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## Fisheries of the <br> United States, 1980

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National Oceanic and
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# Fisheries of the United States, 1980 

Prepared by<br>Resource Statistics Division<br>B.G. Thompson, Chief

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## U. S. DEPARTMENT OF COMMERCE <br> Malcolm Baldrige, Secretary

# National Oceanic and Atmospheric Administration 

James P. Walsh, Acting Administrator
National Marine Fisheries Service
Terry L. Leitzell, Assistant Administrator for Fisheries

## PREFACE

## FISHERIES OF THE UNITED STATES, 1980

This is a preliminary report for $1980^{\circ}$ on commercial and marine recreational fisheries of the United States and foreign catches in the U.S. fishery conservation zone (FCZ). This annual report provides timely answers to frequently asked questions for the previous year. All data in this publication are consistent with the provisions of the Federal Reports Act of 1942.

## MARINE RECREATIONAL FISHING

A section of this publication briefly describes the background and methodology of the Marine Recreational Fishery Statistics Surveys. The results presented on recreational catch by species, number, weight, area and mode of fishing, and number of fishermen and trips are taken from the 1979 survey report for the Atlantic and Gulf coasts.

## SOURCES OF DATA

Information in this report came from many sources. Regional offices of the National Marine Fisheries Service (NMFS), in cooperation with various States, compiled and collected data on U.S. commercial landings and processed fishery products. The NMFS Regional Offices compiled data on the foreign catch from reports by designated foreign officials. The NMFS Washington, D.C., office of Resource Statistics Division tabulated and prepared the data for publication. Sources of other data appearing in this publication are: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, U.S. Coast Guard, U.S. Customs Service, U.S. Department of the Interior, U.S. Department of Agriculture, Food and Agriculture Organization (FAO) of the United Nations, and the countries fishing in the U.S. FCZ.

## PRELIMINARY AND FINAL DATA

Data on U.S. commercial landings are preliminary for 1980. All data on foreign catches are preliminary. Data on U.S. cold storage holdings, employment, prices, and production of processed products are preliminary for 1980. Final data will be published in annual summaries (see section on publications, p. 118 ) and later in 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-shelis excluded) unless otherwise noted; quantities shown for U.S. imports and exports are in product weight, as reported by the U.S. Bureau of the Census, unless otherwise noted; the value of the U.S. domestic catch is exvessel (see Glossary); the value for U.S. imports is generally the market value in the foreign (exporting) country and, therefore, excludes U.S. import duties, freight charges from the foreign country to the United States, and insurance; the value for exports is generally the value at the U.S. port of export, based on the selling price, including inland freight, insurance, and other charges.

## SUGGESTIONS

Because the Resource Statistics Division wishes to provide the kinds of data sought by users of £ishery statistics, the Division welcomes any comments or suggestions that will improve this report.

Address all comments or questions to:
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## ACKNOWLEDGMENT

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## REVIEW

U.S. LANDINGS. Commercial landings (edible and industrial) by U.S. fishermen at ports in the 50 States were a record 6.5 billion pounds valued at $\$ 2.2$ billion in 1980, up 3 percent in quantity but about equal in value compared with 1979, the previous record year. Increased landings of salmon, tuna, rockfishes, Atlantic cod, Pacific herring, and crabs offset declines in other major species such as menhaden and anchovies. Prices in 1980 of most edible fish and shelifish declined. The annual average exvessel price index shows a decline of 10 percent in 1980 compared with 1979.

For the third consecutive year the United States has established new record landings. The percent of the total U.S. supply of commerical fishery products produced by the U.S. domestic fishery has increased the last 4 years. In 1980 domestic production of total supply was 57.1 percent and imports 42.9 percent. In 1976 the U.S. production accounted for 46.5 percent of total supply.

Commercial landings by U.S. fishermen at ports outside the 50 States and transferred in the U.S. fishery conservation zone (FCZ) onto foreign vessels (joint ventures) were an additional 255.4 million pounds valued at $\$ 102.2$ million. Most of these consisted of tuna landed at canneries in Puerto Rico and groundfish transferred to foreign vessels.

Edible fish and shellfish landings in the 50 States were a record 3.7 billion pounds in 1980, up 10 percent compared with 1979. Landings of most major species, particularly salmon, increased.

Landings for reduction and other industrial purposes by U.S. fishermen in the 50 States were 2.8 billion pounds in 1980, 4 percent less than 1979. The decrease is attributed to smaller catches of menhaden, the dominant industrial fish, and anchovies.

FOREIGN CATCH IN U.S. FCZ. The foreign catch of fish (excluding tunas) and shellfish in the U.S. fishery conservation zone (FCZ) was 1,631,000 metric tons ( 3.6 billion pounds) in 1980, I percent below 1979, and 22 percent below the average for the 5 preceding years. As in other years, the FCZ off Alaska supplied by for the largest share of the foreign catch, 93 percent; Washington, Oregon, and California, 3 percent; North Atlantic, 4 percent; and Hawaii and the Pacific islands, less than one tenth of I percent.

Alaska pollock comprised 69 percent of the foreign catch; Pacific flounders, 11 percent; hake (Pacific whiting), 3 percent; and other fish and shellfish, the remainder.

Japan continued as the leading nation fishing in the U.S. FCZ with a catch of 1.2 million metric tons in 1980. Catches by vessels of the Republic of

Korea, the second most important catching nation, were 210,000 metric tons, 65 percent above 1979.
U.S. VS. FOREIGN CATCH IN U.S. FCZ. The combined catch by U.S. and foreign vessels in the area 3 to 200 nautical miles from U.S. shores, known as the FCZ, was 2.6 million metric tons in 1980, up 3 percent compared with 1979. The rise in the U.S. catch more than offset a decline in the foreign catch, and the U.S. share rose to 36 percent of the total, up from 33 percent in 1979.

AQUACULTURE. Commercial production of selected fish and shellfish through aquaculture techniques is developing in the United States. Current production of morine, brackish, and freshwater species is 160.2 million pounds, of which 78 percent is comprised of freshwater species. Total value of these selected species was $\$ 143.2$ million in 1980.

MARINE RECREATIONAL CATCH. The data shown in the publication are for the Atlantic Coast and Gulf of Mexico Coast for 1979 and are part of a recently initiated survey of marine recreational fisheries in the United States. Survey results for other areas were not available in time to be included in the publication, but will be published in the next few months. Fisheries of the United States, 1981 will contain data on the total U.S. marine recreational catch.

WORLD LANDINGS. In 1979, the most recent year for which data are available, world commercial fishery landings were a record 71.3 million metric tons, I percent more than the revised 1978 total of 70.5 million metric tons. Japan was the leading nation with 14 percent of the total; the USSR, second with 13 percent; China, third with 6 percent; Peru, fourth with 5 percent; and the United States, fifth with 5 percent.

PRICES. During 1980, the Index of Exvessel Prices for Fish and Shellfish declined to 399.9. The index ( $1967=100$ ) for edible fish was 406.1 , down II percent from 1979. Among the exceptions to this downward trend were the exvessel prices for ocean perch, red snapper, tuna, whiting, and soft clams, American lobster, Eastern oysters, and sea scallops, all of which increased. The index for industrial fish was 315.6 for 1980, up 3 percent compared with 1979.

PROCESSED PRODUCTS. The 1980 value of domestic production of edible and nonedible processed fishery products was $\$ 4.7$ billion, 5 percent above 1979. The value of edible products increased to $\$ 4.3$ billion, 6 percent above 1979. All categories of edible products increased in value. The value of industrial products of $\$ 395$ million in 1980 was $\$ 17.3$ million less than 1979.

## REVIEW

FOREIGN TRADE. U.S. imports of edible fishery products were 2.1 billion pounds (product weight) valued at a record $\$ 2.7$ billion in 1980 , down 10 percent in quantity, but up I percent in value. U.S. imports of nonedible (industrial) products were $\$ 966.0$ million in 1980, down 16 percent compared with 1979.

The United States exported a record 573.9 million pounds valued at $\$ 904.4$ million of edible fishery products in 1980, up 4 percent in quantity but down 11 percent in value from 1979. Exports in 1980 of nonedible products were $\$ 101.8$ million, 64 percent above 1979.

SUPPLY. THE U.S. supply of edible fishery products (domestic landings plus imports, round weight equivalent) was 8.0 billion pounds in 1980, 3 percent less than 1979. The decrease was caused by lower imports of edible fishery products. The supply of industrial fishery products was 3.4 billion pounds in 1980, 6 percent less than 1979. A decrease in domestic landings of industrial products and less imports contributed to this decline.

PER CAPITA CONSUMPTION. U.S. consumption of fishery products was $\$ 3.0$ pounds of edible meat per person in 1980, down 0.2 pound from 1979.


## REVIEW

## RECORDS ESTABLISHED

## U.S. COMMERCIAL LANDINGS

Volume and value of U.S. commercial landings - 6.5 billion pounds and $\$ 2,237.2$ million.... (previous high, $1979-6.3$ billion pounds, and $\$ 2,233.7$ million).

Cod - $\$ 38.0$ million....(previous high, 1979 - $\$ 31.3$ million).
Flounders -- 216.9 million pounds....(previous high, 1979 - 209.3 million pounds).
Menhaden -- \$112.0 million....(previous high, 1979 - \$ 109.4 million).
Rockfishes - 105.7 million pounds....(previous high, 1979 - 68.0 million pounds).
Tuna - \$233.1 million....(previous high, 1978 - $\$ 176.9$ million).
Crabs -- 523.1 million pounds....(previous high, 1979 - 489.2 million pounds).
Crab, king -- 185.6 million pounds and $\$ 168.7$ million....(previous high, 159.2 million pounds, 1965 and 168.1 million, 1978).

## U.S. PRODUCTION OF PROCESSED FISHERY PRODUCTS

Value of processed fishery products $-\$ 4.7$ billion -- (previous high, $\$ 4.5$ billion, 1979).
Fish oil - 311.6 million pounds....(previous high, 1936 -- 299.3 million pounds).

## U.S. IMPORTS

Edible fishery products -- \$2,682.3 million....(previous high, 1979 -- $\$ 2,668.4$ million).

## U.S. EXPORTS

Edible fishery products -- 573.9 million pounds....(previous high, 1979 - 553.6 million pounds).

## U.S. SUPPLY (DOMESTIC PRODUCTION PLUS IMPORTS)

American lobsters - 69.2 million pounds....(previous high, 1979 - 68.3 million pounds).

## OTHER IMPORTANT FACTS

Menhaden landings in 1980 of 2,497 million pounds ( 1,132 thousand metric tons) made up 38 percent of the commercial fishery landings in the United States.

Salmon was the second most important species in both quantity and value.

Crabs were the third most important in both quantity and value.

Tuna was the fourth most important in both quantity and value.

Shrimp was the fifth most important in quantity, but first in value.

Tuna landings by U.S. craft at ports outside the United States amounted to 100.6 million pounds, mostly landed at Puerto Rican ports. Other species landed at ports outside the United States were shrimp, at Central and South American ports and Pacific groundfish onto foreign vessels in the U.S. FCZ.

Cameron, Louisiana, was the leading U.S. port in quantity of commercial fishery landings. The second was San Pedro, California, followed by PascagoulaMoss Point, Mississippi; Empire-Venice, Louisiana; and Dulac-Chauvin, Louisiana. Menhaden was the principal species landed at these ports, except at San Pedro, where tuna was the principal species.

San Pedro, California was the leading U.S. port in terms of value, followed by San Diego, California; Dutch Harbor and Kodiak, Alaska; and New Bedford, Massachusetts.

Louisiana led all States in volume of landings with 1,423.4 million pounds, followed by Alaska with 1,053.9 million; California with 804.3 million; Virginia with 637.5 million; and Massachusetts with 438.4 million pounds.

Alaska led all States in value with $\$ 560.6$ million, followed by California with $\$ 323.4$ million; Massachusetts with $\$ 178.6$ million; Louisiana with 178.0 million; and Texas with $\$ 153.9$ million.

## REVIEW

## IMPORTANT SPECIES

ALASKA POLLOCK AND OTHER PACIFIC TRAWL FISH. U.S. landings of Pacific trawl fish (Alaska pollock, Pacific cod, flounders, hake (Pacific whiting), ocean perch, and rockfishes) were 207.7 million pounds valued at $\$ 42.2$ million, up 8 percent in volume and 9 percent in value compared with 1979. Decreases in landings of flounders ( 12 percent), ocean perch ( 7 percent), Alaska pollock ( 45 percent), and hake ( 61 percent) were offset primarily by a 55 percent increase in rockfishes but also a 59 percent increase in Pacific cod. An additional catch of 137.7 million pounds of Pacific trawl fish valued at $\$ 8.4$ million was caught by U.S. fishermen and unloaded to foreign vessels in the U.S. FCZ. Efforts to increase the use of Pacific groundfish by U.S. processors was slightly affected this year with the failure of one firm in Alaska handling these fish and another Alaska firm shutting down its groundfish processing lines. However, the introduction of a large U.S. foctory trawler and an experimental floating processor in the Bering Sea partially offset these events.

The foreign catch of trawl fish in the Pacific U.S. FCZ was 1.6 million metric tons, a decline of 2 percent compared to 1979. About 84 percent of this catch was in the Eastern Bering Sea, 13 percent in the Gulf of Alaska, and the remaining 3 percent off Washington, Oregon, and California. Alaska pollock was the leading species caught (1.1 million metric tons), followed by Pacific flounders (181,800 metric tons), and Pacific cod (71,600 metric tons). Japan and South Korea were the major fishing nations.

ANCHOVIES. U.S. landings of anchovies in 1980 were 106.9 million pounds, a decline of 10.5 million pounds ( 9 percent) compared with 1979. In 1980, 103.7 million pounds were used for industrial purposes, with 88.9 million pounds or 86 percent of the anchovies reduced to meal, oil, and solubles. Another 13.8 million pounds or 13 percent was used for bait, mostly live bait for sport fishing. The remaining 982,000 pounds was used for pet food. Most of the anchovies were caught in purse seines, al though some were taken with lampara nets.

HALIBUT. U.S. landings of Atlantic and Pacific halibut were 19.2 million pounds (round weight) valued of $\$ 16.8$ million, down 2.2 million pounds and $\$ 17.8$ million compared with 1979. The Pacific fishery accounted for 99 percent of the 1980 total. The average exvessel price per pound in 1980 was 88 cents compared with \$1.62 in 1979.

HERRING, SEA. U.S. commercial landings of sea herring were 291.1 million pounds valued at $\$ 45.0$ million in 1980, up 39 percent in volume and down 4 percent in value compared with 1979. Landings of Atlantic sea herring were 184.0 million pounds valued at $\$ 10.4$ million, up 28 percent in quantity and 23 percent in value from 1979. Landings of Pacific sea herring were 107.1 million pounds valued at $\$ 34.6$ million, an increase of 41.4 million pounds ( 63 percent) and a decrease of $\$ 3.8$ million ( 10 percent) in value. The average exvessel price per pound of Pacific sea herring decreased from 58 cents in 1979 to 32 cents in 1980.

JACK AND PACIFIC MACKEREL. Landings in California were 109.1 million pounds valued at $\$ 9.8$ million, up 16 percent in quantity and 46 percent in value from 1979. Jack mackerel comprised 41 percent and Pacific mackerel 59 percent of the total. This is the second year in a row that the catch of Pacific mackerel exceeded that of jock mackerel.

Prior to 1978, the State of California prohibited the landings of a pure trip of Pacific mackerel, and the incidental take was limited to 18 percent for a trip. The reason for more Pacific mackerel landings in 1979 and 1980 was simply an increase in near-shore abundance and the removal of the State of California regulations.

MACKEREL, ATLANTIC. U.S. landings of Atlantic mackerel in 1980 were 5.9 million pounds with an exvessel value of $\$ 816,000-1.4$ million pounds more than in 1979 but a decline of $\$ 243,000$ in value. Massachusetts was the leading State with landings of 2.6 million pounds ( 43 percent), followed by New Jersey with 1.6 million pounds ( 27 percent). The average exvessel price per pound in 1980 was 14 cents compared with 24 cents in 1979.

MENHADEN. U.S. menhaden landings were 2.5 billion pounds valued at $\$ 112.0$ million in 1980 , down 107.8 million pounds or 4 percent in quantity but an increase of $\$ 2.6$ million or 2 percent in value compared with 1979. Landings in the Atlantic States increased by 7 percent while the Gulf States declined again in 1980 by 10 percent. Over 99 percent of the total landings were reduced to meal, oil, and solubles; the rest was used for bait or for canned pet food.

Landings along the Atlantic Coast were 948.9 million pounds worth $\$ 42.9$ million in 1980, an increase of 7 percent in quantity and 19 percent in value compared with 1979. Of this amount, 906.5 million' pounds were used for reduction in 1980, the remainder for bait.

Landings of Gulf mienhaden were 1.6 billion pounds compared with the 1979 landings of 1.7 billion pounds and 14 percent less than the record year 1978 when 1.8 billion pounds were landed. Gulf Coast landings in June and July. were the highest during the year when 280.7 and 349.7 million pounds were landed.

NORTH ATLANTIC TRAWL FISH. North Atlantic groundfish landings in 1980 were 460.0 million pounds ( 208,660 metric tons) valued at $\$ 145.6$ million, in 1980 valued at $\$ 145.6$ million, up 12 percent in quantity and 7 percent in value compared to the 411.3 million pounds valued at $\$ 136.5$ million landed in 1979. Fish included are: butterfish, Atlantic cod, cusk, flounders, haddock, red and white hake, Atlantic ocean perch, pollock, and whiting (silver hake). Flounders led in value of these species, accounting for 46 percent of the total, cod second with 22 percent, and haddock third with 15 percent.

## REVIEW

## IMPORTANT SPECIES

Atlantic cod and haddock, managed under an FMP since 1977, have shown a marked increase in landings since 1976 when landings were 56.0 million and 12.8 million pounds respectively, in 1980 cod landings were 118.2 million pounds and haddock 55.2 million pounds. Yellowtail flounder have also been managed under an FMP since 1977, but landings have not shown a substantial increase. Yellowtail landings in 1976 were 38.0 million pounds and 42.6 million pounds in 1980.

Foreign catches in the North Atlantic FCZ in 1980 were 71,714 metric tons, a 12 percent increase compared with 64,106 metric tons in 1979. Canada was the leading country with 40 percent, Spain second with 24 percent, Japan third with 15 percent, and Italy fourth with 13 percent. Other countries fishing the area were Cuba, Mexico, Faroe Islands, Poland, and Romania. Squid catches of 38,124 metric tons led all species caught ( 51 percent). Other species in order of significance were haddock (13 percent), cod ( 9 percent), pollock ( 7 percent), and sea scallops ( 7 percent).

PACIFIC SALMON. U.S. commercial landings were 613.8 million pounds valued at $\$ 352.3$ million, an increase of 77.7 million pounds or 14 percent and a decrease of $\$ 60.5$ million or 15 percent compared with 1979. Excellent runs again of pink and red salmon in Alaska were the major factors for the increase. Alaska accounted for 92 percent of the total landings; Washington, 6 percent; and California and Oregon, I percent each. A small catch of 2,000 pounds of silver salmon were made in the Great Lakes.

Alaska salmon landings in 1980, the largest since 1941, were 567.1 million pounds, up 99.3 million pounds or 21 percent from 1979. The value of Alaska salmon was $\$ 286.6$ million, down $\$ 18.2$ million or 6 percent compared with 1979. Pink salmon landings in Alaska were 253.5 million pounds, the greatest since 1942. Landings of red salmon were 204.4 million pounds, up 13 percent from 1979 and up 114.7 million pounds or 128 percent from 1978. Chum salmon landings were 74.4 million pounds, up 67 percent and silver salmon landings in Alaska were 23.2 million pounds, up I percent from 1979. Chinook salmon showed the only decrease in Alaska with 11.6 million pounds, down 21 percent from 1979.

Salmon landings in Washington in 1980 were 33.8 million pounds valued at $\$ 39.8$ million. Compared with 1979, landings of pink ( 11,000 pounds) and red ( 3.1 million pounds) decreased by 21.9 million pounds and 6.8 million pounds respectively. The largest increase was for chum salmon which rose from 1.3 million pounds in 1979 to 10.6 million pounds in 1980. There was a slight increase in chinook landings from 6.3 million pounds in 1979 to 7.6 million pounds in 1980.

Salmon landings in Oregon were 7.0 million pounds valued at $\$ 12.7$ million, down 3.5 million pounds in quantity and $\$ 8.5$ million in value compared with
1979. The only increase was for chum salmon which went from 1,000 in 1979 to 2,000 pounds in 1980 . Landings of pink salmon went from 127,000 pounds in 1979 to 1,000 pounds in 1980. Silver salmon declined 46 percent ( 2.7 million pounds) and chinook by 16 percent ( 696,000 pounds) compared with 1979.

California salmon landings decreased from 8.8 million pounds in 1979 to 5.9 million pounds in 1980. Chinook landings declined from 7.6 million pounds in 1979 to 5.6 million pounds and silver salmon went from 1.2 million pounds in 1979 to 300,000 pounds in 1980. The 1980 value ( $\$ 13.1$ million) for salmon in California decreased by 32 percent compared with 1979.

SABLEFISH. U.S. commercial landings of sablefish were only 22.1 million pounds valued at $\$ 5.4$ million in 1980. This was a decline of 26.3 million pounds ( 54 percent) compared with 1979, a record year, and \$9.4 million ( 64 percent) in value. Landings in all Pacific States declined-California, 8.3 million pounds (down 55 percent); Oregon, 5.9 million ( 64 percent); Washington, 3.1 millions ( 48 percent); and Alaska, 4.8 million pounds (down 35 percent) compared with 1979. The average exvessel price per pound in 1980 was 24 cents compared with 31 cents in 1979.

TUNA: Landings of tuna in 1980 by U.S. fishermen at ports in the 50 States, Puerto Rico, American Samoa, and other U.S. territories and foreign ports were 500.0 million pounds, valued at $\$ 289.3$ million, down 2 percent in quantity but up 34 percent in value from 1979. The quantity landed was 10 percent below the average for the previous 5 years. The average exvessel price per pound for all species of tuna for 1980 was 58 cents compared to 42 cents in 1979.

Bigeye landings in 1980 were 7.0 million pounds, up from 2.9 million pounds ( 140 percent) in 1979. The average exvessel price per pound was 58 cents in 1980 compared to 78 cents in 1979.

Skipjack landings in 1980 were 235.0 million pounds, up 40.2 million pounds ( 21 percent) from 1979 and still above the average for the past five years. The average exvessel price per pound in 1980 was 54 cents compared to 37 cents in 1979.

Yellowfin landings were 231.6 million pounds in 1980, down 46.4 million pounds ( 17 percent) from 1979. The average exvessel price in 1980 was 60 cents compared with 44 cents in 1979.

Bluefin landings were 8.1 million pounds in 1980 , down 7.9 million pounds ( 49 percent) from 1979. The average exvessel price per pound was 88 cents in 1980 compared to 58 cents in 1979.

Almost 80 percent of the tuna landings were at ports in the continental United States (principally California, with 96 percent of continental landings).

## REVIEW

## IMPORTANT SPECIES

NMFS and the U.S. Coast Guard closely regulate fishing for yellowfin tuna by U.S. fishermen in a major producing area of the eastern Pacific Ocean known as the Commission's Yellowfin Regulatory Area (CYRA). The regulation is in response to recommendations of the Inter-American Tropical Tuna Commission (IATTC).

CLAMS. Landings of all species yielded 95.4 million pounds of meats worth $\$ 90.2$ million in 1980. Compared with 1979, landings increased 3.3 million pounds ( 4 percent) and $\$ 11.0$ million ( 14 percent) in value in 1980. The exvessel price rose from 86 cents in 1979 to 95 cents in 1980.

Surf clams yielded 37.7 million pounds of meats valued at $\$ 19.1$ million, up 2.8 million pounds or 8 percent, but down in value by $\$ 166,000$ or I percent compared with 1979. Virginia was the leading State with 14.4 million pounds; followed by Maryland, 11.4 million; New Jersey, 9.6 million; and New York, 2.0 million pounds. The average exvessel price per pound for surf clams went down from 55 cents in 1979 to 51 cents in 1980.

The ocean quahog fishery produced 33.8 million pounds of meats valued at $\$ 10.2$ million in 1980, a decrease of 892,000 pounds or 3 percent and $\$ 46,000$ compared with 1979. New Jersey was the leading producer in the United States with 22.5 million pounds of meats, accounting for 67 percent of the total landings of ocean quahog. Maryland was second with 7.7 million pounds or 23 percent, followed by Rhode Isiand, 3.6 million pounds or 10 percent. The average exvessel price per pound of meat was 30 cents in 1980 compared with 29 cents in 1979.

The hard clam fishery produced 13.4 million pounds of meats valued at $\$ 44.1$ million. This was an increase of 1.3 million pounds of meats or 11 percent and $\$ 10.3$ million or 31 percent over 1979 . Landings in the Middle Atlantic region (mostly New York) were 5.9 million pounds; New England, 4.4 million; South Atlantic, 1.8 million; Chesapeake, 795,000 ; and the Pacific, 477,000 pounds of meats. Average exvessel price per pound of meats in 1980 was $\$ 3.30$ compared to $\$ 2.80$ in 1979.

Soft clams yielded 8.9 million pounds of meats valued at $\$ 15.4$ million. This was an increase of 363,000 pounds or 4 percent and $\$ 1.6$ million or 12 percent in value over 1979. Maine was the leading State with 5.7 million pounds or 63 percent of the total catch, followed by Maryland with 1.9 million pounds of meats. The average exvessel price per pound of meats was $\$ 1.72$ in 1980 compared with $\$ 1.60$ for 1979.

CRABS. Landings of all species of crabs were a record 523.1 million pounds valued at $\$ 291.4$ million, an increase of 33.9 million pounds or 7 percent in quantity and $\$ 7.1$ million or 2 percent in value over 1979. Landings increased for major species except snow (tanner) and dungeness crabs.

Hard blue crab landings were 163.2 million pounds valued at $\$ 35.2$ million, an increase of 10.4 million pounds or 7 percent and $\$ 3.7$ million or 12 percent compared with 1979. Blue crab landings in the Chesapeake States of 63.3 million pounds decreased 1 percent from 1979. Blue crab landings in the South Atlantic States were 55.0 million pounds, up 12 percent; Middle Atlantic, 3.9 million pounds, up 197 percent; and landings in the Gulf States, 41.1 million pounds, up 8 percent over 1979. The average exvessel price per pound of crabs in 1980 was 22 cents compared with 21 cents in 1979.

Dungeness crab landings were 38.3 million pounds worth $\$ 21.6$ million, a decrease of 412,000 pounds and $\$ 9.4$ million ( 30 percent) compared with 1979. The average exvessel price per pound went from 80 cents in 1979 down to 56 cents in 1980. Oregon led with landings of 18.6 million pounds, up 25 percent from 1979. Landings in California decreased 25 percent; Washington, 18 percent; and Alaska decreased 7 percent when compared with 1979.
U.S. landings of king crabs were 185.6 million pounds, valued at $\$ 168.7$ million to the fishermen. This harvest set a new record passing the previous high of 159.2 million pounds landed in 1966. The fishery in the Bering Sea continued to expand in 1980, and reached 158.4 million pounds, valued at $\$ 156.0$ million. The exvessel price per pound reached $\$ 1.01$ for 1980 compared with 96 cents in 1979. Landings in the Gulf of Alaska were 27.2 million pounds with an average exvessel price of $\$ 1.07$ per pound compared with 22.0 million pounds landed in 1979 and valued at 95 cents per pound.

Snow (tanner) crab landings were 121.7 million pounds, valued at $\$ 55.2$ million--a decrease of 9.7 million pounds or 7 percent from 1979, a record year for landings, and a decrease of $\$ 9.7$ million or 15 percent in value. Landings taken in the Bering Sea of the smaller Chionoecetes opilio were 39.4 million pounds while C. bairdi landings were 37.8 million pounds. Landings of C. bairdi from the Gulf of Alaska were 44.5 million pounds, down 12.1 million pounds or 21 percent from 1979. The average price per pound for 1980 was 45 cents compared with 49 cents in 1979.

LOBSTER, AMERICAN. Landings of American lobster in 1980 were 37.0 million pounds valued at $\$ 75.2$ million-down 232,000 pounds ( 1 percent) and up $\$ 2.9$ million ( 4 percent) compared with 1979. The average exvessel price per pound was $\$ 2.04$ in 1980 compared with $\$ 1.94$ in 1979. Maine, the principal producing State landed 22.0 million pounds, about 1 percent less than the previous year. Massachusetts landings of 9.7 million pounds declined by only 18,000 pounds from the previous year. Rhode Island landings of 2.4 million pounds increased by 128,000 pounds compared with 1979.

## REVIEW

## IMPORTANT SPECIES

LOBSTER, SPINY. U.S. landings of spiny lobster were 6.9 million pounds valued at $\$ 14.8$ mitlion in 1980, up 560,000 pounds ( 9 percent) and $\$ 2.0$ million (16 percent) from 1979. The average exvessel price per pound was $\$ 2.16$ compared with $\$ 2.03$ in 1979. Florida landings accounted for 95 percent of the total landings and 93 percent of the value.

OYSTERS. U.S. landings in 1980 yielded 49.1 million pounds of meats valued at $\$ 70.1$ million, an increase of 1.0 million pounds or 2 percent in quantity and $\$ 4.5$ million or 7 percent in value compared with 1979. Chesapeake States led in production with 20.8 million pounds of meat, followed by the Gulf States with 16.5 million pounds. Landings increased slightly in all areas except in the Middle Atlantic States where it declined by 13 percent.

SHRIMP. U.S. landings were 339.7 million pounds (heads-on) valued at $\$ 402.7$ million--up 11 percent in volume but down 15 percent in value compared with 1979. The average exvessel price per pound for 1980 was $\$ 1.19$ compared to $\$ 1.40$ in 1979. Shrimp landings increased in the South Atlantic, Gulf, and Pacific States but declined in the New England States.

Gulf landings of 208.3 million pounds were up only I percent over 1979. Louisiana: led all States with 88.7 million pounds (up lil percent), followed by Texas; 74.1 million pounds (up 10 percent) above 1979.

SCALLOPS. U.S. landings of all species yielded 29.7 million pounds worth $\$ 114.3$ million in 1980-down 4.4 million pounds or 13 percent in quantity but up $\$ 2.5$ million or 2 percent in value from 1979. The average exvessel price per pound in 1980 was $\$ 3.85$ compared to $\$ 3.28$ in 1979.
U.S. bay scallop landings in 1980 of 968,000 pounds of meats valued at $\$ 3.9$ million were down 806,000 pounds or 45 percent in quantity and $\$ 2.9$ million or 43 percent in value compared with 1979. Massachusetts, the leading State in 1979 with 1.1 million pounds, had only 201,000 pounds in 1980. The average exvessel price per pound for bay scallops was $\$ 4.02$ in 1980 compared to $\$ 3.83$ in 1979.

Sea scallop landings were 28.8 million pounds valued at $\$ 110.4$ million in 1980 -down 2.7 million pounds or 9 percent in quantity and an increase in value of $\$ 7.2$ million or 7 percent compared with 1979. Average exvessel price per pound in 1980 was \$3.84 compared with \$3.28 in 1979.

## REVIEW

## PER CAPITA CONSUMPTION

PER CAPITA CONSUMPTION. U.S. per capita consumption of fish and shellfish was 13.0 pounds (edible meat) in 1980. This was 0.2 pound less than the 13.2 pounds consumed in 1979. All of this decrease was in canned fishery products which fell to 4.6 pounds per person, down 0.3 from 1979. Canned tuna was responsible for the total decrease, falling from 3.3 pounds in 1979 to 3.0 in 1980 . Fresh and frozen fish and shellfish increased to 8.1 pounds per person in 1980, up 0.1 pound from 1979 and partly offsetting the decrease in canned. Fresh and frozen salmon increased to 0.4 pound per person, up 0.2 pound from 1979. There was also an increase of 0.2 pound in other fish. Balancing out these increases in consumption of fresh and frozen fish was a decline of 0.4 pound in consumption of groundfish fillets and blocks. Per capita consumption of fresh and frozen shellfish moved up 0.1 pound due to a 0.1 pound increase in fresh and frozen crabs. Per capita consumption of cured fishery products, at 0.3 pound, remained the same as last year.

It appears that the increases in per capita consumption reflected during the 1970's may be reduced due to a considerable increase in the population estimates. The civilian population of the United States was 225.5 million persons on July 1,

1980, based on the Census count of April 1, 1980. This was considerably higher than the 220.7 million for the same date based on the April I, 1970 census. When the 4.8 million error of closure has been resolved by the Bureau of the Census, estimates of the population for 1971-80 will be adjusted to make them consistent with the 1980 census count. These revisions in population will be reflected in the per capita consumption figures as soon as they become available. For continuity, the population figure, based on the 1970 census count, was used in computing 1980 per copita consumption.

In addition to consumption of commercially caught fish and shellfish, recreational fishermen catch and consume an amount estimated to be 3 to 4 pounds (edible meat) per person.

PER CAPITA USE. The per capita use of all fishery products, both edible and industrial, was 51.0 pounds (round weight) in 1980, down 2.6 pounds ( 4.9 percent) from 1979. The reason for the decrease was that imports were down 688.6 million pounds ( 12.4 percent). The per capita use of edible fishery products was down 4.0 percent and industrial use was down 7.4 percent.

## PROCESSED FISHERY PRODUCTS

## FRESH AND FROZEN

FISH FILLETS AND STEAKS. In 1980, the U.S. production of raw (uncooked) fish fillets and steaks was 173.6 million pounds valued at $\$ 239.5$ million, 13.5 million pounds and $\$ 21.4$ million less than the 1979 production. Flounder fillets led all species with 46.9 million pounds or 27.0 percent of the total. Production of groundfish fillets and steaks (cod, cusk, haddock, hake, Atlantic pollock, and Atlantic ocean perch) was 65.8 million pounds in 1980 compared with 74.6 million pounds produced a year earlier. The production of most fillets and steaks was less in 1980.

FISH STICKS AND PORTIONS. The combined production of fish sticks and portions was 449.6 million pounds valued at $\$ 488.5$ million in 1980 , compared with a 1979 production of 492.1 million pounds, valued at $\$ 529.0$ million. The production of all portion items decreased in 1980: breaded cooked by 8.2 million pounds; batter coated cooked by 9.1 million; breaded raw by 10.7 million; and unbreaded portions by 6.9 million pounds, compared with the 1979 production.

FISH STIÇKS. The production in 1980 of 88.4 million pounds valued at $\$ 88.5$ million was 7.7 million pounds and $\$ 11.3$ million less than the 1979 production. The production of batter coated fish sticks, 18.4 million
pounds, registered the largest decline, 8.5 million pounds; breaded cooked 822,000 pounds, but breaded raw increased by 1.7 million pounds.

BREADED SHRIMP. The 35 plants reporting to NMFS on a quarterly basis during 1980 produced 81.5 million pounds valued at $\$ 259.4$ million. In 1979, 42 plants reporting on a quarterly basis produced 93.8 million pounds valued of $\$ 293.1$ million. The 8 additional firms that reported only on an annual basis in 1979 produced 2.4 million pounds valued at $\$ 6.8$ million that year. Data on the 1980 production of the plants that report only on an annual basis are not yet available.

FROZEN FISHERY TRADE. In 1980, stocks of frozen fishery products in cold storage were at a low of 333.7 million pounds on June 30 and a high of 471.2 million pounds on January I. Cold storage holdings of shrimp products, which were 87.4 million pounds on January 31, dropped to 48.2 million pounds by June 30, and ended the year at 77.8 million pounds on December 31. Fish block holdings reached a high of 62.5 million pounds on January 1. By the end of 1980, stocks of fish blocks had declined to 46.7 million pounds. King crab holdings were 34.1 million pounds on January I, but were 37.8 million pounds on December 31, 1980.

## REVIEW <br> PROCESSED FISHERY PRODUCTS CANNED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS. The 1980 pack of canned fishery products in the 50 States, American Samoa, and Puerto Rico was 53.0 million standard cases ( 1.5 billion pounds) valued at a record $\$ 1.9$ billion-increases of 1.1 million standard cases ( 23.4 million pounds) and $\$ 164.3$ million compared with the 1979 pack. The 1980 pack included 43.7 million standard cases ( 1.0 billion pounds) valued at a record $\$ 1.8$ billion for human consumption and 9.3 million standard cases ( 448.1 million pounds) valued at $\$ 124.2$ million for bait and animal food. The packs of herring and herring specialties, mackerel, salmon, tunalike fish, clams and clam products, clam specialties, shrimp, and squid increased in 1980, but the remaining packs of fish and shellfish declined.

CANNED SALMON. The 1980 U.S. pack of natural Pacific salmon reached 4.2 million standard cases, (201.6 million pounds) valued at $\$ 403.5$ million, compared with 3.1 million standard cases ( 150.1 million pounds) valued at $\$ 275.2$ million packed a year earlier. For the first time since 1949, the Alaska canned salmon pack topped 4 million cases, led by 1.6 million cases of red or sockeye, and 2.1 million standard cases of pinks. Alaskan plants accounted for more than 99 percent of the quantity and value of the salmon pack. The Alaskan catch was more than 110 million fish, about similar to the catch in 1934, when the canned pack was more than 7 million standard cases. However, that was made before the days of frozen salmon and air shipments of fresh salmon to markets in other States. An estimate of between 4 to 6 million pounds of salmon were flown fresh from Alaska to markets throughout the U.S. during the 1980 season.

CANNED SARDINES. The pack of Maine sardines (sea herring) was 846,500 standard cases valued at $\$ 31.5$ million, a decrease of 451,300 standard cases and $\$ 13.4$ million compared with 1979. An additional pack of herring and herring specialties of 134,900 standard cases valued at $\$ 10.5$ million was packed in 1980-63,300 standard cases and $\$ 5.6$ million more than the 1979 pack. The decline in the Maine sardine pack was attributed to larger size fish which were utilized in the pack of herring specialties.

CANNED.TUNA. The 1980 U.S. pack of tuna was 30.9 million standard cases, ( 608.4 million pounds) valued at $\$ 1.1$ billion. This was 528,300 standard cases and 11.8 million pounds less than the 1979 pack, however, the value increased by $\$ 29.0$ million in 1980 . The
pack of albacore tuna was 5.5 million standard cases in 1980-294,000 standard cases less than the 5.8 million standard cases produced in 1979. Albacore tuna was 18 percent of the pack in 1980. Lightmeat tuna (bigeye, bluefin, skipjack, and yellowfin) comprised the remainder with a pack of 25.4 million standard cases-235,000 standard cases less than the 25.6 million standard cases packed in 1979. Plants in the United States packed 47.3 percent of the total; American Samoa, Hawaii, and Puerto Rico packed the rest. About 32 percent of the total supply of canned tuna was packed from U.S.-caught fish, and 58 percent from imported fish. Imports of canned tuna made up the remaining 10 percent.

CANNED CLAMS. The U.S. pack of clams (whole, minced, chowder, and juice) was 3.0 million standard cases valued of a record $\$ 66.0$ million compared with 1979. The 1980 pack of whole and minced clams of 788,100 standard cases, which was 59,500 standard cases more than the 1979 pack, accounted for 26 percent of the total pack in 1980. Clam chowder and clam juice ( 2.3 million standard cases) made up the remaining 1980 pack.

CANNED SHRIMP. The 1980 U.S. pack of natural shrimp was 2.4 million standard cases valued at $\$ 71.1$ million, 977,400 standard. cases and $\$ 31.0$ million more than the 1979 pack. Plants in Lovisiana and Mississippi packed 1.8 million standard cases nearly double the pack of the previous year when only 900,000 standard cases were packed. The remaining pack $(644,400)$ was packed in plants in Alaska and Washington.

OTHER CANNED ITEMS. The U.S. pack of mackerel was 824,300 standard cases valued at $\$ 11.3$ million in 1980, 242,200 standard cases and $\$ 3.6$ million more than the previous year. The pack of tunalike fish (bonito) in 1980 was 227, 100 standard cases valued at $\$ 4.7$ million, compared with 75,500 standard cases, valued at $\$ 1.6$ million a year earlier. The natural pack of oysters continued to decline. In 1980 less than three plants produced this item. In 1980 the pack of pet food ( 10 pounds of fish per standard case of 48 one-pound cans) was 9.3 million standard cases valued at $\$ 123.2$ million, a decline of 660,100 standard cases and $\$ 23.6$ million compared with the pack in 1979. A decline in the pack of natural tuna, accounted for the decrease in the pack of pet food in 1980. Tuna accounted for 49 percent of the pet food pock.

## REVIEW

## PROCESSED FISHERY PRODUCTS INDUSTRIAL FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS. The 1980 value of industrial fishery products produced in the 50 States, American Samoa, and Puerto Rico was a record $\$ 268.8$ million, $\$ 9.3$ million more than the previous record in 1979. In terms of value, the leading States were Louisiana ( $\$ 96.3$ million), followed by Maine ( $\$ 47.2$ million), and Virginia ( $\$ 27.2$ million).

FISH MEAL AND SCRAP. Domestic production in 1980 (including shellfish meal) was 361,922 short tons, 12,371 short tons less than the record production of 374,293 short tons produced in 1979. Menhaden meal ( 271,181 short tons) was 9,632 short tons less than the record production of 280,813 short tons produced in 1979, but still amounted to nearly 75 percent of all the domestic fish meal and shellfish meal produced. The production of anchovy meal ( 7,834 short tons), tuna and mackerel meal ( 47,019 short tons), and shellfish meal ( 6,595 short tons) were down from the 1979 production by 2,072 short tons, 372 short tons, and 4,383 short tons respectively. Unclassified meal ( 29,293 short tons) consisting mainly of alewives, carp, sea herring, and unclassified fish measured the only increase--4,088 short tons more than the 1979 production.

FISH SOLUBLES. Domestic production of fish solubles in 1980 (I33,682 short tons) was 1,246 short
tons less than the 1979 production. Menhaden solubles ( 99,375 short tons) accounted for more than 74 percent of the total production.

FISH OILS. The 1980 domestic production of fish oils set a record in quantity when 311.6 million pounds were produced-- 43.6 million pounds more than the 1979 production and 12.3 million pounds more than the previous record set in 1936 when 299.3 million pounds were produced. Menhaden oil production of 291.4 million pounds was 40.1 million pounds more than the 1979 production and comprised 94 percent of all fish oils produced. Tuna and mackerel oil (4.1 million pounds) and anchovy oil ( 1.4 million pounds) declined in production in 1980, by 1.3 million pounds and 1.4 million pounds respectively. The production of unclassified oil ( 14.7 million pounds) was 6.3 million pounds more than the 1979 production.

OTHER INDUSTRIAL PRODUCTS. Oyster shell products, together with agar-agar, animal feeds, crab and clam shells processed for food serving, fish pellets, Irish moss extracts, kelp products, dry and liquid fertilizers, pearl essence, shark leathers, and mussel shell buttons were valued at $\$ 63.2$ million in 1980, compared with $\$ 58.8$ million in 1979.

## FOREIGN TRADE IN FISHERY PRODUCTS

IMPORTS. The value of U.S. imports of edible fishery products was a record $\$ 2,682$ million, $\$ 14$ million higher than the record $\$ 2,668$ million established in 1979. However, the quantity of edible imports was 225 million pounds less than the 2,369 million pounds imported in 1979. This increase in value for edible imports was mainly due to higher prices for nearly all imported products.

Imports were higher in 1980 for fresh and frozen halibut, salmon, tuna other than albacore, and crabmeat, and for canned sardines not in oil, tuna not in oil, bonito and yellowtail in oil and not in oil, and American lobsters, Edible imports in 1980 consisted of 1,868 million pounds of fresh and frozen products valued at $\$ 2,320$ million, 212 million pounds of canned products valued at $\$ 297$ million, 58 million pounds of cured products valued at $\$ 60$ million, and 6 million pounds of other products valued at $\$ 5$ million.

Adding nonedible imports valued at $\$ 966$ million to the edible products gives total fishery imports in 1980 of $\$ 3,648$ million. The 1980 value was $\$ 177$ million less than the record nonedible imports of $\$ 1,143$ million in 1979.
EXPORTS. U.S. exports of edible fishery products of domestic origin exceeded the record established for quantity in 1979. The new record of 573.9 million pounds was 20.3 million pounds more than the 553.6 million pounds exported in 1979. The value of these same exports was $\$ 904.4$ million in $1980, \$ 115.8$ million less than the record value of $\$ 1,020.2$ million in 1979. Decreases in the value of fresh and frozen fish and shellfish products were responsible for most of the decline.

Adding exports of nonedible products valued at $\$ 101.8$ million to exports of edible products results in total exports of $\$ 1,006.2$ million in 1980, $\$ 76.2$ million less than the 1979 exports of $\$ 1,082.4$ million.

## U.S. COMMERCIAL LANDINGS


U.S. SUPPLY OF INDUSTRIAL FISHERY PRODUCTS, 1971-80

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1979 AND 1980 (1)

| Species | 1979 |  | 1980 |  | $\begin{gathered} \text { 5-year aver- } \\ \text { age }(1975-79) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fish | Thousand | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars | pounds |
| Alewives: |  |  |  |  |  |
| Atlantic and Gulf | 9,691 | 639 | 10,985 | 779 | 14,863 |
| Great Lakes | 23,871 | 501 | 17,523 | 280 | 36,492 |
| Anchovies . . | 117,403 | 9,895 | 106,942 | 8,712 | 194,502 |
| Bluefish. | 13,207 | 2,197 | 15,676 | 2,426. | 11,464 |
| Bonito. | 5,442 | 1,066 | 14,686 | 2,881 | 15,634 |
| Butterfish. | 6,053 | 2,127 | 11,568 | 3,848 | 4,912 |
| Cod: |  |  |  |  |  |
| Atlantic. | 99,352 | 28,632 | 118,245 | 31,883 | 74,674 |
| Pacific | 12,382 | 2,639 | 19,672 | 6,069 | 11,561 |
| Croaker | 28,040 | 5,781 | 28,473 | 6,725 | 31,307 |
| Cusk. | 3,736 | 792 | 4,297 | 872 | 3,156 |
| Flounders: |  |  |  |  |  |
| Atlantic and Gulf: |  |  |  |  |  |
| Blackback . . . | 24,810 | 9,868 | 36,008 | 12,595 | 25,571 |
| Fluke | 30,721 | 15,977 | 34,752 | 18,010 | 21,899 |
| Yellowtail. | 35,246 | 17,679 | 42,619 | 19,855 | 35,565 |
| Other | 50,254 | 22,386 | 43,187 | 16,592 | 34,699 |
| Pacific | 68,257 | 16,835 | 60,354 | 15,436 | 58,388 |
| Total ${ }^{\text {. }}$ | 209,288 | 82,745 | 216,920 | 82,488 | 176,122 |
| Groupers. | 8,156 | 6,424 | 8,682 | 7,804 | 7,572 |
| Haddock . | 41,882 | 17,705 | 55,188 | 21,424 | 27,7.45 |
| Hake: ..... |  |  |  |  |  |
| Pacific (whiting) | 30,750 | 2,057 | 12,021 | 401 | 9,626 |
| Red . | 7,040 | 953 | 5,597 | 677 | 4,754 |
| White | 8,881 | 1,470 | 10,428 | 1,748 | 9,554 |
| Halibut . . . | 21,385 | 34,618 | 19,153 | 16,823 | 19,790 |
| Herring, sea: |  |  |  |  |  |
| Atlantic. . | 143,372 | 8,395 | 183,993 | 10,363 | 111,313 |
| Pacific. | 65,658 | 38,351 | 107,076 | 34,592 | 46,585 |
| Jack mackere1 | 35,150 | 2,525 | 44,390 | 3,995 | 56,296 |
| Lingcod. | 7,143 | 1,673 | 8,129 | 2,290 | 8,006 |
| Mackere1: 8016 |  |  |  |  |  |
| Atlantic. | 4,463 | 1,059 | 5,913 | 816 | 4,280 |
| King. . | 4,859 | 3,503 | 7,035 | 5,361 | 6,921 |
| Pacific. | 59,005 | 4,208 | 64,668 | 5,820 | (2) |
| Spanish. | 6,450 | 1,431 | 11,968 | 3,137 | 10,319 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Gulf. . . | 1,718,243 | 73,426 | 1,547,790 | 69,129 | 1,389,604 |
| Total . | 2,604,481 | 109,430 | 2,496,649 | 112,012 | 2,167,567 |
| Mullet. | 25,886 | 4,817 | 37,360 | 7,153 | 29,160 |
|  |  |  |  |  |  |
| Atlantic. . | 34,039 | 7,164 | 24,201 | 5,548 | 33,768 |
| Pacific. | 7,286 | 1,487 | 6,771 | 1,023 | 6,228 |
| Pollock: 30546 |  |  |  |  |  |
| Atlantic. | 35,546 | 6,657 | 39,652 | 7,172 | 29,587 |
| Alaska. . | 5,625 | 471 | 3,107 | 245 | 1,054 |
| Rockfishes. | 68,010 | 15,285 | 105,735 | 19,060 | 49,102 |
| Sablefish. | 48,441 | 14,827 | 22,122 | 5,396 | 21,424 |
| Salmon, Pacific: |  |  |  |  |  |
| Chinook or king . | 33,008 | 57,270 | 28,533 | 47,453 | 32,245 |
| Chum or keta. . . | 45,784 | 26,363 | 84,916 | 39,640 | 48,022 |
| See footnotes at end |  | (C) | inued) |  |  |

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1979 AND 1980 (1) - Continued

| Species | 1979 |  | 1980 |  | 5-year average (1975-79) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fish - continued | Thousand | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars | pounds |
| Salmon, Pacific - cont.: |  |  |  |  |  |
| Pink . . . . | 226,830 | 92,059 | 253,541 | 90,757 | 140,556 |
| Red or sockeye | 190,727 | 180,404 | 207,551 | 131,354 | 102,970 |
| Silver or coho | 39,767 | 56,680 | 39,270 | 43,073 | 33,623 |
| Total. | 536,116 | 412,776 | 613,811 | 352,277 | 357,416 |
| Scup or porgy. | 20,472 | 7,219 | 20,027 | 7,947 | 18,779 |
| Sea bass: |  |  |  |  |  |
| Black. . | 4,531 | 2,581 | 3,953 | 2,688 | 4,964 |
| White. | 900 | 1,056 | 879 | 1,537 | 967 |
| Sea trout: 30,579 l |  |  |  |  |  |
| Gray . | 30,579 | 6,282 | 35,070 | 7,324 | 21,995 |
| Spotted. | 4,455 | 3,151 | 4,379 | 3,171 | 5,441 |
| White. . | 1,322 | 283 | 1,196 | 265 | 1,518 |
| Sharks: |  |  |  |  |  |
| Dogfish. | 19,319 | 1,681 | 16,759 | 1,416 | (2) |
| 0ther. | 3,325 | 1,561 | 4,486 | 1,634 | 3,131 |
| Snapper: 7040 |  |  |  |  |  |
| Red. - | 4,941 | 7,042 | 4,949 | 7,839 | 6,923 |
| Other. | 2,854 | 2,996 | 3,106 | 3,913 | 2,548 |
| Striped bass | 3,492 | 4,241 | 4,536 | 4,902 | 5,514 |
| Swordfish. - | 8,038 | 13,931 | 9,175 | 17,764 | (2) |
| Tuna: |  |  |  |  |  |
| Albacore | 15,418 | 9,972 | 15,872 | 12,717 | 35,659 |
| Bigeye . | 2,934 | 2,301 | 2,277 | 1,378 | (2) |
| Bluefin. | 14,897 | 8,800 | 7,991 | 7,086 | 17,860 |
| Little. | 126 | 56 | 535 | 100 | 104 |
| Skipjack. | 120,104 | 44,876 | 179,443 | 96,155 | 116,799 |
| Yellowfin. | 210,227 | 92,294 | 192,182 | 115,096 | 226,457 |
| Unclassified | 770 | 88 | 1,132 | 593 | 612 |
| Total. | 364,476 | 158,387 | 399,432 | 233,125 | 399,048 |
| Warsaw. | 83 | 43 | 112 | 62 | 168 |
| Whiting. | 35,264 | 5,770 | 35,571 | 6,113 | 44,349 |
| Wolffish . . . . | 1,530 | 223 | 1,983 | 276 | 1,163 |
| Other marine finfishes: |  |  |  |  |  |
| Atlantic and Gulf. | 188,241 | 35,466 | 190,912 | 46,842 | - |
| Pac ific. . . . | 12,234 | 3,585 | 4,393 | 1;039 | - |
| Other freshwater finfishes | 88,247 | 24,167 | 128,860 | 34,951 | - |
| Total Fish | 5,132,392 | 1,113,965 | 5,328,414 | 1,154,908 | - |
| Shellfish et al. |  |  |  |  |  |
| Clams: |  |  |  |  |  |
| Hard | 12,058 | 33,720 | 13,370 | 44,068 | 14,243 |
| Ocean quahog | 34,724 | 10,233 | 33,832 | 10,187 | (2) |
| Soft . . . . | 8,585 | 13,776 | 8,948 | 15,391 | 9,731 |
| Surf. | 34,912 | 19,273 | 37,737 | 19,107 | 52,247 |
| Other. | 1,771 | 2,203 | 1,482 | 1,470 | 2,372 |
| Total. | 92,050 | 79,205 | 95,369 | 90,223 | 93,841 |
| Crabs: |  |  |  |  |  |
| Blue, hard | 152,830 | 31,424 | 163,206 | 35,167 | 132,778 |
| Dungeness. | 38,690 | 31,019 | 38,278 | 21,613 | 38,025 |
| King . . . | 154,589 | 148,550 | 185,624 | 168,694 | 118,033 |
| Snow (tanner). | 131,393 | 64,834 | 121,674 | 55,161 | 97,222 |
| Other. . . | 11,682 | 8,416 | 14,329 | 10,715 | 10,467 |
| Total. | 489,184 | 284,243 | 523,111 | 291,350 | $396,525$ |

See footnotes at end of table.
(Continued)
U.S. COMMERCIAL LANDINGS, BY SPECIES, 1979 AND 1980 (1) - Continued

| Species | 1979 |  | 1980 |  | -year aver- $e(1975-79)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shellfish et al. continued: | $\begin{aligned} & \frac{\text { Thousand }}{\text { pounds }} \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \hline \text { pounds } \end{aligned}$ |
| Lobsters: |  |  |  |  |  |
| American. | 37,184 | 72,298 | 36,952 | 75,233 | 32,818 |
| Spiny. | 6,301 | 12,765 | 6,861 | 14,801 | 5,791 |
| Oysters | 48,081 | 65,612 | 49,081 | 70,075 | 50,529 |
| Scallops: |  |  |  |  |  |
| Bay. . | 1,774 | 6,798 | 968 | 3,894 | 1,786 |
| Calico. | 863 | 1,846 | - |  | 1,317 |
| Sea. | 31,466 | 103,206 | 28,752 | .110,429 | 23,406 |
| Shrimp: |  |  |  |  |  |
| New England | 1,072 | 338 | 731 | 477 | 3,171 |
| South Atlantic. | 32,295 | 65,273 | 32,996 | 57,399 | 24,294 |
| Gulf. . | 206,564 | 377,642 | 208,280 | 302,077 | 220,182 |
| Pacific | 96,019 | 28,300 | 97,697 | 42,741 | 148,877 |
| Other | 6 | 20 | 3 | 3 | 7 |
| Total | 335,956 | 471,573 | 339,707 | 402,697 | 396,531 |
| Squid: |  |  |  |  |  |
| Atlantic. | 13,392 | 4,273 | 9,794 | 3,177 | 6,346 |
| Pacific | 35,297 | 3,703 | 25,202 | 2,241 | 26,564 |
| Other shellfish | 43,212 | 14,192 | 38,143 | 18,174 | - |
| Total shellfish et a | 1,134,760 | 1,119,714 | 1,153,940 | 1,082,294 | - |
| Grand total . . . . | 6,267,152 | 2,233,679 | 6,482,354 | 2,237,202 | - |

(1) Landings are reported in round (live) weight for all items except univalve and bivalive mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). (2) Data not available.
Note:--Data are preliminary. Joint venture catches are included in 1979 but not in 1980. Data do not include landings outside the 50 States or products of aquaculture, except oysters and clams.
U.S. COMMERCIAL LANDINGS, BY REGIONS, 1979 AND 1980 (1)

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats' (excluding the sheil).
Note:--Data are preliminary. Joint venture catches are included in 1979 but not in 1980. Data do not include landings outside the 50 States or products of aquaculture, except oysters and clams.
U.S. COMMERCIAL LANDINGS, BY STATES, 1979 AND 1980 (1)

| State | 1979 |  | 1980 |  | Record | landings |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousánd }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | Year | $\frac{\text { Thousand }}{\text { pounds }}$ |
| Alabama. | 33,269 | 49,981 | 26,605 | 25,575 | 1973 | 39,749 |
| Alaska | 898,539 | 597,034 | 1,053,896 | 560,603 | 1980 | 1,053,896 |
| California | 728,406 | 227,473 | 804,276 | 323,393 | 1936 | 1,760,183 |
| Connecticut. | 6,456 | 6,900 | 5,198 | 4,675 | 1930 | 1,88,012 |
| Delaware | 1,627 | , 638 | 4,074 | 1,969 | 1953 | 367,500 |
| Florida. | 163,056 | 124,002 | 191,470 | 124,834 | 1938 | 241,443 |
| Georgia. | 21,909 | 27,738 | 19,427 | 20,061 | 1927 | 47,607 |
| Hawaii. | 13,664 | 10,659 | 11,435 | 11,870 | 1954 | 20,610 |
| Idaho. | ${ }^{4} 400$ | , 35 | -120 | 11,20 | - | (2) |
| Illino is | 4,618 | 1,024 | 4,587 | 1,103 | - | (2) |
| Indiana. | 101 | -66 | 127 | 112 | - | (2) |
| Iowa . | 3,741 | 818 | 3,741 | 900 | - | (2) |
| Kansas | 170 | 35 | 170 | 39 |  | (2) |
| Louisiana. | 1,529,081 | 198,508 | 1,423,374 | 177,994 | 1978 | 1,673,922 |
| Maine. | 232,105 | 80,260 | 244,686 | 92,697 | 1950 | 356,266 |
| Maryland | 66,283 | 36,945 | 79,571 | 44,658 | 1890 | 141,607 |
| Massachusetts. | 374,706 | 175,544 | 438,382 | 178,602 | 1948 | 649,696 |
| Michigan | 10,945 | 3,555 | 10,455 | 4,822 | 1930 | 35,580 |
| Minnesota. . | 10,571 | 1,946 | 10,317 | 2,128 | $\cdots$ | (2) |
| Mississippi. | 383,632 | 33,342 | 337,765 | 26,601 | 1971 | 400,576 |
| Missouri | 970 | 203 | 970 | 220 | - | (2) |
| Nebraska | 111 | 25. | 111 | 28 | - | (2) |
| New Hampshire. | 7,495 | 3,327 | 19,050 | 5,182 | - | (2) |
| New Jersey . . | 189,314 | 53,034 | 200,634 | 49,879 | 1956 | 540,060 |
| New York. | 37,895 | 38,966 | 39,725 | 45,058 | 1880 | 335,000 |
| North Carolina | 390,472 | 58,454 | 356,193 | 68,784 | 1979 | 390,472 |
| North Dakota | 727 | 101 | 727 | 111 | - | (2) |
| Ohio . | 9,193 | 2,559 | 10,490 | 3,351 | 1936 | 31,083 |
| Oregon . . | 127,798 | 65,221 | 126,316 | 55,748 | 1978 | 134,657 |
| Pennsylvania | 393 | 251 | 347 | 312 | - | (2) |
| Rhode Is land | 87,844 | 36,006 | 80,773 | 46,143 | 1889 | 128,056 |
| South Carolina | 21,449 | 25,792 | 21,183 | 20,448 | 1965 | 26,611 |
| South Dakota | 2,259 | 309 | 2,259 | 340 | - | (2) |
| Texas. - | 84,891 | 160,200 | 98,478 | 153,880 | 1960 | 237,684 |
| Virginia | 572,707 | 84,632 | 637,515 | 84,993 | 1972 | 666,180 |
| Washington | 169,975 | 115,959 | 155,790 | 85,511 | 1941 | 197,253 |
| West Virginia. | 31 | 14 | 31 | 15 | - | (2) |
| Wisconsin. . . | 36,205 | 4,862 | 30,745 | 5,901 | - | (2) |
| Other. | 44,144 | 7,261 | 31,341 | 8,642 | - | (2) |
| Total . . | 6,267,152 | 2,233,679 | 6,482,354 | 2,237,202 | 1980 | 6,482,354 |

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the sheli).
(2) Not determined.

Note:--Data are preliminary. Joint venture catches are included in 1979 but not in 1980. Data do not include landings outside the 50 States or products of aquaculture, except oysters and clams.


COMMERICAL FISHERY LANDINGS AT MAJOR U.S. PORTS, 1977-80

| Port | Quantity |  |  |  | Port | Value |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1977 | 1978 | 1979 | 1980 |  | 1977 | 1978 | 1979 | 1980 |
|  | -------- - Million pounds- ---- - . |  |  |  |  | . .........-Million dollars-........ |  |  |  |
| Cameron, La. | 306.7 | 606.0 | 593.1 | 479.8 | San Pedro, Calif. | 109.1 | 92.1 | 89.3 | ${ }^{*} 121.9$ |
| San Pedro, Calif. | 519.5 | 312.8 | 378.2 | 380.1 | San Diego, Calif. | 43.4 | 69.8 | 62.7 | 110.6 |
| Pascagoula-Moss Point, Miss. | 272.2 | 334.8 | 283.8 | 291.9 | Dutch Harbor, Alaska. | 61.4 | 99.7 | 92.7 | 91.3 |
| Empire-Venice, La. | 190.5 | 292.8 | 278.9 | 275.4 | Kodiak, Alaska | 72.5 | 92.6 | 73.4 | 84.6 |
| Dulac-Chauvin, La. | 153.7 | 300.2 | 246.3 | 265.8 | New Bedford, Mass. | 43.2 | 54.6 | 67.4 | 71.3 |
| Gloucester, Mass. | 150.9 | 185.4 | 160.2 | 210.0 | Dulac-Chauvin, La. | 33.1 | 46.7 | 41.5 | 50.0 |
| Kodiak, Alaska . | 179.6 | 177.4 | 150.5 | 207.4 | Akutan, Alaska | 15.9 | 21.2 | 28.2 | 42.8 |
| San Diego, Calif. | 124.1 | 168.3 | 156.6 | 199.1 | Brownsville-Port lsabel, Tex. | 42.0 | 43.0 | 50.0 | 42.2 |
| Beaufort-Morehead City, N.C. | 100.7 | 108.7 | 218.5 | 171.5 | Aransas Pass-Rockport, Tex. | 39.0 | 39.0 | 40.0 | 40.2 |
| Dutch Harbor, Alaska. . . . . | 100.5 | 125.8 | 136.8 | 136.5 | Gloucester, Mass. . . . . . . | 21.5 | 28.9 | 29.7 | 34.7 |
| New Bedford, Mass. | 75.5 | 71.9 | 86.0 | 99.6 | Cameron, La. | 18.9 | 34.2 | 34.3 | 33.3 |
| Akutan, Alaska. . | 20.8 | 17.2 | 38.2 | 58.9 | Empire-Venice, La. | 18.0 | 26.4 | 28.8 | 31.0 |
| Rockland, Maine | (1) | 40.1 | 41.8 | 56.0 | Hampton-Norfolk, Va. | 9.1 | 24.3 | 31.1 | 27.5 |
| Portland, Maine. | 30.4 | 45.9 | 59.6 | 54.9 | Cape May-Wildwood, N.J. | 20.7 | 25.1 | 32.2 | 26.9 |
| Cape May-Wildwood, N.J. | 48.6 | 47.7 | 58.3 | 51.5 | Bayou La Batre, Ala. | 25.7 | 25.1 | 34.9 | 23.7 |
| Pt. Judith, R.I. | (1) | 55.3 | 54.3 | 42.9 | Beaufort-Morehead City, N.C. | 4.5 | 6.2 | 22.7 | 22.5 |
| Bellingham, Wash. | 33.0 | 38.0 | 40.0 | 40.0 | Freeport, Tex. | 26.0 | 28.0 | 25.0 | 19.9 |
| Astoria, Oreg. | 28.5 | 45.6 | 40.4 | 39.8 | Newport, R.I. | 9.2 | 10.7 | 13.2 | 19.5 |
| Wanchese-Stumpy Point, N.C. | (1) | 20.5 | 34.6 | 39.5 | Pascagoula-Moss Point, Miss. | 17.6 | 19.4 | 18.1 | 18.9 |
| Newport, Oreg. | 23.3 | 33.1 | 36.0 | 36.4 | Key West, Fla. | 18.0 | 22.4 | 25.9 | 18.3 |
| Eureka, Calif. | 48.7 | 44.4 | 32.1 | 34.5 | Petersburg, Alaska. | 20.0 | 17.5 | 23.7 | 17.0 |
| Boston, Mass. | 22.2 | 27.3 | 30.3 | 34.4 | Bellingham, Wash. | 14.5 | 15.3 | 16.8 | 15.2 |
| Petersburg, Alaska | 33.6 | 31.0 | 31.9 | 32.3 | Lafitte-Barataria, L | 12.7 | 11.5 | 16.6 | 14.8 |
| Newport, R.I. | 18.4 | 16.8 | 21.6 | 28.2 | Astoria, Oreg. | 10.0 | 20.1 | 18.2 | 13.7 |
| Charleston-Coos Bay, Oreg. | 23.4 | 27.1 | 23.5 | 27.0 | Newport, Oreg. | 9.3 | 10.6 | 12.6 | 13.7 |
| Provincetown, Mass. | 17.9 | 19.9 | 23.4 | 25.8 | Portland, Maine. | 4.7 | 7.5 | 10.1 | 13.6 |
| Hampton-Norfolk, Va. | 18.7 | 31.2 | 27.2 | 23.8 | Charleston-Coos Bay, Oreg. | 9.4 | 9.2 | 8.2 | 13.5 |
| Ocean City, Md. | 12.0 | 14.4 | 18.4 | 22.3 | Delcambre, La. | 10.7 | 16.7 | 14.8 | 13.3 |
| Aransas Pass-Rockport, Tex. | 25.0 | 23.0 | 19.0 | 22.1 | Wanchese-Stumpy Point, N.C. | (1) | 8.5 | 13.0 | 13.0 |
| Brownsville-Port Isabel, Tex. | 28.0 | 24.0 | 22.0 | 21.6 | Boston, Mass. | 6.0 | 8.1 | 10.7 | 12.3 |
| Bayou La Batre, Ala. | 25.1 | 22.2 | 21.8 | 19.9 | Golden Meadow-Leeville, La. | 18.5 | 19.1 | 22.5 | 12.2 |
| Oriental-Vandemere, N.C. | (1) | (1) | 19.5 | 19.8 | Pt. Judith, R.I. . | (1) | 9.5 | 11.0 | 11.5 |
| Ketchikan, Alaska | 54.8 | 55.7 | 22.1 | 17.3 | Westport, Wash. | 13.0 | 12.5 | 10.8 | 11.5 |
| Seattle, Wash. | 15.3 | 16.3 | 16.5 | 16.0 | Apalachicola, Fla. | 5.5 | 13.3 | 10.1 | 11.3 |
| Chincoteague, Va | (1) | 13.0 | 12.3 | 15.9 | Eureka, Calif. . . | 17.0 | 19.5 | 14.3 | 11.0 |
| Key West, Fla. | 15.0 | 15.0 | 16.5 | 15.4 | Ft. Myers, Fla. | 8.0 | 13.1 | 17.8 | 10.9 |
| Golden Meadow-Leeville, La. | 23.5 | 22.1 | 15.6 | 15.4 | Provincetown, Mass. | 6.9 | 9.1 | 10.3 | 10.4 |
| Sandwich, Mass. | (1) | (1) | 17.5 | 14.2 | Ocean City, Md. . | 5.9 | 6.9 | 8.2 | 9.9 |
| Ft. Myers, Fla. | 6.0 | 15.2 | 15.9 | 13.5 | Oriental-Vandemere, N.C. | (1) | (1) | 6.6 | 9.1 |
| Applachicola, Fla. | 5.7 | 12.4 | 10.4 | 11.0 | Ketchikan, Alaska. . | 23.9 | 26.4 | 16.4 | 8.7 |
| Lafitte-Barataria, La. | 18.3 | 13.1 | 10.4 | 11.1 | Charleston-Mt. Pleasant, S.C. | (1) | (1) | 12.5 | 8.5 |
| Point Pleasant, N.J. | 14.1 | 15.7 | 12.8 | 11.1 | Rockland, Maine. | (1) | (1) | (1) | 8.4 |
| Freeport, Tex. | 17.0 | 16.0 | 8.0 | 10.1 | Chincoteague, Va. | (1) | 6.1 | 6.5 | 8.0 |
| Blaine, Wash. | (1) | 10.0 | 10.5 | 10.0 | Bon Secour-Gulf Shores, Ala. | 10.1 | 10.0 | 16.0 | 7.7 |
| Brookings, Oreg. | (1) | 10.7 | 9.8 | 9.5 | Darien-Bellevue, Ga. . . | (1) | (1) | 8.7 | 7.5 |
| Delcambe, La. | (1) | (1) | (1) | 8.6 | Sandwich, Mass. . . | (1) | (1) | 9.8 | 7.4 |
| Darien-Bellevue, Ga. | (1) | (1) | 9.0 | 8.2 | Seatte, Wash. | 6.2 | 6.3 | 6.6 | 6.0 |
| Cape Charles-Oyster, Va. | 10.8 | 10.8 | 9.7 | 8.1 | Thunderbolt, Ga. | (1) | (1) | 6.7 | 5.7 |
| Charleston-Mt. Pleasant, S.C. | (1) | (1) | 8.1 | 6.9 | Point Pleasant, N . | 5.1 | 5.9 | 6.8 | 5.0 |
| Thunderbolt, Ga. . . . . . . | (1) | (1) | (1) | 5.4 | Blaine, Wash. . | (1) | (1) | (1) | 4.0 |

(1) Not available.
*Record. Record quantity was 848.2 million lb landed in San Pedro, Calif., in 1950.
Note:-Data for some ports are estimated. To avoid disclosure of private enterprise, the following ports were not included: Fernandina Beach, Fla.; Intercoastal City and Morgan City, La.; Chatham, Mass.; Biloxi, Miss.; Port Monmouth-Belford, N.J.; Southport-Calabash, N.C.; and Reedville, Va.
U.S. COMMERCIAL LANDINGS OF FISH AND SHELLFISH, 1971-80 (1)

| Year | Landings for human food |  | Landings for industrial products (2) |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Million }}{\text { pounds }}$ | $\frac{\text { Million }}{\text { dollars }}$ | $\frac{\text { Million }}{\text { pounds }}$ | $\frac{\text { Million }}{\text { dollars }}$ | $\frac{\text { Million }}{\text { pounds }}$ | $\begin{aligned} & \text { Million } \\ & \text { dollars } \end{aligned}$ |
| 1971. | 2,441 | 604 | 2,577 | 47 | 5,018 | 651 |
| 1972. | 2,435 | 702 | 2,371 | 46 | 4,806 | 748 |
| 1973. | 2,398 | 836 | 2,460 | 101 | 4,858 | 937 |
| 1974. | 2,496 | 844 | 2,471 | 88 | 4,967 | 932 |
| 1975 | 2,465 | 904 | 2,412 | 73 | 4,877 | 977 |
| 1976 | 2,775 | 1,257 | 2,613 | 92 | 5,388 | 1,349 |
| 1977 (3). | 2,900 | 1,404 | 2,298 | 111 | 5,198 | 1,515 |
| 1978 (3). | 3,177 | 1,733 | 2,851 | 121 | 6,028 | 1,854 |
| 1979 (3). | 3,318 | 2,093 | *2,949 | 141 | 6,267 | 2,234 |
| 1980 (3). | *3,654 | 2,092 | 2,828 | 145 | *6,482 | 2,237 |

(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:--Joint venture catches are included in 1979 but not in 1980. Data do not include landings outside the 50 States or products of aquaculture, except oysters and clams. *Record.

DISPOSITION OF U.S. COMMERCIAL LANDINGS, 1979 AND 1980

| End Use | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Million }}{\text { pounds }}$ | Percent | Million pounds | Percent |
| Fresh and frozen: |  |  |  |  |
| For human food. . . . | 2,268 | 36.2 | 2,495 | 38.5 |
| For bait and animal food. | 126 | 2.0 | 126 | 1.9 |
| Total. | 2,394 | 38.2 | 2,621 | 40.4 |
| Canned: |  |  |  |  |
| For human food. . . . . . | 956 | 15.3 | 1,063 | 16.4 |
| For bait and animal food. | 90 | 1.4 | 97 | 1.5 |
| Total. . . . | 1,046 | 16.7 | 1,160 | 17.9 |
| Cured for human food. | 94 | 1.5 | 97 | 1.5 |
| Reduction to meal, oil, etc.. | 2,733 | 43.6 | 2,604 | 40.2 |
| Grand total. | 6,267 | 100.0 | 6,482 | 100.0 |

Note:--Data are preliminary.

DISPOSITION OF U.S. COMMERCIAL LANDINGS, BY MONTHS, 1980

| Month | Landings for <br> human food |  |  |  |  |  |  | Landings for <br> industrial <br> products (1) |  | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |

(1) Processed into meal, oil, solubles, and shell products, and used as bait and animal food. *Record. Record U.S. industrial products was 2,949 million ib in 1979.


COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT
OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1980 (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 | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dol1ars }}$ | $\frac{\text { Thousand }}{\text { Dounds }}$ | $\frac{\text { Thousand }}{\text { dolfars }}$ | $\frac{\text { Thousand }}{\text { Dounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Alewives: |  |  |  |  |  |  |  |  |
| Atlantic and Gulf. | 10,870 | 772 | 115 | 7 | - | - | 10,985 | 779 |
| Great Lakes. | 17,523 | 280 | - | - | - | - | 17,523 | 280 |
| Anchovies. | 12,000 | 6,000 | 94,942 | 2,712 | - | - | 106,942 | 8,712 |
| Bluefish . | 11,404 | 1,756 | 4,272 | - 670 | - | - | 15,676 | 2,426 |
| Bonito | 2,620 | 562 | 4,086 | 771 | 7,980 | 1,548 | 14,686 | 2,881 |
| Butterfish | 984 | 445 | 10,584 | 3,403 | - | , | 11,568 | 3,848 |
| Cod: |  |  |  |  |  |  |  |  |
| Atlantic | 3,951 | 1,283 | 114,125 | 30,547 | 169 | 53 | 118,245 | 31,883 |
| Pacific. | 15,493 | 5,252 | 23,852 | 2,587 | - | - | 39,345 | 7,839 |
| Croaker. | 18,839 | 4,590 | 9,634 | 2,135 |  | - 17 | 28,473 | 6,725 |
| Cusk . | 62 | 11 | 4,154 | 844 | 81 | 17 | 4,297 | 872 |
| Flounders: |  |  |  |  |  |  |  |  |
| Atlantic and Gulf : |  |  |  |  |  |  |  |  |
| Blackback. | 6,645 | 2,077 | 29,361 | 10,517 | 2 | 1 | 36,008 | 12,595 |
| Fluke. . | 10,102 | 5,772 | 24,650 | 12,238 | - | - | 34,752 | 18,010 |
| Yellowtail | 4,061 | 2,003 | 38,549 | 17,848 | 9 | 4 | 42,619 | 19,855 |
| Other. . | 2,584 | 948 | 40,540 | 15,610 | 63 | 34 | 43,187 | 16,592 |
| Pacific. . | 6,727 | 1,016 | 81,557 | 16,119 | - | - | 88,284 | 17,135 |
| Total. | 30,119 | 11,816 | 214,657 | 72,332 | 74 | 39 | 244,850 | 84,187 |
| Groupers | 179 | 163 | 8,294 | 7,466 | 209 | 175 | 8,682 | 7,804 |
| Haddock. | 324 | 120 | 54,300 | 21,019 | 564 | 285 | 55,188 | 21,424 |
| Hake: |  |  |  |  |  |  |  |  |
| Pacific (whiting). | 10,287 | 257 | 62,442 | 3,390 | - | - | 72,729 | 3,647 |
| Red. . . . . . . . | 877 | 107 | 4,720 | . 570 | - | - | 5,597 | 677 |
| White. - | 211 | 31 | 10,105 | 1,692 | 112 | 25 | 10,428 | 1,748 |
| Halibut. . . . | 7,424 | 5,336 | 11,727 | 11,483 | 2 | 4 | 19,153 | 16,823 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pacific. $\cdot$ • | 107,076 | 34,592 | 40, | - | - | - | 107,076 | 34,592 |
| Jack mackerel. . | 4,390 | 395 | 40,021 | 3,601 | - | - | 44,411 | 3,996 |
| Lingcod. . . . . | 547 | 141 | 7,582 | 2,149 | - | - | 8,129 | 2,290 |
| Mackere1: 0 |  |  |  |  |  |  |  |  |
| Atlantic. | 3,584 | - 512 | 2,329 | 304 | - | - | 5,913 | 816 |
| King . . | 843 | 671 | 6,192 | 4,690 | - | $\stackrel{ }{ }$ | 7,035 | 5,361 |
| Pacific. . | 2,500 | 225 | 62,759 | 5,604 | - | - | 65,259 | 5,829 |
| Spanish. . | 6,533 | 1,698 | 5,435 | 1,439 | - | - | 11,968 | 3,137 |

See footnotes at end of table.
(Cont inued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1980 (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: | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dolTars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dotlars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Menhaden: |  |  |  |  |  |  |  |  |
| Atlantic. | 944,959 | 42,699 | 3,900 | 184 | $\cdots$ | - | 948,859 | 42,883 |
| Gulf | 1,305,181 | 58,146 | 242,609 | 10,983 | - | - | 1,547,790 | 69,129 |
| Total | 2,250,140 | - 100,845 | 246,509 | 11,167 | . | - | 2,496,649 | 112,012 |
| Mullet | 37,353 | 7,152 | 7 | 1 | - | - | 37,360 | 7,153 |
| Ocean perch: |  |  |  |  |  |  |  |  |
| Atlantic | 20 | 4 | 22,211 | 5,085 | 1,970 | 459 | 24,201 | 5,548 |
| Pacific. . . . . . | 9 | 2 | 6,936 | 1,039 | - | - | 6,945 | 1,041 |
| Pollock: |  |  |  |  |  |  |  |  |
| Atlantic | 789 | 145 | 38,036 | 6,862 | 827 | 165 | 39,652 | 7,172 |
| Alaska . | 2,613 | 207 | 26,507 | 1,599 | - | - | 29,120 | 1,806 |
| Rockfishes | 5,521 | 1,739 | 100,481 | 17,321 | 64 | 20 | 106,066 | 19,080 |
| Sablefish. | 1,229 | 387 | 21,109 | -5,026 | - | - | 22,338 | 5,413 |
| Salmon, Pacific: |  |  |  |  |  |  |  |  |
| Chinook or king. . | 19,457 | 30,066 | 9,076 | 17,387 | - | - | 28,533 | 47,453 |
| Chum or keta . . | 84,916 | 39,640 | - | - | - | - | 84,916 | 39,640 |
| Pink . . | 253,532 | 90,753 | 9 | 4 | - | - | 253,541 | 90,757 |
| Red or sockeye. | 207,551 | 131,354 | 5510 | - | - | - | 207,551 | 131,354 |
| Silver or coho . . | 33,760 | 36,452 | 5,510 | 6,621 | - | - | 39,270 | 43,073 |
| Total ... . . | 599,216 | 328,265 | 14,595 | 24,012 | - | - | 613,811 | 352,277 |
| Scup or porgy. | 8,458 | 3,471 | 11,569 | 4,476 | - | - | 20,027 | 7,947 |
| Sea bass: |  |  |  |  |  |  |  |  |
| Black. . . . . . . | 445 | 431 | 3,508 | 2,257 | - |  | 3,953 | $2,688$ |
| White. . . . . . . | 45 | 78 | , | 2, | 834 | 1,459 | 879 | 1,537 |
| Sea trout: |  |  |  |  |  |  |  |  |
| Gray | 20,166 | 4,859 | 14,904 | 2,465 | - | - | 35,070 | 7,324 |
| Spotted. $\therefore$. | 4,358 | 3,165 | 21 | 2, 6 | - | - | 4,379 | 3,171 |
| White. . $\quad .$. | 393 | 106 | 803 | 159 | - | - | 1,196 | 265 |
| Sharks: 749 |  |  |  |  |  |  |  |  |
| Dogfish. | 7,564 | 749 | 9,195 | 667. | - | - | 16,759 | 1,416 |
| Other. . | 1,297 | 557 | 3,062 | 1,067 | 127 | 10 | 4,486 | 1,634 |
| Snapper: 6880 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other. . . . | - 423 | 517 | 2,568 | 3,272 | 115 | 124 | 3,106 | 3,913 |
| Striped bass . . . | 4,473 | 4,803 | 63 | -99 | , | , | 4,536 | 4,902 |
| Swordfish. . . . . | 122 | . 273 | 7,996 | 15,644 | 1,057 | 1,847 | 9,175 | 17,764 |

See footnotes at end of table.
(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1980 (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: | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| Tuna: |  |  |  |  |  |  |  |  |
| Albacore | 1 | (3) | 12,575 | 10,297 | 3,335 | 2,453 | 15,911 | 12,750 |
| Bigeye | - |  | 21 | 35 | 7,029 | 4,040 | 7,050 | 4,075 |
| Bluefin. | 7 | 7 | 3,675 | 4,451 | 4,434 | 2,702 | 8,116 | 7,160 |
| Little. | 43 | 11 | 179 | 58 | 313 | 31 | 535 | 100 |
| Skipjack | 49 | 37 | 4,902 | 3,364 | 230,061 | 122,584 | 235,012 | 125,985 |
| Yellowfin. | 241 | 303 | 2,268 | 2,847 | 229,108 | 135,264 | 231,617 | 138,414 |
| Unclassified | 16 | 2 | 1,115 | 590 | 666 | 267 | 1,797 | 859 |
| Total . | 357 | 360 | 24,735 | 21,642 | 474,946 | 267,341 | 500,038 | 289,343 |
| Warsaw. | - | - | 112 | 62 | - | - | 112 | 62 |
| Whiting. | 4,490 | 790 | 31,081 | 5,323 | - | - | 35,571 | 6,113 |
| Wolffish | 132 | 22 | 1,848 | 254 | 3 | (3) | 1,983 | 276 |
| Other marine |  |  |  |  |  |  |  |  |
| finfishes: |  |  |  |  |  |  |  |  |
| Atlantic and Gulf. | 102,097 | 23,453 | 59,970 | 16,995 | 7 | 4 | 162,074 | 40,452 |
| Pacific. . . | 18,221 | 3,638 | 16,842 | 3,734 | 211 | 89 | 35,274 | 7,461 |
| Other freshwater |  |  |  |  |  |  |  |  |
| fishes, ${ }^{\text {c }}$. | 128,860 | 34,951 | 1458,950 | 338,746 | - | - | 128,860 | 34,951 |
| Total fish. | 3,617,858 | 606,432 | 1,458,950 | 338,746 | 489,912 | 274,321 | 5,566,720 | 1,219,499 |
| Shellfish et al. |  |  |  |  |  |  |  |  |
| Clams: |  |  |  |  |  |  |  |  |
| Hard . . . . | 13,234 | 43,601 | 136 | 467 | - | - | 13,370 | 44,068 |
| Ocean quahog | 3,215 | 992 | 30,617 | 9,195 | - | - | 33,832 | 10,187 |
| Soft . | 8,887 | 15,314 | 61 | 77 | - | - | 8,948 | 15,391 |
| Surf. | 3,019 | 1,222 | 34,718 | 17,885 | - | - | 37,737 | 19,107 |
| Other. - | 1,482 | 1,470 | - | - | - | - | 1,482 | 1,470 |
| Total . | 29,837 | 62,599 | 65,532 | 27,624 | - | - | 95,369 | 90,223 |
|  | Crabs: |  |  |  |  |  |  |  |
| Blue, hard | 163,153 | 35,150 | 53 | 17 | - | - | 163,206 | 35,167 |
| Dungeness. | 31,676 | 17,956 | 6,602 | 3,657 | - | - | 38,278 | 21,613 |
| King . . | 37,125 | 33,738 | 148,499 | 134,956 | - | - | 185,624 | 168,694 |
| Snow (tanner). | 14,229 | 7,476 | 107,445 | 47,685 | - | - 1 | 121,674 | 55,161 |
| Other. ${ }^{\text {a }}$ | 4,603 | 3,478 | 9,723. | 7,236 | 3 | 1 | 14,329 | 10,715 |
| Total. | 250,786 | 97,798 | 272,322 | 193,551 | 3 | 1 | 523,111 | 291,350 |

See footnotes at end of table.
(Continued)

COMmercial landings of fish and shellfish by u.s. fishing craft: by species, by distance caught OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1980 (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 | 32,566 | 64,793 | 4,333 | 10,312 | 53 | 128 | 36,952 | 75,233 |
| Spiny. | 1,356 | 3,210 | 5,055 | 10,585 | 450 | 1,006 | 6,861 | 14,801 |
| Oysters. | 49,081 | 70,075 | - | - | - | - | 49,081 | 70,075 |
| Scallops: |  |  |  |  |  |  |  |  |
| Bay. . | 968 | 3,894 | $0^{-} 678$ | 102-793 | - | - | 968 | 3,894 |
| Sea. | 2,071 | 7,621 | 26,678 | 102,793 | 3 | 15 | 28,752 | 110,429 |
| Shrimp: |  |  |  |  |  |  |  |  |
| New England. . | 151 | 123 | 580 | 354 | - | - | 731 | 477 |
| South At lantic | 23,712 | 41,442 | 9,284 | 15,957 | - | - | 32,996 | 57,399 |
| Gulf . . . | 77,144 | 86,838 | 131,136 | 215,239 | - | - | 208,280 | 302,077 |
| Pacific Coast. | 52,546 | 16,453 | 45,151 | 26,288 | - | - | 97,697 | 42,741 |
| Other. | 3 | 3 | $\underline{-}$ | , | - | - | 3 | 3 |
| Total | 153,556 | 144,859 | 186,151 | 257,838 | - | - | 339,707 | 402,697 |
| Squid: |  |  |  |  |  |  |  |  |
| Atlantic | 6,583 | 2,229 | 3,207 | 947 | 4 | 1 | 9,794 | 3,177 |
| Pacific. | 23,768 | 2,113 | 1,434 | 128 | - | - | 25,202 | 2,241 |
| Other shellfish. | 34,078 | 13,983 | 4,065 | 4,191 | 17,100 | 37,620 | 55,243 | 55,794 |
| Total shellfish et al.. | $584,650$ | 473,174 | 568,777 | 607,969 | 17,613 | $38,771$ | 1,171,040 | 1,119,914 |
| Grand total . | 4,202,508 | 1,079,606 | 2,027,727 | 946,715 | 507,525 | 313,092 | 6,737,760 | 2,339,413 |

(1) Landings are reported in round (live) weight for all items, except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell).
(2) Includes all landings in the Great Lakes and other inland waters.
(3) Less than 500 lb or $\$ 500$.

Note:--Data are preliminary. They include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States and catch by U.S.-flag vessels unloaded onto foreign vessels with in the U.S. FCZ (joint venture). Therefore, they will not agree with "U.S. Conmercial Landings " table. Data do not include production of aquaculture, except oysters and clams.

Aquaculture may be defined as the culture or husbandry of aquatic animals or plants by private industry for commercial purposes or by public agencies for augmenting natural stocks. With the passage of the National Aquaculture Act of 1980, Public Law 96-362, in September 1980, it is incumbent upon the Secretories of Agriculture, Commerce, and Interior, where appropriate, to
undertake a continuing assessment of the U.S. aquaculture industry. The following table presents for the first time U.S. commercial aquaculture production of marine, brackish, and freshwater species. Information on freshwater species was obtained from the Department of Agriculture based on their 1980 catfish and trout survey.

U.S. AQUACULTURE PRODUCTION, BY SPECIES, 1979 AND 1980 (1)

| Species | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousands }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousands } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Fish: |  |  |  |  |
| Catfish. | 40,600 | 28,800 | 76,700 | 53,600 |
| Salmon. | 2,400 | 900 | 7,600 | 3,400 |
| Trout. . | 25,000 | 21,000 | 48,000 | 37,500 |
| Shellfish: |  |  |  |  |
| Oysters. | 23,036 | 34,532 | 23,705 | 37,085 |
| Clams. . | 3,919 | 9,471 | 3,909 | 10,398 |
| Shrimp (prawns). | - | - | 300 | 1,200 |
| Total (2). | 94,955 | 94,703 | 160,214 | 143,183 |

(1) Data shown are live weight harvest for consumption except for oysters and clams which are meat weight. Data for oysters and clams are included in commercial landings. Excluded are eggs, fingerlings, etc. which are an intermediate product level.
(2) These estimates do not include aquaculture production for all species such as abalone, mussels, striped bass, crawfish et al., which is estimated to be about 12.0 million pounds.

Note:--Data shown in this table contain estimates. Some species may not be shown to avoid disclosure of private enterprise.

GENERAL. The number of marine recreational fishermen has increased substantially in the last decade. Recent estimates indicate that there are 1520 million recreational fishermen in the United States whose combined harvests account for approximately $30-35$ percent of the total U.S. finfish harvest used for food. Expenditures by these fishermen for recreational fishing, the value of associated industries (such as tackle, boat and trailer manufacturers, and the party and charter boat industries), and the value of the recreational fishing experience itself are significant components of the U.S. economy.

DATA COLLECTION. Detailed statistical information on marine recreational fishing is required to support the objectives of the Magnuson Fishery Conservation and Management Act of 1976 (MFCMA, PL 94-265). The MFCMA mandates preparation of management plans that promote domestic commercial and recreational fisheries, utilizing the best available biological, economic, and social information. Although reliable data on commercial fisheries have been collected for many years, the lack of a continuous or systematic collection of marine recreational fishery data has resulted in an inadequate data base.

Previous marine recreational fishing surveys have employed either a survey of fishermen at home (household survey) or a survey of fishermen at the fishing location (creel census or intercept survey.) The majority of these efforts covered limited geographic areas, were seasonal in nature or addressed specific fisheries. The most significant problems of these surveys related to the high cost of the surveys and the reliability of the results. For example, previous surveys required fishermen to recall information up to one year in the past. Biases introduced by the inability of fishermen to accurately recall the number and size of fish caught, and to correctly identify the species caught, raised questions regarding the reliability of the data. These questions together with other inadequacies in statistical design prompted the NMFS to examine ways of improving the survey design to provide more acceptable data.

CURRENT APPROACH. An optimum survey design consisting of two independent survey techniques used in 1979 was the result of methodology studies conducted in 1976 and 1977. The chosen design utilized an intercept survey of fishermen and a telephone survey of households. Each technique provided certain information that when combined produced estimates of recreational catch, effort, and participation.

The first method of this "complemented" survey approach involved an on-site intercept survey in four fishing modes: beach/bank; party and charter boat; private and rental boat; and fishing from man-made structures. The allocation of interviews over time and by fishing mode was derived from the identification of all fishing sites in coastal counties by fishing activity. Interviews and examination of fishermen's catches were conducted after they had finished fishing or in some cases while they were still fishing. The type of data collected included fishing effort, catch, distribution of catch by species, weights, lengths, mode, and location of fishing.

The second method in the complemented surveys approach involved a telephone survey of households. In each coastal State all counties within a specified distance from the coast were included in the sample. The first eight digits of the telephone numbers called were obtained from a computerized data file of inservice residential numbers in each county; the last two digits were randomly generated. Calls were allocated by two-month periods and by county according to estimated fishing activity and population. The type of data collected included the number of fishermen, the number of trips, location of fishing, and mode of fishing for each trip. A twomonth recall period was used for the telephone survey since beyond that time the respondents memory concerning dates and locations of trips was not sufficiently reliable. Fishermen were not asked detailed information about catch and effort because of the problem in identifying species caught and in recalling weights and lengths.

HOW DATA WAS COMBINED. The household survey collected data from residents with telephones in coastal counties. The intercept survey sample was similar but also included interviews with residents of non-telephone households and of non-coastal counties. During data processing, information collected in the household survey was combined with the intercept survey data to derive expanded estimates of the number of trips taken, the amount of finfish caught (number and weight), and the number of participants in fishing activities.

The estimate of the total number of fish caught in the survey includes: (I) those fish brought ashore in whole form which were available for identification, enumeration, weighing, and measuring by the interviewers (Catch Type A); (2) those fish used for bait, discarded dead, given away or brought ashore filleted or in some other dressed form (Catch Type BI ); and (3) those fish released alive (Catch Type B2). In addition to estimating total catch, the survey provides an estimate for the components of total catch as shown in the following diagram.


1979 RESULTS. The first year's survey from November 1978 to October 1979 included the Atlantic Coast, Gulf Coast, Caribbean area (Puerto Rico and the U.S. Virgin Islands) and the Western Pacific area (Hawaii, Guam, and American Samoa.) This survey was extended through December 1979 to cover the calendar year. The second year's survey covered calendar year 1980 and included the Atlantic Coast, Gulf Coast, and the Western Pacific area (including the Northern Mariana Islands.) A Iyear survey was started on the Pacific Coast in July 1979 and was later extended to December 1980 in order to coincide with other 1980 surveys. These; surveys are planned to continue annually for the next several years.

The following data and tables are excerpted from the 1979 report "Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1979."

The part of the total catch brought ashore, weighed, and measured equaled 39.2 million pounds (Catch Type A). The part of the total catch representing fishing mortality equaled 346.8 million pounds and is the sum of Catch Type A and Catch Type BI (307.6 million pounds). The estimated weight of the catch released alive (Catch Type B2) equaled 91.8 million pounds. The estimated grand total weight of 438.6 million pounds is the sum of Catch Type A, Catch Type BI, and Catch Type B2. Additional data such as State landings and fishing trips are included in the original document (CFS No. 8063; for ordering information see PUBLICATIONS section). Additional reports covering the Caribbean, Pacific, and Western Pacific survey regions are scheduled for publication in 1981.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FI.SHERMEN, BY SPECIES GROUP AND SUBREGION, 1979

| Spec ies group | North Atlantic | Mid-Atlantic | South Atlantic | Gulf | $\begin{aligned} & \text { All } \\ & \text { regions } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - - - - - - Thousands - . . - - - - - . - - |  |  |  |  |
| Barracudas. | - | (1) | 358 | 38 | 418 |
| Basses, sea | 339 | 2,181 | 3,341 | 2,440 | 8,301 |
| Biuefish. . | 4,824 | 15,610 | 4,994 | 1,903 | 27,332 |
| Blue runner |  |  | 802 | 496 | 1,298 |
| Bonito, Atlantic. | 34 | 333 | 69 | 142 | 578 |
| Catfishes, sea . | (1) | 216 | 5,517 | 14,993 | 20,727 |
| Catfishes, freshwater | (1) | 154 |  | 198 | , 375 |
| Cod, Atlantic... | 2,602 | (1) | - 770 |  | 2,627 |
| Croaker, Atlantic |  | 1,719 | 3,778 | 11,008 | 16,505 |
| Cunner. - . | 2,083 | 1,253 |  |  | 3,335 |
| Dolphins. |  | (1) | 2,766 | 54 | 2,828 |
| Drum, black | - | (1) | 415 | 2,245 | 2,665 |
| Drum, red. | - | $\bigcirc$ | 520 | 3,593 | 4,113 |
| Drums . | - | (1) | 154 | 381 | 538 |
| Eel, American .- | 113 | 172 | 47 | 43 | 375 |
| Flounders, summer | 571 | 12,653 | 988 | 1,882 | 16,095 |
| Flounders, winter | 12,448 | 10,107 |  |  | 22,554 |
| Flounders | 523 | 350 | (1) | 427 | 1,315 |
| Groupers. | - | - | 537 | 880 | 1,417 |
| Grunt, wite. | - | (1) | 970 | 2,902 | 3,873 |
| Grunts. | - | (1) | 3,187 | 1,546 | 4,733 |
| Hakes . | 62 | 322 | (i) |  | 393 |
| Herrings. | 800 | 240 | 2,927 | 2,142 | 6,109 |
| Jack, crevalle. | - | (1) | 351 | 1,204 | 1,556 |
| Jacks. . . | - | 51 | 852 | 907 | 1,810 |
| Kingfishes. | - | 31 | 1,083 | 3,383 | 4,498 |
| Ladyfish. . | - |  | 105 | 761 | 866 |
| Little tunny. - . | 2 | (1) | 200 | 326 | 546 |
| Mackerel, Atlantic. | 2,172 | 1,870 | - |  | 4,043 |
| Mackere, ${ }^{\text {l }}$ ing. |  | (1) | 393 | 598 | 994 |
| Mackerel, Spanish. | - 119 |  | 917 | 1,292 | 2,209 |
| Mackerels and tunas | 119 | 131 | 126 | 144 | 519 |
| Mullets | - | (1) | 3,198 | 5,205 | 8,414 |
| Perch, sand. | - | - | 190 | 1,643 | 1,834 |
| Perch, silver | - | (1) | 271 | 1,622 | 1,906 |
| Perch, white. | 143 | 5,284 | 67 |  | 5,494 |
| Perch, yellow. | - | 322 |  | , | 322 |
| Pigfish. | (1) | (1) | 456 | 1,521 | 1,992 |
| Pinfish Pollock | (1) | (1) | 3,720 | 9,070 | 12,811 |
| Porgies | 2,215 | 27 |  |  | 2,547 |
| Puffers | (1) | 290 | 150 | 167 | 409 |
| Scup. | 4,581 | 3,004 | (1) | (1) | 7,601 |
| Searobins | 475 | 2,499 | 655 | 128 | 3,757 |
| Seatrout, sand. | - |  | (1) | 6,286 | 6,291 |
| Seatrout, silver. | - | (1) | 534 | +179 | 723 |
| Seatrout, spotted |  | 410 | 1,511 | 13,506 | 15,426 |
| Sharks. . . . . | (1) | 702 | 439 | 769 | 1,914 |
| Sharks, dogfish | 156 | 601 | ${ }_{1} 54$ | - 80 |  |
| Sheepshead. . . . |  |  | 1,106 | 1,861 | 2,967 |
| Skates and rays Smelts. . | 178 644 | 587 | 172 | 621 | 1,557 |
| Snapper, gray | - | - | 660 | 1,088 | 1,748 |
| Snapper, red. | - | - | 687 | 3,567 | 4,254 |
| Snapper, vermilion. | - |  | 153 | 358 | 511 |
| Snappers. | - | (1) | 2,209 | 620 | 2,850 |
| Spadefish, Atlantic | - | - | (1) | 451 | 452 |
| Spot. . . . |  | 8,708 | 8,840 | 932 | 18,480 |
| Striped bass. | 185 | . 948 | 47 | (1) | 1,181 |
| Tautog. | 999 | 1,883 | (1) | (1) | 2,883 |
| Toadfishes: . . . | (1) | ${ }^{815}$ | - 295 | 202 | 1,313 |
| Tomcod, Atlantic. | ${ }^{833}$ | (1) | - | - | 849 |
| Trigger and filefishes | (1) ${ }_{59}$ | 37 | 364 | 506 | 910 |
| Weakfish. . | 59 | 4,234 | 124 | - | 4,417 |
| Windowpane. | 91 | 377 | - | - | 468 |
| Other fish. | 2,499 | 1,217 | 4,436 | 2,896 | 11,048 |
| Total. . . . . | 40,064 | 82,452 | 66,135 | 109,372 | 298,023 |

(1) Less than 30,000 reported; however, number is included in totals.

Note:--Table may not add because of rounding.

ESTIMATED NUMBER OF FISH CAUGHT (CATCH TYPE A) by marine recreational fishermen, by species group and subregion, 1979

| Spec ies group | North Atlantic | Mid-Atlantic | South Atlantic | Gulf | $\begin{aligned} & \text { All } \\ & \text { regions } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Barracudas. |  | (1) | 109 | - | 131 |
| Basses, sea | (1) | 599 | 622 | 709 | 1,936 |
| Bluefish. . | 1,358 | 8,504 | 2,174 | 743 | 12,780 |
| Blue runner . ${ }^{\text {c }}$ |  |  | 509 | 167 | 676 |
| Bonito, Atlantic. | $(1)$ | ${ }^{82}$ | (1) | 48 | 158 |
| Catfishes, sea. | (1) | (1) | 271 | 483 | 765 |
| Catfishes; freshwater | (1) | (1) 66 | - | 83 | 149 |
| Cod, Atlantic . . | 468 | (1) |  | - | 492 |
| Croaker, Atlantic |  | 1,304 | 2,116 | 2,173 | 5,594 |
| Cunner. . | 59 | 68 | $\underline{-}$ |  | 127 |
| Dolphins. . | - | (1) | 915 | 36 | 953 |
| Drum, black. | - | (1) | 254 | 1,487 | 1,743 |
| Drum, red . | - | - | 449 | 1,479 | 1,927 |
| Drums . . . . |  | (1) | (1) | 60 | 87 |
| Eel, Amer ican . - | (1) | 76 | (1) | (1) | 96 |
| Flounders, summer | 332 | 6,915 | 655 | 1,108 | 9,011 |
| Flounders, winter | 3,957 | 4,419 | - |  | 8,377 |
| Flounders . . . . | (1) | 58 | (1) | 125 | 192 |
| Groupers. ${ }^{\text {a }}$ | - | - | 214 | 321 | 535 |
| Grunt, white. | - | - | 568 | 632 | 1,200 |
| Grunts. . . . |  | - | 978 | 150 | 1,128 |
| Hakes . . - | (1) | ${ }^{220}$ | (1) | (1) | 231 |
| Herrings. . ${ }_{\text {Jack, crevalie. }}$ | (1) | (1) | ${ }_{161}$ | (1) ${ }_{153}$ | 66 317 |
| Jacks . . . . . | - | (1) | 402 | 139 | 543 |
| Kingfishes. | - | (1) | 523 | 1,775 | 2,314 |
| Ladyfish. . | - | - | 33 | (1) | 42 |
| Little tunny . ${ }^{\text {a }}$. | - 626 | (1) | 92 | 96 | 205 |
| Mackere1, Atlantic. | 626 | 1,538 | - | - | 2,163 |
| Mackerel, king. . - | - | (1) | 176 | 399 | 578 |
| Mackerel, Spanish. | 43 | - | 898 | ${ }^{536}$ | 1,433 |
| Mackerels and tunas | 43 | 110 | 52 | (1) | 220 |
| Mullets . . | - | - | 1,306 | 1,861 | 3,167 |
| Perch, sand. | - |  | 54 | 78 | 131 |
| Perch, silver. | 47 | (1) | ${ }^{126}$ | 249 | ${ }^{380}$ |
| Perch, wite. - | 47 | 2,201 | (1) | - | 2,267 |
| Perch, yellow | - | 87 | - | - | 87 |
| Pigfish . . |  | (1) | 86 | 365 | 466 |
| Pinfish. Pollock. | (1) 197 | (1) | 1,000 | 896 | 1,916 |
| Porgies | (1) | 1,226 | 283 | (1) | 197 |
| Puffers |  | (1) | (1) | (1) | 1,592 |
| Scup. | 1,857 | 2,396 | (1) | (1) | 4,266 |
| Searobins ... | (1) | 54 | (1) | - | 81 |
| Seatrout, sand. . | ) |  |  | 3,674 | 3,674 |
| Seatrout, silver. | - | (1) | 223 | 59 | - 292 |
| Seatrout, spotted | - | 328 47 | 843 52 | 5,432 | 6,603 |
| Sharks, dogfish | (1) | 77 | (1) | (1) | 106 |
| Sheepshead. . - |  |  | 835 | ${ }^{925}$ | 1,760 |
| Skates and rays. | (1) | (1) | (1) | (1) | 37 |
| Smelts. . . . - | 339 | - |  |  | 339 |
| Snapper, gray | - | - | 292 | 590 | 882 |
| Snapper, red. . | - | - | 190 | 1,773 | 1,963 |
| Snapper, vermilion. | - | (1) | 57 | 305 | 362 |
| Snappers. . ${ }^{\text {a }}$ | - | (1) | 494 | (1) | 524 |
| Spadefish, Atlantic | - | - | (1) | 179 | 184 |
| Spot. . . . . . | - | 2,443 | 3,974 | 264 | 6,680 |
| Striped bass. . . . | 43 | 487 | (1) | (1) | 540 |
| Tautog. . . . . . | 538 | (1,102 | (1) |  | 1,641 |
| Tomcod, Atiantic. | 707 | (1) | (1) | - | 712 |
| Trigger and filefishes. | - | (1) | 79 | 393 | 476 |
| Weakfish. - | (1) | 3,039 | 115 | - | 3,166 |
| Windowpane. - | (1) | 147 |  | 365 | 5 57 |
| Other fish. . | 362 | 147 | 1,457 | 365 | 2,331 |
| Total. . . . . | 11,069 | 37,836 | 23,811 | 30,497 | 103,213 |

(1) Less than 30,000 reported; however, number is included in totals.

Note:--Catch Type A is an est imate of part of the total catch based on fish brought ashore in whole form, available for interviewer identification and enumeration, from which samples of lengths and weights were obtained. Table may not add because of rounding.

ESTIMATED NUMBER OF FISH CAUGHT (CATCH TYPE BI)
BY MARINE RECREATIONAL FISHERMEN, BY SPECIES GROUP AND SUBREGION, 1979

| Spec ies group | North Atlantic | Mid-Atlantic | South <br> Atlantic | Gulf | $\begin{gathered} \text { All } \\ \text { regions } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Barracudas. | - | - | 79 |  | 79 |
| Basses, sea | 146 | 247 | 1,306 | 512 | 2,211 |
| Bluefish. . | 2,924 | 5,333 | 2,152 | 314 | 10,723 |
| Blue runner . . |  |  | 199 | (1) | 214 |
| Bonito, Atlantic. | (1) | 240 | 41 | (1) | 324 |
| Catfishes, sea . . . |  | (1) | 639 | 2,104 | 2,755 |
| Catfishes, freshwater | (1) | (1) | - | 33 | 58 |
| Cod, Atlantic . . . | 1,729 | (1) | - |  | 1,729 |
| Croaker, Atlantic |  | 225 | 629 | 3,272 | 4,127 |
| Cunner. . | 232 | 39 |  |  | 271 |
| Dolphins. - | - |  | 1,847 | (1) | 1,852 |
| Drum, black. | - | (1) | (1) | 81 | 94 |
| Drum, red . | - | - | 36 | 507 | 542 |
| Drums . . . . | - | (1) | 89 | 58 | 147 |
| Eel, American | 44 | 56 | (1) | (1) | 129 |
| Flounders, summer | 111 | 3,734 | 249 | 677 | 4,771 |
| Flounders, winter | 7,062 | 2,398 | (1) |  | 9,460 |
| Flounders . . . . | 424 | 264 | (1) | 147 | 840 |
| Groupers. Grunt, white. | - | - | 210 | 135 | 345 1,084 |
| Grunts. . . | - | (1) | 654 | 376 | 1,030 |
| Hakes | (1) | 100 | - |  | 121 |
| Herrings. . | 754 | 163 | 2,738 | 1,396 | 5,050 |
| Jack, crevalle. | - | 39 | (1) | 223 | 239 |
| Jacks. ${ }_{\text {kingishes }}$ | - | $(1){ }^{39}$ | 253 | 155 | 447 |
| Ladyfish. . | - | - | (1) | 112 | 118 |
| Little tunny. |  | (1) | 44 | 51 | 98 |
| Mackere 1, Atlantic. | 1,376 | 330 | - | - | 1,705 |
| Mackerel, king. . . | - | - | 197 | 199 | 397 |
| Mackerel, Spanish | - |  | (1) | 660 | 674 |
| Mackerels and tunas | 58 | (1) | 55 | (1) | 155 |
| Mullets - | - | (1) | 1,708 | 2,739 | 4,449 |
| Perch, sand | - |  | 79 | 546 | 625 |
| Perch, silver . |  | (1) ${ }_{590}$ | (1) | 185 | ${ }_{607} 22$ |
| Perch, white. - | (1) | (1) 590 | (1) | - | 607 |
| Perch, ye.low |  |  | (1) | 174 | ${ }_{193}$ |
| Pinfish. | (1) | - | 1,385 | 2,231 | 3,616 |
| Pollock | 830 | 270 | (i) |  | 1,100 |
| Porgies . | 190 | 718 | (1) | ${ }^{62}$ | 199 |
| Puffers . | - | - | (1) | (1) | (1) |
| Scup. ${ }^{\text {a }}$ - | 1,588 | 266 133 | (1) | (1) | 1,854 |
| Searobins Seatrout, sand. | 63 | 133 |  | (1) 937 | 215 937 |
| Seatrout, silver. | - | - | 296 | 43 | 339 |
| Seatrout, spotted | - | (1) | 123 | 2,750 | 2,895 |
| Sharks. . - . - | - | 230 | 82 | 236 | 548 |
| Sharks, dogfish. | 89 | 68 | (1) ${ }_{133}$ | +32 | 192 359 |
| Sheepshead. . ${ }_{\text {Skates and }}$ rays . | (1) | (1) | (1) $^{133}$ | (1) ${ }^{226}$ | 359 95 |
| Smelts. . . . . | 223 | (1) |  |  | 223 |
| Snapper, gray | - | - | 110 | 491 | 601 |
| Snapper, red. | - | - | 417 | 1,168 | 1,585 |
| Snapper, vermilion. | - |  | (1) | (1) | 37 |
|  | - | (1) | 1,608 |  | 1,703 |
| Spadefish, At lantic | - | 2,431 | 3,691 | ${ }_{31}$ | 6,154 |
| Striped bass. . | 90 | 73 | - | 1 | 163 |
| Tautog. . . . . | 269 | 528 | - | (1) | 797 |
| Toadfishes. |  | 266 | (1) | (1) | 292 |
| Tomcod, Atlantic. . . |  | (1) |  | - | 71 |
| Trigger and filefishes | (1) | (1) | ${ }^{70}$ | 34 | . 133 |
| Weakfish. . . . . |  | 1,006 | (1) | - | 1,053 |
| Windowpane. . ${ }_{\text {Other }}$ fish. | (1) ${ }_{1} 659$ | ${ }_{801}$ | 2,198 | 558 | 5,215 |
| Total. . . . . | 20,090 | 20,738 | 23,953 | 25,180 | 89,961 |

(1) Less than 30,000 reported; however, number is included in totals.

Note:--Catch Type B1 is an estimate of part of the total catch based on fish not available in whole form for interviewer's identification, as reported by fishermen. Included are those fish used as bait, filleted, given away, discarded dead, etc., excluding fish released alive. Table may not add because of rounding.

## U.S. MARINE RECREATIONAL FISHERIES

ESTIMATED NUMBER OF FISH CAUGHT (CATCH TYPE B2) by marine recreational fishermen, by species group and subregion, 1979

| Species group | North Atlantic | Mid-Atlantic | South Atlantic | Gulf | $\begin{gathered} \text { All } \\ \text { regions } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - - - - - - - Thousands - - - - . . . - . . - . |  |  |  |  |
| Barracudas. | - | - | 169 | 38 | 207 |
| Basses, sea | 186 | 1,336 | 1,413 | 1,219 | 4,154 |
| Bluefish. . | 542 | 1,774 | 667 | 846 | 3,829 |
| Blue runner |  |  | 94 | 315 | 409 |
| Bonito, Atlantic. | - | (1) | (1) | 78 | 95 |
| Catfishes, sea | - | 193 | 4,607 | 12,406 | 17,207 |
| Catfishes, freshwater | - | 86 |  | 82 | 168 |
| Cod, Atlantic | 406 | - |  |  | 406 |
| Croaker, Atlantic | 79 | 190 | 1,032 | 5,562 | 6,784 |
| Cunner. . . . . . | 1,792 | 1,146 |  |  | 2,938 |
| Dolphins. . | 1,792 | (1) | (1) | (1) | (1) |
| Drum, black. | - | (1) | ${ }_{361}$ | 1,677 | 829 |
| Orum, red . - | - | (1) | 36 | 1,607 | 1,643 |
| Drums . . - | - 57 | (1) | 41 | (1) 263 | 305 |
| Eel, American | 57 | 40 | 37 | (1) | 151 |
| Flounders, surmer | 128 | 2,003 | 84 | 97 | 2,313 |
| Flounders, winter | 1,429 | 3,289 |  |  | 4,718 |
| Flounders.. | 94 | (1) | (1) | 155 | 284 |
| Groupers. |  |  | 113 | 424 | 538 |
| Grunt, white. | - | - | 280 | 1,308 | 1,589 |
| Grunts. . . | - |  | 1,555 | 1,020 | 2,575 |
| Hakes. | 37 | (1) | (1) |  | 42 |
| Herrings. | (1) | 61 | 181 | 733 | 992 |
| Jack, crevalle. | - |  | 173 | 827 | 1,000 |
| Jacks. - | - | (1) | 198 | 613 | 820 |
| Kingfishes. | - | (1) | 283 | 1,082 | 1,373 |
| Ladyfish. . | - | - | 66 | 640 | 706 |
| Little tunny. - | - |  | 64 | 179 | 243 |
| Mackere 1, Atlantic. | 171 | (1) | - | $\cdots$ | 174 |
| Mackerel, king. - | - | (1) | (1) | 97 | (1) |
| Mackerel, Spanish | (1) | (1) | (1) | 97 | 101 |
| Mackerels and tunas | (1) | (1) | (1) | 107 | 144 |
| Mullets . . - | (1) | (1) | 184 | 605 | 798 |
| Perch, sand | - | - | 58 | 1,020 | 1,077 |
| Perch, silver | - 86 | - 193 | 116 | 1,188 | 1,304 |
| Perch, wite. | 86 | 2,493 | 41 | - | 2,619 |
| Perch, yellow | - | 216 | - | - | 216 |
| Pigfish . . - | - | - | 352 1335 | 5 981 | 1,333 |
| Pollock. | 1,251 | - | 1,335 |  | 1,251 |
| Porgies. | (1) | 939 | 35 | 86 | 1,083 |
| Puffers . . . . . | (1) ${ }^{135}$ | 71 | 145 | ${ }^{141}$ | , 359 |
| Scup. . . . . . . . | 1,135 | 342 |  | (1) | 1,481 |
| Searobins | 394 | 2,313 | 626 | 127 | 3,460 |
| Seatrout, sand. | - |  | (1) | 1,675 | 1,681. |
| Seatrout, silver. | - | - | (1) | 77 | 91. |
| Seatrout, spotted |  | 59 | 545 | 5,324 | 5,929 |
| Sharks. - ${ }^{\text {Shere }}$ | (1) 63 | 426 |  | 452 | 1,186 |
| Sharks, dogfish | 63 | 456 | (1) | 46 | 593 |
| Sheepshead. ${ }_{\text {Skates and }}$ | - | - | 138 | 710 | 848 |
| Skates and rays | 145 | 559 | 129 | 593 | 1,426 |
| Smelts. . . . . | 81 | - | - | - | 81 |
| Snapper, gray | - | - | 258 | (1) | 265 |
| Snapper, red. . . | - | - | 80 | 626 | 706 |
| Snapper, vermilion. | - | (1) | 79 | 32 | 111 |
| Snappers. . . . | - | (1) | 106 | 511 | 623 |
| Spadefish, Atlantic | - | - | (1) | 248 | 250 |
| Spot. . . . - | - | 3,834 | 1,175 | 637 | 5,645 |
| Striped bass. . | 52 | 387 | 38 | - | 478 |
| Tautog. . . . . . . | 192 | ${ }_{5}^{252}$ | - | - | 445 |
| Toadfishes. . . . . | (1) | 541 | 262 | 201 | 1,004 |
| Tomcod, Atlantic. . . | 61 | (1) | 5 | - 79 | 66 |
| Trigger and filefishes | - | (1) | ${ }^{215}$ | 79 | 300 |
| Weakfish. . . . . . |  | 188 | (1) | - | 198 |
| Windowpane. . | 61 478 | 322 269 | 782 | 1,974 | $\begin{array}{r}1883 \\ 3,502 \\ \hline\end{array}$ |
| Total. . . . . | 8,905 | 23,879 | 18,370 | 53,694 | 104,848 |

(1) Less than 30,000 reported; however, number is included in totals.

Note:--Catch Type $B 2$ is an estimate of part of the total catch based on fish released alive, as reported by the fishermen. Table may not add because of rounding.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN, BY AREA AND MODE OF FISHING FOR EACH SUBREGION, 1979

(1) This category includes "missing data" on area, and local variation in marine geographic terminology which sometimes prevented interviewers from determining acceptable answers to questions on "distance from shore."
Note:--Table may not add because of rounding.


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

(1) This category includes "missing data" on area, and local variation in marine geographic terminology wich sometimes prevented interviewers from determining acceptable answers to questions on "distance from shore."
Note:--Catch Type $A$ is an estimate of part of the total catch based on fish brought ashore in whole form, available for interviewer identification and enumeration, from which samples of lengths and weights were obtained. Table may not add because of rounding.


ESTIMATED WEIGHT OF FISH CAUGHT (CATCH TYPE A),
BY MARINE RECREATIONAL FISHERMEN, BY SPECIES GROUP AND SUBREGION, 1979

| Species group | North Atlantic | Mid-Atlantic | South Atlantic | Gulf | $\begin{gathered} \text { All } \\ \text { regions } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | -.-......- Thousand kilograms - - - - - .-. - |  |  |  |  |
| Barracudas. | - | (1) | 267 |  | 275 |
| Basses, sea | (1) | 172 | 271 | 101 | 548 |
| Bluefish. . | 1,937 | 16,314 | 3,055 | 473 | 21,781 |
| Blue runner |  |  | 308 | 108 | 415 |
| Bonito, Atlantic. - | (1) | 188 | (1) | 101 | 389 |
| Catfishes, sea . | (1) | (1) | 137 | 324 | 466 |
| Catfishes, freshwater | (1) | (1) 50 |  | 39 | 89 |
| Cod, Atlantic . . . . |  | (1) | - |  | 728 |
| Croaker, Atlantic | - | 711 | 411 | 564 | 1,685 |
| Cunner. . . | 14 | 7 |  |  | 21 |
| Dolphins. | - | (1) | 2,127 | 165 | 2,297 |
| Drum, black | - | (1) | 322 | 1,187 | 1,528 |
| Drum, red . . . . | - |  | ${ }^{469}$ | 1,319 | 1,788 |
| Drums American . . | (1) | (1) 31 | (1) | (1) 109 | 137 43 |
| Eel, American . Flounders, sumer | ${ }^{(1)} 281$ | - 31 | ${ }^{(1)} 358$ | (1) ${ }_{549}$ | 43 6,543 |
| Flounders, winter | 1,803 | 2,006 |  | - | 3,809 |
| Flounders . . . | (1) | 37 | (1) | 40 | 82 |
| Groupers. . . | - | - | 500 | 1,930 | 2,430 |
| Grunt, white. | - | - | 140 | 238 | 378 |
| Grunts. . . . . . - |  |  | 324 | 25 | 349 |
| Hakes . . . . . . | (1) | 124 | (1) | (1) | 129 |
| Herrings. . . . | (1) | (1) | (1) | (1) | 14 |
| Jack, crevalle. |  | (1) | ${ }^{66}$ | 940 | 1,006 |
| Jacks. . . . | - | (1) | 320 | 446 | 767 |
| Kingfishes. | - | (1) | 130 | 322 | 456. |
| Ladyfish. . . | - |  | 27 | (1) | 34 |
| Little tunny. . | - | (1) | 401 | 188. | 673 |
| Mackerel, Atlantic. | 548 | 1,163 | - |  | 1,711 |
| Mackere 1, king. - | - | (1) | 865 | 1,799 | 2,676 |
| Mackerel, Spanish. | - 6 |  | 954 | ${ }^{460}$ | 1,414 |
| Mackerels and tunas | 655 | 1,156 | 240 | (1) | 2,125 |
| Mullets | - |  | 612 | 978 | 1,590 |
| Perch, sand . . | - | (1) | 16 | 13 | 29 |
| Perch, silver | - | (1) | 29 | 22 | 51 |
| Perch, white. - | 6 | 467 | (1) |  | 473 |
| Perch, yellow. | - | ${ }^{17}$ | - 12 | 56 | 17 |
| Pigfish. . | (1) | (1) | 12 | 56 | 71 |
| Pinfish. | (1) ${ }_{248}$ | (1) | 177 | 90 | 271 |
| Porgies . | (1) | 310 | 170 | (1) | 486 |
| Puffers. | - | (1) | (1) | (1) | 7 |
| Scup. . ${ }^{\text {a }}$. | ${ }^{698}$ | 1,017 | (1) | (1) | 1,722 |
| Searobins ... | (1) | 17 | (1) |  | 24 |
| Seatrout, sand. - | - |  |  | 1,333 | 1,333 |
| Seatrout, silver. | - | (1) 440 | 99 539 | 3,031 | +126 |
| Sharks. . . . . . |  | 3,477 | 86 | 385 | 3,949 |
| Sharks, dogfish | (1) | 77 | (1) | (1) | 101 |
| Sheepshead. . - |  |  | ${ }^{787}$ | 741 | 1,527 |
| Skates and rays | (1) | (1) | (1) | (1) | 26 |
| Smelts. . . . | 76 |  |  |  | 76 |
| Snapper, gray . | - | - | 158 | 425 | 582 |
| Snapper, red. . ${ }^{\text {- }}$ | - | - | 143 | 1,220 | 1,362 |
| Snapper, vermilion. | - | (1) | 7 |  | 49 |
| Snappers. . . . | - | (1) | 251 | (1) | 256 |
| Spadefish, Atlantic | - | - | (1) | 25 | 28 |
| Spot. ${ }^{\text {S }}$. . . . |  | 425 |  | $(1){ }^{30}$ |  |
| Striped bass. . | 266 583 | 870 952 | (1) | (1) | 1,144 |
| Toadfishes. . . |  | (1) | (1) | - | (i) |
| Tomcod, Atlantic. | 132 | (1) | - | - | 135 |
| Trigger and filefishes. |  | (1) | 73 | 303 | 381 |
| Heakfish. . . . . . . | (1) | 3,446 | 95 | - | 3,574 |
| Windowpane. . . . | (1) | 15 | - 760 |  | 19 |
| Other fish. . . . . | 190 | 497 | 760 | 1,920 | 3,367 |
| Total. . . . . . | 8,214 | 39,576 | 16,391. | 22,155 | 86,336 |

(1) Less than 30,000 reported; however, numbers are included in totals.

Note:--Catch Type $A$ is an estimate of part of the total catch based on fish brought ashore in whole form, available for interviewer identification and enumeration, from which samples of lengths and weights were obtained. Table may not add because of rounding.

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

| Mode and subregion | Ocean <br> ${ }^{\prime}$ More than 3 mi . | Ocean <br> 3 mi . or less | In.land | Unknown (1) | All areas |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | --- - - | - - - - Thou | kilog | - - - | - - - - |
| NORTH ATLANTIC |  |  |  |  |  |
| Man-made. | - | 194 | 373 | 2 | 570 |
| Beach/bank. | - | 207 | 152 | 5 | 364 |
| Party/charter . | 537 | 179 | 84 | - | 801 |
| Private/rental. | 1,826 | 1,204 | 3,450 | - | 6,480 |
| Total. | 2,363 | 1,784 | 4,060 | 7 | 8,214 |
| MID-ATLANTIC |  |  |  |  |  |
| Man-made. . . | - | 379 | 523 | 241 | 1,143 |
| Beach/bank. . | - | 1,796 | 291 | 305 | 2,392 |
| Party charter . | 9,488 | 1,518 | 1,006 | - | 12,011 |
| Private/rental. | 8,420 | 3,508 | 11,137 | 966 | 24,030 |
| Total. | 17,908 | 7,201 | 12,956 | 1,511 | 39,576 |
| SOUTH ATLANTIC |  |  |  |  |  |
| Man-made. - | - | 1,239 | 535 | 791 | 2,566 |
| Beach/bank. . | - | 667 | 148 | 746 | 1,561 |
| Party/charter . | 476 | 583 | 4 | - | 1,063 |
| Private/rental. | 6,361 | 2,160 | 1,638 | 1,042 | 11,202 |
| Total. | 6,837 | 4,650 | 2,325 | 2,579 | 16,391 |
| GULF |  |  |  |  |  |
| Man-made. . | - | 888 | 190 | 1,148 | 2,226 |
| Beach/bank. - | - | 432 | 644 | 161 | 1,236 |
| Party/charter. | 244 | - | 69 | 1,391 | 1,703 |
| Private/rental. | 7,384 | 1,122 | 5,359 | 3,124 | 16,989 |
| Total. | 7,628 | 2,441 | 6,262 | 5,824 | 22,155 |

(1) This category includes "missing data" on area, and local variation in marine geographic terminology which sometimes prevented interviewers from determining acceptable answers to questions on "distance from shore."
Note:--Catch Type A is an estimate of part of the total catch based on fish brought ashore in whole form, available for interviewer identification and enumeration, from which samples of lengths and weights were obtained. Table may not add because of rounding.


ESTIMATED NUMBER OF PARTICIPANTS IN MARINE RECREATIONAL FISHING, BY STATE AND SUBREGION, FOR THE ATLANTIC AND GULF COASTS, 1979

| Subregion | Coastal participants | Non-coastal participants | Out of State <br> (1) | Participants in State (1) |
| :---: | :---: | :---: | :---: | :---: |
| NORTH ATLANTIC | - ..........- Thousands . . . . . . . . . . . - - |  |  |  |
| Connecticut . | 304 | - | 78 | 382 |
| Maine. . . | 99 | 9 | 76 | 185 |
| Massachusetts | 454 | 47 | 275 | 776 |
| New Hampshire . | 33 | 17 | 169 | 219 |
| Rhode Island. . | 167 | - | 263 | 430 |
| Total. | 1,058 73 |  |  |  |
| MID-ATLANTIC |  |  |  |  |
| Delaware. . | 36 | - | 88 | 124 |
| Maryland. . | 595 | 34 | 284 | 913 |
| New Jersey. | 644 | 18 | 310 | 972 |
| New York. . | 1,059 | 29 | 263 | 1,351 |
| Virginia. . | 384 | 35 | 470 | 889 |
| Total. | 2,718 | 116 |  |  |
| SOUTH ATLANTIC |  |  |  |  |
| Florida. | 1,071 | (2) | 754 | 1,826 |
| Georgia . . . . | 61 | 23 | 19 | 103 |
| North Carolina. | 173 | 468 | 322 | 963 |
| South Carlina . | 117 | 53 | 190 | 360 |
| Total. . | 1,422 | 544 |  |  |
| GULF |  |  |  |  |
| Alabama . | 106 | 41 | 57 | 204 |
| Florida. | 1,243 | 5 | 898 | 2,146 |
| Louisiana. . | 489 | 23 | 46 | 558 |
| Mississippi . | 88 | 15 | 52 | 155 |
| Texas . . . . | 959 | 254 | 107 | 1,319 |
| Total. | 2,885 | 338 |  |  |
| Grand total | 8,083 | 1,070 |  |  |

(1) Column does not add - one person can be counted as "out of State" for more than one State.
(2) Less than 500 participants.

Note:--Table may not add because of rounding.


ESTIMATED NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL FISHERMEN, BY MODE OF FISHING AND SUBREGION, 1979

| Mode and subregion | Trips by coastal residents | Trips by non-coastal residents | Trips by out of state residents | All <br> trips |
| :---: | :---: | :---: | :---: | :---: |
| NORTH ATLANTIC $\quad$ - - - - - - - - - - - - - - |  |  |  |  |
|  |  |  |  |  |
| Man-made. | 921 | 55 | 448 | 1,425 |
| Beach/bank. . | 892 | 27 | 335 | 1,254 |
| Party/charter . | 285 | 40 | 208 | 533 |
| Private/rental. | 2,715 | 94 | 962 | 3,771 |
| Total. | 4,813 | 217 | 1,953 | 6,983 |
| MID-ATLANTIC |  |  |  |  |
| Man-made. . | 2,149 | 88 | 394 | 2,631 |
| Beach/bank. . | 1,530 | 16 | 771 | 2,317 |
| Party charter . | 1,242 | 48 | 501 | 1,790 |
| Private/rental. | 9,536 | 239 | 1,919 | 11,694 |
| Total. | 14,457 | 392 | 3,584 | 18,433 |
| SOUTH ATLANTIC |  |  |  |  |
| Man-made. . | 2,503 | 577 | 896 | 3,977 |
| Beach/bank. . | 1,219 | 802 | 1,140 | 3,161 |
| Party/charter . | 329 | 21 | 319 | 668 |
| Private/rental. . | 4,726 | 515 | 725 | 5,966 |
| Total. | 8,777 | 1,915 | 3,080 | 13,771 |
| GULF |  |  |  |  |
| Man-made. . | 4,011 | 204 | 804 | 5,019 |
| Beach/bank. . | 2,712 | 97 | 690 | 3,499 |
| Party/charter . | 484 | 105 | 341 | 930 |
| Private/rental. . | 8,625 | 550 | 959 | 10,134 |
| Total. | 15,832 | 956 | 2,794 | 19,581 |
| Grand totals | 43,879 | 3,479 | 11,410 | 58,768 |

Note:--Table may not add because of rounding.


## ALL FOREIGN COUNTRIES: CATCH IN THE U.S. FISHERY CONSERVATION ZONE (FCZ), BY COUNTRY AND AREA, 1979 (Preliminary)

| Country and area | North Atlantic (1) | California, Oregon, and Washington | Alaska |  |  | Hawaii and Pacific Islands | Grand total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Gulf of Alaska | Eastern Bering Sea and Aleutian Is lands | Total Alaska |  |  |
| North America: |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Canada. . | 25,414.0 | - | 1,085.9 | - | 1,085.9 | - | 26,499.9 |
| Mexico. | 8,085.2 | - | 10,396.3 | - | 10,396.3 | - | 18,481.5 |
| Europe: |  |  |  |  |  |  |  |
| EEC: |  |  |  |  |  |  |  |
| Ireland | 207.3 | - | - | - | - | - | 207.3 |
| Italy . | 6,690.1 | , | , | - | - | - | 6,690.1 |
| Poland. . | 171.5 | 18,621.3 | 19,744.5 | 18,283.5 | 38,028.0 | - | 56,820.8 |
| Romania . | 28.5 |  |  |  | , | - | 28.5 |
| Spain . . . | 11,540.6 | 98 |  | , 77 |  | - | 11,540.6 |
| USSR.. . . . . . | 4,256.6 | 98,707.2 | 31,046.4 | 150,775.9 | 181,822.3 | - | 284,786.1 |
| Asia: |  |  |  |  |  |  |  |
| China, Taiwan | - 711.7 | - | ${ }^{-}$ | 2,013.3 | 2,013.3 | - | 2,013.3 |
| Japan . . - . | 7,711.7 | - | 72,223.4 | 1,034,695.7 | 1,106,919.1 | 217.8 | 1,114,848.6 |
| Republic of Korea | - | - | 29,936.7 | 98,065.7 | 128,002.4 | - | 128,002.4 |
| Grand total | 64,105.5 | 117,328.5 | 164,433.2 | 1,303,834.1 | 1,468,267.3 | 217.8 | 1,649,919.1 |

(1) Cape Hatteras northward.

Note:--Excludes tunas. Also excludes salmon, caught incidentally to other species, and returned to sea. Beginning June 4, 1978, Canadian authorities excluded almost all United States fishing vessels from Canadian waters, and United States authorities excluded almost all Canadian fishing vessels from United States waters. In the Pacific, halibut fishing continued under the United States-Canada Halibut Convention. In a 1979 groundfish agreement, Canada, in return for the right to catch a specified amount of halibut in the United States FZ, granted United States fishermen the right to catch a specified amount of groundfish in the Canadian fishery zone. In the Atlantic, fishing continued by vessels of both nations in a boundary region often referred to as the "disputed zone."

ALL. FOREIGN COUNTRIES: CATCH IN THE U.S. FISHERY CONSERVATION ZONE (FCZ), BY COUNTRY AHD AREA, 1980
(Preliminary)

| Country and area | North Atlantic <br> (1) | California, Oregon, and Washington | Gulf of Alaska | Eastern Bering Sea and Aleutian Islands | Total Alaska | Hawaii and Pacific Is lands | Grand total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| North Amer ica: |  |  |  |  |  |  |  |
| Canada. . . . . | 28,479.0 | - | 1,177.6 | - | 1,177.6 |  | $29,656.6$ 389.6 |
| Cuba. . . . . . . . . . . | 489.6 | - | - | - | - | - | 389.6 |
| Mexico. . . . . . . . . - | 4,696.9 | - | - | - |  | - | 4,696.9 |
| Europe: |  |  |  |  |  |  |  |
| European Economic Community:Federal Republic of |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Germany. . . . . . . | $0^{-}$ | - | - | 6,729.5 | 6,729.5 | - | 6,729.5 |
| Other: |  |  |  |  | - | - | 9,445.4 |
| Faroe Is land. | 1.3 | - | - | - ${ }^{-1}$ | - | - | 1.3 |
| Poland. . | 338.3 | 46,928.1 | 13,274.4 | 48,093.4 | 61,367.8 | - | 108,634.2 |
| Romania . . . | 77.7 | , |  |  |  | - | 1777.7 |
| Spain . . . . . . . . . . | 17,521.1 | - | -54, 603 | 6 | 1 | - | 17,521.1 |
| USSR. . . . . . . . . . | - | - | 54,603.0 | 3,556.7 | 58,159.7 | - | 58,159.7 |
| Asia: |  |  |  |  |  |  |  |
| China, Taiwan . | 10,765 1 | - |  | 5,508.0 | 5,508.0 |  | 5,508.0 |
| Japan - . ${ }^{\text {a }}$ - | 10,765.1 | - - | -107, 973.1 | 1,060,690.0 | -1, 168,663.1 | 795.2 | 1,180,223.4 |
| Republic of Korea . . . - | - | - | 32,388.2 | 177,589.1 | 209,977.3 | - . | 209,977.3 |
| Grand total. | 71,714.4 | 46,928.1 | 209,416.3 | 1,302,166.7 | 1,511,583.0 | 795.2 | 1,631,020.7 |

Note:--Excludes tunas. Also excludes salmon caught incidentally to other species and returned to sea. Beginning June 4, 1978, Canadian authorities excluded almost all United States fishing vessels from Canadian waters, and United States authorities excluded almost all Canadian fishing vessels from United States waters. In the Pacific, halibut fishing continued under the United States-Canada Halibut Convention. In a 1979 groundfish agreement, Canada, in return for the right to catch a specified amount of halibut in the United States FCZ, granted United States fishermen the right to catch a specified amount of groundfish in the Canadian fishery zone. In the Atlantic, fishing continued by vessels of both nations in a boundary region often referred to as the "disputed zone.". Catches are for calendar year only. Some fishing years over lap 2 calendar years.

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. FISHERY CONSERVATION ZONE (FCZ), 8Y SPECIES AND AREA, 1979 (Preliminary)


| Item | North Atlantic (1) | Washington, Oregon, and California | Alaska |  |  | Hawaif and Pacific Is lands | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Gulf } \\ \text { of } \\ \text { Alaska } \end{gathered}$ | Eastern Bering Sea and Aleutian Is lands | Total Alaska |  |  |
|  | --- | - - - - | - Metric | s, round weight | - - - - | $\cdots$ | ----- |
| Finfish |  |  |  |  |  |  |  |
| Alfonsins and armorheads. | - | - | - | $\cdots$ | ** | 795.2 | 795.2 |
| Atka mackerel . . . . . | - | - | 13,162.4 | 20,224.7 | 33,387.1 | - | 33,387.1 |
| Butterfish. . | 883.7 | - | , | , | , | - | 883.7 |
| Cod: |  |  |  |  |  |  |  |
| Atlantic. | 6,665.0 | - | - ${ }^{-}$ | - ${ }^{-}$ | 71" ${ }^{\circ}$ | - | 6,665.0 |
| Pacific. | - | - | 34,243.5 | 37,318.9 | 71,562.4 | - | 71,562.4 |
| Flounders: |  |  |  |  |  |  |  |
| Atlantic. . | 204.0 | - | - | $7^{-} 768$ | 77-768.0 | - | 204.0 |
| Yellowfin sole. | - | - | - | 77,768.0 | 77,768.0 | - | 77,768.0 |
| Pacific, other. | -755 | 2.1 | 15,496.0 | 88,529.2 | 104,025.2 | - | 104,027.3 |
| Haddock . . . . | 9,755.0 | - | - | - | - | - | 9,755.0 |
| Atlantic: |  |  |  |  |  |  |  |
| Red . . . | 155.2 | - | - | - | - | - | 155.2 |
| Silver (whiting). | 1,696.7 | - | - | - | $\cdots$ | - | 1,696.7 |
| Pacific (whiting). | , | 44,022.9 | - | - | - | - | 44,022.9 |
| Halibut . . . . . . . . . | - | - | 1,177.6 | - | 1,177.6 | - | 1,177.6 |
| Herring, river (alewives) - | 24.6 | - | - | - 782 | - | - | 24.6 |
| Herring, sea, Pacific (2). | - | 1.724 .8 | - | 782.6 | 782.6 | - | 782.6 1.724 .8 |
| Jack mackerel . . . . . . . Mackerel, Atlantic. | 382.7 | 1,724.8 | - | - | - | - | $1,724.8$ 382.7 |
| Mackerel, Atlantic. . . . . Ocean perch: | 382.7 | - | - | - | - | - | 382.7 |
| Atlantic. | 98.0 | - | - | - | - | - | 98.0 |
| Pacific. | - | 32.4 | 12,446.9 | 4,917.0 | 17,363.9 | - | 17,396.3 |
| Pollock: |  |  |  |  |  |  |  |
| At lantic. | 5,474.0 | - | - ${ }^{-}$ | 1,006 ${ }^{-}$ | 1,119.125.5 | - | 5,474.0 |
| Alaska. . . . . . . . . . | , | 9 | 112,996.0 | 1,006,129.5 | 1,119,125.5 | - | 1,119,125.5 |
| Rockfishes, Pacific, other. | - | 958.1 | 4,199.6 | 3,551.0 | . 7,750.6 | - | 8,708.7 |
| Sablefish . . . . . . . . | , | 92.8 | 6,138.8 | 2,438.0 | -8,576.8 | - | 8,669.6 |
| Other finfish | 2,818.5 | 95.0 | 8,714.4 | 46,982.3 | 55,696.7 | - | 58,610.2 |
| Total fish | 28,157.4 | 46,928.1 | 208,575.2 | 1,288,641.2 | 1,497,216.4 | 795.2 | 1,573,097.1 |
| Shellfish et al. |  |  |  |  |  |  |  |
| Crabs, snow (tanner). | - | - | - | 7,094.4 | 7,094.4 |  |  |
| Lobster, American . . | 194.0 | - | - |  | - | - | 194.0 |
| Scallops, sea . . | 5,239.0 | - | - | - | - | - | 5,239.0 |
| Snails (meats). . . | - | - | - | 57.3 | 57.3 | - | 57.3 |
| Atlantic: |  |  |  |  |  |  |  |
| Short-finned. | 17,724.9 | - | - | - | - | - | 17,724.9 |
| Long-finned. | 20,399.1 | - |  |  |  | - | 20,399.1 |
| Pacific . . . | - | - | 841.1 | 6,373.8 | 7,214.9 | - | 7,214.9 |
| Total shellfish | 43,557.0 | - | 841.1 | 13,525.5 | 14,366.6 | . - | 57,923.6 |
| Grand total . . . . . | $==3=3===2$ $71,714.4$ | 46,928.1 | $===5====$ $209,416.3$ | 1,302,166.7 | 1,511,583.0 | 795.2 |  |

(1) Cape Hatteras northward. (2) Harvested between Jan. 1 and Feb. 8, 1980, and then declared a prohibited species.

Note:--Excludes tunas. See note on page 26.

## FOREIGN CATCH

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, $1978-80$
(Preliminary)

| Country and species | 1978 | 1979 | 1980 |
| :---: | :---: | :---: | :---: |
| Bulgaria: |  |  |  |
|  |  |  |  |
| Hake, silver (whiting). | 0.2 | - | - |
| Mackere1, Atlantic. . | 11.0 | - | - |
| Total | 11.2 | = $=$ | - $==$ |
| Canada: (1) |  |  |  |
| Cod, Atlantic . . . | 9,503.0 | 6,390.0 | 6,665.0 |
| Flounders (including yellowtail) | 58.0 | 15.0 | 74.0 |
| Flounders, other. . . . . . . . | 292.0 | 74.0 | 130.0 |
| Haddock . . . . | 10,657.0 | 5,439.0 | 9,755.0 |
| Ocean perch, Atlantic | 92.0 | 26.0 | 98.0 |
| Pollock, Atlantic. | 4,756.0 | 3,032.0 | 5,474.0 |
| Other finfish . . | 937.0 | 994.0 | 850.0 |
| Lobster, American . . | 269.0 | 240.0 | 194.0 |
| Scallops, sea (meats) | 12,123.0 | 9,204.0 | 5,239.0 |
| Total. . | 38.687 .0 | $25,414.0$ | 28.479 .0 |
| Cuba: |  |  |  |
| Butterfish. | - | - | 9.0 |
| Hake: |  |  |  |
| Red . . | - | - | 14.0 |
| Silver (whiting). . . | - | - | 72.8 |
| Herring, river (alewives) | - | - | 23.7 |
| Mackerel, Atlantic. . | - | - | 234.8 |
| Other finfish. . | - | $\cdots$ | 34.4 |
| Squid, 1 ong-finned. | - | - | . 9 |
| Total. |  |  | 389.6 |
| European Economic Community: |  |  |  |
| Ireland: |  |  |  |
| Other finfish . . . . | - | . 1 | - |
| Squid, short-finned | - | 207.2 | - |
| Total. |  | 207.3 | - $==$ |
| Italy: |  |  |  |
| Butterfish. | 354.0 | 137.5 | 73.1 |
| Hake: |  |  |  |
| Red | 50.0 | 188.3 | 42.3 |
| Silver (whiting). | 612.0 | 600.1 | 501.9 |
| Mackere1, Atlantic | 65.0 | 28.4 | 26.8 |
| Other finfish . . . | 695.0 | 600.6 | 724.1 |
| Squid: |  |  |  |
|  |  |  |  |
| Long-finned. | 1,366.0 | 2,064.9 | 2,954.1 |
| Total. | $52 \underline{2}=13.0$ | $\underline{6}$ 290. ${ }^{1}$ | 92445.4 |
| Faroe Islands, <br> Other finfish, total. | - ===== | ===== | $=== \pm=3$ |
| Japan: |  |  |  |
| Butterfish. | : 651.2 | 270.7 | 660.3 |
| Hake: |  |  |  |
| Red . | 8.7 | 12.8 | 37.4 |
| Silver (whiting). | 274.5 | 701.3 | 606.3 |
| Herring, river (alewives) | 1.6 | - | . 1 |
| Mackere 1, Atlantic. . . | 8.6 | 9.2 | 88.4 |
| Other finfish . . | 137.1 | 321.8 | 618.6 |
| Squid: |  |  |  |
| Short-finned. | 3,744.0 | 3,211.8 | 2,207.0 |
| Long-finned . | 2,309.2 | 3,184.1 | 6,547.0 |
| Total. . | 7 7 2134 $=9$ | 7 7 2 7111.7 | 102765.1 |
| See footnote at end of table. |  | en on nex |  |

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1978-80 - Continued (Preliminary)

| Country and species | 1978 | 1979 | 1980 |
| :---: | :---: | :---: | :---: |
| Mexico: |  |  |  |
|  |  |  |  |
| Butterfish. . . . . . . | 93.0 | 342.6 | 72.2 |
| Hake: |  |  |  |
| Red . . $\cdot$ - ${ }^{\text {P }}$ | 1.0 | 40.2 | 12.2 |
| Silver (whiting). | 4.0 | 110.1 | 39.3 |
| Herring, river (alewives) | - | . 4 | . 2 |
| Mackerel, Atlantic. . . | 1.0 | 11.7 | 5.7 |
| Other finfish . . | 33.0 | 467.4 | 104.1 |
| Squid: |  |  |  |
| Short-finned. | 2,769.0 | 3,539.5 | 1,275.8 |
| Long-finned . | 1,053.0 | 3,573.3 | 3,187.4 |
| Total. | $3,954.0$ | 82085 | 42.696 .9 |
| Poland: |  |  |  |
| Butterfish. | - | - | 3.2 |
| Hake, silver (whiting). | - | - | . 5 |
| Mackerel, Atlantic. . . | - | - | 9.1 |
| Other finfish . . . | - | - | 41.1 |
| Squid: |  |  |  |
| Short-finned. | - | 171.5 | 281.4 |
| Long-finned . | - | - | 3.0 |
| Total. . | E | =171 $=5$ | 3388. 3 |
| Romania: |  |  |  |
| Butterfish. | 56.0 | 1.7 | 2.3 |
| Hake: |  |  |  |
| Red . . | - | . 1 | . 6 |
| Silver (whiting). | 20.0 | 15.5 | . 1 |
| Mackere1, Atlantic. | 10.0 |  | . 5 |
| Other finfish . . . | 22.0 | 7.6 | 18.2 |
| Squid: |  |  |  |
| Short-finned. | 50.0 17.0 | .7 2.9 | 56.0 |
| Total. |  | 28. 28.5 | $=77.7$ |
| Spain: |  |  |  |
| Butterfish. | 156.0 | 89.5 | 63.6 |
| Hake: |  |  |  |
| Red . | 3.0 | 65.3 | 48.7 |
| Silver (whiting). | 53.0 | 380.3 | 475.8 |
| Herring, river (alewives) | 8.0 |  | ${ }_{17} .6$ |
| Mackere1, Atlantic. . . . | 28.0 | 5.1 | 17.4 |
| Other finfish . . . . | 265.5 | 425.2 | 426.7 |
|  |  |  |  |
| Short-finned. | 8,583.0 | 6,225.3 | 8,781.6 |
| Long-finned . . . | 4,603.4 | 4,349.9 | 7,706.7 |
| Total. | $======132 \underline{299}=\underline{=}$ | 11.5440 .6 | 17.521 .1 |
| USSR: |  |  |  |
| Butterfish. | 14.0 | 2.4 | - |
| Hake: |  |  |  |
| Red | 2,073.3 | 670.2 | - |
| Silver (whiting). | 13,390.1 | 3,074.8 | - |
| Herring, river (alewives) | 20.3 | 11.5 | - |
| Mackerel, Atlantic. . . | 206.0 | 10.1 | - |
| Other finfish . . . | 2,208.1 | 479.6 | - |
| Squid: |  |  |  |
| Short-finned. | 33.4 | . 1 | - |
| Long-finned . . | 7.0 | 7.9 | - |
| Total. | ====== 17.9252 .2 | 4 $2 \underline{256} \underline{\underline{1}}=6$ | - $===$ |
| Grand total. . . . . | 86,887.2 | 64,105.5 | 71,714.4 |

[^0]
## U.S. FISHERY CONSERVATION ZONE

## FOREIGN CATCH

WASHINGTON, OREGON, AND CALIFORNIA:
FOREIGN CATCH, BY COUNTRY AND SPECIES, 1978-80
(Preliminary)


See note on page 26.

## FOREIGN CATCH

GULF OF ALASKA: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1978-80
(Preliminary)

| Country and species | 1978 | 1979 | 1980 |
| :---: | :---: | :---: | :---: |
|  | - - - - Metric tons, round weight - - - - - |  |  |
| $\frac{\text { Canada }}{\text { Haltbut . . . . . . . . . . . . }}$ 2,533.3 $\quad 1,177.6$ |  |  |  |
|  |  |  |  |  |  |  |
| Total. | = $==========$ | 1,085.9 | 1,177.6 |
| Japan: |  |  |  |
| Atka mackere 1 . | 1,135.7 | 566.9 | 1,895.9 |
| Cod, Pacific. | 8,845.8 | 10,429.2 | 30,581.1 |
| Flounders (1) | 13,809.4 | 12,369.5 | 11,923.5 |
| Ocean perch, Pacific. | 4,547.6 | 7,397.4 | 10,769.7 |
| Pollock, Alaska | 26,093.0 | 31,919.6 | 37,897.4 |
| Rockfishes. . . | 1,277.2 | 1,092.0 | 4,002.1 |
| Sablefish | 6.458 .3 | 5,919.1 | 4,831.3 |
| Other finfish if: | 3,919.1 | 2,270.6 | 5,374.9 |
| Squid, unclassified | 185.8 | 259.1 | 697.2 |
| Total. | 66,271.9 | 72,223.4 | 107,973.1 |
| Mexico: |  |  |  |
| Atka mackerel . | - | 36.3 | - |
| Cod, Pacific. | - | 939.3 | $\cdots$ |
| Flounders (1) . . | - | 113.1 | - |
| Ocean perch, Pacific. | - | 457.0 | - |
| Pollock, Alaska | - | 8,676.9 | - |
| Rockfishes. | - | 5.6 | - |
| Sablefish. - | - | 54.7 | - |
| Other finfish . | - | 100.8 | - |
| Squid, unclassified | - | 12.6 | - |
| Total. | - | 10,396.3 | - |
| Poland: |  |  |  |
| Atka mackere 1 | - | . 4 | 56.9 |
| Cod, Pacific. | 13.6 | 126.9 | 54.3 |
| Flounders (1) | 12.6 | 18.9 | . 2 |
| Ocean perch, Pacific. | 3.5 | 5.3 | 29.8 |
| Pollock, Alaska | 1,226.5 | 19,551.2 | 13,085.0 |
| Rockfishes. - | 8.8 | 18.7 | 3.7 |
| Other finfish . ${ }^{\text {d }}$ | - | 14.0 | 44.4 |
| Squid, unclassified | 1.0 | 9.1 | . 1 |
| Total. | 1,266.0 | 19,744.5 | 13,274.4 |
| Republic of Korea: |  |  |  |
| Atka mackerel . . | 63.0 | 80.5 | 736.1 |
| Cod, Pacific. . | 1,369.0 | 844.1 | 1,665.8 |
| Flounders (1) . . . | 295.5 | 604.4 | 1,733.8 |
| Ocean perch, Pacific. | 3,048.7 | 824.9 | 408.2 |
| Pollock, Alaska. | 27,051.9 | 25,738.8 | 25,012.8 |
| Rockfishes. - | 608.7 | 184.9 | 184.0 |
| Sablefish isi | 664.8 | 758.6 | 891.5 |
| Other finfish is. | 1,686.6 | 757.1 | 1,649.0 |
| Squid, unclassified | 132.7 | 143.4 | 107.0 |
| Total. . . . . | 34,920.9 | 29,936.7 | 32,388.2 |

(Continued)

## U.S. FISHERY CONSERVATION ZONE

## FOREIGN CATCH


(1) May include yellowfin sole. See note on page 26.

## U.S. FISHERY CONSERVATION ZONE <br> FOREIGN CATCH

EASTERN BERING SEA AND ALEUTIAN ISLANDS: FOREIGN CATCH BY COUNTRY AND BY SPECIES, 1978-80
(Preliminary)

| Country and species | 1978 | 1979 | 1980 |
| :---: | :---: | :---: | :---: |
| Canada | - - - - - Metric tons, round weight - .- - - - - |  |  |
| Halibut | 88.7 | - | - |
| European Economic Community, |  |  |  |
| Federal Republic of Germany: |  |  |  |
| Atka mackere1 . . . . | - | - | 42.2 |
| Cod, Pacific. . | - | - | 552.5 |
| Flounders, unclassified | - | - | 15.4 |
| Ocean perch, Pacific. | - | - | 14.8 |
| Pollock, Alaska . . . | - | - | 5,996.3 |
| Rockfishes. . . | - | - | . 3 |
| Sablefish. | - | - | 15.9 |
| Other finfish . | - | - | 38.8 |
| Squid, unclassified | - | - | 53.3 |
| Total. . . . . | - | - | 6,729.5 |
| China, Taiwan: |  |  |  |
| Atka mackere 1. | . 3 | - |  |
| Cod, Pacific. . | 70.4 | 39.4 | 199.7 |
| Flounders: |  |  |  |
| Yellowfin sole. | 1.4 | 3.0 | 35.1 |
| Other . . . . | 68.3 | 19.2 | 126.2 |
| Herring, sea. . |  | - | . 5 |
| Ocean perch, Pacific. | 6.6 | 2.6 | 17.7 |
| Pollock, Alaska . . | 3,039.9 | 1,928.6 | 4,973.7 |
| Rockfishes. . - |  |  | 9.3 |
| Sablefish . | 5.2 | 6.3 | 38.4 |
| Other finfish |  |  | 68.5 |
| Squid, unclassified | 35.0 | 14.2 | 38.9 |
| Total. . . . . . | 3,227.1 | 2,013.3 | 5,508.0 |
| Japan: |  |  |  |
| Atka mackere 1. | 1,531.0 | 1,656.2 | 1,718.7 |
| Cod, Pacific. . - | 45,015.0 | 35,470.3 | 29,524.0 |
| Flounders: |  |  |  |
| Yellowfin sole. . | 59,737.3 | 58,491.0 | 61,295.0 |
| Other . . . . . | 87,785.9 | 75,824.7 | 74,150.7 |
| Herring, sea. . . . . | 2,315.3 | 1,707.9 | 329.2 |
| Ocean perch, Pacific. | 6,776.0 | 6,900.8 | 4,102.7 |
| Pollock, Alaska . . . | 821,306.5 | 779,049.9 | 832,992.6 |
| Rockfishes. . . . . |  | - | 3,024.0 |
| Sablefish | 1,805.2 | 1,687.9 | 1,881.8 |
| Other finfish. | 58,040.7 | 52,676.9 | 39,877.8 |
| Crabs, snow (tanner). | 14,961.9 | 14,953.5 | 7,094.4 |
| Snails (meats). . . | 2,184.4 | 537.2 | 57.3 |
| Squid, unclassified | 9,138.3 | 5,739.4 | 4,641.8 |
| Total. . . . | 1,110,597.5 | ,034,695.7 | 1,060,690.0 |
| Poland: |  |  |  |
| Atka mackerel | - | 1.5 | 43.9 |
| Cod, Pacific. | - | 16.5 | 627.5 |
| Flounders: |  |  |  |
| Yellowfin sole. | - | - | 233.6 |
| Other . . . | - | 1.5 | 610.5 |
| Herring, sea. . . . . | - | - 1. | 2.0 |
| Ocean perch, Pacific. | - | 1.9 | 37.2 |
| Pollock, Alaska. | - | 18,229.9 | 46,145.9 |
| Rockfishes. . . | - | - | 22.8 |
| Sablefish. . | - | 1.8 | 152.2 |
| Other finfish . . | - | 5.8 | 198.3 |
| Squid, unclassified. | - | 24.6 | 19.5 48.093 |

## U.S. FISHERY CONSERVATION ZONE

## FOREIGN CATCH

EASTERN bering sea and aleutian islands: foreign catch BY COUNTRY AND BY SPECIES, 1978-80 - Continued
(Preliminary)

| Country and species | 1978 | 1979 | 1980 |
| :---: | :---: | :---: | :---: |
| - - - - - Metric tons, round weight - - - - - |  |  |  |
| Republic of Korea: |  |  |  |
| Atka mackerel . | 96.6 | 1,329.0 | 17,482.9 |
| Cod, Pacific. | 1,752.8 | 3,245.4 | 6,404.3 |
| Flounders: |  |  |  |
| Yellowfin sole. | 65.5 | 1,355.7 | 16,197.9 |
| Other . . . . . | 309.3 | 1,971.8 | 13,622.5 |
| Herring, sea. . . . . | 19.1 | 107.6 | 22.7 |
| Ocean perch, Pacific. | 491.3 | 282.1 | 740.0 |
| Pollock, Alaska . | 62,370.6 | 84,137.4 | 113,864.6 |
| Rockfishes. | - | - | 493.0 |
| Sablefish | 204.1 | 425.6 | 349.7 |
| Other finfish . . . | 2,912.3 | 3,978.1 | 6,791.2 |
| Squid, unclassified | 215.0 | 1,233.0 | $1,620.3$ |
| Total. . . . . . | 68,436.6 | 98,065.7 | 177,589.1 |
| USSR: |  |  |  |
| Atka mackerel . | 22,622.0 | 20,277.3 | 937.0 |
| Cod, Pacific. | 560.4 | 2,645.0 | 10.9 |
| Flounders: |  |  |  |
| Yellowfin sole. | 50,532.2 | 41,258.7 | 6.4 |
| Other | 37,378.9 | 12,128.1 | 3.9 |
| Herring, sea. | 6,106.4 | 5,717.8 | 428.2 |
| Ocean perch, Pacific. | 242.3 | 21.6 | 4.6 |
| Pollock, Alaska . . . | 92,713.8 | 60,617.4 | 2,156.4 |
| Rockfishes. . . | , | , | 1.6 |
| Sablefish . | . 2 | 49.2 |  |
| Other finfish | 10,806.1 | 8,054.4 | 7.7 |
| Squid, unclassified | 22.8 | 6.4 | - |
| Total. | 220,985.1 | 150,775.9 | 3,556.7 |
| Grand total. . | 403,335.0 | 1,303,834.1 | ,302,166.7 |
| See note on page 26. |  |  |  |
| HAWAII AND PACIFIC ISLANDS <br> (WESTERN PACIFIC SEAMOUNT GROUNDFISH FISHERY) BY SPECIES AND COUNTRY, 1978-80 |  |  |  |
| Country and species | 1978 | 1979 | 1980 |
| -...-.- Metric tons, round weight - . - - . - - |  |  |  |
| Japan 795 |  |  |  |
| Alfonsins and armorheads. | 416.0 | 217.8 | 795.2 |
| Grand total. . . . . . . . . | 416.0 | 217.8 | 795.2 |

WORLD COMMERCIAL CATCH BY LEADING COUNTRIES, 1973-79 (Million metric tons, live weight)


Note:-Does not include marine mammals and aquatic plants.

U.S. AND WORLD COMMERCIAL FISHERY CATCHES, 1950-79

(1) Includes diadromous (salmon and other anadromous fishes and catadromous fishes such as eels).

Note:--There are $2,204.6$ pounds in a metric ton. Prior to 1970, the world commercial catch of whales and seals is excluded. For the years 1970-1979, data for marine mammals and aquatic plants are excluded. There is a revision in the total world commercial catch back to 1970 as published in FAO Yearbook of Fishery Statistics 1979, Vol. 48. However, prior to 1973, data on freshwater and marine catches were not revised. Therefore, for the years 1970 to 1972, data will not add to the grand total.

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

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY COUNTRIES, 1975-79
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

| Country | 1975 (1) | 1976 (1) | 1977 (1) | 1978 (1) | 1979 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - - - - - - Thousand metric tons - - - - - - |  |  |  |  |  |
|  | Live weight |  |  |  |  |
| Japan. | 9;895 | 9,994 | 10,123 | 10,184 | 9,966 |
| USSR | 9,970 | 10,132 | 9,351 | 8,915 | 9,114 |
| China, mainland. | 4,247 | 4,320 | 4,463 | 4,394 | 4,054 |
| Peru | 3,448 | 4,344 | 2,537 | 3,369 | 3,682 |
| United States. | (2)2,842 | (2) 3,050 | (2) 2,980 | (2) 3,418 | (2) 3,511 |
| Norway | 2,481 | 3,361 | 3,402 | 2,587 | 2,652 |
| Chile. | 899 | 1,379 | 1,319 | 1,929 | 2,633 |
| India. | 2,266 | 2,174 | 2,312 | 2,306 | 2,343 |
| Republic of Korea. | 1,887 | 2,118 | 2,085 | 2,092 | 2,162 |
| Denmark. . . . . . | 1,767 | 1,912 | 1,806 | 1,740 | 1,738 |
| Indonesia. | 1,382 | 1,479 | 1,568 | 1,642 | 1,732 |
| Thailand. | 1,553 | 1,659 | 2,188 | 2,095 | 1,716 |
| Iceland. | 995 | 986 | 1,374 | 1,567 | 1,645 |
| Philippines. | 1,443 | 1,393 | 1,509 | 1,495 | 1,476 |
| Canada . . . | 993 | 1,102 | 1,235 | 1,366 | 1,332 |
| North Korea. | (3) 1,050 | (3)1,120 | (3)1,190 | (3) 1,260 | (3)1,330 |
| Spain. . | 1,512 | 1,469 | 1,389 | (1,373 | 1,205 |
| Vietnam. | (3)1,014 | (3)1,014 | (3)1,014 | (3)1,014 | (3)1,014 |
| Mexico | 468 | 526 | 611 | 703 | 875 |
| Brazil . | 753 | 653 | 748 | 803 | 843 |
| France. | 784 | 787 | 744 | 777 | 732 |
| Malaysia . - . - . | 474 | 517 | 619 | 685 | 698 |
| Republic of South Africa | 600 | 595 | 550 | 600 | 659 |
| Ecuador. | 222 | 298 | 434 | 617 | 644 |
| Bangladesh | 823 | 826 | 835 | 640 | (3) 640 |
| Poland. . | 801 | 750 | 655 | 571 | 601 |
| Argentina. | 211 | 266 | 370 | 519 | 566 |
| Burma. . | 485 | 502 | 519 | 540 | 565 |
| Nigeria. . . . . . | 466 | 497 | 504 | 519 | 535 |
| England and Wales. | 497 | 520 | 525 | 548 | 494 |
| Italy. . | 406 | 420 | 380 | 402 | 427 |
| Scot land . . . . . . | 442 | 476 | 445 | 456 | 383 |
| Federal Rep. of Germany. | 442 | 454 | 432 | 412 | 356 |
| Tanzania . . . . . . | 196 | 239 | 288 | 295 | 344 |
| Namibia (S.W. Africa). | 761 | 574 | 404 | 418 | 327 |
| Nether Tands. . . . . | 351 | 285 | 313 | 324 | 324 |
| Senegal. All others . | 363 7,298 | 362 7,317 | 348 7,601 | 359 7,614 | $\begin{array}{r} \text { (3) } 308 \\ 7,661 \end{array}$ |
| Total........ | 66.487 | 69,870 | 69,170 | 70,548 | 71,287 |

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

Note:--Statistics for mariculture, aquaculture and other kinds of fish farming are included in country totals. Statistics on quantities caught by recreational fishermen are excluded.

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1979, Vol. 48.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY CONTINENTS, 1975-79 (dOES NOT inClude marine mammals and aquatic plants.)

| Continent | 1975(1) | 1976(1) | 1977(1) | 1978(1) | 1979 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - - - Thousand metric tons - - - - - |  |  |  |  |
|  | Live weight |  |  |  |  |
| Asia. . | 27,945 | 28,561 | 29,933 | 29,843 | 29,182 |
| Europe. . | 12,513 | 13,407 | 13,289 | 12,502 | 12,305 |
| USSR. . . | 9,970 | 10,132 | 9,351 | 8,915 | 9,114 |
| South America . . . . . . | 5,811 | 7,226 | 5,707 | 7,586 | 8,722 |
| North and Central America | 4,689 | 5,188 | 5,403 | 6,018 | 6,249 |
| Africa. . . | 4,434 | 4,259 | 4,217 | 4,363 | 4,360 |
| Oceania . . | 244 | 284 | 282 | 334 | 340 |
| Other . | 881 | 813 | 988 | 987 | 1,015 |
| Total. . . . . . . . . | 66,487 | 69,870 | 69,170 | 70,548 | 71,287 |

(1) Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1979, Vol. 48.


WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY MAJOR FISHING AREAS, 1975-79 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

| Area | 1975(1) | 1976(1) | 1977(1) | 1978(1) | 1979 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - - - - Thousand metric tons - - - - - - |  |  |  |  |
|  | Live weight |  |  |  |  |
| Marine areas: |  |  |  |  |  |
| Pacific Ocean and adjacent areas. | 30,553 | 32,906 | 32,071 | 34,003 | 35,257 |
| Atlantic Ocean and adjacent | 25,539 | 26,632 | 25,944 | 25,651 | 24,912 |
| Indian Ocean and adjacent areas. | 3,202 | 3,219 | 3,791 | 3,767 | 3,638 |
| Total. | 59,294 | 62,757 | 61,806 | 63,421 | 63,807 |
| Inland waters: |  |  |  |  |  |
| Asia. . | 4,169 | 4,266 | 4,385 | 4,169 | 4,357 |
| Africa. | 1,399 | 1,416 | 1,506 | 1,518 | 1,605 |
| USSR. . | 944 | 770 | 771 | 730 | 806 |
| Europe. . . | 282 | 290 | 307 | 295 | 310 |
| South America. | 250 | 224 | 244 | 259 | 246 |
| North and Central America | 147 | 145 | 148 | 154 | 154 |
| Oceania. | 2 | 2 | 3 | 2 | 2 |
| Total. | 7,193 | 7,113 | 7,364 | 7,127 | 7,480 |
| Grand total. . . . . . . | 66,487 | 69,870 | 69,170 | 70,548 | 71,287 |

(1) Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1979, Vol. 48.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY SPECIES GROUPS, 1975-79 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

| Species group | 1975(1) | 1976(1) | 1977(1) | 1978(1) | 1979 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - - - Thousand metric tons - - - - - |  |  |  |  |
|  | Live weight |  |  |  |  |
| Herring, sardines, anchovies, et al. | 13,763 | 15,249 | 12,899 | 14,350 | 15,642 |
| Cods, hakes, haddocks, et al. | 11,858 | 12,130 | 10,595 | 10,409 | 10,589 |
| Jacks, mullets, sauries, et al. | 5,885 | 7,277 | 8,710 | 8,094 | 7,855 |
| Miscellaneous marine and diadromous fishes. . . . . . . | 7,501 | 7,811 | 7,887 | 7,762 | 7,246 |
| Freshwater fishes . . . . | 6,154 | 5,947 | 6,076 | 5,817 | 6,069 |
| Redfish, basses, congers, et a]. | 5,213 | 5,143 | 5,716 | 5,596 | 5,295 |
| Mollusks. . . . . . . | 4,121 | 4,393 | 4,635 | 4,772 | 4,976 |
| Mackerels, snoeks, cutlassfishes, et al. | 4,167 | 3,842 | 4,080 | 4,765 | 4,516 |
| Crustaceans . . | 2,451 | 2,516 | 2,808 | 2,885 | 3,066 |
| Tunas, bonitos, billfishes, et al. | 2,099 | 2,323 | 2,391 | 2,516 | 2,421 |
| Flounders, halibuts, soles, et al. | 1,158 | 1,136 | 1,084 | 1,257 | 1,148 |
| Shads, milkfishes, et al. . | -750 | 1,766 | -768 | 813 | 835 |
| Salmon, trouts, smelts, et al.. | 552 | 556 | 632 | 623 | 750 |
| Sharks, rays, chimaeras, et al. | 595 | 556 | 563 | 590 | 567 |
| River eels. . . . . . . . . . . | 57 | 67 | 70 | 75 | 85 |
| Sturgeons, paddlefishes, et al. | 28 | 31 | 32 | 28 | 29 |
| Miscellaneous . . . . . . . | 134 | 127 | 225 | 194 | 197 |
| Total (2).......... | 66,487 | 69,870 | 69,170 | 70,548 | 71,287 |

## (1) Revised.

(2) May not add to total because of rounding.

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1979, Vol. 48.

DISPOSITION OF WORLD COMMERCIAL CATCH (EXCEPT WHALES AND SEALS), 1974-78


| Country | 1974 | 1975 | 1976 | 1977 | 1978 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - - - - - Thousand U.S. dollars - - - - - - - - |  |  |  |  |
| IMPORTS |  |  |
| Japan. |  |  |  |  |  | 1,050,306 | 1,218,062 | 1,783,926 | 2,295,503 | 3,041,606 |
| United States. | 1,518,599 | 1,381,271 | 1,890,869 | 2,085,845 | 2,225,946 |
| France | 404,968 | 489,030 | 540,895 | 655,111 | 844,410 |
| Federal Republic of Germany. | 513,809 | 490,344 | 535,598 | 666,377 | 766,262 |
| United Kingdom | 446,655 | 434,354 | 512,703 | 556,205 | 692,769 |
| Italy. . . . | 306,239 | 310,673 | 387,828 | 425, 257 | 542,307 |
| Nether lands. | 161,741 | 172,477 | 202,395 | 257,693 | 327,078 |
| Belgium. | 175,245 | 177,762 | 216,264 | 256,479 | 301,277 |
| Hong Kong. | 128,664 | 135,808 | 182,458 | 215,056 | 254,873 |
| Sweden . . | 174,857 | 168,605 | 195,555 | 218,833 | 245,717 |
| Spain. . | 183,097 | 151,707 | 152,572 | 155,762 | 245,679 |
| Denmark. | 118,391 | 115,935 | 132,122 | 175,106 | 221,097 |
| Canada. | 120,135 | 130,812 | 183,618 | 205,755 | 216,414 |
| Switzer land. | 98,319 | 96,103 | 107,977 | 138,551 | 172,983 |
| Australia. . | 105,475 | 100,380 | 90,861 | 122,978 | 137,452 |
| Singapore. | 60,865 | 71,801 | 68,704 | 89,588 | 104,273 |
| Poland | 102,920 | 76,565 | 71,260 | 76,129 | (1) 84,388 |
| Czechoslovakia. | (1) 52,250 | (1) 55,950 | (1)84,879 | (1)73,064 | (1)75,064 |
| Other countries. | 1,141,546 | 1,178,273 | 1,329,616 | 1,373,521 | 1,533,460 |
| Total . | 6,864,081 | 6,955,912 | 8,670,100 | 10,042,813 | 12,033,055 |

EXPORTS

| Canada | 433,360 | 441,928 | 598,796 | 756,595 | 981,222 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| United States. | 252,641 | 298,034 | 371,899 | 508,064 | 897,261 |
| Norway | 517,162 | 515,440 | 654,577 | 840,728 | 756,337 |
| Japan. | 609,112 | 489,958 | 649,373 | 631,357 | 748,786 |
| Denmark. | 439,834 | 426,772 | 586,282 | 628,655 | 727,855 |
| Republic of Korea. | 168,977 | 361,117 | 321,468 | 696,716 | 639,363 |
| Iceland. | 248,275 | 243,530 | 316,760 | 381,064 | 497,650 |
| Nether Tands. | 215,839 | 258,036 | 279,790 | 314,928 | 399,559 |
| United Kingdom | 138,272 | 134,207 | 153,382 | 197,063 | 284,721 |
| Spain. | 208,560 | 181,914 | 244,970 | 236,419 | 281,041 |
| Peru . | 255,911 | 212,586 | 212,868 | 226,043 | (1)252,385 |
| Mexico | 135,650 | 160,557 | 205,200 | 197,055 | 250,676 |
| Thailand | 75,935 | 102,694 | 150,378 | 176,782 | 246,808 |
| USSR . . | 162,058 | 212,159 | 198,448 | 195,198 | 237,221 |
| Federal Republic of Germany. | 157,500 | 139,039 | 181,585 | 230,913 | 235,099 |
| India. . | 95,088 | 132,879 | 192,601 | 205,727 | (1)229,360 |
| France | 109,959 | 110,593 | 136,796 | 150,956 | 214,514 |
| Chile. | 54,349 | 40,295 | 101,126 | 124,285 | 171,339 |
| Other countries. | 1,738,831 | 1,899,110 | 2,368,604 | 2,772,188 | 3,118,896 |
| Total | 6,017,313 | 6,360,848 | 7,924,903 | 9,470,736 | 11,170,093 |

(1) Estimated by FAO.

Note:--Data on imports and exports cover the international trade of 162 countries. Among the countries excluded, only mainland China has significant exports. 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. 0ils 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, 1978, Vol. 47.
(Processed from domestic catch and imported product)



VALUE OF PROCESSED FISHERY PRODUCTS, 1979 AND 1980 (Processed from domestic catch and imported products).

| Item | 1979 |  | 1980 (1) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { dollars }}$ | $\begin{aligned} & \text { Percent } \\ & \text { of total } \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\begin{aligned} & \text { Percent } \\ & \text { of totat } \end{aligned}$ |
| Edible: <br> Fresh and frozen: |  |  |  |  |
|  |  |  |  |  |
| Fillets and steaks, raw. | 260,930 | , 5.8 | 239,525 | 5.1 |
| Fish sticks. . . . . . | 99,790 | ' 2.2 | 88,505 | 1.9 |
| Fish portions. | 429,164 | 9.6 | 399,974 | 8.5 |
| Breaded shrimp | 277,460 | 6.2 | 259,415 | 5.5 |
| Other. . . . . | 1,285,092 | 28.7 | 1,400,000 | 29.9 |
| Total. | $2,352,436$ | $\begin{gathered} 52.5 \\ ==a==== \\ \hline \end{gathered}$ | $\begin{gathered} 2,387,419 \\ ========== \end{gathered}$ | $\begin{gathered} 50.9 \\ ==a x=x==== \end{gathered}$ |
| Canned | 1,601,847 | 35.8 | 1,792,233 | 38.2 |
| Cured. | 112,477 | 2.5 | 118,000 | 2.5 |
| Total edible | 4,066,760 | 90.8 | 4,297,652 | $91.6$ |
| Industrial: |  |  |  |  |
| Bait and animal food (canned). | 150,316 | 3.3 | 124,240 | 2.6 |
| Fish meal, oil, and solubles. | 200,690 | 4.5 | 205,538 | 4.4 |
| Other. . | 61,720 | 1.4 | 65,599 | 1.4 |
| Total industrial | 412,726 | 9.2 | 395,377 | 8.4 |
| Grand total. | 4,479,486 | 100.0 | 4,693,029 | 100.0 |

## (1) Preliminary.

Note:--Includes value of sealskins and the value of imported items that may be further processed in the United States. Value is based on selling price at plant. Includes products made from domestic landings and imported products.


PROCESSED FISHERY PRODUCTS

## FISH FILLETS AND STEAKS

U.S. PRODUCTION OF FRESH AND. FROZEN FILLETS AND STEAKS, BY SPECIES, 1979 AND 1980

| Species | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars |
| Fillets: |  |  |  |  |
| Anglerfish | 2,923 | 3,242 | 1,572 | 1,801 |
| Buffalofish. | 181 | 105 | 229 | 138 |
| Carp | 3,417 | 1,902 | 2,317 | 1,467 |
| Cod. | 32,956 | 44,824 | 30,275 | 41,258 |
| Cusk | 1,506 | 1,977 | 1,346 | 1,562 |
| Flounders. | 47,848 | 87,918 | 46,908 | 84,901 |
| Groupers | 436 | 1,287 | 289 | 966 |
| Haddock. | 19,278 | 33,275 | 17,560 | 29,158 |
| Hake, Atlantic | 1,401 | 1,605 | 988 | 1,158 |
| Halibut. . . . | 62 | 251 | 141 | 354 |
| Herring, sea | 15,714 | 8,842 | 16,987 | 10,134 |
| Lingcod. . . | 913 | 1,094 | 918 | 1,011 |
| Ocean perch: |  |  |  |  |
| Atlantic. | 8,576 | 10,017 | 7,112 | 9,132 |
| Pacific. | 2,140 | 2,454 | 1,797 | 1,863 |
| Pollock, Atlantic. | 10,008 | 8,749 | 8,114 | 8,111 |
| Rockfishes . . . . | 10,783 | 11,259 | 13,275 | 11,655 |
| Sablefish. | 2,111 | 1,682 | 2,099 | 1,700 |
| Salmon : . | 301 | 1,064 | 176 | 574 |
| Snapper, red . | 360 | 1,021 | 337 | 1,214 |
| Span ish mackerel | 590 | , 641 | 394 | 1,548 |
| Whitefish. . . | 599 | 1,343 | 684 | 1,488 |
| Whiting, Atlantic. | 491 | 371 | 591 | 485 |
| Yellow perch | 1,949 | 5,932 | 1,747 | 4,614 |
| Yellow pike. | 911 | 2,574 | 551 | 1,829 |
| Unclassified | 15,726 | 15,973 | 12,161 | 10,662 |
| Total. | 181,180 | 249,402 | 168,568 | 227,783 |
|  |  |  |  |  |
| Cod. . . | 843 | 1,028 | 358 | 370 |
| Halibut. | 1,038 | 2,850 | 2,380 | 5,919 |
| Salmon. - | 2,781 | 5,359 | 1,440 | 3,881 |
| Swordfish. | 269 | 835 | 702 | 1,330 |
| Unclassified | 1,056 | 1,456 | 201 | 242 |
| Total. . | 5,987 | $11,528$ | $5,081$ | $11,742$ |
| Grand total. . | 187,167 | 260,930 | 173,649 | 239,525 |

Note:--The following amounts of frozen fish blocks were produced from the fillets reported above: 4.9 million lb valued at $\$ 4.4$ million in 1979 and $561,000 \mathrm{lb}$ valued at $\$ 820,000$ in 1980. Final data for 1980 will be published in U.S. Production of Fish Fillets and Steaks, Annual Summary, 1980, Current Fishery Statistics No. 8108.

FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP
U.S. PRODUCTION OF FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 1971-80

| Year | Fish sticks |  | Fish portions |  | Breaded shrimp |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dol1ars }}$ |
| 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. | 87,230 | 68,727 | 355,443 | 341,760 | 97,518 | 216,551 |
| 1978. | 94,674 | 86,712 | 389,430 | 415,892 | 110,888 | 258,467 |
| 1979. | 96,050 | *99,790 | *396,089 | *429,164 | 98,993 | *277,460 |
| 1980. | 88,394 | 88,505 | 361,228 | 399,974 | 81,474 | 259,415 |

*Record. Note:--Data for 1971 to 1979 include ail firms reporting annually and quarterly. Data for 1980 include only those firms reporting quarterly. Fish Sticks, Fish Portions, and Breaded. Shrimp Annual Surmary, 1980, Current Fishery Statistics No. 8104 will give additional information.

## CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED FISHERY PRODUCTS, BY SPECIES, 1979 AND 1980

| Species | $\begin{gathered} \text { Pounds } \\ \text { per } \\ \text { case } \end{gathered}$ | 1979 |  |  | 1980 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Standard cases | Thousand pounds | Thousand dollars | Standard cases | Thous and pounds | Thousand dollars |



Shellfish:
Clams:

| Whole and minced (2) 15 | 728,514 | 10,928 | 25,514 | 788,054 | 11,821 | 27,256 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chowder and juice (2) 30 | 2,055,253 | 61,658 | 35,602 | 2,255,484 | 67,665 | 38,759 |
| Specialties. . . . 48 | 111,275 | 5,341 | 5,544 | 153,716 | 7,378 | 8,271 |
| Crabs: |  |  |  |  |  |  |
| Natura]. . . . . . . 19.5 | 242,214 | 4,723 | 23,569 | 237,928 | 4,640 | 23,749 |
| Specialties. . . . . 48 | 6,599 | 317 | 345 | 4,817 | 231 | 271 |
| Oysters: |  |  |  |  |  |  |
| Natural (3). . . . . 7 | 64,351 | 450 | 1,023 | (4) | (4) | (4) |
| Specialties. . . . . 48 | 127,882 | 6,138 | 5,420 | 127,184 | 6,105 | 5,348 |
| Shrimp: |  |  |  |  |  |  |
| Natural (3). . . . . 6.75 | 1,419,881 | 9,584 | 40,089 | 2,397,292 | 16,182 | 71,070 |
| Specialties. . . . . 48 | 24,793 | 1,190 | 940 | 22,884 | 1,098 | + 867 |
| Squid. . . . . . . . . 48 | 84,647 | 4,063 | 1,424 | 86,941 | 4,173 | 1,148 |
| Other. | 47,136 | 2,263 | 2,561 | 120,850 | 2,152 | 3,648 |
| Total shellfish'. | 4,912,545 | 106,655 | 142,031 | 6,195,150 | 121,445 | 180,387 |

Total for human
consumption. . . -- $41,941,151$ 961,134 1,601,847 43,651,299 1,016,190 1,792,233
For bait and animal food:
Animal food. . . . . . . 48
Salmon eggs, et al.. . . 48
Total for bait and animal food. 48

| $\begin{array}{r} 9,988,203 \\ 6,882 \\ \hline \end{array}$ | $\begin{array}{r} 479,434 \\ \quad 330 \\ \hline \end{array}$ | $\begin{array}{r} 146,828 \\ 3,488 \\ \hline \end{array}$ | $\begin{array}{r} 9,328,067 \\ 8,137 \\ \hline \end{array}$ | $\begin{array}{r} 447,747 \\ \hline 391 \\ \hline \end{array}$ | $\begin{array}{r} 123,215 \\ 1,025 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9,995,085 | 479,764 | 150,316 | 9,336,204 | 448,138 | 124,240 |
| = = $=$ |  |  |  |  | = $=$ = $=$ |
| 51,936,236 | ,440,898 | ,752,163 | 52,987,503 | 4,328 | ,916,473 |

[^1]Note:--Final figures will be published in Canned Fishery Products, Annual Summary, 1980 Current Fishery Statistics No. 8101.

## CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED TUNA, 1978-80

| Item | Pounds per case | 1978 |  | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Albacore: |  |  |  |  |  |  |  |
| Solid. | 21 | 5,579 | 239,822 | 4,494 | 193,941 | 4,290 | 201,407 |
| Chunk. | 19.5 | 1,265 | 49,458 | 1,033 | 42,127 | 1,064 | 46,202 |
| Flakes and grated. | 18 | 276 | 7,226 | 278 | 7,783 | 157 | 4,896 |
| Total | -- | 7,120 | 296,506 | 5,805 | 243,851 | 5,511 | 252,505 |
|  |  | ====== | ==ッ= | = $=$ | = $==$ | = $==$ | ======= |
| Lightmeat: |  |  |  |  |  |  |  |
| Solid. . | 21 | 1,690 | 61,676 | 1,341 | 51,522 | 510 | 20,420 |
| Chunk. | 19.5 | 26,436 | 904,523 | 23,957 | 800,488 | 24,475 | 852,233 |
| Flakes and grated. | 18 | 389 | 10,555 | 300 | 7,988 | 378 | 7,692 |
| Total | -- | 28,515 | 976,754 | 25,598 | 859,998 | 25,363 | 880,345 |
| Grand total | -- | 35,635 | 1,273,260 | 31,403 | 1,103,849 | 30,874 | 1,132,850 |

PRODUCTION OF CANNED SHRIMP, BY AREA, 1978-80

| Area | Pounds per case | 1978 |  | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Gulf States. . Pacific States | $\begin{aligned} & 6.75 \\ & 6.75 \end{aligned}$ | $\begin{array}{r} 1,531 \\ 959 \\ \hline \end{array}$ | $\begin{aligned} & 33,563 \\ & 15,231 \\ & \hline \end{aligned}$ | $\begin{aligned} & 900 \\ & 520 \\ & \hline \end{aligned}$ | $\begin{array}{r} 30,148 \\ 9,941 \\ \hline \end{array}$ | $\begin{array}{r} 1,753 \\ \hline 644 \\ \hline \end{array}$ | $\begin{aligned} & 58,725 \\ & 12,345 \\ & \hline \end{aligned}$ |
| Total. | -- | 2,490 | 48,794 | 1,420 | 40,089 | 2,397 | 71,070 |

PRODUCTION OF CANNED SALMON, 1978-80

| Item | $\begin{gathered} \text { Pounds } \\ \text { per } \\ \text { case } \end{gathered}$ | 1978 |  | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Chinook or king. | 48.0 | 19 | 1,655 | 15 | 1,446 | 16 | 1,444 |
| Chum or keta . . | 48.0 | 368 | 21,011 | 144 | 10,057 | 428 | 32,948 |
| Pink . . . | 48.0 | 1,957 | 127,165 | 1,897 | 148,202 | 2,123 | 170,927 |
| Red or sockeye . | 48.0 | 1,041 | 95,914 | 1,037 | 112,598 | 1,579 | 193,029 |
| Silver or coho. | 48.0 | 37 | 2,808 | 33 | 2,881 | 54 | 5,179 |
| Total . . . . . | -- | 3,422 | 248,553 | 3,126 | 275,184 | 4,200 | 403,527 |

PRODUCTION OF CANNED FISHERY PRODUCTS, 1971-80

| Year | Forhuman consumption |  | Foranimal food and bait |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | Thousand pounds | $\frac{\text { Thousand }}{\text { dollars }}$ |
| 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. | 904,498 | 1,220,559 | 660,659 | *197,955 | 1,565,157 | 1,418,514 |
| 1977. | 923,660 | 1,404,534 | 512,683 | 170,155 | 1,436,343 | 1,574,689 |
| 1978. | *1,076,254 | 1,748,068 | 539,234 | 164,959 | 1,615,488 | 1,913,027 |
| 1979. | ,961,134 | 1,601,847 | 479,764 | 150,316 | 1,440,898 | 1,752,163 |
| 1980. | 1,016,190 | *1,792,233 | 448,138 | 124,240 | 1,464,328 | *1,916,473 |

*Record.
U.S. SUPPLY OF CANNED TUNA, 1971-80


## INDUSTRIAL PRODUCTS

PRODUCTION OF FISH MEAL, OIL, AND SOLUBLES, 1979 and 1980

(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, 1980, Current Fisheries Statistics No. 8102.

PRODUCTION OF INDUSTRIAL PRODUCTS, 1971-80

| Year | Quantity |  |  | Value |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fish meal | Fish solubles | Marine animal oil | Fish meal, solubles, and oil | Shell products (1) | Other industrial products | Grand total |
|  | $\frac{\text { Short }}{\text { tons }}$ | $\frac{\text { Short }}{\text { tons }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | - - . . . - Thousand dollars - . . . - - |  |  |  |
| 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. | 282,291 | 122,330 | 133,182 | 139,423 | 6,708 | 44,441 | 190,572 |
| 1978. | 362,910 | 162,543 | 296,287 | 204,211 | 4,465 | 42,247 | 250,923 |
| 1979. | *374,293 | 134,928 | 267,949 | 200,690 | (2) | 58,768 | 259,458 |
| 1980. | 361,922 | 133,682 | *311,599 | *205,538 | (2) | 63,221 | *268,759 |

(1) Beginning in 1971, data include only the value of oyster shell products. Data for marineshell and mussel-shell products are included with "other industrial products." (2) Included with "other industrial products." *Record. Record fish soluble production, 165,359 short tons in 1959; and shell products, $\$ 17.3$ million in 1950.
Note:--Does not include the value of imported items that may be further processed, or the value of sealskins. Table may not add because of rounding.

## FROZEN FISHERY PRODUCTS

U.S. COLD STORAGE HOLDINGS OF FISHERY PRODUCTS, 1980

| Item | $\begin{gathered} \text { January } \\ 1 \end{gathered}$ | March 31 | $\begin{aligned} & \text { June } \\ & 30 \end{aligned}$ | September 30 | December 31 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Blocks: |  |  |  |  |  |
|  |  |  |  |  |  |
| Flounder. | 3,587 | 2,704 | 2,254 | 2,740 | 3,015 |
| Greenland turbot. | 2,032 | 1,354 | 716 | 1,259 | 1,276 |
| Haddock | 885 | 510 | 3,297 | 7,965 | 9,354 |
| Ocean perch | 3,024 | 1,870 | 1,225 | 1,141 | 1,988 |
| Pollock (Alaska and other). | 13,971 | 8,719 | 4,052 | 5,457 | 4,808 |
| Whiting | 7,302 | 7,077 | 7,638 | 7,919 | 5,861 |
| Minced (grated) all species | 4,376 | 3,856 | 3,351 | 4,326 | 4,369 |
| Unclassified. . . . . . . | 2,575 | 2,927 | 4,167 | 5,841 | 4,941 |
| Total blocks | 62,500 | 44,326 | 42,720 | 57,643 | 46,740 |
| Fillets and steaks: |  |  |  |  |  |
| Cod . . . | 23,971 | 20,377 | 26,107 | 26,016 | 19,652 |
| Flounder. | 12,707 | 10,776 | 7,577 | 9,342 | 12,495 |
| Greenland turbot. | 9,101 | 4,736 | 2,044 | 4,029 | 3,383 |
| Haddock | 4,356 | 3,608 | 5,535 | 6,743 | 7,678 |
| Halibut | 1,993 | 2,187 | 2,574 | 2,735 | 2,029 |
| Ocean perch | 19,373 | 15,837 | 8,835 | 8,903 | 8,704 |
| Whiting | 3,719 | 2,759 | 2,605 | 2,510 | 2,588 |
| Unclassified. | 36,214 | 34,956 | 23,415 | 28,317 | 31,488 |
| Total fillets and steaks | 111,434 | 95,236 | 78,692 | 88,595 | 88,017 |
| Fish sticks and portions (cooked and uncooked, all species) . . | 41,719 | 36,091 | 43,581 | 28,653 | 31,973 |
| Round, dressed, etc: |  |  |  |  |  |
| Catfish | 1,765 | 2,196 | 3,201 | 2,351 | 3,560 |
| Halibut | 8,500 | 4,955 | 10,288 | 8,932 | 5,742 |
| Rainbow trout | 1,988 | 1,802 | 1,919 | 1,958 | 1,867 |
| Salmon. | 36,653 | 24,803 | 10,125 | 37,287 | 26,526 |
| Whiting . - | 2,502 | 2,222 | 1,349 | 1,133 | 900 |
| Unclassified fish | 21,637 | 21,168 | 23,104 | 23,959 | 25,273 |
| Crabs: |  |  |  |  |  |
| King. | 34,063 | 29,050 | 11,595 | 11,311 | 37,768 |
| Snow. . | 11,222 | 9,860 | 13,944 | 10,496 | 6,448 |
| Unclassified. | 7,659 | 7,275 | 4,532 | 3,910 | 4,855 |
| Lobsters (spiny and other). | 8,050 | 7,445 | 7,274 | 7,982 | 7,571 |
| Shrimp: |  |  |  |  |  |
| Raw, headless | 46,866 | 41,248 | 17,735 | 23,118 | 31,612 |
| Breaded . . | 6,838 | 6,196 | 4,784 | 5,533 | 6,360 |
| Peeled. . | 20,101 | 18,859 | 13,914 | 16,876 | 19,111 |
| Unclassified. | 13,638 | 12,338 | 11,812 | 10,976 | 20,595 |
| Total shrimp . | 87,443 | 78,641 | 48,245 | 56,503 | 77,678 |
| Other shellfish | 23,000 | 20,782 | 20,565 | 20,233 |  |
| Bait and animal food. | 11,054 | 13,444 | 12,572 | 17,637 | 8,345 |
| Total fish and shellfish. | 471,189 | 399,296 | 333,706 | 378,583 | 393,264 |

Note:--Holdings of frozen fishery products include domestic and imported frozen fish and shellfish.
Source:--Final figures will be published in Frozen Fishery Products, Annual Summary, 1980, Current Fishery Statistics No. 8106.

## FOREIGN TRADE

## U.S. IMPORTS



## U.S. IMPORTS

IMPORTS OF EDIBLE AND NONEDIBLE FISHERY PRODUCTS, 1971-80

|  | Year | Edible |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | - - Thousand dollars - - - |  |
| 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. | -• | 2,177,010 | 2,078,492 | 543,699 | 2,622,191 |
| 1978. | . . . | 2,410,512 | 2,253,142 | 823,422 | 3,076,564 |
| 1979. |  | 2,369,373 | 2,668,396 | *1,142,656 | *3,811,052 |
| 1980. | - • • | 2,144,332 | *2,682,284 | 965,798 | 3,648,082 |

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

IMPORTS OF FISHERY PRODUCTS: VALUE, DUTIES COLLECTED, AND AD VALOREM EQUIVALENT, 1971-80

| Year | Value |  | Duties collected |  | Average ad valorem equivalent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fishery imports | All <br> imports | Fishery imports | $\begin{gathered} \text { All } \\ \text { imports } \end{gathered}$ | Fishery imports | $\begin{gathered} \text { Al1 } \\ \text { imports } \end{gathered}$ |
|  | - - - - Thousand dollars - . - - - |  |  |  | Percent |  |
| 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 | 1.9 | 3.9 |
| 1977. | 2,622,191 | 147,075,300 | 58,252 | 5,484,800. | 2.2 | 3.7 |
| 1978. | 3,076,564 | 172,952,200 | 88,240 | 7,161,500 | 2.9 | 4.1 |
| 1979. | 3,811,052 | 205,922,662 | 116,617 | 7,202,174 | 3.1 | 3.5 |
| 1980. | 3,648,082 | 239,943,468 | 87,389 | 7,535,421 | 2.4 | 3.1 |

(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, 1979 AND 1980

| Item | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Edible fishery products: Fresh and frozen: |  |  |  |  |
|  |  |  |  |  |
| Groundfish. . | 252,957 | 284,953 | 220,954 | 256,846 |
| Other . . . | 174,569 | 185,418 | 148,207 | 158,405 |
| Total . | 427,526 | 470,371 | 369,161 | 415,251 |
| Blocks and slabs. | 408,152 | 337,365 | 336,117 | 288,914 |
| Halibut . . . . . . . . . . | 4,119 | 7,407 | 6,338 | 9,326 |
| Salmon. . . . . . . . . . . | 5,022 | 11,390 | 5,533 | 13,887 |
| Tuna: |  |  |  |  |
| Albacore. | 212,517 | 144,553 | 164,980 | 148,441 |
| Other . . . . | 535,262 | 171,307 | 554,020 | 275,488 |
| Loins and discs | 5,842 | 5,706 | 3,686 | 5,343 |
| Crabmeat. . . . . . . . | 2,784 | 9,807 | 3,302 | 10,410 |
| Scallops (meats). . . . . | 25,155 | 84,906 | 20,885 | 82,002 |
| Lobsters: |  |  |  |  |
| American (includes |  |  |  |  |
| fresh-cooked meat) | 16,262 | 39,047 | 14,375 | 40,479 |
| Spiny . . . . . . . . . | 44,417 | 259,421 | 36,157 | 230,152 |
| Shrimp. . . . . . . . . . . | 220,216 | 705,008 | 215,083 | 711,200 |
| Other . | 182,350 | 100,706 | 138,213 | 89,279 |
| Canned: |  |  |  |  |
| Herring, not in oil | 7,077 | 9,481 | 5,577 | 8,615 |
| Salmon. . | 434 | 800 | 167 | 454 |
| Sardines: |  |  |  |  |
| In oil. . | 22,878 | 27,679 | 18,218 | 24,226 |
| Not in oil. | 26,878 | 16,299 | 32,960 | 19,834 |
| Tuna: . 743 |  |  |  |  |
| In oil. . ${ }^{\text {. }}$ | 627 | 743 | 446 | 569 |
| Not in oil. | 53,076 | 64,328 | 63,107 | 96,685 |
| Bonito and yellowtail: 300 |  |  |  |  |
| In oil. . . . . . | 300 | 224 | 531 | 311 |
| Not in oil. | 71 | 67 | 273 | 313 |
| Abalone . | 4,282 | 15,035 | 3,012 | 15,363 |
| Clams.. | 5,967 | 7,427 | 5,531 | 6,851 |
| Crabmeat. . | 5,073 | 12,329 | 5,002 | 12,503 |
| Lobsters: . .... |  |  |  |  |
| American. | 1,790 | 10,912 | 2,090 | 12,529 |
| Spiny. | 135 | 743 | 88 | 314 |
| Oysters | 19,075 | 18,320 | 16,989 | 20,263 |
| Shrimp. | 4,288 | 8,230 | 4,225 | 8,063 |
| Other. | 56,306 | 58,639 | 54,054 | 70,409 |
| Cured:Pickled or salted: |  |  |  |  |
|  |  |  |  |  |
| Cod, haddock, hake, etc.. | 39,683 | 43,293 | 33,015 | 35,992 |
| Herring . | 17,218 | 9,433 | 16,727 | 10,388 |
| Other . . . . ${ }^{\text {a }}$ | 7,851 | 12,594 | 7,806 | 13,139 |
| Other fish and shellfish. | 6,740 | 4,826 | 6,664 | 5,291 |
| Total edible fishery products | 2,369,373 | 2,668,396 | 2,144,332 | 2,682,284 |
| Nonedible fishery products: |  |  |  |  |
| Scrap and meal. . . . . . | 179,226 | 29,616 | 99,074 | 15,530 |
| Solubles. . | 207 | , 24 | 104 | 13 |
| other ${ }^{\text {a }}$, | - | 1,113,016 | - | 950,255 |
| Total nonedible fishery products . . . . . . . |  | 1,142,656 | - | $965,798$ |
| Grand total . . . . . . . | - | 3,811,052 | - | 3,648,082 |

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

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

## U.S. IMPORTS

IMPORTS OF EDIBLE AND NONEDIBLE FISHERY PRODUCTS, 1980

| Continent and country | Edible |  | Nonedible | Tota 1 |
| :---: | :---: | :---: | :---: | :---: |
| Thousand |  |  |  |  |
|  | pounds | - - - - | ousand dol | - - |
| North America: |  |  |  |  |
| Mexico. | 101,759 | 351,829 | 11,233 | 363,062 |
| Panama | 52,919 | 70,901 | 7,246 | 78,147 |
| Nicaragua. | 7,723 | 30,615 | 7 | 30,622 |
| Honduras. | 6,809 | 25,341 | 6 | 25,347 |
| El Salvador. | 6,452 | 18,715 | 22 | 18,737 |
| Other. . . . | 60,868 | 75,663 | 6,878 | 82,541 |
| Total | = $7118 \pm 007$ | $1.133,678$ | 65,460 | 99.138 |
| South America: |  |  |  |  |
| Brazil . | 46,780 | 85,824 | 3,936 | 89,760 |
| Ecuador. | 48,942 | 81,423 | 67 | 81,490 |
| Peru . | 42,537 | 19,392 | 12,524 | 31,916 |
| Argentina. | 25,442 | 17,051 | 9,770 | 26,821 |
| Venezuela. | 13,707 | 21,556 | 55 | 21,611 |
| Other. .. | 45,109 | 74,145 | 16,601 | 90,746 |
| Total | $===2225=217$ | $29.993=29$ | 42, 2953 | 3422 |
| Europe: |  |  |  |  |
| European Economic Community: |  |  |  |  |
| Italy. . . . . . . . . | 635 | 723 | 287,647 | 288,370 |
| France . . . | 24,499 | 11,211 | 47,791 | 59,002 |
| Federal Republic of |  |  |  |  |
| Germany . . . . . | 1,285 | 1,556 | 51,912 | 53,468 |
| United Kingdom | 8,435 | 16,480 | 35,893 | 52,373 |
| Other. . . . | 35,408 | 46,290 | 15,985 | 62,275 |
| Total . | $===302262$ | 76,260 | 4392 2228 | 515,488 |
| Other: |  |  |  |  |
| Iceland. | 164,101 | 194,689 | 464 | 195,153 |
| Norway . . - | 48,684 | 66,554 | 3,470 | 70,024 |
| SwitzerTand. | 65 | 91 | 64,111 | 64,202 |
| Spain. . . . | 20,537 | 20,410 | 15,273 | 35,683 |
| Other. | 27,527 | 28,369 | 18,346 | 46,715 |
| Total | 2602914 | 3102113 | 101,664 | 41112777 |
| Asia: |  |  |  |  |
| Japan. - | 246,086 | 206,926 | 104,907 | 311,833 |
| Hong Kong. . | 9,922 | 12,773 | 97,859 | 110,632 |
| China, Taiwan. | 59,601 | 68,694 | 14,342 | 83,036 |
| Republic of Korea. | 83,482 | 63,401 | 6,482 | 69,883 |
| Republic of Philippines. | 80,269 | 58,186 | 11,176 | 69,362 |
| Other. . . . . | 225,143 | 216,481 | 72,759 | 289,240 |
| Total | $== \pm=704.503$ | 626,461 | 307 $=25$ | =933 2988 |
| Australia and Oceania: |  |  |  |  |
| Australia. . . | 12,562 | 91,168 | 1,561 | 92,729 |
| New Zealand. . . | 8,813 | 23,317 | 754 | 24,071 |
| British Pacific Islands. | 31,360 | 22,085 | - | 22,085 |
| Papua New Guinea . | 40,722 | 19,647 | - | 19,647 |
| Other. : $\cdot$. | 8,123 | 6,864 | 1,421 | 8,285 |
| Total. | $===101,550$ | 163081 | - $=2$ | 1662817 |
| Africa: |  |  |  |  |
| Republic of South Africa | 31,268 | 48,014 | 2,608 | 50,622 |
| Mauritius. . | 5,763 | 5,832 | 9 | 5,841 |
|  | 12,884 | 5,186 | 9 | 5,195 |
| French Indian Ocean Areas. | 7,112 | 4,634 | - | 4,634 |
| Other . . . ${ }^{\text {a }}$ • • | - 9,522 | 9,634 | 2,606 | 12,240 |
| Total . | $===662549$ | $=7330200$ | = 5 , 2 232 | 78.532 |
| Grand total . . . | 2,144,332 | 2,682,284 | 965,798 | ,648,082 |

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

IMPORTS OF REGULAR AND MINCED FISH BLOCKS AND SLABS, BY SPECIES AND TYPE, 1979 AND 1980

| Species and type | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand: | Thousand |
|  | pounds | dollars | pounds | dollars |
| Regular blocks and slabs: |  |  |  |  |
| Flatfish: |  |  |  |  |
| Turbot. | 5,361 | 3,791 | 5,348 | 3,336 |
| Other | 12,594 | 16,385 | 8,048 | 9,295 |
| Haddock | 18,308 | 18,439 | 31,281 | 36,155 |
| Ocean Perch, Atlantic | 5,120 | 4,216 | 3,901 | 2,968 |
| Pollock | 86,583 | 53,631 | 62,665 | 38,954 |
| Whiting | 54,287 | 35,320 | 36,867 | 25;502 |
| Other . | 11,284 | 8,460 | 6,563 | 5,358 |
| Total | 386,491 | 327,292 | 315,091 | 278,282 |
| Minced blocks and slabs: (1). | 21,661 | 10,073 | 21,026 | 10,632 |
| Grand total . | 408,152 | 337,365 | 336,117 | 288,914 |

(1) Most of the shipments were from Canada, Iceland, and Argentina.

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

IMPORTS OF• REGULAR AND MINCED FISH BLOCKS AND SLABS, BY COUNTRY OF ORIGIN, 1979 AND 1980


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

IMPORTS OF GROUNDFISH FILLETS AND STEAKS, BY SPECIES, 1979 AND 1980 (1)

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

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

## U.S. IMPORTS

UNDER-QUOTA AND OVER-QUOTA IMPORTS OF GROUNDFISH FILLETS AND STEAKS, 1971-80 (1)

| Year | Imports |  |  |
| :---: | :---: | :---: | :---: |
|  | Under-quota (2) | Over-quota (3) | Total |
|  | - - - - - - Thousand pounds - - - - - - - |  |  |
| 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 | 181,986 | 217,423 |
| 1978. | 39,025 | 194,074 | 233,099 |
| 1979. | 42,744 | 210,213 | 252,957 |
| 1980. | 45,241 | 181,004 | 226,245 |

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

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


QUOTA AND IMPORTS OF CANNED TUNA NOT IN OIL, 1971-80

| Year | Quota <br> (1) | Imports |  |
| :---: | :---: | :---: | :---: |
|  |  | Under quota (2) | Over quota (3) |
|  | - - - - - Thousand pounds - - - - - - |  |  |
| 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 | - |
| 1978. | 101,407 | 50,031 | - |
| 1979. | 125,813 | 82,202 | 50 |
| 1980.. . . | 109,074 | 109,074 | 5,030 |

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

1970, 8.5 percent; 1971, 7 percent; and in 1972 to 1980, 6 percent.
(3) Dutiable in 1970 at 17 percent ad valorem; 1971, 15 percent; and 1972 to 1980, 12.5 percent ad valorem.

Note:--Data in this table will not agree with tuna import data released by the U.S. Department of Commerce, Bureau of the Census. Any tuna entered for consumption or withdraw from a warehouse for consumption during the calendar year is subject to this quota. Data include tuna imported from American Samoa and are counted towards the quota.

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

IMPORTS OF SHRIMP, BY COUNTRY OF ORIGIN, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand | Thousand |
| North America: | pounds | dollars | pounds | dollars |
| Mexico. | 71,891 | 294,615 | 76,062 | 316,842 |
| Panama. | 12,199 | 49,799 | 13,727 | 46,205 |
| Nicaragua | 5,397 | 17,771 | 5,624 | 20,835 |
| El Salvador | 6,271 | 19,489 | 6,233 | 18,139 |
| Honduras. | 3,127 | 12,078 | 4,637 | 15,228 |
| Guatemala | 3,569 | 13,179 | 3,608 | 12,143 |
| Costa Rica. | 2,193 | 4,503 | 2,459 | 6,092 |
| Canada. | 1,146 | 3,450 | 2,356 | 5,463 |
| Bahamas | - 8 | 46 | -832 | 2,046 |
| Greenland | 795 | 1,445 | 716 | 1,223 |
| Trinidad. | 265 | 1,074 | 393 | 1,131 |
| Other | 229 | 862 | 488 | 1,248 |
| Total. . . . . . . . . . | $=10=7=2090$ | 418, 3111 | $117,135$ | 446, 595 $=$ |
|  |  |  |  |  |
| Ecuador . . . . . . : | 13,703 | 54,483 | 20,195 | 68,081 |
| Brazil. | 9,681 | 27,454 | 8,768 | 20,317 |
| Guyana. . | 3,734 | 7,636 | 5,281 | 16,394 |
| Venezueta | 2,345 | 10,490 | 3,874 | 15,993 |
| French Guiana | 3,598 | 7,260 | 4,194 | 14,594 |
| Colombia. - | 4,147 | 15,616 | 3,282 | 13,294 |
| Surinam. | 1,471 | 5,101 | , 935 | 4,038 |
| Peru. | 782 | 1,984 | 1,475 | 3,999 |
| Chite. | 243 | 901 | 54 | 181 |
| Argentina . | 59 | 171 | 16 | 23 |
| Total. | 39.763 | 1312096 | 48.2074 | $15 \underline{15} 219$ |
| Europe: |  |  |  |  |
| United Kingdom. . . . . . | 311 | 1,079 | 1,651 | 4,049 |
| Belgjum and Luxembourg. | 27 | 65 | 316 | 658 |
| Nether lands . . . . . . | 330 | 669 | 274 | 600 |
| Federal Republic of Germany | 103 | 268 | 37 | 167 |
| Denmark . . . . . . . . . . | 262 | 410 | 1 | 2 |
| Other | 38 | 111 | 2 | 2 |
| Total. | = $===12071$ | $22_{2} 602$ | 2281 | 52478 |
|  |  |  |  |  |
| Norway. | 369 | 1,307 | 1,598 | 6,288 |
| Spain . - | 275 | 1,938 | 547 | 2,277 |
| Iceland. | 18 | 51 | 64 | 288 |
| Sweden. | 100 | 407 | 67 | 245 |
| Austria | 15 | 31 | 19 | 73 |
| Other . | 20 | 10 | 41 | 68 |
| Total. | 797 | 32744 | 22336 | =92239 |
|  |  |  |  |  |
| India . - | 30,785 | 48,212 | 12,999 | 20,898 |
| Thailand. | 10,620 | 22,065 | 8,841 | 16,586 |
| China, Taiwan | 7,934 | 14,312 | 5,427 | 9,754 |
| Indonesia . . | 5,523 | 11,209 | 4,579 | 8,840 |
| Pakistan. | 1,024 | 1,819 | 3,358 | 5,264 |
| Hong Kong | 5,349 | 16,307 | 1,975 | 4,662 |
| Sri Lanka (Ceylon). | 1,320 | 3,092. | 1,670 | 4,520 |
| China, Peking . . . | 2,989 | 14,904 | 934 | 3,437 |
| Malaysia. . - | 1,727 | 2,562 | 2,010 | 3,433 |
| Bangladesh. | 2,694 | 7,688 | 930 | 2,847 |
| Burma . . . | 494 | 1,690 | 616 | 2,268 |
| Republic of Philippines | 1,294 | 2,709 | 580 | 1,267 |
| Other . | 1,489 | 2;764 | 2,139 | 5,870 |
| Total. | $===732242$ | 1492333 | 462058 | 89.646 |
| Australia and Oceania | = = = $=121173$ | $={ }^{5} 2568$ | $===12530$ | $=\underline{-2}_{2} \underline{69}=$ |
| Africa. . | $====12368$ | 2, 588 | 12894 | 4 4.2699 |
| Grand total. . . . . . . | 224,504 | 713,238 | 219,308 | 719,263 |

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

## U.S. IMPORTS

IMPORTS OF SHRIMP, BY TYPE OF PRODUCT, 1979 AND 1980

| Type of product | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| Shell-on (heads off). | 123,447 | 469,857 | 138,750 | 519,217 |
| Peeled: <br> Canned |  |  |  |  |
| Not breaded: | 4,288 | 8,230 | 4,225 | 8,063 |
| Raw . . . | 86,069 | 212,474 | 66,270 | 170,459 |
| Other . | 10,214 | 21,610 | 9,891 | 21,129 |
| Breaded . | 486 | 1,067 | 172 | 395 |
| Total. | 224,504 | 713,238 | 219,308 | 719,263 |

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

IMPORTS OF FISH MEAL AND SCRAP, BY COUNTRY OF ORIGIN, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Short | Thousand | Short | Thousand |
|  | tons | dollars | tons | dollars |
| Canada. | 27,230 | 8,312 | 24,203 | 7,324 |
| Panama. . | 13,179 | 4,599 | 18,054 | 5,810 |
| Peru. . . | 28,243 | 9,418 | 6,622 | 2,163 |
| Mique 7 on. | 323 | 118 | 389 | 127 |
| USSR. . | - | - | 231 | 87 |
| Norway. . | 11,773 | 4,355 | 25 | 17 |
| Chile. | 8,266 | 2,575 | - | - |
| France. . | 578 | 216 | - | - |
| Argentina . | 20 | 13 | . - |  |
| Other . . | 1 | 10 | 13 | 2 |
| Total. | 89,613 | 29,616 | 49,537 | 15,530 |

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


## U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, BY PRINCIPAL ITEMS, 1979 AND 1980

| Item | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Edible fishery products: <br> Fresh and frozen: <br> Whole or eviscerated: |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Salmon. . . . . . . | 140,160 | 302,324 | 122,112 | 198,397 |
| Other . | 104,941 | 91,650 | 143,672 | 91,703 |
| Fillets: |  |  |  |  |
| Salmon. | 4,205 | 9,270 | 3,353 | 8,674 |
| Other . . . . . . | 46,559 | 35,720 | 46,657 | 41,866 |
| Fish sticks and portions. | 896 | 1,453 | 975 | 1,334 |
| Shellfish: |  |  |  |  |
| Shrimp. . | 28,934 | 87,391 | 15,913 | 48,928 |
| King crab | 36,219 | 96,346 | 28,871 | 76,409 |
| Snow crab | 42,978 | 70,296 | 33,742 | 49,825 |
| Other . . | 37,759 | 52,519 | 33,207 | 52,585 |
| Canned fish and shellfish: |  |  |  |  |
| Mackere 1. . . . . | 8,357 | 11,142 | 10,362 | 13,764 |
| Salmon. . | 50,719 | 91,917 | 74,006 | 149,971 |
| Sardines. | 1,590 | 1,180 | 1,839 | 1,371 |
| Shrimp. . | 5,469 | 12,391 | 5,832 | 17,207 |
| King crab | 866 | 3,898 | 373 | 2,179 |
| Squid . | 8,382 | 2,447 | 8,473 | 2,327 |
| Other | 2,581 | 7,322 | 2,964 | 6,793 |
| Cured . | 10,441 | 15,326 | 13,478 | 17,482 |
| Fish roe. . . . . . | 21,010 | 123,551 | 26,556 | 120,032 |
| Other fish and shellfish. | 1,513 | 4,061 | 1,511 | 3,516 |
| Total edible fishery products | 553,579 | 1,020,204 | 573,896 | 904,363 |
| Nonedible fishery products: |  |  |  |  |
| Fish meal . | 31,402 | 5,526 | 170,562 | 29,137 |
| Fish oils. | 198,497 | 39,571 | 284,009 | 52,395 |
| Seal furs | (1) | 2,450 | (1) | 1,897 |
| Other | - | 14,615 | - | 18,362 |
| Total nonedible fishery products | - | 62,162 | - | 101,791 |
| Grand total . . . | - | 1,082,366 | - | 1,006,154 |

(1) Number of seal furs was 23,422 in 1979 and 21,604 in 1980.

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

EXPORTS OF DOMESTIC FISHERY PRODUCTS, 1971-80

| Year | Edible |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | - - - - | ousand dol | - |
| 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 |
| 1978. | 448,311 | 831,654 | 73,880 | 905,534 |
| 1979. | 553,579. | *1,020,204 | 62,162 | *1,082,366 |
| 1980. | *573,896 | 904,363 | *101,791 | 1,006,154 |

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

## U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1980

| Country | Edible |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | ---- | ousand doll | --- |
| North America: |  |  |  |  |
| Canada. . | 118,486 | 144,255 | 2,610 | 146,865 |
| Mexico. . . . . . . | 8,556 | 15,748 | 789 | 16,537 |
| Netherlands Antilles. . . . . | 1,776 | 3,385 | 8 | 3,393 |
| Bermuda . . . . . . . . . | 1,733 | 2,873 | 28 | 2,901 |
| Dominican Republic. | ${ }_{912}$ | +854 | 640 | 1,494 |
| Bahamas . . . . . . . . . | 971 | 1,345 | 33 | 1,378 |
| Panama. | 742 | 872 | 59 | 931 |
| British Virgin Islands. . | 566 | 569 | 4 | 573 |
| Trinidad. ${ }^{\text {French We }}$. . - | 290 | 489 | ${ }^{4}$ | 493 |
| French West Indies. | 374 | 381 | 10 | 391 |
| Jamaica İ. ${ }^{\text {Cayman }}$ Is. . | 245 101 | 345 274 | 8 | 351 282 |
| Guatemala . | 333 | 264 | 7 | 271 |
| Costa Rica. | 64 | 51 | 167 | 218 |
| Barbados. . | 104 | 171 | 13 | 184 |
| Honduras. | 67 | 76 | 20 | 96 |
| Haiti . | 89 | 67 | - | 67 |
| Belize. . | 21 | 52 | - | 52 |
| Nicaragua . | 54 | 42 | - | 42 |
| Turks and Caicos Islands. | 6 | 5 | - | 5 |
| El Salvador . . : | 2 | 4 | - | 4 |
| Total. | 135.392 | $172=122$ | $42406=$ | 176, $5=2$ |
| South America: |  |  |  |  |
| Venezuela. | 11,887 | 7,881 | 81 | 7,962 |
| Peru. . | 55 | 37 | 5,244 | 5,281 |
| Colombia. . | 162 | 334 | 827 | 1,161 |
| Argentina . | 1 | 3 | 137 | 140 |
| Surinam. | 99 | 95 | 4 | 99 |
| Brazil. . | 21 | 86 | 10 | 96 |
| Chile . . | 34 | 57 | 33 | 90 |
| Ecuador . . . . . | 1 | 3 | 44 | 47 |
| Uruguay . . . . . | 6 | 12 | - | 12 |
| Bolivia . | 7 | 9 | - | 9 |
| Paraguay... | 9 | 8 |  | 8 |
| Total . . . . | $=-12,282$ | $82 \underline{525}=$ | 6, 3 380 $=$ | 14.905 |
| Europe: |  |  |  |  |
| European Economic Conmunity: |  |  |  |  |
| United Kingdom. . . . . . | 44,178 | 88,403 | 15,899 | 104,302 |
| France. . . . - | 29,899 | 52,085 | 727 | 52,812 |
| Nether lands . . . | 12,369 | 26,103 | 19,700 | 45;803 |
| Federal Republic of Germany | 20,272 | 19,474 | 24,503 | 43,977 |
| Belgium and Luxembourg. | 12,359 | 21,298 | 4,646 | 25,944 |
| Italy . . . . | 5,170 | 9,671 | 4,710 | 14,381 |
| Denmark . | 2,638 | 4,110 | 100 | 4,210 |
| Ireland | 544 | 957 | - | 957 |
| Total. | $=-127=2429$ | $222=2101$ | $702285=$ | 292.386 |
| Other: |  |  |  |  |
| Sweden. . | 7,781 | 13,155 | 1,773 | 14,928 |
| Spain (1). | 3,363 | 3,478 | 2,119 | 5,597 |
| Greece. . . . . . | 9,589 | 5,189 | 26 | 5,215 |
| Switzer land . . . . . . . | 887 | 2,259 | 641 | 2,900 |
| See footnotes at end of table. |  | ntinued) |  |  |

## U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1980 - Continued


See footnotes at end of table.
(Continued)

## U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1980 - Continued

| Country | Edibla |  | Nonedible ${ }^{\text {a }}$ | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | ---- | ousand doll | --- |
| Africa: |  |  |  |  |
| Egypt - - - - . . . | 3,979 | 1,472 | 3,875 | 5,347 |
| Republic of South Africa. | 1,615 | 2,937 | 64 | 3,001 |
| Canary Islands (3). . . | 951 | 1,053 | - | 1,053 |
| Nigeria . . . . | 2,356 | 822 | 118 | 940 |
| Madeira Islands | 106 | 120 | - | 120 |
| Guinea. . | 50 | 81 | - | 81 |
| Libya. | 31 | 74 | - | 74 |
| Zaire . | 9 | 30 | - | 30 |
| Liberia. | 6 | 23 | - | 23 |
| Mauritius . . . ${ }^{\text {a }}$ | 8 | 16 | 6 | 22 |
| Congo (Brazzaville) | - | - | 13 | 13 |
| Ghana . . . . . | 5 | 10 | - | 10 |
| Algeria. . . | 2 | 5 | - | 5 |
| Sierra Leone. | 2 | 5 | - | 5 |
| Rhodesia. | 3 | 3 | - | 3 |
| Senegal. | 1 | 1 | - | 1 |
|  |  |  |  |  |
| Grand total. | 573,896 | 904,363 | 101,791 | 1,006,154 |

(1) Does not include Canary Islands, a province of Spain.
(2) Less than 500 lb .
(3) A province of Spain.

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

VALUE OF U.S. EXPORTS OF DOMESTIC FISHERY PRODUCTS, 1971-80


## U.S. EXPORTS

EXPORTS OF DOMESTIC AND FOREIGN SHRIMP PRODUCTS, 1979 AND 1980

| Item | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| Fresh and frozen: Domestic . . . | 28,934 | 87,391 | 15,913 | 48,928 |
| Foreign. . | 5,826 | 21,866 | 9,566 | 33,997 |
| Total . | 34,760 | 109,257 | 25,479 | 82,925 |
| Canned: |  |  |  |  |
| Domestic . | 5,469 | 12,391 | 5,832 | 17,207 |
| Foreign. . | 25 | 45 | 371 | 679 |
| Total . | 5,494 | 12,436 | 6,203 | 17,886 |
| Total: |  |  |  |  |
| Domestic | 34,403 | 99,782 | 21,745 | 66,135 |
| Foreign. | 5,851 | 21,911 | 9,937 | 34,676 |
| Total. | 40,254 | 121,693 | 31,682 | 100,811 |

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

EXPORTS OF DOMESTIC FRESH AND FROZEN SHRIMP, BY COUNTRY OF DESTINATION, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Canada | 11,176 | 29,251 | 8,016 | 23,403 |
| Japan. | 3,953 | 16,624 | 2,841 | 11,670 |
| Mexico . . . | 10,629 | 33,194 | 3,723 | 10,416 |
| Saudi Arabia | - 56 | 161 | 106 | 450 |
| Nether lands. | 561 | 856 | 180 | 346 |
| New Zealand. | 231 | 610 | 62 | 262 |
| Sweden . . | 646 | 1,940 | 32 | 135 |
| Hong Kong. | 291 | 489 | 62 | 60 |
| Australia. | 185 | 500 | 5 | 22 |
| Norway . | 214 | 753 | 5 | 8 |
| Other. . . | 992 | 3,013 | 881 | 2,1,56 |
| Total. | 28,934 | 87,391 | 15,913 | 48,928 |

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

EXPORTS OF DOMESTIC CANNED SHRIMP, BY COUNTRY OF DESTINATION, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thous and }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| Canada | 4,127 | 8,972 | 4,282 | 12,771 |
| United Kingdom | 145 | 316 | 394 | 1,078 |
| Switzer land. . | 264 | 730 | 288 | 942 |
| Thailand. . | 19 | 34 | 196 | 396 |
| New Zealand. | 145 | 360 | 105 | 358 |
| Sweden . . . | 287 | 735 | 117 | 328 |
| Japan. . . . . . . . . . . | 209 | 497 | 51 | 116 |
| Federal Republic of Germany. | 47 | 128 | 19 | 37 |
| France . . . . . . . . . . | 50 | 166 | - | - |
| Other. . | 176 | 453 | 380 | 1,181 |
| Total. | 5,469 | 12,391 | 5,832 | 17,207 |

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, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Thousand | Thousand | Thousand |
|  | pounds | dollars | pounds | dollars |
| Japan | 93,458 | 191,803 | 67,332 | 105,576 |
| France. | 17,123 | 48,448 | 13,931 | 30,533 |
| Canada. | 6,445 | 9,264 | 19,255 | 20,288 |
| United Kingdom. | 6,497 | 13,941 | 5,740 | 9,898 |
| Sweden. . . . . | 5,972 | 9,421 | 4,913 | 7,793 |
| Belgium and Luxembourg. . | 2,747 | 8,222 | 2,439 | 5,632 |
| Federal Republic of Germany | 2,700 | 7,746 | 2,024 | 5,267 |
| Nether lands . . . . . . | 1,637 | 4,553 | 1,493 | 3,744 |
| Italy . . . | , 812 | 2,783 | -927 | 3,369 |
| Denmark . . . . . | 1,443 | 2,909 | 1,228 | 2,307 |
| Republic of Korea. | 409 | 886 | 1,717 | 1,649 |
| Switzer land . . . | 125 | 352 | 106 | 263 |
| Other . . . . . . . | 792 | 1,996 | 1,007 | 2,078 |
| Total. . . . . . . . | 140,160 | 302,324 | 122,112 | 198,397 |

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, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| France. | 763 | 2,541 | 709 | 2,443 |
| Canada. | 786 | 1,280 | 896 | 1,442 |
| Italy . | 2 | 3 | 220 | 951 |
| Japan . . . . . . . . . | 1,820 | 3,742 | 294 | 937 |
| Federal Republic of Germany | 285 | 849 | 261 | 925 |
| Sweden. . . . . . . . . . . | 179 | 249 | 249 | 476 |
| United Kingdom. . . . . | 105 | 109 | 187 | 427 |
| Belgium and Luxembourg. . | 94 | 182 | 152 | 303 |
| Republic of South Africa. | - | - | 170 | 167 |
| Other . . . . . . . | 171 | 315 | 215 | 603 |
| Total. . . . . . . . | 4,205 | 9,270 | 3,353 | 8,674 |

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

EXPORTS OF DOMESTIC CANNED SALMON, BY COUNTRY OF DESTINATION, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| United Kingdom . | 18,296 | 37,574 | 33,012 | 72,588 |
| Canada . . . . . | 10,189 | 17,650 | 14,860 | 28,688 |
| Australia. | 6,698 | 11,061 | 9,089 | 17,723 |
| Nether lands. . . . . . | 5,720 | 9,707 | 7,354 | 14,183 |
| Belgium and Luxembourg . | 3,360 | 4,693 | 4,465 | 7,448 |
| France - . - . . - . | 615 | 1,256 | 1,455 | 2,334 |
| Republic of South Africa . | 356 | 491 | 792 | 1,456 |
| Japan. . . . . . . . . . . | 3,078 | 5,511 | 527 | 1,163 |
| Other. . . . . . . . . . . | 2,407 | 3,974 | 2,452 | 4,388 |
| Total . . . . . . . . . | 50,719 | 91,917 | 74,006 | 149,971 |

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

## U.S. EXPORTS

EXPORTS OF DOMESTIC FROZEN KING CRAB, BY COUNTRY OF DESTINATION, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | Thousand | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Japan | 32,863 | 78,262 | 23,866 | 58,098 |
| Canada. . . | 1,291 | 4,289 | 3,280 | 9,535 |
| Nether lands | 526 | 4,085 | 488 | 3,013 |
| Belgium and Luxembourg. | 634 | 5,027 | 270 | 1,717 |
| Australia . | 152 | 887 | 104 | 587 |
| Italy. | 21 | 85 | 122 | 527 |
| France. | 167 | 982 | 57 | 375 |
| Mexico. | 21 | 43 | 187 | 360 |
| Norway. . . . . . . | 63 | 312 | 82 | 353 |
| Federal Republic of Germany | 85 | 433 | 76 | 328 |
| Switzer land . . . | 89 | 491 | 23 | 96 |
| Other . | 307 | 1,450 | 316 | 1,420 |
| Total. | 36,219 | 96,346 | 28,871 | 76,409 |

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

EXPORTS OF DOMESTIC FROZEN SNOW CRAB, BY COUNTRY OF DESTINATION, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\begin{aligned} & \frac{\text { Thousand }}{\text { pounds }} \end{aligned}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Japan | 41,942 | 66,328 | 33,156. | 47,540 |
| Belgium and Luxembourg. | 127 | 696 | 124 | 626 |
| Australia . . . . . . . | 124 | 607 | 93 | 431 |
| France. . | 176 | 885 | 74 | 381 |
| Canada. . . | 170 | - 352 | 104 | 217 |
| Nether lands. | 30 | 173 | 29 | 147 |
| United Kingdom. | 247 | 781 | 9 | 27 |
| Other . . . . . | 162 | 474 | 153 | 456 |
| Total. | 42,978 | 70,296 | 33,742 | 49,825 |

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

EXPORTS OF DOMESTIC CANNED SQUID, BY COUNTRY OF DESTINATION, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { doflars }}$ |
| Greece. | 6,516 | 1,808 | 7,125 | 1,812 |
| Philippines . . | 973 | 355 | 423 | 133 |
| Federal Republic of Germany | 176 | 60 | 237 | 87 |
| Japan . . . . . . . | 50 | 22 | 212 | 49 |
| Spain. | 130 | 43 | 91 | 10 |
| Canada. | 247 | 47 | 20 | 7 |
| Australia | 106 | 43 | 18 | 5 |
| Other | 184 | 69 | 347 | 224 |
| Total. . | 8,382 | 2,447 | 8,473 | 2,327 |

[^2]
## U.S. EXPORTS

EXPORTS OF DOMESTIC FISH AND FISH LIVER OILS, BY COUNTRY OF DESTINATION, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\frac{\text { Thousand }}{\text { pounds }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ |
| Nether lands | 75,167 | 14,989 | 86,051 | 16,314 |
| United Kingdom. . | 45,048 | 8,843 | 83,678 | 14,952 |
| Federal Republic of Germany | 13,820 | 2,971 | 36,890 | 6,553 |
| Peru. . . . . . . . . . . . | (1) | 3 | 27,010 | 5,242 |
| Belgium and Luxembourg. | 17,717 | 3,459 | 24,411 | 4,291 |
| Sweden. . . . . . . . ${ }^{\text {a }}$ | 12,238 | 2,356 | 9,619 | 1,739 |
| Spain. | 9,099 | 1,737 | 7,925 | 1,277 |
| Columbia. | 21,438 | 4,034 | 4,418 | 810 |
| France. | 1,876 | 353 | 1,984 | 358 |
| Other . | 2,094 | 826 | 2,023 | 859 |
| Total. | 198,497 | 39,571 | 284,009 | 52,395 |

(1) Less than 500 pounds.

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

EXPORTS OF DOMESTIC FISH MEAL, BY COUNTRY OF DESTINATION, 1979 AND 1980

| Country | 1979 |  | 1980 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Short }}{\text { Tons }}$ | $\frac{\text { Thousand }}{\text { dollars }}$ | $\begin{aligned} & \frac{\text { Short }}{\text { Tons }} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Thousand } \\ & \text { dollars } \end{aligned}$ |
| Federal Republic of Germany | 951 | 267 | 49,002 | 16,763 |
| Egypt . . . . . . . . . . . | 9,720 | 4,024 | 9,878 | 3,875 |
| Italy . . . | - | - | 8,272 | 3,002 |
| Philippines . | 784 | 274 | 6,091 | 2,069 |
| China, Taiwan . - | 259 | 45 | 4,046 | 1,476 |
| Dominican Republic. . - | 1,007 | 326 | 1,656 | 532 |
| Belgium and Luxembourg. | 5 | 1 | 700 | 238 |
| Mexico. . . . . . . . | 682 | 116 | 1,154 | 136 |
| Canada. ${ }^{\text {S }}$. | 904 | 129 | 1,011 | 146 |
| Saudi Arabia. | 512 | 206 | 228 | 75 |
| Other . . . . . . | 877 | 138 | 3,243 | 825 |
| Total. | 15,701 | 5,526 | 85,281 | 29,137 |

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



FOREIGN TRADE

## U.S. SUPPLY OF EDIBLE AND INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1971-80 (Round weight)

| Year | Domestic commercial landings |  | Imports (1) |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million |  | Million |  | Million |
|  | pounds | Percent | pounds | Percent | pounds |
| 1971 | 5,018 | 42.5 | 6,786 | 57.5 | 11,804 |
| 1972 | 4,806 | 34.7 | 9,043 | 65.3 | 13,849 |
| 1973 | 4,858 | 46.8 | 5,520 | 53.2 | 10,378 |
| 1974 | 4,967 | 50.3 | 4,908 | 49.7 | 9,875 |
| 1975 | 4,877 | 48.0 | 5,287 | 52.0 | 10,164 |
| 1976 | 5,388 | 46.5 | 6,205 | 53.5 | 11,593 |
| 1977 (2) | 5,198 | 49.1 | 5,381 | 50.9 | 10,579 |
| 1978 (2) | 6,028 | 52.4 | 5,481 | 47.6 | 11,509 |
| 1979 (2) | 6,267 | 53.0 | 5,564 | 47.0 | 11,831 |
| 1980 (2) | *6,482 | 57.1 | 4,875 | 42.9 | 11,357 |

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. (2) Preliminary.
Note:--The weights of U.S. landings and imports represent the round (live) weight of all items except univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.) which are shown in weight of meats (excluding the shell). *Record. Record imports in 1968, 13,221 million lb; record total, $17,381 \mathrm{mfllion} 1 \mathrm{~b}$.

## U.S. SUPPLY OF EDIBLE COMMERCIAL FISHERY PRODUCTS, 1971~80 <br> (Round weight)


(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. (2) Preliminary. *Record.
U.S. SUPPLY OF INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1971-80
(Round weight)


## U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1979 AND 1980

| Item | Domestic commercial landings |  | Imports (1) |  | Tota 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1979 | 1980 | 1979 | 1980 | 1979 | 1980 |
| - - - - - - Million pounds, round weight - - . - - - |  |  |  |  |  |  |
| Edible fishery products: |  |  |  |  |  |  |
| Finfish . . | 2,204 | 2,516 | 4,120 | 3,623 | 6,324 | 6,139 |
| Shellfish . | 1,114 | 1,138 | 813 | 729 | 1,927 | 1,867 |
| Total. . | 3,318 | 3,654 | 4,933 | 4,352 | 8,251 | 8,006 |


| ```Industrial fishery products: Finfish Shellfish``` | $\begin{array}{r} 2,928 \\ 21 \end{array}$ | $\begin{array}{r} 2,812 \\ 16 \end{array}$ | $\underset{(3)}{(2) 631}$ | $\underset{(3)}{(2)} 523$ | $\begin{array}{r} 3,559 \\ 21 \end{array}$ | $\begin{array}{r} 3,335 \\ 16 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total. | 2,949 | 2,828 | (2)631 | (2) 523 | 3,580 | 3,351 |
| Total: |  |  |  |  |  |  |
| Finfish | 5,132 | 5,328 | 4,751 | 4,146 | 9,883 | 9,474 |
| Shellfish | 1,135 | 1,154 | 813 | 729 | 1,948 | 1,883 |
| Total. | 6,267 | 6,482. | 5,564 | 4,875 | 11,831 | 11,357 |

See footnotes below.

VALUE OF U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1979 AND 1980

| Item | Domestic commerciallandings |  | Imports (1) |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1979 | 1980 | 1979 | 1980 | 1979 | 1980 |
| ---- - - - Million dollars - - - . - - - - |  |  |  |  |  |  |
| Edible fishery products: |  |  |  |  |  |  |
| Finfish . . . . . . . | 983 | 1,019 | 1,246 | 1,249 | 2,229 | 2,268 |
| Shellfish . | 1,110 | 1,073 | 1,228 | 1,203 | 2,338 | 2,276 |
| Total. | 2,093 | 2,092 | 2,474 | 2,452 | 4,567 | 4,544 |
| Industrial fishery products: |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Finfish . . . . . | 131 | 136 | (2) 31 | (2)19 | 162 | 155 |
| Shellfish . | 10 | 9 | (3) | (3) | 10 | 9 |
| Total. | 141 | 145 | (2)31 | (2)19 | 172 | 164 |
| Total: |  |  |  |  |  |  |
| Finfish | 1,114 | 1,155 | 1,277 | 1,268 | 2,391 | 2,423 |
| Shellfish | 1,120 | 1,082 | 1,228 | 1,203 | 2,348 | 2,285 |
| Total. . | 2,234 | 2,237 | 2,505 | 2,471 | 4,739 | 4,708 |

(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, 1971-80 <br> (Edible weight)

| Year | U.S. production |  | Imports |  | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Percentage of total supply | Quantity | Percentage of total supply | Quantity |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | Percent | $\frac{\text { Thousand }}{\text { pounds }}$ | Percent | $\frac{\text { Thousand }}{\text { pounds }}$ |
| 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 | 2,138 | . 6 | 385,138 | 99.4 | 387,276 |
| 1978 | 1,879 | . 5 | 406,286 | 99.5 | 408,165 |
| 1979 | 4,857 | 1.2 | *408,152 | 98.8 | *413,009 |
| 1980 | 561 | (1) | 336,117 | 100.0 | 336,678 |

(I) Less than one-tenth of 1 percent. *Record.
U.S. SUPPLY OF ALL FILLETS AND STEAKS, 1971-80
(Edible weight)

| Year | U.S. production (1) |  | Imports |  | Total supplyQuantity |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Percentage of total supply | Quantity | Percentage of total supply |  |
|  | Thousand |  | Thousand |  | Thousand |
|  | pounds | Percent | pounds | Percent | pounds. |
| 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 | 144,274 | 25.9 | 413,307 | 74.1 | 557,581 |
| 1977 | 160,644 | 28.8 | 398,110 | 71.2 | 558,754 |
| 1978 | 184,356 | 30.3 | 423,749 | 69.7 | 608,105 |
| 1979 | 187,167 | 30.4 | *427,526 | 69.6 | *614,693 |
| 1980 | 173,649 | 32.0 | 369,161 | 68.0 | 542,810 |

(1) Includes fillets used to produce blocks. *Record. Record U.S. production, 205,486,000 lb . in 1951.
U.S. SUPPLY OF GROUNDFISH FILLETS AND STEAKS, $1971-80$
(Edible weight)

| Year | U.S. production (1) |  | Imports |  | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Percentage of total supply | Quantity | Percentage of total supply | Quantity |
|  | $\frac{\text { Thousand }}{\text { pounds }}$ | Percent | $\frac{\text { Thousand }}{\text { pounds }}$ | Percent | $\frac{\text { Thousand }}{\text { pounds }}$ |
| 1971 | 43,808 | 20.4 | 171,452 | 79.6 | 215,260 |
| 1972 | 39,266 | 15.5 | 213,255 | 84.5 | 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 | 59,942 | 21.6 | 217,423 | 78.4 | 277,365 |
| 1978 | 65,573 | 22.0 | 233,106 | 78.0 | 298,679 |
| 1979 | 74,568 | 22.8 | *252,957 | 77.2 | *327,525 |
| 1980 | 65,753 | 22.9 | 220,954 | 77.1 | 286.707 |

(1) Includes fillets used to produce blocks. Species include: cod, cusk, haddock, hake, Atlantic pollock, and Atlantic ocean perch. *Record. Record U.S. production, 148,786,000 lb in 1951.
U.S. COMMERCIAL LANDINGS AND IMPORTS OF TUNA, 1971-80

| Year | Domestic commercial landings |  |  | Imports |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ```Atlantic, Gulf, Pacific Coast States, and Hawaii``` | Puerto Rico | Total | Fresh and frozen including cooked loins and discs (1) | Canned |  |
|  | - - . . . - Round weight - - . . - - Product weight - - |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 1971 |  |  |  |  |  |  |
| 1972 | 387,032 (2) | (2) 147,668 | 534,700 | 764,784 | 384 | 56,129 |
| 1973 | 346,571 |  | 519,063 | 816,739 | 244 | 38,382 |
| 1974 | 392,223 | 165,008 | 557,231 | 838,889 | 233. | 52,513 |
| 1975 | 392,527 | (2) $* 177,100$ | 569,627 | 516,735 | 199 | 51,472 |
| 1976 | *490,567 | 174,346 | *664,9:13 | 641,121 | 288 | 58,605 |
| 1977 | 345,229 | 123,666 | 468,895 | 670,072 | 178 | 34,453 |
| 1978 | 408,878 | (2) 156,813 | 565,691 | *861,803 | 207 | 51,574 |
| 1979 | 364,476 | (2) 143,676 | 508,152 | 800,178 | 627 | 53,076 |
| 1980 | 399,432 | (2) 100,606 | 500,038 | 767,064 | 446 | 63,107 |

(1) Includes landings in Amer ican Samoa of foreign-caught fish. (2) Includes a small quantity of fish landed in American Samoa by U.S. vessels. *Record.
U.S. SUPPLY OF CANNED TUNA, 1971-80
(Canned weight)

| Year | U.S. pack from domestic commercial landings (1) |  | U.S. pack from imported fresh and frozen tuna (2) |  | Total | Imported canned |  | $\begin{aligned} & \text { Total } \\ & \text { supply } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand |  | Thousand |  | - Thousand pounds - |  |  | Thousand |
|  | pounds | Percent | pounds | Percent |  |  | Percent | pounds |
| 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. | 260,785 | 44.9 | 268,618 | 46.2 | 529,403 | 51,671 | 8.9 | 581,074 |
| 1976. | *287,003 | 43.6 | 312,188 | 47.4 | 599,191 | 58,893 | 9.0 | 658,084 |
| 1977. | 206,805 | 35.5 | 341,204 | 58.6 | 548,009 | 34,631 | 5.9 | 582,640 |
| 1978. | 257,166 | 34.0 | *447,627 | 59.2 | *704,793 | 51,781 | 6.8 | *756,574 |
| 1979. | 218,493 | 32.4 | 401,740 | 59.6 | 620,233 | 53,703 | 8.0 | 673,936 |
| 1980. | 215,663 | 32.1 | 392,781 | 58.4 | 608,444 | 63,553 | 9.5 | 671,997 |

(1) Includes pack from landings in Puerto Rico and Amer ican Samoa by U.S. vessels. (2) Includes tuna canned in Amer ican Samoa from foreign-caught fish. *Record.
U.S. SUPPLY OF CANNED BONITO AND YELLOWTAIL, 1971-80
(Canned weight)


U.S. SUPPLY OF CANNED SALMON, 1971-80
(Canned weight)

| Year | U.S. pack <br> (1) | Imports | Total | Exports |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Domestic | Foreign |
|  | - - - - - - - Thousand pounds - . - . . . - - - |  |  |  |  |
| 1971 | 168,452 | 1,551 | 170,003 | 18,232 | 1 |
| 1972 | 92,858 | 11,647 | 104,505 | 21,358 | 53 |
| 1973 | 71,772 | 7,859 | 79,631 | 16,941 | 24 |
| 1974 | 87,791 | 8,553 | 96,344 | 8,320 | 2 |
| 1975 | 78,086 | 3,265 | 81,351 | 22,504 | 54 |
| 1976 | 125,323 | 2,521 | 127,844 | 19,588 | 232 |
| 1977 | 150,823 | 586 | 151,409 | 21,275 | 11 |
| 1978 | 164,279 | 325 | 164,604 | 32,513 | 33 |
| 1979. | 150,066 | 434 | 150,500 | 50,719 | 70 |
| 1980 . .... | 201,600 | 167 | 201,767 | 74,006 | 57 |

(1) Record pack was $430,328,000 \mathrm{lb}$ in 1936.
U.S. SUPPLY OF CLAM MEATS, 1971-80
(Meat weight)

| Year | U.S. commercial landings |  |  |  |  | Imports <br> (1) | ```Total for U.S. consumption``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hard | Soft | Surf | Other | Total |  |  |
|  |  |  |  |  |  |  |  |
| 1971 | 16,666 | 12,652 | 52,535 | 2,636 | 84,489 | 3,447 | 87,936 |
| 1972 | 16,153 | 9,078 | 63,471 | 1,987 | 90,689 | 5,128 | 95,817 |
| 1973 | 14,505 | 8,627 | 82,370 | 2,038 | 107,540 | 4,254 | 111,794 |
| 1974 | 14,665 | 9,590 | 96,110 | 1,328 | 121,693 | 4,913 | 126,606 |
| 1975 | 14,995 | 9,174 | 86,956 | 2,262 | 113,387 | 2,435 | 115,822 |
| 1976 | 15,251 | 10,467 | 49,158 | 7,656 | 82,532 | 6,705 | 89,237 |
| 1977 | 15,433 | 10,683 | 51,036 | 19,008 | 96,160 | 8,423 | 104,583 |
| 1978 | 13,295 | 10,091 | 39,237 | .25,088 | 87,711 | 6,131 | 93,842 |
| 1979 | 12,058 | 8,585 | 34,912 | 36,495 | 92,050 | 7,273 | 99,323 |
| 1980 | 13,370 | 8,948 | 37,737 | 35,314 | 95,369 | 6,880 | 102,249 |

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

(1) Domestic merchandise. Converted to round (live) weight by using these conversion factors: domestic--frozen, 1.75; and canned 5.33. (2) Data not available. (3) Data revised since publication of Fishery Statistics of the United States, 1972. Note:--Data on U.S. commercial landings include deadloss weight for 1977-80.

| U.S. SUPPLY OF SNOW (TANNER) CRABS, 1971-80(Round weight) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | $\begin{aligned} & \text { U.S. } \\ & \text { commercial } \\ & \text { landings } \end{aligned}$ | Imports <br> (1) | Total | Exports (2) |
|  | ———————— Thousand pounds |  |  |  |
| 1971. | $12,880$ | (3) 12,880 <br> (3) (4) 30,135 |  | (3) |
| 1972. | (4) 30,135 |  |  | (3) |
| 1973 | 61,719 | (3) | 61,71963,906 | (3) |
| 1974 | 63,906 | (3) |  |  |
| 1975 | 46,856 | (3) | 46,856 | (3) |
| 1976 | 80,771 | (3) | 80,771 | (3) |
| 1977 | 98,329 | (3) | 98,329 | 47,045 |
| 1978 | 128,837 | 4,460 | 133,297 | 67,53091,543 |
| 1979 . . | *130,453 | 4,255 | 134,708 |  |
| 1980 . . . . . . | 121,287 | 3,732 | 125,019 | 71,871 |

(1) Converted to round (live) weight by multiplying canned weight by 5.00 . (2) Domestic merchandise. Converted to round (live) weight by multiplying frozen weight by 2.13 (believed to be mostly sections). Data for foreign exports not available. (3) Data not reported separately. (4) Data revised since publication of Fishery Statistics of the United States, 1972. Note:--Data on U.S. commercial landings include deadloss weight for 1978-80. *Record.
U.S. SUPPLY OF CANNED CRABMEAT, 1971-80 (Canned weight)

| Year | U.S. pack | ```Percentage of total``` | Imports | $\begin{gathered} \text { Percentage } \\ \text { of. } \\ \text { tota } \end{gathered}$ | Total | Exports (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand |  | Thousand |  | Thousand | Thousand |
|  | pounds | Percent | pounds | Percent | pounds | pounds |
| 1971 | 3,213 | 46.3 | 3,723 | 53.7 | 6,936 | 40 |
| 1972 | 2,513 | 49.7 | 2,547 | 50.3 | 5,060 | 21 |
| 1973 | 3,724 | 65.6 | 1,956 | 34.4 | 5,680 | 1,524 |
| 1974 | 4,358 | 64.8 | 2,371 | 35.2 | 6,729 | 707 |
| 1975 | 3,283 | 69.5 | 1,440 | 30.5 | 4,723 | 446 |
| 1976 | 3,811 | 65.0 | 2,054 | 35.0 | 5,865 | 370 |
| 1977 | 5,013 | 59.1 | 3,463 | 40.9 | 8,476 | 268 |
| 1978 | 4,986 | 55.2 | 4,053 | 44.8 | 9,039 | 462 |
| 1979 | 4,723 | 48.2 | 5,073 | 51.8 | 9,796 | 866 |
| 1980 | 4,640 | 48.1 | 5,002 | 51.9 | 9,642 | 373 |

(1) Domestic king crab only. Record production was $11,002,000 \mathrm{lb}$ in 1966 ; record imports, 13,507;000 lb in 1939.

## U.S. SUPPLY OF AMERICAN LOBSTERS, 1971-80

(Round weight)

| Year |  | U.S. commercial landings |  | Imports (1) |  |  |  | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | ```Percentage of total supply``` | Quantity |  |  | ```Percentage of total supply``` |  |
|  |  | Fresh and frozen |  | Canned | Total |  |  |
|  |  |  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | Percent | - - Th | sand pou | - | Percent | $\frac{\text { Thousand }}{\text { pounds }}$ |
| 1971 |  | 33,688 | 49.4 | 23,894 | 10,635 | *34,529 | 50.6 | 68,217 |
| 1972 | -•• | 32,244 | 52.8 | 18,811 | 10,032 | 28,843 | 47.2 | 61,087 |
| 1973 | . | 28,991 | 52.9 | 18,113 | 7,656 | 25,769 | 47.1 | 54,760 |
| 1974 | . | 28,543 | 53.3 | 17,586 | 7,392 | 24,978 | 46.7 | 53,521 |
| 1975 | - • | 30,200 | 52.3 | 18,325 | 9,243 | 27,568 | 47.7 | 57,768 |
| 1976 |  | 31,483 | 51.9 | 19,176 | 9,957 | 29,133 | 48.1 | 60,616 |
| 1977 |  | 31,708 | 52.4 | 16,944 | 11,818 | 28,762 | 47.6 | 60,470 |
| 1978 |  | 34,419 | 55.9 | 16,468 | 10,648 | 27,116 | 44.1 | 61,535 |
| 1979 |  | *37,184 | 54.5 | 22,790 | 8,307 | 31,097 | 45.5 | 68,281 |
| 1980 | . | 36,952 | 53.4 | 22,503 | 9,699 | 32,202 | 46.6 | *69,154 |

(1) Imports were converted to round (live) weight by using these conversion factors: 1.00, whole; 4.50, meat; and 4.64, canned. *Record.
U.S. SUPPLY OF SPINY LOBSTERS, 1971-80
(Round weight)

|  | Year | U.S. commercial landings |  | Imports (1) |  |  |  | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | Percentage of total supply | Quantity |  |  | Percentage of total supply |  |
|  |  |  |  | Fresh and frozen | Canned | Total |  |  |
|  |  | $\begin{aligned} & \text { Thousand } \\ & \text { pounds } \end{aligned}$ | Percent | - - Th | sand pou | - | Percent | $\frac{\text { Thousand }}{\text { pounds }}$ |
| 1971 | - . | 8,941 | 6.2 | 133,974 | 473 | 134,447 | 93.8 | 143,388 |
| 1972 | . - | *12,215 | 8.0 | 139,802 | 428 | 140,230 | 92.0 | 152,445 |
| 1973 | -• | 11,432 | 8.5 | 123,219 | 603 | 123,822 | 91.5 | 135,254 |
| 1974 | . . | 11,708 | 8.1 | 132,158 | 428 | 132,586 | 91.9 | 144,294 |
| 1975 | . | 7,613 | 5.1 | 142,280 | 504 | 142,784 | 94.9 | 150,397 |
| 1976 | . | 5,643 | 3.2 | 164,859 | 3,536 | *168,395 | 96.8 | *174,038 |
| 1977 | . . | 5,483 | 3.5 | 149,156 | 1,517 | 150,673 | 96.5 | 156,156 |
| 1978 |  | 4,629 | 3.1 | 143,945 | 563 | 144,508 | 96.9 | 149,137 |
| 1979 |  | 6,301 | 4.0 | 150,470 | 604 | 151,074 | 96.0 | 157,375 |
| 1980 | . . . | 6,861 | 5.4 | 119,817 | 395 | 120,212 | 94.6 | 127,073 |

(1) Imports were converted to round (live) weight by using these conversion factors: 1.00, whole; 3.00, tails; 4.35, other; and 4.50, canned. *Record.

U.S. SUPPLY OF OYSTERS, 1971-80
(Meat weight)

| Year | U.S. commercial landings |  |  |  | Imports(1) | Total for U.S. consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eastern | Pacific | Western | Tota 1 |  |  |
|  | - - . - . - . . . - - - Thousand pounds - . . . . - . . . . . . - |  |  |  |  |  |
| 1971 | 49,838 | 8,048 | 52 | 57,938 | 17,519 | 75,457 |
| 1972 | 47,667 | 8,362 | 29 | 56,058 | 30,893 | 86,951 |
| 1973 | 45,333 | 6,576 | 22 | 51,931 | 26,351 | 78,282 |
| 1974 | 45,125 | 5,030 | 21 | 50,176 | 23,634 | 73,810 |
| 1975 | 47,398 | 5,807 | 22 | 53,227 | 20,542 | 73,769 |
| 1976 | 48,010 | 6,354 | 31 | 54,395 | 23,682 | 78,077 |
| 1977 | 40,436 | 5,590 | (2) | 46,026 | 29,774 | 75,800 |
| 1978 | 45,183 | 5,800 | (2) | 50,983 | 33,843 | 84,826 |
| 1979 | 42,325 | 5,756 | (2) | 48,081 | 27,131 | 75,212 |
| 1980 | 42,439 | 6,642 | (2) | 49,081 | 21,732 | 70,813 |

(1) Imports were converted to meat weight by using these conversion factors: 0.93 , canned; 3.12 , canned smoked; and 0.75 for other. (2) Not available.
U.S. SUPPLY OF SCALLOP MEATS, $1971-80$
(Edible weight)

| Year | U.S. commercial landings |  |  |  | Imports | Total for U.S. consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bay | Calico | Sea | Total |  |  |
| - . . . . . . . . - - Thousand pounds - . . . . . . . . . . - |  |  |  |  |  |  |
| 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 | 1,648 | 1,992 | 10,063 | 13,703 | 19,737 | 33,440 |
| 1976 | 1,590 | 2,268 | 19,853 | 23,711 | 25,253 | 48,964 |
| 1977 | 1,703 | 1,111 | 25,012 | 27,826 | *29,786 | 57,612 |
| 1978 | 1,371 | 948 | 30,976 | 33,295 | 28,367 | *61,662 |
| 1979 | 1,774 | 863 | 31,466 | *34,103 | 25,155 | 59,258 |
| 1980 . | 968 | - - | 28,752 | 29,720 | 20,885 | 50,605 |

*Record.


## U.S. SUPPLY OF ALL FORMS OF SHRIMP, 1971-80

(Heads-off weight)

| Year | U.S. <br> commercial <br> landings | Imports(1) | Total | Exports (2) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Fresh and frozen |  | Canned |  |
|  |  |  |  | Domestic | Foreign | Domestic | Foreign |
|  | - - - - . . - - - - Thousand pounds - . . . - . . . . . . - - |  |  |  |  |  |  |
| 1971 | 238,073 | 215,073 | 453,146 | 35,404 | 10,475 | 16,835 |  |
| 1972 | 235,852 | 254,534 | 490,386 | 34,201 | 6,095 | 17,069 | 20 |
| 1973 | 228,643 | 230,780 | 459,423 | *44,172 | 10,212 | *20,097 | 106 |
| 1974. | 225,529 | 267,462 | 492,991 | 32,719 | 6,383 | 13,908 | 91 |
| 1975. | 209,151 | 230,963 | 440,114 | 33,132 | 6,586 | 12,570 | 10 |
| 1976. | 245,597 | *270,720 | 516,317 | 27,489 | 9,138 | 15,693 | 181 |
| 1977 . | *288,443 | 270,406 | *558,849 | 30,785 | 8,902 | 18,111 | 121 |
| 1978. | 256,882 | 239,044 | 495,926 | 41,065 | 13,308 | 12,088 | 146 |
| 1979 | 205,587 | 267,119 | 472,706 | 34,143 | 5,826 | 11,047 | 63 |
| 1980 | 207,869 | 255,957 | 463,826 | 18,770 | 9,567 | 11,781 | *936 |

(1) Imports were converted to heads-off weight by using these conversion factors: 0.63 , breaded; 1.00, shell-on; 1.28, peeled raw; 2.02, canned; and 2.40 for other. (2) Exports were converted to heads-off weight by using these conversion factors: domestic--fresh and frozen, 1.18 and canned, 2.02; foreign--fresh and frozen, 1.00 and canned, 2.52. *Record. Record fresh and frozen foreign exports were 14,699,000 in 1970.
U.S. SUPPLY OF CANNED SHRIMP, 1971-80 (Canned weight)

| Year | U.S. pack | ```Percentage of total``` | Imports | ```Percentage of total``` | Total | Exports |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Domestic | Foreign |
|  | Thousand |  | Thousand |  |  |  |  |
|  | pounds | Percent | pounds | Percent | --- | usand poun | s - - |
| 1971 | 22,345 | 89.1 | 2,742 | 10.9 | 25,087 | 8,334 |  |
| 1972 | 23,795 | 95.5 | 1,123 | 4.5 | 24,918 | 8,450 | 8 |
| 1973 | *25,228 | 89.3 | 3,027 | 10.7 | 28,255 | *9,949 | 42 |
| 1974 | 22,121 | 78.4 | *6,107 | 21.6 | 28,228 | 6,885 | 36 |
| 1975 | 12,407 | 91.7 | 1,118 | 8.3 | 13,525 | 6,223 | 4 |
| 1976 | 19,041 | 89.0 | 2,350 | 11.0 | 21,391 | 7,769 | 72 |
| 1977 | 24,525 | 89.7 | 2,809 | 10.3 | 27,334 | 8,966 | 48 |
| 1978 | 16,806 | 86.0 | 2,739 | 14.0 | 19,545 | 5,984 | 58 |
| 1979 | 9,584 | 69.1 | 4,288 | 30.9 | 13,872 | 5,469 | 25 |
| 1980. | 16,182 | 79.3 | 4,225 | 20.7 | 20,407 | 5,832 | *371 |

*Record. Record total supply was 29,001,000 in 1970.

U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1971-80
(Product weight)

(1) Includes shellfish meal production. (2) Data do not include imports of fish solubles for 1978-80.
Note:--Wet weight of solubles have been converted to dry weight by reducing its poundage by onehalf. *Record. Record imports in 1968, 856,172 short tons and total, 1,127,225 short tons.
U.S. SUPPLY OF FISH MEAL, $1971-80$
(Product weight)

| Year | Domestic production (1) | Imports | Total supply | Exports (2) | Total for U.S. consumption |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - . - - - - - Short tons - - - . . . . - . . - |  |  |  |  |
| 1971 | 292,812 | 283,249 | 576,061 | 10,594 | 565,467 |
| 1972 | 285,506 | 391,955 | 677,461 | 18,869 | 658,592 |
| 1973 | 287,517 | 68,496 | 356,013 | 45,745 | 310,268 |
| 1974 | 300,714 | 68,297 | 369,011 | 55,522 | 313,489 |
| 1975 | 290,431 | 118,371 | 408,802 | 12,475 | 396,327 |
| 1976 | 309,694 | 140,377 | 450,071 | 33,322 | 416,749 |
| 1977 | 282,291 | 81,491 | 363,782 | 37,199 | 326,583 |
| 1978 | 362,910 | 43,901 | 406,811 | 54,633 | 352,178 |
| 1979 | *374,293 | 89,613 | 463,906 | 16,456 | 447,450 |
| 1980 | 361,922 | 49,537 | 411,459 | *86,036 | 325,423 |

(1) Includes shellfish meal. (2) Includes exports of domestic and foreign fish meal. *Record. Record imports in $1968,855,285$ short tons; total supply and total for U.S. consumption, 1,090,421 short tons.
U.S. SUPPLY OF FISH SOLUBLES, 1971-80
(Product weight)

| Year | U.S. production |  | Imports (1) |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Short tons | Percent | Short tons | Percent | Short tons |
| 1971 | 111,188 | 99.9 | 56 | 0.1 | 111,244 |
| 1972 | 134,395 | 99.9 | 85 | . 1 | 134,480 |
| 1973 | 137,435 | 99.8 | 309 | . 2 | 137,744 |
| 1974 | 137,259 | 100.0 | 19 | (2) | 137,278 |
| 1975 | 127,850 | 100.0 | 48 | (2) | 127,898 |
| 1976 | 133,107 | 99.1 | 1,221 | . 9 | 134,328 |
| 1977 | 122,330 | 99.3 | 820 | . 7 | 123,150 |
| 1978 | 162,543 | 100.0 | (3) | - | 162,543 |
| 1979 | 134,928 | 100.0 | (3) | - | 134,928 |
| 1980. . . . | 133,682. | 100.0 | (3) | - | 133,682 |

(1) Includes on ly fish solubles and will not check with other tables that show total imports of fish solubles and cod-liver solubles for years 1970 to 1977. (2) Less than one-tenth of 1 percent. (3) Data no longer reported separately by the Bureau of the Census.
Note:--Record U.S. production in 1959, 165,359 short tons; imports, 26,630 short tons; and total, 191,989 short tons.
U.S SUPPLY OF FISH OILS, 1971-80

| Year | Domestic production | Imports (1) | Total supply | Exports | Total for U.S. consumption |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - - - - - - Thousand pounds - . . - . - - - - - |  |  |  |  |
| 1971 | 265,032 | 7,512 | 272,544 | 229,898 | 42,646 |
| 1972 | 188,445 | 9,466 | 197,911 | 193,198 | 4,713 |
| 1973 | 224,634 | 6,733 | 231,367 | 247,793 | (2) |
| 1974 | 237,980 | 12,356 | 250,336 | 199,122 | 51,214 |
| 1975 | 245,653 | 11,283 | 256,936 | 191,843 | 65,093 |
| 1976 | 204,581 | 20,937 | 225,518 | 179,235 | 46,283 |
| 1977 | 133,182 | 13,731 | 146,913 | 90,633 | 56,280 |
| 1978 | 296,287 | 16,041 | 312,328 | 222,012 | 90,316 |
| 1979 | 267,949 | 14,463 | 282,412 | 198,497 | 83,915 |
| 1980 . . . . | *311,599 | 21,350 | 332,949 | 284,009 | 48,940 |

(1) Excludes fish liver oil.
(2) Total for U.S. consumption was a negative (-) $16,426,000 \mathrm{lb}$ because of export of prior year stocks.

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


## INDEXES OF EXVESSEL PRICES

The tables that follow show indexes of exvessel prices prepared by the National Marine Fisheries Service. Most of the prices used in calculating the "Indexes of Exvessel Prices for Fish and Shellfish" are based on monthly landings and value data. In a few cases, prices are obtained from Fishery Market News Reports and Market News Offices. The index for each species is calculated by multiplying the current monthly price by the total quantity caught in 1967 (the base year) to obtain a value for the current month. That value is then divided by the 1967 average monthly value to obtain the final index:
$\frac{\text { (Current price } X 1967 \text { quantity) }}{\text { T967 average monthly value }}=$ Index for each species
To calculate the index for salmon, tuna, New England finfish, and other shellfish, the current monthly values for each of these species are added together and divided
by the aggregate 1967 average monthly values for the group. To calculate monthly indexes for edible finfish, edible shellfish, edible fish, industrial fish, and all fish, the index number for each species is multiplied by a factor representing its importance in the total exvessel value of all species of fish and shellfish for the period 1966-70; the sum of these products is the index number for the group of species.

Each index number calculated for years other than the base year of 1967 measures price changes from the reference period (1967) which equals 100. An increase of 85 percent from the reference period in the index, for example, is shown as 185.0. This change can also be expressed in dollars, as follows: The price of a species of fish that sold in the United States for $\$ 1.00$ per pound in 1967 has increased to $\$ 1.85$ per pound.


## EXVESSEL

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY YEARS, 1975-80
(1967=100)

| Species or group | 1975 | 1976 | 1977 | 1978 | 1979 (1) | 1980 (2) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England finfish: |  |  |  |  |  |  |
| Cod. | 285.2 | 312.5 | 284.6 | 287.5 | 335.7 | 325.0 |
| Haddock. | 232.5 | 290.2 | 246.8 | 241.0 | 299.7 | 285.2 |
| Yellowtail flounder. | 339.8 | 399.3 | 432.4 | 558.2 | 497.7 | 438.3 |
| Other flounders. | 254.2 | 381.0 | 278.3 | 352.6 | 346.3 | 299.4 |
| Ocean perch. | 263.0 | 347.1 | 391.5 | 440.1 | 544:3 | 615.9 |
| Pollock. | 227.7 | 255.9 | 267.9 | 307.4 | 376.8 | 346.2 |
| Whiting. | 193.3 | 180.8 | 213.6 | 307.6 | 365.6 | 384.9 |
| New England finfish | 260.2 | 305.7 | 298.9 | 343.9 | 373.9 | 357.0 |
| Red snapper | 237.3 | 275.5 | 330.8 | 389.0 | 455.7 | 504.5 |
| Pacific halibut. | 332.6 | 463.3 | 494.8 | 550.6 | 674.6 | 506.3 |
| Salmon: |  |  |  |  |  |  |
| Chinook - troll. | 210.6 | 312.7 | 404.4 | 401.2 | 468.4 | 448.9 |
| Chinook - nontroll | 203.0 | 369.0 | 564.2 | 548.9 | 642.6 | 553.5 |
| Chum . . . . | 436.8 | 564.2 | 664.6 | 738.8 | 815.3 | 658.8 |
| Coho - troll | 214.9 | 287.1 | 330.2 | 346.2 | 454.7 | 411.2 |
| Coho - nontroll. | 292.3 | 370.0 | 478.0 | 538.5 | 507.4 | 569.6 |
| Pink . . . . . . | 353.7 | 275.1 | 378.6 | 402.8 | 350.4 | 360.2 |
| Sockeye. . | 447.8 | 452.4 | 490.4 | 781.8 | 819.1 | 486.9 |
| Salmon. | 336.6 | 380.9 | 459.0 | 572.6 | 615.4 | 479.0 |
| Tuna: |  |  |  |  |  |  |
| Albacore | 197.8 | 246.0 | 286.0 | 316.3 | 338.1 | 398.0 |
| Skipjack | 220.1 | 246.6 | 316.8 | 353.4 | 355.0 | 485.2 |
| Bluefin. | 203.2 | 225.6 | 285.7 | 323.9 | 346.0 | 427.1 |
| Yellowfin. | 189.5 | 209.5 | 209.5 | 297.8 | 315.6 | 420.3 |
| Tuna. | 200.5 | 228.6 | 286.8 | 318.8 | 332.9 | 434.4 |
| Edible finfish | 276.3 | 319.7 | 370.7 | 448.3 | 476.4 | 439.1 |
| Shrimp | 218.5 | 298.0 | 301.5 | 313.1 | 452.3 | 369.4 |
| Other sheilfish: . . 318.5 |  |  |  |  |  |  |
| Hard clams . | 171.6 | 204.5 | 229.1 | 265.9. | 330.4 | 400.0 |
| Soft clams | 236.4 | 310.2 | 342.7 | 364.7 | 432.7 | 458.7 |
| Surf clams | 136.7 | 482.6 | 517.7 | 521.7 | 522.2 | 509.0 |
| Hard blue crabs. | 291.4 | 383.9 | 440.5 | 372.3 | 376.6 | 361.0 |
| King crabs | 340.2 | 659.6 | 923.1 | 1,267.0 | 1,283.1 | 855.4 |
| American lobsters. | 206.0 | 216.3 | 245.1 | 264.3 | 262.8 | 278.1 |
| Eastern oysters. | 119.8 | 152.5 | 173.6 | 171.1 | 186.4 | 192.2 |
| Sea scallops. | 239.4 | 247.2 | 216.0 | 327.2 | 439.4 | 535.2 |
| Other shellfish. | 199.3 | 281.6 | 336.6 | 393.7 | 419.6 | 383.2 |
| Edible shellfish. | 208.7 | 289.7 | 319.4 | 354.2 | 435.6 | 376.4 |
| Edible fish. | 240.7 | 303.9 | 343.7 | 398.7 | 454.9 | 406.1 |
| Industrial fish. | 224.4 | 234.8 | 292.6 | 293.6 | 305.1 | 315.6 |
| Menhaden . . | 224.4 | 234.8 | 292.6 | 293.6 | 305.1 | 315.6 |
| All fish....... | 239.6 | 299.1 | 340.1 | 391.4 | 444.6 | 399.9 |

(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.
exvessel

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY MONTHS, 1980
(1967=100)

| Species or group | Jan. | Feb. | Mar. | Apr. | May | June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England finfish: |  |  |  |  |  |  |
| Cod. | 459.8 | 368.3 | 414.1 | 252.2 | 204.1 | 217.0 |
| Haddock. | 437.4 | 325.3 | 367.3 | 216.6 | 189.4 | 230.6 |
| Yellowtail flounder. | 503.5 | 525.1 | 680.3 | 359.1 | 328.4 | 333.8 |
| Other flounders. | 358.0 | 339.1 | 446.4 | 213.1 | 179.0 | 242.8 |
| Ocean perch. . | 659.8 | 672.6 | 746.4. | 634.4 | 583.4 | 557.9 |
| Pollock. | 463.6 | 428.1 | 531.3 | 353.6 | 247.1 | 306.3 |
| Whiting. | 385.9 | 470.8 | 513.2 | 294.8 | 347.8 | 502.5 |
| New England finfish | 454.3 | 411.7 | 488.0 | 289.9 | 262.5 | 301.9 |
| Red snapper. | 461.0 | 463.8 | 499.9 | 502.7 | 519.4 | 497.1 |
| Pacific halibut. | 637.0 | 637.0 | 637.0 | 637.0 | 442.3 | 392.8 |
| Salmon: |  |  |  |  |  |  |
| Chinook - troll. | 530.2 | 530.2 | 530.2 | 477.2 | 445.4 | 424.2 |
| Chinook - nontroll | 571.9 | 571.9 | 571.9 | 553.5 | 553.5 | 590.4 |
| Chum - . . | 698.8 | 698.8 | 698.8 | 698.8 | 698.8 | 698.8 |
| Coho - troll . | 551.0 | 551.0 | 551.0 | 551.0 | 367.4 | 293.9 |
| Coho - nontroll. | 681.4 | 681.4 | 681.4 | 527.5 | 527.5 | 505.5 |
| Pink . . | 392.9 | 392.9 | 392.9 | 392.9 | 392.9 | 392.9 |
| Sockeye. . | 639.7 | 639.7 | 639.7 | 639.7 | 639.7 | 426.4 |
| Salmon. | 580.7 | 580.7 | 580.7 | 562.2 | 527.4 | 442.5 |
| Tuna: |  |  |  |  |  |  |
| Albacore | 367.4 | 367.4 | 367.4 | 367.4 | 367.4 | 367.4 |
| Skipjack | 423.3 | 465.5 | 493.3 | 493.3 | 493.3 | 493.3 |
| Bluefin. | 369.2 | 369.2 | 369.2 | 369.2 | 369.2 | 468.4 |
| Yellowfin. | 381.8 | 403.8 | 425.8 | 425.8 | 425.8 | 425.8 |
| Tuna. | 390.2 | 412.4 | 430.5 | 430.5 | 430.5 | 434.5 |
| Edible finfish | 495.3 | 492.8 | 515.8 | 465.1 | 436.5 | 408.6 |
| Shrimp | 409.9 | 398.5 | 378.1 | 358.5 | 335.8 | 382.9 |
| Other shellfish: 370.5 |  |  |  |  |  |  |
| Hard clams | 389.0 | 407.1 | 394.4 | 379.2 | 353.9 | 353.6 |
| Soft clams | 435.7 | 455.8 | 411.7 | 403.0 | 396.5 | 416.1 |
| Surf clams | 406.4 | 408.5 | 534.8 | 532.8 | 513.3 | 525.6 |
| Hard blue crabs. | 402.8 | 467.1 | 472.2 | 353.7 | 362.2 | 397.7 |
| Xing crabs | 812.0 | 812.0 | 812.0 | 812.0 | 812.0 | 812.0 |
| American lobsters. | 303.6 | 332.1 | 397.6 | 392.2 | 260.5 | 286.6 |
| Eastern oysters. | 190.7 | 192.2 | 196.1 | 207.0 | 203.8 | 157.8 |
| Sea scallops. | 534.3 | 517.7 | 509.2 | 456.2 | 403.3 | 453.5 |
| Other shellfish | 379.0 | 392.1 | 408.2 | 395.4 | 360.2 | 358.4 |
| Edible shellfish | 394.1 | 395.2 | 393.5 | 377.3 | 348.2 | -370.4 |
| Edible fish. | 442.0 | 441.4 | 451.3 | 418.8 | 390.0 | 388.5 |
| Industrial | 223.3 | 223.3 | 223.3 | 348.7 | 356.0 | 394.9 |
| Menhaden | 223.3 | 223.3 | 223.3 | 348.7 | 356.0 | 394.9 |
| All fish . | 426.9 | 426.4 | 435.6 | 414.0 | 387.7 | 388.9 |

## EXVESSEL

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY MONTHS, 1980 - Continued ( $1967=100$ )

| Species or group | July | Aug. | Sept. | Oct. | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England finfish: |  |  |  |  |  |  |
| Cod. . . . . . . . | 238.2 | 282.7 | 254.5 | 317.9 | 416.4 | 475.1 |
| Haddock. | 229.8 | 234.7 | 228.1 | 273.4 | 345.1 | 344.3 |
| Yellowtail flounder. | 394.3 | 444.8 | 341.1 | 427.7 | 462.9 | 458.4 |
| Other flounders. | 287.0 | 320.3 | 252.9 | 305.8 | 314.5 | 334.1 |
| Ocean perch. . | 532.4 | 501.9 | 517.2 | 570.7 | 687.8 | 726.1 |
| Pollock. | 267.3 | 284.2 | 307.9 | 333.4 | 319.7 | 311.4 |
| Whiting. | 383.8 | 364.7 | 345.6 | 313.8 | 330.8 | 364.7 |
| New England finfish | 308.7 | 325.8 | 291.1 | 340.8 | 397.3 | 412.1 |
| Red snapper. | 499.9 | 536.0 | 530.4 | 511.0 | 513.8 | 519.4 |
| Pacific halibut. | 392.8 | 460.0 | 460.0 | 460.0 | 460.0 | 460.0 |
| Salmon: |  |  |  |  |  |  |
| Chinook - troll. | 371.2 | 381.8 | 424.2 | 424.2 | 424.2 | 424.2 |
| Chinook - nontroll | 553.5 | 664.2 | 498.1 | 516.6 | 498.1 | 498.1 |
| Chum . | 436.8 | 436.8 | 742.5 | 786.1 | 655.1 | 655.1 |
| Coho - troll | 269.4 | 330.6 | 367:4 | 367.4 | 367.4 | 367.4 |
| Coho - nontroll. | 505.5 | 439.6 | 593.4 | 593.4 | 549.5 | 549.5 |
| Pink | 392.9 | 314.4 | 314.4 | 314.4 | 314.4 | 314.4 |
| Sockeye. | 511.7 | 554.4 | 511.7 | 213.2 | 213.2 | 213.2 |
| Salmon. | 436.1 | 455.6 | 474.9 | 379.7 | 363.5 | 363.5 |
| Tuna: |  |  |  |  |  |  |
| Albacore | 425.6 | 425.6 | 425.6 | 429.8 | 432.4 | 432.4 |
| Skipjack | 493.3 | 493.3 | 493.3 | 493.3 | 493.3 | 493.3 . |
| Bluefin. | 468.4 | 468.4 | 468.4 | 468.4 | 468.4 | 468.4 |
| Yellowfin. | 425.8 | 425.8 | 425.8 | 425.8 | 425.8 | 425.8 |
| Tuna. | 446.8 | 446.8 | 446.8 | 447.7 | 448.3 | 448.3 |
| Edible finfish | 411.2 | 426.9 | 427.1 | 377.9 | 404.5 | 407.9 |
| Shrimp | 381.6 | 388.2 | 373.6 | 344.4 | 340.3 | 341.3 |
| Other sheilfish: 38.2 |  |  |  |  |  |  |
| Hard clams | 381.3 | 430.9 | 394.8 | 436.6 | 448.2 | 431.2 |
| Soft clams | 471.3 | 520.5 | 566.7 | 480.8 | 480.4 | 466.1 |
| Surf clams . . . | 535.8 | 524.6 | 535.8 | 533.8 | 539.9 | 516.3 |
| Hard blue crabs. | 347.0 | 328.3 | 313.1 | 311.4 | 326.6 | 250.5 |
| King crabs . | 812.0 | 812.0 | 820.5 | 923.1 | 1,000.0 | 1,025.6 |
| American lobsters. | 204.7 | 193.8 | 183.0 | 205:4 | 245.0 | 333.0 |
| Eastern oysters. | 172.3 | 197.0 | 219.6 | 183.2 | 189.2 | 197.8 |
| Sea scallops . | 482.5 | 545.3 | 601.4 | 617.7 | 642.7 | 658.3 |
| Other. shelifish | 350.4 | 366.9 | 372.8 | 383.3 | 408.1 | 423.7 |
| Edible shellfish | 365.7 | 377.3 | 373.2 | 364.2 | 374.9 | 383.3 |
| Edible fish. | 387.2 | 400.8 | 398.7 | 370.7 | 388.9 | 394.9 |
| Industrial fish. | 338.2 | 390.0 | 399.7 | 241.9 | 323.7 | 323.7 |
| Menhaden | 338.2 | 390.0 | 399.7 | 241.9 | 323.7 | 323.7 |
| All fish . . . . . . . . | . 383.8 | 400.1 | 398.8 | 361.8 | 384.4 | 390.0 |

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 exvessel prices.

PRICES

## WHOLESALE

AVERAGE WHOLESALE PRICES FOR EDIBLE FISH AND SHELLFISH, BY MONTHS, 1980

| Group, subgroup, and item specification | Point of pricing | Unit | Jan. | Feb. | Mar. | Apr. | May | June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ---.-. Dollars - - . - - |  |  |  |  |  |  |
| FRESH AND FROZEN FISHERY PRODUCTS: Haddock, large, offshore, drawn, |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| fresh. . . . . ${ }^{\text {c }}$. | Boston | 1 b | 1.10 | 0.55 | 1.00 | 0.45 | 0.40 | 0.40 |
| Halibut, west., 20-80 ib, dressed, fresh and frozen. | New York | 1b | 2.60 | 2.60 | 2.60 | 2.60 | 2.60 | 2.60 |
| Salmon, king, large and medium, dressed, fresh and frozen. | New York | 1 b | 1.81 | 1.81 | 1.81 | 1.81 | 1.25 | 1.20 |
| Whitefish, Lake Superior, drawn, fresh. | Chicago | 1 b | 1.70 | 2.20 | 2.63 | 2.23 | 1.15 | 1.15 |
| Yellow pike, Lakes Michigan and | Chicago |  |  |  |  |  |  |  |
| Huron, round, fresh. . . . | New York | 1b | 1.75 | 2.25 | 2.50 | 2.40 | 2.10 | 1.75 |
| PROCESSED, FRESH (fish and shel1fish): |  |  |  |  |  |  |  |  |
| Fillets, haddock, small, skin on, $20-1 \mathrm{~b}$ tins | Boston | 16 | 1.88 | 1.63 | 2.55 | 1.50 | 1.50 | 1.45 |
| Shrimp, large (26-30 count), headless, fresh. | New York | 16 | 5.40 | 5.40 | 5.40 | 5.40 | 4.40 | 4.25 |
| Oysters, shucked, standards | Norfolk | gal | 19.00 | 18.50 | 18.25 | 18.25 | 18.25 | 18.75 |
| PROCESSED, FROZEN (fish and shell- |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| - Canadian, 1-İb package | Boston | 1 b | - | . 98 | - | 1.04 | 1.03 | 1.00 |
| Flounder, skinless, |  |  |  |  |  |  |  |  |
| 1-1b package . . . | Boston | 1b | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 |
| Ocean perch, large, skin on 1-1b package | Boston | 1 b | 1.50 | 1.15 | 1.15 | 1.15 | 1.00 | 1.00 |
| Shrimp, large ( $26-30$ count), |  |  |  |  |  |  |  |  |
| brown, 5-1b package. . $\cdot$. | Chicago | 1 b | 5.40 | 5.30 | 5.08 | 4.60 | 4.45 | 4.55 |
| Shrimp, raw, breaded (15-20 count), 4-1b package . . . | Selected areas | 1 b | 4.12 | 4.13 | 4.12 | 4.05 | 4.02 | 4.05 |
| Fish blocks, cod, raw, 13-1/2 - 16-1b carton . . . . . | Selected areas | 1b | 1.05 | 1.05 | 1.05 | 1.07 | 1.07 | 1.05 |
| Fish sticks, cod, precooked, breaded, 1/2-1-1b package. |  |  |  |  |  |  |  |  |
| Fish portions, cod, raw, breaded, 6-1b package. | Selected areas | 1 b | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.25 |
| CANNED FISHERY PRODUCTS: |  |  |  |  |  |  |  |  |
| Salmon, pink, No. 1 tall (16oz) 48 cans/case | Seattle | case | 76.00 | 76.00 | 76.00 | 76.00 | 76.00 | 78.00 |
| Tuna, light meat, chunk, No. 1/2 (6-1/2-oz) 48 cans/case. | Los |  |  |  |  |  |  |  |
|  | Angeles | case | 37.50 | 38.50 | 39.00 | 40.50 | 41.50 | 42.00 |
| Sardines, Maine, keyless, oil, |  |  |  |  |  |  |  |  |
| cans/case. . . . . . . . . . . . | New York | case | 32.10 | 32.10 | 32.10 | 34.10 | 34.10 | 34.10 |

(Continued)

## WHOLESALE

AVERAGE WHOLESALE PRICES FOR EDIBLE FISH AND SHELLLFISH, BY MONTHS, 1980 - Continued

| Group, subgroup, and item specification | Point of pricing | Unit | July | Aug. | Sept. | Oct. | Nov. | Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | - - - - Dollars - - - - - |  |  |  |  |  |
| FRESH AND FROZEN FISHERY PRODUCTS: |  |  |  |  |  |  |  |  |
| Haddock, large, offshore, drawn, fresh. | Boston | 1b | 0.68 | 0.52 | 0.52 | 0.50 | 0.80 | 1.03 |
| Halibut, western, 20-80 ib, dressed, fresh or frozen . . . . | New York | 1b | 2.60 | 2.60 | 2.60 | 1.95 | 2.13 | 2.10 |
| Salmon, king, large and medium, dressed, fresh or frozen . . . | New York | 1b | 1.35 | 1.50 | 1.50 | 1.50 | 1.50 | 1.35 |
| Whitefish, Lake Superior, drawn, fresh. | Chicago | 1b | 1.30 | 1.18 | 2.13 | 1.38 | 1.43 | 1.70 |
| Yellow pike, Lakes Michigan and Huron, round, fresh. | New York | 1b | 2.00 | 2.10 | 2.65 | 2.00 | 2.25 | 2.25 |
| PROCESSED, FRESH (fish and shellfish): |  |  |  |  |  |  |  |  |
| Fillets, haddock, small, skin on, 20-1b tins | Boston | 1b | 1.50 | 1.55 | 1.25 | 1.63 | 1.60 | 1.58 |
| Shrimp, large ( $26-30$ count), headless, fresh. | New York | 1b | 4.25 | 4.75 | 4.50 | 4.25 | 4.50 | 4.45 |
| Oysters, shucked, standards | Norfolk | gal | 19.00 | 19.00 | 19.00 | 20.00 | 20.00 | 20.00 |
| PROCESSED, FROZEN (fish and shellfish): |  |  |  |  |  |  |  |  |
| Fillets: Cod, skinless, l-ib package . | Boston | 1b | . 99 | . 99 | . 99 | . 99 | . 99 | 1.05 |
| Flounder, skiniess, |  |  |  |  |  |  |  |  |
| 1-1b package. . | Boston | Ib | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 |
| Ocean perch, large, skin on, 1-lb package. | Boston | lb | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 |
| Shrimp, large ( $26-30$ count), brown, 5-1b package. | Chicago | 1b | 4.65 | 4.68 | 4.38 | 4.28 | 4.15 | 4.18 |
| Shrimp, raw, breaded (15-20 count ${ }^{2}$, 4-ib package . . . | Selected areas | 1b | 4.04 | 3.90 | 3.90 | 3.80 | 3.76 | 3.64 |
| Fish blocks, cod, raw, 13-1/2 -16-1b carton | Selected areas | 1b | 1.05 | 1:05 | 1.05 | 1.05 | 1.07 | 1.12 |
| Fish sticks, cod, precooked, breaded, 1/2 - 1-1b package. | Selected areas | 1b | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.25 |
| Fish portions, cod, raw, breaded, 6-1b package | Selected areas | 16 | 1.25 | 1.24 | 1.24 | 1.24 | 1.27 | 1.31 |
| CANNED FISHERY PRODUCTS: <br> Salmon, pink, No. 1 tall (16-0z) 48 cans/case | Seattle | case | 78.00 | 78.00 | 78.00 | 80.25 | 80.25 | 80.25 |
| Tuna, light meat, chunk, No. $1 / 2$ (6-1/2-oz) 48 cans/case. | Los <br> Angeles |  | 42.00 | 42.50 | 43.00 | 43.25 | 44.25 | 44.25 |
| Sardines, Maine, keyless, oil, 1/4 drawn (3-3/4-0z) 100 cans/case. | New York | case | 36.00 | 36.00 | 34.00 | 34.00 | 34.00 | 36.00 |

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 116 for information on these reports, and how they can be obtained.)

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

## WHOLESALE

WhOLESALE PRICE INDEXES FOR EDIBLE FISH AND SHELLFISH, BY MONTHS, 1980

| Group | Jan. | Feb. | Mar. | Apr. | May | June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - - - Index (1967=100) - . . - - |  |  |  |  |  |
|  |  |  |  |  |  |  |
| frozen, and canned). . . . . | 397.7 | 394.1 | 400.7 | 386.1 | 355.2 | 354.9 |
| Fresh and frozen fishery products | 436.4 | 429.9 | 437.6 | 415.4 | 373.3 | 371.7382.2 |
| Drawn, dressed, or whole finfish. | 493.7 | 481.6 | 505.7 | 478.4 | 388.9 |  |
| Processed, fresh (fish and shellfish). | 422.5 | 415.0 | 438.3 | 411.3 | 349.0 | 339.4 |
| Processed, frozen (fish and shell- |  |  |  |  |  |  |
| Canned fishery products . . . . | 309.7 | 316.1 | 319.3 | 330.7 | 337.2 | 341.5 |
| dishery product |  |  |  |  |  |  |
| Group | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|  | - - - - - - Index (1967=100) - . . - - - |  |  |  |  |  |
| All fish and shellfish (fresh, 3570 |  |  |  |  |  |  |
| frozen, and canned). ..... | 364.3 | 370.3 | 367.5 | 350.0 | 357.8 | 355.4 |
| Fresh and frozen fishery products | 383.3 | 390.2 | 386.2 | 362.5 | 371.0 | 367.5 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Processed, frozen (fish and sheli- |  |  |  |  |  |  |
| Canned fishery products | 343.1 | 346.3 | 347.8 | 263.3 | 357.1 | 358.8 |

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


## RETAIL

RETAIL. PRICES OF FISHERY PRODUCTS, BY MONTHS, 1980

| ITEM | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | NOV. | DEC. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | - Do | lars $p$ | pound - |  |  |  |  |  |
| FRESH |  |  |  |  |  |  |  |  |  |  |  |  |
| Cod fillets | 2.91 | 2.38 | 2.31 | 2.39 | 2.24 | 2.17 | 2.43 | 2.31 | 2.34 | 2.29 | 2.45 | 2.57 |
| Flounder fillets | - |  | 2.69 | 2.49 | 2.91 | 3.07 | 2.24 | 2.49 | 2.38 | 2.52 | 2.81 | 2.65 |
| Haddock fillets | - | 3.69 | 2.98 | 2.53 | 2.28 | 2.39 | 2.66 | 2.84 | 2.35 | 2.75 | 2.87 | 3.20 |
| Ocean perch fillet | 2.75 | 2.58 | 2.58 | 2.53 | 2.61 | 2.19 | 2.53 | 2.25 | 2.22 | 2.38 | 2.20 | 2.32 |
| Sole fillets. | 3.15 | 3.53 | 3.01 | 3.69 | 3.21 | 2.92 | 3.07 | 3.35 | 3.00 | 3.09 | 3.19 | 3.16 |
| RAW FROZEN |  |  |  |  |  |  |  |  |  |  |  |  |
| Cod fillets, 1 lb . pkg . . . . . . . . . . . | 2.19 | 2.03 | 1.99 | 1.97 | 1.98 | 1.99 | 1.98 | 2.06 | 2.04 | 2.03 | 2.04 | 2.10 |
| Flounder fillets, 1 1b. pkg . . . . . . . . | 2.78 | 2.81 | 2.28 | 2.86 | 2.76 | 2.87 | 2.87 | 2.83 | 2.90 | 2.89 | 2.84 | 2.90 |
| Haddock fillets, 1 lb. pkg . . . . . . . | 2.54 | 2.63 | 2.59 | 2.50 | 2.52 | 2.58 | 2.54 | 2.66 | 2.61 | 2.65 | 2.69 | 2.71 |
| Halibut steaks................. | 5.91 | 5.91 | 5.79 | 5.85 | 5.53 | 5.50 | 5.78 | 5.08 | 5.31 | 4.46 | 4.67 | 4.63 |
| Ocean perch filiets, $1 \mathrm{lb} . \mathrm{pkg}$. | 2.14 | 2.19 | 2.20 | 2.13 | 2.10 | 2.13 | 2.16 | 2.17 | 2.19 | 2.17 | 2.12 | 2.16 |
| Turbot fillets, $1 \mathrm{lb} . \mathrm{pkg} . .$. | 1.70 | 1.69 | 1.74 | 1.75 | 1.81 | 1.81 | 1.80 | 1.75 | 1.76 | 1.75 | 1.82 | 1.88 |
| King crab meat, 6 oz. pkg . . . . . . . | 14.57 | 14.53 | 14.32 | 14.65 | 13.69 | 13.85 | 14.43 | 14.51 | 15.24 | 14.90 | 14.60 | 14.92 |
| BREADED, COOKED |  |  |  |  |  |  |  |  |  |  |  |  |
| Fish sticks, breaded, 14 oz. pkg | 1.92 | 1.89 | 1.99 | 2.00 | 1.97 | 1.96 | 2.01 | 2.13 | 2.05 | 2.05 | 2.05 | 2.11 |
| Fish portions, breaded, 14 oz. pkg. | 2.02 | 1.95 | 2.18 | 2.02 | 1.99 | 2.05 | 2.01 | 2.12 | 2.04 | 2.06 | 2.14 | 2.20 |
| Shrimp breaded, fantail. | 4.99 | 5.23 | 5.13 | 4.95 | 5.06 | 5.10 | 4.68 | 4.92 | 4.77 | 4.69 | 4.67 | 4.63 |
| CANNED |  |  |  |  |  |  |  |  |  |  |  |  |
| Tuna, solid, white, in water, <br>  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tuna, chunk, light, in oil, $61 / 2 \mathrm{oz}$. can | 2.11 | 2.08 | 2.19 | 2.14 | 2.18 | 2.26 | 2.34 | 2.39 | 2.47 | 2.45 | 2.37 | 2.49 |
| Salmon, pink, 1 ib. can . . . . . . . . . | 2.20 | 2.19 | 2.21 | 2.23 | 2.28 | 2.29 | 2.27 | 2.34 | 2.32 | 2.36 | 2.33 | 2.34 |
| Salmon, red, 1 lb, can . . . . . . . . . . | 3.15 | 3.20 | 3.23 | 3.23 | 3.26 | 3.24 | 3.23 | 3.24 | 3.20 | 3.23 | 3.21 | 3.29 |
| Sardines, Maine, single layer, soybean oil, 3 3/4 oz. can . . . . . . . | 2.11 | 2.07 | 2.12 | 2.13 | 2.15 | 2.14 | 2.22 | 2.22 | 2.21 | 2.25 | 2.22 | 2.33 |
| Sardines, Norway, single layer, soybean oil, 3 3/4 oz. can | 3.16 | 3.08 | 3.17 | 3.31 | 3.42 | 3.55 | 3.66 | 3.65 | 3.76 | 3.78 | 3.83 | 3.94 |
| Shrimp, small, $41 / 2 \mathrm{oz}$. can...... | 6.76 | 6.83 | 6.76 | 7.19 | 7.37 | 7.16 | 7.41 | 7.27 | 7.47 | 7.56 | 7.59 | 7.31 |

INDEX OF RETAIL PRICES, BY MONTHS, 1980
$1977=100$

| ITEM | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | NOV. | DEC. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fish. | 222.0 | 221.3 | 222.2 | 137.5 | 137.1 | 138.3 | 139.1 | 140.7 | 141.4 | 140.5 | 140.2 | 143.0 |
| Meat | 157.0 | 158.6 | 156.6 | 144.8 | 142.7 | 140.5 | 143.5 | 146.7 | 151.1 | 152.5 | 155.2 | 154.4 |
| Poultry | 130.7 | 132.7 | 131.0 | 122.0 | 119.7 | 119.7 | 126.7 | 132.7 | 135.7 | 133.7 | 131.0 | 130.3 |

Note:--The retail prices and indexes are based on an informal monthly survey of retail prices of fish and other items in three retail grocery stores in each of ten cities. All items in each index are given equal weight. The indexes are not seasonally adjusted.

Source:--Operation Price Watch, National Marine Fisheries Service, Fisheries Development Division, Washington, D.C. 20235, Phone: (202) 634-7385.

VALUE ADDED, MARGINS, AND CONSUMER EXPENDITURES FOR EDIBLE FISHERY PRODUCTS IN THE UNITED STATES, 1979 AND 1980


## VALUE ADDED, MARGINS, AND CONSUMER EXPENDITURES FOR EDIBLE FISHERY PRODUCTS IN THE 'UNITED STATES, 1979 AND 1980 - Continued

## FOOTNOTES

(1) For imported fishery products, the margin and sales values at different levels are calculated in the same manner as they are done for the domestic production column, except that the markup rate at the processor level is 0.6518 in 1979 and 0.7111 in 1980; at the wholesale level the markup rate is 0.1736 in 1979 and 0.1695 in 1980 . In 1979 and 1980 the distribution rate is 51 percent at retail stores, 43 percent at eating places, and 6 percent at institutions.
(2) Value-added rate at each level is the weighted average of all fishery products, expressed as a percentage of its corresponding margin.
(3) Multiply each item under the total margin column by its corresponding value under the value-added rate column to get the actual value added as contribution to the economy from all production and distribution levels of the U.S. fishing industry in the food fish sector.
(4) Value of landings of fish for industrial purposes is deducted.
(5) Exports of unprocessed fish are deducted from the value of the landings after being converted to an equivalent value for domestic landings.
(6) Processor's purchase value (or domestic sales at the harvesting level) times the processor's markup rate (weighted average for all fishery products is 1.1320 in 1979 and 1.1378 in 1980) equals the margin at the processor's level.
(7) Exports of processed products are deducted at their export value from this level.
(8) Wholesale purchase value (processors domestic sales and unprocessed products from domestic landings) times the weighted average of markup rates ( 0.2087 for 1979 and 0.2095 for 1980).
(9) In 1979 and 1980, 39.7 percent of wholesale sales value is distributed to retailers. This value times the weighted average of markup rates ( 0.2872 in 1979 and 0.2878 in 1980) at the retail level equals the margin at retail.
(10) In 1979 and 1980, 55.3 percent of wholesale sales value is distributed to public eating places. At a markup rate of 1.210 for 1979 and 1.200 for 1980, the margin and sales values at this level are obtained.
(11) A wholesale sales value of 5 percent is distributed to institutions with a markup rate of 0.6530 in 1979 and 0.6520 in 1980; the margin and sales value at this level are then calculated.
(12) Consumer expenditures are the total sales value at retail stores, public eating places, and institutions. This total is also the sum of margins of five marketing levels and the landings value after export value is deducted.
Note:--The concept and derivation of value-added, markup rates, and consumer expenditures for edible fishery products are discussed in two comprehensive reports: Cost Analyses of U.S. Fish Price Margins, 1972-77, at Different Production and Distribution Levels and Marketing Bill and lits Cost Components of U.S. Food Fish Products, both prepared by Erwin S. Penn (202-634-7111) of the Economic Analysis Staff, Office of Policy and Planning, Fx53.

A detailed discussion of the procedures for calculating the results of this table appeared in a paper Value Added, Margins, and Consumer Expenditures for Edible Fishery Products in the United States 1976-78, by Erwin S. Penn and Wenona J. Crews, published in the December 1979 issue of the Marine Fisheries Review, NMFS, NOAA.

Per capita use of commercial fish and shellfish is based on the supply of fishery products, both edible and nonedible (industrial), on a round-weight equivalent basis, without considering beginning or ending stocks, defense purchases, or exports (see page 67).

Per capita use figures are not comparable with per capita consumption data (see page 89). Per capita consumption figures represent edible (for human use) meat-weight consumption rather than round-weight
consumption. In addition, per capita consumption includes allowances for beginning and ending stocks, defense purchases, and exports, whereas the use does not include such allowances.

Per capita use is derived by using total population including U.S. Armed Forces overseas. The per capita consumption is derived by using civilian resident population.
U.S. ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1950-80

| Year | Total population <br> including armed <br> forces overseas <br> July 1 | Total <br> U.S. <br> supply <br> (1) | Conmercial <br> landings | Per capita utilization | Imports |
| :---: | :---: | :---: | :---: | :---: | :---: |

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

Note:--Population estimates do not reflect the results of the 1980 Census count.

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

## U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-80

| Year | $\begin{aligned} & \text { Civilian } \\ & \text { resident } \\ & \text { population } \\ & \text { July } 1 \text { (1) } \\ & \hline \end{aligned}$ | Per capita consumption |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Fresh and frozen (2) | Canned (3) | Cured (4) | Total |
|  | $\frac{\text { Million }}{\text { persons }}$ | - - - - - Pounds, edible meat - - - - |  |  |  |
|  | persons |  |  |  |  |
| 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. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-80 - Continued

| Year | Civilian resident population July 1 (1) | Per capita consumption |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Fresh } \\ & \text { and } \\ & \text { frozen (2) } \end{aligned}$ | Canned (3) | Cured (4) | Total |
|  | Million | - - - - - Pounds, edible meat - . - - - - |  |  |  |
| 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 | 7.6 | 4.3 | . 4 | 12.3 |
| 1976 | 213.0 | *8.3 | 4.3 | . 5 | 13.1 |
| 1977 (6). | 214.7 | 7.9 | 4.6 | . 4 | 12.9 |
| 1978 (6). | 216.6 | 8.2 | 5.1 | . 4 | *13.7 |
| 1979 (6). | 218.5 | 8.0 | 4.9 | . 3 | 13.2 |
| 1980 (6).... | 220.7 | 8.1 | 4.6 | . 3 | 13.0 |

(1) Resident population for 1909 to 1929 and civilian resident population for 1930 to date. These population estimates do not reflect the results of the 1980 Census count.
(2) Fresh and frozen fish consumption from 1910 to 1928 is estimated. Beginning in 1973, data include consumption of artificially cultivated catfish.
(3) Canned fish consumption for 1910 to 1920 is estimated. Beginning in 1921 it is based on production reports, packer stocks, and foreign trade statistics for individual years.
(4) Cured fish consumption for 1910 to 1928 is estimated.
(5) Data for 1909 estimate based on the 1908 census and foreign trade data.
(6) Preliminary.
*Record.
Note:--These consumption figures refer only to consumption of fish and shellfish entering comercial channels, and they do not include data on consumption of recreationally caught fish and shellfish which since 1970 is estimated to be between 3 and 4 pounds (edible meat) per person annually.

## U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, $1960-80$

| 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. ${ }^{\text {. }}$ | . 4 | . 3 | 2.9 | . 4 | . 3 | 4.3 |
| $1977^{\circ}$ (1).. | . 5 | . 3 | 2.9 | . 6 | . 3 | 4.6 |
| 1978 (1). . | . 6 | . 3 | 3.3 | . 5 | . 4 | 5.1 |
| 1979 (1).. | . 5 | . 3 | 3.3 | . 5 | . 3 | 4.9 |
| 1980 (1). . | . 5 | . 3 | 3.0 | . 5 | . 3 | 4.6 |

(1) Preliminary.
U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, $1960-80$

| Year | $\begin{aligned} & \text { Fillets } \\ & \text { and } \\ & \text { steaks (1) } \end{aligned}$ | $\begin{gathered} \text { Sticks } \\ \text { and } \\ \text { portions } \end{gathered}$ | 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 . | 2.55 | 2.07 | 1.50 |
| 1977 (3). | 2.56 | 2.05 | *1.59 |
| 1978 (3). | *2.72 | 2.19 | 1.51 |
| 1979 (3). | 2.72 | *2.20 | 1.34 |
| 1980 (3).... . . | 2.54 | 2.05 | 1.46 |

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

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1975:77 AVERAGE

| Region and country | Estimated live weight equivalent |  | Region and country | Estimated live weight equivalent. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kilograms | Pounds |  | Kilograms | Pounds |
| North Amer ica: |  |  | Europe - Continued: |  |  |
| Canada. | 18.2 | 40.1 | Poland. . | 20.5 | 45.2 |
| United States | 15.9 | 35.1 | Portugal. | 38.6 | 85.1 |
|  |  |  | Romania. | 5.7 | 12.6 |
| Latin Amer ica: |  |  | Spain . | 35.3 | 77.8 |
| Argentina . | 4.1 | 9.0 | Sweden. | 32.5 | 71.6 |
| Bolivia . | 1.8 | 4.0 | Switzer land | 10.4 | 22.9 |
| Brazil. | 6.9 | 15.2 | United Kingdom. | 17.3 | 38.1 |
| Chile | 15.8 | 34.8 | Yugos lavià. . | 2.9 | 6.4 |
| Colombia. | 3.4 | 7.5 | USSR. | 28.7 | 63.3 |
| Costa Rica. | 4.5 | 9.9 |  |  |  |
| Cuba. . . | 20.9 | 46.1 | Near East: |  |  |
| Dominican Republic. | 6.3 | 13.9 | Afghanistan | . 1 | . 2 |
| Ecuador . . . . . . | 10.4 | 22.9 | Cyprus. . . | 6.5 | 14.3 |
| E1 Salvador | 2.2 | 4.8 | Egypt . | 4.2 | 9.3 |
| Guatemala | . 7 | 1.5 | Iran. | . 5 | 1.1 |
| Guyana. . | 20.9 | 46.1 | Iraq. | 2.8 | 6.2 |
| Haiti . | 1.6 | 3.5 | Israel. | 11.1 | 24.5 |
| Honduras. | 1.1 | 2.4 | Jordan. | 2.1 | 4.6 |
| Jamaica . | 24.0 | 52.9 | Lebanon | 3.3 | 7.3 |
| Mexico. . | 4.9 | 10.8 | Libya . | 7:3 | 16.1 |
| Nicaragua | 4.3 | 9.5 | Saudi Arabia. | 5.2 | 11.5 |
| Panama. . | 9.7 | 21.4 | Sudan . | 1.4 | 3.1 |
| Paraguay. | 1.0 | 2.2 | Syria. | 1.4 | 3.1 |
| Peru. . . | 17.2 | 37.9 | Turkey. . . . . | 4.4 | 9.7 |
| Surinam . - | 22.0 | 48.5 | Yemen Arab Republic | 3.8 | 8.4 |
| Trinidad and Tobago | 10.1 | 22.3 | Yemen (Aden). . . . | 12.4 | 27.3 |
| Uruguay . . . . | 5.0 | 11.0 |  |  |  |
| Venezuela | 10.2 | 22.5 | Far East: |  |  |
|  |  |  | Bangladesh. | 10.4 | 22.9 |
| Europe: |  |  | Burma . . | 13.0 | 28.7 |
| Albania . | 1.8 | 4.0 | Cambodia. . | 10.0 | 22.0 |
| Austria . . . . . . . . | 7.8 | 17.2 | China, mainland | 5.9 | 13.0 |
| Belgium and Luxembourg. | 18.5 | 40.8 | Hong Kong . . . | 50.5 | 111.3 |
| Bulgaria. | 12.0 | 26.5 | India. | 3.2 | 7.0 |
| Czechos lovakia. | 7.9 | 17.4 | Indonesia | 10.7 | 23.6 |
| Denmark | 35.1 | 77.4 | Japan . . | 67.4 | 148.6 |
| Fed. Republic of Germany. | 10.7 | 23.6 | Laos. | 6.2 | 13.7 |
| Finland | 26.1 | 57.5 | Malaysia. | 34.7 | 76.5 |
| France. | 22.2 | 48.9 | Mongolia. | . 4 | . 9 |
| German Democratic Rep.. | 18.6 | 41.0 | Nepal N. | . 2 | $\begin{array}{r}.9 \\ \hline 8.4\end{array}$ |
| Greece. . . . . . | 15.8 | 34.8 | North Korea | 35.6 | 78.5 |
| Hungary . | 5.0 | 11.0 | Pakistan. - | 1.6 | 3.5 |
| Iceland. | 66.8 | 147.3 | Philippines $\dot{\text { P }}$ | 33.1 | 73.0 |
| Ireland. | 14.2 | 31.3 | Republic of Korea | 47.3 | 104.3 |
| Italy . | 12.4 | 27.3 | Singapore ${ }^{\text {a }}$. ${ }^{\text {. }}$ | 42.5 | 93.7 |
| Malta $\qquad$ Netheriands | 13.2 | 29.1 | Sri Lanka (Ceylon). | 11.3 | 24.9 |
| Nether lands | 13.2 | 29.1 | Thailand. . . . . | 22.9 | 50.5 |
| Norway. . . . . . . . | 47.0 | 103.6 | Vietnam | 21.8 | 48.1 |
| See note at end of table. |  | (Con | inued) |  |  |

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1975-77 AVERAGE - Cont inued


Note:--Data for most countries are tentative. Aquatic plants are included where applicable.
Source:--Food and Agriculture Organization of the United Nations (FAO), Rome.

FISHERY EMPLOYMENT, CRAFT, AND ESTABLISHMENTS, VARIOUS YEARS, 1955-79

| Item | 1955 | 1960 | 1965 | 1970 | 1975 | 1979(1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | --- - - - - - - Number - - - - - - - - - |  |  |  |  |  |
| Persons employed: |  |  |  |  |  |  |
| Fishermen. . . | 144,359 | 130,431 | 128,565 | 140,538 | 168,013 | 184,000 |
| Processing and wholesaling (2). . . . . | 97,825 | 93,625 | 86,864 | 86,813 | 92,310 | 93,100 |
| Total | 242,184 | 224,056 | 215,429 | 227,351 | 260,323 | 277,100 |
| Craft used: |  |  |  |  |  |  |
| Vessels (3). | 11,796 | 12,018 | 12,311 | 13,591 | 16,211 | 18,400 |
| Motor boats. | 58,218 | 56,889 | 63,828 | 71,570 | 85,290 | 83,900 |
| Other boats. | 1,952 | 8,150 | 3,393 | 2,000 | 1,693 | 1,400 |
| Total . | 71,966 | 77,057 | 79,532 | 87,161 | 103,194 | 103,700 |
| Shore establishments: |  |  |  |  |  |  |
| New England States . | 532 | 568 | 532 | 537 | 509 | 480 |
| Mid-At lantic States. | 1,230 | 1,133 | 1,109 | 832 | 747 | 744 |
| South Atlantic States. . | 449 | , 454 | , 443 | 432 | 520 | 692 |
| Gulf Coast States. . . | 642 | 743 | 847 | 817 | 723 | 846 |
| Pacific States . . | 421 | 381 | 420 | 402 | 366 | 357 |
| Alaska. | 179 | 134 | 137 | 108 | 221 | 240 |
| Inland States. | 671 | 772 | 673 | 564 | 512 | 254 |
| Other (4). . . . . | - | 22 | 24 | 43 | 8 | 8 |
| Total . . . . . . . . . . . | 4,124 | 4,207 | 4,185 | 3,735 | 3,606 | 3,621 |

(1) Estimated for fishermen and craft.
(2) Average for season.
(3) Craft 5 net tons and over as documented by U.S. Coast Guard.
(4) Data for 1955 not available. Data for 1960 and 1965 include Hawaii only. Data for other years include American Samoa, Hawaii, and Puerto Rico.


PROCESSORS AND WHOLESALERS: PLANTS AND EMPLOYMENT, 1979

(1) Data estimated. (2) Data on wholesale establishments are not available. (3) A partial survey was made in some inland States.
vessels constructed in 1978 FOR THE UNITED STATES AND PUERTO RICO FISHING FLEETS

| Gross tonnage | $\begin{aligned} & \text { New } \\ & \text { England } \end{aligned}$ | $\begin{aligned} & \text { Middle } \\ & \text { Atlantic } \end{aligned}$ | Chesapeake | $\begin{gathered} \text { South } \\ \text { Atlantic } \end{gathered}$ | $\frac{\text { tonnag }}{\text { Gulf }}$ | $\begin{aligned} & \text { groups } \\ & \text { Pacific } \\ & \text { Coast } \end{aligned}$ | $\begin{aligned} & \text { Great } \\ & \text { Lakes } \end{aligned}$ | Hawaii | $\begin{gathered} \text { Puerto } \\ \text { Rico } \\ \hline \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - - - - - - - - - - - - Number - - - - - - . - - - - - |  |  |  |  |  |  |  |  |  |  |
| 0-9 | 32 | . - | 26 | 8 | 31 | 103 | 1 | - | - | 201 |
| $10-19$ | 33 | 9 | 42 | 15 | 63 | 346 |  | 2 | - | 510 |
| $20-29$ | 15 | 3 | 4 | 25 | 83 | 74 | 1 | 1 | - | 206 |
| $30-39$ | 3 | 3 | - | 12 | 30 | 40 | - |  | - | 88 |
| $40-49$ | 4 | 3 | - | 11 | 32 | 28 | - | 1 | 1 | 80 |
| $50-59$ | 2 | - | - | 5 | 28 | 12 | - | - | - | 47 |
| $60-69$ | 6 | 2 | - | 2 | 13 | 11 | - | - | - | 34 |
| $70-79$ | 4 | - | - | 7 | 9 | 12 | - | - | - | 32 |
| $80-89$ | - | - | - | 7 | 27 | 10 | - | - | - | 44 |
| $90-99$ | 4 | - | - | 10 | 42 | 4 | - | - | - | 60 |
| 100-109 | - | 1 | - | 18 | 123 | - | - | - | - | 142 |
| 110-119 | 4 | 3 | - | 5 | 43 | 3 | - | - | - | 58 |
| 120-129 | 1 | 1 | - | 6 | 22 | 8 | - | - | - | 38 |
| 130-139 | - | - | 1 | 1 | 12 | 2 | - | - | - | 16 |
| 140-149 | 5 | - | 1 | 2 | 10 | 3 | - | - | - | 21 |
| 150-159 | 1 | 1 | - | 1 | 4 | 2 | - | - | - | 9 |
| 160-169 | 3 | 2 | 5 | - | 3 | 2 | - | - | - | 15 |
| 170-179 | 3 | 2 | 1 | 1 | 2 | 3 | - | - | - | 12 |
| 180-189 | - | - | - | - | 6 | 9 | - | - | - | 15 |
| 190-199 | 5 | - | - | - | 2 | 27 | - | - | - | 34 |
| 460-469 | - | - | - | - | 1 | - | - | - | - | 1 |
| 490-499 | - | - | - | - | - | 1 | - | - | - | 1 |
| $530-539$ | - | - | - | - | 1 | - | - | - | - | 1 |
| 900-909 | - | - | - | - | - | 1 | - | - | - | 1 |
| 990-999 | - | - | - | - | - | 2 | - | - | - | 2 |
| 1000-1009 | - | - | - | - | - | 1 | - | - | - | 1 |
| 1160-1169 | - |  |  | - | - | 1 | - | - | - | 1 |
|  |  |  |  |  |  |  |  |  |  |  |
| LengthLin |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { in } \\ \text { feet } \\ \hline \end{gathered}$ | $\begin{gathered} \text { New } \\ \text { England } \end{gathered}$ | Middle Atlantic | Chesapeake | $\begin{gathered} \text { South } \\ \text { Attantic } \\ \hline \end{gathered}$ | Gulf | Pacific Coast | Great Lakes | Hawaji | Puerto Rico | Tota 1 |
| -................ Number $\ldots$ - . . . . . . . . . . . . . . - |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 1 |  | - |  |
| $30-39$ | $51$ | 9 | 44 | 27 | $88$ | $255$ | - | 1 | - | 475 |
| $40-49$ | 9 | 6 | 20 | 33 | 123 | 83 | 1 | 2 | 1 | 278 |
| $50-59$ | 6 | 3 |  | 11 | 52 | 28 | - | 1 | - | 101 |
| $60-69$ | 16 | 4 | 1 | 41 | 230 | 25 | - | - | - | 317 |
| $70-79$ | 9 | 5 | 1 | 15 | 60 | 10 | - | - | - | 100 |
| $80-89$ | 8 | 2 | 6 | 2 | 12 | 18 | - | - | - | 48 |
| 90-99 | 1 |  |  | - | - | 7 | - | - | - | 8 |
| 100-109 |  | - | - | - | - | 4 | - | - | - | 4 |
| 110-119 | - | - | - | - | - | 6 | - | - | - | 6 |
| 120-129 | - | - | - | - | - | 1 | - | - | - | 1 |
| 130-139 | - | - | - | - | - | 2 | - | - | - | 2 |
| 150-159 | - | - | - | - |  | 1 | - | - | - | 1 |
| 160-169 | - | - | - | - | 3 | 1 | - | - | - | 3 |
| 190-199 | - | - | - | - | - | 3 | - | - | - | 3 |
| 200-209 | - | - | - | - | - | 1 | - | - | - | 1 |
| Total vessels | 125 | 30 | 80 | 136 | 587 | 705 | 2 | 4 | 1 | 1,670 |

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

| VESSELS CONSTRUCTED IN 1978 FOR THE UNITED STATES AND PUERTO RICO FISHING FLEETS - Continued |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | By horsepower distribution |  |  |  |  |  |  |  |  |  |  |
| power | $\begin{gathered} \text { New } \\ \text { England } \end{gathered}$ | Middle Atlantic | Chesapeake | South Atlantic | Gulf | Pacific Coast | Great Lakes |  | Hawaii | Puerto Rico | Total |
| - - - - . . . - - - - - Number - . - - - - . . . . . . . - - |  |  |  |  |  |  |  |  |  |  |  |
| 0-99 | 91 | - | 2 | 3 | 7 | 28 |  | 1 |  |  | 42 |
| 100-199 | 36 | 2 | 13 | 18 | 99 | 133 |  |  |  | 1 | 302 |
| 200-299 | 32 | 8 | 37 | 28 | 71 | 245 |  | 1 |  | 1 I | 1424 |
| $300-399$ | 30 | 6 | 15 | 68 | 311 | 171 |  |  |  | 2 | 603 |
| 400-499 | - 8 | 4 | 3 | 2 | 42 | 20 |  | - | - | - | 79 |
| 500-599 | - 6 | 1 | 3 | 9 | 32 | 25 |  | - | - | - | 76 |
| $600-699$ | 3 | 7 | - | 1 | 14 | 31 |  | - | - | - | 56 |
| 700-799 | - | 1 | 7 | 5 | 7 | 14 |  | - | - | - | 36 |
| 800-899 | 4 | - | $\sim$ | - | - | 15 |  | - | - | - | 19 |
| 900-999 | - | - | - | 1 | - | - |  | - | - | - - | 3 |
| 1000-1099 | 9 | 1 | - | - | - | 4 |  | - | - | - - | 5 |
| 1100-1199 | 1 | - | - | - | 1 | 9 |  | - | - | - | 11 |
| 1200-1299 | - | - | - | 1 | - | 2 |  | - | - | - | 3 |
| 1300-1399 | 9 | - | - | - | - | 1 |  | - | - | - | 1 |
| 1800-1899 | 9 | - | - | - | 2 | 1 |  | - | - | - | 3 |
| 1900-1999 |  | - | - | - | - | 1 |  | - | - | - | 1 |
| 2200-2299 | - | - | - | - | - | 1 |  | - | - | - | 1 |
| 2400-2499 | - | - | - | - | 1 | - |  | - | - | - - | 1 |
| 36.00-3699 |  | - | - | - | - | 4 |  | - | - | - | 4 |
| Total vessels | s 125 | 30 | 80 | 136 | 587 | 705 |  | 2 |  | $4 \quad 1$ | 1 1,670 |

Note:--The above data represent the number of vessels documented by the U.S. Coast Guard as being constructed in 1978 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.


PLANTS PRODUCING CANNED FISHERY PRODUCTS, INDUSTRIAL FISHERY PRODUCTS, AND FISH FILLETS AND STEAKS, 1980

| Area and State | Canned fishery products | Industrial fishery products | Fish fillets <br> and steaks | Total plants, exclusive of duplication |
| :---: | :---: | :---: | :---: | :---: |
| New England: |  |  |  |  |
| Maine. . . . . | 16 | 7 | 24 | 46 |
| Massachusetts. | 1 | 3 | 60 | 64 |
| New Hampshire. | - | - | 1 | 1 |
| Rhode Island | - | - | 1 | 1 |
| Total . | 17 | 10 | 86 | 112 |
| Mid-Atlantic: |  |  |  |  |
| New York . . | 4 | 2 | 16 | 21 |
| New Jersey . | 11 | 4 | 1 | 16 |
| Pennsylvania | 3 | - | 4 | 7 |
| Delaware. | 2 | - | - | 2 |
| Maryland. | - | 2 | - | 2 |
| Virginia. | 3 | 6 | 4 | 12 |
| Total | 23 | 14 | 25 | 60 |
| South Atlantic and Gulf: |  |  |  |  |
| North Carolina . | 3 | 11 | 31 | 42 |
| South Carolina | 2 | 1 | 5 | 8 |
| Georgia. | - | 2 | - | 2 |
| Florida. | 1 | 3 | 20 | 24 |
| Alabama. . . | - | 1 | - | 1 |
| Mississippi. | 5 | 3 | - | 8 |
| Louisiana. . | 10 | 18 | - | 27 |
| Toṭal | 21 | 39 | 56 | 112 |
| Pacific: |  |  |  |  |
| Washington | 20 | 11 | 20 | 48 |
| Oregon . . | 7 | 3 | 19 | 28 |
| California | 12 | 12 | 26 | 42 |
| Total. . | 39 | 26 | 65 | 118 |
| Alaska. . | 70 | 3 |  | 73 |
| Inland States: |  |  |  |  |
| Illinois . | - | - | 11 | 11 |
| Iowa . . . | - | 1 | 3 | 4 |
| Kansas . | 1 | - | - | 1 |
| Michigan . | 2 | - | 9 | 11 |
| Minnesota. | - | 1. | 5 | 5 |
| Ohio . | 1 | - | 6 | 7 |
| Nebraska . | 1 | - | - | 1 |
| Wisconsin. | 2 | 3 | 15 | 19 |
| Total. | 7 | 5 | 49 | 59 |
| Hawaii . . . . . | 1 | 1 | - | 1 |
| American Samoa . . | 2 | 2 | - | 2 |
| Puerto Rico. . . . . . | 5 | 4 | - | 5 |
| Grand Total . . . . | 185 | 104 | 281 | 542 |



Fishery products and establishments inspected in calendar year 1980

| Region | Edible fishery products |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Establishments (1) |  |  | Amount inspected |  |  |  |  |
|  | SIFE <br> (2) | PUFI <br> (3) | MP <br> (4) | Grade A (5) | PUFI <br> (5) | No mark (6) | Lot <br> (7) | Total |
| Hortheast. <br> Southeast. | - - Number - - - |  |  | - - - - Thousand pounds - .-. |  |  |  |  |
|  | 6 | 27 | 6 | $\begin{array}{r} 99,368 \\ 6,447 \\ 8,390 \end{array}$ | $\begin{array}{r} 204,107 \\ 62,012 \\ 155,961 \end{array}$ | $\begin{array}{r} 24,703 \\ 7,891 \\ 6,439 \end{array}$ | $\begin{aligned} & 39,202 \\ & 23,646 \\ & 45,329 \end{aligned}$ | $\begin{array}{r} 367,380 \\ 99,996 \\ 216,119 \end{array}$ |
|  | 1 | 16 | 12 |  |  |  |  |  |
| ```West . . . . . . . . Total, 1980. . . . Tota1, 1979. . . .``` | 4 | 14 | 5 |  |  |  |  |  |
|  | 11 | 57 | 23 | 114,205 | 422,080 | 39,033 | 108,177 | 683,495 |
|  | 10 | 64 | 25 | 139,518 | 345,408 | 31,436 | 79,464 | 595,826 |

(1) These establishments are inspected under contract and certified as meeting U.S. Department of Commerce (USDC) regulations for construction and maintenance of facilities and equipment, processing techniques, and employment practices.
(2) Fish processing establishments approved for sanitation under the Sanitarily Inspected Fish Establishment Service (SIFE). Products are not processed under inspection.
(3) Sanitarily inspected fish establishments processing fishery products under USDC inspection.
(4) Plants under USDC inspection for military purchase (MP) products only.
(5) Products processed under USDC inspection in inspected estabTishments 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 quality and condition at the time of examination and located in processing plants, warehouses, cold storage facilities, or terminal markets anywhere in the United States.

Source:--NHFS, Seafood Research, Inspection, and Consumer Services Division.


FISHERY COOPERATIVES

FISHERY COOPERATIVES IN THE UNITED STATES, PUERTO RICO, AND VIRGIN ISLANDS, 1980

| Region and State |
| :---: | :---: | :---: | :---: | :---: | :---: |
| or area |

Note:--These cooperatives will be listed in List of Fishery Cooperatives in the United States, 1980-81. This publication will become available from NMFS, Fisheries Development Division (F/UD1), Washington, D.C. 20235. These cooperatives meet at least one of the following two requirements: 1. Each member of the Association has one vote irrespective of the amount of stock or membership capital he may own therein; or 2. The association's dividends on stock or membership capital does not exceed 8 percent per year and the association shall not deal in the products of nonmembers in an amount greater in value than is handled for members.
Source:--NMFS, Fisheries Development Division (F/UD1)

# THE MAGNUSON FISHERY CONSERVATION AND 

The Magnuson Fishery Conservation and Management Act (MFCMA), Public Law 94-265, as amended, December 22, 1980, provides for the conservation and exclusive management of all fishery resources within the U.S. fishery conservation zone (FCZ), except highly migratory species of tuna. It also provides for exclusive management authority over Continental Shelf Fishery resources and anadromous species beyond the U.S. FCZ, except during the time they are found within any foreign nation's territorial sea or fishery conservation zone for the equivalent), to the extent that such sea or zone is recognized by the United States.

The U.S. FCZ extends from the seaward boundaries of the territorial sea ( 3 nautical miles from shore for all but 2 States) to 200 nautical miles from shore. The seaward boundaries of Texas and the Gulf Coast of Florida are 3 marine leagues ( 9 nautical miles).

## GOVERNING INTERNATIONAL <br> FISHERY AGREEMENTS

Under MFCMA, the U.S. Department of State, with cooperation from the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce, negotiates a Governing International Fishery Agreement (GIFA) with any foreign country wishing to fish within the U.S. FCZ. After the GIFA is signed, it is transmitted by the President to the Congress for review.

## FOREIGN FISHING PERMIT

After a GIFA is in force, the foreign nation submits a vessel permit application for each vessel to the U.S. Department of State. The U.S. Department of State provides copies of the application to the Congress, the U.S. Coast Guard, the appropriate Regional Fishery Management Council, and a copy with recommendations to the Assistant Administrator for Fisheries of the National Marine Fisheries Service (NMFS). The NMFS also recoives recommendations from the Regional Fishery Management Councils and the U.S. Coast Guard.

The Assistant Administrator for Fisheries reviews all recommendations pertinent to the application and, after consultation with the U.S. Department of State and the U.S. Coast Guard, may approve the application. The conditions and restrictions on the approval of the application, are sent to the foreign nation through the U.S. Department of State.

## FEES

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

The permit fees in 1980 were annual charges of $\$ 1$ per gross registered ton for each vessel engaged in fishing; 50 cents per gross registered ton for each vessel engaged in processing fish (not to exceed $\$ 2,500$ per vessel); $\$ 200$ for each ship assisting other vessels in harvesting or processing; and $\$ 200$ for each vessel in a nonretention fishery. Permit fees must be paid when permit applications are submitted.

The poundage fee in 1980 was computed by taking 3.5 percent of the dockside (exvessel) price of fish that are allocated annually to each foreign nation. The value of the fish is based on the dockside price received by U.S. fishermen. For species not landed in the United States, an appropriate foreign dockside price is used. Upon application by a foreign nation at the end of the year, a refund is made for fees paid for unused allocations.

In 1980, the United States imposed a surcharge of up to 20 percent on each nation's permit fee and poundage fee, but not on the observer fee. The surcharge is used to capitalize a fund to compensate U.S. fishermen operating in the U.S. FCZ whose vessels are lost or damaged because of foreign vessel activities, or whose fishing gear is lost or damaged by any foreign or domestic vessel or by "Acts of God."

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

## FOREIGN ALLOCATIONS

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

Each assessment of $O Y$ and each assessment of the anticipated U.S. harvest will be reviewed during each fishing season. Adjustments to TALFFs will be made based on updated information relating to status of stocks, estimated and actual performance of domestic and foreign fleets, and other relevant factors.

FMPs and PMPs
Under the MFCMA, eight Regional Fishery Management Councils are charged with the obligation to prepare fishery management plans (FMPs) for the fisheries under their jurisdiction. After the Councils develop FMPs, which cover both domestic and foreign fishing efforts, the FMPs are submitted to the Secretary of Commerce for Secretarial approval and implementation. The Department, through NMFS agents, and the U.S. Coast Guard are responsible for enforcing the law and regulations. The Secretary of Commerce is also empowered to prepare plans. Where no FMP exists, Preliminary Fishery Management Plans (PMPs), which only cover foreign fishing efforts, are prepared by the Secretary for each fishery for which a foreign nation requests a permit. The Secretary is also empowered to produce an FMP for any fishery that a Council has not duly produced. In this latter case, the Secretary's plan covers both domestic and foreign fishing.

There were 20 major domestic and foreign fisheries under management plan on March 15, 1980 .- 12 FMPs and eight PMPs. The FMPs in effect on that date were:

Atlantic Butterfish
Atlantic Groundfish
Atlantic Herring
Atlantic Mackere!
Surf Clam and Ocean Quahog
Atlantic Squid
Stone Crab
Northern Anchovy
Troll Salmon (Washington, Oregon, and California)
Gulf of Alaska Groundfish
High Seas Salmon (Alaska)
Tanner Crab

The PMPs in effect on March 15, 1980, were:
Atlantic Billfishes and Sharks
Atlantic Hake
Other Finfish (Atlantic)
Trawl Fishery (Washington, Oregon, California)
Bering Sea Herring and Groundfish
Bering Sea Snails
Pacific Billfish and Sharks
Seamount Groundfish

The following three FMPs are in the FMP approval or implementation process.

Gulf of Mexico Shrimp
Bering Sea Groundfish
Pacific Precious Corals

The NMFS submitted these additional seven FMPs for approval in calendar year 1980.

Gulf of Mexico and South Atlantic Coastal Pelagics (Mackerel)
Gulf of Mexico Reef Fishes
Gulf of Mexico Spiny Lobster
Bering Sea Herring
Caribbean Spiny Lobster
Pacific Pink Shrimp
Pacific Groundfish

## REGIONAL FISHERY MANAGEMENT COUNCILS

| Council | States | Telephone number | Executive Dlrector |
| :---: | :---: | :---: | :---: |
| NEW ENGLAND | (Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut) | 617-231-0422 | Douglas G. Marshall, Suntaug Office Park 5 Broadway (Rte. 1), Saugus, MA 01906 |
| MID-ATLANTIC | (New York, New Jersey, Delaware, Pennsylvania, Maryland, and Virginia) | 302-674-2331 | John C. Bryson, Federal Bldg., Suite 2115 North and New Sts., Dover, DE 19901 |
| SOUTH ATLANTIC | (North Carolina, South Carolina, Georgia, and Florida) | 803-571-4366 | David H. G. Gould, Southpark Bldg., Suite 306 1 Southpark Circle, Charleston, SC 29407 |
| GULF OF MEXICO | (Texas, Louisiana, Mississippi, Alabama, and Florida) | 813-228-2815 | Wayne E. Swingle, Lincoln Center, Suite 881 5401 W. Kennedy Bivd., Tampa, FL 33607 |
| CARIBBEAN | (Puerto Rico and Virgin Islands) | 809-753-4926 | Omar Munoz-Roure, Banco de Ponce Bldg. P.O. Box 1001 Hato Rey, PR 00918 |
| PACIFIC | (California, Washington, Oregon, and Idaho) | 503-221-6352 | Lorry M. Nakatsu, 526 SW. Mill St. Portland, OR 97201 |
| NORTH PACIFIC | (Alaska, Washington, and Oregon) | 907-271-4064 | Jim H. Branson, 333 W. Fourth Ave., Suite 32 P.O. Box 3136DT, Anchorage, AK 99510 |
| WESTERN PACIFIC | (Hawaii, American Samoa, Guam, and other Pacific areas). | 808-523-1368 | Svein Fougner 1164 Bishop St., Room 1608 Honolulu, HI 96813 |

## OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN ALLOCATIONS: BY COUNTRY AND REGION, 1980 <br> (FINAL)

| Item | North Atlantic | Washington, Oregon, and <br> California | Gulf of Alaska | Eastern Bering Sea and ATeutian Is lands | Pacific Seamount | Tota 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\ldots$ - - - - Metric tons, round weight - . . . . . . - - |  |  |  |  |  |
| Optimum |  |  |  |  |  |  |
| yield (OY). | 485,150 | 352,200 | 374,750 | 1,689,410 | 2,000 | 2,903,510 |
| U.S. capacity. | 291,800 | 226,712 | 28,041 | 180,168 | 0 | 726,721 |
| Reserve. . . | 0 | , 0 | 0 | $\bigcirc$ | 0 | 0 |
| TALFF (1). | 193,350 | 125,488 | 346,709 | 1,509,242 | 2,000 | 2,176,789 |
| $\begin{aligned} & =========- \\ & \text { Country } \\ & \text { allocations } \end{aligned}$ |  |  |  |  |  |  |
| Bulgaria . . . | 637 | 0 | 0 | 0 | 0 | 637 |
| China, Taiwan. | 0 | 0 | 0 | 9,020 | 1,000 | 10,020 |
| Cuba. | 8,508 | 0 | 0 | 0 | 0 | 8,508 |
| EEC: |  |  |  |  |  |  |
| United Kingdom . .$0$$0$$0$$0$$0$$0$ |  |  |  |  |  |  |
| Federal Republic of Germany. . . | 7,550 | 0 | 0 | 16,484 | 0 | 24,034 |
| Italy. . . . . . | 23,719 | 0 | 0 | 16,4 | 0 | 23,719 |
| Faroe Islands. . . | 600 | 0 | 0 | 0 | 0 | 600 |
| German Democratic 0 |  |  |  |  |  |  |
| Republic. | 714 | 0 | 0 | 0 | 0 | 714 |
| Japan. | 22,873 | 0 | 159,422 | 1,220,640 | 1,000 | 1,403,935 |
| Mexico | 7,867 | 0 | 21,108 | 0 | 0 | 28,975 |
| Poland . | 9,729 | 125,488 | 34,961 | 69,637. | 0 | 239,815 |
| Portugal . . . . . | 4,370 | 0 | 0 | 0 | 0 | 4,370 |
| Republic of Korea. | 0 | 0 | 52,105 | 190,340 | 0 | 242,445 |
| Romania. | 1,931 | 0 | 0 | 0 | 0 | 1,931 |
| Spain. | 36,007 | 0 | 0 | 0 | 0 | 36,007 |
| USSR . . ${ }^{\text {- }}$ | 0 | 0 | 73,337 | (2) 3,121 | 0 | 76,458 |
| Unallocated. | 68,845 | 0 | 5,776 | 0 | 0 | 74,621 |

(1) Total allowable level of foreign fishing.
(2) Harvested between Jan. 1-11, 1980, prior to terminating fishing pursuant to Executive Order.

Note:--TALFF = OY minus U.S. capacity minus Reserve. (See Glossary.) Table only includes species for which there was a foreign fishery. Species prohibited to foreign fishing are not included.

Source:--Country allocations are from the U.S. Department of State, Office of Fisheries Affairs; all other data are from the National Marine Fisheries Service, Office of Resource Conservation and Management.


OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
NORTH ATLANTIC AND GULF OF MEXICO, BY SPECIES AND COUNTRY, 1980
(FINAL)

| Item | Directed fisheries |  |  |  |  | Incidental catch |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Red hake | Silver hake | Sharks, except dogfish | Longfinned squid(1) | Short- <br> finned squid(1) | Atlantic mackere 1 (1) | Butterfish $(1)(2)$ | River herring (3) | Other finfish |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Optimum |  |  |  |  |  |  |  |  |  |  |
| U.S. capacity . | 8,500 | 29,600 | 5,000 | 7,000 | 5,000 | 20,000 | 7,000 | 9,500 | 200,200 | 291,800 |
| Reserve ${ }^{\text {alfF }}$. ${ }^{\text {a }}$ | 8,500 | - 0 | - 0 | 7,00 37,000 | -00 | 10,000 |  | 0 500 | - 0 | 193,350 |
| TALFF (4) ... | 8,500 | 60,400 | 1,150 | 37,000 | 25,000 | 10,000 | 4,000 | 500 | 46,800 | 193,350 |
|  |  |  |  |  |  |  |  |  |  |  |
| Bulgaria. . . . | 0 | 0 | 0 | 125 | 233 | 265 | 14 | 0 | 0 | 637 |
| Cuba. . . . . | 500 | 5,000 | 0 | 125 | 234 | 538 | 86 | 25 | 2,000 | 8,508 |
| United Kingdom Federal Rep. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| of Germany . | 500 | 5,000 | 0 | 0 | 0 | 0 | 0 | 50 | 2,000 | 7,550 |
| Italy . - | 500 | 2,000 | 0 | 9,480 | 6,270 | 2,595 | 824 | 50 | 2,000 | 23,719 |
| Faroe Islands . | 0 | 0 | 500 | 0 | 0 | 0 | 0 | 0 | 100 | 600 |
| German Democratic |  |  |  |  |  |  |  |  |  |  |
| Republic. . . | 50 | 500 | 0 | 0 | 0 | 100 | 14 | 25 | 25 | 714 |
| Japan . . . . . | 1,000 | 2,000 | 0 | 9,718 | 3,655 | 400 | 1,050 | 50 | 5,000 | 22,873 |
| Mexico. - | 500 | 1,000 | 0 | 0 | 2,000 | 100 | 217 | 50 | 4,000 | 7,867 |
| Poland. . | 200 | 300 | 0 | 1,396 | 2,074 | 4,558 | 151 | 50 | 1,000 | 9,729 |
| Portugal. . | 0 | 0 | 0 | 3,175 | 200 | 756 | 239 | 0 | 0 | 4,370 |
| Romania . . | 10 | 1,700 | 0 | 25 | 25 | 125 | 11 | 10 | 25 | 1,931 |
| Spain . . . . - | 1,000 | 6,000 | 0 | 11,031 | 10,309 | 513 | 1,079 | 75 | 6,000 | 36,007 |
| USSR. . . . . . |  |  | 0 |  | 0 | 0 | 0 | ${ }^{0}$ | 0 | 0 |
| Unallocated . - | 4,240 | 36,900 | 650 | 1,925 | 0 | 50 | 315 | 115 | 24,650 | 68,845 |

(1) For fishing year beginning on April 1, 1980, and ending on March 31, 1981.
(2) Allocated by country in proportion to long-finned squid fishery.
(3) Includes alewife, blueback herring, and hickory shad.
(4) Total allowable level of foreign fishing.

Source:--Country allocations are from the U.S. Department of State, Office of Fisheries Affairs; all other data are from the National Marine Fisheries Service, Office of Resource Conservation and Management.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS: WASHINGTON, OREGON, AND CALIFORNIA, BY SPECIES AND COUNTRY, 1980 (FINAL)

| Item | Directed fisheries |  |  | Incidental catch |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Pacific } \\ & \text { hake } \\ & \text { (whiting) } \end{aligned}$ |  | Flounders | Rockfishes |  | Sablefish | Other species |  |
|  |  | Jack mackere 1 |  | Pacific ocean perch | Other |  |  |  |
| $\ldots \ldots$ - . . . . . . . Metric tons, round weight $-\ldots \ldots$ |  |  |  |  |  |  |  |  |
| Optimum |  |  |  |  |  |  |  |  |
| U.S. capacity | 55,000 | 51,400 | 38,280 | 1,926 | 42,414 | 13,192 | 25,500 | 226,712 |
| Reserve . . . | 0 | 0 | 0 | 0 | (5) 0 | 0 | (7) 0 | 0 |
| TALFF (1) . . | 120,000 | (2) 3,600 | (3)120 | (4) 74 | (5)886 | (6)208 | (7)600 | 125,488 |
| $\frac{\text { Country }}{\text { allocations }}$ |  |  |  |  |  |  |  |  |
| Mexico. . | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Poland. . - | 120,000 | 3,600 | 120 | 74 | 886 | 208 | 600 | 125,488 |
| Unallocated . | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(1) Total allowable level of foreign fishing.
(2) $3.0 \%$ of the hake TALFF.
(3) $0.1 \%$ of the hake TALFF.
(4) $0.062 \%$ of the hake TALFF.
(5) $0.738 \%$ of the hake TALFF.
(5) $0.738 \%$ of the hake TALFF.
(7) $0.5 \%$ of the hake TALFF.

Source:--Country allocations are from the U.S. Department of State, Office of Fisheries Affairs; all other data are from the National Marine Fisheries Service, Office of Resource Conservation and Management.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
GULF OF ALASKA, BY SPECIES AND COUNTRY, 1980 FISHING YEAR (NOVEMBER 1, 1979, TO OCTOBER 31, 1980) (FINAL)

(1) Total allowable level of foreign fishing.
(2) Unallocated TALFF are those allocations withheld from Mexico.

Source:--Country allocations are from the U.S. Department of State, Office of Fisheries Affairs; all other data are from the National Marine Fisheries Service, Office of Resource Conservation and Management.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS: EASTERN BERING SEA AND ALEUTIAN ISLANDS, BY SPECIES AND COUNTRY, 1980
(FINAL)

(1) Herring was declared a prohibited species on Feb. 8, 1980. (2) Total allowable level of foreign fishing. (3) Spain released all allocations. (4) Harvested between Jan. 1-11, 1980, prior to terminating fishing pursuant to Executive Order.
Source:--Country allocations are from the U.S. Department of State, Office of Fisheries Affairs; all other data are from the National Marine Fisheries Service, Office of Resource Conservation and Management.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATXONS: PACIFIC SEAMOUNT GROUNDFISH FISHERY, BY COUNTRY, 1980 (FINAL)

(1) Total allowable level of foreign fishing.

Note:--The TALFF for armorheads, alfonsins, and other groundfish resources was subject to additional restrictions on total effort by foreign fishing vessels. No more than 50 vessel days of trawling and 50 vessel days of bottom longlining were allowed in this fishery.
Source:--Country allocations are from the U.S. Department of State, Office of Fisheries Affairs; all other data are from the National Marine Fisheries Service, Office of Resource Conservation and Management.


| Mail routing code |  | Telephone number | Location |
| :---: | :---: | :---: | :---: |
| $\cdots$ | Secretary of Commerce, Malcolm Baldrige 14th and E Sts., NW. <br> Washington, DC 20230 | 202-377-2112 | Commerce |
| A | National Oceanic and Atmospheric Administrat Administrator, Vacant 14th and E Sts., NW. Washington, DC 20230 | 202-377-3567 | Commerce |
|  | NATIONAL MARINE FISHERIES SERV | CENTRAL OFF |  |
| $F$ | Assistant Administrator for Fisheries, Terry L. Leitzell | 202-634-7283 | Page 2 Bldg. |
| $F$ | Deputy Assistant Administrator, William H. Stevenson | 202-634-7243 | Page 2 Bldg. |
| Fx3 | Executive Director, Vacant | 202-634-7292 | . |
| Fx3 | Deputy, Robert K. Crowell | 202-634-7405 | Page 2 Bidg. |
| Fx32 | Administrative Support Staff, Jack L. Falls | 202-634-7405 | Page 2 Bldg. |
| Fx33 | Budget Operations Staff, David H. Rand | 202-634-7444 | Page 2 Bldg. |
| Fx34 | Management Services Staff, <br> E. Craig Felber | 202-634-7405 |  |
| Fx5 | Office of Policy and Planning, Director, Richard E. Gutting, Jr. | 202-634-7430 | Page 2 Bldg. |
| Fx5 | Deputy, Samuel W. McKeen | 202-634-7430 | Page 2 Bldg. |
| Fx51 | Policy Staff, Herbert L. Blatt | 202-653-7551 | Page 2 Bldg. |
| Fx52 | Plans and Budget Staff, James H. Czerwonky | 202-634-7328 | Page 2 Bldg. |
| Fx53 | Economics Staff, Morton M. Miller | 202-634-7111 | Page 2 Bldg. |
| Fx54 | Evaluation Staff, John P. Wise | 202-653-7553 | Page 2 Bldg. |
| PAF | Office of Public Affairs, Public Affairs Officer (NMFS), Gerald D. Hill, Jr. | 202-634-7281 | Page 2 Bldg. |
| GCF | Office of General Counsel-Fisheries, Assistant General Counsel, Jay S. Johnson | 202-634-4224 | Page 2 Bldg. |
| CAx2 | Office of Congressional Affairs, Congressional Affairs Specialist, Vacant | 202-634-1795 | Page 2 Bldg. |
| F/UD | Office of Utilization and Development, Director, Martha 0. Blaxall | 202-634-7261 | Page 2 8ldg. |
| F/UD | Deputy, Vacant | 202-634-7261 | Page 2 Bldg. |
| F/UD1 | Fisheries Development Division, John T. Everett | 202-634-7451 | Page 2 Bldg. |
| F/UD2 | Seafood Research, Inspection, and Consumer Services Division, Thomas J. Billy | 202-634-7458 | Page 2 Bldg. |
| F/J024 | ```National Seafood Quality and Inspection Laboratory, E. Spencer Garrett P.0. Drawer 1207 PascagouTa,MS 39567``` | 601-762-4591 | Pascagoula, MS |
| F/UD5 | Financial Services Division, Michael L. Grable <br> (Continued) | 202-634-7496 | Page 2 Bldg. |



| Mail routing code | REGIONAL O | Telephone number ES | Location |
| :---: | :---: | :---: | :---: |
| F/NER | Northeast Region Director, Allen E. Peterson Jr. Federal Bldg., 14 Elm St. Gloucester, MA 01930 | $\begin{gathered} 617-281-3600 \\ \text { Ext. } 250 \end{gathered}$ | Gloucester, MA |
| F/SER | Southeast Region Director, Vacant Duval Bldg., 9450 Koger Blvd. St. Petersburg, FL 33702 | 813-893-3142 | St. Petersburg, FL |
| F/SWR | Southwest Region <br> Director, Alan Ford 300 South Ferry St. Terminal Island, CA 90731 | 213-548-2575 | Terminal Island, CA |
| F/SWR1 | Western Pacific Program Office Administrator, Doyle E. Gates 2570 Dole St., P.0. Box 3830 Honolulu, HI 96812 | 808-946-2181 | Honolulu, HI |
| F/NWR | Northwest Region Director, H.A. Larkins 1700 Westlake Ave., North Seattle, WA 98109 | 206-442-7575 | Seatt le, WA |
| F/NWR5 | ```Environmental and Technical Services Division, Chief, Dale R. Evans 811 N.E. Oregon St., P.O. Box 4332 Portland, OR 97208``` | $\begin{gathered} 503-234-3361 \\ \text { Ext. } 4301 \end{gathered}$ | Portland, OR |
| F/AKR | Alaska Region <br> Director, Robert W. McVey <br> Federal Bldg., Room 453 <br> 709 West Ninth St., P.O. Box 1668 <br> Juneau, AK 99802 | 907-586-7221 | Juneau, AK |
|  | FISHERIES CENTERS AND LABORATORIES |  |  |
| F/NWC | Northwest and Alaska Fisheries Center Director, William Aron 2725 Montlake Blvd., East Seattle, WA 98112 | 206-442-4760 | Seattle, WA |
| F/NWCx9 | Auke Bay Laboratory Director, William Smoker P.O. Box 155 Auke Bay, AK 99821 | 907-789-7231 | Auke Bay, AK |
| F/NWC11 | Kodiak Facility <br> Director, Robert Wolotira <br> P.O. Box 1638 |  |  |
|  | Kodiak, AK 99615 | 907-487-4961 | Kodiak, AK |
| F/SEC | Southeast Fisheries Center Director, William W. Fox, Jr. 75 Virginia Beach Dr. Miami, FL 33149 | 305-361-5761 | Miami, FL |
| F/SECI | Miami Laboratory <br> Director, William J. Richards Address same as above | Same as abov |  |
| F/SEC2 | Mississippi Laboratories Director, Andrew J. Kenmerer National Space Technology Labs NSTL Station, MS 39529 | 601-688-3650 | Bay St. Louis, MS |
| F/SEC22 | Pascagoula Facility <br> Acting Chief, Wilbur R. Seidel 3209 Frederick St., P.O. Drawer 1207 Pascagoula, MS 39567 | 601-762-4591 | Pascagoula, MS |
| F/SEC5 | Panama City Laboratory Director, Eugene L. Nakamura 3500 Delwood Beach Road Panama City, FL 32407 |  |  |
|  | (Cont inued) |  | Panama City, FL |



|  | NATIONAL MARINE FISHERIES SERVICE <br> RESOURCE STATISTICS OFFICES |
| :--- | :--- |
| City | Telephone <br> number |

## NORTHEAST REGION

| - NEW ENGLAND |  |  |
| :---: | :---: | :---: |
| Portland | 207-780-3322 | Robert C. Morrill, U.S. Custom House, Room 16 Portland, ME 04101 |
| Rock 1 and | 207-594-5969 | Richard C. Barnard, Federal Bldg., Room 217 Rockland, ME 04841 |
| Boston | 617-542-6070 | Gregory R. Powers, Commonwealth Pier, Room 10 Boston, MA 02210 |
| G] oucester | $\begin{gathered} 617-281-3600 \\ \text { Ext. } 304 \end{gathered}$ | 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 |
| New Bedford | 617-994-9200 | Paul 0. Swain, Address same as above New Bedford, MA 02740 |
| Provincetown | 617-487-0868 | William D. Sprague, Post Office Bldg., P.0. Box 91, Provincetown, MA 02657 |
| Woods Hole | $\begin{gathered} 617-548-5123 \\ \text { Ext. } 264 \end{gathered}$ | Ronnee L. Schultz, Northeast Fisheries Center, Woods Hole, MA 02543 |
| Newport | 401-847-3115 | William J. Murphy, Post Office Bldg., Newport, RI 02840 |
| Pt. Judith | 401-783-7797 | Susan Murphy, P.0. Box 547, Pt. Judith, RI 02882 |
| MIDDLE ATLANTIC |  |  |
| Greenport | 516-477-2425 | Emerson C. Hasbrouck, Jr., 41 Front St., P.0. Box 7, Greenport, L.I., NY 11944 |
| Patchogue | $516-475-6988$ $201-349-3533$ | Fred C. Blossom, P.0. Box 606, Patchogue, L.I., NY 11772 |
| Pt. Pleasant | 201-349-3533 | Eugene J. Steady, P.0. Box 143, Toms River, NJ 08753 |
| (1)Sandy Hook | $\begin{aligned} & \text { 201-872-0200 } \\ & \text { Ext. } 241 \end{aligned}$ | Darryl Christensen, Sandy Hook Laboratory, P.O. Box 428 Highlands, NJ 07732 |
| Toms River | 201-349-3533 | Eugene A. LoVerde, P.0. Box 143, Toms River, NJ 08753 |
| Cape May | 609-884-2113 | Patricia A. Heying, P.0. Box 624, Cape May, NJ 08204 |
| CHESAPEAKE |  |  |
| Easton | 301-822-6976 | William E. Brey, P.0. Box 356, Easton, MD 21601 |
| Greenbackville | 804-824-4725 | George Ward, Biological Lab., Franklin City, Greenbackville, VA 23356 |
| Hampton | 804-723-3360 | William N. Kelly, P.O. Box 447, Hampton, VA 23669 |

GREAT LAKES and NORTHERN MISSISSIPPI RIVER AREA
Gloucester $617-281-3600 \quad$ John G. Terrill, State Fish Pier, Gloucester, MA 01930

## SOUTHEAST REGION

| SOUTH ATLANTIC <br> Beaufort | $919-728-4595$ |
| :--- | :--- |
| Char leston | $803-724-4691$ |
| Brunswick | $912-265-7080$ |
| New Smyrna Beach | $904-427-6562$ |
| (1)Miami | $305-361-4461$ |
| Miami | $305-361-4461$ |
| Key West | $305-294-1921$ |

[^3]


## FISHERY MARKET NEWS REPORTS

## DIRECTORY - Continued

HAMPTON (Issues no printed report)
William N. Keliy
P.O. Box 447

222 E. Queen St., Room 215
Hampton, VA 23669
804.723.3369

NEW ORLEANS GOLDENROD SHEET
Edward J. Barry, Supervisor
546 Carondelat St., Room 412
New Orleans, LA 70130
504-589-6151
TERMINAZ ISLAND BUFF SHEET
Patricia J. Donley, Chief
P.O. Box 3266

300 South Ferry St.
Terminal Island, CA 90731
213-548-2572
SEATTLE PINK SHEET
John K. Bishop, Chief
1700 Westlake Ave., North, Room 732
Seatte, WA 98109
206-442-5230
CHICAGO (Issues no printed report)
Alphonse A. Autin, Reporter
610 South Canal St., Room 816
Chicago, IL 60607
312-353-5772

## MESSAGE CENTERS

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

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

MESSAGE CENTERS - Continued

| Chicago, IL |
| :--- |
| Wholesale prices |
| shrimp in Chicago. for |

Gloucester, MA
Glozen headless

New York, NY
212-620-3577
Landings and exvessel prices at New York City, Boston, Gloucester, and New Bedford announced 10:15 a.m. to 3:00 p.m. Wholesale prices on New York Fulton Market annourced 3:15 p.m. to 10:00 a.m. the following day.

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

Portland, ME
207-780-3340
Landings and exvessel prices at Boston. Scallop landings and exvessel prices at New Bedford.

## FISHERY MARKET NEWS REPORTS: CONTENTS

DAILY AND OTHER DATA PUBLISHED MONDAY, WEDNESDAY, AND FRIDAY

|  | BOSTON BLUE SHEET | NEW YORK GREEN SHEET | NEW ORLEANS GOLDENROD SHEET | TERMINAL ISLAND BUFF SHEET | SEATTLE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Landings | New England Major Ports New York City | New England Major Ports 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 | Tuna and California Anchovy, Bonito, Mackerel, and Squid San Pedro Market Fish Otter Trawl Landings (Weekly) | Alaska Halibut, Salmon <br> Alaska Groundfish Alaska Shellfish Oregon, ali Fisheries Washington, all Fisheries |
| Market Receipts (Truck, air, rail, vessel) | Boston Shippers' Market and Live Lobsters | New York Fulton Market | New Orleans <br> New York Fulton Market, Selected Shellfish Chicago Shrimp Shellfish | San Pedro Market Fish | -- |
| Cannery Receipts | -- | -- | Shrimp | Tuna and Bonito, California Mackerel, and Squid | -- |
| Imports | New England Chicago <br> Detroit, Mich. Pembina, N.D. Frozen Blocks by Species and Country Selected Products by Country | New York City Customs District <br> Shrimp by Country (monthly) <br> Shrimp by Size (weekly on Wed.) | Gulf Area <br> Shrimp by Country <br> Shrimp by Size <br> Selected Products by Country | Tuna and Bonito by Species, Type, and Country. Arizona and Calif. Mexican Shrimp Shrimp by Size Selected Products by Country | Washington, Oregon and idaho |
| Exports | Selected Products Monthly, by Country | -- | Selected Products Monthly, by Country | Prices selected species Selected Products Monthly, by Country | Pacific Northwest and Alaska by Country |
| Cold Storage Holdings | New England (Weekly) National (Monthly) | National (Monthly) | National (Monthly) | National (Monthly) | Northwest (Monthly) <br> National (Monthly) |
| Canned Pack | . -- | -- | -- | Tuna and Bonito | Alaska Canned Salmon Pack in Season |
| Exvessel Prices | Boston and New Bedford Auction Sales Live Lobsters (Mass.) | Boston and New Bedford Auction Sales | -- | Tuna and Bonito California Port | Alaska Halibut, Salmon <br> Alaska Groundfish Alaska Shellfish Oregon, all-Fisheries Washington, all Fisheries |
| Wholesale Prices <br> (Fresh and frozen) | Boston Shellfish (Wed.) Live Lobsters (Bought by Wholesaler) Chicago Freshwater | New York Salt-water Finfish-Shellfish and Freshwater Finfish | New Orleans and Chicago Shrimp New York Shellfish | New York Shellfish | New York Halibut and Salmon Boston, Gloucester, and New Bedford Frozen Fish |
| Processors; Importers, and Brokers' Prices | Frozen Blacks, Fillets, Shellfish Specialty Items, (Chicago, Boston, New Bedford, and Gloucester) (Weekly on Wed.) | Frozen Shrimp, Lobster Tails, Other Sheilfish, Fillets Specialty Items, etc. (Weokly on Fri.) | New York Frozen Shrimp, and Lobster Tails <br> Fish Meal Oil and Solubles, (Weekly on Wed.) | Canned Tuna and Bonito New England Frozen Blocks <br> Fish Meal, Oil, and Solubles | Canned Salmon, Crab, and Shrimp Frozen Shrimp and Crab Washington Oysters Fish 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).

## WEEKLY SUMMARY EVERY FRIDAY

In addition to the usual daily and other data, the Weekly Summary part of the Friday reports contain these special weekly features:

| Landings | New England Ports | Chesapeake and North Carolina Areas | Shrimp | California Tuna, Bonito, Mackerel, and Anchovy Fisheries Otter Trawl Landings | Alaska Groundfish Alaska Shellfish Otter Trawl-Seattle |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Market Receipts | Chicago Freshwater Boston Lobster | New York Fulton Market Selected Species | -- | -- | -- |
| Canned Pack | - - | -- | Gulf Oyster and Shrimp | -- | -- |
| Imports | - - | -- | -- | Shrimp from Mexico | Oregon and Washington |
| Exvessel Prices | Boston and New Bedford | -- | Weighted Average for Shrimp by Area and Size | - | Alaska and Oregon |
| Wholesale Prices | Live Lobster Market Chicago Freshwater | New York Fulton Market Selected Species | New Orleans Fresh Fish | -- | -- |

## PUBLICATIONS

## SCIENTIFIC PUBLICATIONS ONLY

Information on scientific publication by NMFS may be obtained from the Scientific Publications Office (F/NWR1), 1700 Westlake Avenue, North, Room 366, Seatt le WA 98109. Telephone: 206-442-4232

## OTHER PUBLICATIONS

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 from:

User Services Branch (OA/D822) Environmental Science Information Service, NOAA Rockville, MD 20852 301-443-8330

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 Resource Statistics Division (F/SR1) Washington, D.C. 20235

202-634-7366
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.
() Participation in Marine Recreational Fishing, Northeastern United States, 1973-74 C.F.S. No. 6236
() Participation in Marine Recreational Fishing, Southeastern United States, 1974 C.F.S. No. 7333
() Marine Recreational Fishery Statistics Survey, At lantic and Gulf Coasts, 1979, C.F.S. No. 8063

The following are preliminary bulletins on commercial landings. They are issued monthly and annually.
( ) GC-6 Shrimp 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.

> | $\frac{\text { New England Fisheries }}{\text { Middle Atlantic Fisheries }}$ |
| :--- |
| Chesapeake Fisheries |

() SR South Atlantic Fisheries Gulf Fisheries
Hawaii Fisheries
Great Lakes Fisheries 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 following pages.

The following are issued as monthly and annual bulletins:
( ) Frozen Fishery.Products
() Fish Meal and 0i1

The following, with one exception, are issued annually:
( $\left\{\begin{array}{lll} & \text { MF-1 } & \text { Canned Fishery Products } \\ & \text { MF-2 } & \text { Industrial Fishery Products }\end{array}\right.$
MF-3 Production of Fish Fillets and Steaks
() MF-4 Processed Fishery Products
() MF-5 Fish Sticks, Fish Portions, and Breaded Shrimp (Quarterly and Annually)
() MF-6 Imports and Exports of Fishery Products

## LIBRARY INFORMATION

Library information is available from NOAA's Georgetown Center (OA/D8222), Page Building 2, Room 193, 3300 Whitehaven St.,NW., Washington, D.C. 20235. Telephone: 202-634-7346.

## PUBLICATIONS AVAILABLE FROM NATIONAL MARINE FISHERIES SERVICE, NOAA

## Shellfish Market Review

## Food Fish Market Review

Fish Meal and Oil Market Review
Each of these reports is published on an irregular basis. 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

This report is based on an informal inwiFS survey of retail prices of fish and other items. The report is published monthly. It includes prices of surveyed items in each of 10 cities and three price indexes (fish, meat, and poultry). Because prices of some items, notably fresh fish, are not regularly available, they are not included in the 10 -city averages, nor in the index日s. The three indexes differ from those published by the Bureau of Labor Statistics (BLS), which conducts separate formal surveys of retail prices for the Consumer Price Index (CPI).

The reports listed below are studies of the market for underutilized fish in the United States and 16 foreign countries.

Study Report of Export and Domestic. Market Opportunities for Underutifized Fish and Shellfish.

Export Market Summaries for France, Belgium/Luxembourg Switzeriand, W. Germany.

Export Market Summaries for Italy, Spain, Portugal, Greace.
Export Market Summaries for Denmark, Sweden, United Kingdom, Netherlands.

Export Market Summaries for Japan, Korea, Taiwan, Nigaria.
Prospectus for Development of the United States Fisheries.


FURTHER INFORMATION MAY BE OBTAINED FROM:
Fisheries Development Division (F/UD1)
National Marine Fisheries Service
Washington, DC 20235
202-634-7451

## PUBLICATIONS

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

Report of the National Marine Fisheries Service for the Calendar Year 1978, PB-80-12956.

RECREATIONAL. MARINE FISHING
1970 Salt-Water Angling Survey, PB-265416.
Determination of the Number of Commercial and NonCommercial Recreational Boats in the United States, Their Use, and Selected Characteristics, COM-74-11186.

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

Marine Recreational Fishery Statistics Survey Atlantic \& Gulf Coasts, 1979, PB 81-165557

## 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 | 1973 | COM-74-50546 |
| 1967 | COM-75-10663 | 1974 | COM-75-10862 |
| 1968 | COM-75-10664 | 1975 | PB-25-3966 |
| 1969 | COM-75-10665 | 1976 | PB-268662 |
| 1970 | COM-71-50081 | 1977 | PB-282741 |
| 1971 | COM-75-10666 | 1978 | PB-297083 |
| 1972 | COM-73-50644 | 1979 | PB-80-201593 |

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

| Year | Accession number | Year | Accession number |
| :--- | :---: | :---: | :---: |
| 1939 | COM-75-11265 | 1958 | COM-75-11061 |
| 1940 | COM-75-11266 | 1959 | COM-75-11062 |
| 1941 | COM-75-11267 | 1960 | COM-75-11063 |
| 1942 | COM-75-11268 | 1961 | COM-75-11064 |
| 1943 | COM $75-11269$ | 1962 | COM-75-11065 |
| 1944 | COM-75-11270 | 1963 | COM-75-11066 |
| 1945 | COMM-75-11271 | 1964 | COM-75-11067 |
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| 1947 | COM-75-11273 | 1966 | PB-246429 |
| 1948 | COM-75-11274 | 1967 | PB-246430 |
| 1949 | COM-75-11275 | 1968 | COM-72-50249 |
| 1950 | COM-75-11056 | 1969 | COM-75-10887 |
| 1951 | COM-75-11053 | 1970 | COM-75-10643 |
| 1952 | COM-75-11054 | 1971 | COM-74-51227 |
| 1953 | COM-75-11055 | 1972 | COM-75-11430 |
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## FISHERIES DEVELOPMENT SERVICES

The National Marine Fisheries Service (NMFS) provides many services with emphasis on developing our Nation's fisheries, particularly for underutilized species. Information is available describing foreign and domestic markets for a variety of species of fish and shellfish. 0ther services include assistance to organize fishery cooperatives, information on foreign tariffs, trade barriers, fishing vessel safety and insurance, and identify needless regulations which erode industry stability and limit its growth. Market reports covering foodfish, shellfish, and industrial fishery products are issued periodically. Consumer services include educational films, fish cooking demonstrations, seafood recipe materials, and bulletins describing nutritional benefits of seafoods. Financial services are available to give fishermen access to private sources of long term financing for fishing vessel construction, reconstruction, and reconditioning (see back cover). A voluntary Federal inspection service is provided for fishery products to ensure that wholesome, safe, and acceptable seafood products are provided for the consumer (see inside back cover).

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## CONSUMER AFFAIRS

The Consumer Affairs Branch is in the Seafood Research, Inspection, and Consumer Services Division of the National Marine Fisheries Service.

The Consumer Affairs Branch provides educational and informational materials and services as follows:

## SERVICES

- workshops/presentations on seafood issues
- complaint handling
. distribution of educational and informational materials
. provide information about --
. the voluntary seafood inspection program
- grade standards and Federal specifications for seafood
. seafood labeling approval

MATERIALS
. how to -

- select, handle, and prepare seafood
- can, smoke, and freeze seafood
- determine quality of fresh, frozen, and canned seafood
- seafood recipes
. nutritional data on seafoods
- audio-visual materials (teacher's unit, seafood charts, brochures)
- news releases on fisheries/consumer information
- best-buy information


## LOCATION

The Consumer Affairs Branch is in the Washington, D.C., area. For further information please contact the following:

## REGIONAL COASTAL INFORMATION CENTERS

The Regional Coastal Information Center (RCIC) network is a joint project of three components of NOAA (National Oceanic and Atmospheric Administration). These are OA/D (Environmental Data and Information Service), CZ (Office of Coastal Zone Management), and RD/SG (Office of Sea Grant).

SERVICES. RCIC's can provide newsletters, lists of published materials and resources data files for local use, literature searches, and general information on coastal and marine resources.

SUBJECT AREAS. The major subject areas include coastal and marine resources, land use and facility siting, urban and regional planning, as well as legal, socioeconomic, and environmental information.

LOCATION. Currently three RCIC's are in operation -- Northeast, Great Lakes and Northwest regions. Six others are planned.

Northeast Regional Coastal Information Center URI Bay Campus
Narragansett, RI 02882
401-792-6211
Great Lakes Regional Information
Referral Center
P.O. Box 999

Ann Arbor, MI 48106
313-668-2330
Northwest Coastal Information Center
OSU Marine Science Center
Newport, OR 97365
503-867-3011

## RCIC Regions



ANADROMOIJS SPECIES. 'These ore species of fish that mature in the ocean, and then ascend streams to spawn in frestwater. In the MFCMA, these species include, but are not limited to, Atlantic and Pacific salmons, steelhead trout, and striped bass. See 42 FR 60682, Nov. 28, 1977.

BOAT, OTHER. Commercial fishing croft not powered by a motor, e.g., rowboat or sailboat, having a capacity of less than 5 net tons. See motorboat.

BREADED FISH PRODUCTS. Sticks and portions or other forms of fish or shellfish coated with a nonleavened mixture containing cereat products, flaverings, and other ingredients. Breaded producis are sold row or pertially cooked.

BATTER-COATED FISH PRODUCTS. Sticks and portions or other forms of fish or shellfish coated with a batter containing a leavening agent and mixture of cereal products, flavoring, and other ingredients, and partially cooked in hot oil a short time to expand and set the batter.

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

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

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

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

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

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

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

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

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

FISH BLOCKS. Regular fish blocks are frozen blocks or slabs of fillets or pieces of fillets cut or sliced from fish. Minced fish blocks are frozen blocks or slabs of minced flesh produced by a meat and bone separating machine.

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

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

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

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

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

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

FISH STICK. An elongated piece of breaded fish flesh weighing not less than $3 / 4$ of an ounce and not more than $1-1 / 2$ ounces with the largest dimension at least three times that of the next larger dimension. A fish stick is generally cut from a fish block.

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

FISHERY MANAGEMENT PLAN (FMP). A plan developed by a Regional Fishery Manogement Council to manage a fishery resource pursuant to the MFCMA.

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 rerigging.

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

GROUNDFISH. Broadly, fish that are caught on or near the sea floor. The term includes a wide variety of bottomfishes, rockfishes, and flatfishes. However, NMFS sometimes uses the term in a narrower sense. In import statistics shown in "Fisheries of the United States," the term applies to the following species: cod, cusk, haddock, hake, poliock, and Atlantic ocean perch.

INDEXES OF EXVESSEL PRICES. Indexes ' of exvessel prices in this report are calculated by averaging prices for the various species of fish. The weight assigned to each species represents its importance in the total exvessel value of all species in 1966-70. Detailed data are aggregated to obtain indexes for groups of species. Each index measures price changes from 1967, the reference period, which is designed as 100. An increase of 85 percent from the reference period in the index, for example, is shown as 185.0.

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

INTERNATIONAL CONVENTION FOR THE NORTHWEST ATLANTIC FISHERIES (ICNAF). This convention, which entered into force on July 3, 1950, was for the investigation, protection, and conservation of the fishery resources of the Northwest Atlantic Ocean. In 1975, there were 18 member nations. The United States withdrew from ICNAF on

December 31, 1976, because continued adherence to the convention was deemed incompatible with the extension of U.S. fishery management jurisdictions to 200 miles under the Magnuson Fishery Conservation and Management Act of 1976. See Northwest Atlantic Fisheries Organization (NAFO).

JOINT VENTURE. An operation authorized under the MFCMA in which a permitted foreign vessel receives fish in the U.S. FCZ from a U.S. vessel. The fish received from the U.S. vessel are part of the U.S. harvest.

LANDINGS, COMMERCIAL. Quantities of fish, shellifish, 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 liveweight basis except for shrimp which may be on a heads-on or heads-off basis. Mollusks are generally landed with the shell on, but for some species only the meats are landed, such as sea scallops. Data for all mollusks are published on meat-weight basis.

MAGNUSON FISHERY CONSERVATION AND
MANAGEMENT ACT, Public Law $94-265$, as amended, (MFCMA). The Act provides a national program for the conservation and management of fisheries to allow for an optimum yield (OY) on a continuing basis and to realize the full potential of the Nation's fishery resources. The MFCMA established the U.S. fishery conservation zone (FCZ) and a means to control foreign and certain domestic fisheries through PMPs and FMPs. Within the U.S. FCZ, the United States has exclusive management authority over all fish (meaning finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals, birds, and highly migratory species of tuna). The Act provides further exclusive management authority beyond the U.S. FCZ for all continental shelf fishery resources and all anadromous species throughout the migratory range of each such species, except during the time they are found within any foreign nation's territorial sea or fishery conservation zone (or the equivalent), to the extent that such a sea or zone is recognized by the United States.

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

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

MARINE RECREATIONAL FISHERMEN. Those people who fish in marine waters primarily for recreational purposes. Their catch is primarily for home consumption, although occasionally a part or all of their catch may be sold and enter commercial channels.

MAXIMUM SUSTAINABLE YIELD (MSY). MSY from a fishery is the largest annual catch or yield in terms of weight of fish caught by both commercial and recreational fishermen that can be taken continuously from a stock under existing environmental conditions. A determination of MSY, which should be an estimate based upon the best scientific information available, is a biological measure necessary in the development of optimum yield.

NORTHWEST ATLANTIC FISHERIES ORGANIZATION (NAFO). This convention, which entered into force January I, 1979, replaces ICNAF. NAFO provides a forum for continued multilateral scientific research and investigation of fishery resources of the Northwest Atlantic. NAFO will manage fishery resources that occur beyond the limits of coastal nations fishery jurisdiction in the northwest Atlantic, and will ensure consistency between NAFO management measures in this area and those adopted by the coastal notions within the limits of their fishery jurisdiction. U.S. adherence to the NAFO Convention is anticipated in 1980.

MOTORBOAT. A motor-driven commercial fishing craft having a capacity of less than 5 net tons. See "boat, other."

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

PACKAGED FISH. A term used in NMFS publications prior to 1972 to designate fresh or frozen row 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 CONSUMPTION. Consumption of edible fishery products in the United States divided by the total civilian population. In calculating annual per capita consumption, estimates of the civilion resident population of the United States on July I of each year are used. These estimates are taken from current population reports, series $\mathrm{P}-25$, published by the U.S. Bureau of the Census.

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

PRELIMINARY FISHERY MANAGEMENT PLAN (PMP). The Secretary of Commerce prepares a PMP whenever a foreign nation with whom the United States has made a Governing International Fishery Agreement (GIFA) submits an application to fish in a
fishery, 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.

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 cought. 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. Iandings include only the weight of the meats.

TOTAL ALLOWABLE LEVEL OF FOREIGN FISHING (TALFF). The TALFF, if any, with respect to any fishery subject to the exclusive fishery management authority of the United States, shall be that portion of the optimum yield of such fishery which will not be harvested by vessels of the United States, as determined by provisions of the MFCMA.
U.S. FISHERY CONSERVATION ZONE (FCZ). The MFCMA defines this zone as contiguous to the territorial sea of the United States and extending seaward 200 nautical miles measured from the baseline from which the territorial sea is measured.
U.S.-FLAG VESSEL LANDINGS. Includes landings by all U.S. fishery vessels regardless of where landed as opposed to landings at ports in the 50 States. These include landings at foreign ports, U.S. territories, and foreign vessels in the U.S. FCZ under joint venture agreements. U.S. Iaw prohibits vessels constructed or registered in foreign countries to land fish catches at U.S. ports.
U.S. TERRITORIAL SEA. A zone extending 3 nautical miles from shore for all States except Texas and the .Gulf Coast of Florida where the seaward boundary is 3 marine leagues ( 9 nautical miles).

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

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

WHOLESALE FISH AND SHELLFISH PRICES. Prices in this report generally are those received at principal fishery markets by primary wholesalers (processors, importers, and brokers) in customary quantities, free on board (f.o.b.) warehouse.

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[^0]:    (1) See note on page 26. Note:--Excludes tunas.

[^1]:    (1) Standard cases 48 cans, solid pack ( 70 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. (4) Included with other shellfish.

[^2]:    Source:--U.S. Department of Commerce, Bureau of the Census.

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