Pata, Fishery Marketing Specialist, 525 Market St., Suite 2555, San Francisco, CA 94102 |
| Los Angeles | 213-548-2575 | Doris Robinson, Seafood Consumer Specialist, 300 South Ferry St., Rm. 2016, Terminal Island, CA 90731 |
| - |  | ALASKA REGION |
| Juneau | 907-586-7224 | Walter G. Jones, Chief, Fisheries Development, P.O. Box 1668, Juneau, AK 99802 |

## SEA GRANT MARINE ADVISORY SERVICE

Sea Grant is a major program element of the National Oceanic and Atmospheric Administration. Its activities are funded jointly by the Federal Government and colleges or universities. Sea Grant's Marine Advisory

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Service offers a broad range of information to recreational and commercial fishermen, fish processors, and others concerning the Nation's fisheries. The following program leaders can provide information on Sea Grant activities:

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Certain Rules and Regulations Published by NMFS in the Federal Register (FR), by Volume, Page Number, and Date, January 1, 1977 - March 15, 1978

42 FR 4873 (January 26, 1977) - Proposes regulations to assist Federal agencies in complying with Section 7 of the Endangered Spectes Act of 1973 (see 43 FR 870).

42 FR 5460 (January 28, 1977) - Publication of the draft fishery management plan for cod, haddock, yellowtail flounder (see 42 FR 13998).

42 FR 5698 (January 31, 1977) - Announcement that the regulations contained in 50 CFR Part 240 pursuant to the Northwest Atlantic Fisheries Act, 16 USC 986, remaln in effect with respect to U.S. fishermen and vessels.

42 FR 6873 (February 4, 1977) - Notice that certain foreign nations have applled for fishing permits and that seven preliminary fishery management plans have been approved for issuance (see 42 FR 12385).

42 FR 6874 (February 4, 1977) - Notice of a joint public hearing to receive comments on the DEIS/FMP for the groundfish fishery of the northwest Atlantic.

42 FR 6875 (February 4, 1977) - Notice of avallability of DEIS/PFMP on commercial troll and recreational salmon fisheries off the coasts of Washington, Oregon, and California (see 43 FR 10426).

42 FR 6875 (February 4, 1977) - Notice of avallability of FEIS/PFMP for the trawl fishery of the Gulf of Alaska, the trawl and herring gillinet fishery of the Bering Sea and Aleutian Islands, and the king and tanner crabs of the eastern Bering Sea.

42 FR 6876 (February 4, 1977) - Notice of availability of FEIS for the hake fisheries of the northwestern Atlantic, the Atlantic mackerel fishery of the northwestern Atlantic, the squid fisheries of the northwestern Atlantic, the Atlantic herring, fishery of the northwestern Atlantic, and the finfish caught incidental to the trawl fisheries of the northwestern Atlantic.

42 FR 6877 (February 4, 1977) - Notice of avallability of the FEIS for the sablefish of the Bering Sea and the north-eastern Pacific Ocean.

42 FR 8176 (February 9, 1977) - Notice of foreign fee schedule for 1977.

42 FR 8534 (February 10, 1977) - The preliminary fishery management plan for the sablefish fishery of the eastern Bering Sea and northeastern Pacific.

42 FR 8567 (February 10, 1977) - The preliminary fishery management plan for the seamount groundfish fishery of the Pacific.

42 FR 8578 (February 10, 1977) - The preliminary fishery management plan for the trawl fisheries of Washington, Oregon, and California.

42 FR 8782 (February 11, 1977) - The preliminary fishery management plan for the traw1 fishery of the Gulf of Alaska (see 42 FR 60149).

42 FR 8813 (February 11, 1977) - Final regulations on foreign fishing for 1977 (amends 41 FR 55904; see 42 FR 12057, 12176, I6631, 22559, 37558, 38183, 39106, 41430, 52425, 56128, 60149, 60915).

42 FR 9298 (February 15, 1977) - The preliminary fishery management plan for the traw1 fisheries and herring gillnet fisherles of the eastern Bering Sea and northeast Pacific.

42 FR 9333 (February 15, 1977) - The preliminary fishery management plan for the snail fishery of the eastern Bering Sea.

42 FR 9402 (February 16, 1977) - Proposes the Carlbbean monk seal as an endangered species and requests comments.

42 FR 9520 (February 16, 1977) - The preliminary fishery management plan for king and tanner crabs of the Eastern Bering Sea.

42 FR 9552 (February 16, 1977) - The preliminary fishery management plan for the mackerel flshery of the northwestern Atlantic.

42 FR 9596 (February 16, 1977) - The preliminary fishery management plan for the squid fisheries of the northwestern Atlantic.

42 FR 9950 (February 17, 1977) - The preliminary fishery management plan for finfish caught incidental to the trawl fisheries of the northwestern Atlantic.

42 FR 10146 (February 18, 1977) - The preliminary fishery management plan for the hake fisheries of the northwestern Atlantic.

42 FR 10495 (February 22, 1977) - The preliminary fishery management plan for the Atlantic herring fishery of the northwestern Atlantic.

42 FR 11839 (March I, 1977) - Interim regulations on citations, foreign fishing.

42 FR 12015 (March 1, 1977) - Final regulations governing the issuance of pernits to allow the taking of marine mammals incidental to yellowfin tuna purse seining, and the importation of yellowfin tuna. (see 42 FR 12010, 22575).

42 FR 12010 (March 1, 1977) - Final regulations governing the takling and importing of marine mammals; taking of marine mammals incidental to commercial fishing operations (see 42 FR 12015, 22575, 28904, 36835).

42 FR 12026 (March 1, 1977) - Interim civil procedures concerning forelgn fishing.

42 FR 12057 (March 2, 1977). - Foreign fishing; corrections to 42 FR 8813.

42 FR 12176 (March 3, 1977) - Foreign fishery allocations by country and species for 1977 (amends 42 FR 8813; see 42 FR 16331, 16631, 18607, 39106, 44130).

42 FR 12385 (March 3, 1977) - Addition of Japan to list of natlons, and of preliminary fishery management plan for the shrimp fishery of the eastern Bering Sea and Gulf of Alaska to 42 FR 6873. The shrimp preliminary fishery management plan (see 42 FR 18607).

Certain Rules and Regulations Published by NMFS in the Federal Register (FR), by Volume, Page Number, and Date, January 1, 1977 - March 15, 1978 - Continued

42 FR 12443 (March 4, 1977) - Announcement of public hearing on amendments to regulations based on IATTC recommendations on the yellowfin tuna fishery (see 42 FR 25863).

42 FR 13574 (March 11, 1977) - Review and revision of methodology by which NMFS will determine the date for prohibiting further setting on the varlous species/stocks of porpoise (revises 41 FR 43726).

42 FR 13998 (March 14, 1977) - Notice of approval and Implementation of the haddock, cod, yellowtall flounder fishery management plan, and emergency regulations (see 42 FR 5460, 1.5065, 20156, 29876, 58412).

42 FR 14733 (March íb, i977) - Interim regime for taking of marine mammals incidental to commercial fishing operations (see 42 FR 1034).

42 FR 15065 (March 18, 1977) - Cod, haddock, yellowtall flounder; emergency regulations; correction of landing restrictions (see 42 FR 13998).

42 FR 15116 (March 18, 1977) - Permits for experimental fishing in Mexican waters.

42 FR 16170 (March 25, 1977) - Finding as to whether any applicant for a permit or certificate of inclusion issued under the Marine Mammal Protection Act of 1972 has taken any porpoises after February 3, 1977 without a permit.

42 FR 16331 (March 29, 1977) - Corrections to 42 FR 12176.

42 FR 16631 (March 29, 1977)- Foreign fishlng; amendments and corrections to 42 FR 8813.

42 FR 18607 (April 8, 1977) - Foreign allocations; corrections to 42 FR 12176.

42 FR 20156 (April 18, 1977) - Request for comments, Atlantic groundfish (haddock, cod, yellowtell flounder) plan, and clarlfication of 42 FR 13998.

42 FR 21412 (April 26, 1977) - Emergency regulations for the commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California; publication and request for comments (see 42 FR 26580, 29485, 37558).

42 FR 21415 (April 26, 1977) - Approval and pubilication and request for comments on the fishery management plan for the commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California.

42 FR 21784 (Apri1 29, 1977) - Cod, haddock, yellowtail flounder; emergency regulations in 42 FR 13998 extended.

42 FR 21825 (April 29, 1978) - Proposed rule to change Atlantic bluefin tuna regulations that went into effect on August 10, 1975 (see 42 FR 30373).

42 FR 22559 (May 4, 1977) - Foreign fishing regulations; adds new section regarding tanner crabs; correction of 42 FR 8813.

42 FR 22575 (May 4, 1977) - Pollcy on accidental taking of eastern spinner dolphins in the tuna purse seine fishery (see 42 FR 12010 , 12015).

42 FR 24742 (May 16, 1977) - Interim finai rule to extend to August 1 , 1077 the date when embargo on yellowfin tuna and tuna products would be effective (see 42 FR 39394, 41128).

42 FR 25863 (May 20, 1977) - Amendments to rules for Pacific tuna fisheries (see 42 FR 12443).

42 FR 26580 (May 24, 1977) - Commerclal and recreational fishery for salmon off the coasts of Washington, Oregon, and Callfornia; amends emergency regulations in 42 FR 21412 and adds new sections concerning Indian Treaty rights (see 42 FR 27599, 30875, 32250, 35160).

42 FR 27599 (May 31, 1977) - Commercial and recreational fishery for salmon off coasts of Washington, Oregon, and California; correction concerning size restrictions for coho salmon (see 42 FR 26580):

42 FR 28904 (June 6, 1977) - Proposed amendments to Title 50, Section 216.24(d)(2)(i), to assure that accurate information on number of vessels and porpoise mortalities is reported to NMFS on a timely basis (see 42 FR 12010 and 42 FR 36835).

42 FR 29485 (June 9, 1977) - Commercial and recreational fishery for salmon off the coasts of Washington, Oregon, and Californla; emergency regulations published in 42 FR: 21412 extended (see 42 FR 37558).

42 FR 29533 (June 9, 1977) - Increase of Incidental mortality of whitebelly spinner dolphins.

42 FR 29876 (June 10, 1977) - Final regulations for cod, haddock, yellowtall flounder fisheries (see 42 FR 13998, 21784, 34905, 36542, 42243, 63892, 65186, 43 FR 8283).

42 FR 29946 (June 10, 1977) - Proposed designation of bowhead whale as depleted (see 42 FR 60149).

42 FR 30373 (June 14, 1977) - Promulgation of final regulations for Atlantic bluefin tuna fishery for 1977 (see 42 FR 31824, 49836).

42 FR 30529 (June 15, 1977) - Notice of proposed foreign fishing fee schedule for 1978 (see 42 FR 54588).

42 FR 30841 (June 17, 1977) - Emergency regulations on Fraser River sockeye and pink salmon fisheries (see 42 FR 38527, 40866).

42 FR 30875 (June 17, 1977) - Foreign fishing ventures; advance notlce of proposed rule (see 43 FR 5398).

42 FR 31824 (June 23, 1977) - Closure of the 1977 purse seine fishing season for Atlantic bluefin tuna (see 42 FR 30373).

42 FR 32250 (June 24, 1977) - Salmon emergency regulations (42 FR 26580) amended to provide fishing rights to Quileute Indians.

42 FR 34364 (July 5, 1977) - closure of yellowfin tuna season.

42 FR 34450 (July 5, 1977) - Final regulations for development of FMP's and operation of Regional Fishery Management Councils (supersedes 41 FR 39436; see 42 FR 36980, 43 FR 1460).

Certain Rules and Regulations Published by NMFS in the Federal Register (FR), by Volume, Page Number, and Date, January 1, 1977 - March 15, 1978 - Continued

42 FR 34905 (July 7, 1977) - Closure of cod fishery in Gulf of Maine (see 42 FR'29876).

42 FR 35160 (July 8, 1977) - Salmon emergency regulations amendments ( 42 FR 26580 ) extended.

42 FR 35967 (July 13, 1977) - Establishes expedited procedures to amend quotas and regulations dealing with the taking of marine mammals incidental to yellowfin. tuna fishing.

42 FR 35996 (July 13, 1977) - Proposed rule on new procedures for modification of existing foreign permits issued under FCMA.

42 FR 36542 (July 15, 1977) - Termination of haddock optlonal settlement agreements for 1977 (see 42 FR 29876).

42 FR 36542 (July 15, 1977) - Termination of yellowtall flounder optional settlement agreements for 1977 (see 42 FR 29876).

42 FR 36835 (July 18, 1977) - Final rule and amendment of regulations to assure timely and accurate reporting of information on porpoise mortalities (see 42 FR 28904).

42 FR 36980 (July 18, 1977) - Interim regulations to provide Regional Fishery Management Councils with guidelines for operation; comments to be submitted by $9 / 16 / 77$ (see 42 FR 42216).

42 FR 37558 (July 22, 1977) - Atlantic herring; authorized area for foreign fishing (amends 42 FR 8813).

42 FR 37558 (July 22, 1977) - Final regulations for commercial and recreational salmon fisherles (see 42 FR 21412).

42 FR 38183 (July 27, 1977) - Final regulations for forelgn fishing; clarification on incIdental catches (see 42 FR 8813).

42 FR 38183 (July 27, 1977) - Clarification on forelgn fishing support regulations (see 42 FR 8813).

42 FR 38572 (July 29, 1977) - Amends Fraser River sockeye and pink salmon regulations (see 42 FR 30841).

42 FR 39106 (August 2, 1977) - Short-finned squid and long-finned squid; increased forelgn allocations (amends 42 FR 8813; see 42 FR 41430).

42 FR 39131 (August 2, 1977) - Notice of proposed amendments to preliminary fishery management plans for 1978 (see 42 FR 44569, 60945).

42 FR 39394 (August 4, 1977) - Interim final rule extending the effective date of the regulations governing the importation of yellowfin tuna and tuna products to October 1 , 1977 (see 42 FR 24742, 41128).

42 FR 40866 (August 12, 1977) - Amendment to emergency regulations for Fraser River sockeye and pink salmon fishery (see 42 FR 30841, 38572).

42 FR 41128 (August 15, 1977) - Final rules on incidental taking of marine mamals and importation of yellowfin tuna and tuna products (see 42 FR 24742, 39394).

42 FR $41 \dot{4} 30$ (August 17, 1977) - Short-finned and long-finned squid; second foreign reallocation (amends 42 FR 8813 and 42 FR 39106)

42 FR 42216 (August 22, 1977) - Guidelines for development of fishery management plans; interim regulations, comment period extended (see 42 FR 36980).

42 FR 42216 (August 22, 1977) - Regulations for U.S. fishermen under U.S.-Canada Reciprocal Fisheries Agreement.

42 FR 42243 (August 22, 1977) - Closure of - 1977 cod fishery in areas other than the Gulf of Maine (see 42 FR 29876, 63892, 65186).

42 FR 43216 (August 27, 1977) - Extends period for public comments on Interim regulations.

42 FR 44547 (September 6, 1977) - Foreign fishing; final regulations on Washington, Oregon, California hake trawl fishery (see 42 FR 52425).

42 FR 44569 (September 6, 1977) Avallability of supplements to final EIS's for PFMP's (see 42 FR 39131, 60945).

42 FR 45551 (September 9, 1977) - Proposed amendments to foreign fishing regulations for 1978, request for comments (see 42 FR 60682).

42 FR 49836 (September 28, 1977) - Closure of purse seine fishery for Atlantlc bluefin tuna (see 42 FR 30373).

42 FR 52425 (September 30, 1977) - Foreign fishing; final regulations for Washington, Oregon, California preliminary fishery management plan (amends 42 FR 8813, 8577, 12176, 44547).

42 FR 54588 (October 7, 1977) - Foreign fishing fee schedules for 1978 (see 42 FR 30529) .
$42 \mathrm{FR} 5: 488$ (October 17, 1977) - Yellowfin tuna fishing in eastern troplcal Pacific Ocean; increase of incidental catch rate.

42 FR 56128 (October 21, 1977) - Atlantic herring; forelgn fishing, amends regulations (see 42 FR 8813).

42 FR 56617 (October 27, 1977) - Final rule that Canada, Ecuador, Mexico and the Netherlands Antilles are in substantial conformance with U.S. regulations governing the taking of marine mammals incidental to fishing operations (see 42 FR 64121).

42 FR 57716 (November 4, 1977) - Notice of final availability of FEIS on preliminary fishery management plan on Atlantic billfishes and sharks (see 43 FR 3292).

42 FR 58195 (November 8, 1977) - Prohibition of taking of Fraser's Dolphin incidental to commercial fishing operations.

42 FR 58412 (November 9, 1977)- Emergency amendment to regulations for haddock, cod, yellowtall flounder (see 42 FR 13998, 29876, 63892).

Certain Rules and Regulations Published by NMFS in the Federal Register (FR), by Volume, Page Number, and Date, January 1, 1977 - March 15, 1978 - Continued

42 FR 59948 (November 22, 1977) - Surf clam and ocean quahog; emergency regulations (see 42 FR 65187, 43 FR 4029, 7208, 8283).

42 FR 60149 (November 25, 1977) - Final ruling that the bowhead whale is a depleted species (see 42 FR 29946).

42 FR 60149 (November 25, 1977) - Trawl fishery of the Gulf of Alaska; foreign fisheries regulation, emergency amendment (see 42 FR 8813 , 8782).

42 FR 60185 (November 25, 1977) - Taking of bowhead whales by Indians, Aleuts, or Eskimos for subsistence purposes (see 43 FR 3921 , 9172).

42 FR 60438 (November 25, 1977) - The fishery management plan for the surf clam and ocean quahog fisheries (see 42 FR 59948).

42 FR 60682 (November 28, 1977) - Final regulations on forelgn fishing for 1978 (see 42 FR 45551, 43 FR 2726, 10566).

42 FR 60915 (November 30, 1977) - Bering. Sea and Aleutian Islands trawl and herring gillnet fishery; interim amendments to regulations for forelgn fishing (see 42 FR 8813).

42 FR 60945 (November 30, 1977) - Notice of avallability of supplements to FEIS for preliminary fishery management plans for 1978 (see 42 FR 39131, 44569).

42 FR 61471 (December 5, 1977) - Foreign fishing; interim final amendment to regulations; gear losses by U.S. citizens, and reimbursement (see 42 FR 62926, 43 FR 3566).

42 FR 62926 (December 14, 1977) - Forelgn Eishing; interlm final amendments to regulations; clarifies and supersedes 42 FR 61471 (see 43 FR 3566).

42 FR 63892 (December 21, 1977) - Cod, haddock, yellowtall flounder; domestic fishery closure; amends 42 FR 29876 (see 42 FR 42243, 58412).

42 FR 64121 (December 22, 1977) - Final rule that Nicaragua is in substantial conformance with U.S. regulations governlng the taking of marine mammals incidental to fishing operations (see 42 FR 56617).

42 FR 64548 (December 23, 1977) - Final decision establishing regulations to govern the taking of marine mammals in the eastern tropical Pacific. Ocean during 1978, 1979, and 1980 (see 43 FR 1627).

42 FR 64551 (December 23, 1977) - Final regulations governing the taking and importing of marline mammals; taking and related acts incidental to commercial fishing in the eastern tropical Pacific Ocean (see 43 FR 1627).

42 FR 65186 (December 30, 1977) - Cod, haddock, yellowtail flounder; emergency regulations extended to February 14, 1978 (amends 42 FR 29876, see 42 FR 42243, 58412, 43 FR 777, 6094, 8282, 8283).

42 FR 65187 (December 30, 1977) - Surf clam and ocean quahog fisheries; emergency regulations repromulgated (amends 42 FR 59948 ; see 43 FR 21, 4029, 6952, 7208, 8263).

43 FR 21 (January 3, 1978) - Proposed regulations for surf clam fishing; request for comments (see 43 FR 6952, 7208).

43 FR 777 (January 4, 1978) - Corrections to emergency regulations for cod, haddock, and yellowtall flounder (see 42 FR 42243, 65186, 43 FR 6094, 8282, 8283).

43 FR 870 (January 4, 1978) - Final rule establishing procedural regulations governing Interagency consultation under Section 7 of the Endangered Species Act of 1973 (see 42 FR 4873).

43 FR 1093 (January 6, 1978) - Final rule that Panama is in substantial conformance with U.S. regulations governing the taking of marine mammals incidental to fishing operations.

43 FR 1460 (January 9, 1978) - Proposed rules on funding of Fishery Management Councils, compliance with NEPA, and confidentiality of statistics submitted pursuant to a Fishery Management Plan.

43 FR 1627 (January 11, 1978) - Corrections to 42 FR 64548 and 42 FR 64551.

43 FR 2726 (January 19, 1978) - Corrections to 42 FR 60682.

43 FR 3292 (January 24, 1978) - Proposed amendments to regulations for foreign fishing for Atlantic billfish and sharks (see 42 FR 57716).

43 FR 3420 (January 25, 1978) - Proposed amendments to forefgn fee schedule; adds sharks and certain species of billfish, and exvessel prices for each (see 42 FR 30529, 54588).

43 FR 3566 (January 26, 1978) - Final rule that Bermuda is in substantial conformance with U.S. regulations governing the taking of marine mammals incidental to fishing operations.

43 FR 3566 (January 26, 1978) - Final amendment to foreign flshing regulations; provides U.S. fishermen additional method for seeking redress when filxed gear is damaged as a result of activities by forelgn fishermen (see 42 FR 61471, 62926).

43 FR 3601 (January 26, 1978) - Announcement of public' hearing to recelve comments on proposed regulations for cod, haddock, and yellowtall flounder (see $42 \mathrm{FR} \mathrm{29876}, \mathrm{65186)}$.

43 FR 3818 (January 27, 1978) - Issuance of preliminary fishery management plan for Atlantic billfish and sharks.

43 FR 3921 (January 30, 1978) - Withdrawal of proposed regulations regarding taking of bowhead whales by Indians, Aleuts, or Eskimos for subsistence purposes (see 42 FR 60185, 43 FR 9172).

43 FR 4029 (January 31, 1978) - Emergency amendments to regulations; restricts fishing for surf clams to 2 days per week (see 42 FR 59948, 65187, 43 FR 8283).

43 FR 5398 (February 8, 1978) - Interim policy on consideration of applications for foreign vessels to purchase fish from U.S. vessels (see 42 FR 30875).

Certain Rules and Regulations Published by NMFS in the Federal Reglster (FR),
by Volume, Page Number, and Date, January 1,1977 March 15,1978

43 FR 5519 (February 9, 1978) - Regulations for wilditfe research on the Pribilof Islands.

43 FR 5521 (February 9, 1978) - Final rule: publication of regulations regarding taking of marine mammals incidental to commercial fishing operations for yellowfin tuna; exemption of Costa Rica from importation prohibition.

43 FR 6094 (February 13, 1978) - Extends emergency regulations on cod, haddock, yellowtall flounder to March 31, 1978 (see 42 FR 65186, 43 FR 8283).

43 FR 6952 (February 17, 1978) - Final regulations on surf clam fishing (see 42 FR 59948, 43 FR 21, 4029, 7208, 8283, 10426).

43 FR 7208 (February 21, 1978) - Emergency amendment to surf clam regulations; reduction of fishing time (see 42 FR 59948, 43 FR 21, 4029, 6952, 8283).

43 FR 8282 (March 1, 1978) - Closure of the directed commercial fishery for cod on Georges Bank and in Southern New England waters (see 42 FR 29877, 65186, 43 FR 777).

43 FR 8282 (March 1, 1978) - C1osure of the directed commercial fishery for cod in the Gulf of Maine (see $42 \mathrm{FR} 65186,43 \mathrm{FR} 777$, 9515).

43 FR 8283 (March 1, 1978) - Reminder that during March, April, and May certain areas off Cape Cod and Georges Bank are closed to bottom trawling under cod, haddock, yellowtail management plan (see 42 FR 29876, 65186, 43 FR 6094)

43 FR 8283 (March 1, 1978) - Announcement of public hearings to determine the procedure by which surf clam vessel owners or operators may change fishing days (see 42 FR 59948 , 43 FR 21, 4029, 6502, 7208, 8283).

43 FR 8554 (March 2, 1978) - Final rule: correction; yellowfin tuna and tuna import restrictions (see 42 FR 30373 ).

43 FR 9172 (March 6, 1978) - Taking of bowhead whales by Indians, Aleuts, or Eskimos for subsistence purposes; proposed rule (see 42 FR 60185, 43 FR 3921).

43 FR 9515 (March 8, 1978) - Correction of 43 FR 8282.

43 FR 9632 (March 9, 1978) - Prohibition of taking of rough-toothed dolphin incidental to commercial fishing operations.

43 FR 10426 (March 13, 1978) - FEIS for the Fishery. Management Plan for commercial and recreational salmon fisherles off the coasts of Washington, Oregon, and Callfornia commencing in 1978 (see 42 FR 6875).

43 FR 10426 (March 13, 1978) - Closure of the surf clam fishery (see 43 FR 6952).

43 FR 10566 (March 14, 1978) - Conditions and restrictions pertaining to forelgn fishing for snow (Tanner) crabs in the Bering Sea (see 42 FR 60682).

ANADROMOUS SPECIES. These are species of fish which spawn in fresh or estuarine waters and which migrate to ocean waters. In the FCMA these species include but not limited to Atlantic and Pacific salmons, steelhead trout, and striped bass. See 42 FR 60682 (November 28, 1977).

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 SHRIMP. Peeled shrimp coated with breading. The product may be identified as fantail (butterfly) and round, with or without tail fins and last sheil 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.

BREADING. A finely ground mixture containing cereal products, flavorings, and other ingredients, that is applied to a product that has been moistened, usually with batter.

BUTTERFLY FILLETS. The two skin-on fillets of a fish joined together by the belly skin. See fillets.

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

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

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; U.S. production of fishery products from both domestically caught and imported fish, shellfish and other edible aquatic plants and animals; imports; exports; and purchases by the U.S. armed forces.

CONTINENTAL SHELF FISHERY RESOURCES. In the FCMA these include certain corals and sponges, abaiones, queen conch, surf clams, ocean quahog, American lobster, tanner (snow) crabs, king crabs, stone crabs, dungeness crab, and Atlantic deep sea red crab. See 42 FR 60682 (November 28, 1977).
CURED FISHERY PRODUCTS. Products preserved by drying, pickling, salting, and smoking. Does not include canned, frozen, irradiated, or pasteurized products. Dried products are cured by sun or air-drying; pickled or salted products are those products preserved by applying salt, or by pickling (immersing in brine); smoked products are cured with smoke or a combination of smoking and drying or salting.

EXVESSEL PRICE. Price received by fishermen for fish, shellfish, and other aquatic plants and animals landed at the dock.

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 specified as "boneless fillets."

FISH MEAL. A high protein animal feed supplement made by heating, 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 generally of uniform size with thickness of $3 / 8$ of an inch or more and which does not conform to the definition of a fish stick. A fish portion is generally cut from a fish block.
FISH SOLUBLES. A product extracted from the residual press liquor (called "stick water") after the solids are removed for drying (fish meal) and the oil extracted by centrifuging. This residue is generally condensed to 50 percent solids and marketed as "condensed fish solubles."

FISH STEAK. Cross-section slices cut from large dressed fish. Steaks are usually about $3 / 4$ of an inch thick.
FISH STICK. An elongated piece of breaded fish flesh weighing not less than $3 / 4$ of an ounce and not more than 1-1/2 ounces with the largest dimension at least three times that of the next largest dimension. A fish stick is generally cut from a fish block.

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

FCMA (Fishery Conservation and Management Act of 1976, PL. 94-265). The FCMA became law on April 13, 1976, and was put into force, March 1, 1977. The FCMA provides for a national program for the conservation and management of fishery resources within a declared Fishery Conservation Zone (FCZ), contiguous to the territorial sea of the United States. The Act gives the United States exclusive management of all fish in the FCZ, except highly migratory tuna, and provides for exclusive management authority over continental shelf fishery resources and authority over anadromous species beyond the FCZ, 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 sea or zone is recognized by the United States.

FCZ (Fishery Conservation Zone). In the FCMA this is defined as a zone contiguous to the territorial sea of the U.S. and extending seaward 200 nautical miles measured from the baseline from which the territorial sea is measured.

FMP (Fishery Management Plan). A plan developed by a Regional Fishery Management Council to manage a fishery resource pursuant to the FCMA.

FULL-TIME COMMERCIAL FISHERMAN. An individual who spends 50 percent or more of the working year in commercial fishing activities, including port activity such as vessel repair, and re-rigging.

GROUNDFISH. Broadly, fish that are caught on or near the sea floor. The term includes a wide variety of bottomfishes, rockfishes, and flatfishes. However, the National Marine Fisheries Service 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, pollock, and Atlantic ocean perch.

INDUSTRIAL FISHERY PRODUCTS. Items processed from fish, shellfish, or other aquatic plants and animals which are not consumed directly by humans. These items include fish meal, fish oils, fish solubles, pearl essence, shark and other aquatic animal skins, certain products from seaweeds, and shells.

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 in some cases only the meats are landed (such as scallops). Data for all mollusks are published on meat weight basis.

MARINE FISHING. Fishing for finfish in oceans, bays, estuaries, and tidal portions of rivers. Marine fishing also includes the harvest of shellfish and other living aquatic organisms in these waters.
MOTORBOAT. A motor-driven commercial fishing craft having a capacity of less than 5 net tons. See boat, other.

OY (Optimum Yield). In the FCMA the OY with respect to the yield from a fishery, means the amount of fish which (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 economic, social, or ecological factor.

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 spends less than 50 percent of the working year in commercial fishing activities.

PER CAPITA COMSUMPTION. 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 Unitesd 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 UTILIZATION. The utilization of all fishery products both edible and nonedible in the United States, divided by the total population of the United States.

PMP or PFMP (Preliminary Fishery Management Plan). A PMP is prepared by the Secretary of Commerce. The Secretary prepares such a plan whenever a foreign nation, whom the U.S. has effected a Governing International Fishery Agreement (GIFA), submits an application to fish in a fishery, for which there is no fishery management plan (FMP). A PMP is replaced by an FMP as soon as the latter is implemented. A PMP applies only to foreign fishing.
PROCESSED FISHERY PRODUCTS. Fish, shellfish, and other aquatic plants and animals, and products thereof, preserved by canning, freezing, cooking, dehydrating, drying, fermenting, pasteurizing, adding salt or other chemical substances, and by other commercial processes. Also, changing the form of fish, shellfish, or other aquatic plants and animals from their original state into sticks, portions, and other products in which the species are not readily identified.

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.

RECREATIONAL FISHING DAY. A day, or any part of a day, spent fishing for recreational purposes.

RECREATIONAL MARINE 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.

RECREATIONAL MARINE FISHING EXPENDITURES.
That amount of money spent for goods and services used specifically in recreational fishing. Generally these items include (1) food, lodging, and transportion; (2) cost of rental, charter, party, and owned boats; (3) fishing equipment; (4) auxiliary equipment; (5) license tags and/or permits; and (6) privilege fees and other miscellaneous items related directly to recreational 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.

TALLF (Total Allowable Level of Foreign Fishing). The TALLF, if any, with respect to any fishery subject to the exclusive fishery management authority of the United States, shall be that portion of the OY of such fishery which will not be harvested by vessels of the United States, as determined by provisions of the FCMA.

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).

UTILIZATION OF FISHERY PRODUCTS. Estimated disappearance of the total supply of fishery products both edible and inedible on a round weight basis without taking into consideration 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. Prices in this report generally are price quotations at principal fishery markets by original receivers (producers, importers, and brokers) to primary wholesalers and processors in customary quantities, f.o.b. warehouse.
(Reference gives page numbers)

CLAMS
Canned, 34
Landings, 2, 10
Price indexes, exvessel, 62, 64
Value of landings, 2, 10

## CONSUMPTION

Canned, 71, 73
Cured, 71
Fillets and Steaks, 73
Fish and shellfish, 71
Country, 74
Fresh and frozen, 71
Salmon, canned, 73
Sardines, canned, 73
Shellfish, canned, 73
Shrimp, 71
Sticks and portions, 73
Tuna, canned, 73
CRABS
Canned, 34
Frozen holdings, 37
Imports, 39, 58
Landings, 2, 10
Price indexes, exvessel, 62, 64
Supply, canned, 58
Value of landings, 2, 10
COOPERATIVES, FISHERY, 84
CRAFT FISHING
Additions to U.S. fleet, 78
Motorboats, 82
Vessels, 82
DISPOSITION OF LANDINGS
United States, 6
World, 30
DUTIES COLLECTED, 38
EMPLOYMENT
Establishments, shore, 82
Fishermen, 82
Processing and wholesaling 80, 82
EXPORTS
All fishery products, 45, 46
Country of destination, 46
Edible, by years, 45, 46
Fish meal, 45, 50
King crab, 45, 50
Nonedible, by years, 45, 46
Oils, 45, 51
Principal items, 45
Salmon, canned, 45, 49
Salmon, fillets, 45, 49
Salmon, whole or eviscerated, 45, 49
Sardines, canned, 45
Seal furs, 45
Shrimp, canned, 45, 48
Shrimp, fresh and frozen, 45, 48

EXPORTS - continued
Shrimp, domestic and foreign
products, 48
Squid, canned, 45, 50
Value, by years, 45
Volume, by years, 45
FISHERY CONSERVATION ZONE
Allocations, by country,
by species, $14,16,17,18,19$
Catch by foreign countries, 12
Catch by species, by region, 13

## FLOUNDERS

Fillets, 33
Foreign shores; landings off, 8
Frozen holdings, 37
Landings, 1,8
Military purchases, 61
Price indexes, exvessel, 62, 64
Prices, wholesale, 66
Value of landings, 1, 8
World catch, 30
GROUNDFISH FILLETS AND STEAKS
Fillets, supply, 54
Imports, 39
Quota, imports, fillets, 42
halibut, pacific
Foreign shores, landings off, 8
Frozen holdings, 37
Imports, 39
Landings, 1, 8
Military purchases, 61
Price indexes, exvessel, 62, 64
Prices, wholesale, 66
Steaks, 33
Value of landings, 1,8
World catch, 30
HERRING, SEA
Canned (sardines), 34
Consumption (sardines), per capita, 73
Exports (sardines), 45
Imports (sardines), 39
Landings, 1,8
Prices (sardines), 66
Value of landings, 1, 8
World catch, 30

## IMPORTS

All fishery products, 38, 39
Blocks and slabs, 39, 4I
Bonito and yellowtail, canned, 39, 55
Continent and country, by, 40
Crab meat, canned, 39, 58
Duties collected, 38
Edible, 38
Fillets, groundfish and ocean perch, 39, 41

Fillets, other than groundfish and ocean perch, 39
Finfish, 53
Halibut, 39
Industrial, 52
Lobsters, canned, 39
Lobsters, fresh and frozen, 39
Meal and scrap, 39, 44
Nonedible, 39
Oils, 60
Oyster, canned, 39
Principal items, 39
Quota, canned tuna, not in
oil, 42
Quota, groundfish fillets and steaks, 42
Salmon, canned, 39
Salmon, fresh and frozen, 39
Sardines, canned, 39
Scallop meats, 39
Shellfish, 53
Shrimp, by country, 43
Solubles, 39, 44
Tuna, canned, 39
Tuna, fresh and frozen, 39
Utilization, per capita, 70
Value, by years, 38
INSPECTION
Establishments and products
inspected, 83
LANDINGS
Disposition, 6
Foreign shores, off; 8
Human food (edible), 6
Industrial, 6
Months, by, 7
Ports, certain U.S., 5
Record year, by States, 4
Regions, by, 3.
Sealskins, Pribilof Islands, 7
Species, by, 1
States, by, 4
U.S., 1, 4, 5, 6, 27
U.S., shores, distance from, 8

Utilization, per capita, 70
World, 27, 28, 29, 30
LOBSTERS, AMERICAN
Imports, 39, 58
Landings, 3, 11
Price indexes, exvessel, 62, 64
Supply, fresh and frozen, 58
Value of landings, 3, 11
LOBSTERS, SPINY
Frozen holdings, 37
Imports, 39, 58
Landings, 3, 11
Military purchases, 61
Supply, fresh and frozen, 58
Value of landings, 3, 11

```
MACKEREL
    Landings, 1, }
    Meal, }3
    Prices, wholesale, }6
    Value of landings, 1, 8
    World catch, }3
```

MEAL AND SCRAP
Imports, 39, 44
Landings, end use for, 7
Mackerel, 36
Menhiaden, 36
Production, U.S., 36
Supply, 59
Tuna, 36
World catch, end use for, 30
MENHADEN
Landings, 1, 9
Meal, 36
Oil, 36
Price indexes, exvessel, 62, 64
Value of landings, 1, 9
MILITARY PURCHASES
Fresh and frozen, and canned, 61 MARINE, 21
Principal species, 61
OIL
Exports, 45, 51
Imports, 60
Mackerel, 36
Menhaden, 36
Production, 36
Supply, 60
Tuna, 36
World catch, end use for, 30
Years, production, 36, 60
OYSTERS
Canned, 34
Imports, 39
Landings, 3, 11
Military purchases, 61
Price indexes, exvessel, 62, 64
Prices, wholesale, 66
Value of landings, 3, 11
PLANTS AND FIRMS
Employment, 80, 82
Establishments, shore, 82
Producing canned and industrial
products, and fillets and
steaks, 77
PRICES
CPI (Consumer Price Index), 68
Indexes, exvessel, 62, 64
Indexes, wholesale, 68
Retail, 68
Wholesale, 66
(Reference gives page numbers)

## PROCESSING

Animal food and bait, canned, 35
Canned products, 34, 35
Clams, canned, 34
Crabs, canned, 34
Employment in, 80, 82
Fillets and steaks, fresh and frozen, 33
Frozen holdings, 37
Industrial products, 36
Meal, oil, solubles, 36
Oysters, canned, 34
Plants, number of, 77, 80, 82
Salmon, canned, 34
Sardines, canned, 34
Sealskins, Pribilof Islands, 7
Shrimp, canned, 34, 35
Squid, canned, 34
Sticks, portions, and breaded shrimp, 33
Tuna, canned, 34, 35
Tunalike fish, canned, 34
Value, processed products, 32
RECREATICNAL FISHERIES, U.S.

SALMON
Canned, 34
Consumption, per capita, 73
Exports, 45, 48
Foreign shores, landings off, 9
Frozen holdings, 37
Imports, 39
Landings, 1, 9
Military purchases, 6l
Price indexes, exvessel, 62, 64
Prices, wholesale, 66
Supply, canned, 56
Value of landings, 1, 9
World catch, 30
SARDINES
Canned, 34
Consumption, per capita, 73
Exports, 45
Imports, 39
Prices, retail, 68
Prices, wholesale, 66
Supply, canned, 56
World catch, 30
SCALLOPS
Imports, 39
Landings, 3, 11
Military purchases, 61
Price indexes, exvessel, 62, 64
Supply, 57
Value of landings, 3, 11

SHRIMP
Breaded, 33
Canned, 34, 35
Consumption, per capita, 73'
Exports, 45, 48
Foreign shores, landings off, 11
Frozen holdings, 37
Imports, 39, 43, 44
Landings, 3, 11
Landings, heads-off, 57
Landings, heads-on, 3, 11
Military purchases, 61
Price indexes, exvessel, 62, 64
Prices, retail, 68
Prices, wholesale, 66
Supply, canned, 57
Supply, total, 57
Value of landings, 3, 11
SUPPLY
All fishery products, 52, 53
Blocks, 54
Bonito and yellowtail, canned, 55
Clam meats, 56
Crab meat, canned, 58
Eaible fishery products, 52, 53
Fillets and steaks, all, 54
Fillets and steaks, groundfish, 54
Industrial fishery products, 52, 53
Lobsters, American, 58
Lobsters, spiny, 58
Meal, 59
Meal and solubles, 59
Oils, 60
Salmon, canned, 56
Sardines, canned, 56
Scallop meat, fresh and frozen, 57
Shrimp, 57
Shrimp, canned, 57
Solubles, 59
Tuna, canned, 55
Utilization, per capita, 70
IUNA
Canned, 34, 35, 55
Consumption, per capita, 73
Foreign shores, landings
off, 10
Imports, 39, 55
Landings, 2, 10, 55
Meal, 36
Oil, 36
Price indexes, exvessel, 62, 64
Prices, retail, 68

```
(Reference gives page numbers)
TUNA - continued:
    Prices, wholesale, 66
    Quota, imports, canned, 42
    Supply, canned, 55
    Value of landings, 2, 10
    World catch, }3
UTILIZATION
    Per capita, }7
    Landings, by month, 7
VALUE
    Canned products, 32, 34, 35
    Duties collected, }3
    Exports, 45, 46
    Human food; 6, 53
    Imports, 38, 39
    Industrial landings, 6, 53
    Industrial products, 32, 36
    Landings, 1, 4, 5, 6, 27, 53
    Various levels, }6
WHITING
    Foreign shores, landings off, ll
    Frozen holdings, 37
    Landings, 2, Il
    Price indexes, exvessel, 62, 64
    Value of landings, 2, 11
WORLD FISHERIES
    Catch by countries, }2
    Catch by continents, }2
    Catch by major fishing areas, }2
    Catch by species groups, 30
    Catch by years, 27
    Disposition, }3
    Imports and exports value, }3
    Per capita, }7
```



## U. S. SUPPLY OF CANNED TUNA, 1968-77




[^0]:    Note:--Data are preliminary.

[^1]:    (1) May be in the shell or shucked.

[^2]:    (1) Information on number of mernbers, number of craft, and functions performed is preliminary. Source: - NMFS, Industry and Consumer Services Division.

