## Fisheries of the

## United States



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## Fisheries Statistics Division David Van Voorhees, Chief

Alan Lowther \& Michael Liddel, Editors
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Wilbur Ross
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Benjamin Friedman
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National Marine Fisheries Service

## Chris Oliver

Assistant Administrator for Fisheries

## NOAA Fisheries Publications

Each year NOAA Fisheries produces three annual reports covering different aspects of the status of United States marine fisheries.

Status of Stocks is an annual report to Congress on the status of U.S. fisheries and is required by the MagnusonStevens Fishery Conservation and Management Act. This report, which is published each spring, summarizes the number of stocks on the overfished, overfishing, and rebuilt lists for U.S. federally managed fish stocks and stock complexes. The report also shows trends over time, discusses the value and contributions of our partners, and highlights how management actions taken by NOAA Fisheries have improved the status of U.S. federally managed stocks. For example, the 2015 report shows the number of stocks listed as subject to overfishing or overfished remains near an all-time low. http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/

Fisheries of the United States, published each fall, has been produced in its various forms for more than 100 years. It is the NOAA Fisheries yearbook of fishery statistics for the United States. It provides a snapshot of data, primarily at the national level, on U.S. recreational catch and commercial fisheries landings and value. In addition, data are reported on U.S. aquaculture production, the U.S. seafood processing industry, imports and exports of fishery-related products, and domestic supply and per capita consumption of fishery products. The focus is not on economic analysis, although value of landings, processed products, and foreign trade are included. http://www.st.nmfs.noaa.gov/commercial-fisheries/fus/fus16/index

Fisheries Economics of the United States, published each fall, provides a detailed look at the economic performance of commercial and recreational fisheries and other marine-related sectors on a state, regional, and national basis. The economic impact of commercial and recreational fishing activities in the U.S. is also reported in terms of employment, sales, and value-added impacts. The report provides management highlights for each region that include a summary of stock status, updates on catch share programs, and other selected management issues. Economic performance indicators for catch share programs and non-catch share fisheries are reported. http://www.st.nmfs.noaa.gov/economics/publications/feus/fisheries_economics_2015/index

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A copy of this report is available from:
Fisheries Statistics Division, (F/ST1)
National Marine Fisheries Service, NOAA
1315 East-West Highway - Rm. 12441
Silver Spring, MD 20910-3282
PHONE: 301-427-8103 / FAX: 301-713-4137
Or online at: https://www.st.nmfs.noaa.gov/commercial-fisheries/fus/fus16/index

Members of the Office of Science and Technology in Silver Spring who contributed to this publication were: Rob Andrews, Lauren Dolinger Few, Joshua Dub, Josanne Fabian, Jacqui Fenner, Tim Haverland, Laura Johansen, Michael Lewis, Michael Liddel, Avi Litwack, Alan Lowther, Damian Schreiber, John Thibodeau, Alex Valderrama and Melissa Yencho.

FISHERIES OF THE UNITED STATES, 2016
This publication is the annual National Marine Fisheries Service (NMFS) yearbook of fishery statistics for the United States for 2016. The report provides data on U.S. recreational catch and commercial fisheries landings and value as well as other aspects of U.S. commercial fishing. In addition, data are reported on the U.S. fishery processing industry, imports and exports of fishery-related products, and domestic supply and per capita consumption of fishery products.

## SOURCES OF DATA

Information in this report came from many sources. Field offices of NMFS, with the generous cooperation of the coastal states and Regional Fishery Information Networks, collected and compiled data on U.S. commercial landings and processed fishery products.

The NMFS Fisheries Statistics Division in Silver Spring, MD, managed the collection and compilation of recreational statistics, in cooperation with various States and Interstate Fisheries Commissions, and tabulated and prepared all data for publication. Sources of other data appearing in this publication are: U.S. Census Bureau, U.S. Bureau of Labor Statistics, U.S. Department of the Interior, U.S. Department of Agriculture, and the Food and Agriculture Organization (FAO) of the United Nations.

Data in this publication are considered to be preliminary and are subject to revision as better information becomes available and updates are made by our regional partners. For the most current data please visit the data queries pages on our website: http:// www.st.nmfs.noaa.gov/commercial-fisheries/index.

## ACKNOWLEDGMENTS

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## NOTES

As in past issues of this publication, the units of quantity and value are defined as follows unless otherwise noted: U.S. landings are shown in round weight (except mollusks which are in meat weight); quantities shown for U.S. imports and exports are in product weight, as reported by the U.S. Bureau of the Census; the value of the U.S. domestic commercial landings is exvessel; in the Review section, deflated ex-vessel prices are shown. The deflated value was computed using the Gross Domestic Product Implicit Price Deflator using a base year 2009. 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 and insurance from the foreign country to the United States. The value for exports is generally the value at the U.S. port of export, based on the selling price, including inland freight, insurance, and other charges. Countries and territories shown in the U.S. foreign trade section are established for statistical purposes in the Tariff Schedules of the United States Annotated (International Trade Commission) and reported by the U.S. Bureau of the Census. Due to data availability, aquaculture production data lags the rest of the publication by 1 year.

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

Address all comments or questions to:
Fisheries Statistics Division, (F/ST1)
National Marine Fisheries Service, NOAA
1315 East-West Highway - Rm. 12441
Silver Spring, MD 20910-3282
PHONE: 301-427-8103 / FAX: 301-713-4137
HOMEPAGE: http://www.st.nmfs.noaa.gov/ commercial-fisheries/index

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## Review

## U.S. COMMERCIAL LANDINGS

Commercial landings (edible and industrial) by U.S. fishermen at ports in the 50 states were 9.6 billion pounds or 4.3 million metric tons valued at $\$ 5.3$ billion in 2016-a decrease of 145.6 million pounds (down $1.5 \%$ ) and an increase of $\$ 108.7$ million (up 2.1\%) compared with 2015. Finfish accounted for 88 percent of the total landings, but only 43 percent of the value. The 2016 average ex-vessel price paid to fishermen was 55 cents per pound compared to 54 cents per pound in 2015.

Catches of Alaska pollock, Pacific whiting, and other Pacific groundfish that are processed at-sea aboard U.S. vessels in the northeastern Pacific are credited as "landings" to the state nearest the area of capture. Information is unavailable for landing port or percentage of catch transferred to transport ships for delivery to foreign ports. These at-sea processed fishery products, on a round (live) weight basis, was almost 1.6 million metric tons in 2016 and made up 36 percent of the total domestic landings in the 50 states.

Commercial landings by U.S. fishermen at ports outside the 50 states provided an additional 420.4 million pounds ( 190,707 metric tons) valued at $\$ 277$ million. This was a decrease of 23 percent, or 128 million pounds ( 57,912 metric tons) in quantity and a decrease of $\$ 7.2$ million ( $2.5 \%$ ) in value compared with 2015. Most of these landings consisted of tuna landed in American Samoa and other foreign ports. Note that improved foreign port data collection in 2012 resulted in a more complete dataset, and thus higher numbers, than were historically available at the time of publication. Therefore, use caution when comparing data before 2012 to those from more recent years.

Edible fish and shellfish landings in the 50 states were 7.5 billion pounds ( 3.4 million metric tons) in 2016-a decrease of 266 million pounds ( 120 metric tons) compared with 2015.

Landings for reduction and other industrial purposes were over 2 billion pounds ( 947 thousand metric tons) in 2016-an increase of 6 percent compared with 2015.

## AQUACULTURE

In 2015, estimated freshwater plus marine U.S. aquaculture production was 627.4 million pounds with a value of $\$ 1.4$ billion, an increase of 19.6 million pounds ( $3.2 \%$ ) in volume and $\$ 61.5$ million ( $4.6 \%$ ) in value from 2014. Atlantic salmon was the leading species for marine finfish aquaculture, with 47.5 million pounds produced an increase of 6.3 million pounds $(15.2 \%)$. Atlantic salmon produced was valued at $\$ 87.7$ million (up $15.2 \%$ ). Oysters have the highest volume for marine shellfish production ( 35.2 million pounds, up $5.7 \%$ ).

The United Nations Food and Agriculture Organization (FAO) estimates that nearly half of the world's consumption of seafood comes from aquaculture. Globally, Asia is the leading continent for aquaculture production volume with 89.3 percent of the global total of 76.6 million metric tons. The top five producing countries are in Asia: China, with 62.3 percent of the global total; India, 6.8 percent; Indonesia, 5.7 percent; Viet Nam, 4.5 percent; and Bangladesh, 2.7 percent. The United States ranks sixteenth in production.

## U.S. MARINE RECREATIONAL CATCH

The 2016 U.S. marine recreational finfish catch, including fish kept and fish released (discarded) on the Atlantic, Gulf, and Pacific coasts (including Alaska, Hawaii and Puerto Rico), was an estimated 371.6 million fish taken on an estimated 63.1 million fishing trips. The harvest (fish kept or released dead) was estimated at 144.6 million fish weighing 181.6 million pounds.

## WORLD LANDINGS

In 2015, the most recent year for which global data are available, world commercial fishery landings and aquaculture production were 169.2 million metric tons-an increase of 4.4 million metric tons compared with 2014. Aquaculture production increased by 2.9 million metric tons while fishery landings increased by 1.5 million tons.

China was the leading nation in both fishery landings and aquaculture production, accounting for 38.5 percent of the total harvest. Indonesia is the second leading producer with 6.3 percent. India was third with just under 5.9 percent. Vietnam was fourth with 3.5 percent. The United States was fifth with 3.2 percent.

## PROCESSED PRODUCTS

The estimated value of the 2016 domestic production of edible and nonedible processed fishery products was $\$ 9.6$ billion, down 1.8 billion ( $16.1 \%$ ) from 2015. The value of edible products was $\$ 8.8$ billion-down 1.6 billion ( $15.7 \%$ ) compared with 2015 . The value of industrial products was $\$ 794.6$ million in 2016 down 196.1 million ( $19.8 \%$ ) from 2015.

## FOREIGN TRADE

The total import value of edible and nonedible fishery products was $\$ 35.8$ billion in 2016-a decrease of $\$ 1.5$ billion ( $4.3 \%$ ) compared with 2015. Imports of edible fishery products (product weight) were 5.8 billion pounds valued at $\$ 19.5$ billion in 2016. Volume increased 90.3 million pounds ( $1.6 \%$ ), while value increased by $\$ 693.0$ million ( $3.7 \%$ ) compared with 2015. Imports of nonedible (i.e., industrial) products were $\$ 16.4$ billion-a increase of $\$ 838.2$ million ( $5.4 \%$ ) compared with 2015.

Total export value of edible and nonedible fishery products was $\$ 28.0$ billion in 2016-a decrease of $\$ 409.8$ million ( $1.4 \%$ ) compared with 2015. United States firms exported 2.9 billion pounds of edible products valued at $\$ 5.4$ billion-volume decreased 214.5 million pounds ( $6.8 \%$ ) and value decreased $\$ 186.1$ million (3.3\%) compared with 2015. Exports of nonedible products were valued at $\$ 22.6$ billion, which is $\$ 223.7$ million ( $1.0 \%$ ) less than 2015.

## SUPPLY

The U.S. supply of edible fishery products (domestic landings plus imports, round weight equivalent, minus exports) was 12.0 billion pounds in 2016 essentially unchanged from 2015. The supply of industrial fishery products was 860 million pounds in 2016-an increase of 116 million pounds compared with 2015.

## PER CAPITA CONSUMPTION

Estimated U.S. per capita consumption of fish and shellfish was 14.9 pounds (edible meat) in 2016. This total was a decrease of 0.6 pounds from the 15.5 pounds consumed in 2015.

## CONSUMER EXPENDITURES

U.S. consumers spent an estimated $\$ 93.2$ billion for fishery products in 2016. The 2016 total includes $\$ 63.4$ billion in expenditures at food service establishments (restaurants, carry-outs, caterers, etc.);
$\$ 29.8$ billion in retail sales for home consumption; and $\$ 75.8$ million for industrial fish products. By producing and marketing a variety of fishery products for domestic and foreign markets, the commercial marine fishing industry contributed $\$ 46.7$ billion (in value added) to the U.S. Gross National Product.

## PRICES

The 2016 annual ex-vessel price index for edible fish decreased by 0.8 percent. Shellfish decreased by 3.7 percent and industrial products increased 1.2 percent compared with 2015. Ex-vessel price indices increased for 17 out of 32 species groups being tracked, decreased for 13 species groups, and remained unchanged for 2 product groups. The coho salmon price index had the largest increase ( $61.2 \%$ ) while the snow crab price index showed the largest decrease ( $42.5 \%$ ).

2016 U.S. Commercial Fisheries and the Seafood Industry Highlights


## 2016 U.S. Commercial Fisheries and the Seafood Industry Top Ports by Volume and Value of Seafood Landed




## 2015 Aquaculture Production Highlights



## 2016 U.S. Recreational Fisheries Saltwater Trips and Catch



## 2016 U.S. Recreational Fisheries Top Species by Pounds Harvested*



2016 Value of Processed Fisheries Products
(Processed from domestic catch and imported products)

TOTAL for Edible and Industrial Products: \$9.55 billion



## 2016 U.S. Trade with East Asia*

| Total Pounds | Edible IMPORTS |  | Edible EXPORTS |  | TRADE DEFICIT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| and Value | 3.35 | \$9.63 | 1.64 | \$2.65 | -\$6.98 |
| of U.S. Edible Imports | billion pounds | billion | billion pounds | billion | billion |

Pounds and Value by Category of U.S. Edible Imports and Exports




Commercial Landings, 1996-2016 National Landings and Deflated Value


Volume of U.S. Domestic Finfish and Shellfish Landings, 1996-2016


Value of U.S. Domestic Finfish and Shellfish Landings, 1996-2016


Alaska led all states in volume with landings of 5.6 billion pounds, followed by: Louisiana, 1.2 billion pounds; Washington, 551.9 million pounds; Virginia, 363.3 million pounds; and Mississippi, 304.0 million pounds.

Alaska led all states in value of landings with $\$ 1.6$ billion, followed by: Maine, $\$ 633.6$ million; Massachusetts, $\$ 552.2$ million; Louisiana, $\$ 407.2$ million; and Washington, $\$ 321.0$ million.

Dutch Harbor, Alaska, was the leading U.S. port in quantity of commercial fishery landings, followed by: Aleutian Islands (Other), Alaska; Empire-Venice, Louisiana; Kodiak, Alaska; and Reedville, VA.

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

Tuna landings by U.S.-flag vessels at ports outside the continental United States amounted to 418.5 million pounds.

## Major U.S. Domestic Species Groups Landed in 2016

 Ranked by Volume and ValueVolume of Landings

| Rank | Species | Thousand <br> Pounds |
| ---: | :--- | ---: |
| 1 | Pollock | $3,360,760$ |
| 2 | Menhaden | $1,727,502$ |
| 3 | Cod | 711,791 |
| 4 | Flatfish | 590,613 |
| 5 | Hakes | 576,086 |
| 6 | Salmon | 561,036 |
| 7 | Crabs | 317,348 |
| 8 | Shrimp | 270,787 |
| 9 | Sea Herring | 191,550 |
| 10 | Rockfishes | 165,039 |

Value of Landings

| Rank | Species | Thousand <br> Dollars |
| ---: | :--- | ---: |
| 1 | Lobsters | 722,615 |
| 2 | Crabs | 704,288 |
| 3 | Scallops | 488,051 |
| 4 | Shrimp | 483,430 |
| 5 | Pollock | 423,575 |
| 6 | Salmon | 420,233 |
| 7 | Flatfish | 268,399 |
| 8 | llams | 234,856 |
| 9 | Oysters | 217,170 |
| 10 | Cod | 177,540 |

## ALASKA POLLOCK AND OTHER PACIFIC TRAWL FISH

U.S. landings of Pacific trawl fish (Pacific cod, flounders, hake, Pacific ocean perch, Alaska pollock, and rock fishes) were over 5.3 billion pounds valued at nearly $\$ 762.9$ million-an increase of nearly 7 percent in quantity and a decrease of almost 11 percent in value compared with 2015.

Landings of Alaska pollock ( 3.4 billion pounds) increased from 2015 and were 336.2 million pounds over their 2011-2015 5 - year average. Landings of Pacific cod were 708.6 million pounds - an increase of more than 1 percent from 699.1 million in 2015. Pacific hake (whiting) landings were 558 million pounds (up more than 67 percent) valued at $\$ 46.6$ million (up 85 percent) compared to 2015. Landings of rockfishes were over 42.3 million pounds (down almost 12 percent) and valued at nearly $\$ 16.8$ million (down nearly 13 percent) compared to 2015.


## ANCHOVIES

U.S. landings of anchovies were 18.9 million poundsa decrease of 19 million pounds ( 50 percent) compared with 2015. One percent of all landings were used for animal food or reduction and 99 percent were used for bait. The U.S. imports all edible anchovies.

## HALIBUT

U.S. landings of Atlantic and Pacific halibut were 25.2 million pounds valued at $\$ 127$ million-an increase of 627,000 pounds (almost 3 percent) and $\$ 7.7$ million (more than 6 percent) compared with 2015. The Pacific fishery accounted for all but 285,000 pounds of the 2016 total halibut catch. The average ex-vessel price per pound in 2016 was $\$ 5.05$ compared with \$4.86 in 2015.

## SEA HERRING

U.S. commercial landings of sea herring were 191.5 million pounds valued at over $\$ 35.2$ million-a decrease of 55 million pounds (over 22 percent), but an increase of more than $\$ 2.3$ million ( 7 percent) compared with 2015. Landings of Atlantic sea herring were 139.3 million pounds valued at almost $\$ 29.7$ million-a decrease of 38.1 million pounds (more than 21 percent), but an increase of $\$ 4.1$ million ( 16 percent) compared with 2015.

Landings of Pacific sea herring were 52.3 million pounds valued at $\$ 5.5$ million-a decrease of nearly 16.9 million pounds ( 24 percent), and nearly $\$ 1.8$ million (over 24 percent) compared with 2015. Alaska landings accounted for 99 percent of the Pacific coast with nearly 51.8 million pounds valued at $\$ 5.4$ million-a decrease of 16.6 million pounds (over 24 percent) and $\$ 1.7$ million ( 24 percent) compared with 2015.


## JACK MACKEREL

California accounted for 57 percent, Oregon for 3 percent, and Washington nearly 40 percent of the U.S. landings of jack mackerel in 2016. Total landings were 800,000 pounds valued at $\$ 62,000-\mathrm{a}$ decrease of almost 2.2 million pounds ( 73 percent) and $\$ 157,000$ (more than 71 percent) compared with 2015. The 2016 average ex-vessel price per pound was 8 cents.

## MACKEREL, ATLANTIC

U.S. landings of Atlantic mackerel were nearly 11.8 million pounds valued at nearly $\$ 3.1$ million-a decrease of 605,000 pounds (nearly 5 percent) and $\$ 900,000$ (almost 23 percent) compared with 2015. Massachusetts with nearly 9.9 million pounds and New Jersey with 306,000 pounds accounted for almost 87 percent of the total landings. The average
ex-vessel price per pound in 2016 was 26 cents compared with 32 cents in 2015.

## MACKEREL, CHUB

Landings of chub mackerel were 4.6 million pounds valued at $\$ 594,000$-a decrease of 9.9 million pounds (over 68 percent), and $\$ 1.1$ million (over 65 percent) compared with 2015. California accounted for over 84 percent of the total landings. The average exvessel price in 2016 was 13 cents compared with 12 cents in 2015.

## MENHADEN

The U.S. menhaden landings were almost 1.7 billion pounds valued at $\$ 179.8$ million-an increase of almost 109.6 million pounds (nearly 7 percent), and over $\$ 13.3$ million (8 percent) compared with 2015. Landings decreased by 72.5 million pounds (almost 17 percent) in the Atlantic states, while increasing by 182.1 million pounds (more than 15 percent) in the Gulf states compared with 2015. Landings along the Atlantic coast were more than 363.5 million pounds valued at $\$ 36.5$ million. Gulf region landings were 1.4 billion pounds valued at $\$ 143.3$ million.

Menhaden are used primarily for the production of meal, oil, and solubles, while small quantities are used for bait.


## NORTH ATLANTIC TRAWL FISH

Landings of butterfish, Atlantic cod, cusk, flounders (winter/blackback, summer/fluke, yellowtail and other), haddock, red and white hake, ocean perch, pollock and whiting (silver hake) in the North Atlantic (combination of New England and Middle Atlantic Regions) were 62 million pounds valued at $\$ 89$
million-a decrease of 12.2 million pounds (more than 16 percent), and nearly $\$ 6.3$ million (almost 7 percent) compared with 2015. Of these species, flounders led in total value in the North Atlantic, accounting for more than 45 percent of the total; followed by haddock, 15 percent; and whiting (silver hake), nearly 12 percent.

The 2016 landings of Atlantic cod were over 3.2 million pounds valued at more than $\$ 6.1$ million-a decrease of 149,000 pounds (more than 4 percent), and $\$ 307,000$ (almost 5 percent) compared with 2015. The ex-vessel price per pound in 2016 was \$1.91, unchanged from 2015.

Landings of yellowtail flounder were more than 1.2 million-a decrease of 890,000 pounds (almost 42 percent) from 2015 and were over 65 percent lower than the 5-year average.

Haddock landings decreased to 11.1 million pounds (down over 7 percent) but increased to over $\$ 13.3$ million (up 5 percent) compared to 2015.

North Atlantic pollock landings were nearly 5.7 million pounds valued at almost $\$ 6.4$ million-a decrease of over 1 million pounds (over 15 percent), and almost $\$ 1.2$ million (more than 15 percent) compared with 2015.


## PACIFIC SALMON

U.S. commercial landings of salmon were 561 million pounds valued at over $\$ 420.2$ million-a decrease of 505 million pounds (more than 47 percent) and nearly $\$ 39.9$ million (almost 9 percent) compared with 2015. Alaska accounted for almost 97 percent of total landings; Washington, nearly 3 percent; California,

Oregon, and the Great Lakes combined accounted for less than 1 percent of the catch. Sockeye salmon landings were 287.3 million pounds valued at over $\$ 250.2$ million-a decrease of nearly 2.8 million pounds ( 1 percent), but an increase of $\$ 50.2$ million ( 25 percent) compared with 2015. Chinook salmon landings decreased to 11.9 million pounds-down almost 6.2 million pounds ( 34 percent) from 2015. Pink salmon landings were 130.3 million pounds-a decrease of 477.2 million (almost 79 percent); chum salmon landings were 101.4 million, a decrease of nearly 23.8 million ( 19 percent); and coho salmon increased to 30.3 million-an increase of 5 million (nearly 20 percent) compared with 2015.

Alaska landings were almost 542.6 million pounds valued at almost $\$ 380.5$ million-a decrease of 498.2 million pounds (nearly 48 percent) and almost $\$ 32.7$ million (nearly 8 percent) compared with 2015. The distribution of Alaska salmon landings by species in 2016 was: sockeye, 287.1 million pounds (nearly 53 percent); pink, 130.3 million pounds ( 24 percent); chum, 92.5 million pounds ( 17 percent); coho, 27.4 million pounds ( 5 percent); and chinook, nearly 5.3 million pounds ( 1 percent). The average price per pound for all species in Alaska was 70 cents in 2016-an increase of 30 cents from 2015.

Washington salmon landings were nearly 15.8 million pounds valued at $\$ 26.1$ million-a decrease of 4.8 million pounds ( 23 percent) and $\$ 780,000$ (nearly 3 percent) compared with 2015. The biennial fishery for pink salmon went from nearly 2.8 million in 2015 to 0 pounds in 2016. Washington landings of chum salmon were 8.8 million (down almost 8 percent); followed by chinook, 4.2 million pounds (down more than 42 percent); coho, nearly 2.7 million pounds (up almost 360 percent); and sockeye, 130,000 pounds (down more than 67 percent). The average ex-vessel price per pound for all species in Washington increased from $\$ 1.30$ in 2015 to $\$ 1.64$ in 2016.

Oregon salmon landings were 1.8 million pounds valued at almost $\$ 8.3$ million-a decrease of 1.3 million pounds (nearly 42 percent) and almost $\$ 3.6$ million ( 30 percent) compared with 2015. Chinook salmon landings were 1.6 million pounds valued at $\$ 7.9$ million; coho landings were 216,000 pounds
valued at $\$ 396,000$; sockeye landings were 2,000 pounds valued at $\$ 6,000$; pink landings were less than 500 pounds valued at less than $\$ 500$; and chum landings were less than 500 pounds valued at less than $\$ 500$. The average ex-vessel price per pound for Chinook salmon in Oregon increased from \$3.94 in 2015 to $\$ 4.93$ in 2016.

California salmon landings were 709,000 pounds valued at nearly $\$ 5.3$ million— a decrease of 643,000 pounds (almost 48 percent) and $\$ 2.9$ million ( 35 percent) compared with 2015. Chinook salmon were the principal species landed in the state. The average ex-vessel price per pound paid to fishermen in 2016 was $\$ 7.44$ compared with $\$ 6.02$ in 2015.


## SABLEFISH

U.S. commercial landings of sablefish were almost 33.6 million pounds valued at nearly $\$ 116.9$ milliona decrease of 1.8 million pounds ( 5 percent), but an increase of $\$ 3$ million (almost 3 percent) compared with 2015. Landings decreased in Alaska to 21.8 million pounds-a decrease of almost 9 percent compared with 2015. Landings increased in Washington to 2.4 million pounds (up 1 percent) and almost $\$ 7.5$ million (up more than 3 percent). The 2016 Oregon catch was 5.5 million pounds (up 9 percent), and $\$ 15.1$ million (up over 18 percent) compared with 2015. California landings of 3.9 million pounds and $\$ 8.8$ million represent a decrease of more than 4 percent in quantity and nearly 1 percent in value from 2015. The average ex-vessel price per pound in 2016 was $\$ 3.48$ compared with $\$ 3.22$ in 2015.

## TUNA

Landings of tuna by U.S. fishermen at ports in the United States, American Samoa, other U.S. territories, and foreign ports were 474.5 million pounds valued at nearly $\$ 432.8$ million-a decrease of almost 129.7 million pounds (more than 21 percent), but an increase of $\$ 12.5$ million ( 3 percent) compared with 2015. The average ex-vessel price per pound of all species of tuna in 2016 was 91 cents compared with 70 cents in 2015.

Bigeye landings in 2016 were 23.8 million pounds-a decrease of almost 2.1 million pounds ( 8 percent) compared with 2015. The average ex-vessel price per pound was $\$ 3.44$ in 2016 compared to $\$ 3.17$ in 2015.

Skipjack landings were 377.3 million poundsa decrease of 121.4 million pounds ( 24 percent) compared with 2015. The average ex-vessel price per pound was 66 cents in 2016 compared to 51 cents in 2015.

Yellowfin landings were 45.4 million pounds-a decrease of 4.2 million pounds (almost 9 percent) compared with 2015. The average ex-vessel price per pound was $\$ 1.06$ in 2016 compared with $\$ 0.82$ in 2015.

Bluefin landings were almost 2.7 million pounds-an increase of 781,000 pounds (more than 41 percent) compared with 2015. The average ex-vessel price per pound in 2016 was $\$ 5.26$ compared with $\$ 4.67$ in 2015.


## CLAMS

Landings of all species yielded 88.9 million pounds of meats valued at $\$ 234.9$ million-an increase of 2.8 million pounds (3 percent) and almost $\$ 28.6$
million (nearly 14 percent) compared with 2015. The average ex-vessel price per pound in 2016 was $\$ 2.65$ compared with $\$ 2.40$ in 2015.

Surf clams yielded 41.9 million pounds of meats valued at $\$ 31.6$ million-an increase of more than 1.2 million pounds ( 3 percent) and almost $\$ 1.2$ million (nearly 4 percent) compared with 2015. Massachusetts was the leading state with 19.8 million pounds (up nearly 3 percent compared with 2015); followed by New Jersey, more than 16.5 million pounds (down 10 percent); and New York, nearly 3.7 million pounds (up 200 percent). The average ex-vessel price per pound of meats was 75 cents in 2016, unchanged from 2015.

The ocean quahog fishery produced 30.7 million pounds of meats valued at $\$ 26.3$ million-an increase of 738,000 pounds (more than 2 percent) and nearly $\$ 2.6$ million (nearly 11 percent) compared with 2015. New Jersey had landings of 18.1 million pounds (up almost 12 percent compared with 2015) valued at $\$ 16.3$ million (up more than 22 percent) while Massachusetts production was over 12.2 million pounds (down 8 percent) valued at nearly $\$ 8.7$ million (down 4 percent). Together, New Jersey and Massachusetts accounted for 99 percent of total ocean quahog production in 2016. The average ex-vessel price per pound of meats increased from 79 cents in 2015 to 85 cents in 2016.

The hard clam fishery produced 8.7 million pounds of meats valued at $\$ 61.9$ million-an increase of over 1.2 million pounds (more than 16 percent) and $\$ 4.8$ million (more than 8 percent) compared with 2015. Landings in the New England region were almost 1.4 million pounds of meats (down almost 8 percent); Middle Atlantic, 6.2 million pounds (up 20 percent); and the South Atlantic region, more than 1.1 million pounds (up almost 33 percent). The average ex-vessel price per pound of meats decreased from $\$ 7.63$ in 2015 to $\$ 7.11$ in 2016.

Soft clams yielded 2.5 million pounds of meats valued at nearly $\$ 24.8$ million—a decrease of 30,000 pounds ( 1 percent) and $\$ 4.8$ million ( 16 percent) compared with 2015. Maine was the leading state with 1.6 million pounds of meats (down 17 percent), followed by Massachusetts, 669,000 pounds (up 61 percent), and Maryland, 306,000 pounds (up 320 percent).

The average ex-vessel price per pound of meats was $\$ 9.72$ in 2016, compared with $\$ 11.46$ in 2015.


## CRABS

Landings of all species of crabs were 317.3 million pounds valued at $\$ 704.3$ million-a decrease of more than 9 million pounds ( 3 percent), but an increase of almost $\$ 25.6$ million (nearly 4 percent) compared with 2015.

Hard blue crab landings were 157.5 million pounds valued at $\$ 213.8$ million-a decrease of almost 1.2 million pounds ( 1 percent) and $\$ 21$ million (nearly 9 percent) compared with 2015. Louisiana landed more than 24 percent of the total U.S. landings followed by: Maryland, 22 percent; Virginia, more than 17 percent; and North Carolina, 16 percent. Hard blue crab landings in the South Atlantic, with almost 34.7 million pounds, decreased 15 percent; and the Gulf region, with almost 49.5 million pounds, decreased almost 1 percent. The Middle Atlantic region, with over 73.3 million pounds valued at nearly $\$ 114.8$ million, had an increase of almost 5.4 million pounds (nearly 8 percent) compared with 2015. The average ex-vessel price per pound of hard blue crabs was $\$ 1.36$ in 2016 compared with $\$ 1.48$ in 2015.

Dungeness crab landings were 64.2 million pounds valued at $\$ 222.6$ million-an increase of over 40.2 million pounds (almost 168 percent) and $\$ 110.6$ million ( 99 percent) compared with 2015. California landings of almost 26.7 million pounds (up 760 percent from 2015) led all states with almost 42 percent of the total landings. Washington landings were 19.1 million pounds (up almost 28 percent) or nearly 30 percent of the total landings. Oregon
landings were 15.7 million pounds (up nearly 590 percent) and Alaska landings were nearly 2.7 million pounds (down 25 percent). The average ex-vessel price per pound was $\$ 3.47$ in 2016 compared with \$4.68 in 2015.
U.S. landings of king crab were almost 14.6 million pounds valued at $\$ 104.7$ million-a decrease of 2.9 million pounds (nearly 17 percent), but an increase of $\$ 6$ million ( 6 percent) compared with 2015. The average ex-vessel price per pound in 2016 was $\$ 7.17$ compared with $\$ 5.63$ in 2015.

Snow crab landings were almost 39.6 million pounds valued at $\$ 79.9$ million-a decrease of over 41.2 million pounds ( 51 percent) and $\$ 53.8$ million (over 40 percent) compared with 2015. The average exvessel price per pound was $\$ 2.02$ in 2016, up from \$1.65 in 2015.


## LOBSTER, AMERICAN

American lobster landings were almost 158.6 million pounds valued at $\$ 666.7$ million-an increase of 12.6 million pounds ( 9 percent) and $\$ 49.5$ million (8 percent) compared with 2015. Maine led in landings for the 35th consecutive year with 132 million pounds valued at nearly $\$ 537.9$ million-an increase of 10.2 million pounds ( 8 percent) compared with 2015. Massachusetts, the second leading producer, had landings of almost 17.7 million pounds valued at $\$ 82$ million-an increase of more than 1.2 million pounds ( 8 percent) compared with 2015. Together, Maine and Massachusetts produced more than 94 percent of the total national landings. The average
ex-vessel price per pound was $\$ 4.20$ in 2016 compared with \$4.23 in 2015.

## LOBSTER, SPINY

U.S. landings of spiny lobster were 5.9 million pounds valued at $\$ 55.9$ million-a decrease of 659,000 pounds ( 10 percent) and nearly $\$ 6.1$ million (nearly 10 percent) compared with 2015 . Florida, with landings of nearly 5.2 million pounds valued at $\$ 42.2$ million, accounted for more than 88 percent of the total catch and more than 75 percent of the value. This was a decrease of 569,000 pounds ( 10 percent) and $\$ 4$ million (almost 9 percent) compared with 2015. Overall, the average ex-vessel price per pound was $\$ 9.54$ in 2016 compared with $\$ 9.51$ in 2015.

## OYSTERS

U.S. oyster landings yielded 33.3 million pounds valued at $\$ 217.2$ million-an increase of 5.8 million pounds (nearly 21 percent) and nearly $\$ 3.4$ million (2 percent) compared with 2015. The Gulf region led in production with almost 14.6 million pounds of meats, 44 percent of the national total, principally from Louisiana with 10.6 million pounds ( 72.0 percent of the regional volume); followed by the Pacific Coast region with almost 7.5 million pounds (more than 22 percent), principally from Washington, with 5.7 million pounds (nearly 77 percent of the region's total volume); and the South Atlantic region with nearly 5.5 million pounds (more than 16 percent). The average ex-vessel price per pound of meats was $\$ 6.52$ in 2016 compared with $\$ 7.76$ in 2015.


## SCALLOPS

U.S. landings of bay and sea scallops totaled 40.6 million pounds valued at $\$ 488$ million-an increase of 4.8 million pounds (more than 13 percent) and almost $\$ 47.6$ million (nearly 11 percent) compared with 2015. The average ex-vessel price per pound of meats decreased from $\$ 12.30$ in 2015 to $\$ 12.02$ in 2016.

Bay scallop landings were 97,000 pounds valued at $\$ 2$ million-a decrease of 5,000 pounds ( 5 percent) and $\$ 612,000$ (nearly 24 percent) compared with 2015. The average ex-vessel price per pound of meats was $\$ 20.10$ in 2016 compared with $\$ 25.12$ in 2015.

Sea scallop landings were 40.5 million pounds valued at $\$ 486.1$ million-an increase of 4.8 million pounds (more than 13 percent) and over $\$ 48.2$ million (11 percent) compared with 2015. Massachusetts and New Jersey were the leading states in landings of sea scallops with nearly 22.9 million and 10.5 million pounds of meats, respectively, representing 82 percent of the national total. The average ex-vessel price per pound of meats in 2016 was $\$ 12.00$ compared with \$12.26 in 2015.

## SHRIMP

U.S. landings of shrimp were nearly 270.8 million pounds valued at over $\$ 483.4$ million-a decrease of over 56.3 million pounds ( 17 percent) and nearly $\$ 5.0$ million ( 1 percent) compared with 2015. Shrimp landings by region were: New England, up 44 percent; South Atlantic, up 7 percent; Gulf, down 4 percent; and Pacific, down more than 47 percent. The average ex-vessel price per pound of shrimp increased to $\$ 1.78$ in 2016 from $\$ 1.49$ in 2015. Gulf region landings were the nation's largest with 189 million pounds and nearly 70 percent of the national total. Louisiana led all Gulf states with over 92.3 million pounds (up nearly 4 percent compared with 2015); followed by Texas, 60.1 million pounds (down more than 15 percent); Alabama, nearly 17.9 million pounds (up more than 4 percent); Florida West Coast, 10.3 million pounds (down 11 percent); and Mississippi, almost 8.4 million pounds (up less than 1 percent). In the Pacific region, Oregon had
landings of 35.3 million pounds (down 34 percent compared with 2015); Washington had landings of nearly 14.8 million pounds (down 65 percent); and California, almost 4.2 million pounds (down 53 percent).


## SQUID

U.S. commercial landings of squid were 140.9 million pounds valued at almost $\$ 97.7$ million-an increase of 24.2 million pounds (almost 21 percent) and $\$ 40.1$ million (nearly 70 percent) compared with 2015. California was the leading state with nearly 81.8 million pounds ( $58 \%$ of the national total) and was followed by Rhode Island with almost 22.5 million pounds ( 16 percent of the national total). The Pacific Coast region landings were 86.1 million pounds (up 1 percent compared with 2015); followed by New England, with 39.2 million pounds (up 66 percent); followed by the Middle Atlantic region with more than 15.5 million pounds (up 94 percent); the South Atlantic region with 107,000 pounds (up over 120 percent); and the Gulf region with 70,000 pounds (up over 37 percent). The average ex-vessel price per pound for squid was 69 cents in 2016 compared with 49 cents in 2015.


## COMMERCIAL LANDINGS DATA COLLECTION

Commercial landings data used in this publication are collected by our state and regional partners, and then combined by NMFS Headquarters staff to provide a national overview of landings made by the domestic fishing fleet. Although reporting is required for all commercially-landed species, the data collected and methods used vary widely among fisheries and among the various regions. Some data come from the fishermen themselves via a logbook or trip ticket program, while others use reports from the seafood dealers who buy their catch. See the following section for summaries of each of the major regional data sources.

MAINE THROUGH GEORGIA. NMFS receives landings data for the Atlantic Coast (Maine through Georgia), from the Atlantic Coastal Cooperative Statistics Program (ACCSP, http://www.accsp.org). ACCSP is a cooperative state-federal program that designs, implements, and conducts marine fisheries data collection programs into a single data management system to meet the needs of fishery managers, scientists, and fishermen. ACCSP compiles landings from the relevant state agencies and from NMFS. Most of these landings are collected from reports of seafood dealers using the Standard Atlantic Fisheries Information System (SAFIS), an online reporting tool developed by the ACCSP and used throughout the Atlantic Coast.

FLORIDA THROUGH TEXAS. For Fisheries of the United States, landings data for the Gulf of Mexico region are provided by the NMFS Southeast Fisheries Science Center (http://www.sefsc.noaa.gov/) in cooperation with the Fisheries Information Network of the Gulf States Marine Fisheries Commission (http:// www.gsmfc.org). Most of these data are collected through dealer trip-ticket programs administered by the states. Landings data for Florida are provided by ACCSP.

ATLANTIC HIGHLY MIGRATORY SPECIES (HMS). Landings data for Atlantic HMS (swordfish, sharks, bluefin tuna, and BAYS [bigeye, albacore, yellowfin, and skipjack tunas]) are provided by the NMFS' Atlantic HMS Management Division. For all species except bluefin tuna, the data are collected through the existing electronic dealer reporting programs from Maine to Texas, which include SAFIS (including Georgia and South Carolina) and state trip-ticket programs for the Northeast region,

North Carolina, and Florida through Texas. For HMS dealers in the Caribbean, data are collected via an HMS-specific dealer reporting program. Atlantic bluefin tuna landings data are from the HMS Management Division's bluefin tuna dealer reporting database.

WASHINGTON, OREGON, and CALIFORNIA. Pacific Coast landings data are provided by the Pacific Fisheries Information Network (PacFIN, http:// pacfin.psmfc.org/), a joint state-federal program focused on fisheries data collection and information management for the Pacific Coast. PacFIN includes data from state fish-ticket, port sampling, and logbook programs, as well as limited-entry and observer data provided by NMFS.

ALASKA. Alaska data are provided by the Alaska Fisheries Information Network (AKFIN, http:// www.akfin.org). Landings estimates are derived by combining the NMFS Alaska Regional Office's new Catch Accounting System for groundfish and the Alaska Commercial Fisheries Entry Commissionsourced fish tickets for species other than groundfish.

HAWAII. Data for Hawaii and the Pacific Territories are provided by the Western Pacific Fisheries Information System (WPacFIN, http://www.pifsc. noaa.gov/wpacfin/), a program of the NMFS Pacific Islands Fishery Science Center. WPacFIN staff combines Hawaii Department of Aquatic Resources data with landings from the PIFSC Hawaii-based longline fleet logbook program to compile species totals for the state.

GREAT LAKES. Landings data from the Great Lakes are provided by the U.S. Geological Survey's Great Lakes Science Center (http://www.glsc.usgs. gov/). These data lag the other landings data by 1 year.

## LANDINGS BY DISTANCE-FROM-SHORE.

 Landings by distance-from-shore has been included in Fisheries of the United States for many decades. The categories for distance-from-shore reporting are: " 0 to 3 miles from shore" corresponding to state waters; "3-200 miles from shore" corresponding to federally managed waters in the Exclusive Economic Zone (EEZ) of the United States; and "High seas or off Foreign Waters" corresponding to ocean areas beyond the EEZ. Distance-from-shore is derived from spatial elements in the data where it is available. The distribution of landings by distance-from-shore isusually estimated based on historic data and industry knowledge because location of the catch is not a required reporting element for most fisheries. The Landings by Distance-From-Shore table includes landings, primarily tuna, caught by US-flagged purse seine and trolling vessels that are landed in foreign ports. These ports include American Samoa, Federated States of Micronesia, Kiribati, Papua New Guinea, and the Marshall Islands. Data are estimated by NMFS staff in the Southwest Fisheries Science Center, Pacific Islands Regional Office, and Pacific Islands Fisheries Science Center based on unloading receipts. All of these catches are assumed to have been made on the high seas, beyond 200 miles offshore. This table also includes landings of Atlantic groundfish and Pacific albacore in Canada made by US-flagged vessels under international agreement.
U.S. Commercial Landings
U.S. DOMESTIC LANDINGS, BY SPECIES, 2015 AND 2016 (1)

| Species | 2015 |  |  | 2016 |  |  | Average <br> $(2011-2015)$ <br> Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |  |
| Fish |  |  |  |  |  |  |  |
| Alewife | 1,337 | 606 | 422 | 1,332 | 604 | 408 | 1,522 |
| Anchovies | 37,944 | 17,212 | 1,998 | 18,927 | 8,585 | 1,236 | 17,397 |
| Atka mackerel | 117,679 | 53,379 | 42,016 | 121,286 | 55,015 | 31,516 | 91,037 |
| Bluefish | 4,299 | 1,950 | 3,278 | 4,533 | 2,056 | 3,037 | 4,921 |
| Blue runner | 324 | 147 | 265 | 297 | 135 | 254 | 317 |
| Bonito | 370 | 168 | 300 | 275 | 125 | 181 | 193 |
| Butterfish | 5,050 | 2,291 | 3,233 | 3,248 | 1,473 | 1,945 | 4,000 |
| Catish and bullheads | 11,859 | 5,379 | 5,450 | 12,682 | 5,753 | 6,342 | 10,342 |
| Chubs | 139 | 63 | 394 | 200 | 91 | 548 | 159 |
| Cod: |  |  |  |  |  |  |  |
| Atlantic | 3,370 | 1,529 | 6,447 | 3,221 | 1,461 | 6,140 | 8,328 |
| Pacific | 699,106 | 317,112 | 257,744 | 708,572 | 321,406 | 171,400 | 696,247 |
| Crevalle (jack) | 707 | 321 | 545 | 698 | 317 | 532 | 538 |
| Croaker: |  |  |  |  |  |  |  |
| Atlantic | 6,974 | 3,163 | 7,010 | 6,482 | 2,940 | 6,536 | 9,732 |
| Pacific (white) | 13 | 6 | 8 | 34 | 15 | 29 | 9 |
| Cusk | 99 | 45 | 65 | 85 | 39 | 50 | 95 |
| Dolphinfish | 2,401 | 1,089 | 6,817 | 2,216 | 1,005 | 7,626 | 2,506 |
| Eels, American | 835 | 379 | 14,097 | 852 | 386 | 14,460 | 1,004 |
| Flatfish: |  |  |  |  |  |  |  |
| Atlantic and Gulf |  |  |  |  |  |  |  |
| American plaice | 2,829 | 1,283 | 5,216 | 2,268 | 1,029 | 5,681 | 3,027 |
| Summer flounder | 10,626 | 4,820 | 34,262 | 7,760 | 3,520 | 30,327 | 12,373 |
| Winter flounder | 3,761 | 1,706 | 7,884 | 2,561 | 1,162 | 7,900 | 4,831 |
| Witch flounder | 1,083 | 491 | 2,861 | 877 | 398 | 2,686 | 1,612 |
| Yellowtail flounder | 2,135 | 968 | 2,801 | 1,245 | 565 | 2,084 | 3,591 |
| Other | 2,276 | 1,032 | 5,058 | 2,491 | 1,130 | 4,858 | 2,947 |
| Total, Atlantic/Gulf | 22,710 | 10,301 | 58,082 | 17,202 | 7,803 | 53,536 | 28,381 |
| Pacific |  |  |  |  |  |  |  |
| Arrowtooth flounder | 61,252 | 27,784 | 7,141 | 62,051 | 28,146 | 6,069 | 85,242 |
| Dover sole | 10,903 | 4,946 | 4,984 | 15,699 | 7,121 | 6,977 | 15,055 |
| Flathead sole | 26,281 | 11,921 | 4,327 | 25,008 | 11,344 | 3,638 | 32,442 |
| Petrale sole | 5,829 | 2,644 | 7,084 | 5,883 | 2,669 | 7,006 | 4,076 |
| Rock sole | 103,477 | 46,937 | 16,105 | 101,979 | 46,257 | 14,812 | 129,532 |
| Yellowfin sole | 271,313 | 123,067 | 34,204 | 289,257 | 131,206 | 37,333 | 318,589 |
| Other | 52,840 | 23,968 | 12,417 | 48,368 | 21,940 | 12,020 | 65,744 |
| Total, Pacific | 531,895 | 241,266 | 86,262 | 548,245 | 248,682 | 87,855 | 650,680 |

See notes at end of table.
U.S. DOMESTIC LANDINGS, BY SPECIES, 2015 AND 2016 (1)

| Species | 2015 |  |  | 2016 |  |  | Average <br> $(2011-2015)$$\|$Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |  |
| Halibut | 24,539 | 11,131 | 119,271 | 25,166 | 11,415 | 127,008 | 30,931 |
| Total, flatfish | 579,144 | 262,698 | 263,615 | 590,613 | 267,900 | 268,399 | 709,992 |
| Goosefish (monkfish) | 19,009 | 8,622 | 19,215 | 19,913 | 9,032 | 19,981 | 19,437 |
| Groupers | 8,502 | 3,856 | 30,852 | 8,545 | 3,876 | 31,626 | 8,781 |
| Haddock | 11,925 | 5,409 | 12,685 | 11,057 | 5,015 | 13,315 | 8,603 |
| Hakes: |  |  |  |  |  |  |  |
| Pacific (whiting) | 333,298 | 151,183 | 25,208 | 558,047 | 253,128 | 46,639 | 451,478 |
| Red | 1,040 | 472 | 515 | 1,081 | 490 | 520 | 1,347 |
| Silver (Att. whiting) | 14,229 | 6,454 | 10,492 | 13,929 | 6,318 | 10,615 | 15,516 |
| White | 3,637 | 1,650 | 4,978 | 3,029 | 1,374 | 4,727 | 5,069 |
| Herring: |  |  |  |  |  |  |  |
| Sea: |  |  |  |  |  |  |  |
| Atlantic | 177,397 | 80,467 | 25,558 | 139,263 | 63,169 | 29,675 | 191,152 |
| Pacific | 69,176 | 31,378 | 7,307 | 52,287 | 23,717 | 5,528 | 88,868 |
| Thread | 1,465 | 665 | 310 | 2,225 | 1,009 | 450 | 1,345 |
| Jack mackerel | 2,959 | 1,342 | 220 | 799 | 362 | 63 | 1,928 |
| Lingcod | 1,413 | 641 | 2,110 | 1,483 | 673 | 2,150 | 1,468 |
| Mackerels: |  |  |  |  |  |  |  |
| Atlantic | 12,382 | 5,616 | 3,987 | 11,777 | 5,342 | 3,089 | 9,587 |
| Chub | 14,517 | 6,585 | 1,707 | 4,606 | 2,089 | 594 | 13,723 |
| King and Cero | 4,730 | 2,146 | 10,085 | 5,123 | 2,324 | 11,195 | 4,951 |
| Spanish | 3,441 | 1,561 | 4,097 | 4,741 | 2,151 | 5,252 | 4,400 |
| Menhaden: |  |  |  |  |  |  |  |
| Atlantic | 435,980 | 197,759 | 41,418 | 363,473 | 164,870 | 36,453 | 438,457 |
| Gulf | 1,181,950 | 536,129 | 125,065 | 1,364,029 | 618,719 | 143,338 | 1,158,870 |
| Total, menhaden | 1,617,930 | 733,888 | 166,483 | 1,727,502 | 783,590 | 179,791 | 1,597,327 |
| Mullets | 12,460 | 5,652 | 8,597 | 12,862 | 5,834 | 9,505 | 13,476 |
| Pollock: |  |  |  |  |  |  |  |
| Atlantic | 6,715 | 3,046 | 7,530 | 5,692 | 2,582 | 6,368 | 11,726 |
| Walleye (Alaska) | 3,262,608 | 1,479,909 | 441,668 | 3,355,068 | 1,521,849 | 417,207 | 3,018,869 |
| Rockfishes: |  |  |  |  |  |  |  |
| Ocean perch: |  |  |  |  |  |  |  |
| Atlantic (redfish) | 10,869 | 4,930 | 6,341 | 8,573 | 3,889 | 5,134 | 8,348 |
| Pacific | 106,004 | 48,083 | 23,945 | 114,152 | 51,779 | 23,040 | 93,783 |
| Other | 47,945 | 21,748 | 19,215 | 42,314 | 19,194 | 16,758 | 40,755 |
| Total, rockfishes | 164,818 | 74,761 | 49,501 | 165,039 | 74,861 | 44,932 | 142,886 |
| Sablefish | 35,342 | 16,031 | 113,879 | 33,575 | 15,230 | 116,882 | 38,487 |

U.S. Commercial Landings
U.S. DOMESTIC LANDINGS, BY SPECIES, 2015 AND 2016 (1)

| Species | 2015 |  |  | 2016 |  |  | Average <br> $(2011-2015)$ <br> Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | $\begin{aligned} & \hline \text { Thousand } \\ & \text { dollars } \end{aligned}$ | Thousand pounds | Metric tons | Thousand dollars |  |
| Salmon: |  |  |  |  |  |  |  |
| Chinook | 18,035 | 8,181 | 59,266 | 11,862 | 5,381 | 48,623 | 17,361 |
| Chum | 125,163 | 56,774 | 59,813 | 101,359 | 45,976 | 56,708 | 124,028 |
| Coho | 25,294 | 11,473 | 18,064 | 30,305 | 13,746 | 34,869 | 32,500 |
| Pink | 607,504 | 275,562 | 123,006 | 130,258 | 59,085 | 29,793 | 443,996 |
| Sockeye | 290,051 | 131,566 | 200,017 | 287,252 | 130,297 | 250,240 | 236,357 |
| Total, salmon | 1,066,047 | 483,556 | 460,166 | 561,036 | 254,484 | 420,233 | 854,242 |
| Sardines: |  |  |  |  |  |  |  |
| Pacific | 8,412 | 3,816 | 1,156 | 1,108 | 503 | 192 | 104,071 |
| Spanish | 1,339 | 607 | 249 | 1,612 | 731 | 300 | 1,298 |
| Scup or porgy | 17,091 | 7,752 | 11,551 | 15,903 | 7,214 | 10,911 | 16,299 |
| Sea bass: |  |  |  |  |  |  |  |
| Black (Atlantic) | 2,815 | 1,277 | 9,309 | 2,894 | 1,313 | 9,903 | 2,834 |
| White (Pacific) | 194 | 88 | 849 | 234 | 106 | 852 | 339 |
| Sea trout or weakfish: |  |  |  |  |  |  |  |
| Gray | 153 | 69 | 332 | 182 | 83 | 324 | 231 |
| Spotted | 224 | 102 | 559 | 361 | 164 | 972 | 386 |
| Sand (white) | 26 | 12 | 19 | 23 | 10 | 22 | 47 |
| Shads: |  |  |  |  |  |  |  |
| American | 527 | 239 | 451 | 383 | 174 | 290 | 727 |
| Hickory | 159 | 72 | 110 | 104 | 47 | 34 | 109 |
| Sharks: |  |  |  |  |  |  |  |
| Dogfish | 21,224 | 9,627 | 4,259 | 28,238 | 12,809 | 6,056 | 23,572 |
| Other | 3,689 | 1,673 | 2,474 | 3,142 | 1,425 | 2,810 | 3,389 |
| Sheepshead (Atlantic) | 1,330 | 603 | 971 | 1,355 | 615 | 1,001 | 1,563 |
| Skates | 54,734 | 24,827 | 11,200 | 54,206 | 24,588 | 13,426 | 57,360 |
| Smelts | 597 | 271 | 359 | 397 | 180 | 250 | 733 |
| Snappers: |  |  |  |  |  |  |  |
| Red | 6,882 | 3,122 | 27,480 | 6,639 | 3,011 | 26,790 | 5,068 |
| Vermilion | 2,276 | 1,032 | 7,059 | 2,427 | 1,101 | 7,379 | 2,937 |
| Unclassified | 3,048 | 1,383 | 9,583 | 3,301 | 1,497 | 11,012 | 2,989 |
| Spearfish | 3,251 | 1,475 | 3,584 | 3,137 | 1,423 | 4,931 | 2,537 |
| Spot | 2,111 | 958 | 2,901 | 707 | 321 | 863 | 3,532 |
| Striped bass | 4,963 | 2,251 | 17,351 | 4,979 | 2,258 | 19,852 | 6,322 |
| Swordfish | 6,371 | 2,890 | 17,236 | 5,791 | 2,627 | 17,212 | 7,462 |
| Tenpounder (ladyfish) | 1,429 | 648 | 1,032 | 2,350 | 1,066 | 1,849 | 1,135 |
| Tilefish | 2,656 | 1,205 | 9,051 | 2,268 | 1,029 | 8,005 | 3,106 |
| Trout, rainbow | 467 | 212 | 1,054 | 390 | 177 | 853 | 393 |

See notes at end of table.
continued
U.S. DOMESTIC LANDINGS, BY SPECIES, 2015 AND 2016 (1)

| Species | 2015 |  |  | 2016 |  |  | Average <br> $(2011-2015)$ <br> Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |  |
| Tuna: |  |  |  |  |  |  |  |
| Albacore | 26,010 | 11,798 | 31,096 | 24,079 | 10,922 | 39,402 | 28,806 |
| Bigeye | 21,060 | 9,553 | 79,278 | 19,643 | 8,910 | 79,183 | 16,916 |
| Bluefin | 1,887 | 856 | 8,820 | 2,668 | 1,211 | 14,028 | 1,544 |
| Little tunny | 693 | 314 | 316 | 675 | 306 | 333 | 661 |
| Skipjack | 680 | 308 | 620 | 637 | 289 | 829 | 672 |
| Yellowfin | 6,718 | 3,047 | 17,718 | 8,199 | 3,719 | 23,591 | 7,374 |
| Unclassified | 75 | 34 | 118 | 72 | 32 | 111 | 184 |
| Total, tuna | 57,123 | 25,911 | 137,966 | 55,973 | 25,389 | 157,477 | 56,157 |
| Whitefish, Lake | 6,650 | 3,016 | 14,613 | 6,231 | 2,826 | 10,865 | 8,323 |
| Wolffish, Atlantic | - | - | - | - | - |  | - |
| Yellow perch | 1,766 | 801 | 3,816 | 1,529 | 694 | 4,094 | 1,795 |
| Other marine |  |  |  |  |  |  |  |
| finfishes | 40,684 | 18,454 | 46,168 | 49,663 | 22,527 | 62,737 | 39238 |
| Other freshwater |  |  |  |  |  |  |  |
| finfishes | 13,731 | 6,228 | 5,788 | 13,053 | 5,921 | 6,062 | 13,729 |
| Total, fish | 8,582,612 | 3,893,047 | 2,369,384 | 8,442,812 | 3,829,634 | 2,288,300 | 8,430,686 |
| Shellfish |  |  |  |  |  |  |  |
| Crustaceans: |  |  |  |  |  |  |  |
| Crabs: |  |  |  |  |  |  |  |
| Blue: Hard | 158,616 | 71,948 | 234,837 | 157,466 | 71,426 | 213,838 | 160,322 |
| Soft and peeler | 978 | 444 | 2,724 | 784 | 356 | 2,701 | 1,207 |
| Dungeness | 23,944 | 10,861 | 112,019 | 64,166 | 29,106 | 222,640 | 57,367 |
| Jonah | 13,567 | 6,154 | 9,965 | 15,358 | 6,966 | 11,751 | 13,929 |
| King | 17,532 | 7,952 | 98,710 | 14,592 | 6,619 | 104,669 | 16,599 |
| Snow (Tanner): |  |  |  |  |  |  |  |
| Opilio | 80,794 | 36,648 | 133,699 | 39,574 | 17,951 | 79,924 | 68,471 |
| Bairdi | 19,301 | 8,755 | 41,199 | 11,771 | 5,339 | 25,939 | 8,558 |
| Other | 11,661 | 5,289 | 45,574 | 13,637 | 6,186 | 42,826 | 11,643 |
| Total, crabs | 326,393 | 148,051 | 678,727 | 317,348 | 143,948 | 704,288 | 338,096 |
| Crawfish (freshwater) | 4,977 | 2,258 | 6,261 | 12,036 | 5,459 | 10,660 | 10,578 |
| Lobsters: |  |  |  |  |  |  |  |
| American | 145,921 | 66,189 | 617,187 | 158,561 | 71,923 | 666,679 | 143,779 |
| Spiny | 6,520 | 2,957 | 62,027 | 5,861 | 2,659 | 55,936 | 5,727 |

U.S. Commercial Landings
U.S. DOMESTIC LANDINGS, BY SPECIES, 2015 AND 2016 (1)

| Species | 2015 |  |  | 2016 |  |  | Average <br> (2011-2015) <br> Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |  |
| Shrimp: |  |  |  |  |  |  |  |
| New England | 36 | 16 | 126 | 51 | 23 | 279 | 3,534 |
| South Atlantic | 24,131 | 10,946 | 59,523 | 25,843 | 11,722 | 62,069 | 19,726 |
| Gulf | 196,992 | 89,355 | 339,147 | 188,984 | 85,723 | 369,967 | 199,932 |
| Pacific | 105,904 | 48,038 | 89,547 | 55,746 | 25,286 | 50,696 | 81,013 |
| Other | 7 | 3 | 41 | 163 | 74 | 419 | 13 |
| Total, shrimp | 327,070 | 148,358 | 488,384 | 270,787 | 122,828 | 483,430 | 304,218 |
| Total, crustaceans | 810,881 | 367,813 | 1,852,586 | 764,593 | 346,817 | 1,920,993 | 802,398 |
| Mollusks: |  |  |  |  |  |  |  |
| Clams: |  |  |  |  |  |  |  |
| Quahog (hard) | 7,480 | 3,393 | 57,065 | 8,702 | 3,947 | 61,901 | 6,589 |
| Geoduck (Pacific) | 2,493 | 1,131 | 52,175 | 2,584 | 1,172 | 64,636 | 2,523 |
| Manila (Pacific) | 550 | 249 | 9,635 | 990 | 449 | 19,373 | 908 |
| Ocean quahog | 30,002 | 13,609 | 23,670 | 30,740 | 13,944 | 26,252 | 32,110 |
| Softshell | 2,578 | 1,169 | 29,555 | 2,549 | 1,156 | 24,786 | 3,650 |
| Surf (Atlantic) | 40,652 | 18,440 | 30,460 | 41,898 | 19,005 | 31,627 | 42,236 |
| Other | 2,341 | 1,062 | 3,739 | 1,423 | 645 | 6,281 | 973 |
| Total, clams | 86,096 | 39,053 | 206,299 | 88,886 | 40,318 | 234,856 | 88,989 |
| Conch (snails) | 3,226 | 1,463 | 11,882 | 2,724 | 1,236 | 10,327 | 4,203 |
| Mussels, blue (sea) | 6,129 | 2,780 | 8,130 | 6,445 | 2,923 | 11,023 | 4,345 |
| Oysters | 27,535 | 12,490 | 213,773 | 33,295 | 15,103 | 217,170 | 33,615 |
| Scallops: |  |  |  |  |  |  |  |
| Bay | 102 | 46 | 2,562 | 97 | 44 | 1,950 | 164 |
| Sea | 35,722 | 16,203 | 437,934 | 40,514 | 18,377 | 486,101 | 45,423 |
| Squid: |  |  |  |  |  |  |  |
| Atlantic: |  |  |  |  |  |  |  |
| Illex | 5,340 | 2,422 | 1,587 | 14,728 | 6,681 | 7,218 | 20,057 |
| Loligo | 26,325 | 11,941 | 31,202 | 39,946 | 18,119 | 49,893 | 25,315 |
| Unclassified | 4,009 | 1,818 | 275 | 1,748 | 793 | 229 | 1,942 |
| Pacific: |  |  |  |  |  |  |  |
| Loligo | 81,069 | 36,773 | 24,447 | 84,501 | 38,329 | 40,315 | 204,016 |
| Unclassified | - | - | - | - | - |  | 10 |
| Total, Squid | 116,743 | 52,954 | 57,511 | 140,923 | 63,922 | 97,655 | 251,340 |
| Total, mollusks | 275,553 | 124,990 | 938,091 | 312,884 | 141,923 | 1,059,082 | 428,079 |
| Other shellfish | 20,933 | 9,495 | 19,575 | 15,453 | 7,009 | 17,793 | 17,405 |
| Total, Shellfish | 1,107,367 | 502,298 | 2,810,252 | 1,092,930 | 495,750 | 2,997,868 | 1,247,882 |

See notes at end of table.
U.S. DOMESTIC LANDINGS, BY SPECIES, 2015 AND 2016 (1)

| Species | 2015 |  |  | 2016 |  |  | Average <br> $(2011-2015)$ <br> Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |  |
| Other |  |  |  |  |  |  |  |
| Horseshoe crab | 1,661 | 753 | 1,312 | 1,895 | 860 | 1,643 | 2,098 |
| Sea urchins | 11,118 | 5,043 | 13,128 | 9,303 | 4,220 | 15,242 | 14,148 |
| Seaweed, unclassified | 14,262 | 6,469 | 1,028 | 24,521 | 11,123 | 1,038 | 19,941 |
| Kelp (with herring eggs) | - | - |  | - | - |  | 18 |
| Worms | 607 | 275 | 7,900 | 576 | 261 | 7,605 | 678 |
| Total, other | 27,648 | 12,540 | 23,368 | 36,295 | 16,463 | 25,528 | 36,883 |
|  |  |  |  |  |  |  |  |
| Grand Total, U.S. | 9,717,627 | 4,407,887 | 5,203,004 | 9,572,037 | 4,341,848 | 5,311,696 | 9,715,451 |

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River drainage area states are not available.
(2) Less than $500 \mathrm{lb} ., 0.5 \mathrm{M} . \mathrm{T}$., or $\$ 500$.

Note: Totals may not add due to rounding. Data do not include landings by U.S.-flag vessels at ports outside the 50 states. Data do not include aquaculture products, except oysters and clams. Metric tons are arrived at by dividing the landings of individual species and group totals by 2.2046.

## U.S. Commercial Landings

DISPOSITION OF U.S. DOMESTIC LANDINGS, 2015 AND 2016

| End Use | 2015 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Million } \\ \text { pounds } \end{gathered}$ | Thousand metric tons | Percent | $\begin{gathered} \hline \text { Million } \\ \text { pounds } \end{gathered}$ | Thousand metric tons | Percent |
| Fresh and frozen: |  |  |  |  |  |  |
| For human food | 7,321 | 3,321 | 76.5 | 7,207 | 3,269 | 75.3 |
| For bait and animal food | 301 | 137 | 3.1 | 302 | 137 | 3.2 |
| Total | 7,622 | 3,457 | 79.6 | 7,509 | 3,406 | 78.4 |
| Canned: |  |  |  |  |  |  |
| For human food | 364 | 165 | 3.8 | 186 | 84 | 1.9 |
| For bait and animal food | 0 | 0 | 0.0 | 0 | 0 | 0.0 |
| Total | 364 | 165 | 3.8 | 186 | 84 | 1.9 |
| Cured for human food | 65 | 29 | 0.7 | 57 | 26 | 0.6 |
| Reduction to meal, oil, other | 1,667 | 756 | 17.4 | 1,820 | 826 | 19.0 |
| Grand total | 9,718 | 4,408 | 100.0 | 9,572 | 4,342 | 100.0 |

Note: Table may not add due to rounding.

Disposition of U.S. Domestic Landings, 2016

U.S. COMMERCIAL LANDINGS OF FISH AND SHELLFISH, 2007-2016 (1)

| Year | Landings for human food |  |  | Landings for industrial purposes (2) |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { Million } \\ & \text { pounds } \end{aligned}$ | Thousand metric tons | Million dollars | Million pounds | Thousand metric tons | $\begin{aligned} & \hline \text { Million } \\ & \text { dollars } \\ & \hline \end{aligned}$ | Million pounds | Thousand metric tons | $\begin{aligned} & \hline \text { Million } \\ & \text { dollars } \\ & \hline \end{aligned}$ |
| 2007 | 7,490 | 3,397 | 4,015 | 1,819 | 825 | 177 | 9,309 | 4,223 | 4,192 |
| 2008 | 6,633 | 3,009 | 4,231 | 1,692 | 767 | 152 | 8,325 | 3,776 | 4,383 |
| 2009 | 6,198 | 2,811 | 3,733 | 1,833 | 831 | 158 | 8,031 | 3,643 | 3,891 |
| 2010 | 6,526 | 2,960 | 4,356 | 1,705 | 773 | 164 | 8,231 | 3,734 | 4,520 |
| 2011 | 7,909 | 3,587 | 5,108 | 1,949 | 884 | 181 | 9,858 | 4,472 | 5,289 |
| 2012 | 7,477 | 3,392 | 4,923 | 2,157 | 978 | 180 | 9,634 | 4,370 | 5,103 |
| 2013 | 8,043 | 3,648 | 5,268 | 1,827 | 829 | 198 | 9,870 | 4,477 | 5,466 |
| 2014 | 7,828 | 3,551 | 5,256 | 1,658 | 752 | 192 | 9,486 | 4,303 | 5,448 |
| 2015 | 7,750 | 3,515 | 4,972 | 1,968 | 893 | 231 | 9,718 | 4,408 | 5,203 |
| 2016 | 7,484 | 3,395 | 5,007 | 2,088 | 947 | 305 | 9,572 | 4,342 | 5,312 |

(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, solubles, and shell products, or used as bait or animal food.

* Record. For industrial purposes 1983, 3,201 million lb.; For human food 19938,214 million lb.; Total record 1993, 10,467 million lb.

NOTE: Data do not include landings outside the 50 states or products of aquaculture, except oysters and clams.
U.S. DOMESTIC LANDINGS, BY REGION AND BY STATE, 2015 AND 2016 (1)

| Regions and States | 2015 |  |  | 2016 |  |  | Record Landings |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars | Year | Thousand pounds |
| New England: | 590,982 | 268,068 | 1,238,588 | 595,087 | 269,930 | 1,328,285 | - | - |
| Maine | 233,780 | 106,042 | 588,261 | 247,947 | 112,468 | 633,675 | 1950 | 356,266 |
| New Hampshire | 11,088 | 5,029 | 27,788 | 7,926 | 3,595 | 33,480 | 2003 | 27,435 |
| Massachusetts | 261,094 | 118,431 | 524,915 | 244,304 | 110,816 | 552,175 | 1948 | 649,696 |
| Rhode Island | 75,636 | 34,308 | 81,835 | 82,541 | 37,440 | 93,869 | 1957 | 142,080 |
| Connecticut | 9,384 | 4,257 | 15,789 | 12,369 | 5,611 | 15,086 | 1930 | 88,012 |
| Middle Atlantic: | 641,560 | 291,010 | 511,425 | 577,384 | 261,900 | 548,681 | - | - |
| New York | 24,560 | 11,140 | 48,676 | 29,155 | 13,225 | 47,726 | 1880 | 335,000 |
| New Jersey | 148,504 | 67,361 | 165,962 | 123,607 | 56,068 | 193,013 | 1956 | 540,060 |
| Delaware | 3,528 | 1,600 | 6,746 | 4,980 | 2,259 | 10,097 | 1953 | 367,500 |
| Maryland | 54,637 | 24,783 | 90,581 | 56,316 | 25,545 | 94,644 | 1890 | 141,607 |
| Virginia | 410,331 | 186,125 | 199,460 | 363,326 | 164,804 | 203,201 | 1990 | 786,794 |
| South Atlantic: | 109,298 | 49,577 | 214,397 | 109,967 | 49,881 | 200,727 | - | - |
| North Carolina | 65,663 | 29,785 | 119,217 | 59,330 | 26,912 | 94,386 | 1981 | 432,006 |
| South Carolina | 10,985 | 4,983 | 24,528 | 15,833 | 7,182 | 24,645 | 1965 | 26,611 |
| Georgia | 7,091 | 3,216 | 17,076 | 6,357 | 2,884 | 11,886 | 1927 | 47,607 |
| Florida, East Coast | 25,559 | 11,593 | 53,576 | 28,447 | 12,903 | 69,810 | 1952 | 264,561 (4) |
| Gulf: | 1,534,739 | 696,153 | 816,487 | 1,716,140 | 778,436 | 856,946 | - | - |
| Florida, West Coast | 71,633 | 32,493 | 190,586 | 69,127 | 31,356 | 178,894 | 1952 | 264,561 (4) |
| Alabama | 23,361 | 10,596 | 42,246 | 24,869 | 11,281 | 50,797 | 1973 | 36,744 |
| Mississippi | 304,098 | 137,938 | 69,005 | 304,054 | 137,918 | 29,405 | 1984 | 476,997 |
| Louisiana | 1,054,114 | 478,143 | 339,816 | 1,244,403 | 564,457 | 407,222 | 1984 | 1,931,027 |
| Texas | 81,533 | 36,983 | 174,834 | 73,687 | 33,424 | 190,628 | 1960 | 237,684 |
| Pacific Coast: | 6,791,476 | 3,080,593 | 2,296,363 | 6,523,654 | 2,959,110 | 2,239,762 | - | - |
| Alaska | 6,038,185 | 2,738,903 | 1,763,425 | 5,585,905 | 2,533,750 | 1,550,840 | 2015 | 6,038,185 |
| Washington (5) | 363,007 | 164,659 | 274,116 | 551,860 | 250,322 | 321,072 | 2016 | 551,860 |
| Oregon | 195,448 | 88,655 | 115,735 | 209,486 | 95,022 | 151,711 | 2013 | 339,614 |
| California | 194,836 | 88,377 | 143,087 | 176,403 | 80,016 | 216,139 | 1936 | 1,760,193 |
| Great Lakes (3): | 14,949 | 6,781 | 22,345 | 14,755 | 6,693 | 19,162 | - | - |
| Illinois | - | - |  | - | - |  | - | (2) |
| Michigan | 7,460 | 3,384 | 12,148 | 6,698 | 3,038 | 9,837 | 1930 | 35,580 |
| Minnesota | 217 | 98 | 156 | 286 | 130 | 238 | - | (2) |
| New York | 58 | 26 | 108 | 62 | 28 | 137 | - | (2) |
| Ohio | 4,503 | 2,043 | 4,885 | 4,585 | 2,080 | 4,981 | 1936 | 31,083 |
| Pennsylvania | 35 | 16 | 117 | 105 | 48 | 125 | - | (2) |
| Wisconsin | 2,676 | 1,214 | 4,931 | 3,019 | 1,369 | 3,844 | - | (2) |
| Hawaii | 34,623 | 15,705 | 103,399 | 35,051 | 15,899 | 118,134 | 1999 | 36,907 |
| Total, United States | 9,717,627 | 4,407,887 | 5,203,004 | 9,572,038 | 4,341,848 | 5,311,697 | --- | --- |

(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) Data not available.
(3) Data for the Great Lakes states lag by one year - i.e. data for 2014 (under 2015) and 2015 (under 2016) are in this table.
(4) Record landings for Florida is for all of Florida. Highest Florida landings since 1950 by coast: East - 163,426 (1951), West - 145,659 (1989).
(5) Washington landings incude at-sea processors.

NOTE: Data are preliminary. Totals may not add due to rounding. Data do not include landings by U.S.-flag vessels at Puerto Rico and other
ports outside the 50 States. Therefore, they will not agree with the U.S. Commercial Landings by Distance from Shore table beginning on page 15.

COMMERCIAL FISHERY LANDINGS AND VALUE AT MAJOR U.S. PORTS, 2015-2016

| Port | Quantity |  | Port | Value |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 | 2016 |  | 2015 | 2016 |
|  | Million pounds |  |  | Million dollars |  |
| Dutch Harbor, AK | 787 | 770 | New Bedford, MA | 322 | 327 |
| Aleutian Islands (Other), AK | 467 | 508 | Dutch Harbor, AK | 218 | 198 |
| Empire-Venice, LA | 379 | 440 | Empire-Venice, LA | 111 | 122 |
| Kodiak, AK | 514 | 417 | Naknek, AK | 69 | 108 |
| Reedville, VA | 350 | 321 | Kodiak, AK | 138 | 107 |
| Pascagoula-Moss Point, MS | 295 | 285 | Honolulu, HI | 97 | 106 |
| Alaska Penninsula (Other), AK | 268 | 243 | Aleutian Islands (Other), AK | 111 | 105 |
| Intracoastal City, LA | 428 | 215 | Alaska Penninsula (Other), AK | 90 | 85 |
| Naknek, AK | 176 | 170 | Cape May-Wildwood, NJ | 72 | 85 |
| Westport, WA | 84 | 108 | Bristol Bay (Other), AK | 90 | 76 |
| New Bedford, MA | 124 | 107 | Stonington, ME | 64 | 68 |
| Astoria, OR | 92 | 94 | Key West, FL | 71 | 67 |
| Newport, OR | 65 | 77 | Hampton Roads Area, VA | 56 | 61 |
| Ketchikan, AK | 84 | 65 | Westport, WA | 65 | 59 |
| Gloucester, MA | 68 | 63 | Point Judith, RI | 46 | 56 |
| Sitka, AK | 87 | 56 | Sitka, AK | 59 | 55 |
| Bristol Bay (Other), AK | 70 | 54 | Brownsville-Port Isabel, TX | 55 | 53 |
| Point Judith, RI | 46 | 53 | Gloucester, MA | 44 | 52 |
| Portland, ME | 62 | 50 | Dulac-Chauvin, LA | 45 | 48 |
| Cape May-Wildwood, NJ | 77 | 47 | Newport, OR | 33 | 48 |
| Petersburg, AK | 70 | 41 | Galveston, TX | 42 | 45 |
| Port Hueneme-Oxnard-Ventura, CA | 44 | 38 | Bayou La Batre, AL | 37 | 45 |
| Los Angeles, CA | 15 | 37 | Vinalhaven, ME | 40 | 42 |
| Cordova, AK | 162 | 35 | Astoria, OR | 38 | 42 |
| Rockland, ME | 31 | 34 | Seward, AK | 59 | 42 |
| Honolulu, HI | 32 | 32 | Palacios, TX | 31 | 39 |
| Dulac-Chauvin, LA | 31 | 32 | Portland, ME | 35 | 38 |
| Seward, AK | 94 | 27 | Cordova, AK | 65 | 38 |
| Provincetown-Chatham, MA | 21 | 27 | Petersburg, AK | 39 | 37 |
| Point Pleasant, NJ | 24 | 26 | Shelton, WA | 34 | 36 |
| Atlantic City, NJ | 26 | 24 | Ketchikan, AK | 40 | 36 |
| Stonington, ME | 19 | 23 | Port Arthur, TX | 27 | 33 |
| Kenai, AK | 50 | 22 | Provincetown-Chatham, MA | 31 | 33 |
| Bayou La Batre, AL | 20 | 22 | Point Pleasant, NJ | 28 | 32 |
| Coos Bay-Charleston, OR | 21 | 21 | Reedville, VA | 33 | 31 |
| Lafitte-Barataria, LA | N/A | 21 | Delacroix-Yscloskey, LA | 26 | 29 |
| Brownsville-Port Isabel, TX | 25 | 18 | Lafitte-Barataria, LA | N/A | 29 |
| North Kingstown, RI | 16 | 18 | Coos Bay-Charleston, OR | 22 | 28 |
| Golden Meadow-Leeville, LA | 16 | 17 | Long Beach-Barnegat, NJ | 25 | 27 |
| Wanchese-Stumpy Point, NC | 18 | 16 | Port Hueneme-Oxnard-Ventura, CA | 21 | 26 |
| Juneau, AK | 17 | 16 |  |  |  |
|  |  |  | Intracoastal City, LA | 33 | 26 |
| Key West, FL | 17 | 16 | Seattle, WA | 25 | 26 |
| Port Arthur, TX | 14 | 15 | Golden Meadow-Leeville, LA | 24 | 25 |
| Palacios, TX | 15 | 15 | Kenai, AK | 33 | 25 |
| Galveston, TX | 16 | 15 | Beals Island, ME | 21 | 23 |
| Delacroix-Yscloskey, LA | 14 | 14 | San Francisco Area, CA | 9 | 23 |
| Moss Landing, CA | 45 | 13 | Tampa Bay-St. Petersburg, FL | 25 | 23 |
| Ilwaco-Chinook, WA | 15 | 13 | Juneau, AK | 23 | 23 |
| San Francisco Area, CA | 5 | 13 | Crescent City, CA | 7 | 23 |
| Princeton-Half Moon Bay, CA | 11 | 13 | Ilwaco-Chinook, WA | 15 | 22 |

[^0]
## U.S. Commercial Landings

Commercial Fishery Landings at Major U.S. Ports, 2016


Commercial Fishery Value at Major U.S. Ports, 2016

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT

| Species | Distance from U.S. Shores |  |  |  |  |  | High Seas or off Foreign Shores |  |  | Total U.S. Landings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 to 3 miles |  |  | 3 to 200 miles |  |  |  |  |  |  |  |  |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Fish |  |  |  |  |  |  |  |  |  |  |  |  |
| Alewife | 1,330 | 603 | 408 | 2 | 1 | - | - | - |  | 1,332 | 604 | 408 |
| Anchovies | 18,740 | 8,500 | 1,223 | 187 | 85 | 13 | - | - | - | 18,927 | 8,585 | 1,236 |
| Atka mackerel | 78 | 35 | 20 | 121,208 | 54,980 | 31,496 | - | - |  | 121,286 | 55,015 | 31,516 |
| Bluefish | 1,942 | 881 | 1,272 | 2,591 | 1,175 | 1,765 | - | - |  | 4,533 | 2,056 | 3,037 |
| Blue runner | 146 | 66 | 127 | 151 | 69 | 127 | - | - | - | 297 | 135 | 254 |
| Bonito | 128 | 58 | 83 | 147 | 67 | 98 | - | - | - | 275 | 125 | 181 |
| Butterfish | 363 | 165 | 284 | 2,885 | 1,309 | 1,661 | - | - | - | 3,248 | 1,473 | 1,945 |
| Catfish \& bullheads | 12,306 | 5,582 | 6,221 | 376 | 170 | 121 | - | - | - | 12,682 | 5,753 | 6,342 |
| Chubs | 200 | 91 | 548 | - | - | - | - | - | - | 200 | 91 | 548 |
| Cod: |  |  |  |  |  |  |  |  |  |  |  |  |
| Atlantic | 112 | 51 | 215 | 3,109 | 1,410 | 5,925 | - | - | - | 3,221 | 1,461 | 6,140 |
| Pacific | 118,052 | 53,548 | 33,854 | 590,520 | 267,858 | 137,546 | - | - |  | 708,572 | 321,406 | 171,400 |
| Crevalle (jack) | 662 | 300 | 514 | 36 | 16 | 18 | - | - | - | 698 | 317 | 532 |
| Croaker: |  |  |  |  |  |  |  |  |  |  |  |  |
| Atlantic | 2,733 | 1,239 | 3,011 | 3,749 | 1,701 | 3,525 | - | - | - | 6,482 | 2,940 | 6,536 |
| Pacific (white) | 21 | 10 | 18 | 13 | 6 | 11 | - | - |  | 34 | 15 | 29 |
| Cusk | 6 | 3 | 4 | 79 | 36 | 46 | - | - | - | 85 | 39 | 50 |
| Dolphinfish | 82 | 37 | 257 | 1,461 | 663 | 4,899 | 673 | 305 | 2,470 | 2,216 | 1,005 | 7,626 |
| Eel, American | 827 | 375 | 14,420 | 25 | 11 | 40 | - | - | - | 852 | 386 | 14,460 |
| Flatfish: |  |  |  |  |  |  |  |  |  |  |  |  |
| Atlantic and Gulf |  |  |  |  |  |  |  |  |  |  |  |  |
| American plaice | 29 | 13 | 76 | 2,239 | 1,016 | 5,605 | - | - |  | 2,268 | 1,029 | 5,681 |
| Summer flounder | 904 | 410 | 3,643 | 6,856 | 3,110 | 26,684 | - | - | - | 7,760 | 3,520 | 30,327 |
| Winter flounder | 251 | 114 | 752 | 2,310 | 1,048 | 7,148 | - | - | - | 2,561 | 1,162 | 7,900 |
| Witch flounder | 13 | 6 | 38 | 864 | 392 | 2,648 | - | - | - | 877 | 398 | 2,686 |
| Yellowtail flounder | 49 | 22 | 85 | 1,196 | 543 | 1,999 | - | - |  | 1,245 | 565 | 2,084 |
| Other | 1,218 | 553 | 4,569 | 1,273 | 577 | 289 | - | - | - | 2,491 | 1,130 | 4,858 |
| Total Atlantic/Gulf | 2,464 | 1,118 | 9,163 | 14,738 | 6,685 | 44,373 | - | - | - | 17,202 | 7,803 | 53,536 |

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT

| Species | Distance from U.S. Shores |  |  |  |  |  | High Seas or off Foreign Shores |  |  | Total U.S. Landings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 to 3 miles |  |  | 3 to 200 miles |  |  |  |  |  |  |  |  |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Mullets | 12,701 5,761 |  |  | 16173 |  | 125 | - - - |  |  | 12,862 | 5,834 | 9,505 |
| Pollock: |  |  |  |  |  |  |  |  |  |  |  |  |
| Atlantic | 140 | 63 | 195 | 5,552 | 2,518 | 6,173 |  | - | - | 5,692 | 2,582 | 6,368 |
| Walleye (Alaska) | 82,961 | 37,631 | 7,226 | 3,272,107 | 1,484,218 | 409,981 |  | - | - | 3,355,068 | 1,521,849 | 417,207 |
| Rockfishes: |  |  |  |  |  |  |  |  |  |  |  |  |
| Ocean perch: |  |  |  |  |  |  |  |  |  |  |  |  |
| Atlantic (redfish) | 1,922 | 872 | 1,142 | 6,651 | 3,017 | 3,992 |  | - | - | 8,573 | 3,889 | 5,134 |
| Pacific | 577 | 262 | 110 | 113,575 | 51,517 | 22,930 |  | - | - | 114,152 | 51,779 | 23,040 |
| Other | 1,593 | 723 | 2,052 | 40,721 | 18,471 | 14,706 |  | - | - | 42,314 | 19,194 | 16,758 |
| Total rockfishes | 4,092 | 1,856 | 3,304 | 160,947 | 73,005 | 41,628 |  | - | - | 165,039 | 74,861 | 44,932 |
| Sablefish | 2,072 | 940 | 7,586 | 31,503 | 14,290 | 109,296 |  | - | - | 33,575 | 15,230 | 116,882 |
| Salmon: |  |  |  |  |  |  |  |  |  |  |  |  |
| Chinook or king | 10,575 | 4,797 | 40,438 | 1,287 | 584 | 8,185 |  | - | - | 11,862 | 5,381 | 48,623 |
| Chum or keta | 101,355 | 45,974 | 56,706 | 4 | 2 | 2 |  | - | - | 101,359 | 45,976 | 56,708 |
| Coho | 29,891 | 13,559 | 34,242 | 414 | 188 | 627 |  | - | - | 30,305 | 13,746 | 34,869 |
| Pink | 130,258 | 59,085 | 29,793 | - | - | - |  | - | - | 130,258 | 59,085 | 29,793 |
| Sockeye | 287,246 | 130,294 | 250,235 | 6 | 3 | 5 |  | - | - | 287,252 | 130,297 | 250,240 |
| Total salmon | 559,325 | 253,708 | 411,414 | 1,711 | 776 | 8,819 |  | - | - | 561,036 | 254,484 | 420,233 |
| Sardines: |  |  |  |  |  |  |  |  |  |  |  |  |
| Pacific | 1,106 | 502 | 192 | 2 | 1 | (2) |  | - | - | 1,108 | 503 | 192 |
| Spanish | 1,533 | 696 | 282 | 79 | 36 | 18 |  | - | - | 1,612 | 731 | 300 |
| Scup or porgy | 5,476 | 2,484 | 3,638 | 10,427 | 4,730 | 7,273 |  | - | - | 15,903 | 7,214 | 10,911 |
| Sea bass: |  |  |  |  |  |  |  |  |  |  |  |  |
| Black (Atlantic) | 572 | 259 | 1,888 | 2,322 | 1,053 | 8,015 |  | - | - | 2,894 | 1,313 | 9,903 |
| White (Pacific) | 82 | 37 | 298 | 152 | 69 | 554 |  | - | - | 234 | 106 | 852 |
| Sea trout or weakfish: |  |  |  |  |  |  |  |  |  |  |  |  |
| Gray | 83 | 38 | 143 | 99 | 45 | 181 |  | - | - | 182 | 83 | 324 |
| Spotted | 343 | 155 | 931 | 18 | 8 | 41 |  | - | - | 361 | 164 | 972 |
| Sand (white) | 18 | 8 | 17 | 5 | 2 | 5 |  | - | - | 23 | 10 | 22 |
| Shads: |  |  |  |  |  |  |  |  |  |  |  |  |
| American | 370 | 168 | 274 | 13 | 6 | 16 |  | - | - | 383 | 174 | 290 |
| Hickory | 103 | 47 | 34 | 1 | 1 | (2) |  | - | - | 104 | 47 | 34 |
| See notes at end of table. |  |  |  | continued |  |  |  |  |  |  |  |  |

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT

| Species | Distance from U.S. Shores |  |  |  |  |  | High Seas or off Foreign Shores |  |  | Total U.S. Landings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 to 3 miles |  |  | 3 to 200 miles |  |  |  |  |  |  |  |  |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | $\begin{gathered} \hline \text { Thousand } \\ \text { dollars } \\ \hline \end{gathered}$ | Thousand pounds | Metric tons | Thousand dollars |
| Shellfish |  |  |  |  |  |  |  |  |  |  |  |  |
| Crustaceans: |  |  |  |  |  |  |  |  |  |  |  |  |
| Crabs: |  |  |  |  |  |  |  |  |  |  |  |  |
| Blue: Hard | 149,649 | 67,880 | 202,496 | 7,817 | 3,546 | 11,342 |  | - |  | 157,466 | 71,426 | 213,838 |
| Soft or peeler | 784 | 356 | 2,698 | (2) | (2) | 3 | - |  |  | 784 | 356 | 2,701 |
| Dungeness | 51,626 | 23,417 | 182,389 | 12,540 | 5,688 | 40,251 | - | - |  | 64,166 | 29,106 | 222,640 |
| Jonah | 4,750 | 2,154 | 3,646 | 10,608 | 4,812 | 8,105 | - | - |  | 15,358 | 6,966 | 11,751 |
| King | 844 | 383 | 4,394 | 13,748 | 6,236 | 100,275 | - | - | - | 14,592 | 6,619 | 104,669 |
| Snow (tanner): |  |  |  |  |  |  |  |  |  |  |  |  |
| Opilio | - | - | - | 39,574 | 17,950 | 79,924 | - | - | - | 39,574 | 17,951 | 79,924 |
| Bairdi | 1,325 | 601 | 2,996 | 10,446 | 4,738 | 22,943 | - | - | - | 11,771 | 5,339 | 25,939 |
| Other | 7,367 | 3,342 | 23,734 | 6,270 | 2,844 | 19,092 | - | - |  | 13,637 | 6,186 | 42,826 |
| Total crabs | 216,345 | 98,133 | 422,353 | 101,003 | 45,815 | 281,935 | - | - |  | 317,348 | 143,948 | 704,288 |
| Crawfish, freshwater | 12,036 | 5,460 | 10,660 | - | - | - | - | - | - | 12,036 | 5,459 | 10,660 |
| Lobsters: |  |  |  |  |  |  |  |  |  |  |  |  |
| American | 93,531 | 42,425 | 390,233 | 65,030 | 29,498 | 276,446 | - | - | - | 158,561 | 71,923 | 666,679 |
| Spiny | 4,259 | 1,932 | 39,882 | 1,602 | 727 | 16,054 | - | - | - | 5,861 | 2,659 | 55,936 |
| Shrimp: |  |  |  |  |  |  |  |  |  |  |  |  |
| New England | 19 | 9 | 100 | 32 | 14 | 179 | - | - |  | 51 | 23 | 279 |
| South Atlantic | 14,295 | 6,484 | 32,298 | 11,548 | 5,238 | 29,771 | - | - | - | 25,843 | 11,722 | 62,069 |
| Gulf | 90,238 | 40,932 | 140,230 | 98,746 | 44,791 | 229,737 | - | - | - | 188,984 | 85,723 | 369,967 |
| Pacific | 16,307 | 7,397 | 15,383 | 39,439 | 17,889 | 35,313 | - | - | - | 55,746 | 25,286 | 50,696 |
| Other | 75 | 34 | 174 | 88 | 40 | 245 | - | - | - | 163 | 74 | 419 |
| Total shrimp | 120,934 | 54,855 | 188,185 | 149,853 | 67,973 | 295,245 | - | - | - | 270,787 | 122,828 | 483,430 |
| Total crustaceans | 447,105 | 202,805 | 1,051,313 | 317,488 | 144,012 | 869,680 | - | - | - | 764,593 | 346,817 | 1,920,993 |
| See notes at end of table. |  |  |  | continued |  |  |  |  |  |  |  |  |

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT

| Species | Distance from U.S. Shores |  |  |  |  |  | High Seas or off Foreign Shores |  |  | Total U.S. Landings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 to 3 miles |  |  | 3 to 200 miles |  |  |  |  |  |  |  |  |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |
| Horseshoe crab | 1,679 | 762 | 1,438 | 216 | 98 | 205 | - | - | - | 1,895 | 860 | 1,643 |
| Sea urchins | 7,235 | 3,282 | 12,670 | 2,068 | 938 | 2,572 | - | - |  | 9,303 | 4,220 | 15,242 |
| Seaweed, unclassified | 22,940 | 10,406 | 841 | 1,581 | 717 | 197 | - | - | - | 24,521 | 11,123 | 1,038 |
| Kelp (with herring eggs) | - | - | - | - | - | - | - | - |  | - | - |  |
| Worms | 576 | 261 | 7,605 | - | - | - | - | - | - | 576 | 261 | 7,605 |
| Total other | 32,430 | 14,710 | 22,554 | 3,865 | 1,753 | 2,974 | - | - | - | 36,295 | 16,463 | 25,528 |
| Grand total, 2016 | 3,286,981 | 1,490,965 | 2,406,948 | 6,258,078 | 2,838,646 | 2,815,767 | 447,413 | 202,945 | 365,890 | 9,992,472 | 4,532,556 | 5,588,605 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grand total, 2015 | 3,673,576 | 1,666,323 | 2,303,751 | 6,019,342 | 2,730,356 | 2,826,567 | 572,251 | 259,571 | 356,214 | 10,265,169 | 4,656,250 | 5,486,532 |

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are in weight of meats (excluding the shell). The National Marine Fisheries Service estimated the distance-from-shore landings for data collected by the Service and States. Includes landings from the Great Lakes and other inland waters, but excludes Mississippi River drainage area states.
NOTE: Totals may not agree due to rounding. Data include landings by U.S.-flag vessels in Canada, Puerto Rico, and other ports outside the 50 States. Therefore, they will not agree with "U.S. Commercial Landings" tables beginning on page 1. Data do not include aquaculture products except oysters or clams.
U.S. Commercial Landings

DOMESTIC LANDINGS FOR U.S. TERRITORIAL POSSESSIONS, 2016

| Group / Species | American Samoa |  |  | Guam |  |  | Northern Marianas Islands |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pounds | Kilos | Dollars | Pounds | Kilos | Dollars | Pounds | Kilos | Dollars |
| Fish |  |  |  |  |  |  |  |  |  |
| Barracudas | 1,112 | 504 | 3,640 | 965 | 438 | 2,170 | 17 | 8 |  |
| Billfishes: |  |  |  |  |  |  |  |  |  |
| Marlin | 260 | 118 | 766 | 18,896 | 8,571 | 28,630 | 1,435 | 651 | 2,865 |
| Sailifish | 281 | 127 | 931 | 908 | 412 | 1,312 | - | - |  |
| Swordfish | 4,595 | 2,084 | 12,335 | - | - |  | - | - |  |
| Spearfish | 18,903 | 8,574 | 22,750 | - | - |  | - | - |  |
| Dolphinfish | 2,849 | 1,292 | 6,084 | 24,984 | 11,333 | 61,134 | 3,966 | 1,799 | 8,555 |
| Emperors | 6,794 | 3,082 | 21,759 | 952 | 432 | 3,062 | 13,300 | 6,033 | 33,657 |
| Goatish | 77 | 35 | 253 | 474 | 215 | 1,748 | 2,087 | 947 | 5,452 |
| Groupers | 4,312 | 1,956 | 13,171 | 154 | 70 | 519 | 1,171 | 531 | 4,368 |
| Jacks: |  |  |  |  |  |  |  |  |  |
| Amberjack | 383 | 174 | 479 | 76 | 34 | 266 | 530 | 240 | 1,401 |
| Bigeye scad | 62 | 28 | 186 | 1,368 | 621 | 3,743 | 1,534 | 696 | 4,366 |
| Black jack | 994 | 451 | 3,286 | 15 | 7 | 49 | 107 | 49 | 268 |
| Rainbow runner | 771 | 350 | 2,052 | 1,767 | 802 | 3,967 | 1,521 | 690 | 3,516 |
| Other | 1,403 | 636 | 3,263 | 689 | 313 | 2,120 | 1,307 | 593 | 3,307 |
| Parrotishes | 14,869 | 6,745 | 46,339 | 4,237 | 1,922 | 14,803 | 8,232 | 3,734 | 28,136 |
| Rabbitfish | 24 | 11 | 70 | 1,273 | 577 | 4,248 | 2,942 | 1,334 | 9,607 |
| Snappers: |  |  |  |  |  |  |  |  |  |
| Blue lined snapper | 1,280 | 581 | 4,321 |  |  |  | 758 | 344 | 1,912 |
| Ehu | 1,477 | 670 | 6,887 | 82 | 37 | 350 | 1,643 | 745 | 6,591 |
| Gindai (flower snapper) | 282 | 128 | 887 | 153 | 69 | 648 | 626 | 284 | 2,474 |
| Gray jobfish | 5,463 | 2,478 | 17,940 | 30 | 14 | 94 | 440 | 200 | 994 |
| Humpback | 4,015 | 1,821 | 12,951 | - | - |  | - | - |  |
| Lehi (silverjaw) | 2,569 | 1,165 | 10,281 | 93 | 42 | 389 | 541 | 245 | 1,603 |
| Onaga | 4,617 | 2,094 | 21,380 | 493 | 224 | 2,959 | 4,291 | 1,946 | 20,991 |
| Opakapaka | 656 | 298 | 2,477 | 249 | 113 | 1,056 | 1,464 | 664 | 5,003 |
| Snappers, other | 3,511 | 1,593 | 10,597 | 552 | 250 | 1,991 | 1,643 | 745 | 4,962 |
| Total snappers |  |  |  |  |  |  |  |  |  |
| Squirrelish | 4,039 | 1,832 | 10,938 | 29 | 13 | 93 | 1,945 | 882 | 5,015 |
| Surgeonfishes: |  |  |  |  |  |  |  |  |  |
| Unicornishes | 4,426 | 2,008 | 13,301 | 3,909 | 1,773 | 12,817 | - | - |  |
| Other | 25,933 | 11,763 | 76,120 | 344 | 156 | 1,149 | 21,861 | 9,916 | 55,784 |
| Tunas: |  |  |  |  |  |  |  |  |  |
| Albacore | 3,055,249 | 1,385,852 | 3,475,743 | - | - |  | - | - |  |
| Bigeye | 218,266 | 99,005 | 132,018 | - | - |  | - | - |  |
| Skipjack | 130,385 | 59,142 | 80,467 | 22,007 | 9,982 | 43,813 | 103,299 | 46,856 | 213,227 |
| Yellowfin | 502,364 | 227,871 | 369,484 | 10,240 | 4,645 | 24,540 | 10,880 | 4,935 | 24,028 |
| Other | 2,992 | 1,357 | 7,826 | 1,102 | 500 | 2,405 | 2,332 | 1,058 | 4,795 |
| Total, tuna | 3,909,256 | 1,773,227 | 4,065,538 | 33,349 | 15,127 | 70,758 | 116,511 | 52,849 | 242,050 |
| Wahoo | 133,804 | 60,693 | 99,499 | 12,916 | 5,859 | 31,977 | 1,029 | 467 | 2,185 |
| Wrasses | 16 | 7 | 48 | 80 | 36 | 276 | 36 | 16 | 106 |
| Other marine finfishes | 8,459 | 3,837 | 26,331 | 13,090 | 5,938 | 42,818 | 8,993 | 4,079 | 22,593 |
| Total fish | 4,167,492 | 1,890,362 | 4,516,860 | 122,127 | 55,396 | 295,146 | 199,930 | 90,688 | 477,761 |
| Shellfish, et al. |  |  |  |  |  |  |  |  |  |
| Crabs | - | 5 |  | 5 | 2 | 17 | - | - |  |
| Lobster, spiny | 1,102 | 500 | 4,137 | 211 | 96 | 846 | 2,065 | 937 | 24,854 |
| Octopus | 384 | 174 | 944 | 4,767 | 2,162 | 16,135 | 1,258 | 571 | 3,341 |
| Shelfish, other | 17 | 8 | 60 | - | - |  | 392 | 178 | 2,743 |
| Total shellfish, et al. | 1,503 | 682 | 5,141 | 4,983 | 2,260 | 16,998 | 3,715 | 1,685 | 30,938 |
| Grand Total | 4,168,995 | 1,891,044 | 4,522,001 | 127,110 | 57,657 | 312,144 | 203,645 | 92,373 | 508,699 |

(1) All landings are as reported. No adjustments or estimations have been made.

DOMESTIC LANDINGS FOR U.S. TERRITORIAL POSSESSIONS, 2016

| Group / Species | Puerto Rico (1) |  |  | U.S. Virgin Islands (1) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pounds | Kilos | Dollars | Pounds | Kilos | Dollars |
| Fish |  |  |  |  |  |  |
| Ballyhoo | 45,048 | 20,434 | 54,922 | 8,121 | 3,684 | 38,855 |
| Barracuda | 1,852 | 840 | 4,744 | 1,369 | 621 | 5,476 |
| Dolphinfish | 56,946 | 25,831 | 175,027 | 62,139 | 28,186 | 453,132 |
| Goatfish | 3,574 | 1,621 | 9,171 | 1,012 | 459 | 1,035 |
| Groupers: |  |  |  |  |  |  |
| Red hind | 33,500 | 15,196 | 88,662 | 41,667 | 18,900 | 262,217 |
| Misty | 2,487 | 1,128 | 7,972 | 34 | 15 | 204 |
| Other | 5,715 | 2,592 | 17,836 | 16,212 | 7,354 | 93,183 |
| Grunts | 14,630 | 6,636 | 27,197 | 27,302 | 12,384 | 166,470 |
| Hogfish | 29,490 | 13,377 | 97,825 | 2,735 | 1,240 | 16,407 |
| Jacks: |  |  |  |  |  |  |
| Bar jack | 17,176 | 7,791 | 35,977 | 4,446 | 2,017 | 26,135 |
| Horse-eye jack | 1,247 | 566 | 2,156 |  |  |  |
| Other | 2,506 | 1,137 | 5,129 | 26,721 | 12,120 | 159,578 |
| Mackerel, king and cero | 33,481 | 15,187 | 85,308 | 20,142 | 9,137 | 137,708 |
| Mojarra | 4,577 | 2,076 | 7,731 | - | - |  |
| Mullet | 9,808 | 4,449 | 15,620 | - |  |  |
| Parrotfish | 24,989 | 11,335 | 50,606 | 87,976 | 39,906 | 505,713 |
| Scup or porgy | 10,406 | 4,720 | 19,084 | 9,548 | 4,331 | 49,988 |
| Sharks, other | 7,146 | 3,241 | 11,754 | 635 | 288 | 372 |
| Snappers: |  |  |  |  |  |  |
| Lane | 63,505 | 28,806 | 175,570 | 2,675 | 1,213 | 16,766 |
| Mutton | 19,224 | 8,720 | 57,507 | 10,154 | 4,606 | 63,707 |
| Silk | 138,830 | 62,973 | 728,668 | 9,360 | 4,246 | 63,655 |
| Yellowtail | 94,773 | 42,989 | 296,020 | 34,094 | 15,465 | 213,544 |
| Other | 121,839 | 55,266 | 616,770 | 28,042 | 12,720 | 179,876 |
| Total snappers | 438,171 | 198,754 | 1,874,535 | - | - |  |
| Snook | 6,221 | 2,822 | 12,412 | - | - |  |
| Squirrelfish | 2,762 | 1,253 | 5,326 | 9,331 | 4,233 | 31,690 |
| Surgeonfish |  |  |  | 27,183 | 12,330 | 140,446 |
| Triggerfish | 39,493 | 17,914 | 65,071 | 61,784 | 28,025 | 392,631 |
| Trunkfish (boxfish) | 24,576 | 11,148 | 61,350 | 11,773 | 5,340 | 35,420 |
| Tuna: |  |  |  |  |  |  |
| Albacore | 1,548 | 702 | 4,214 | - | - | - |
| Blackfin | 21,142 | 9,590 | 42,441 | 1,450 | 658 | 9,425 |
| Little (tunny) | 5,267 | 2,389 | 7,588 | 22,841 | 10,360 | 161,731 |
| Skipjack | 8,542 | 3,875 | 15,016 | 1,231 | 558 | 8,390 |
| Yellowfin | 5,412 | 2,455 | 14,577 | 9,983 | 4,528 | 71,021 |
| Unclassified | 2,731 | 1,239 | 9,282 | 4,364 | 1,979 | 1,927 |
| Total tuna | 44,642 | 20,250 | 93,118 | 39,869 | 18,083 | 252,494 |
| Wahoo | 10,111 | 4,586 | 32,256 | 37,516 | 17,017 | 277,301 |
| Other marine finfishes | 21,713 | 9,849 | 34,354 | 44,054 | 19,983 | 191,688 |
| Total fish | 892,267 | 404,733 | 2,895,143 | 625,894 | 283,903 | 3,775,691 |
| Shellfish, et al. |  |  |  |  |  |  |
| Crabs | 2,873 | 1,303 | 49,568 | 1,844 | 836 | 8,298 |
| Lobster, spiny | 260,435 | 118,133 | 1,685,455 | 151,488 | 68,715 | 1,317,573 |
| Conch (snail) meats | 179,318 | 81,338 | 947,934 | 32,659 | 14,814 | 196,775 |
| Octopus | 14,661 | 6,650 | 56,242 | - | - | - |
| Shellfish, other | 1,578 | 716 | 7,186 | 3,674 | 1,667 | 9,262 |
| Total shellfish, et al. | 458,865 | 208,140 | 2,746,385 | 189,665 | 86,032 | 1,531,908 |
| Grand Total | 1,351,132 | 612,873 | 5,641,528 | 815,559 | 369,935 | 5,307,599 |

[^1]
## U.S. Commercial Landings

The following comparisons between the top species, by weight, for U.S. commercial landings and recreational fish harvests include only species with both recreational and commercial fisheries. Further, these comparisons do not include data for Alaska and Texas because recreational weight data are not provided by those states. Recreational harvest shown represents type $\mathrm{A}+\mathrm{B} 1$ catch which includes both fish brought back to the dock, used for bait, released dead, or filleted.

## Selected Recreational Species-Harvest vs. Commercial Harvest, 2016



## Top Recreational and Commercial Finfish Species, by Coast, 2016 (Thousands of Pounds)

Atlantic Coast

| Rank | Species | Commercial | Recreational | Total Landings |
| :--- | ---: | ---: | ---: | ---: |
| 1 | Atlantic Herring | 138,374 | 129 | 138,503 |
| 2 | Dogfish | 27,603 | 213 | 2,916 |
| 3 | Striped bass | 4,978 | 19,894 | 24,873 |
| 4 | Goosefish (anglerfish) | 19,913 | 19,918 |  |
| 5 | Atlantic mackerel | 11,776 | 2,999 | 14,775 |
| 6 | Silver Hake | 13,929 | 51 | 13,980 |
| 7 | Summer flounder (fluke) | 7,761 | 6,183 | 13,944 |
| 8 | Bluefish | 4,256 | 9,538 | 13,794 |
| 9 | Haddock | 11,057 | 1,535 | 12,592 |
| 10 | Catfish \& Bullheads | 7,294 | 1,382 | 8,676 |

Gulf Coast

| Rank | Species | Commercial | Recreational | Total Landings |
| :--- | ---: | ---: | ---: | ---: |
| 1 | Mullets | 9,528 | 2,597 | 12,125 |
| 2 | Red snapper | 2,830 | 5,479 | 8,309 |
| 3 | Spotted sea trout | 63 | 5,606 | 5,669 |
| 4 | King \& Cero mackerel | 1,495 | 2,686 | 4,181 |
| 5 | Spanish mackerel | 1,612 | 2,489 | 4,100 |
| 6 | Thread herring | 2,212 | 248 | 2,461 |
| 7 | Vermilion snapper | 1,061 | 692 | 1,753 |
| 8 | Blue runner | 157 | 1,191 | 1,348 |
| 9 | Dolphinfish | 30 | 1,102 | 1,132 |
| 10 | Sand (white) sea trout | 19 | 1,109 | 1,128 |

West Coast

| Rank | Species | Commercial | Recreational | Total Landings |
| :--- | ---: | ---: | ---: | ---: |
| 1 | Unspecified rockfishes | 10,365 | 4,474 | 14,839 |
| 2 | Sablefish | 11,799 | 4 | 11,802 |
| 3 | Chub mackerel | 3,945 | 398 | 4,344 |
| 4 | Lingcod | 1,053 | 2,206 |  |
| 5 | Pacific Flounder | 2,736 | 2,736 |  |
| 6 | Halibut | 1,619 | 1 | 2,465 |
| 7 | Yellowfin tuna | 808 | 846 | 1,232 |
| 8 | Bluefin tuna | 424 | 873 |  |
| 9 | Jack mackerel | 89 | 89 | 808 |
| 10 | Dogfish | 800 | 8 | 637 |

## U.S. Aquaculture

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## INTRODUCTION

Aquaculture is defined as the propagation and rearing of aquatic species in controlled or selected environments (National Aquaculture Act of 1980). Aquaculture is gaining global importance and plays an important role in global food security. Although the U.S. is not a major aquaculture producer, ranking 16th worldwide for fish and shellfish production from aquaculture, it is estimated that over half of the seafood that the U.S. imports and consumes comes from aquaculture. Aquaculture plays an important role in producing many popular seafood products, including salmon, oysters, and clams in the U.S. as well as imported shrimp. The data in this section are current through 2015 and therefore lag 1 year behind the rest of the data in Fisheries of the United States.

## SOURCES OF DATA

Accurate statistics about the state of the U.S. marine aquaculture industry are essential for quantitatively demonstrating the contribution of aquaculture to coastal economies and to U.S. seafood production. Regular, periodic data are also necessary to assess industry trends. However, the United States does not conduct an annual national data collection for aquaculture production. To derive the estimates reported here, NMFS compiles data from a number of sources including state agencies, industry groups, the United States Department of Agriculture (USDA) and specialized surveys. Round weight is reported for most species, but oysters, clams, and mussels are reported as meat weight (i.e., without the shell). For a few species, such as ornamental fish, only value is reported. The values reported are at the farm-gate level.

More detailed data on United States Aquaculture are available from the USDA Census of Aquaculture for 2013 (http://www.agcensus.usda.gov/Publications/ Census_of_Aquaculture/). This is the first Census of Aquaculture since 2005 and is a follow-up to the 2012 Census of Agriculture. The Census of Aquaculture provides more information on freshwater aquaculture, species farmed, and methods used. Data in the census is from 2013 because the census is not conducted annually. Data from this publication will not agree exactly with data from the Census of Aquaculture due to differences in methodology and sources of data.

World data are compiled by the FAO and are available on its website (http://www.fao.org/fishery/ statistics/global-aquaculture-production) and through
its FishStatJ software (http://www.fao.org/fishery/ statistics/software/fishstatj/en). For global data, all species are reported in live weight.

## DATA HIGHLIGHTS

In 2015, estimated freshwater plus marine U.S. aquaculture production was 627 million pounds with a value of $\$ 1.39$ billion. This volume of production reflects an increase of 19 million pounds ( $3.2 \%$ ) from 2014. Freshwater aquaculture production increased slightly from 2014, increasing 13.6 million pounds $(2.6 \%)$. In 2015, marine aquaculture production also increased slightly, increasing by 6.0 million pounds $(6.6 \%)$ and $\$ 7.9$ million ( $2.1 \%$ ). Freshwater production is primarily composed of catfish (317.4 million pounds), crawfish (140.4 million pounds), and trout ( 45.8 million pounds). Atlantic salmon is the leading species for marine finfish aquaculture ( 47.5 million pounds), while oysters have the highest volume ( 35.2 million pounds) for marine shellfish production. Thriving shellfish industries can be found in all coastal regions of the United States, however the Atlantic and Pacific Coast states produce more oysters, clams, and mussels by value (\$112.4 and \$95.9 million, respectively), while the Gulf states produce more by volume ( 24.9 million pounds).

The FAO estimates that nearly half of world seafood consumption comes from aquaculture and this percentage is likely to increase in the future. By far, Asia is the leading continent for aquaculture production. Asia produces 89 percent of the global aquaculture production of fish, crustaceans and mollusks, which totals 76.6 million metric tons. The top five producing countries are in Asia: China, India, Indonesia, Vietnam, and Bangladesh. FAO reported that the United States ranked sixteenth in aquaculture production of fish, crustaceans and mollusks. Globally, carps ( 29.1 million metric tons), tilapias ( 5.7 million metric tons), and salmon ( 3.4 million metric tons) are the finfish species groups with the greatest production. Clams ( 5.4 million metric tons), oysters ( 5.3 million metric tons), and shrimp (4.9 million metric tons) are the shellfish species groups with the most production. Aquatic plant farming, primarily seaweed, also represents a significant sector of global aquaculture production ( 29.4 million metric tons, valued at 4.8 billion). Seaweed farming is just now establishing in the U.S. and shows promise to become an important contributor to future U.S. marine aquaculture production.

| Species | ESTIMATED U.S. AQUACULTURE PRODUCTION, 2010-2015 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  |  | 2011 |  |  |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Freshwater: |  |  |  |  |  |  |
| Catfish | 478,854 | 217,205 | 375,078 | 348,202 | 157,942 | 390,977 |
| Striped bass | 8,531 | 3,870 | 28,837 | 7,751 | 3,516 | 29,256 |
| Tilapia | 22,000 | 9,979 | 52,988 | 22,000 | 9,979 | 53,900 |
| Trout | 33,953 | 15,401 | 47,745 | 33,316 | 15,112 | 51,532 |
| Crawfish | 116,716 | 52,942 | 177,406 | 117,804 | 53,435 | 205,725 |
| Total Freshwater | 660,054 | 299,396 | 682,054 | 529,074 | 239,984 | 731,390 |
| Marine: |  |  |  |  |  |  |
| Salmon | 43,066 | 19,535 | 98,986 | 40,995 | 18,595 | 104,038 |
| Clams | 9,182 | 4,165 | 95,458 | 10,324 | 4,683 | 104,337 |
| Mussels | 886 | 402 | 6,633 | 880 | 399 | 7,254 |
| Oysters | 36,864 | 16,721 | 111,778 | 26,592 | 12,062 | 98,444 |
| Shrimp | 2,974 | 1,349 | 5,949 | 3,554 | 1,612 | 6,145 |
| Total Marine | 92,973 | 42,172 | 318,804 | 82,345 | 37,351 | 320,218 |
| Miscellaneous | - | - | 282,114 | - | - | 285,359 |
| Totals | 753,027 | 341,568 | 1,282,972 | 611,418 | 277,335 | 1,336,967 |
| Species | 2012 |  |  | 2013 |  |  |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Freshwater: |  |  |  |  |  |  |
| Catfish | 340,164 | 154,296 | 318,784 | 358,380 | 162,560 | 354,337 |
| Striped bass | 7,915 | 3,590 | 29,438 | 7,444 | 3,377 | 34,987 |
| Tilapia | 23,000 | 10,433 | 56,350 | 18,428 | 8,359 | 40,049 |
| Trout | 36,226 | 16,432 | 55,388 | 44,496 | 20,183 | 71,869 |
| Crawfish | 95,762 | 43,437 | 160,717 | 106,924 | 48,500 | 144,347 |
| Total Freshwater | 503,067 | 228,188 | 620,677 | 535,672 | 242,979 | 645,588 |
| Marine: |  |  |  |  |  |  |
| Salmon | 42,538 | 19,295 | 77,064 | 41,593 | 18,866 | 104,709 |
| Clams | 10,262 | 4,655 | 98,797 | 9,533 | 4,324 | 122,150 |
| Mussels | 739 | 335 | 9,451 | 699 | 317 | 9,804 |
| Oysters | 34,802 | 15,786 | 135,718 | 35,243 | 15,986 | 157,272 |
| Shrimp | 2,846 | 1,291 | 6,029 | 3,355 | 1,522 | 7,108 |
| Total Marine | 91,187 | 41,362 | 327,059 | 90,422 | 41,015 | 401,043 |
| Miscellaneous | - | - | 286,087 | - | - | 289,181 |
| Totals | 594,254 | 269,550 | 1,233,823 | 626,094 | 283,994 | 1,335,812 |
| Species | 2014 |  |  | 2015 |  |  |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Freshwater: |  |  |  |  |  |  |
| Catfish | 307,498 | 139,480 | 331,963 | 317,445 | 143,992 | 347,021 |
| Striped bass | 8,110 | 3,679 | 31,142 | 8,111 | 3,679 | 30,831 |
| Tilapia | 18,999 | 8,618 | 42,745 | 18,999 | 8,618 | 42,745 |
| Trout | 48,456 | 21,979 | 76,206 | 45,854 | 20,799 | 76,748 |
| Crawfish | 134,168 | 60,858 | 172,071 | 140,411 | 63,690 | 199,350 |
| Total Freshwater | 517,231 | 234,615 | 654,128 | 530,820 | 240,778 | 696,695 |
| Marine: |  |  |  |  |  |  |
| Salmon | 41,268 | 18,719 | 76,186 | 47,528 | 21,559 | 87,743 |
| Clams | 10,405 | 4,720 | 120,727 | 9,086 | 4,121 | 112,139 |
| Mussels | 699 | 317 | 9,861 | 717 | 325 | 10,201 |
| Oysters | 33,323 | 15,115 | 168,991 | 35,229 | 15,980 | 172,778 |
| Shrimp | 4,870 | 2,209 | 10,316 | 3,979 | 1,805 | 11,137 |
| Total Marine | 90,565 | 41,080 | 386,081 | 96,539 | 43,790 | 393,998 |
| Miscellaneous | - | - | 291,717 | - | - | 302,774 |
| Totals | 607,796 | 275,695 | 1,331,926 | 627,359 | 284,568 | 1,393,468 |

Note: Table may not add due to rounding. Clams, oysters, and mussels are reported as meat weights (excludes shell), while all other species such as shrimp and finfishes are reported as whole (live) weights. Some clam and oyster production is reported with U.S. commercial landings. Weights and values represent the final sales of products to processors and dealers. The "Miscellaneous" category includes baitfish, ornamental/tropical fish, alligators, algae, aquatic plants, eels, scallops, crabs, and others. The production volume of "Miscellaneous" is not reported because production value, but not weight, is reported for many species such as ornamental fishes.
Source: Fisheries Statistics Division, F/ST1, State Data, NMFS and Census of Aquaculture, USDA.
FUS 2016

Volume of Domestic Commercial Landings and Aquaculture Production


Value of Domestic Commercial Landings and Aquaculture Production


## Estimated Marine Aquaculture Production Value and Volume, 2010-2015



Estimated Value of Freshwater and Marine Aquaculture, 2010-2015


[^2]
## Aquaculture

Estimated U.S. Marine Aquaculture Production by Region, by Volume, 2015


Estimated U.S. Marine Aquaculture Production by Region, by Value, 2015


Estimated Shellfish Aquaculture Production, by Volume, 2015


ESTIMATED SHELLFISH VOLUME AND VALUE BY REGION, 2015

| Region | Total Shellfish Volume (pounds) | Total Shellfish Value (1000 \$) |
| :--- | ---: | ---: |
| Atlantic | $9,573,513$ | 112,379 |
| Gulf | $24,870,284$ | 86,829 |
| Pacific | $10,588,666$ | 95,910 |

Note: Volume is reported in meat weight.

## Aquaculture

AQUACULTURE PRODUCTION OF FISH, CRUSTACEANS, AND MOLLUSKS, BY TOP COUNTRIES
AND BY CONTINENT, 2015

| Country (ranked by volume) | Volume (metric tons) | $\begin{gathered} \text { Value } \\ \text { (1000 US\$) } \end{gathered}$ | Continent | Volume (metric tons) | $\begin{gathered} \text { Value } \\ (1000 \text { US\$) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| China | 47,610,040 | 76,792,942 | Asia | 68,392,709 | 125,489,608 |
| India | 5,235,017 | 10,456,749 | Europe | 2,975,159 | 11,429,505 |
| Indonesia | 4,342,465 | 7,911,027 | South America | 2,268,348 | 12,743,917 |
| Viet Nam | 3,438,378 | 8,510,506 | Africa | 1,772,391 | 3,507,158 |
| Bangladesh | 2,060,408 | 5,150,023 | North America | 1,005,028 | 3,212,346 |
| Norway | 1,380,839 | 5,823,110 | Oceania | 186,267 | 1,536,995 |
| Egypt | 1,174,831 | 1,831,035 |  |  |  |
| Chile | 1,045,790 | 6,834,121 |  |  |  |
| Myanmar | 997,306 | 1,644,829 |  |  |  |
| Thailand | 897,096 | 2,349,711 |  |  |  |
| Philippines | 781,798 | 1,869,973 |  |  |  |
| Japan | 703,915 | 3,460,729 |  |  |  |
| Brazil | 574,530 | 1,218,343 |  |  |  |
| South Korea | 479,360 | 1,720,303 |  |  |  |
| Ecuador | 426,410 | 2,303,203 |  |  |  |
| United States of America | 425,973 | 1,149,612 |  |  |  |
| All others | 5,025,746 | 18,893,313 |  |  |  |
| Total | 76,599,902 | 157,919,529 |  | 76,599,902 | 157,919,529 |

Source: FAO, U.S. total may not agree with other estimates in this section.
Additional detail on global aquaculture production can be found in the world section.

## Aquaculture Production by Continent, 2015



## United States Marine Recreational Fisheries

## DATA COLLECTION

Detailed information on marine recreational fishing is required to support a variety of fishery management purposes and is mandated by the Sustainable Fisheries Act, 1996 (PL 104-297) and the MagnusonStevens Fishery Conservation and Management Reauthorization Act of 2006 (PL 109-479). In 1981, following 2 years of preliminary surveys, NOAA Fisheries began a comprehensive survey of marine recreational fisheries covering all fishing modes (private/rental boat, party/charter boat, and shore), and including estuarine and brackish water. Although the annual recreational harvest is only about 9 percent of the total weight of U.S. harvest of finfish for states covered by this program, the fishing activities of millions of anglers are important to monitor because marine recreational fishing significantly impacts the stocks of many finfish species, and recreational catches surpass commercial landings of some species (see figure on page 24).

## METHODS

On the Atlantic and Gulf coasts of the U.S., the Marine Recreational Information Program (MRIP) consists of the Coastal Household Telephone Survey (CHTS), the For-Hire Survey (FHS), and the Access Point Angler Intercept Survey (APAIS). Additional information is also obtained from state and regional logbook programs and is used to supplement survey data to produce more robust catch and effort estimates. The CHTS collects data on the number of shore and private boat fishing trips taken by residents of coastal counties. The APAIS collects data on species composition of catches, catch rates by species, lengths and weights of landed fish, the proportion of fishing trips by residents of non-coastal counties, and angler avidity. These data are combined to produce estimates of participation, catch and effort. Catch estimates are separated into two categories harvested catch and catch released alive. Harvested catch includes landed fish and catch reported as dead. Whenever possible, field interviewers identify, count, weigh, and measure landed fish that are available in whole form. Angler reports are obtained for catch released alive and for all other harvested catch, such as catch released dead, used for bait, or filleted fish. Catch estimates are stratified by sub-region, state and wave (bimonthly sampling period), and further partitioned by species, fishing mode (private/rental boat, party/charter boat, and shore), primary area fished, and catch type.

On the Atlantic and Gulf Coasts, and in California, effort for the party and charter boat fishing modes is estimated through the FHS. This survey differs from the CHTS because it uses a telephone survey of boat captains as the primary method for estimating fishing effort. The weekly survey uses a directory of charter and party boats as the sampling frames. This survey estimates the number of angler-trips on boats included in the sampling frames. Dockside and on-board angler-intercept surveys collect catch data. The total catch of any one species is calculated as the product of the estimated total angler trips and the estimated mean catch per trip for that species. The FHS produces separate estimates for party and charter boat on the Atlantic and Gulf Coasts, while for-hire fishing vessels are not designated by type in California. The FHS effort methodology was initiated in 2000 on the Gulf coast, in 2001 on the Pacific coast, and in 2003 on the Atlantic coast. The FHS in the Gulf Coast only includes charter boats.

In Oregon and Washington, ocean boat surveys are used to produce catch and effort estimates. Oregon's Ocean Recreational Boat Survey (ORBS) and Washington's Ocean Sampling Program (OSP) consist of a field intercept survey for effort and catch of passenger and private boats. Estimates of mean catch per boat, catch per angler, total angler trips and boat trips are produced for each port inlet or port group stratified by time period and portioned by type of boat, type of trip and water area. Catch estimates in numbers of fish and weight are produced for each species of fish.

## COVERAGE

In 2016, MRIP (conducted by NOAA Fisheries) included the Atlantic coast (ME-East FL), Gulf coast (MS-West FL), Puerto Rico, and Hawaii. Detailed information and access to the data are available on the Fisheries Statistics web page (www.st.nmfs.noaa. gov/recreational-fisheries). Care is advised when comparing catch estimates across an extended time series because of differences in sampling coverage through the years.

In the South Atlantic and Gulf sub-regions (NC-LA) party boat catch data have not been collected since 1985, so estimates for these sub-regions only include charter boats in the for-hire sector. Since 2014, marine recreational fishing in Louisiana has been monitored by the Louisiana Department of Wildlife and Fisheries, prior years were surveyed by NOAA Fisheries' survey program. Marine recreational
fishing in Texas is monitored by the Texas Parks and Wildlife Department and has not been surveyed by the NOAA Fisheries' survey program since 1985. Prior to 1998, on the Pacific coast, ocean boat trips and salmon trips were not sampled during certain waves because they were surveyed by state natural resource agencies. Recreational fishing data in Alaska are collected through an annual mail survey administered by the Alaska Department of Fish and Game. Harvest, effort and participation data are included, but not available for the current year. West Pacific U.S. territories have not been included in the national survey program since 1981. Hawaii was not surveyed between 1981 and 2002. Puerto Rico was not surveyed between 1981 and 2000. Since 2004, the numbers reported for Washington and Oregon include only private boat and for-hire fisheries. Data from other NOAA Fisheries and state surveys are not included in this report.

Historically, only about five percent of the annual recreational catch on the Atlantic and Gulf coasts is taken during Wave 1 (Jan/Feb). Costs to sample these months are very high due to low fishing activity. Therefore, in Jan/Feb of 1981 the surveys were not conducted in any region. In 1982, Jan/ Feb data collection resumed on the Pacific and Gulf coasts and also on the Atlantic coast of Florida. In 2004, Jan/Feb data collection resumed in North Carolina. With a few exceptions the recreational statistics program has not collected data in Jan/Feb on the Atlantic coast north of Florida since 1980. A pilot study of fishing effort in Jan/Feb by coastal household residents was conducted in 2010 in NY, NJ, DE, MD, and VA. Results suggested only ~ $0.1-1.3 \%$ of coastal households reported fishing in $\mathrm{Jan} / \mathrm{Feb}$ in these mid-Atlantic states, compared to the average fishing household rates of $1.25-4.5 \%$ in Mar/Apr and Nov/Dec (2007-2009 pooled), the two lowest periods of activity that are surveyed by the CHTS regularly. These extremely low levels of fishing incidence in Wave 1 are therefore difficult to survey precisely and suggest very low contribution to annual catches if the anglers are successful.

Time periods when the marine recreational statistics program has not been conducted: Nov/Dec (ME \& NH) - 1987 to present; Mar/Apr (ME \& NH) - 1986 to present; Jan/Feb (Northern CA \& OR) - 1994; Jan/Feb (Southern CA \& OR) - 1995 Nov/Dec (OR) - 1994; Nov/Dec (WA shore modes) - 2003; July - Dec (OR shore modes) - 2003; All Waves (CA

- WA) - 1990 to 1993, 2004 to present; All Waves (WA) - 1993 to 1994.


## CATCH AND EFFORT ESTIMATION

MRIP developed a new method for estimating catch rates using properly weighted intercept data collected via the APAIS. This new method was determined to result in unbiased samples and has been used for all catch estimates beginning in 2011. This new technique has also been applied to the previously collected intercept data from 2004-2010 to produce revised effort and catch estimates. The data presented in the tables are the products of this new estimation computational method.

## DATA TABLES

The estimated harvests (numbers and weight of fish) for the continental U.S., Alaska, Hawaii, and Puerto Rico are presented. Harvest by weight are not available for Texas and Alaska, or Louisiana after 2013. Numbers of fish harvested and released alive are also presented for many important species groups. Estimated harvests are presented by sub-region and primary fishing area: inland (sounds, rivers, bays), state territorial seas (ocean to 3 miles from shore, except for Texas and Florida's Gulf coast, where state territorial seas extend to 10 miles from shore), and Exclusive Economic Zone (EEZ) (ocean from the outer edge of the state territorial seas to 200 miles from shore). The total numbers of estimated trips and participants are presented by state. Estimated anglers for Louisiana, Hawaii, Texas, California, Oregon, and Washington are not available.

## 2016 MARINE RECREATIONAL FISHING DATA

The 2016 national estimate of 9.6 million anglers was derived from two sources: 1) an estimate based on current survey data for the Atlantic and Gulf coasts, from Maine to Mississippi, and 2) estimates of the number of anglers for California, Oregon and Washington (since 2003) and Louisiana (since 2014) based on historical rates of participation in recreational saltwater fishing. Texas, Hawaii and Puerto Rico lack historical data adequate to estimate participation and are not included. NOAA fisheries has a growing concern and lack of confidence in the second portion of the total estimate which depends on historical participation rates to provide current estimates, especially over a long time frame. NOAA Fisheries will continue to provide that portion of the national estimate described in 1) above, and
will work with its state partners to explore ways to improve annual estimates of marine recreational angler participation rather than continuing to use the source described in 2) above. In particular, NOAA Fisheries is evaluating an approach to utilize estimates produced every five years by the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, which is sponsored by the U.S. Fish and Wildlife Service.

These 9.6 million marine recreational anglers made 63 million marine recreational fishing trips in the continental United States, Hawaii, and Puerto Rico. Alaska data are not available for the current year. The estimated total marine recreational catch was more than 371 million fish, of which 61 percent was released alive. The estimated total weight of harvested catch was almost 182 million pounds. The Atlantic coast accounted for the majority of trips (more than 58 percent) and catch (almost 57 percent). The Gulf coast accounted for nearly 33 percent of trips, and nearly 39 percent of the catch. The Pacific coast accounted for 6 percent of trips, and more than 3 percent of the catch. Nationally, most (almost 54 percent in numbers of fish) of the recreational catch came from inland waters, almost 34 percent from state territorial seas, and almost 11 percent from the EEZ. The majority of Atlantic, Gulf and Pacific trips fished primarily in inland waters.

## ATLANTIC

In 2016, 6 million residents of Atlantic Coast states participated in marine recreational fishing. All participants, including visitors, took nearly 37 million trips and caught a total of nearly 210 million fish. Nearly 24 percent of the trips were made in east Florida, followed by almost 15 percent in North Carolina, almost 12 percent in New Jersey, almost 12 percent in New York, more than 6 percent in Massachusetts, more than 6 percent in Maryland, and almost 6 percent in Virginia. Together, South Carolina, Connecticut, and Rhode Island accounted for nearly 13 percent of the trips, and Delaware, Georgia, Maine, and New Hampshire accounted for the remaining trips. The most commonly caught non-bait species (in numbers of fish) were black sea bass, summer flounder, striped bass, scup, and bluefish. The largest harvests by weight were striped bass, bluefish, dolphinfish, summer flounder, and black sea bass.

Over the last ten years, the total annual catch of Atlantic croaker decreased overall from nearly 23
million fish in 2007 to over 11 million fish in 2016. In 2016, Atlantic croaker catch (over 11 million fish) was nearly 37 percent below the 10 -year average of nearly 18 million fish. Annual catch of summer flounder has varied between 12 million fish and 24 million fish over the last ten years, with an average catch of 19 million fish per year. Of the 14 million caught in 2016, 12 million fish (almost $86 \%$ ) were released alive. The species most commonly caught on Atlantic coast trips that fished primarily in federally managed waters were black sea bass, summer flounder, haddock, Atlantic cod, and Atlantic mackerel. More than 32 percent of the total Atlantic catch came on saltwater trips that fished primarily in the state territorial seas, and almost 57 percent came on trips that fished primarily in inland waters.

## GULF OF MEXICO

In 2016, 2.7 million residents of Gulf Coast states participated in marine recreational fishing. All participants, including visitors, took almost 21 million trips and caught over 144 million fish. Nearly 64 percent of the trips were made in west Florida, followed by more than 12 percent in Alabama, nearly 11 percent in Louisiana, over 7 percent in Mississippi, and almost 6 percent in Texas. The most commonly caught non-bait species (numbers of fish) were spotted seatrout, gray snapper, red drum, sand seatrout, and red snapper. The largest harvests by weight were for spotted seatrout, red snapper, red drum, king mackerel, Spanish mackerel, and striped mullet.

Annual spotted seatrout catch declined to a low in 2014 but has increased in subsequent years. At 23 million fish, 2016 spotted seatrout catch was below the 10 -year mean of nearly 28 million. Annual catch of red drum has varied between 4.9 million fish and nearly 12 million fish over the last ten years, with an average catch of almost 8.7 million fish per year. Of the 4.9 million caught in 2016, nearly 2.9 million fish (more than $58 \%$ ) were released alive. The species most commonly caught on Gulf of Mexico trips that fished primarily in federally managed waters were red snapper, white grunt, red grouper, black sea bass, and gray triggerfish. Over 31 percent of the total Gulf catch came from trips that fished primarily in the state territorial seas, and almost 54 percent came from trips that fished primarily in inland waters.

## PACIFIC

In 2016, marine recreational anglers took 3.8 million trips and caught a total of nearly 13 million fish. Almost 92 percent of the trips were made in California, followed by almost 5 percent in Oregon, and almost 4 percent in Washington. The most commonly caught non-bait species (in numbers of fish) were Pacific (chub) mackerel, kelp bass, black rockfish, barred surfperch, and lingcod. By weight, the largest harvests were lingcod, black rockfish, albacore, Pacific halibut, vermilion rockfish, and yellowtail.

From 2007 to 2016, total annual catch of California halibut has averaged over 179,000 fish. Catch declined to a low in 2011 but has increased in subsequent years. Of the total catch in 2016 ( 115,000 fish), almost 83 percent were released alive. Annual catch of Chinook salmon has varied between 28,000 fish and 114,000 fish over the last ten years, with an average catch of nearly 73,000 fish per year. Of the 43,000 caught in 2016, 19,000 fish ( $44 \%$ ) were released alive. The most commonly caught Pacific coast species in federally managed waters were California scorpionfish, squarespot rockfish, kelp bass, vermilion rockfish, and Pacific (chub) mackerel. More than 70 percent of the total Pacific catch came from trips that fished primarily in the state territorial seas, and nearly 18 percent came from trips that fished primarily in inland waters.

## ALASKA

In 2015, 319,000 marine recreational anglers took more than 632,000 trips and caught a total of 2.6 million fish. Commonly caught non-bait fishes included Pacific halibut, rockfishes, Pacific cod, lingcod, and the salmons: Chinook, chum, coho, pink and sockeye. The most abundantly harvested of the salmons were coho salmon and Chinook salmon. Current year statistics are not available.

## HAWAII

In 2016, marine recreational anglers took over 1 million trips and caught a total of 2.8 million fish. The most commonly caught non-bait species (in numbers of fish) were yellowstripe goatfish, mackerel scad, convict tang, Hawaiian flagtail, and bluefin trevally. By weight, the largest harvests were yellowfin tuna, wahoo, dolphinfish, skipjack tuna, blue marlin, and bluefin trevally.

## PUERTO RICO

In 2016, marine recreational anglers took almost 654,000 trips and caught a total of 1.5 million fish. The most commonly caught non-bait species (in numbers of fish) were dolphinfish, great barracuda, blue runner, yellowtail snapper, and red hind. By weight, the largest harvests were dolphinfish, wahoo, great barracuda, mutton snapper, yellowfin tuna, and yellow jack.

## U.S. Marine Recreational Fisheries

U.S. RECREATIONAL HARVEST, BY SPECIES, 2015 AND 2016

| Species | 2015(2,3) |  |  | 2016 (2,3,4) |  |  | Average <br> $(2012-2016)$$\|$Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Total numbers (thousands) (thousands) | Thousand pounds | Metric tons | Total numbers (thousands) |  |
| Anchovies ** |  |  |  |  |  |  |  |
| Northern Anchovy | 4 | 2 | 126 | 1 | (1) | 48 | 5 |
| Other Anchovies | (1) | (1) | 133 | (1) | (1) | 35 | (1) |
| Barracudas |  |  |  |  |  |  |  |
| Pacific Barracuda | 96 | 44 | 22 | 64 | 28 | 14 | 117 |
| Other Barracudas | 1,091 | 496 | 191 | 621 | 280 | 135 | 776 |
| Bluefish | 11,792 | 5,346 | 4,153 | 9,884 | 4,484 | 4,566 | 12,287 |
| Smallmouth Bonefish | 79 | 35 | 26 | 102 | 46 | 26 | 88 |
| Cartilaginous Fishes |  |  |  |  |  |  |  |
| Skates/Rays ** | 316 | 140 | 87 | 868 | 391 | 110 | 356 |
| Spiny Dogfish | 87 | 38 | 16 | 199 | 88 | 29 | 93 |
| Other Sharks ** | 7,454 | 3,377 | 161 | 2,606 | 1,182 | 155 | 3,789 |
| Catfishes |  |  |  |  |  |  |  |
| Freshwater Catfishes | 1,912 | 865 | 913 | 1,168 | 529 | 536 | 1,665 |
| Saltwater Catfishes | 538 | 243 | 443 | 547 | 251 | 530 | 810 |
| Cods and Hakes |  |  |  |  |  |  |  |
| Atlantic Cod | 356 | 161 | 58 | 1,165 | 529 | 188 | 1,314 |
| Pacific Cod | 2 | 1 | 58 | 2 | 1 | (1) | 2 |
| Pacific Hake | (1) | (1) | (1) | (1) | (1) | (1) | (1) |
| Pacific Tomcod | (1) | (1) | (1) | (1) | (1) | (1) | (1) |
| Pollock | 803 | 365 | 234 | 660 | 299 | 211 | 1,000 |
| Red Hake | 45 | 19 | 39 | 127 | 57 | 104 | 106 |
| Walleye Pollock | - | - | - | - | - | - | - |
| Other Cods/Hakes | 631 | 286 | 249 | 1,711 | 775 | 640 | 1,036 |
| Damselfishes |  |  |  |  |  |  |  |
| Blackspot Sergeant | - | - | 10 | - | - | 16 | 4 |
| Other Damselfishes | - | - | 3 | (1) | (1) | 16 | 1 |
| Dolphinfishes ** | 13,026 | 5,908 | 1,794 | 10,959 | 4,971 | 1,177 | 10,631 |
| Drums |  |  |  |  |  |  |  |
| Atlantic Croaker | 2,851 | 1,292 | 7,012 | 2,771 | 1,255 | 5,568 | 3,597 |
| Black Drum | 2,060 | 933 | 683 | 1,736 | 787 | 800 | 2,814 |
| California Corbina | 12 | 5 | 6 | 28 | 13 | 19 | 14 |
| Kingfishes | 2,289 | 1,037 | 5,751 | 1,974 | 891 | 5,217 | 2,585 |
| Queenfish | 1 | 1 | 9 | 1 | (1) | 10 | 4 |
| Red Drum | 5,708 | 2,589 | 2,676 | 5,506 | 2,498 | 2,621 | 10,011 |
| Sand Seatrout | 1,481 | 670 | 3,124 | 1,164 | 528 | 3,158 | 1,565 |

See notes at end of table
continued
U.S. RECREATIONAL HARVEST, BY SPECIES, 2015 AND 2016

| Species | 2015(2,3) |  |  | 2016 (2,3,4) |  |  | Average <br> $(2012-2016)$$\|$Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Total numbers (thousands) | Thousand pounds | Metric tons | Total numbers (thousands) |  |
| Silver Perch | 40 | 18 | 209 | 39 | 18 | 194 | 52 |
| Spot | 2,307 | 1,045 | 6,150 | 764 | 344 | 2,815 | 2,001 |
| Spotted Seatrout | 5,113 | 2,319 | 8,335 | 7,498 | 3,399 | 11,087 | 10,465 |
| Weakfish ** | 126 | 58 | 112 | 90 | 38 | 92 | 156 |
| White Croaker | 13 | 6 | 48 | 13 | 5 | 42 | 20 |
| Other Drum | 268 | 121 | 329 | 220 | 100 | 389 | 300 |
| Eels ** |  |  |  |  |  |  |  |
| Conger Eels | 7 | 3 | 2 | 4 | 1 | 1 | 24 |
| Moray Eels | (1) | (1) | 10 | (1) | (1) | 9 | (1) |
| Other Eels | 11 | 5 | 9 | 107 | 49 | 65 | 29 |
| Hawaiian Flagtail | 43 | 19 | 138 | 11 | 5 | 125 | 44 |
| Flounders |  |  |  |  |  |  |  |
| California Halibut ** | 154 | 69 | 15 | 195 | 88 | 21 | 242 |
| Gulf Flounder | 312 | 141 | 225 | 309 | 141 | 239 | 406 |
| Rock Sole | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| Sanddabs | 73 | 34 | 315 | 62 | 28 | 255 | 150 |
| Southern Flounder | 756 | 343 | 748 | 903 | 409 | 820 | 1,380 |
| Starry Flounder | 2 | 1 | (1) | 1 | (1) | (1) | 2 |
| Summer Flounder | 4,724 | 2,142 | 1,624 | 6,185 | 2,805 | 2,029 | 6,434 |
| Winter Flounder | 88 | 39 | 63 | 107 | 49 | 87 | 113 |
| Other Flounders ** | 628 | 283 | 572 | 665 | 302 | 166 | 668 |
| Goatfishes |  |  |  |  |  |  |  |
| Manybar Goatfish | 7 | 3 | 25 | 2 | 1 | 15 | 13 |
| Whitesaddle Goatfish | 2 | 1 | 4 | (1) | (1) | 3 | 5 |
| Yellowstripe Goatfish | 68 | 31 | 759 | 14 | 6 | 205 | 116 |
| Other Goatishes | 329 | 149 | 263 | 31 | 14 | 23 | 80 |
| Greenlings |  |  |  |  |  |  |  |
| Kelp Greenling | 52 | 23 | 36 | 34 | 16 | 23 | 46 |
| Lingcod | 2,331 | 1,058 | 382 | 2,153 | 976 | 329 | 1,869 |
| Other Greenlings | 2 | 1 | 1 | 1 | (1) | (1) | 8 |
| Grunts |  |  |  |  |  |  |  |
| Pigfish | 356 | 160 | 983 | 232 | 104 | 662 | 280 |
| White Grunt | 1,326 | 602 | 1,527 | 1,320 | 597 | 1,535 | 1,639 |
| Other Grunts | 182 | 81 | 377 | 248 | 111 | 517 | 196 |
| Herrings ** |  |  |  |  |  |  |  |
| Pacific Herring | 2 | 1 | 8 | 48 | 21 | 316 | 21 |
| Other Herrings | 2,512 | 1,137 | 35,814 | 3,209 | 1,456 | 33,271 | 3,175 |

See notes at end of table
continued

## U.S. Marine Recreational Fisheries

U.S. RECREATIONAL HARVEST, BY SPECIES, 2015 AND 2016

| Species | 2015(2,3) |  |  | 2016 (2,3,4) |  |  | Average <br> (2012-2016) <br> Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Total numbers (thousands) | Thousand pounds | Metric tons | Total numbers (thousands) |  |
| Jacks |  |  |  |  |  |  |  |
| Bigeye Scad | 573 | 260 | 1,069 | 528 | 239 | 1,138 | 378 |
| Bigeye Trevally | 2 | 1 | (1) | - | - | - | 4 |
| Blue Runner | 2,167 | 984 | 2,275 | 1,669 | 756 | 2,550 | 1,838 |
| Bluefin Trevally | 289 | 131 | 104 | 150 | 69 | 73 | 250 |
| Crevalle Jack | 1,170 | 532 | 614 | 2,371 | 1,075 | 960 | 1,461 |
| Florida Pompano | 570 | 258 | 463 | 403 | 183 | 478 | 495 |
| Giant Trevally | 624 | 283 | 48 | 113 | 51 | 20 | 342 |
| Greater Amberjack | 2,303 | 1,044 | 129 | 2,516 | 1,143 | 159 | 2,187 |
| Island Jack | 10 | 4 | 9 | 23 | 11 | 15 | 27 |
| Mackerel Scad | 61 | 28 | 209 | 4 | 2 | 148 | 40 |
| Yellowtail | 1,814 | 823 | 130 | 535 | 243 | 76 | 784 |
| Other Jacks | 1,107 | 498 | 3,136 | 976 | 442 | 1,681 | 938 |
| Mullets ** |  |  |  |  |  |  |  |
| Striped Mullet | 2,303 | 1,043 | 2,254 | 2,510 | 1,135 | 2,374 | 3,060 |
| Other Mullets | 321 | 145 | 5,356 | 313 | 141 | 6,251 | 461 |
| Porgies |  |  |  |  |  |  |  |
| Pinfishes | 1,615 | 731 | 5,017 | 996 | 451 | 3,663 | 1,353 |
| Red Porgy | 451 | 205 | 409 | 513 | 232 | 425 | 432 |
| Scup ** | 4,620 | 2,096 | 4,208 | 4,259 | 1,933 | 3,839 | 4,647 |
| Sheepshead | 4,118 | 1,868 | 1,781 | 3,569 | 1,621 | 1,713 | 4,379 |
| Other Porgies ** | 303 | 133 | 381 | 405 | 182 | 488 | 342 |
| Puffers | 422 | 190 | 926 | 154 | 68 | 356 | 275 |
| Rockfishes |  |  |  |  |  |  |  |
| Black Rockfish | 2,305 | 1,046 | 972 | 2,139 | 971 | 892 | 2,058 |
| Blue Rockfish | 458 | 206 | 446 | 339 | 153 | 366 | 320 |
| Bocaccio | 202 | 91 | 137 | 152 | 69 | 81 | 231 |
| Brown Rockfish | 209 | 95 | 152 | 181 | 82 | 135 | 198 |
| Canary Rockfish | 95 | 42 | 68 | 78 | 36 | 57 | 63 |
| Chilipepper Rockfish | 13 | 6 | 30 | 11 | 5 | 22 | 16 |
| Copper Rockfish | 317 | 144 | 173 | 337 | 152 | 187 | 263 |
| Gopher Rockfish | 120 | 54 | 126 | 147 | 66 | 152 | 121 |
| Greenspotted Rockfish | 19 | 8 | 27 | 21 | 9 | 28 | 25 |
| Olive Rockfish | 113 | 51 | 107 | 116 | 52 | 113 | 83 |
| Quillback Rockfish | 21 | 10 | 10 | 24 | 12 | 13 | 25 |
| Widow Rockfish | 16 | 6 | 14 | 5 | 2 | 6 | 23 |
| Yellowtail Rockfish | 319 | 145 | 262 | 168 | 77 | 117 | 227 |
| Other Rockfishes ** | 1,088 | 489 | 1,472 | 965 | 433 | 1,122 | 1,164 |

U.S. RECREATIONAL HARVEST, BY SPECIES, 2015 AND 2016

| Species | 2015(2,3) |  |  | 2016 (2,3,4) |  |  | Average <br> (2012-2016) <br> Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Total numbers (thousands) | Thousand pounds | Metric tons | Total numbers (thousands) |  |
| Sablefishes | 4 | 2 | 24 | 4 | 2 | 1 | 2 |
| Scorpionfishes | (1) | (1) | 4 | (1) | (1) | 1 | 2 |
| Sculpins |  |  |  |  |  |  |  |
| Cabezon | 154 | 70 | 35 | 138 | 62 | 33 | 141 |
| Other Sculpins | 4 | 1 | 8 | 2 | (1) | 3 | 5 |
| Sea Basses |  |  |  |  |  |  |  |
| Barred Sand Bass | 141 | 64 | 72 | 44 | 20 | 20 | 143 |
| Black Sea Bass | 4,160 | 1,888 | 2,526 | 5,696 | 2,583 | 2,992 | 4,165 |
| Epinephelus Groupers ** | 2,200 | 999 | 317 | 1,671 | 758 | 287 | 2,173 |
| Groupers | - | - | 3 | 32 | 14 | 9 | 17 |
| Kelp Bass | 151 | 68 | 86 | 226 | 102 | 125 | 175 |
| Mycteroperca Groupers ** | 1,227 | 558 | 154 | 1,248 | 565 | 144 | 1,465 |
| Spotted Sand Bass | 5 | 2 | 4 | 12 | 6 | 12 | 10 |
| Other Sea Basses | 61 | 27 | 150 | 108 | 48 | 286 | 91 |
| Sea Chubs ** |  |  |  |  |  |  |  |
| Halfmoon | 14 | 6 | 16 | 24 | 11 | 28 | 26 |
| Highfin Rudderfish | - | - | 9 |  | - | 5 | 3 |
| Opaleye | 19 | 8 | 23 | 20 | 9 | 23 | 33 |
| Other Sea Chubs | 23 | 10 | 28 | 13 | 6 | 13 | 43 |
| Searobins | 259 | 115 | 240 | 227 | 100 | 231 | 240 |
| Silversides |  |  |  |  |  |  |  |
| Jacksmelt | 117 | 52 | 274 | 150 | 68 | 383 | 113 |
| Other Silversides | 12 | 5 | 173 | 2 | (1) | 105 | 29 |
| Smelts ** |  |  |  |  |  |  |  |
| Surf Smelt | (1) | (1) | 10 | (1) | (1) | (1) | (1) |
| Other Smelts | (1) | (1) | 86 | (1) | (1) | 1 | (1) |
| Snappers |  |  |  |  |  |  |  |
| Blacktail Snapper | (1) | (1) | 12 | 9 | 4 | 15 | 5 |
| Bluestripe Snapper | 15 | 6 | 35 | 8 | 4 | 52 | 8 |
| Gray Snapper | 1,987 | 902 | 2,034 | 2,612 | 1,185 | 2,414 | 2,287 |
| Green Jobfish | 230 | 105 | 21 | 46 | 20 | 10 | 111 |
| Lane Snapper | 225 | 101 | 351 | 309 | 140 | 368 | 268 |
| Pink Snapper | 30 | 13 | 23 | 27 | 12 | 17 | 124 |
| Red Snapper | 3,928 | 1,780 | 841 | 5,492 | 2,490 | 1,013 | 5,433 |
| Vermilion Snapper | 771 | 349 | 785 | 927 | 420 | 912 | 857 |
| Yellowtail Snapper | 880 | 398 | 796 | 773 | 349 | 777 | 762 |
| Other Snappers ** | 802 | 366 | 255 | 775 | 349 | 360 | 751 |

See notes at end of table
continued

## U.S. Marine Recreational Fisheries

U.S. RECREATIONAL HARVEST, BY SPECIES, 2015 AND 2016

| Species | 2015(2,3) |  |  | 2016 (2,3,4) |  |  | Average <br> (2012-2016) <br> Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Total numbers (thousands) | Thousand pounds | Metric tons | Total numbers (thousands) |  |
| Squirrel/Soldierfishes |  |  |  |  |  |  |  |
| Bigscale Soldierfish | - | - | 32 |  | - | 50 | 3 |
| Squirrel Fishes | 3 | (1) | 13 | (1) | (1) | 4 | 3 |
| Whitetip Soldierfish | (1) | (1) | 7 |  | - | (1) | (1) |
| Other Soldierfishes | 4 | 2 | 12 | (1) | (1) | 6 | 4 |
| Sturgeons | 32 | 14 | 1 | 16 | 7 | (1) | 15 |
| Surfperches |  |  |  |  |  |  |  |
| Barred Surfperch | 603 | 274 | 763 | 337 | 153 | 461 | 386 |
| Black Perch | 12 | 4 | 16 | 12 | 4 | 16 | 19 |
| Pile Perch | 4 | 1 | 4 | 4 | 2 | 3 | 6 |
| Redtail Surfperch | 76 | 34 | 64 | 102 | 46 | 89 | 67 |
| Shiner Perch | 5 | 2 | 69 | 2 | (1) | 37 | 5 |
| Silver Surfperch | 30 | 14 | 124 | 15 | 7 | 55 | 12 |
| Striped Seaperch | 46 | 21 | 44 | 36 | 16 | 40 | 37 |
| Walleye Surfperch | 9 | 3 | 43 | 12 | 6 | 49 | 21 |
| White Seaperch | 2 | 1 | 8 | 1 | (1) | 5 | 3 |
| Other Surfperches | 44 | 19 | 91 | 29 | 13 | 65 | 50 |
| Surgeonfishes |  |  |  |  |  |  |  |
| Convict Tang | 40 | 18 | 91 | 21 | 9 | 123 | 28 |
| Goldring Surgeonfish | - | - | 36 | (1) | (1) | 58 | 17 |
| Unicornfishes | 1 | 1 | 12 | 1 | (1) | 10 | 9 |
| Other Surgeonfishes | 35 | 16 | 78 | 13 | 6 | 43 | 53 |
| Temperate Basses |  |  |  |  |  |  |  |
| Striped Bass | 17,140 | 7,774 | 1,311 | 20,037 | 9,087 | 1,560 | 21,628 |
| White Perch | 719 | 326 | 1,529 | 1,147 | 521 | 2,472 | 879 |
| Other Temperate Basses | (1) | (1) | 2 | 19 | 9 | 10 | 8 |
| Toadfishes | 8 | 4 | 11 | 7 | 3 | 7 | 25 |
| Triggerfishes/Filefishes | 503 | 230 | 216 | 869 | 390 | 363 | 743 |

U.S. RECREATIONAL HARVEST, BY SPECIES, 2015 AND 2016

| Species | 2015(2,3) |  |  | 2016 (2,3,4) |  |  | Average <br> $(2012-2016)$ <br> Thousand <br> pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Total numbers (thousands) | Thousand pounds | Metric tons | Total numbers (thousands) |  |
| Tunas and Mackerels |  |  |  |  |  |  |  |
| Albacore | 2,227 | 1,010 | 121 | 1,569 | 711 | 88 | 2,582 |
| Atlantic Mackerel | 2,552 | 1,158 | 5,144 | 2,999 | 1,359 | 5,768 | 2,152 |
| Chub Mackerel | 678 | 308 | 1,681 | 400 | 180 | 1,032 | 412 |
| Kawakawa | 116 | 52 | 33 | 38 | 18 | 9 | 82 |
| King Mackerel ** | 4,375 | 1,984 | 485 | 4,384 | 1,987 | 572 | 4,312 |
| Little Tunny/Atl. Bonito ** | 2,851 | 1,295 | 429 | 2,616 | 1,186 | 419 | 2,610 |
| Pacific Bonito ** | 384 | 174 | 183 | 202 | 92 | 104 | 174 |
| Skipjack Tuna | 1,806 | 819 | 303 | 838 | 379 | 128 | 1,738 |
| Spanish Mackerel | 2,928 | 1,329 | 2,408 | 3,815 | 1,727 | 2,961 | 3,936 |
| Wahoo | 3,064 | 1,389 | 127 | 3,784 | 1,715 | 136 | 2,443 |
| Yellowfin Tuna | 13,276 | 6,023 | 514 | 8,612 | 3,907 | 255 | 11,372 |
| Other Tunas/Mackerels ** | 2,844 | 1,287 | 246 | 4,383 | 1,989 | 394 | 3,277 |
| Wrasses |  |  |  |  |  |  |  |
| California Sheephead | 89 | 41 | 29 | 89 | 39 | 32 | 104 |
| Cunner | 20 | 9 | 38 | 20 | 8 | 39 | 29 |
| Hawaiian Hogfish | 2 | 1 | 2 | - | - | 3 | 6 |
| Razorfishes | 23 | 11 | 49 | 13 | 6 | 33 | 56 |
| Tautog | 2,047 | 928 | 545 | 2,705 | 1,227 | 681 | 2,754 |
| Other Wrasses | 542 | 245 | 317 | 506 | 227 | 257 | 460 |
| Other Fishes ** | 8,229 | 3,723 | 6,821 | 6,206 | 2,809 | 4,433 | 7,190 |
| Grand Total | 189,575 | 85,917 | 153,192 | 181,628 | 82,306 | 144,625 | 202,535 |

NOTES: (1) Number or pounds less than 1,000 or less than 1 metric ton.
(2) Texas harvest is estimated by numbers only (no weight) and includes only private and for-hire fisheries.
(3) Louisiana harvest is estimated by numbers only (no weight).
(4) Alaska data not available for current year.
${ }^{* *}$ Fish included in these groups are not equivalent to those with similar names listed in the commercial tables.
U.S. RECREATIONAL HARVEST, BY DISTANCE FROM SHORE AND SPECIES GROUP, 2016

U.S. RECREATIONAL HARVEST, BY DISTANCE FROM SHORE AND SPECIES GROUP, 2016

U.S. RECREATIONAL HARVEST, BY DISTANCE FROM SHORE AND SPECIES GROUP, 2016

See notes at end of table.
U.S. RECREATIONAL HARVEST, BY DISTANCE FROM SHORE AND SPECIES GROUP, 2016

U.S. RECREATIONAL HARVEST, BY DISTANCE FROM SHORE AND SPECIES GROUP, 2016

U.S. RECREATIONAL HARVEST, BY DISTANCE FROM SHORE AND SPECIES GROUP, 2016

| Species | Distance from U.S. Shores |  |  |  |  |  |  |  |  | Grand Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inland |  |  | 0 to 3 miles (2,3,4) (State Territorial Sea) |  |  | 3 to 200 miles <br> (Exclusive Economic Zone) |  |  |  |  |  |
|  | Thousand pounds | Metric tons | Total number (thousands) | Thousand pounds | Metric tons | Total number (thousands) | Thousand pounds | Metric tons | Total number (thousands) | Thousand pounds | Metric tons | Total number (thousands) |
| Squirrel/Soldierfishes |  |  |  |  |  |  |  |  |  |  |  |  |
| Bigscale Soldierfish | 1 |  |  | 49 |  |  | - - - |  |  |  |  | 50 |
| Squirrel Fishes | 1 |  |  | (1) | (1) | 3 | (1) | (1) | (1) | (1) | (1) | 4 |
| Whitetip Soldierfish | (1) |  |  | - | - | - | - | - | - |  |  | (1) |
| Other Soldierfishes | (1) |  |  | (1) | (1) | 5 | - |  | 1 | (1) | (1) | 6 |
| Sturgeons | 167 |  |  | (1) | (1) | (1) | - | - | - | 16 | 7 | (1) |
| Surfperches $\quad$ 年 |  |  |  |  |  |  |  |  |  |  |  |  |
| Barred Surfperch | $\begin{array}{lll} 2 & 1 & 2 \end{array}$ |  |  | 335 | 152 | 459 | - | - | - | 337 | 153 | 461 |
| Black Perch | 416 |  |  | 8 | 3 | 10 | (1) | (1) | (1) | 12 | 4 | 16 |
| Pile Perch | 212 |  |  | 2 | 1 | 1 | - | - | - | 4 | 2 | 3 |
| Redtail Surfperch | 1 (1) 1 |  |  | 101 | 46 | 88 | - | - | - | 102 | 46 | 89 |
| Shiner Perch | 1 (1) 11 |  |  | 2 | (1) | 26 | - | - | - | 2 | (1) | 37 |
| Silver Surfperch | (1) (1) (1) |  |  | 15 | 7 | 54 | (1) | (1) | (1) | 15 | 7 | 55 |
| Striped Seaperch | 31 |  |  | 33 | 15 | 37 | - | - | ( | 36 | 16 | 40 |
| Walleye Surfperch | $1 \begin{array}{ll}1 & 1\end{array}$ |  |  | 11 | 5 | 45 | - | - |  | 12 | 6 | 49 |
| White Seaperch | (1) 11 |  |  | 1 | (1) | 3 | (1) | (1) | (1) | 1 | (1) | 5 |
| Other Surfperches | $\begin{array}{lll}3 & 1\end{array}$ |  |  | 26 | 12 | 60 | (1) | (1) | 1 | 29 | 13 | 65 |
| Surgeonfishes |  |  |  |  |  |  |  |  |  |  |  |  |
| Convict Tang | 1 (1) 4 |  |  | 20 | 9 | 119 | - | - | - | 21 | 9 | 123 |
| Goldring Surgeonfish | - $\quad 2$ |  |  | (1) | (1) | 56 | - | - | - | (1) | (1) | 58 |
| Unicornfishes | 1 (1) 1 |  |  | - | - | 9 | - | - | - | 1 | (1) | 10 |
| Other Surgeonfishes | $\begin{array}{lll}9 & 4\end{array}$ |  |  | 4 | 2 | 29 | - | - | - | 13 | 6 | 43 |
| Temperate Basses |  |  |  |  |  |  |  |  |  |  |  |  |
| Striped Bass | 13,431 | 6,092 1,220 |  | 6,162 | 2,795 | 306 | 444 | 200 | 33 | 20,037 | 9,087 | 1,560 |
| White Perch | 1,144 | 519 | 2,467 | 3 | 2 | 5 | (1) | (1) | (1) | 1,147 | 521 | 2,472 |
| Other Temperate Basses | 19 | 9 | 8 | - | - | 2 | - | - | - | 19 | 9 | 10 |
| Toadfishes | 31 |  | 4 | 4 | 2 | 3 | (1) | (1) | (1) | 7 | 3 | 7 |
| Triggerfishes/Filefishes | $16 \quad 7$ |  | 9 | 293 | 130 | 137 | 560 | 253 | 217 | 869 | 390 | 363 |

U.S. RECREATIONAL HARVEST, BY DISTANCE FROM SHORE AND SPECIES GROUP, 2016


[^3]U.S. RECREATIONAL HARVEST AND TOTAL LIVE RELEASES, BY SPECIES GROUP, 2007-2016

| Year | Barracudas |  |  | Bluefish |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pounds Harvested (thousands) | $\begin{array}{c}\text { Number Harvested } \\ \text { (thousands) }\end{array}$ | Number Released (thousands) | Pounds Harvested (thousands) | Number Harvested (thousands) | Number Released (thousands) |
| 2007 | 1,609 | $268$ | 476 | 22,064 |  | 16,123 |
| 2008 | 1,317 | 207 | 458 | 20,107 | 6,845 | 14,001 |
| 2009 | 1,395 | 198 | 387 | 14,791 | 5,388 | 9,077 |
| 2010 | 874 | 150 | 320 | 16,630 | 6,244 | 10,488 |
| 2011 | 702 | 123 | 213 | 11,720 | 5,217 | 9,989 |
| 2012 | 843 | 166 | 283 | 12,038 | 5,640 | 9,121 |
| 2013 | 749 | 133 | 302 | 16,889 | 6,018 | 9,411 |
| 2014 | 999 | 217 | 314 | 10,831 | 6,094 | 11,098 |
| 2015 | 1,187 | 213 | 409 | 11,792 | 4,153 | 7,149 |
| 2016 | 684 | 149 | 327 | 9,884 | 4,566 | 8,458 |
|  |  |  |  |  |  |  |
| Year | Cartilaginous Fishes |  |  | Catfishes |  |  |
|  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Pounds Harvested } \\ \text { (thousands) } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { Number Harvested } \\ \text { (thousands) } \end{gathered}$ | Number Released (thousands) | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Pounds Harvested } \\ \text { (thousands) } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { Number Harvested } \\ \text { (thousands) } \end{gathered}$ | $\begin{gathered} \hline \begin{array}{c} \text { Number Released } \\ \text { (thousands) } \end{array} \\ \hline \end{gathered}$ |
| 2007 | 4,132 | 502 | 12,811 | 2,232 | 1,095 | 12,516 |
| 2008 | 2,659 | 338 | 12,355 | 1,640 | 890 | 12,556 |
| 2009 | 4,124 | 310 | 11,288 | 1,277 | 672 | 10,487 |
| 2010 | 2,203 | 291 | 9,584 | 1,899 | 980 | 15,229 |
| 2011 | 1,253 | 280 | 8,463 | 2,276 | 1,065 | 13,939 |
| 2012 | 1,354 | 231 | 9,226 | 2,634 | 1,744 | 13,729 |
| 2013 | 4,796 | 380 | 11,442 | 2,704 | 1,307 | 17,020 |
| 2014 | 3,514 | 316 | 11,004 | 2,872 | 1,082 | 9,131 |
| 2015 | 7,857 | 264 | 8,708 | 2,450 | 1,356 | 9,992 |
| 2016 | 3,673 | 294 | 8,886 | 1,715 | 1,066 | 9,443 |
|  |  |  |  |  |  |  |
| Year | Cods and Hakes |  |  | Dolphinfishes |  |  |
|  | Pounds Harvested (thousands) | $\begin{array}{c}\text { Number Harvested } \\ \text { (thousands) }\end{array}$ | Number Released (thousands) | Pounds Harvested (thousands) | $\begin{gathered} \text { Number Harvested } \\ \text { (thousands) } \end{gathered}$ | Number Released (thousands) |
| 2007 | 5,501 | 1,045 | 1,286 | 15,205 | 1,603 | 641 |
| 2008 | 6,986 | 1,238 | 1,480 | 14,171 | 1,704 | 500 |
| 2009 | 6,327 | 1,144 | 1,164 | 12,290 | 1,302 | 166 |
| 2010 | 7,897 | 1,333 | 1,551 | 9,900 | 1,241 | 242 |
| 2011 | 8,325 | 1,453 | 1,452 | 9,431 | 1,412 | 467 |
| 2012 | 3,573 | 858 | 1,143 | 11,159 | 1,418 | 226 |
| 2013 | 4,675 | 1,380 | 2,237 | 8,836 | 1,262 | 1,542 |
| 2014 | 3,537 | 1,117 | 2,281 | 9,177 | 1,217 | 557 |
| 2015 | 1,837 | 580 | 1,767 | 13,026 | 1,794 | 673 |
| 2016 | 3,664 | 1,143 | 2,961 | 10,959 | 1,177 | 127 |
|  |  |  |  |  |  |  |

U.S. RECREATIONAL HARVEST AND TOTAL LIVE RELEASES, BY SPECIES GROUP, 2007-2016

| Year | Drums |  |  | Flounders |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pounds Harvested (thousands) | Number Harvested (thousands) | Number Released (thousands) | Pounds Harvested (thousands) | $\begin{array}{c}\text { Number Harvested } \\ \text { (thousands) }\end{array}$ | Number Released (thousands) |
| 2007 | 53,890 | 54,439 | 65,711 | 12,896 | 5,078 | 19,977 |
| 2008 | 60,136 | 57,354 | 75,231 | 11,718 | 4,222 | 23,440 |
| 2009 | 50,622 | 45,897 | 60,499 | 9,455 | 3,686 | 24,869 |
| 2010 | 45,759 | 41,093 | 56,382 | 8,943 | 3,724 | 25,594 |
| 2011 | 52,784 | 47,068 | 60,926 | 9,685 | 4,344 | 22,414 |
| 2012 | 47,803 | 44,294 | 69,982 | 10,221 | 4,583 | 17,411 |
| 2013 | 53,028 | 49,157 | 72,766 | 11,415 | 5,244 | 16,873 |
| 2014 | 23,024 | 38,158 | 44,268 | 10,176 | 4,883 | 19,345 |
| 2015 | 22,270 | 34,443 | 43,650 | 6,738 | 3,142 | 12,861 |
| 2016 | 21,804 | 32,011 | 46,203 | 8,428 | 3,617 | 14,389 |
| Year | Greenlings |  |  | Grunts |  |  |
|  | Pounds Harvested (thousands) (thousands) | Number Harvested (thousands) | Number Released (thousands) | Pounds Harvested (thousands) (thousands) | Number Harvested (thousands) | Number Released (thousands) |
| 2007 | 783121 |  | 96 | 1,400 | 2,791 | 4,898 |
| 2008 | 568 98 |  | 78 | 1,940 | 3,499 | 6,145 |
| 2009 | 638 111 |  | 113 | 1,617 | 2,750 | 4,411 |
| 2010 | 655128 |  | 139 | 1,366 | 2,068 | 3,809 |
| 2011 | 1,109 210 |  | 229 | 1,751 | 2,608 | 4,634 |
| 2012 | 1,297 243 |  | 234 | 2,106 | 3,072 | 5,096 |
| 2013 | 1,750 295 |  | 209 | 2,369 | 3,849 | 6,927 |
| 2014 | 1,993 327 |  | 202 | 2,440 | 3,943 | 6,096 |
| 2015 | 2,385 391 |  | 196 | 1,863 | 2,887 | 6,087 |
| 2016 | 2,187 353 |  | 202 | 1,800 | 2,714 | 6,159 |
| Year | Herrings |  |  | Jacks |  |  |
|  | Pounds Harvested (thousands) (thousands) | Number Harvested (thousands) | Number Released (thousands) | Pounds Harvested (thousands) (thousands) | Number Harvested (thousands) | Number Released (thousands) |
| 2007 | 2,743 | 39,952 | 5,291 | 6,198 | 6,173 | 6,889 |
| 2008 | 3,111 | 50,994 | 2,768 | 7,312 | 5,035 | 7,265 |
| 2009 | 2,724 | 50,980 | 6,763 | 8,148 | 5,494 | 5,454 |
| 2010 | 1,621 | 27,646 | 3,994 | 5,273 | 3,312 | 5,010 |
| 2011 | 1,365 | 21,228 | 4,956 | 3,721 | 3,503 | 4,983 |
| 2012 | 3,497 | 23,207 | 8,795 | 5,421 | 4,016 | 6,353 |
| 2013 | 2,720 | 32,237 | 4,591 | 8,288 | 7,795 | 11,837 |
| 2014 | 3,995 | 32,679 | 13,168 | 10,028 | 7,752 | 12,972 |
| 2015 | 2,513 | 35,821 | 3,959 | 10,690 | 8,187 | 10,918 |
| 2016 | 3,256 | 33,586 | 9,272 | 9,290 | 7,297 | 8,783 |
|  |  |  |  |  |  |  |

U.S. RECREATIONAL HARVEST AND TOTAL LIVE RELEASES, BY SPECIES GROUP, 2007-2016

| Year | Mullets |  |  | Porgies |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pounds Harvested (thousands) | $\begin{array}{c}\text { Number Harvested } \\ \text { (thousands) }\end{array}$ | Number Released (thousands) | Pounds Harvested (thousands) | $\begin{gathered} \text { Number Harvested } \\ \text { (thousands) } \end{gathered}$ | Number Released (thousands) |
| 2007 | 2,663 | 8,656 | 2,818 | 11,917 | 14,167 | 16,947 |
| 2008 | 3,745 | 9,764 | 1,579 | 13,314 | 15,864 | 22,732 |
| 2009 | 2,382 | 5,834 | 1,795 | 10,037 | 11,990 | 15,717 |
| 2010 | 3,724 | 6,849 | 3,011 | 13,756 | 13,210 | 19,549 |
| 2011 | 3,914 | 8,420 | 2,935 | 14,975 | 11,070 | 16,739 |
| 2012 | 4,031 | 9,092 | 2,668 | 11,604 | 11,714 | 24,113 |
| 2013 | 5,148 | 10,044 | 1,847 | 11,750 | 12,961 | 19,743 |
| 2014 | 2,981 | 7,562 | 3,252 | 11,564 | 13,626 | 21,881 |
| 2015 | 2,624 | 7,610 | 1,567 | 11,107 | 11,796 | 20,939 |
| 2016 | 2,823 | 8,625 | 1,660 | 9,742 | 10,128 | 21,983 |
|  |  |  |  |  |  |  |
| Year | Puffers |  |  | Rockfishes |  |  |
|  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Pounds Harvested } \\ \text { (thousands) } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { Number Harvested } \\ \text { (thousands) } \end{gathered}$ | Number Released (thousands) | Pounds Harvested (thousands) | $\begin{gathered} \text { Number Harvested } \\ \text { (thousands) } \end{gathered}$ | Number Released (thousands) |
| 2007 | 35 | 73 | 1,634 | 3,663 | 2,243 | 272 |
| 2008 | 54 | 161 | 1,899 | 2,765 | 1,759 | 222 |
| 2009 | 49 | 99 | 1,407 | 3,356 | 2,050 | 250 |
| 2010 | 137 | 253 | 1,067 | 3,213 | 2,045 | 303 |
| 2011 | 377 | 1,196 | 1,382 | 3,609 | 2,661 | 392 |
| 2012 | 446 | 710 | 2,259 | 4,081 | 3,146 | 418 |
| 2013 | 289 | 493 | 1,259 | 4,945 | 3,617 | 626 |
| 2014 | 65 | 129 | 1,653 | 5,087 | 3,732 | 574 |
| 2015 | 422 | 926 | 2,334 | 5,293 | 3,668 | 581 |
| 2016 | 154 | 356 | 1,808 | 4,682 | 3,291 | 526 |
|  |  |  |  |  |  |  |
| Year | Sculpins |  |  | Sea Basses |  |  |
|  | Pounds Harvested (thousands) | $\begin{gathered} \text { Number Harvested } \\ \text { (thousands) } \end{gathered}$ | $\begin{array}{c}\text { Number Released } \\ \text { (thousands) }\end{array}$ | Pounds Harvested (thousands) | Number Harvested (thousands) | Number Released (thousands) |
| 2007 | 91 | 28 | 91 | 8,908 | 3,623 | 19,786 |
| 2008 | 92 | 46 | 107 | 9,563 | 3,307 | 24,135 |
| 2009 | 120 | 37 | 77 | 7,662 | 3,208 | 18,252 |
| 2010 | 111 | 29 | 113 | 7,377 | 3,658 | 17,266 |
| 2011 | 152 | 73 | 159 | 4,113 | 2,319 | 12,739 |
| 2012 | 147 | 48 | 128 | 7,897 | 3,390 | 20,908 |
| 2013 | 134 | 47 | 266 | 8,207 | 2,764 | 18,278 |
| 2014 | 149 | 40 | 91 | 8,093 | 3,658 | 20,264 |
| 2015 | 158 | 43 | 64 | 7,946 | 3,311 | 15,261 |
| 2016 | 139 | 37 | 189 | 9,037 | 3,875 | 20,308 |

## U.S. Marine Recreational Fisheries

U.S. RECREATIONAL HARVEST AND TOTAL LIVE RELEASES, BY SPECIES GROUP, 2007-2016


See notes at end of table
U.S. RECREATIONAL HARVEST AND TOTAL LIVE RELEASES, BY SPECIES GROUP, 2007-2016


NOTES: (1) Number or pounds less than 1,000 or less than 1 metric ton.
(2) Louisiana (2014-2016) harvest is estimated by numbers only (no weight).
(3) Alaska data not available for current year.
(4) Texas harvest is estimated by numbers only (no weight) and includes only private and for-hire fisheries.

## U.S. Marine Recreational Fisheries

U.S. RECREATIONAL FINFISH HARVESTED AND RELEASED, 2015 AND 2016

| State | 2015 |  |  |
| :---: | :---: | :---: | :---: |
|  | Pounds Harvested (1) (thousands) | Number Harvested (thousands) | Number Released (1) (thousands) |
| California | 13,136 | 8,447 | 4,696 |
| Oregon | 2,831 | 677 | 144 |
| Washington | 3,970 | 586 | 131 |
| Connecticut | 6,170 | 1,838 | 3,826 |
| Maine | 871 | 1,069 | 686 |
| Massachusetts | 10,029 | 6,471 | 5,780 |
| New Hampshire | 872 | 526 | 1,072 |
| Rhode Island | 4,037 | 1,321 | 3,204 |
| Delaware | 470 | 377 | 1,109 |
| Maryland | 6,093 | 3,191 | 9,168 |
| New Jersey | 13,160 | 4,586 | 14,873 |
| New York | 20,040 | 6,073 | 15,491 |
| Virginia | 5,660 | 5,931 | 7,799 |
| Florida | 51,985 | 65,259 | 82,157 |
| Georgia | 899 | 1,210 | 2,378 |
| North Carolina | 11,917 | 10,363 | 21,137 |
| South Carolina | 3,428 | 6,080 | 11,852 |
| Alabama | 12,040 | 8,368 | 9,484 |
| Louisiana |  | 7,714 |  |
| Mississippi | 4,625 | 4,315 | 4,652 |
| Hawaii | 15,831 | 4,638 | 541 |
| Texas | - | 1,917 |  |
| Alaska |  | 1,623 | 1,002 |
| Puerto Rico | 1,511 | 612 | 345 |
| Grand Total | 189,575 | 153,192 | 201,526 |
| State | 2016 |  |  |
|  | Pounds Harvested $(1,2)$ (thousands) | Number Harvested (thousands) | Number Released (1,2) (thousands) |
| California | 8,219 | 6,908 | 4,748 |
| Oregon | 2,400 | 566 | 104 |
| Washington | 2,957 | 505 | 94 |
| Connecticut | 5,342 | 2,421 | 8,159 |
| Maine | 881 | 1,867 | 1,368 |
| Massachusetts | 10,566 | 5,940 | 8,653 |
| New Hampshire | 965 | 1,027 | 1,078 |
| Rhode Island | 3,551 | 1,337 | 4,950 |
| Delaware | 611 | 227 | 1,942 |
| Maryland | 7,035 | 3,793 | 11,126 |
| New Jersey | 16,374 | 5,118 | 19,158 |
| New York | 16,727 | 5,653 | 20,817 |
| Virginia | 5,974 | 5,941 | 8,788 |
| Florida | 55,769 | 63,136 | 86,203 |
| Georgia | 1,479 | 1,288 | 2,478 |
| North Carolina | 11,994 | 8,618 | 21,784 |
| South Carolina | 2,118 | 3,048 | 7,459 |
| Alabama | 11,050 | 7,421 | 11,170 |
| Louisiana | - | 8,210 |  |
| Mississippi | 6,175 | 5,731 | 6,147 |
| Hawaii | 7,701 | 2,483 | 382 |
| Texas | - | 2,207 |  |
| Alaska | - | - |  |
| Puerto Rico | 3,739 | 1,178 | 353 |
| Grand Total | 181,628 | 144,625 | 226,961 |

NOTES: Harvest shown represents Type A+B1 catch. Type A catch are fish brought back to the dock in a form that can be identified by trained interviewers. Type B1 catch are fish that are used for bait, released dead, or filleted; identification is by individual anglers. Live releases are type B2, fish that are caught and released alive; identification is by individual anglers.
(1)TX estimates only number harvested (no weight or release data) and only private and for-hire fisheries are included; (2) Louisiana only estimates harvest (no weight or release data); (3) Oregon and Washington estimates include only private and for-hire fisheries.
(4) Alaska data not available for current year.
U.S. RECREATIONAL NUMBERS OF ANGLERS AND TRIPS BY STATE, 2015 AND 2016


NOTES: (1) All counties in Puerto Rico, Rhode Island, Connecticut, Delaware, and Florida are considered coastal. (2) Alaska estimates are pre-
sented as coastal, current year data not available. (3) Louisiana, Hawaii, Texas, California, Oregon, and Washington angler data not available. (4) Out-of-state angler estimates are not additive across states.

## World Fisheries



WORLD AQUACULTURE AND COMMERCIAL CATCHES, 2006-2015

| Year | World Aquaculture |  |  | World Commercial Catch |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inland | Marine | Total | Inland | Marine | Total |  |
|  | --------- Metric tons ---------- |  |  |  |  |  |  |
|  | Live weight |  |  | Live weight |  |  |  |
| 2006 | 27,982,287 | 19,274,230 | 47,256,517 | 9,829,794 | 80,328,763 | ,158,557 | 7,415,074 |
| 2007 | 29,929,903 | 20,010,986 | 49,940,889 | 10,078,056 | 80,363,672 | 90,441,728 | 140,382,617 |
| 2008 | 32,391,076 | 20,523,624 | 52,914,700 | 10,164,899 | 79,286,565 | 89,451,464 | 142,366,164 |
| 2009 | 34,270,264 | 21,415,862 | 55,686,126 | 10,328,718 | 78,805,106 | 89,133,824 | 144,819,950 |
| 2010 | 36,886,166 | 22,078,199 | 58,964,366 | 11,035,796 | 76,730,613 | 87,766,409 | 146,730,775 |
| 2011 | 38,567,427 | 23,229,129 | 61,796,556 | 10,716,792 | 81,327,431 | 92,044,223 | 153,840,779 |
| 2012 | 42,047,045 | 24,395,723 | 66,442,769 | 11,177,128 | 78,187,747 | 89,364,875 | 155,807,644 |
| 2013 | 44,780,938 | 25,432,765 | 70,213,702 | 11,229,711 | 79,213,040 | 90,442,751 | 160,656,453 |
| 2014 | 46,893,824 | 26,787,647 | 73,681,470 | 11,336,810 | 79,804,562 | 91,141,372 | 164,822,842 |
| 2015 | 48,759,355 | 27,840,547 | 76,599,902 | 11,465,775 | 81,164,685 | 92,630,460 | 169,230,362 |

Note: Data for marine mammals and aquatic plants are excluded.
Source: Food and Agriculture Organization of the United Nations (FAO).
WORLD AQUACULTURE AND COMMERCIAL CATCHES OF FISH, CRUSTACEANS, AND MOLLUSKS, 2014-2015

| Species group | 2014 |  |  | 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aquaculture | Catch | Total | Aquaculture | Catch | Total |
|  | ---------Metric tons---.---- |  |  | ---------Metric tons- - - - - - - |  |  |
|  | Live weight |  |  | Live weight |  |  |
| Herrings, sardines, anchovies | - | 15,588,847 | 15,588,847 | - | 16,733,194 | 16,733,194 |
| Carps, barbels, cyprinids | 28,229,332 | 1,559,590 | 29,788,922 | 29,120,963 | 1,524,090 | 30,645,053 |
| Cods, hakes, haddocks | 1,702 | 8,708,602 | 8,710,304 | 79 | 8,932,274 | 8,932,353 |
| Tunas, bonitos, billfishes | 34,837 | 7,479,746 | 7,514,583 | 36,827 | 7,388,653 | 7,425,480 |
| Salmons, trouts, smelts | 3,431,155 | 949,211 | 4,380,366 | 3,410,890 | 1,102,952 | 4,513,842 |
| Tilapias | 5,315,558 | 721,530 | 6,037,088 | 5,670,981 | 709,400 | 6,380,381 |
| Flatish | 195,036 | 1,038,670 | 1,233,706 | 203,345 | 970,254 | 1,173,599 |
| Sharks, rays, chimaeras |  | 764,981 | 764,981 | - | 756,075 | 756,075 |
| Shads | 310 | 626,093 | 626,403 | 387 | 659,769 | 660,156 |
| River eels | 250,122 | 10,540 | 260,662 | 273,932 | 8,020 | 281,952 |
| Sturgeons, paddlefish | 87,936 | 273 | 88,209 | 105,132 | 262 | 105,394 |
| Other fishes | 12,130,356 | 38,595,593 | 50,725,949 | 13,084,936 | 39,260,010 | 52,344,946 |
| Shrimp | 4,679,368 | 3,370,947 | 8,050,315 | 4,875,793 | 3,439,907 | 8,315,700 |
| Crabs | 352,997 | 1,726,880 | 2,079,877 | 359,041 | 1,688,882 | 2,047,923 |
| Lobsters | 1,615 | 306,568 | 308,183 | 1,624 | 308,947 | 310,571 |
| Krill |  | 317,615 | 317,615 | - | 250,846 | 250,846 |
| Other crustaceans | 2,012,762 | 854,496 | 2,867,258 | 2,114,891 | 873,958 | 2,988,849 |
| Clams, cockles, arkshells | 5,354,353 | 771,189 | 6,125,542 | 5,392,277 | 610,911 | 6,003,188 |
| Oysters | 5,147,053 | 130,754 | 5,277,807 | 5,321,737 | 146,828 | 5,468,565 |
| Squids, cuttlefishes, octopus | 1 | 4,855,295 | 4,855,296 | 1 | 4,711,605 | 4,711,606 |
| Mussels | 1,875,727 | 90,101 | 1,965,828 | 1,878,475 | 118,869 | 1,997,344 |
| Scallops | 1,914,667 | 740,559 | 2,655,226 | 2,081,616 | 572,963 | 2,654,579 |
| Abalones, winkles, conchs | 361,061 | 155,449 | 516,510 | 384,917 | 165,492 | 550,409 |
| Other mollusks | 1,412,345 | 1,149,499 | 2,561,844 | 1,372,967 | 1,106,521 | 2,479,488 |
| Sea urchins, other echinoderms | 208,992 | 112,964 | 321,956 | 215,373 | 114,503 | 329,876 |
| Miscellaneous | 684,185 | 515,380 | 1,199,565 | 693,720 | 475,275 | 1,168,995 |
| Total | 73,681,470 | 91,141,372 | 164,822,842 | 76,599,902 | 92,630,460 | 169,230,362 |

[^4]
## WORLD AQUACULTURE AND COMMERCIAL CATCHES BY COUNTRY OF FISH, CRUSTACEANS, AND MOLLUSKS, 2014-2015

| Country | 2014 |  |  | 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aquaculture | Catch | Total | Aquaculture | Catch | Total |
|  |  |  |  | - ---------Metric tons----..-- |  |  |
|  | Live weight |  |  | Live weight |  |  |
| China | 45,468,960 | 17,106,547 | 62,575,507 | 47,610,040 | 17,591,299 | 65,201,339 |
| Indonesia | 4,253,896 | 6,436,715 | 10,690,611 | 4,342,465 | 6,485,320 | 10,827,785 |
| India | 4,881,019 | 4,982,088 | 9,863,107 | 5,235,017 | 4,843,388 | 10,078,405 |
| Vietnam | 3,340,015 | 2,694,641 | 6,034,656 | 3,438,378 | 2,757,314 | 6,195,692 |
| United States | 421,189 | 4,975,947 | 5,397,136 | 425,973 | 5,038,791 | 5,464,764 |
| Peru | 115,269 | 3,573,371 | 3,688,640 | 90,975 | 4,824,050 | 4,915,025 |
| Russia | 161,214 | 4,259,055 | 4,420,269 | 151,207 | 4,457,138 | 4,608,345 |
| Japan | 647,913 | 3,641,494 | 4,289,407 | 703,915 | 3,460,168 | 4,164,083 |
| Bangladesh | 1,956,925 | 1,591,190 | 3,548,115 | 2,060,408 | 1,623,837 | 3,684,245 |
| Norway | 1,332,497 | 2,301,697 | 3,634,194 | 1,380,839 | 2,293,698 | 3,674,537 |
| Myanmar | 962,156 | 1,970,550 | 2,932,706 | 997,306 | 1,953,510 | 2,950,816 |
| Philippines | 788,029 | 2,246,299 | 3,034,328 | 781,798 | 2,151,502 | 2,933,300 |
| Chile | 1,214,523 | 2,175,486 | 3,390,009 | 1,045,790 | 1,786,633 | 2,832,423 |
| Thailand | 897,863 | 1,670,035 | 2,567,898 | 897,096 | 1,693,050 | 2,590,146 |
| South Korea | 480,394 | 1,736,346 | 2,216,740 | 479,360 | 1,648,993 | 2,128,353 |
| Malaysia | 275,682 | 1,464,646 | 1,740,328 | 246,205 | 1,491,974 | 1,738,179 |
| Mexico | 194,224 | 1,519,864 | 1,714,088 | 211,562 | 1,467,203 | 1,678,765 |
| Egypt | 1,137,091 | 344,791 | 1,481,882 | 1,174,831 | 344,112 | 1,518,943 |
| Morocco | 1,189 | 1,365,149 | 1,366,338 | 1,050 | 1,364,643 | 1,365,693 |
| Iceland | 8,434 | 1,076,769 | 1,085,203 | 8,430 | 1,317,349 | 1,325,779 |
| All others | 5,142,988 | 24,008,692 | 29,151,680 | 5,317,257 | 24,036,488 | 29,353,745 |
| Total | 73,681,470 | 91,141,372 | 164,822,842 | 76,599,902 | 92,630,460 | 169,230,362 |

Note: For the U.S., the weight of clams, oysters, scallops, and other mollusks includes the shell weight. This weight is not included in U.S. landings shown elsewhere. Data for marine mammals and aquatic plants are excluded.
Source: Food and Agriculture Organization of the United Nations (FAO).

> World Aquaculture and Commercial Catches, By Area, 2015


## World Fisheries

WORLD AQUACULTURE AND COMMERCIAL CATCHES BY AREA OF FISH, CRUSTACEANS, AND MOLLUSKS, 2014-2015

| Marine Areas | 2014 |  |  | 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aquaculture | Catch | Total | Aquaculture | Catch | Total |
|  | ---------Metric tons---...-- |  |  | ---------Metric tons----.---- |  |  |
|  | Live weight |  |  | Live weight |  |  |
| Atlantic Ocean: |  |  |  |  |  |  |
| Northeast | 2,153,901 | 8,655,961 | 10,809,862 | 2,191,938 | 9,137,549 | 11,329,487 |
| Northwest | 110,151 | 1,841,777 | 1,951,928 | 126,507 | 1,842,608 | 1,969,115 |
| Eastern central | 8,339 | 4,420,711 | 4,429,050 | 8,778 | 4,342,492 | 4,351,270 |
| Western central | 151,248 | 1,171,608 | 1,322,856 | 131,252 | 1,412,556 | 1,543,808 |
| Southeast | 2,850 | 1,564,481 | 1,567,331 | 3,045 | 1,680,827 | 1,683,872 |
| Southwest | 87,129 | 2,419,529 | 2,506,658 | 90,949 | 2,427,725 | 2,518,674 |
| Mediterranean and |  |  |  |  |  |  |
| Black Sea | 436,543 | 1,112,901 | 1,549,444 | 457,267 | 1,312,920 | 1,770,187 |
| Indian Ocean: |  |  |  |  |  |  |
| Eastern | 529,280 | 6,496,545 | 7,025,825 | 516,175 | 6,358,707 | 6,874,882 |
| Western | 439,008 | 4,795,993 | 5,235,001 | 564,089 | 4,659,209 | 5,223,298 |
| Pacific Ocean: |  |  |  |  |  |  |
| Northeast | 107,044 | 3,148,706 | 3,255,750 | 136,847 | 3,164,604 | 3,301,451 |
| Northwest | 17,451,794 | 21,949,674 | 39,401,468 | 18,394,967 | 22,050,596 | 40,445,563 |
| Eastern central | 183,712 | 1,903,802 | 2,087,514 | 212,561 | 1,695,331 | 1,907,892 |
| Western central | 3,409,887 | 12,547,195 | 15,957,082 | 3,369,313 | 12,581,999 | 15,951,312 |
| Southeast | 1,562,450 | 6,888,218 | 8,450,668 | 1,493,367 | 7,702,987 | 9,196,354 |
| Southwest | 154,311 | 575,152 | 729,463 | 143,491 | 550,933 | 694,424 |
| Arctic | - | 4 | 4 | - | 15 | 15 |
| Antarctic | - | 312,305 | 312,305 | - | 243,627 | 243,627 |
| Inland Areas: |  |  |  |  |  |  |
| Africa | 1,689,288 | 2,874,913 | 4,564,201 | 1,749,729 | 2,860,131 | 4,609,860 |
| Asia | 43,581,526 | 7,499,114 | 51,080,640 | 45,447,129 | 7,582,037 | 53,029,166 |
| Europe | 473,529 | 397,847 | 871,376 | 475,304 | 435,062 | 910,366 |
| North America | 422,559 | 182,553 | 605,112 | 414,290 | 208,033 | 622,323 |
| South America | 722,357 | 364,081 | 1,086,438 | 667,729 | 362,482 | 1,030,211 |
| Oceania | 4,564 | 18,302 | 22,866 | 5,175 | 18,030 | 23,205 |
| Total | 73,681,470 | 91,141,372 | 164,822,842 | 76,599,902 | 92,630,460 | 169,230,362 |

Note: Data for marine mammals and aquatic plants are excluded Source: Food and Agriculture Organization of the United Nations (FAO).

WORLD IMPORTS AND EXPORTS OF SEVEN FISHERY COMMODITY GROUPS,
BY LEADING COUNTRIES, 2011-2015

| Country | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| IMPORTS: |  |  |  |  |  |
| United States | 17,466,321 | 17,556,581 | 18,975,440 | 21,305,873 | 19,820,311 |
| Japan | 17,340,620 | 17,985,530 | 15,318,515 | 14,844,738 | 13,460,585 |
| China | 7,572,593 | 7,441,250 | 7,982,251 | 8,501,380 | 8,467,702 |
| Spain | 7,309,435 | 6,371,882 | 6,390,868 | 6,982,926 | 6,440,496 |
| France | 6,566,623 | 6,033,942 | 6,506,208 | 6,596,770 | 5,730,494 |
| Italy | 6,211,012 | 5,496,804 | 5,732,819 | 6,094,933 | 5,537,899 |
| Germany | 5,513,806 | 5,193,746 | 5,414,454 | 6,029,092 | 5,132,326 |
| Sweden | 3,633,264 | 3,619,179 | 4,485,916 | 4,783,346 | 4,424,106 |
| South Korea | 3,935,296 | 3,738,467 | 3,644,958 | 4,271,146 | 4,349,541 |
| United Kingdom | 4,257,951 | 4,246,019 | 4,494,884 | 4,537,105 | 4,082,971 |
| Other Countries | 50,171,377 | 51,309,398 | 54,459,746 | 57,268,884 | 50,106,054 |
| Total | 129,978,298 | 128,992,798 | 133,406,059 | 141,216,193 | 127,552,485 |
| EXPORTS: |  |  |  |  |  |
| China | 16,959,557 | 18,211,620 | 19,539,377 | 20,984,231 | 19,737,723 |
| Norway | 9,456,756 | 8,898,196 | 10,367,544 | 10,802,761 | 9,187,704 |
| Viet Nam | 6,241,707 | 6,276,751 | 6,886,846 | 8,028,649 | 6,756,070 |
| United States | 5,788,126 | 5,752,005 | 5,963,088 | 6,143,310 | 5,911,022 |
| Thailand | 8,141,815 | 8,132,389 | 7,057,194 | 6,633,959 | 5,677,394 |
| India | 3,539,109 | 3,404,437 | 4,601,717 | 5,600,900 | 4,871,591 |
| Chile | 4,504,659 | 4,348,178 | 4,985,211 | 5,854,098 | 4,812,362 |
| Canada | 4,198,638 | 4,223,549 | 4,364,195 | 4,527,531 | 4,704,012 |
| Denmark | 4,482,925 | 4,147,122 | 4,664,309 | 4,764,274 | 4,269,659 |
| Spain | 4,185,692 | 3,904,813 | 3,946,949 | 4,041,371 | 3,751,925 |
| Other Countries | 62,145,758 | 63,157,529 | 66,947,314 | 71,148,519 | 63,665,623 |
| Total | 129,644,742 | 130,456,589 | 139,323,744 | 148,529,603 | 133,345,085 |

[^5]Source:--Food and Agriculture Organization of the United Nations (FAO).

DISPOSITION OF WORLD AQUACULTURE AND COMMERCIAL CATCHES, 2011-2015

| Item | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Marketed fresh | 38 | 39 | 39 | 40 | 40 |
| Frozen | 25 | 26 | 26 | 26 | 27 |
| Canned | 12 | 12 | 11 | 11 | 11 |
| Cured | 10 | 10 | 10 | 10 | 10 |
| Reduced to meal and oil (1) | 12 | 10 | 10 | 9 | 9 |
| Miscellaneous purposes | 3 | 3 | 3 | 3 | 3 |
| Total | 100 | 100 | 100 | 100 | 100 |

NOTE: Data for 2011-2014 are revised and are preliminary for 2015. Data for marine mammals and aquatic plants are excluded.
(1) Only whole fish destined for the manufacture of oils and meals are included. Raw material for reduction derived from fish primarily destined for mar-
keting fresh, frozen, canned, cured, and miscellaneous purposes is excluded; such waste quantities are included under the other disposition channels. Source: Food and Agriculture Organization of the United Nations (FAO).

Disposition of World Aquaculture and Commercial Catches, 2015


## Processed Fishery Products



## FRESH AND FROZEN

FISH STICKS AND PORTIONS. The combined production of fish sticks and portions was 145 million pounds valued at $\$ 246.3$ million compared with the 2015 production of 219 million pounds valued at $\$ 378$ million. The total production of fish sticks amounted to 54.9 million pounds valued at $\$ 83.3$ million. The total production of fish portions amounted to 90.1 million pounds valued at $\$ 163$ million.

FISH FILLETS AND STEAKS. In 2016, the U.S. production of raw (uncooked) fish fillets and steaks, including blocks, was 749.8 million pounds, 16.9 million pounds less than the 766.7 million pounds in 2015 due to decreases in haddock, tilapia, tuna, and salmon fillets. There were also notable decreases in sablefish, striped bass, and dolphinfish. All fillets and steaks were valued at $\$ 1.9$ billion. Alaska pollock fillets and blocks continue to lead all species with 472.5 million pounds-an increase from the 461.3 million pounds in 2015, and representing 63 percent of the total. Production of groundfish fillets and steaks (cod, hake, ocean perch, pollock, cusk, and haddock) was 593 million pounds, an increase of 18 million pounds from 2015.

BREADED SHRIMP. The production of breaded shrimp in 2016 was 105.5 million pounds valued at $\$ 376.4$ million. This represents a decrease in value and volume from the 2015 production of 107.9 million pounds valued at $\$ 379.7$ million.

## CANNED PRODUCTS

CANNED FISHERY PRODUCTS. The pack of canned fishery products in the 50 states, American Samoa, and Puerto Rico was 865.5 million pounds valued at $\$ 1.2$ billion-a decrease in volume of 137.8 million pounds and $\$ 286.5$ million dollars compared to 2015. The 2016 pack included 576.1 million pounds with a value of $\$ 1.0$ billion for human consumption and 289.4 million pounds valued at $\$ 215.7$ million for bait and animal food.

CANNED SALMON. The 2016 U.S. pack of salmon was 52.0 million pounds valued at $\$ 141.9$ million, decreases in volume and value from the 2015 levels of 167.6 million pounds and $\$ 355.5$ million.

CANNED TUNA. The U.S. pack of tuna was 382.9 million pounds valued at $\$ 699.4$ million-a decrease of 17 million pounds in volume and $\$ 74$ million in value compared with the 2015 pack. The
pack of albacore tuna was 139.9 million pounds comprising 36.5 percent of the tuna pack in 2016. Lightmeat tuna (bigeye, bluefin, skipjack, and yellowfin) comprised the remainder with a pack of 243 million pounds.

CANNED CLAMS. The 2016 U.S. pack of clams (whole, minced, chowder, juice, and specialties) was 117.5 million pounds valued at $\$ 145.3$ million. The pack of whole and minced clams was 36.9 million pounds. Clam chowder and clam juice was 80.6 million pounds and made up the majority of the pack.

OTHER CANNED ITEMS. The pack of pet food and bait was 289.4 million pounds valued at $\$ 216$ million-unchanged from the 2015 volume and value levels.

## INDUSTRIAL FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS. The value of the domestic production of industrial fishery products was $\$ 561.1$ million-a decrease of $\$ 138.1$ million compared with the 2015 value.

FISH MEAL. The domestic production of fish and shellfish meal was 559.1 million pounds valued at $\$ 307.7$ million, a decrease of 52 million pounds and $\$ 89.4$ million compared with 2015. Most of this production was fish meal ( 559 million pounds) while shellfish meal production was 0.33 million pounds-a decrease of 682 thousand pounds from the 2015 level.

FISH OILS. The domestic production of fish oils was 177.5 million pounds (approximately 22.9 million gallons) valued at $\$ 70.8$ million, an increase of 37.5 million pounds and a $\$ 26.5$ million decrease in value compared with 2015 production.

OTHER INDUSTRIAL PRODUCTS. Oyster shell products, agar-agar, animal feeds, crab and clam shells processed for food serving, fish pellets, Irish moss extracts, kelp products, dry and liquid fertilizers, and mussel shell buttons were valued at $\$ 182.5$ million.

## METHODOLOGY:

The NMFS Annual Survey of U.S. Seafood Processors is the only comprehensive, national survey that focuses on the domestic seafood processing industry. The resulting data are reported in this section of Fisheries of the United States, as well as reports of the Food and Agriculture Organization of the United Nations (FAO), Fisheries Economics of the United States, and are used in commercial fisheries disposition calculations, annual per-capita consumption figures, and other reports.

The survey is voluntary in all regions except the Northeast. In the Northeast, it is mandatory for processors with a federal processing permit to provide the requested data.

The survey instrument is a paper form that asks for monthly employment figures, a list of product types, and the volume and value of each product processed in the previous year. Space is provided for the company to fill in new products. The survey forms are produced by the NMFS Office of Science and Technology and are mailed to five different regional contacts. Each region then proceeds slightly differently:

- Northeast - The distribution of forms to companies is overseen by a lead port agent. Other port agents assist with collecting information from the companies in their area. Dealer permits are not renewed if the processor has not provided the required data.
- Southeast and Gulf - Forms are distributed through the Southeast Fishery Science Center to the port agents along the coast who are then responsible for obtaining the data from the companies.
- Southwest and Northwest - Forms are distributed through, and returned to, the Pacific States Marine Fisheries Commission office under an agreement with NMFS.
- Pacific Islands - Forms are distributed and collected by Pacific Islands Regional Office staff. The companies in the survey are those that have reported previously or have been found by research or word-of-mouth. Adding companies in order to have a more complete data frame is a constant goal throughout the year.

Forms are returned to the Office of Science and Technology for data entry. Follow up contact may
be attempted to clarify data that is excluded or unclear. Because the survey is voluntary, we do not receive data from every company we contact. We employ various estimation and alternate data collection methods:

- Most Alaska data are obtained from the Alaska Fisheries Information Network (AKFIN).
- Data on Alaskan salmon processing come from the Alaska Department of Fish and Game.
- USDA reports provide data on rainbow trout processing and catfish data are estimated from USDA catfish production numbers.
- Data from the NOAA Seafood Inspection Program are used to estimate the data for companies that have not reported to the Survey of Fishery Processors but are included in the inspection program.
- Imputation is used to estimate the remaining missing companies.


## VALUE OF PROCESSED FISHERY PRODUCTS, 2015 AND 2016

(Processed from domestic catch and imported products)

| Item | 2015 (1) |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Thousand dollars | $\begin{array}{c\|} \hline \begin{array}{c} \text { Percent of } \\ \text { total } \end{array} \\ \hline \end{array}$ | Thousand dollars | Percent of total |
| Edible: |  |  |  |  |
| Fresh and frozen | 8,836,849 | 78 | 7,620,015 | 80 |
| Canned | 1,303,371 | 11 | 1,017,447 | 11 |
| Cured | 248,794 | 2 | 119,423 | 1 |
| Total edible | 10,389,015 | 91 | 8,756,885 | 92 |
| Industrial: |  |  |  |  |
| Bait and animal food | 296,208 | 3 | 233,702 | 2 |
| Meal and oil | 494,463 | 4 | 378,549 | 4 |
| Other | 200,043 | 2 | 182,338 | 2 |
| Total industrial | 990,714 | 9 | 794,589 | 8 |
| Grand total | 11,379,729 | 100 | 9,551,474 | 100 |

Note: Value is based on selling price at the plant.
(1) Revised based on additional data.
U.S. PRODUCTION OF FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 2007-2016

| Year | Fish sticks |  |  | Fish portions |  |  | Breaded shrimp |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| 2007 | 59,353 | 26,922 | 61,942 | 178,742 | 81,077 | 302,984 | 139,571 | 63,309 | 347,152 |
| 2008 | 73,926 | 33,533 | 104,974 | 194,005 | 88,000 | 300,137 | 86,131 | 39,069 | 200,147 |
| 2009 | 82,461 | 37,404 | 120,615 | 204,491 | 92,757 | 310,213 | 74,172 | 33,644 | 159,416 |
| 2010 | 79,586 | 36,100 | 125,258 | 140,584 | 63,768 | 291,569 | 97,124 | 44,055 | 251,594 |
| 2011 | 74,451 | 33,771 | 113,069 | 141,849 | 64,342 | 277,466 | 116,935 | 53,041 | 562,928 |
| 2012 | 80,034 | 36,303 | 104,829 | 172,051 | 78,042 | 345,686 | 92,460 | 41,940 | 240,976 |
| 2013 | 58,214 | 26,406 | 87,430 | 151,721 | 68,820 | 259,504 | 79,740 | 36,170 | 193,837 |
| 2014 | 58,545 | 26,556 | 87,487 | 146,594 | 66,495 | 255,725 | 109,293 | 49,575 | 311,211 |
| 2015 | 66,289 | 30,068 | 96,217 | 152,633 | 69,234 | 281,833 | 107,929 | 48,956 | 379,688 |
| 2016 | 54,896 | 24,901 | 83,276 | 90,129 | 40,882 | 163,057 | 105,513 | 47,860 | 376,409 |

## PRODUCTION OF FRESH AND FROZEN FILLETS AND STEAKS, BY SPECIES, 2015 AND 2016

| Species | 2015 (1) |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Fillets: |  |  |  |  |  |  |
| Amberjack | 81 | 37 | 825 | 65 | 29 | 614 |
| Anglerfish | 453 | 205 | 2,323 | 281 | 127 | 1,614 |
| Bluefish | 84 | 38 | 377 | 53 | 24 | 229 |
| Cobia | 50 | 23 | 537 | 17 | 8 | 203 |
| Cod | 67,594 | 30,660 | 271,503 | 72,632 | 32,946 | 304,651 |
| Cusk | 19 | 9 | 56 | 5 | 2 | 21 |
| Dolphinfish | 4,280 | 1,941 | 23,221 | 2,636 | 1,196 | 16,990 |
| Flounders | 12,296 | 5,577 | 51,299 | 10,221 | 4,636 | 43,189 |
| Groupers | 1,092 | 495 | 13,065 | 768 | 348 | 9,994 |
| Haddock | 14,042 | 6,369 | 65,831 | 8,884 | 4,030 | 46,680 |
| Hake | 28,925 | 13,120 | 38,493 | 36,537 | 16,573 | 45,622 |
| Halibut | 4,836 | 2,194 | 45,279 | 3,526 | 1,599 | 26,868 |
| Lingcod | 96 | 44 | 503 | 265 | 120 | 1,468 |
| Ocean perch: |  |  |  |  |  |  |
| Atlantic | 1,309 | 594 | 4,219 | 988 | 448 | 2,997 |
| Pacific | 786 | 357 | 2,129 | 795 | 361 | 2,536 |
| Opah | 238 | 108 | 1,073 | 162 | 73 | 487 |
| Patagonian Toothfish | 908 | 412 | 18,014 | 307 | 139 | 6,079 |
| Pollock: |  |  |  |  |  |  |
| Atlantic | 1,346 | 611 | 4,507 | 893 | 405 | 3,454 |
| Alaska | 461,255 | 209,224 | 624,886 | 472,517 | 214,332 | 653,272 |
| Rockfishes | 2,757 | 1,251 | 8,812 | 2,333 | 1,058 | 7,137 |
| Sablefish | 800 | 363 | 6,248 | 149 | 68 | 1,698 |
| Salmon | 116,544 | 52,864 | 597,223 | 103,304 | 46,858 | 552,674 |
| Sea bass | 318 | 144 | 2,859 | 168 | 76 | 1,607 |
| Sea trout | 97 | 44 | 647 | 66 | 30 | 469 |
| Shark | 485 | 220 | 1,501 | 326 | 148 | 1,190 |
| Snapper | 836 | 379 | 9,335 | 1,109 | 503 | 10,944 |
| Striped bass | 355 | 161 | 3,134 | 84 | 38 | 927 |
| Swordfish | 2,933 | 1,330 | 26,321 | 1,921 | 871 | 17,369 |
| Tilapia | 11,061 | 5,017 | 37,918 | 7,770 | 3,524 | 24,632 |
| Tuna | 10,927 | 4,956 | 108,664 | 8,175 | 3,708 | 80,829 |
| Wahoo | 465 | 211 | 2,200 | 282 | 128 | 1,245 |
| Wolffish | (2) | (2) | (2) | (2) | (2) | (2) |
| Yellowtail Jack | 190 | 86 | 1,280 | 67 | 30 | 358 |
| Unclassified | 12,731 | 5,775 | 76,640 | 7,475 | 3,391 | 39,579 |
| Total Fillet | 760,189 | 344,819 | 2,050,922 | 744,781 | 337,830 | 1,907,626 |
| Steaks: |  |  |  |  |  |  |
| Halibut | 590 | 268 | 6,546 | 590 | 268 | 6,530 |
| Salmon | 540 | 245 | 3,905 | (2) | (2) | (2) |
| Swordfish | 1,685 | 764 | 6,154 | 1,577 | 715 | 5,411 |
| Tuna | 890 | 404 | 8,207 | 786 | 357 | 7,502 |
| Unclassified | 2,851 | 1,293 | 5,657 | 2,086 | 946 | 7,345 |
| Total Steaks | 6,556 | 2,974 | 30,469 | 5,039 | 2,286 | 26,788 |
| Grand total | 766,745 | 347,793 | 2,081,391 | 749,820 | 340,116 | 1,934,414 |

(1) Revised based on additional data.
(2) Included in unclassified.

Note: Some fillet products were further processed into frozen blocks.

Processed Fishery Products

PRODUCTION OF CANNED FISHERY PRODUCTS,
BY SPECIES, 2015 AND 2016

| Species | $\begin{gathered} \hline \text { Pounds } \\ \text { per } \\ \text { case } \end{gathered}$ | 2015 (1) |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Standard cases | Thousand pounds | Thousand dollars | Standard cases | Thousand pounds | Thousand dollars |
| For human consumption: |  |  |  |  |  |  |  |
| Fish: |  |  |  |  |  |  |  |
| Herring | 23.4 | (5) | (5) | (5) | (5) | (5) | (5) |
| Salmon: |  |  |  |  |  |  |  |
| Chinook | 44.25 | 113 | 5 | 57 | 136 | 6 | 71 |
| Chum | 44.25 | 12,249 | 542 | 881 | 19,299 | 854 | 798 |
| Pink | 44.25 | 2,944,542 | 130,296 | 232,751 | 508,768 | 22,513 | 49,822 |
| Coho | 44.25 | 14,305 | 633 | 1,263 | 4,475 | 198 | 333 |
| Sockeye | 44.25 | 817,333 | 36,167 | 120,567 | 643,141 | 28,459 | 90,840 |
| Total salmon |  | 3,788,542 | 167,643 | 355,519 | 1,175,819 | 52,030 | 141,864 |
| Specialties | 48 | 13,271 | 637 | 3,911 | 31,625 | 1,518 | 9,872 |
| Sardines, Maine | 23.4 | (5) | (5) | (5) | (5) | (5) | (5) |
| Tuna: (2) |  |  |  |  |  |  |  |
| Albacore: |  |  |  |  |  |  |  |
| Solid | 18 | 7,297,833 | 131,361 | 339,797 | 6,498,833 | 116,979 | 299,269 |
| Chunk | 18 | 1,286,611 | 23,159 | 53,949 | 1,272,333 | 22,902 | 52,455 |
| Total albacore |  | 8,584,444 | 154,520 | 393,746 | 7,771,167 | 139,881 | 351,724 |
| Lightmeat: |  |  |  |  |  |  |  |
| Solid | 18 | 618,944 | 11,141 | 29,718 | 966,889 | 17,404 | 38,288 |
| Chunk | 18 | 13,011,833 | 234,213 | 349,952 | 12,532,222 | 225,580 | 309,400 |
| Total lightmeat |  | 13,630,778 | 245,354 | 379,670 | 13,499,111 | 242,984 | 347,688 |
| Total tuna |  | 22,215,222 | 399,874 | 773,416 | 21,270,278 | 382,865 | 699,412 |
| Specialties | 48 | 42 | 2 | 30 | 83 | 4 | 54 |
| Other | 48 | 5,979 | 287 | 918 | 1,875 | 90 | 494 |
| Total fish | - | 26,023,056 | 568,443 | 1,133,794 | 22,479,680 | 436,507 | 851,696 |
| Shellfish: |  |  |  |  |  |  |  |
| Clam and clam products: (3) |  |  |  |  |  |  |  |
| Whole and minced | 15 | 2,627,933 | 39,419 | 84,853 | 2,463,800 | 36,957 | 81,151 |
| Chowder and juice | 30 | 2,687,400 | 80,622 | 62,551 | 2,685,967 | 80,579 | 64,154 |
| Specialties | 48 | (5) | (5) | (5) | (5) | (5) | (5) |
| Total clams | - | 5,315,333 | 120,041 | 147,404 | 5,149,767 | 117,536 | 145,305 |
| Crab meat and specialties: | 20 | 2,205 | 43 | 166 | 9,231 | 180 | 689 |
| Oyster, specialties | 48 | (5) | (5) | (5) | (5) | (5) | (5) |
| Shrimp, natural (4) | 6.75 | (5) | (5) | (5) | (5) | (5) | (5) |
| Other | 48 | 528,854 | 25,385 | 22,007 | 456,146 | 21,895 | 19,757 |
| Total shellfish | - | 5,846,393 | 145,469 | 169,577 | 5,615,143 | 139,611 | 165,751 |
| Total for human |  |  |  |  |  |  |  |
| consumption |  | 31,869,449 | 713,912 | 1,303,371 | 28,094,824 | 576,118 | 1,017,447 |
| For bait and animal food | 48 | 6,029,458 | 289,414 | 216,256 | 6,029,125 | 289,398 | 215,720 |
| Grand total | - | 37,898,907 | 1,003,326 | 1,519,627 | 34,123,949 | 865,516 | 1,233,167 |

(1) Revised based on additional data.
(2) Flakes included with chunk.
(3) "Cut out" or "drained" weight of can contents are given for whole or minced clams and net contents for other clam products.
(4) Drained weight.
(5) Confidential included with "Other".

PRODUCTION OF CANNED FISHERY PRODUCTS, 2007-2016

| Year | For human consumption |  | For animal food and bait |  | Total |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand <br> pounds | Metric tons | Thousann <br> dollars | Thousann <br> pounds | Metric tons | Thousand <br> dollars | Thousand <br> pounds | Metric tons | Thousand <br> dollars |
| 2007 | 698,831 | 316,988 | $1,090,070$ | 371,032 | 168,299 | 233,614 | $1,069,863$ | 485,287 | $1,323,684$ |
| 2008 | 713,946 | 323,844 | $1,191,214$ | 601,678 | 272,919 | 231,273 | $1,315,624$ | 596,763 | $1,422,487$ |
| 2009 | 621,256 | 281,800 | $1,190,067$ | 312,887 | 141,925 | 217,699 | 934,143 | 423,724 | $1,407,766$ |
| 2010 | 656,420 | 297,750 | $1,196,346$ | 299,300 | 135,762 | 217,583 | 955,720 | 433,512 | $1,413,929$ |
| 2011 | 640,917 | 290,588 | $1,251,332$ | 305,906 | 138,209 | 224,953 | 946,823 | 429,476 | $1,476,285$ |
| 2012 | 581,908 | 263,952 | $1,373,011$ | 298,667 | 135,474 | 241,663 | 880,575 | 399,426 | $1,614,674$ |
| 2013 | 662,435 | 300,478 | $1,533,585$ | 301,659 | 135,477 | 246,336 | 964,094 | 437,310 | $1,779,921$ |
| 2014 | 561,750 | 254,808 | $1,226,636$ | 171,104 | 77,612 | 149,822 | 732,854 | 332,420 | $1,376,458$ |
| 2015 | 713,912 | 323,828 | $1,303,371$ | 289,414 | 131,277 | 216,256 | $1,003,326$ | 455,106 | $1,519,627$ |
| 2016 | 576,118 | 261,325 | $1,017,447$ | 289,398 | 131,270 | 215,720 | 865,516 | 392,595 | $1,233,167$ |

Production of Canned Fishery Products, 2007-2016


## Processed Fishery Products

PRODUCTION OF MEAL AND OIL, 2015 AND 2016


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

PRODUCTION OF INDUSTRIAL PRODUCTS, 2007-2016

| Year | Scrap and Meal |  | Marine Animal Oil |  | Meal and <br> Oil | Other <br> Industrial <br> Products | Grand <br> Total |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Thousand pounds | Metric tons | Thousand pounds | Metric tons | $\ldots \ldots-$-Thousand dollars $-\ldots \ldots-$ - |  |  |
| 2007 | 563,221 | 255,475 | 152,205 | 69,040 | 277,874 | 62,025 | 339,899 |
| 2008 | 492,828 | 223,545 | 190,023 | 86,194 | 245,240 | 64,631 | 309,871 |
| 2009 | 472,805 | 214,463 | 168,157 | 76,276 | 227,438 | 61,657 | 289,095 |
| 2010 | 487,692 | 221,216 | 136,362 | 61,853 | 218,937 | 64,040 | 282,977 |
| 2011 | 620,823 | 281,603 | 143,171 | 64,942 | 301,462 | 133,640 | 435,102 |
| 2012 | 585,565 | 265,611 | 115,090 | 52,204 | 335,188 | 162,341 | 497,529 |
| 2013 | 508,057 | 230,453 | 175,877 | 79,777 | 298,709 | 180,073 | 478,780 |
| 2014 | 515,000 | 233,602 | 139,005 | 63,052 | 384,700 | 206,251 | 590,951 |
| 2015 | 611,082 | 277,185 | 139,951 | 63,481 | 494,463 | 204,750 | 699,213 |
| 2016 | 559,132 | 253,621 | 177,459 | 80,495 | 378,549 | 182,538 | 561,087 |

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

# U.S. Foreign Trade in Fishery Products 



The data used in this section are from the U.S. Census Bureau Merchandise Trade Statistics for 2016 as revised on June 2, 2017, (FT900: U.S. International Trade in Goods and Services). Data for imports and exports are primarily compiled from records filed with U.S. Customs and Border Protection. Data for U.S. exports to Canada are based on import documents filed with Canadian agencies and forwarded to the U.S. Census Bureau. Estimates are made for low-value imports or exports by trading partner and are based on bilateral trade patterns. See http://www.census.gov/foreigntrade/index.html for more information.

## IMPORTS

U.S. imports of edible fishery products in 2016 were 5.8 billion pounds, valued at $\$ 19.5$ billion. An increase of 90.3 million pounds ( $1.6 \%$ ) and $\$ 693.0$ million (3.7\%) from 2015.

Edible imports consisted of 4.9 billion pounds of fresh and frozen products valued at $\$ 17.3$ billion, 688.8 million pounds of canned products valued at $\$ 1.6$ billion, 101.2 million pounds of cured products valued at $\$ 314.2$ million, 7.1 million pounds of caviar and roe products valued at $\$ 49.4$ million, and 89.9 million pounds of other products valued at $\$ 221.3$ million.

The quantity of shrimp imported in 2016 was 1.3 billion pounds, 40.5 million pounds more than the quantity imported in 2015 . Valued at $\$ 5.7$ billion, shrimp imports accounted for 29.3 percent of the value of total edible imports. Imports of fresh and frozen salmon, including fillets, were 733.9 million pounds valued at $\$ 3.0$ billion in 2016. Imports of fresh and frozen tuna, including steaks, were 375.5 million pounds, 29.3 million pounds less than the 404.8 million pounds imported in 2015. Imports of canned tuna were 292.3 million pounds, a 21.0 million pounds decrease over 2015. Imports of fresh and frozen fillets and steaks amounted to 1.6 billion pounds, increasing 9.6 million pounds from 2015. Fish meat imports were 51.2 million pounds valued at $\$ 187.1$. Regular block imports were 80.7 million pounds, a decrease of 13.6 million pounds from 2015.

Imports of nonedible fishery products were valued at $\$ 16.4$ billion, an increase of $\$ 838.1$ million compared with 2015. The total value of edible and nonedible fishery imports was $\$ 35.8$ billion in 2016, $\$ 1.53$ billion more than in 2015.

## EXPORTS

U.S. exports of edible fishery products were 2.9 billion pounds valued at $\$ 5.4$ billion, a decrease of 214.5 million pounds ( $6.8 \%$ ) from 2015. Value decreased $\$ 186.1$ million ( $3.3 \%$ ). Fresh and frozen exports were 2.7 billion pounds valued at $\$ 4.7$ billion, a decrease of 153.2 million pounds ( $5.3 \%$ ) and a decrease of $\$ 35.2$ million ( $0.7 \%$ ) compared with 2015. In terms of individual items, fresh and frozen exports consisted principally of 356.7 million pounds of salmon valued at $\$ 732.2$ million, 420.9 million pounds of surimi valued at $\$ 448.6$ million, and 122.7 million pounds of lobsters valued at $\$ 753.0$ million.

Canned items were 109.4 million pounds valued at $\$ 251.0$ million. Salmon was the major canned item exported, with 82.1 million pounds valued at $\$ 178.0$ million. Cured items were 7.8 million pounds valued at $\$ 19.3$ million. Caviar and roe exports were 68.3 million pounds valued at $\$ 312.4$ million.

Exports of nonedible products were valued at $\$ 22.6$ billion, a decrease of $\$ 233.7$ million when compared with $2015(1.0 \%)$. Exports of fish meal amounted to 339.9 million pounds valued at $\$ 223.1$ million. The total value of edible and nonedible exports was $\$ 28.0$ billion, a decrease of $\$ 409.8(1.4 \%)$ compared with 2015.

## DATA NOTES

The weights reported in this section are of individual products as imported or exported, i.e., fillets, steaks, whole, headed, etc. The reported import value is value of the product as appraised by the U.S. Customs Service. This value may be based on foreign market value, constructed value, American selling price, etc. It generally represents a value in a foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States.

The export value is generally equivalent to the free alongside ship (f.a.s.) value at the U.S. port of export based on the transaction price, including inland freight, insurance, and other charges incurred in placing the merchandise alongside the carrier at the U.S. port of exportation. The value excludes the cost of loading, freight, insurance, and other charges or transportation costs beyond the port of exportation.

Re-exports are commodities that have entered the country as imports and are subsequently exported in substantially the same condition as when originally imported. These are also referred to as foreign exports.
U.S. Trade Balance in Edible Fishery Products, 2007-2016

U.S. Trade in Edible Fishery Products, 2016


## Foreign Trade |lmports

U.S. Imports of Edible Products, Product Type by Volume, 2016

U.S. Imports of Edible Products, Product Type by Value, 2016

U.S. Fishery Products Imports, 2007-2016


EDIBLE AND NONEDIBLE FISHERY PRODUCTS IMPORTS, 2007-2016

| Year | Edible |  |  | Nonedible $\quad$ Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | -------- Thousand dollars-------- |  |  |
| 2007 | 5,346,345 | 2,425,086 | 13,696,207 | 15,080,912 | 28,777,119 |
| 2008 | 5,225,960 | 2,370,480 | 14,170,848 | 14,285,768 | 28,456,616 |
| 2009 | 5,161,513 | 2,341,247 | 13,124,170 | 10,430,117 | 23,554,288 |
| 2010 | 5,447,135 | 2,470,804 | 14,810,857 | 12,541,650 | 27,352,507 |
| 2011 | 5,349,471 | 2,426,504 | 16,617,625 | 14,325,656 | 30,943,281 |
| 2012 | 5,383,538 | 2,441,957 | 16,689,567 | 14,417,370 | 31,106,937 |
| 2013 | 5,415,289 | 2,456,359 | 18,006,248 | 15,149,527 | 33,155,775 |
| 2014 | 5,566,746 | 2,525,059 | 20,264,457 | 15,650,387 | 35,914,844 |
| 2015 | 5,737,895 | 2,602,692 | 18,798,004 | 15,513,078 | 34,311,081 |
| 2016 | 5,828,202 | 2,643,655 | 19,491,036 | 16,351,245 | 35,842,282 |

[^6]U.S. Imports of Edible Fishery Products from Major

Areas, 2016, by Volume

U.S. Imports of Edible Fishery Products from Major

Exporters, 2016, by Volume


FISHERY PRODUCTS IMPORTS, BY PRINCIPAL ITEMS, 2015 AND 2016


[^7]Source: U.S. Department of Commerce, U.S. Census Bureau.

EDIBLE AND NONEDIBLE FISHERY PRODUCTS IMPORTS, 2016

| Continent and Country | Edible |  |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric Tons | -------- | Thousand dollars-- | ---- |
| North America: |  |  |  |  |  |
| Canada | 687,066 | 311,651 | 3,193,099 | 1,188,609 | 4,381,708 |
| Mexico | 154,948 | 70,284 | 555,754 | 416,465 | 972,219 |
| Dominican Republic | 527 | 239 | 5,984 | 198,060 | 204,044 |
| Honduras | 33,294 | 15,102 | 129,818 | 57 | 129,875 |
| Panama | 24,310 | 11,027 | 89,288 | 8,215 | 97,503 |
| Other | 75,885 | 34,421 | 294,820 | 31,003 | 325,823 |
| Total | 976,029 | 442,724 | 4,268,763 | 1,842,409 | 6,111,172 |
| South America: |  |  |  |  |  |
| Chile | 350,990 | 159,208 | 1,551,058 | 110,469 | 1,661,527 |
| Ecuador | 243,461 | 110,433 | 795,476 | 10,896 | 806,372 |
| Peru | 59,008 | 26,766 | 206,682 | 77,712 | 284,394 |
| Argentina | 56,189 | 25,487 | 197,480 | 56,835 | 254,315 |
| Brazil | 28,638 | 12,990 | 103,471 | 141,270 | 244,741 |
| Other | 74,562 | 33,821 | 253,346 | 126,532 | 379,878 |
| Total | 812,847 | 368,705 | 3,107,513 | 523,714 | 3,631,228 |
| Europe: |  |  |  |  |  |
| European Union: |  |  |  |  |  |
| France | 4,312 | 1,956 | 19,093 | 1,894,650 | 1,913,743 |
| Italy | 2,429 | 1,102 | 10,636 | 1,095,737 | 1,106,373 |
| United Kingdom | 27,333 | 12,398 | 111,052 | 487,988 | 599,040 |
| Germany | 14,998 | 6,803 | 77,242 | 492,688 | 569,930 |
| Spain | 32,670 | 14,819 | 109,383 | 302,107 | 411,490 |
| Other | 58,036 | 26,325 | 203,835 | 437,742 | 641,577 |
| Total | 139,778 | 63,403 | 531,241 | 4,710,912 | 5,242,152 |
| Other: |  |  |  |  |  |
| Norway | 145,067 | 65,802 | 584,339 | 110,934 | 695,273 |
| Russian Federation | 59,105 | 26,810 | 410,691 | 2,741 | 413,432 |
| Switzerland | 40 | 18 | 194 | 409,526 | 409,720 |
| Turkey | 6,691 | 3,035 | 26,489 | 247,245 | 273,734 |
| Iceland | 50,734 | 23,013 | 190,982 | 15,855 | 206,837 |
| Other | 36,662 | 16,630 | 146,227 | 12,185 | 158,412 |
| Total | 298,300 | 135,308 | 1,358,922 | 798,486 | 2,157,409 |
| Asia: |  |  |  |  |  |
| China | 1,235,187 | 560,277 | 2,533,041 | 2,328,670 | 4,861,711 |
| India | 371,036 | 168,301 | 1,581,797 | 1,886,798 | 3,468,595 |
| Thailand | 485,257 | 220,111 | 1,386,861 | 1,471,610 | 2,858,471 |
| Indonesia | 389,698 | 176,766 | 1,645,641 | 283,152 | 1,928,793 |
| Vietnam | 563,070 | 255,407 | 1,412,557 | 87,726 | 1,500,283 |
| Other | 374,784 | 170,001 | 1,171,165 | 2,148,016 | 3,319,181 |
| Total | 3,419,033 | 1,550,863 | 9,731,062 | 8,205,972 | 17,937,034 |
| Oceania: |  |  |  |  |  |
| New Zealand | 48,966 | 22,211 | 134,495 | 25,716 | 160,211 |
| Australia | 6,568 | 2,979 | 52,414 | 71,298 | 123,712 |
| Fiji | 35,223 | 15,977 | 84,026 | 1,029 | 85,055 |
| French Polynesia | 2,163 | 981 | 7,802 | 31,925 | 39,727 |
| Vanuatu | 12,921 | 5,861 | 14,198 | 28 | 14,226 |
| Other | 23,779 | 10,786 | 34,119 | 1,969 | 36,088 |
| Total | 129,619 | 58,795 | 327,054 | 131,965 | 459,018 |
| Africa: |  |  |  |  |  |
| South Africa | 3,688 | 1,673 | 32,942 | 111,354 | 144,296 |
| Morocco | 22,546 | 10,227 | 47,256 | 7,756 | 55,012 |
| Mauritius | 17,105 | 7,759 | 41,844 | 1,223 | 43,067 |
| St. Helena | 1,290 | 585 | 14,341 |  | 14,341 |
| Reunion | 758 | 344 | 9,537 |  | 9,537 |
| Other | 7,208 | 3,269 | 20,562 | 17,454 | 38,016 |
| Total | 52,596 | 23,857 | 166,482 | 137,787 | 304,269 |
| Grand total | 5,828,200 | 2,643,654 | 19,491,036 | 16,351,245 | 35,842,282 |

Source: U.S. Department of Commerce, U.S. Census Bureau.
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# Foreign Trade | لmports 

REGULAR FISH BLOCKS AND MEAT IMPORTS, BY SPECIES AND TYPE, 2015 AND 2016

| Species and Type | 2015 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Regular blocks and slabs: |  |  |  |  |  |  |
| Freshwater | 1,646 | 746 | 4,830 | 2,033 | 922 | 3,759 |
| Flatfish | 6,090 | 2,762 | 10,064 | 4,672 | 2,119 | 7,695 |
| Groundfish |  |  |  |  |  |  |
| Cod | 14,759 | 6,695 | 23,632 | 9,038 | 4,100 | 16,030 |
| Ocean Perch | 816 | 370 | 1,596 | 888 | 403 | 1,501 |
| Pollock | 42,154 | 19,121 | 49,468 | 33,701 | 15,287 | 36,835 |
| Whiting | 6,166 | 2,797 | 9,681 | 8,512 | 3,861 | 13,017 |
| Other groundfish | 1,609 | 730 | 2,797 | 1,516 | 688 | 2,919 |
| Total groundfish | 70,643 | 32,043 | 98,834 | 57,848 | 26,239 | 78,329 |
| Other regular blocks | 15,958 | 7,238 | 56,083 | 16,186 | 7,342 | 54,509 |
| Total Regular Blocks | 94,337 | 42,791 | 169,811 | 80,739 | 36,623 | 144,291 |
| Meat whether or not minced: |  |  |  |  |  |  |
| Freshwater | 4,560 | 2,069 | 15,668 | 4,320 | 1,959 | 14,854 |
| Flatfish | 571 | 259 | 1,561 | 443 | 201 | 1,285 |
| Groundfish | 7,564 | 3,431 | 25,217 | 14,101 | 6,396 | 50,546 |
| Other | 26,265 | 11,914 | 103,719 | 32,359 | 14,678 | 120,402 |
| Total Meat | 38,961 | 17,673 | 146,165 | 51,223 | 23,234 | 187,087 |
| Total Blocks and Meat | 133,298 | 60,463 | 315,976 | 131,962 | 59,858 | 331,378 |

Source: U.S. Department of Commerce, U.S. Census Bureau.
REGULAR FISH BLOCKS AND MEAT IMPORTS, BY COUNTRY OF ORIGIN, 2015 AND 2016

| Country | 2015 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| China | 72,412 | 32,846 | 102,857 | 62,328 | 28,272 | 85,961 |
| Norway | 4,513 | 2,047 | 18,018 | 8,333 | 3,780 | 34,403 |
| Chile | 7,350 | 3,334 | 30,124 | 5,902 | 2,677 | 33,040 |
| Argentina | 6,049 | 2,744 | 24,697 | 8,080 | 3,665 | 26,082 |
| Iceland | 6,936 | 3,146 | 21,021 | 5,783 | 2,623 | 23,004 |
| Canada | 7,747 | 3,514 | 20,812 | 10,207 | 4,630 | 19,771 |
| Indonesia | 5,132 | 2,328 | 11,059 | 8,527 | 3,868 | 13,741 |
| Australia | 1,071 | 486 | 11,613 | 1,056 | 479 | 13,487 |
| Falkand Islands | 280 | 127 | 3,339 | 670 | 304 | 9,264 |
| Other | 21,807 | 9,892 | 72,436 | 21,075 | 9,560 | 72,625 |
| Total | 133,298 | 60,464 | 315,976 | 131,962 | 59,858 | 331,378 |

Source: U.S. Department of Commerce, U.S. Census Bureau.
GROUNDFISH FILLET AND STEAK IMPORTS, BY SPECIES, 2015 AND 2016 (1)

| Species |  | 2015 |  |  | $\mathbf{2 0 1 6}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |  |
| Cod | 114,042 | 51,729 | 348,965 | 123,478 | 56,009 | 380,666 |  |
| Cusk | - | - | - | - | - | - |  |
| Haddock | 28,313 | 12,843 | 102,813 | 36,003 | 16,331 | 105,366 |  |
| Hake | 2,964 | 1,345 | 5,158 | 3,476 | 1,577 | 5,447 |  |
| Ocean perch | 3,993 | 1,811 | 8,388 | 5,420 | 2,458 | 10,977 |  |
| Pollock | 55,521 | 25,184 | 71,377 | 35,209 | 15,971 | 42,079 |  |
| Other | 17,602 | 7,984 | 30,604 | 38,020 | 17,246 | 57,536 |  |
| Total | $\mathbf{2 2 2 , 4 3 4}$ | $\mathbf{1 0 0 , 8 9 6}$ | $\mathbf{5 6 7 , 3 0 4}$ | $\mathbf{2 4 1 , 6 0 5}$ | $\mathbf{1 0 9 , 5 9 1}$ | $\mathbf{6 0 2 , 0 7 1}$ |  |

[^8]CANNED TUNA NOT IN OIL, QUOTA AND IMPORTS, 2007-2016

| Year | Quota (1) |  | Over Quota (2) |  | Total |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand pounds |  | Metric tons | Thousand pounds |  | Metric tons |
| 2007 | 41,178 | 18,678 | 300,412 | 136,266 | 341,590 | 154,944 |  |  |
| 2008 | 38,951 | 17,668 | 303,915 | 137,855 | 342,866 | 155,523 |  |  |
| 2009 | 40,690 | 18,457 | 329,200 | 149,324 | 369,890 | 167,781 |  |  |
| 2010 | 36,043 | 16,349 | 370,796 | 168,192 | 406,839 | 184,541 |  |  |
| 2011 | 40,011 | 18,149 | 345,514 | 156,724 | 385,525 | 174,873 |  |  |
| 2012 | 36,667 | 16,632 | 382,771 | 173,624 | 419,438 | 190,256 |  |  |
| 2013 | 34,334 | 15,574 | 385,104 | 174,682 | 419,438 | 190,256 |  |  |
| 2014 | 34,905 | 15,833 | 384,533 | 174,423 | 419,438 | 190,256 |  |  |
| 2015 | 34,771 | 15,772 | 444,344 | 201,553 | 479,115 | 217,325 |  |  |
| 2016 | 26,852 | 12,180 | 460,270 | 208,777 | 487,122 | 220,957 |  |  |

(1) Imports have been subject to tariff rate quotas since April 14, 1956. Dutiable in 1956 to 1967 at 12.5 percent ad valorem; 1968, 11 percent; 1969, 10 percent; 1970, 8.5 percent; 1971, 7 percent; and 1972 to present, 6 percent.
(2) Dutiable in 1972 to present, 12.5 percent.

Source: U.S. Department of Homeland Security, U.S. Customs and Border Protection.
Note: Because data in this table are from a different source, this table will not agree with tuna import data released by the U.S. Department of Commerce, U.S. Census Bureau, used elsewhere in this report.

Canned Tuna Quota and Imports, 2007-2016


## Imports of Canned Tuna by Major Exporter, 2016 by Volume



CANNED TUNA, BY COUNTRY OF ORIGIN, 2015 AND 2016

| Country | 2015 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | $\begin{array}{\|c} \hline \begin{array}{c} \text { Thousand } \\ \text { dollars } \end{array} \\ \hline \end{array}$ | Thousand pounds | Metric tons | Thousand dollars |
| Thailand | 154,565 | 70,110 | 267,535 | 145,030 | 65,785 | 247,545 |
| Ecuador | 40,289 | 18,275 | 101,513 | 38,431 | 17,432 | 90,978 |
| Vietnam | 41,735 | 18,931 | 80,148 | 42,580 | 19,314 | 73,472 |
| Indonesia | 19,035 | 8,634 | 33,173 | 20,152 | 9,141 | 35,353 |
| Philippines | 34,599 | 15,694 | 51,929 | 18,825 | 8,539 | 30,262 |
| Mexico | 11,085 | 5,028 | 17,477 | 13,051 | 5,920 | 20,029 |
| China | 6,453 | 2,927 | 9,918 | 6,850 | 3,107 | 11,604 |
| Costa Rica | 1,221 | 554 | 4,731 | 2,787 | 1,264 | 4,741 |
| South Korea | 1,082 | 491 | 2,784 | 1,239 | 562 | 3,135 |
| Other | 3,309 | 1,501 | 7,763 | 3,382 | 1,534 | 7,242 |
| Total | 313,373 | 142,145 | 576,971 | 292,326 | 132,598 | 524,361 |

[^9]SHRIMP IMPORTS, BY COUNTRY OF ORIGIN, 2015 AND 2016

| Country | 2015 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| North America: |  |  |  |  |  |  |
| Mexico | 61,718 | 27,995 | 320,381 | 55,834 | 25,326 | 294,805 |
| Panama | 7,053 | 3,199 | 33,246 | 6,759 | 3,066 | 32,889 |
| Canada | 8,964 | 4,066 | 30,494 | 8,646 | 3,922 | 31,220 |
| Guatemala | 8,702 | 3,947 | 35,413 | 6,336 | 2,874 | 27,729 |
| Honduras | 10,487 | 4,757 | 32,333 | 8,040 | 3,647 | 26,718 |
| Nicaragua | 5,095 | 2,311 | 15,323 | 5,505 | 2,497 | 16,421 |
| Belize | 1,054 | 478 | 5,888 | 467 | 212 | 2,567 |
| Costa Rica | 284 | 129 | 1,336 | 157 | 71 | 843 |
| El Salvador | 108 | 49 | 438 | 55 | 25 | 349 |
| Greenland | 4 | 2 | 50 | - | 2 | 54 |
| Other | - | - | 4 | 7 | 1 | 5 |
| Total | 103,468 | 46,933 | 474,906 | 91,806 | 41,643 | 433,600 |
| South America: |  |  |  |  |  |  |
| Ecuador | 188,740 | 85,612 | 634,083 | 161,218 | 73,128 | 584,065 |
| Peru | 22,650 | 10,274 | 83,707 | 20,968 | 9,511 | 82,978 |
| Argentina | 11,180 | 5,071 | 43,847 | 17,046 | 7,732 | 69,522 |
| Guyana | 16,027 | 7,270 | 45,432 | 18,505 | 8,394 | 51,575 |
| Venezuela | 5,110 | 2,318 | 12,582 | 6,400 | 2,903 | 16,591 |
| Suriname | 816 | 370 | 2,517 | 1,045 | 474 | 3,063 |
| Chile | 90 | 41 | 484 | 265 | 120 | 1,547 |
| Colombia | 370 | 168 | 1,954 | 97 | 44 | 604 |
| Brazil | 2 | 1 | 2 | 18 | 8 | 238 |
| Total | 244,986 | 111,125 | 824,608 | 225,561 | 102,314 | 810,183 |
| Europe: |  |  |  |  |  |  |
| European Union: |  |  |  |  |  |  |
| Denmark | 53 | 24 | 277 | 183 | 83 | 872 |
| Spain | 146 | 66 | 1,191 | 152 | 69 | 839 |
| Portugal | 49 | 22 | 480 | 57 | 26 | 443 |
| Cyprus | 42 | 19 | 136 | 42 | 19 | 133 |
| Italy | - |  |  | - | - | 6 |
| Other | 9 | 4 | 46 | - | - | 10 |
| Total | 298 | 135 | 2,130 | 434 | 197 | 2,303 |
| Other Europe: | - | - |  | 37 | 17 | 128 |
| Total | 298 | 135 | 2,130 | 472 | 214 | 2,431 |
| Asia: |  |  |  |  |  |  |
| India | 298,029 | 135,185 | 1,279,537 | 339,411 | 153,956 | 1,497,545 |
| Indonesia | 252,235 | 114,413 | 1,100,192 | 258,176 | 117,108 | 1,107,875 |
| Thailand | 161,286 | 73,159 | 748,674 | 178,908 | 81,152 | 819,153 |
| Vietnam | 132,499 | 60,101 | 655,133 | 139,765 | 63,397 | 683,595 |
| China | 62,970 | 28,563 | 189,226 | 76,683 | 34,783 | 232,956 |
| Bangladesh | 4,687 | 2,126 | 35,423 | 9,043 | 4,102 | 61,455 |
| Philippines | 5,002 | 2,269 | 15,852 | 4,758 | 2,158 | 16,597 |
| Pakistan | 1,905 | 864 | 10,598 | 575 | 261 | 8,010 |
| Saudi Arabia | 783 | 355 | 2,208 | 2,271 | 1,030 | 7,453 |
| Burma | 983 | 446 | 8,045 | 384 | 174 | 2,742 |
| Other | 20,117 | 9,571 | 90,881 | 2,582 | 1,171 | 10,665 |
| Total | 940,496 | 426,606 | 4,127,724 | 1,012,172 | 459,118 | 4,445,304 |
| Oceania | 42 | 19 | 323 | 157 | 71 | 1,103 |
| Africa | 474 | 215 | 5,737 | 401 | 182 | 4,393 |
| Grand Total | 1,290,061 | 585,033 | 5,435,428 | 1,330,570 | 603,543 | 5,697,013 |

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

SHRIMP IMPORTS, BY TYPE OF PRODUCT, 2015 AND 2016

| Type of product | 2015 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Shell-on (heads off) | 494,566 | 224,334 | 1,995,561 | 512,474 | 232,456 | 2,161,496 |
| Peeled: |  |  |  |  |  |  |
| Canned | 7,304 | 3,313 | 37,920 | 3,143 | 1,426 | 23,404 |
| Not breaded: |  |  |  |  |  |  |
| Raw | 512,202 | 232,333 | 2,183,997 | 534,949 | 242,651 | 2,317,052 |
| Other | 177,549 | 80,536 | 881,746 | 182,676 | 82,861 | 885,825 |
| Breaded | 98,141 | 44,517 | 336,204 | 97,328 | 44,148 | 309,236 |
| Total | 1,289,763 | 585,032 | 5,435,428 | 1,330,570 | 603,543 | 5,697,013 |

Source: U.S. Department of Commerce, U.S. Census Bureau.
Shrimp Imports by Major Exporter, 2016, by Volume


Shrimp Imports by Type, 2016, by Volume

FISH MEAL AND SCRAP IMPORTS, BY COUNTRY OF ORIGIN, 2015 AND 2016

| Country | 2015 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Chile | 65,146 | 29,550 | 60,808 | 63,111 | 28,627 | 61,490 |
| Mexico | 16,334 | 7,409 | 10,868 | 12,037 | 5,460 | 7,094 |
| Norway | 3,851 | 1,747 | 3,545 | 9,140 | 4,146 | 6,876 |
| Canada | 8,300 | 3,765 | 6,639 | 6,909 | 3,134 | 5,990 |
| Denmark | 3,089 | 1,401 | 2,097 | 5,472 | 2,482 | 4,944 |
| France | 6,706 | 3,042 | 3,139 | 4,473 | 2,029 | 4,340 |
| Argentina | 1,129 | 512 | 446 | 6,907 | 3,133 | 3,335 |
| Ecuador | 452 | 205 | 285 | 2,899 | 1,315 | 2,043 |
| Peru | 2,385 | 1,082 | 1,793 | 2,385 | 1,082 | 1,871 |
| Other | 2,842 | 1,289 | 2,118 | 7,183 | 3,258 | 5,132 |
| Total | 110,234 | 50,002 | 91,738 | 120,517 | 54,666 | 103,115 |

Source: U.S. Department of Commerce, U.S. Census Bureau.
U.S. Fishery Product Exports, 2007-2016


EDIBLE AND NONEDIBLE FISHERY PRODUCTS EXPORTS, 2007-2016 (1)

| Year | Edible |  |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars- - - - - - - | Thousand dollars- - - - - - - |  |
| 2007 | 2,869,376 | 1,301,541 | 4,268,578 | 15,785,140 | 20,053,718 |
| 2008 | 2,650,093 | 1,202,074 | 4,256,835 | 19,110,474 | 23,367,309 |
| 2009 | 2,546,281 | 1,154,985 | 3,979,728 | 15,655,964 | 19,635,693 |
| 2010 | 2,733,127 | 1,239,738 | 4,389,171 | 17,996,550 | 22,385,721 |
| 2011 | 3,267,525 | 1,482,140 | 5,446,677 | 20,771,139 | 26,217,815 |
| 2012 | 3,254,394 | 1,476,183 | 5,470,491 | 21,913,933 | 27,384,424 |
| 2013 | 3,323,761 | 1,507,648 | 5,584,082 | 23,529,404 | 29,113,486 |
| 2014 | 3,402,041 | 1,543,156 | 5,753,667 | 24,224,826 | 29,978,493 |
| 2015 | 3,141,371 | 1,424,916 | 5,566,642 | 22,829,182 | 28,395,824 |
| 2016 | 2,926,886 | 1,327,627 | 5,380,531 | 22,605,492 | 27,986,024 |

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

Source: U.S. Department of Commerce, U.S. Census Bureau.
U.S. Exports of Edible Products, Product Type by Volume, 2016

U.S. Exports of Edible Products, Product Type by Value, 2016

U.S. Exports to Major Areas, 2016, by Volume

U.S. Exports to Major Importers, 2016, by Volume


FISHERY PRODUCTS EXPORTS, BY PRINCIPAL ITEMS, 2015 AND 2016 (1)

| Item | 2015 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Edible fishery products: Fresh and frozen: | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Whole or eviscerated: |  |  |  |  |  |  |
| Freshwater | 11,908 | 5,402 | 14,830 | 13,027 | 5,909 | 16,679 |
| Flatfish | 257,788 | 116,932 | 195,141 | 281,191 | 127,548 | 220,472 |
| Groundfish | 484,203 | 219,633 | 565,960 | 453,809 | 205,846 | 533,273 |
| Herring | 87,963 | 39,900 | 45,008 | 56,035 | 25,417 | 30,894 |
| Sablefish | 14,751 | 6,691 | 82,554 | 12,325 | 5,591 | 80,954 |
| Salmon | 430,820 | 195,418 | 631,352 | 311,264 | 141,188 | 577,285 |
| Tuna | 26,537 | 12,037 | 41,887 | 38,485 | 17,457 | 55,094 |
| Other | 224,314 | 101,748 | 281,451 | 220,866 | 100,184 | 281,908 |
| Fillets and steaks: |  |  |  |  |  |  |
| Freshwater | 15,350 | 6,963 | 51,246 | 15,298 | 6,939 | 47,830 |
| Flatfish | 2,824 | 1,281 | 12,167 | 2,422 | 1,098 | 8,991 |
| Groundfish | 303,782 | 137,795 | 393,302 | 315,593 | 143,152 | 389,553 |
| Salmon | 44,694 | 20,273 | 149,267 | 45,461 | 20,621 | 154,882 |
| Other | 14,663 | 6,651 | 40,142 | 12,967 | 5,882 | 41,139 |
| Meat whether or not minced | 66,261 | 30,056 | 72,551 | 86,095 | 39,053 | 94,587 |
| Surimi | 402,422 | 182,538 | 431,389 | 420,850 | 190,896 | 448,627 |
| Fish sticks | 42,818 | 19,422 | 85,103 | 41,564 | 18,853 | 78,802 |
| Clams | 15,837 | 7,184 | 85,896 | 17,483 | 7,930 | 111,886 |
| Crabs | 43,252 | 19,619 | 242,345 | 46,217 | 20,964 | 250,009 |
| Crabmeat | 3,069 | 1,392 | 12,301 | 2,163 | 981 | 11,967 |
| Lobsters | 114,097 | 51,754 | 687,209 | 122,655 | 55,636 | 752,963 |
| Scallops (meats) | 21,703 | 9,845 | 166,055 | 22,392 | 10,157 | 174,981 |
| Sea urchins | 446 | 202 | 2,225 | 520 | 236 | 2,625 |
| Shrimp | 47,377 | 21,490 | 230,051 | 26,508 | 12,024 | 123,915 |
| Squid | 161,359 | 73,192 | 110,485 | 129,405 | 58,698 | 137,475 |
| Other fish and shellfish | 31,589 | 14,329 | 134,747 | 22,056 | 10,004 | 102,641 |
| Total, Fresh and Frozen | 2,869,827 | 1,301,745 | 4,764,664 | 2,716,652 | 1,232,265 | 4,729,432 |
| Canned: |  |  |  |  |  |  |
| Salmon | 86,701 | 39,327 | 197,214 | 82,088 | 37,235 | 178,028 |
| Sardines | 838 | 380 | 473 | 432 | 196 | 254 |
| Tuna | 9,326 | 4,230 | 20,860 | 4,351 | 1,973 | 9,087 |
| Abalone | 218 | 99 | 5,628 | 92 | 42 | 1,437 |
| Crabmeat | 1,857 | 842 | 9,385 | 1,971 | 894 | 10,756 |
| Shrimp | 666 | 302 | 2,227 | 281 | 128 | 1,009 |
| Squid | 1,937 | 878 | 1,097 | 446 | 203 | 269 |
| Other fish and shellfish | 37,378 | 16,955 | 79,620 | 19,698 | 8,935 | 50,202 |
| Total, canned | 138,920 | 63,014 | 316,504 | 109,361 | 49,606 | 251,042 |
| Cured: |  |  |  |  |  |  |
| Dried | 8,654 | 3,925 | 12,190 | 2,555 | 1,159 | 4,665 |
| Pickled or salted | 1,985 | 900 | 2,848 | 4,354 | 1,975 | 7,220 |
| Smoked or kippered | 1,200 | 544 | 8,385 | 931 | 422 | 7,408 |
| Total, cured | 11,838 | 5,370 | 23,423 | 7,840 | 3,556 | 19,293 |
| Caviar and roe: |  |  |  |  |  |  |
| Herring | 4,072 | 1,847 | 11,258 | 1,124 | 510 | 2,171 |
| Pollock | 44,706 | 20,279 | 152,078 | 30,997 | 14,060 | 111,051 |
| Salmon | 32,976 | 14,958 | 149,265 | 16,843 | 7,640 | 104,538 |
| Sea urchin | 925 | 420 | 24,165 | 979 | 444 | 24,969 |
| Other | 18,908 | 8,577 | 70,894 | 18,334 | 8,316 | 69,713 |
| Total, caviar and roe | 101,587 | 46,080 | 407,660 | 68,277 | 30,970 | 312,442 |
| Edible seaweed and algae | 2,764 | 1,254 | 14,439 | 2,495 | 1,132 | 12,021 |
| Prepared meals | 10,143 | 4,601 | 21,478 | 13,554 | 6,148 | 36,397 |
| Other fish and shellfish | 6,283 | 2,850 | 18,474 | 7,173 | 3,254 | 17,404 |
| Total Edible Products | 3,141,364 | 1,424,914 | 5,566,642 | 2,926,886 | 1,327,627 | 5,380,531 |
| Nonedible products: |  |  |  |  |  |  |
| Meal and scrap | 327,509 | 148,557 | 181,802 | 339,881 | 154,169 | 223,083 |
| Fish oils | 121,089 | 54,926 | 144,250 | 166,595 | 75,567 | 176,899 |
| Other | - | - | 22,503,130 | - | - | 22,205,511 |
| Total Nonedible Products | - |  | 22,829,182 | - |  | 22,605,492 |
| Grand Total | - |  | 28,395,824 | - |  | 27,986,024 |

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

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

EDIBLE AND NONEDIBLE FISHERY PRODUCTS EXPORTS, 2016 (1)

| Continent and Country | Edible |  |  | Nonedible | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | -----Thousand dollars----- |  |  |
| North America: |  |  |  |  |  |
| Canada | 391,707 | 177,677 | 1,202,988 | 3,570,574 | 4,773,562 |
| Mexico | 62,509 | 28,354 | 78,905 | 1,631,883 | 1,710,788 |
| Sint Maarten | 1,464 | 664 | 4,698 | 320,621 | 325,319 |
| Dominican Republic | 8,287 | 3,759 | 17,026 | 306,559 | 323,585 |
| Panama | 3,889 | 1,764 | 7,906 | 197,738 | 205,644 |
| Other | 34,588 | 15,689 | 77,495 | 650,772 | 728,267 |
| Total | 502,444 | 227,907 | 1,389,018 | 6,678,147 | 8,067,165 |
|  |  |  |  |  |  |
| Brazil | 5,840 | 2,649 | 9,417 | 285,469 | 294,886 |
| Chile | 721 | 327 | 2,569 | 172,811 | 175,380 |
| Colombia | 7,815 | 3,545 | 13,317 | 137,984 | 151,301 |
| Peru | 3,437 | 1,559 | 6,602 | 82,110 | 88,712 |
| Argentina | 101 | 46 | 245 | 88,255 | 88,500 |
| Other | 4,923 | 2,233 | 9,089 | 274,322 | 283,411 |
| Total | 22,837 | 10,359 | 41,239 | 1,040,951 | 1,082,190 |
| Europe: |  |  |  |  |  |
| European Union: |  |  |  |  |  |
| United Kingdom | 41,623 | 18,880 | 105,407 | 954,316 | 1,059,723 |
| France | 71,491 | 32,428 | 141,472 | 873,090 | 1,014,562 |
| Netherlands | 149,913 | 68,000 | 240,555 | 522,083 | 762,638 |
| Germany | 197,574 | 89,619 | 269,659 | 364,771 | 634,430 |
| Belgium | 5,311 | 2,409 | 25,533 | 347,524 | 373,057 |
| Other | 189,095 | 85,773 | 352,134 | 670,851 | 1,022,985 |
| Total | 655,007 | 297,109 | 1,134,760 | 3,732,635 | 4,867,395 |
| Other: |  |  |  |  |  |
| Switzerland | 736 | 334 | 4,572 | 1,636,925 | 1,641,497 |
| Russian Federation | 119 | 54 | 114 | 78,391 | 78,505 |
| Turkey | 2,549 | 1,156 | 1,858 | 63,447 | 65,305 |
| Ukraine | 47,965 | 21,757 | 43,166 | 8,329 | 51,495 |
| Monaco | 317 | 144 | 248 | 36,079 | 36,327 |
| Other | 9,716 | 4,407 | 16,429 | 44,835 | 61,264 |
| Total | 61,403 | 27,852 | 66,387 | 1,868,006 | 1,934,393 |
| Asia: |  |  |  |  |  |
| China - Hong Kong | 33,600 | 15,241 | 192,587 | 2,786,792 | 2,979,379 |
| China | 736,832 | 334,225 | 969,144 | 1,105,126 | 2,074,270 |
| Japan | 397,194 | 180,166 | 684,522 | 1,146,281 | 1,830,803 |
| South Korea | 348,889 | 158,255 | 487,673 | 496,724 | 984,397 |
| United Arab Emirates | 3,699 | 1,678 | 17,726 | 569,071 | 586,797 |
| Other | 129,053 | 58,538 | 333,563 | 2,476,964 | 2,810,527 |
| Total | 1,649,268 | 748,103 | 2,685,215 | 8,580,958 | 11,266,173 |
| Oceania: |  |  |  |  |  |
| Australia | 20,161 | 9,145 | 44,626 | 458,152 | 502,778 |
| New Zealand | 2,116 | 960 | 3,966 | 82,990 | 86,956 |
| French Polynesia | 245 | 111 | 806 | 1,337 | 2,143 |
| Fiji | 99 | 45 | 283 | 1,402 | 1,685 |
| Micronesia | 84 | 38 | 83 | 780 | 863 |
| Other | 247 | 112 | 576 | 1,493 | 2,069 |
| Total | 22,952 | 10,411 | 50,340 | 546,154 | 596,494 |
| Africa: |  |  |  |  |  |
| South Africa | 4,524 | 2,052 | 3,553 | 73,418 | 76,971 |
| Egypt | 2,275 | 1,032 | 2,486 | 27,591 | 30,077 |
| Nigeria | 342 | 155 | 397 | 13,442 | 13,839 |
| Angola | 0 |  |  | 6,156 | 6,156 |
| Ghana | 811 | 368 | 593 | 4,608 | 5,201 |
| Other | 5,022 | 2,278 | 6,544 | 33,425 | 39,969 |
| Total | 12,974 | 5,885 | 13,573 | 158,640 | 172,213 |
| Grand total | 2,926,886 | 1,327,627 | 5,380,531 | 22,605,492 | 27,986,024 |

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

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

FRESH AND FROZEN SHRIMP EXPORTS, BY COUNTRY OF DESTINATION, 2015 AND 2016 (1)

| Country | 2015 |  |  |  | $\mathbf{2 0 1 6}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Thousand pounds | Metric tons |  | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Canada | 6,272 | 2,845 | $\$ 28,298$ | 3,653 | 1,657 | 17,411 |  |
| Vietnam | 4,030 | 1,828 | $\$ 21,048$ | 3,893 | 1,766 | 16,230 |  |
| Singapore | 507 | 230 | $\$ 2,372$ | 3,772 | 1,711 | 12,973 |  |
| India | 1,991 | 903 | $\$ 14,627$ | 1,667 | 756 | 11,560 |  |
| Sweden | 3,607 | 1,636 | $\$ 17,436$ | 1,832 | 831 | 7,595 |  |
| China | 2,575 | 1,168 | $\$ 16,442$ | 1,054 | 478 | 6,801 |  |
| Thailand | 679 | 308 | $\$ 4,077$ | 1,986 | 901 | 5,337 |  |
| Indonesia | 1,032 | 468 | $\$ 6,924$ | 732 | 332 | 5,297 |  |
| China- Hong Kong | 1,378 | 625 | $\$ 7,086$ | 503 | 228 | 4,497 |  |
| Other | 26,684 | 11,479 | 111,741 | 7,416 | 3,364 | 36,214 |  |
|  | Total | $\mathbf{4 7 , 3 7 7}$ | $\mathbf{2 1 , 4 9 0}$ | $\mathbf{\$ 2 3 0 , 0 5 1}$ | $\mathbf{2 6 , 5 0 8}$ | $\mathbf{1 2 , 0 2 4}$ | $\mathbf{1 2 3 , 9 1 5}$ |

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

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

## U.S. Shrimp Exports by Major Importer, 2016 by Volume



FRESH AND FROZEN LOBSTER EXPORTS, BY COUNTRY OF DESTINATION, 2015 AND 2016 (1)

| Country | 2015 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Canada | 67,948 | 30,821 | 334,845 | 70,726 | 32,081 | 351,179 |
| China | 8,622 | 3,911 | 58,978 | 11,978 | 5,433 | 91,926 |
| Italy | 7,363 | 3,340 | 54,749 | 8,170 | 3,706 | 59,228 |
| Spain | 5,620 | 2,549 | 42,290 | 5,681 | 2,577 | 44,598 |
| China - Hong Kong | 4,299 | 1,950 | 35,267 | 5,053 | 2,292 | 43,990 |
| Vietnam | 4,667 | 2,117 | 38,813 | 3,234 | 1,467 | 27,135 |
| France | 3,746 | 1,699 | 26,433 | 3,902 | 1,770 | 26,789 |
| South Korea | 2,094 | 950 | 15,457 | 2,683 | 1,217 | 18,983 |
| United Kingdom | 2,282 | 1,035 | 18,190 | 1,936 | 878 | 15,294 |
| Other | 7,456 | 3,382 | 62,187 | 9,292 | 4,215 | 73,841 |
| Total | 114,097 | 51,754 | 687,209 | 122,655 | 55,636 | 752,963 |

[^10]
## U.S. Lobster Exports by Major Importer, 2016 by Volume



FRESH AND FROZEN SALMON EXPORTS, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 2015 AND 2016 (1)

| Country | 2015 |  |  | 2016 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Canada | 41,592 | 18,866 | 92,093 | 62,088 | 28,163 | 164,056 |
| China | 212,493 | 96,386 | 241,770 | 111,445 | 50,551 | 142,184 |
| Japan | 39,923 | 18,109 | 85,597 | 25,540 | 11,585 | 56,912 |
| South Korea | 32,302 | 14,652 | 56,540 | 23,589 | 10,700 | 54,098 |
| Germany | 16,605 | 7,532 | 33,279 | 15,221 | 6,904 | 38,282 |
| France | 12,414 | 5,631 | 17,718 | 11,027 | 5,002 | 22,251 |
| Thailand | 39,176 | 17,770 | 48,755 | 12,884 | 5,844 | 18,571 |
| Netherlands | 4,616 | 2,094 | 9,735 | 5,935 | 2,692 | 12,427 |
| India | - | - | - | 5,088 | 2,308 | 9,354 |
| Other | 31,698 | 14,378 | 45,865 | 38,446 | 17,439 | 59,150 |
| Total | $\mathbf{4 3 0 , 8 1 9}$ | $\mathbf{1 9 5 , 4 1 8}$ | $\mathbf{6 3 1 , 3 5 2}$ | $\mathbf{3 1 1 , 2 6 3}$ | $\mathbf{1 4 1 , 1 8 8}$ | $\mathbf{5 7 7 , 2 8 5}$ |

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

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

CANNED SALMON EXPORTS,
BY COUNTRY OF DESTINATION, 2015 AND 2016 (1)

| Country | 2015 |  |  | 2016 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Canada | 31,951 | 14,493 | 85,662 | 36,466 | 16,541 | 88,082 |
| United Kingdom | 32,538 | 14,759 | 65,434 | 22,681 | 10,288 | 47,071 |
| Australia | 11,814 | 5,359 | 25,946 | 11,753 | 5,331 | 22,951 |
| Netherlands | 3,078 | 1,396 | 5,910 | 3,510 | 1,592 | 6,223 |
| Mexico | 2,727 | 1,237 | 5,347 | 1,933 | 877 | 3,992 |
| New Zealand | 1,559 | 707 | 2,642 | 1,459 | 662 | 2,360 |
| Trinidad and Tobago | 575 | 261 | 1,301 | 582 | 264 | $\mathbf{1 , 1 2 9}$ |
| Israel | 108 | 49 | 234 | 743 | 337 | 839 |
| Bahamas | 132 | 60 | 272 | 293 | 133 | 532 |
| Other | 2,218 | 1,006 | 4,466 | 2,668 | $\mathbf{1 , 2 1 0}$ | $\mathbf{4 , 8 4 9}$ |
| Total | $\mathbf{8 6 , 7 0 0}$ | $\mathbf{3 9 , 3 2 7}$ | $\mathbf{1 9 7 , 2 1 4}$ | $\mathbf{8 2 , 0 8 8}$ | $\mathbf{3 7 , 2 3 5}$ | $\mathbf{1 7 8 , 0 2 8}$ |

[^11]FROZEN SURIMI EXPORTS,
BY COUNTRY OF DESTINATION, 2015 AND 2016 (1)

| Country | $\mathbf{2 0 1 5}$ |  |  | $\mathbf{2 0 1 6}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| South Korea | 136,593 | 61,958 | 158,090 | 162,858 | 73,872 | 184,160 |
| Japan | 183,557 | 83,261 | 189,237 | 153,980 | 69,845 | 156,847 |
| France | 19,396 | 8,798 | 19,065 | 23,155 | 10,503 | 22,858 |
| Spain | 16,812 | 7,626 | 17,363 | 20,721 | 9,399 | 22,031 |
| Netherlands | 8,565 | 3,885 | 9,717 | 14,522 | 6,587 | 16,411 |
| Lithuania | 9,264 | 4,202 | 9,600 | 12,795 | 5,804 | 13,052 |
| Thailand | 6,202 | 2,813 | 6,879 | 10,783 | 4,891 | 10,850 |
| Germany | 10,494 | 4,760 | 9,379 | 8,668 | 3,932 | 8,744 |
| China | 5,540 | 2,513 | 6,036 | 4,974 | 2,256 | 5,375 |
| Other | 6,000 | 2,722 | 6,023 | 8,394 | 3,807 | 8,299 |
| Total | $\mathbf{4 0 2 , 4 2 2}$ | $\mathbf{1 8 2 , 5 3 8}$ | $\mathbf{4 3 1 , 3 8 9}$ | $\mathbf{4 2 0 , 8 5 0}$ | $\mathbf{1 9 0 , 8 9 6}$ | $\mathbf{4 4 8 , 6 2 7}$ |

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

FRESH AND FROZEN CRAB EXPORTS, BY COUNTRY OF DESTINATION, 2015 AND 2016 (1)

| Country | $\mathbf{2 0 1 5}$ |  |  | $\mathbf{2 0 1 6}$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |  |
| China | 13,602 | 6,170 | 70,370 | 15,097 | 6,848 | 87,972 |  |
| Canada | 13,475 | 6,112 | 70,995 | 18,922 | 8,583 | 85,726 |  |
| Japan | 9,537 | 4,326 | 65,443 | 6,239 | 2,830 | 41,520 |  |
| Indonesia | 2,685 | 1,218 | 12,507 | 2,597 | 1,178 | 11,645 |  |
| Vietnam | 1,243 | 564 | 5,857 | 772 | 350 | 4,626 |  |
| Thailand | 375 | 170 | 2,475 | 470 | 213 | 3,902 |  |
| China - Hong Kong | 461 | 209 | 3,910 | 448 | 203 | 3,877 |  |
| United Arab Emirates | 66 | 30 | 562 | 212 | 96 | 1,505 |  |
| South Korea | 578 | 262 | 2,768 | 212 | 96 | 1,481 |  |
| Other | 1,230 | 558 | 7,458 | 1,250 | 567 | 7,755 |  |
|  | Total | $\mathbf{4 3 , 2 5 2}$ | $\mathbf{1 9 , 6 1 9}$ | $\mathbf{2 4 2 , 3 4 5}$ | $\mathbf{4 6 , 2 1 7}$ | $\mathbf{2 0 , 9 6 4}$ | $\mathbf{2 5 0 , 0 0 9}$ |

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

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

## U.S. Crab Exports by Major Importer, 2016, by Volume



FRESH AND FROZEN CRABMEAT EXPORTS,
BY COUNTRY OF DESTINATION, 2015 AND 2016 (1)

| Country | 2015 |  |  | $\mathbf{2 0 1 6}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Canada | 522 | 237 | 2,783 | 448 | 203 | 2,870 |
| Japan | 714 | 324 | 1,992 | 185 | 84 | 1,205 |
| China | 564 | 256 | 1,633 | 207 | 94 | 1,176 |
| Dominican Republic | 35 | 16 | 174 | 132 | 60 | 867 |
| Mexico | 254 | 115 | 778 | 181 | 82 | 853 |
| South Korea | 42 | 19 | 197 | 117 | 53 | 552 |
| Panama | 75 | 34 | 149 | 97 | 44 | 333 |
| Jamaica | 40 | 18 | 210 | 57 | 26 | 326 |
| Thailand | 11 | 5 | 85 | 64 | 29 | 322 |
| Other | 811 | 368 | 4,300 | 675 | 306 | 3,463 |
| Total | $\mathbf{3 , 0 6 9}$ | $\mathbf{1 , 3 9 2}$ | $\mathbf{1 2 , 3 0 1}$ | $\mathbf{2 , 1 6 3}$ | 981 | $\mathbf{1 1 , 9 6 7}$ |

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

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

## U.S. Crabmeat Exports by Major Importer, 2016, by Volume



FISH MEAL EXPORTS,
BY COUNTRY OF DESTINATION, 2015 AND 2016 (1)

| Country | 2015 |  |  | $\mathbf{2 0 1 6}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| China | 117,208 | 53,165 | 65,401 | 134,198 | 60,872 | 90,755 |
| South Korea | 46,012 | 20,871 | 40,839 | 44,952 | 20,390 | 35,240 |
| Mexico | 69,754 | 31,640 | 19,741 | 66,233 | 30,043 | 33,145 |
| Canada | 40,463 | 18,354 | 26,896 | 45,320 | 20,557 | 29,550 |
| Germany | 15,534 | 7,046 | 8,604 | 11,122 | 5,045 | 10,750 |
| Taiwan | 7,271 | 3,298 | 3,714 | 15,538 | 7,048 | 9,921 |
| Japan | 6,881 | 3,121 | 5,413 | 8,589 | 3,896 | 5,715 |
| Dominican | 5,922 | 2,686 | 4,245 | 4,683 | 2,124 | 2,035 |
| Republic | 833 | 378 | 707 | 1,841 | 835 | 1,579 |
| Thailand | 17,632 | 7,998 | 6,242 | 7,405 | 3,359 | 4,393 |
| Other | $\mathbf{3 2 7 , 5 0 9}$ | $\mathbf{1 4 8 , 5 5 7}$ | $\mathbf{1 8 1 , 8 0 2}$ | $\mathbf{3 3 9}, 881$ | $\mathbf{1 5 4 , 1 6 9}$ | $\mathbf{2 2 3 , 0 8 3}$ |
| Total |  |  |  |  |  |  |

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

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

## U.S. Fish Meal Exports by Major Importer, 2016, by Volume



FISH AND MARINE ANIMAL OIL EXPORTS, BY COUNTRY OF DESTINATION, 2015 AND 2016 (1)

| Country | $\mathbf{2 0 1 5}$ |  |  | $\mathbf{2 0 1 6}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Thousand pounds | Metric tons | Thousand dollars | Thousand pounds | Metric tons | Thousand dollars |
| Denmark | 15,688 | 7,116 | 16,352 | 87,520 | 39,699 | 68,838 |
| Canada | 28,102 | 12,747 | 28,048 | 28,219 | 12,800 | 29,691 |
| Netherlands | 2,703 | 1,226 | 12,332 | 1,876 | 851 | 9,782 |
| Norway | 22,652 | 10,275 | 19,379 | 11,162 | 5,063 | 9,455 |
| South Korea | 5,234 | 2,374 | 4,173 | 8,007 | 3,632 | 8,708 |
| China - Hong Kong | 884 | 401 | 7,569 | 750 | 340 | 8,039 |
| Chile | 14,888 | 6,753 | 11,931 | 7,489 | 3,397 | 5,392 |
| Taiwan | 3,413 | 1,548 | 3,956 | 4,480 | 2,032 | 5,054 |
| Japan | 985 | 447 | 901 | 9,881 | 4,482 | 4,816 |
| Other | 26,541 | 12,039 | 39,609 | 7,211 | 3,271 | 27,124 |
| Total | $\mathbf{1 2 1 , 0 9 0}$ | $\mathbf{5 4 , 9 2 6}$ | $\mathbf{1 4 4 , 2 5 0}$ | $\mathbf{1 6 6 , 5 9 5}$ | $\mathbf{7 5 , 5 6 7}$ | $\mathbf{1 7 6 , 8 9 9}$ |

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

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

## U.S. Fish Oil Exports by Major Importer, 2016, by Volume



U.S. SUPPLY OF EDIBLE AND INDUSTRIAL FISHERY PRODUCTS, 2007-2016
(Round weight)

| Year | Domestic Commercial Landings | Imports | Exports | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | ---------------- Million pounds--------------- |  |  |  |
| 2007 | 9,309 | 11,252 | 7,057 | 13,504 |
| 2008 | 8,326 | 10,875 | 6,353 | 12,848 |
| 2009 | 8,031 | 10,868 | 5,738 | 13,161 |
| 2010 | 8,231 | 11,517 | 6,129 | 13,619 |
| 2011 | 9,858 | 11,248 | 7,695 | 13,411 |
| 2012 | 9,634 | 11,123 | 8,259 | 12,498 |
| 2013 | 9,870 | 11,118 | 8,915 | 12,073 |
| 2014 | 9,486 | 11,945 | 9,344 | 12,087 |
| 2015 | 9,718 | 11,709 | 8,771 | 12,656 |
| 2016 | 9,572 | 11,936 | 8,675 | 12,833 |

U.S. SUPPLY OF EDIBLE FISHERY PRODUCTS, 2007-2016
(Round weight)

| Year | $\qquad$ | Imports | Exports | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | ---------------- Million pounds--------------- |  |  |  |
| 2007 | 7,490 | 10,763 | 5,761 | 12,492 |
| 2008 | 6,633 | 10,404 | 5,253 | 11,784 |
| 2009 | 6,198 | 10,439 | 4,760 | 11,877 |
| 2010 | 6,526 | 11,034 | 5,170 | 12,389 |
| 2011 | 7,909 | 10,823 | 6,602 | 12,130 |
| 2012 | 7,477 | 10,588 | 6,474 | 11,591 |
| 2013 | 8,043 | 10,529 | 7,066 | 11,506 |
| 2014 | 7,828 | 11,286 | 7,365 | 11,749 |
| 2015 | 7,750 | 11,098 | 6,936 | 11,912 |
| 2016 | 7,484 | 11,261 | 6,772 | 11,973 |

## U.S. SUPPLY OF INDUSTRIAL FISHERY PRODUCTS, 2007-2016

(Round weight)

| Year | Domestic Commercial Landings | Imports | Exports | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | ---------------- Million pounds--------------- |  |  |  |
| 2007 | 1,819 | 489 | 1,296 | 1,012 |
| 2008 | 1,692 | 471 | 1,100 | 1,063 |
| 2009 | 1,833 | 430 | 978 | 1,285 |
| 2010 | 1,705 | 483 | 959 | 1,229 |
| 2011 | 1,949 | 425 | 1,093 | 1,281 |
| 2012 | 2,157 | 535 | 1,785 | 907 |
| 2013 | 1,827 | 589 | 1,850 | 566 |
| 2014 | 1,658 | 659 | 1,979 | 338 |
| 2015 | 1,968 | 611 | 1,835 | 744 |
| 2016 | 2,088 | 675 | 1,903 | 860 |

U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 2015 and 2016

| Item | Domestic Commercial landings |  | Imports |  | Exports |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 |
|  |  |  |  |  |  |  |  |  |
| Edible |  |  |  |  |  |  |  |  |
| Finfish | 6,621,028 | 6,392,630 | 7,240,872 | 7,319,100 | 6,348,030 | 6,283,815 | 7,513,870 | 7,427,915 |
| Shellfish, et al. | 1,129,044 | 1,091,866 | 3,856,938 | 3,941,982 | 587,994 | 487,996 | 4,397,988 | 4,545,852 |
| Subtotal | 7,750,072 | 7,484,496 | 11,097,810 | 11,261,082 | 6,936,024 | 6,771,811 | 11,911,858 | 11,973,767 |
|  |  |  |  |  |  |  |  |  |
| Industrial |  |  |  |  |  |  |  |  |
| Finfish | 1,961,584 | 2,050,183 | 611,053 | 674,893 | 1,835,123 | 1,903,333 | 737,514 | 821,743 |
| Shellfish, et al. | 5,971 | 37,359 | (1) | (1) | (1) | (1) | 5,971 | 37,359 |
| Subtotal | 1,967,555 | 2,087,542 | 611,053 | 674,893 | 1,835,123 | 1,903,333 | 743,485 | 859,102 |
|  |  |  |  |  |  |  |  |  |
| Total: |  |  |  |  |  |  |  |  |
| Finfish | 8,582,612 | 8,442,813 | 7,851,925 | 7,993,993 | 8,183,153 | 8,187,149 | 8,251,384 | 8,249,658 |
| Shellfish, et al. | 1,135,015 | 1,129,225 | 3,856,938 | 3,941,982 | 587,994 | 487,996 | 4,403,959 | 4,583,211 |
| Grand Total | 9,717,627 | 9,572,038 | 11,708,863 | 11,935,975 | 8,771,147 | 8,675,145 | 12,655,343 | 12,832,869 |

Note: Total landings shown in this table may not agree with landings reported in other tables due to rounding.
U.S. SUPPLY OF ALL FILLETS AND STEAKS, 2007-2016 (edible weight)

| Year | U.S. Production <br> (1) | Imports | Total | Exports | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 632,196 | 1,255,476 | 1,887,672 | 324,237 | 1,563,435 |
| 2008 | 655,604 | 1,255,249 | 1,910,853 | 308,119 | 1,602,734 |
| 2009 | 511,389 | 1,250,960 | 1,762,349 | 316,308 | 1,446,041 |
| 2010 | 584,563 | 1,326,331 | 1,9010,894 | 304,413 | 1,606,481 |
| 2011 | 774,666 | 1,370,445 | 2,145,111 | 515,724 | 1,629,387 |
| 2012 | 691,764 | 1,467,223 | 2,158,987 | 318,111 | 1,840,876 |
| 2013 | 753,123 | 1,538,357 | 2,291,480 | 373,512 | 1,917,968 |
| 2014 | 822,030 | 1,576,748 | 2,398,778 | 408,710 | 1,990,068 |
| 2015 | 724,590 | 1,593,436 | 2,318,026 | 381,305 | 1,936,721 |
| 2016 | 749,820 | 1,602,883 | 2,352,703 | 391,742 | 1,960,961 |

(1) Includes fillets used to produce blocks.
U.S. Supply of Fillets and Steaks, 2007-2016

U.S. SUPPLY OF GROUNDFISH FILLETS AND STEAKS, 2007-2016 (edible weight)

| Year | U.S. Production <br> (1) | Imports | Total | Exports (2) | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 483,267 | 215,350 | 698,617 | 261,743 | 436,874 |
| 2008 | 471,758 | 198,405 | 670,163 | 222,398 | 447,765 |
| 2009 | 367,572 | 205,314 | 572,886 | 209,596 | 363,290 |
| 2010 | 396,078 | 214,803 | 610,881 | 199,966 | 410,915 |
| 2011 | 605,292 | 235,354 | 840,646 | 275,636 | 565,010 |
| 2012 | 516,727 | 230,972 | 747,699 | 235,967 | 511,732 |
| 2013 | 601,315 | 245,427 | 846,742 | 292,509 | 554,234 |
| 2014 | 627,159 | 236,609 | 863,768 | 336,241 | 527,527 |
| 2015 | 568,029 | 222,435 | 790,464 | 303,781 | 486,683 |
| 2016 | 593,251 | 299,453 | 892,704 | 315,593 | 577,111 |

[^12]U.S. SUPPLY OF FRESH AND FROZEN TUNA, 2007-2016 (round weight)

| Year | U.S. Commercial Landings (1) |  |  | Imports (2) |  |  | Exports Total | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For canning | Other | Total | For Canning | Other | Total |  |  |
|  |  |  |  |  |  |  |  |  |
| 2007 | 124,366 | 84,138 | 208,504 | 450,251 | 223,750 | 674,001 | 39,266 | 843,239 |
| 2008 | 176,456 | 122,300 | 298,756 | 430,185 | 151,939 | 582,124 | 40,720 | 840,160 |
| 2009 | 125,176 | 314,050 | 439,226 | 392,160 | 165,728 | 557,888 | 45,978 | 951,136 |
| 2010 | 68,936 | 461,972 | 530,908 | 433,475 | 304,366 | 737,841 | 43,426 | 1,225,323 |
| 2011 | 95,232 | 405,443 | 500,675 | 370,180 | 187,754 | 557,934 | 42,488 | 1,016,121 |
| 2012 | 136,680 | 484,800 | 621,480 | 399,830 | 212,879 | 612,709 | 65,469 | 1,168,720 |
| 2013 | 132,374 | 435,666 | 568,040 | 444,342 | 165,229 | 609,571 | 46,507 | 1,131,104 |
| 2014 | 169,074 | 533,297 | 702,371 | 459,517 | 188,218 | 647,735 | 38,839 | 1,311,267 |
| 2015 | 161,428 | 442,801 | 604,229 | 454,219 | 209,488 | 663,707 | 43,349 | 1,224,587 |
| 2016 | 173,454 | 301,033 | 474,487 | 399,291 | 248,681 | 647,972 | 44,528 | 1,077,931 |

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

## U.S. Supply of Fresh and Frozen Tuna, 2007-2016


U.S. SUPPLY OF FRESH AND FROZEN SALMON, 2007-2016 (round weight)

| Year | U.S. Commercial Landings |  |  | Imports Total | Exports Total | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For Canning | Other | Total |  |  |  |
|  |  |  |  |  |  |  |
| 2007 | 279,560 | 605,423 | 884,983 | 835,675 | 392,833 | 1,327,825 |
| 2008 | 189,860 | 468,482 | 658,342 | 835,675 | 383,841 | 1,110,176 |
| 2009 | 216,960 | 488,242 | 705,202 | 816,027 | 350,420 | 1,170,809 |
| 2010 | 223,345 | 564,395 | 787,740 | 783,370 | 428,024 | 1,143,086 |
| 2011 | 225,057 | 555,031 | 780,088 | 826,115 | 441,683 | 1,164,520 |
| 2012 | 182,987 | 452,818 | 635,805 | 1,013,010 | 381,181 | 1,267,634 |
| 2013 | 308,729 | 760,341 | 1,069,070 | 1,027,823 | 555,017 | 1,541,877 |
| 2014 | 136,586 | 583,615 | 720,201 | 1,158,950 | 484,204 | 1,394,947 |
| 2015 | 255,784 | 810,263 | 1,066,047 | 1,245,408 | 605,761 | 1,705,694 |
| 2016 | 81,394 | 479,642 | 561,036 | 1,269,733 | 463,739 | 1,367,030 |

U.S. SUPPLY OF CANNED SALMON, 2007-2016 (canned weight)

| Year | U.S. Pack | Imports | Total | Exports | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 142,449 | 22,289 | 164,738 | 114,203 | 50,535 |
| 2008 | 123,930 | 19,749 | 143,679 | 117,876 | 25,803 |
| 2009 | 141,917 | 22,789 | 164,706 | 97,342 | 67,364 |
| 2010 | 146,430 | 17,048 | 163,478 | 90,662 | 72,816 |
| 2011 | 147,699 | 14,290 | 161,989 | 112,024 | 49,965 |
| 2012 | 120,022 | 16,043 | 136,065 | 91,006 | 45,059 |
| 2013 | 202,752 | 25,580 | 228,332 | 100,472 | 127,860 |
| 2014 | 89,371 | 21,021 | 110,392 | 94,781 | 15,611 |
| 2015 | 167,643 | 19,771 | 187,414 | 86,703 | 100,711 |
| 2016 | 52,030 | 18,916 | 70,946 | 82,088 | $(11,142)$ |

Our method of calculating canned salmon supply does not incorprate annual beginning and ending warehouse stock. Because of the biennial nature of the pink salmon fishery some salmon canned in one year may be exported in a following year. The negative value for total salmon supply this year is a result of this interannnual variation.
U.S. SUPPLY OF CANNED TUNA, 2007-2016 (canned weight)

| Year | U.S. Pack | Imports | Total | Exports | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 436,297 | 378,457 | 814,754 | 3,128 | 811,626 |
| 2008 | 473,941 | 377,776 | 851,717 | 3,743 | 847,974 |
| 2009 | 369,231 | 397,981 | 767,212 | 4,969 | 762,243 |
| 2010 | 395,449 | 442,360 | 837,809 | 3,946 | 833,862 |
| 2011 | 384,904 | 412,696 | 797,600 | 4,210 | 793,390 |
| 2012 | 387,022 | 353,765 | 740,787 | 5,822 | 734,965 |
| 2013 | 383,565 | 347,392 | 730,957 | 5,443 | 725,514 |
| 2014 | 390,993 | 342,105 | 733,098 | 5,020 | 728,078 |
| 2015 | 399,866 | 313,373 | 713,239 | 9,325 | 703,914 |
| 2016 | 382,865 | 292,326 | 675,191 | 4,351 | 670,840 |

U.S. SUPPLY OF KING CRAB, 2007-2016 (round weight)

| Year | U.S. Commercial Landings | Imports (1) | Total | Exports (1) | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 25,939 | 124,503 | 150,442 | 16,880 | 133,562 |
| 2008 | 27,208 | 64,409 | 91,617 | 20,977 | 70,640 |
| 2009 | 22,391 | 64,205 | 86,596 | 24,504 | 62,092 |
| 2010 | 24,042 | 42,589 | 66,631 | 22,555 | 44,076 |
| 2011 | 17,003 | 40,163 | 57,166 | 21,846 | 35,320 |
| 2012 | 16,358 | 57,321 | 73,679 | 11,169 | 62,510 |
| 2013 | 15,434 | 50,647 | 66,081 | 12,581 | 53,500 |
| 2014 | 16,666 | 49,649 | 66,315 | 12,372 | 53,943 |
| 2015 | 17,532 | 45,909 | 63,441 | 10,695 | 52,747 |
| 2016 | 14,592 | 40,736 | 55,328 | 5,600 | 49,728 |

(1) Imports, exports, foreign exports were converted to round (live) weight by using these conversion factors: frozen, 1.75; meat, 4.50; and canned, 5.33 .
U.S. SUPPLY OF SNOW (TANNER) CRABS, 2007-2016 (round weight)

| Year | U.S. Commercial Landings | Imports (1) | Total | Exports (2) | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 38,283 | 182,350 | 220,633 | 12,369 | 208,264 |
| 2008 | 66,078 | 160,834 | 226,912 | 30,220 | 196,692 |
| 2009 | 61,530 | 195,030 | 256,560 | 32,751 | 223,809 |
| 2010 | 50,473 | 172,481 | 222,954 | 26,405 | 196,549 |
| 2011 | 60,017 | 160,832 | 220,849 | 43,651 | 177,198 |
| 2012 | 92,991 | 177,010 | 270,001 | 68,015 | 201,986 |
| 2013 | 68,937 | 206,192 | 275,129 | 46,069 | 229,060 |
| 2014 | 63,103 | 170,994 | 234,092 | 39,690 | 194,395 |
| 2015 | 100,095 | 184,049 | 284,144 | 45,087 | 239,056 |
| 2016 | 51,345 | 186,431 | 237,776 | 32,970 | 204,806 |

(1) Converted to round (live) weight by multiplying fresh and frozen by 1.50; meat, 4.50; and canned, 5.00.
(2) Domestic merchandise converted to round (live) weight by multiplying frozen weight by 2.13 (believed to be mostly sections); meat, 4.50; and canned, 5.33. Foreign exports converted using the same factors as imports.
U.S. SUPPLY OF CANNED CRABMEAT, 2007-2016 (canned weight)

| Year | U.S. Pack | Imports | Total | Exports | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 5 | 67,306 | 67,311 | 1,265 | 66,046 |
| 2008 | 20 | 70,064 | 70,084 | 2,504 | 67,580 |
| 2009 | 11 | 60,957 | 60,968 | 2,191 | 58,777 |
| 2010 | 699 | 67,979 | 68,678 | 2,952 | 65,726 |
| 2011 | 226 | 66,167 | 66,393 | 3,508 | 62,885 |
| 2012 | 260 | 71,184 | 71,444 | 4,120 | 67,324 |
| 2013 | 60 | 64,088 | 64,148 | 3,137 | 61,011 |
| 2014 | 63 | 64,235 | 64,298 | 2,542 | 61,756 |
| 2015 | 43 | 65,302 | 65,345 | 1,865 | 63,480 |
| 2016 | 180 | 62,331 | 62,511 | 1,971 | 60,540 |

## Supply of Fishery Products

U.S. SUPPLY OF AMERICAN LOBSTERS, 2007-2016 (Round weight)

| Year | U.S. Commercial Landings | Imports (1) | Total | Exports (2) | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 81,303 | 106,214 | 187,517 | 59,018 | 128,499 |
| 2008 | 81,835 | 118,545 | 200,380 | 56,843 | 143,537 |
| 2009 | 96,890 | 114,794 | 211,684 | 52,979 | 158,705 |
| 2010 | 115,433 | 141,993 | 257,426 | 71,398 | 186,028 |
| 2011 | 126,318 | 148,246 | 274,564 | 88,375 | 186,190 |
| 2012 | 149,550 | 167,832 | 317,382 | 106,463 | 210,919 |
| 2013 | 149,323 | 168,446 | 317,769 | 105,880 | 211,889 |
| 2014 | 147,786 | 179,987 | 327,773 | 117,574 | 210,199 |
| 2015 | 145,921 | 189,503 | 335,424 | 113,517 | 221,907 |
| 2016 | 158,561 | 193,918 | 352,479 | 122,351 | 230,128 |

(1) Only imports from Canada and St. Pierre and Miquelon are considered American lobster and were converted to round (live) weight by using these conversion factors: 1.00 , whole; 4.50 , meat; and 4.64 , canned.
(2) Domestic exports converted to live weight by 1.00 , whole; 4.00 , meat; and 4.50 , canned. Foreign exports converted using import factors.
U.S. Supply of Lobster, 2007-2016

U.S. SUPPLY OF SPINY LOBSTERS, 2007-2016 (Round weight)

| Year | U.S. Commercial Landings | Imports (1) | Total | Exports (2) | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 4,426 | 86,688 | 91,114 | 12,723 | 78,391 |
| 2008 | 4,196 | 88,131 | 92,327 | 9,551 | 82,776 |
| 2009 | 4,729 | 67,406 | 72,135 | 14,845 | 57,290 |
| 2010 | 6,371 | 79,927 | 86,298 | 26,760 | 59,538 |
| 2011 | 6,355 | 67,690 | 74,045 | 19,751 | 54,295 |
| 2012 | 4,808 | 61,530 | 66,338 | 15,119 | 51,220 |
| 2013 | 6,172 | 63,638 | 69,810 | 39,097 | 30,714 |
| 2014 | 4,778 | 56,526 | 61,304 | 48,815 | 12,489 |
| 2015 | 6,520 | 59,144 | 65,664 | 52,744 | 12,920 |
| 2016 | 5,861 | 52,523 | 58,384 | 30,721 | 27,664 |

(1) Imports were converted to round (live) weight by using these conversion factors: 1.00, whole; 3.00, tails; 4.35, other; and 4.50, canned.
(2) Domestic exports converted to round weight by using: 1.00 , whole; 3.00 , tails; 4.00 , other; and 4.50 canned. Foreign exports converted using import factors.
U.S. SUPPLY OF CLAMS, 2007-2016 (meat weight)

| Year | U.S. Commercial <br> Landings (1) | Imports (2) | Total | Exports | Total supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 115,848 | 19,423 | 135,271 | 7,833 | 127,438 |
| 2008 | 107,772 | 21,008 | 128,780 | 8,065 | 120,715 |
| 2009 | 101,137 | 21,875 | 123,012 | 7,243 | 115,769 |
| 2010 | 88,891 | 22,941 | 111,832 | 6,675 | 105,157 |
| 2011 | 86,449 | 25,260 | 111,709 | 4,318 | 107,391 |
| 2012 | 90,563 | 25,006 | 115,569 | 6,961 | 108,608 |
| 2013 | 91,090 | 27,995 | 119,085 | 8,338 | 110,747 |
| 2014 | 90,744 | 20,831 | 111,575 | 2,815 | 108,760 |
| 2015 | 86,096 | 22,299 | 108,395 | 2,916 | 105,480 |
| 2016 | 88,886 | 22,189 | 111,075 | 2,189 | 108,886 |

(1) For species breakout see the "U.S. Domestic Landings by Species" table in the U.S. Commercial Landings section.
(2) Imports and exports were converted to meat weight by using these conversion factors: 0.40 in shell or shucked; 0.30 , canned chowder and juice; and 0.93 , other.
U.S. SUPPLY OF OYSTERS, 2007-2016 (meat weight)

| Year | U.S. Commercial Landings | Imports (1) | Total | Exports | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - |  |  |  |  |
| 2007 | 37,755 | 39,682 | 77,437 | 7,856 | 69,581 |
| 2008 | 30,162 | 32,563 | 62,725 | 9,017 | 53,708 |
| 2009 | 35,571 | 31,745 | 67,316 | 8,604 | 58,712 |
| 2010 | 28,080 | 34,656 | 62,736 | 5,922 | 56,814 |
| 2011 | 28,504 | 42,614 | 71,118 | 7,989 | 63,129 |
| 2012 | 33,087 | 27,277 | 60,364 | 6,253 | 54,111 |
| 2013 | 35,399 | 30,545 | 65,944 | 5,976 | 59,968 |
| 2014 | 34,135 | 30,153 | 66,889 | 6,436 | 58,352 |
| 2015 | 27,535 | 34,883 | 65,766 | 6,380 | 57,437 |
| 2016 | 33,295 | 36,618 | 69,913 | 5,844 | 64,069 |

U.S. SUPPLY OF SCALLOPS, 2007-2016 (meat weight)

(1) For species breakout see the "U.S. Domestic Landings by Species" table in the U.S. Commercial Landings section.

## Supply of Fishery Products

U.S. SUPPLY OF ALL FORMS OF SHRIMP, 2007-2016 (head-off weight)

| Year | $\begin{aligned} & \text { U.S. Commercial } \\ & \text { Landings (1) } \end{aligned}$ | Imports (2) | Total | Exports (3) | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 174,623 | 1,630,531 | 1,805,154 | 61,681 | 1,743,473 |
| 2008 | 158,725 | 1,624,438 | 1,783,163 | 61,365 | 1,721,798 |
| 2009 | 187,062 | 1,611,019 | 1,798,081 | 52,438 | 1,745,643 |
| 2010 | 159,355 | 1,625,165 | 1,784,520 | 45,022 | 1,739,498 |
| 2011 | 192,033 | 1,675,412 | 1,867,445 | 57,300 | 1,810,144 |
| 2012 | 186,073 | 1,500,771 | 1,686,844 | 51,359 | 1,635,484 |
| 2013 | 173,754 | 1,440,126 | 1,613,880 | 48,994 | 1,564,886 |
| 2014 | 180,245 | 1,609,059 | 1,789,304 | 56,023 | 1,733,281 |
| 2015 | 199,476 | 1,664,556 | 1,864,032 | 67,348 | 1,796,684 |
| 2016 | 167,023 | 1,701,002 | 1,868,025 | 48,659 | 1,819,366 |

(1) Commercial landings were converted to heads-off weight by using these conversion factors: South Atlantic and Gulf, 0.629; and New England, Pacific and other, 0.57 .
(2) Imports were converted to heads-off weight by using these conversion factors: breaded, 0.63 ; shell-on, 1.00; peeled raw, 1.28; canned, 2.52 ; and other, 2.40 .
(3) Exports were converted to heads-off weight by using these conversion factors: domestic fresh and frozen, 1.18; canned, 2.02; other, 2.40; foreign--fresh and frozen, 1.00; canned, 2.52; and other, 2.40.
U.S. Supply of Shrimp, 2007-2016

U.S. SUPPLY OF FISH MEAL, 2007-2016 (product weight)

| Year | U.S. Production (1) | Imports | Total | Exports | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 563,221 | 87,364 | 650,585 | 231,388 | 419,197 |
| 2008 | 492,828 | 84,042 | 576,870 | 196,483 | 380,387 |
| 2009 | 472,805 | 76,731 | 549,536 | 174,613 | 374,923 |
| 2010 | 487,692 | 86,251 | 573,943 | 171,240 | 402,702 |
| 2011 | 620,823 | 75,858 | 696,681 | 195,017 | 501,664 |
| 2012 | 585,565 | 95,532 | 681,097 | 318,803 | 362,294 |
| 2013 | 508,056 | 105,192 | 613,248 | 330,280 | 282,969 |
| 2014 | 515,000 | 117,653 | 632,653 | 353,325 | 279,328 |
| 2015 | 610,362 | 109,117 | 719,479 | 327,701 | 391,778 |
| 2016 | 559,132 | 120,517 | 679,649 | 339,881 | 339,768 |

(1) Includes shellfish meal.
U.S. SUPPLY OF FISH OILS, 2007-2016 (product weight)

| Year | U.S. Production | Imports | Total | Exports | Total Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2007 | 152,205 | 55,144 | 207,349 | 123,193 | 84,156 |
| 2008 | 190,023 | 53,779 | 243,802 | 127,843 | 115,959 |
| 2009 | 168,157 | 34,341 | 202,498 | 111,938 | 90,560 |
| 2010 | 136,362 | 45,061 | 181,423 | 174,985 | 6,437 |
| 2011 | 143,171 | 48,880 | 192,051 | 149,071 | 42,981 |
| 2012 | 115,090 | 52,055 | 167,145 | 92,983 | 74,162 |
| 2013 | 175,876 | 53,040 | 228,916 | 151,650 | 77,266 |
| 2014 | 139,005 | 41,354 | 180,359 | 177,232 | 3,127 |
| 2015 | 139,951 | 44,780 | 184,731 | 121,077 | 63,654 |
| 2016 | 177,459 | 46,749 | 224,208 | 166,595 | 57,613 |

U.S. Supply of Fish Meal, 2007-2016

U.S. Supply of Fish Oils, 2007-2016


Freshywilo Black

- COD


## Per Capita

 Consumption
# FRESH Leal <br> RAINBOW trout 

\$ $/ .77 \mathrm{lb}$.

(1)

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

Estimated U.S. per capita consumption of fish and shellfish was 14.9 pounds (edible meat) in 2016. This total is a decrease of 0.6 pounds from the 15.5 pounds consumed in 2015, primarily due to small decreases in the consumption of fresh and frozen seafood and canned seafood. This overall decrease follows three years of increases in total consumption. The current level of fresh and frozen consumption of 11.3 pounds is a 0.2 pound decrease from the 2015 figure but is still higher than most recent years. The decrease in consumption of canned seafood products was driven by a decrease in canned salmon production in 2016. The model used to calculate consumption does not take into account inventories of products on hand at the beginning and end of the year, so all production is assumed to be consumed in the year it is produced. Because the primary salmon that is canned, pink salmon, generally has a large harvest every other year, small fluctuations in the consumption of canned products will result. The pink salmon harvest was particularly small in 2016 leading to a low consumption figure. It is reasonable to assume that some salmon canned in 2015 was actually consumed in 2016. It may be better to combine consecutive years to derive a more realistic figure of canned salmon consumption.

Of the per capita consumption of fresh and frozen products, fresh and frozen finfish accounted for 6.0 pounds, while fresh and frozen shellfish consumption was 5.3 pounds per capita. Consumption of canned fishery products was 3.3 pounds per capita in 2016, down 0.4 pounds from 2015. Cured fish accounted for 0.3 pounds per capita, the same as in previous years.

NOAA calculates the percent of edible seafood consumption that is made up of imports by converting all imports, exports, domestic landings, and domestic processing into a common, standard edible meat weight. Numerous conversion factors are used to calculate this edible meat weight standard, and the accuracy and variability of these factors are likely to effect the overall calculation. In addition, this figure may include a substantial amount of domestic catch that was exported for further processing and returned to the United States as an import in a processed form. This measure has been rising in recent years and reflects the increase in imported seafood. Since 2010 the number has been greater than 85 percent each year and the corresponding figure for 2016 is 95 percent. However, NOAA Fisheries believes that the existing model may overestimate this percentage. Therefore, while seafood imports are rising, the exact percentage of consumption from imports is difficult to know. We plan to investigate better ways to report consumption and indicate the Nation's dependence on imported seafood.

## PER CAPITA USE

Per capita use 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. The per capita use of all edible and industrial fishery products in 2016 was 66.5 pounds, down 0.1 pounds compared with 2015.

## WORLD CONSUMPTION

The FAO calculation for apparent consumption is also based on a disappearance model, but with slightly different assumptions and based on a round-weight standard. The 3 -year average considers a country's landings, imports, and exports. The average data from 2011 to 2013, and 2012 population figures, indicate that the U.S. now ranks as the second largest consumer of seafood in the world after China.

## Per Capita Consumption | U.S. Consumption

Annual per capita consumption of seafood products represents the pounds of edible meat consumed from domestically caught and imported fish and shellfish adjusted for exports, divided by the civilian resident population of the United States as of July 1 of each year.
U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1910-2016

(1) Resident population is used for 1910 and 1920 and civilian resident population is used since 1930.
(2) Fresh and frozen fish consumption for 1910 and 1920 is estimated. Beginning in 1973, data include consumption of cultivated catfish.
(3) Canned fish consumption for 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 and 1920 is estimated.
(5) The use of beginning and ending inventories was discontinued as of 2003.
*Record years: Fresh \& Frozen -- 12.3,2006; Canned--5.8, 1936; Cured--4.0, 1909.

## Per Capita Consumption | U.S. Consumption

U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1985-2016

| Year | Salmon | Sardines | Tuna | Shellfish | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 1985 | 0.5 | 0.3 | 3.3 | 0.5 | 0.4 | 5.0 |
| 1986 | 0.5 | 0.3 | 3.6 | 0.5 | 0.5 | 5.4 |
| 1987 | 0.4 | 0.3 | 3.5 | 0.5 | 0.5 | 5.2 |
| 1988 | 0.3 | 0.3 | 3.6 | 0.4 | 0.3 | 4.9 |
| 1989 | 0.3 | 0.3 | 3.9 | 0.4 | 0.2 | 5.1 |
|  |  |  |  |  |  |  |
| 1990 | 0.4 | 0.3 | 3.7 | 0.3 | 0.4 | 5.1 |
| 1991 | 0.5 | 0.2 | 3.6 | 0.4 | 0.2 | 4.9 |
| 1992 | 0.5 | 0.2 | 3.5 | 0.3 | 0.1 | 4.6 |
| 1993 | 0.4 | 0.2 | 3.5 | 0.3 | 0.1 | 4.5 |
| 1994 | 0.4 | 0.2 | 3.3 | 0.3 | 0.3 | 4.5 |
| 1995 | 0.5 | 0.2 | 3.4 | 0.3 | 0.3 | 4.7 |
| 1996 | 0.5 | 0.2 | 3.2 | 0.3 | 0.3 | 4.5 |
| 1997 | 0.4 | 0.2 | 3.1 | 0.3 | 0.4 | 4.4 |
| 1998 | 0.3 | 0.2 | 3.4 | 0.3 | 0.2 | 4.4 |
| 1999 | 0.3 | 0.2 | 3.5 | 0.4 | 0.3 | 4.7 |
|  |  |  |  |  |  |  |
| 2000 | 0.3 | 0.2 | 3.5 | 0.3 | 0.4 | 4.7 |
| 2001 | 0.4 | 0.2 | 2.9 | 0.3 | 0.4 | 4.2 |
| 2002 | 0.5 | 0.1 | 3.1 | 0.3 | 0.3 | 4.3 |
| 2003 | 0.4 | 0.1 | 3.4 | 0.4 | 0.3 | 4.6 |
| 2004 | 0.3 | 0.1 | 3.3 | 0.4 | 0.4 | 4.5 |
| 2005 | 0.4 | 0.1 | 3.1 | 0.4 | 0.3 | 4.3 |
| 2006 | 0.2 | 0.2 | 2.9 | 0.4 | 0.2 | 3.9 |
| 2007 | 0.3 | 0.2 | 2.7 | 0.4 | 0.3 | 3.9 |
| 2008 | 0.1 | 0.2 | 2.8 | 0.4 | 0.4 | 3.9 |
| 2009 | 0.2 | 0.2 | 2.5 | 0.4 | 0.4 | 3.7 |
|  |  |  |  |  |  |  |
| 2010 | 0.2 | 0.2 | 2.7 | 0.4 | 0.4 | 3.9 |
| 2011 | 0.2 | 0.2 | 2.6 | 0.4 | 0.4 | 3.8 |
| 2012 | 0.2 | 0.2 | 2.4 | 0.4 | 0.4 | 3.6 |
| 2013 | 0.4 | 0.2 | 2.3 | 0.4 | 0.4 | 3.7 |
| 2014 | 0.1 | 0.2 | 2.3 | 0.4 | 0.4 | 3.4 |
| 2015 | 0.3 | 0.2 | 2.2 | 0.5 | 0.5 | 3.7 |
| 2016 | 0.0 | 0.2 | 2.1 | 0.5 | 0.5 | 3.3 |

U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1985-2016

| Year | Fillets and Steaks (1) | Sticks and Portions | Shrimp, All Preparations |
| :---: | :---: | :---: | :---: |
| Year |  |  |  |
| 1985 | 3.2 | 1.8 | 2.0 |
| 1986 | 3.4 | 1.8 | 2.2 |
| 1987 | 3.6 | 1.7 | 2.4 |
| 1988 | 3.2 | 1.5 | 2.4 |
| 1989 | 3.1 | 1.5 | 2.3 |
|  |  |  |  |
| 1990 | 3.1 | 1.5 | 2.2 |
| 1991 | 3.0 | 1.2 | 2.4 |
| 1992 | 2.9 | 0.9 | 2.5 |
| 1993 | 2.9 | 1.0 | 2.5 |
| 1994 | 3.1 | 0.9 | 2.6 |
| 1995 | 2.9 | 1.2 | 2.5 |
| 1996 | 3.0 | 1.0 | 2.5 |
| 1997 | 3.0 | 1.0 | 2.7 |
| 1998 | 3.2 | 0.9 | 2.8 |
| 1999 | 3.2 | 1.0 | 3.0 |
|  |  |  |  |
| 2000 | 3.6 | 0.9 | 3.2 |
| 2001 | 3.7 | 0.8 | 3.4 |
| 2002 | 4.1 | 0.8 | 3.7 |
| 2003 | 4.3 | 0.7 | 4.0 |
| 2004 | 4.6 | 0.7 | 4.2 |
| 2005 | 5.0 | 0.9 | 4.1 |
| 2006 | *5.2 | 0.9 | *4.4 |
| 2007 | 5.0 | 0.9 | 4.1 |
| 2008 | 4.8 | 1.0 | 4.1 |
| 2009 | 4.6 | 0.7 | 4.1 |
|  |  |  |  |
| 2010 | 5.0 | 0.9 | 4.0 |
| 2011 | 5.0 | 0.9 | 4.2 |
| 2012 | 5.6 | 0.7 | 3.8 |
| 2013 | 5.9 | 0.6 | 3.6 |
| 2014 | 5.9 | 0.6 | 4.0 |
| 2015 | 5.9 | 0.7 | 4.0 |
| 2016 | 5.8 | 0.5 | 4.1 |

[^13]PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 2011-2013 AVERAGE

| Region and Country | Estimated Live Weight Equivalent |  |
| :---: | :---: | :---: |
|  | Kilograms | Pounds |
| North America: |  |  |
| Bermuda | 45.2 | 99.6 |
| Canada | 22.4 | 49.3 |
| Greenland | 86.4 | 190.5 |
| Saint Pierre \& Miquelon | 73.0 | 160.9 |
| United States | 21.4 | 47.2 |
| Caribbean: |  |  |
| Anguilla | 49.6 | 109.4 |
| Antigua and Barbuda | 56.0 | 123.5 |
| Aruba | 47.1 | 103.9 |
| Bahamas | 29.0 | 63.9 |
| Barbados | 39.5 | 87.0 |
| British Virgin Islands | 28.6 | 63.0 |
| Cayman Islands | 16.6 | 36.5 |
| Cuba | 5.5 | 12.2 |
| Dominica | 21.4 | 47.3 |
| Dominican Republic | 10.1 | 22.3 |
| Grenada | 28.8 | 63.4 |
| Guadeloupe | 21.2 | 46.7 |
| Haiti | 4.5 | 9.9 |
| Jamaica | 26.2 | 57.9 |
| Martinique | 12.2 | 27.0 |
| Montserrat | 33.7 | 74.2 |
| Puerto Rico | 0.4 | 0.8 |
| Saint Kitts \& Nevis | 35.2 | 77.6 |
| Saint Lucia | 24.6 | 54.2 |
| Saint Vincent | 18.3 | 40.3 |
| Trinidad \& Tobago | 24.1 | 53.2 |
| Turks \& Caicos | 49.1 | 108.1 |
| U.S. Virgin Islands | 5.7 | 12.6 |
| Latin America: |  |  |
| Argentina | 6.3 | 13.9 |
| Belize | 14.2 | 31.2 |
| Bolivia | 2.2 | 4.9 |
| Brazil | 9.6 | 21.2 |
| Chile | 13.7 | 30.2 |
| Colombia | 6.2 | 13.8 |
| Costa Rica | 13.1 | 28.9 |
| Ecuador | 8.5 | 18.6 |
| El Salvador | 7.0 | 15.5 |
| Falkland Islands | 42.4 | 93.5 |
| French Guiana | 16.3 | 36.0 |
| Guatemala | 2.5 | 5.4 |
| Guyana | 30.3 | 66.8 |
| Honduras | 4.0 | 8.7 |
| Mexico | 12.0 | 26.4 |
| Nicaragua | 5.4 | 11.9 |
| Panama | 13.8 | 30.4 |
| Paraguay | 3.9 | 8.5 |
| Peru | 21.4 | 47.2 |
| Suriname | 17.2 | 38.0 |
| Uruguay | 7.0 | 15.5 |
| Venezuela | 10.0 | 22.0 |
| Europe: |  |  |
| Albania | 5.2 | 11.5 |
| Armenia | 3.7 | 8.1 |
| Austria | 14.0 | 30.8 |
| Azerbaijan | 2.4 | 5.4 |

continued

| Region and Country | Estimated Live Weight Equivalent |  |
| :---: | :---: | :---: |
|  | Kilograms | Pounds |
| Belarus | 15.4 | 34.0 |
| Belgium | 25.5 | 56.2 |
| Bosnia-Herzegovina | 4.5 | 10.0 |
| Bulgaria | 6.2 | 13.6 |
| Croatia | 19.1 | 42.1 |
| Czech Republic | 8.8 | 19.3 |
| Denmark | 23.0 | 50.8 |
| Estonia | 13.1 | 28.8 |
| Faroe Islands | 86.5 | 190.7 |
| Finland | 35.6 | 78.5 |
| France | 34.0 | 75.0 |
| Georgia | 8.1 | 17.9 |
| Germany | 13.5 | 29.8 |
| Greece | 19.1 | 42.2 |
| Hungary | 5.1 | 11.3 |
| Iceland | 91.9 | 202.6 |
| Ireland | 21.1 | 46.5 |
| Italy | 25.8 | 56.9 |
| Kazakhstan | 5.0 | 11.0 |
| Kyrgyzstan | 2.5 | 5.6 |
| Latvia | 23.4 | 51.7 |
| Lithuania | 30.5 | 67.3 |
| Luxembourg | 33.5 | 73.9 |
| Macedonia | 5.5 | 12.1 |
| Malta | 31.9 | 70.2 |
| Moldova | 13.3 | 29.2 |
| Montenegro | 11.6 | 25.6 |
| Netherlands | 22.6 | 49.8 |
| Norway | 52.8 | 116.3 |
| Poland | 10.2 | 22.5 |
| Portugal | 54.1 | 119.3 |
| Romania | 5.2 | 11.4 |
| Russian Federation | 23.0 | 50.8 |
| Serbia | 6.9 | 15.2 |
| Slovakia | 8.0 | 17.7 |
| Slovenia | 10.6 | 23.4 |
| Spain | 41.9 | 92.4 |
| Sweden | 31.3 | 69.1 |
| Switzerland | 17.6 | 38.8 |
| Tajikistan | 0.5 | 1.1 |
| Turkmenistan | 3.7 | 8.2 |
| Ukraine | 15.2 | 33.4 |
| United Kingdom | 20.5 | 45.1 |
| Uzbekistan | 0.7 | 1.6 |
| Near East: |  |  |
| Afghanistan | 0.1 | 0.2 |
| Bahrain | 11.7 | 25.8 |
| Cyprus | 22.1 | 48.8 |
| Egypt | 22.2 | 49.0 |
| Iran | 9.6 | 21.1 |
| Iraq | 3.3 | 7.2 |
| Israel | 22.7 | 50.0 |
| Jordan | 6.5 | 14.3 |
| Kuwait | 14.5 | 31.9 |
| Lebanon | 11.3 | 24.8 |
| Oman | 27.6 | 60.9 |
| Qatar | 23.0 | 50.7 |
| Saudi Arabia | 12.6 | 27.8 |
| Syria | 2.8 | 6.1 |
| Turkey | 6.3 | 13.9 |
| United Arab Emirates | 25.0 | 55.2 |
| Yemen | 4.3 | 9.6 |

continued

## PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 2011-2013 AVERAGE

| Region and Country | Estimated Live Weight Equivalent |  |
| :---: | :---: | :---: |
|  | Kilograms | Pounds |
| Far East: |  |  |
| Bangladesh | 20.5 | 45.2 |
| Bhutan | 5.9 | 13.0 |
| Brunei | 42.0 | 92.6 |
| Burma | 57.9 | 127.7 |
| Cambodia | 40.9 | 90.1 |
| China | 36.1 | 79.5 |
| China - Hong Kong | 68.2 | 150.4 |
| China - Macao | 56.4 | 124.3 |
| India | 5.7 | 12.7 |
| Indonesia | 30.1 | 66.3 |
| Japan | 50.8 | 112.1 |
| Laos | 21.2 | 46.7 |
| Malaysia | 58.9 | 129.7 |
| Maldives | 188.2 | 414.9 |
| Mongolia | 0.9 | 2.0 |
| Nepal | 2.3 | 5.0 |
| North Korea | 10.2 | 22.6 |
| Pakistan | 1.9 | 4.2 |
| Philippines | 31.3 | 69.0 |
| Singapore | 49.8 | 109.9 |
| South Korea | 57.1 | 125.8 |
| Sri Lanka | 29.2 | 64.3 |
| Taiwan | 34.0 | 75.0 |
| Thailand | 26.7 | 58.9 |
| Timor-Leste | 6.4 | 14.1 |
| Vietnam | 35.0 | 77.2 |
| Africa: |  |  |
| Algeria | 4.0 | 8.8 |
| Angola | 18.5 | 40.8 |
| Benin | 13.1 | 28.9 |
| Botswana | 4.0 | 8.8 |
| Burkina Faso | 6.9 | 15.1 |
| Burundi | 1.8 | 3.9 |
| Cameroon | 16.1 | 35.5 |
| Cape Verde | 11.1 | 24.6 |
| Central African Republic | 8.5 | 18.8 |
| Chad | 8.5 | 18.8 |
| Comoros | 15.9 | 35.1 |
| Congo (Brazzaville) | 25.0 | 55.1 |
| Congo (Kinshasa) | 5.3 | 11.8 |
| Côte d'Ivoire | 16.9 | 37.2 |
| Djibouti | 3.5 | 7.7 |
| Equatorial Guinea | 24.6 | 54.3 |
| Eritrea | 0.6 | 1.3 |
| Ethiopia | 0.3 | 0.7 |
| Gabon | 35.0 | 77.1 |
| Gambia | 23.3 | 51.3 |
| Ghana | 26.3 | 58.1 |
| Guinea | 10.5 | 23.2 |
| Guinea-Bissau | 1.6 | 3.6 |
| Kenya | 4.1 | 9.1 |
| Lesotho | 1.5 | 3.4 |
| Liberia | 4.3 | 9.5 |
| Libya | 20.8 | 45.9 |
| Madagascar | 4.8 | 10.6 |
| Malawi | 7.1 | 15.6 |
| Mali | 7.5 | 16.6 |
| Mauritania | 8.2 | 18.1 |
| Mauritius | 23.2 | 51.1 |
| Morocco | 16.6 | 36.6 |

continued

| Region and Country | Estimated Live Weight Equivalent |  |
| :---: | :---: | :---: |
|  | Kilograms | Pounds |
| Mozambique | 9.3 | 20.6 |
| Namibia | 12.4 | 27.4 |
| Niger | 3.0 | 6.5 |
| Nigeria | 14.0 | 30.8 |
| Rwanda | 4.3 | 9.6 |
| Saint Helena | 71.5 | 157.7 |
| Sao Tome and Principe | 29.3 | 64.7 |
| Senegal | 23.9 | 52.6 |
| Seychelles | 57.4 | 126.5 |
| Sierra Leone | 33.3 | 73.4 |
| Somalia | 3.1 | 6.7 |
| South Africa | 6.5 | 14.3 |
| South Sudan | 3.3 | 7.4 |
| Sudan | 1.7 | 3.7 |
| Swaziland | 1.9 | 4.2 |
| Tanzania | 6.6 | 14.5 |
| Togo | 11.6 | 25.6 |
| Tunisia | 13.4 | 29.5 |
| Uganda | 12.9 | 28.5 |
| Zambia | 8.1 | 18.0 |
| Zimbabwe | 3.1 | 6.7 |
| Oceania: |  |  |
| American Samoa | 6.0 | 13.1 |
| Australia | 26.3 | 58.0 |
| Cook Islands | 59.0 | 130.1 |
| Fiji | 35.3 | 77.8 |
| French Polynesia | 48.1 | 106.0 |
| Kiribati | 76.1 | 167.8 |
| Marshall Islands | 18.2 | 40.0 |
| Micronesia | 48.5 | 106.9 |
| Nauru | 51.9 | 114.3 |
| New Caledonia | 27.9 | 61.5 |
| New Zealand | 25.0 | 55.2 |
| Palau | 59.8 | 131.8 |
| Papua New Guinea | 17.2 | 37.9 |
| Samoa | 48.4 | 106.8 |
| Solomon Islands | 36.0 | 79.5 |
| Tonga | 24.6 | 54.3 |
| Tuvalu | 48.3 | 106.4 |
| Vanuatu | 32.8 | 72.4 |
| Wallis \& Futuna | 64.1 | 141.3 |
| World | 19.4 | 42.8 |

Note: Data are preliminary and refer to per capita consumption of fish, crustaceans and mollusks.
Source: Food and Agriculture Organization of the United Nations (FAO)

## Per Capita Consumption

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 the beginning or ending stocks, defense purchases, or exports.

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

Per capita use is derived by using total population including U.S. Armed Forces overseas; per capita consumption is derived by using civilian resident population.
U.S. ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1970-2016 (1)


[^14]Industry Information

| Sector or Type of | Purchase of Fishery Inputs | Mark-up of fishery inputs | Total Mark-Up Within Sector | Value Added as Percent of Total Markup | Value Added Within Sector | Value of Sales by Sector | Value Added Contribution | Offshore Fleet \& Exported Fishery Products |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Activity | Thousand Dollars | Percentage of Fishery Inputs | Thousand Dollars | Percentage | Thousand Dollars | Thousand Dollars | Percentage of GNP <br> Contribution | Thousand Dollars |
| Domestic Harvest: |  |  |  |  |  |  |  |  |
| Edible |  | 100\% | 5,131,904 | 63\% | 3,253,229 | 5,106,376 | 7\% |  |
| Industrial |  | 100\% | 179,791 | 58\% | 105,155 | 179,791 | 0\% |  |
| Harvest not landed in U.S |  | 100\% | 276,910 | 69\% | 192,104 | 276,910 | 0\% | 276,910 |
|  |  |  |  |  |  |  |  |  |
| Imports, Unprocessed | 6,789,547 |  |  |  |  | 6,789,547 |  |  |
| Exports, Unprocessed |  |  |  |  |  |  |  | 1,873,058 |
| Primary Wholesale and Processing | 10,202,656 | 80\% | 8,154,970 | 60\% | 4,933,744 | 18,357,627 | 11\% |  |
| Imports, Processed | 12,924,795 |  | - |  |  | 12,924,795 |  |  |
| Exports, Processed |  |  | - | - |  |  |  | 3,729,152 |
| Secondary Wholesale and Processing: |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Edible | 27,506,693 | 63\% | 17,249,474 | 28\% | 4,837,363 | 44,756,167 | 10\% |  |
| Industrial | 46,577 | 63\% | 29,208 | 28\% | 8,191 | 75,785 | 0\% |  |
| Retail Trade from Food Service | 22,457,534 | 182\% | 40,963,912 | 70\% | 28,577,704 | 63,421,446 | 61\% |  |
| Retail Trade from Stores | 22,298,633 | 33\% | 7,452,712 | 64\% | 4,786,991 | 29,751,345 | 10\% |  |
| TOTAL DOCKSIDE VALUE OF EXPORTED FISHERY PRODUCTS (\& HARVEST NOT LANDED IN U.S. PORTS): |  |  |  |  |  |  |  | 5,879,120 |
| TOTAL U.S. VALUE ADDED ACTIVITY: |  |  |  |  | 46,694,481 |  | 100 |  |
| CONSUMERS EXPENDITURES (\& WHOLESALE PURCHASES OF INDUSTRIAL PRODUCTS) FOR FISHERY PRODUCTS: |  |  |  |  |  | 93,248,576 |  |  |

(1) Includes industrial products and landings by U.S.-flag vessels at U.S. ports, foreign ports, and transfers to internal water processing vessels. Note: The table reports the contribution of commercial marine fishing to the national economy as measured by margin, value added, and sales. These measures are consistent with the Bureau of the Census definitions.

Margin or mark-up is the difference between the price paid for the product by the consumer or wholesale purchaser and the dockside or wholesale value for an equivalent weight of the product. It is assumed that fishermen catch their fish without paying purchase price and therefore the entire dockside or ex-vessel price is considered margin. Value added is a measure of the factors added to the total worth of a product at each stage of the production process. It is defined as the gross receipts of firms minus the cost of purchased goods and services needed to fabricate the products. Gross National Product (GNP) is equal to the sum of the value added of all economic entities in the economy. Value added within a sector represents that sector's contribution to GNP. Value added includes wages, salaries, interest, depreciation, rent, taxes and profit. Consumer expenditures are the final retail value of seafood products sold through stores and food service outlets plus secondary wholesale and processing of industrial products.

The Indexes of Ex-Vessel Prices table (following page) presents the annual dockside price of fish and shellfish sold by fishing vessels as a percentage of the 2009 dockside price for the same species or species group. The ex-vessel price for each year was obtained by dividing the total ex-vessel value for each species or group by its total quantity as reported in the U.S. commercial landings tables on

$$
\text { Index }=\left(\frac{\text { Current Price }}{2009 \text { Price }}\right) \times 100
$$

pages 2 through 5. The index for each species or group was obtained using the following formula:

For example, a species of fish that sold for $\$ 0.75$ a pound in 2011 and $\$ 1.00$ a pound in 2009 would have an index of 75 in 2011, which means that the 2011 price was 75 percent of the 2009 price or 25 percent less than the 2009 price. If the price of the same species was $\$ 1.07$ in 2013, the index in

2013 would be 107, which means that the price had increased by 7 percent between 2009 and 2013 .

The figure below presents the percentage changes in the ex-vessel price index since 2009 for each of the following categories: edible finfish, edible shellfish, and industrial fish. The index for each category was obtained using the following formula:

The change in the price index for a category is the difference between the index for that year and 100, where 100 is the index for 2009.

The year 2009 is selected as a base year to match the GDP Implicit Price Deflator determined by the U.S. Department of Commerce, Bureau of Economic Analysis.

Changes in Ex-Vessel Price Index, 2009-2016 (Change Relative to Base Year = 2009)


Prices

INDEXES OF EX-VESSEL PRICES FOR FISH AND SHELLFISH, BY YEARS, 2009-2016 (2009=100)

| Species | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Groundfish, et al: |  |  |  |  |  |  |  |  |
| Cod | 100 | 101 | 111 | 92 | 78 | 73 | 121 | 80 |
| Haddock | 100 | 94 | 122 | 170 | 137 | 107 | 100 | 113 |
| Pollock: |  |  |  |  |  |  |  |  |
| Atlantic | 100 | 138 | 127 | 146 | 168 | 177 | 184 | 184 |
| Alaska | 100 | 102 | 91 | 84 | 95 | 90 | 95 | 88 |
| Flounders | 100 | 58 | 103 | 126 | 60 | 106 | 146 | 137 |
| Total groundfish, et al. | 100 | 95 | 128 | 111 | 99 | 103 | 118 | 108 |
| Halibut | 100 | 157 | 213 | 191 | 167 | 212 | 208 | 216 |
| Sea herring | 100 | 100 | 78 | 100 | 89 | 75 | 74 | 102 |
| Salmon: |  |  |  |  |  |  |  |  |
| Chinook | 100 | 131 | 137 | 155 | 170 | 150 | 150 | 188 |
| Chum | 100 | 150 | 181 | 157 | 124 | 144 | 111 | 130 |
| Coho | 100 | 121 | 126 | 136 | 142 | 125 | 80 | 129 |
| Pink | 100 | 151 | 191 | 191 | 177 | 123 | 90 | 101 |
| Sockeye | 100 | 138 | 150 | 124 | 200 | 175 | 86 | 109 |
| Total salmon | 100 | 140 | 159 | 143 | 180 | 156 | 93 | 117 |
| Swordfish | 100 | 128 | 135 | 137 | 138 | 135 | 123 | 135 |
| Tuna: |  |  |  |  |  |  |  |  |
| Albacore | 100 | 110 | 170 | 148 | 144 | 120 | 120 | 118 |
| Bluefin | 100 | 196 | 195 | 229 | 189 | 104 | 104 | 132 |
| Skipjack | 100 | 128 | 100 | 212 | 222 | 153 | 153 | 115 |
| Yellowfin | 100 | 99 | 100 | 159 | 183 | 125 | 125 | 107 |
| Total tuna | 100 | 122 | 126 | 196 | 194 | 144 | 144 | 121 |
| Total edible finfish | 100 | 116 | 141 | 140 | 140 | 131 | 123 | 122 |
| Clams: |  |  |  |  |  |  |  |  |
| Hard | 100 | 137 | 99 | 91 | 101 | 86 | 106 | 99 |
| Ocean Quahog | 100 | 104 | 111 | 117 | 117 | 121 | 126 | 136 |
| Soft | 100 | 91 | 89 | 111 | 122 | 137 | 217 | 184 |
| Surf | 100 | 102 | 102 | 109 | 107 | 107 | 111 | 112 |
| Total clams | 100 | 133 | 134 | 117 | 121 | 126 | 119 | 133 |
| Crabs: |  |  |  |  |  |  |  |  |
| Blue | 100 | 119 | 94 | 107 | 148 | 161 | 154 | 141 |
| Dungeness | 100 | 103 | 133 | 163 | 139 | 185 | 226 | 168 |
| King | 100 | 132 | 169 | 144 | 139 | 133 | 146 | 186 |
| Snow | 100 | 83 | 158 | 139 | 148 | 157 | 127 | 73 |
| Total crabs | 100 | 102 | 131 | 136 | 172 | 168 | 177 | 151 |
| American Lobster | 100 | 115 | 113 | 96 | 106 | 122 | 134 | 134 |
| Oysters | 100 | 109 | 120 | 122 | 126 | 183 | 183 | 184 |
| Scallops: |  |  |  |  |  |  |  |  |
| Bay | 100 | 146 | 164 | 153 | 165 | 291 | 309 | 247 |
| Sea | 100 | 120 | 150 | 148 | 173 | 190 | 186 | 182 |
| Total scallops | 100 | 120 | 150 | 148 | 173 | 191 | 187 | 182 |
| Shrimp: |  |  |  |  |  |  |  |  |
| Gulf and South Atlantic | 100 | 145 | 150 | 144 | 184 | 229 | 135 | 151 |
| Other | 100 | 97 | 118 | 126 | 122 | 130 | 161 | 175 |
| Total shrimp | 100 | 142 | 148 | 143 | 181 | 224 | 136 | 152 |
| Total edible shellfish | 100 | 120 | 135 | 130 | 155 | 173 | 160 | 154 |
|  |  |  |  |  |  |  |  |  |
| Total edible fish and shellfish | 100 | 118 | 137 | 135 | 148 | 154 | 143 | 139 |
| Industrial fish, Menhaden | 100 | 110 | 110 | 126 | 142 | 147 | 162 | 164 |
| All fish and shellfish | 100 | 118 | 137 | 134 | 148 | 153 | 143 | 140 |

Plants and Employment
PROCESSORS AND WHOLESALERS: PLANTS AND EMPLOYMENT, 2015

| Area and State | Processing (1) |  | Wholesale (2) |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Plants | Employment | Plants | Employment | Plants | Employment |
|  | ------------------------------------------Number----------------------------------------------- |  |  |  |  |  |
| New England: |  |  |  |  |  |  |
| Maine | 38 | 847 | 172 | 1,278 | 210 | 2,125 |
| New Hampshire | 9 | 216 | 9 | 91 | 18 | 307 |
| Massachusetts | 52 | 2,292 | 149 | 2,263 | 201 | 4,555 |
| Rhode Island | 9 | (3) | 35 | (3) | 44 | (3) |
| Connecticut | 3 | 74 | 18 | 195 | 21 | 269 |
| Total | 111 | 3,429 | 383 | 3,827 | 494 | 7,256 |
| Middle Atlantic: |  |  |  |  |  |  |
| New York | 20 | 443 | 274 | 2,102 | 294 | 2,545 |
| New Jersey | 16 | 618 | 80 | 855 | 96 | 1,473 |
| Pennsylvania | 4 | 87 | 32 | 659 | 36 | 746 |
| Delaware | 3 | (3) | 5 | 17 | 8 | 17 |
| District of Columbia | - | - | 2 | (3) | 2 | (3) |
| Maryland | 16 | 338 | 46 | 543 | 62 | 881 |
| Virginia | 35 | 1,450 | 63 | 491 | 98 | 1,941 |
| Total | 94 | 2,936 | 502 | 4,667 | 596 | 7,603 |
| South Atlantic: |  |  |  |  |  |  |
| North Carolina | 30 | 665 | 64 | 582 | 94 | 1,247 |
| South Carolina | 3 | (3) | 22 | 162 | 25 | 162 |
| Georgia | 6 | 702 | 34 | 706 | 40 | 1,408 |
| Florida | 43 | 1,572 | 317 | 2,706 | 360 | 4,278 |
| Total | 82 | 2,939 | 437 | 4,156 | 519 | 7,095 |
| Gulf: |  |  |  |  |  |  |
| Alabama | 33 | 1,376 | 14 | 263 | 47 | 1,639 |
| Mississippi | 23 | 2,331 | 19 | 96 | 42 | 2,427 |
| Louisiana | 60 | 1,599 | 98 | 626 | 158 | 2,225 |
| Texas | 46 | 1,647 | 130 | 1,266 | 176 | 2,913 |
| Total | 162 | 6,953 | 261 | 2,251 | 423 | 9,204 |
| Pacific: |  |  |  |  |  |  |
| Alaska | 151 | 10,156 | 11 | 35 | 162 | 10,191 |
| Washington | 96 | 6,463 | 141 | 1,496 | 237 | 7,959 |
| Oregon | 28 | 1,113 | 23 | 479 | 51 | 1,592 |
| California | 43 | 982 | 372 | 4,701 | 415 | 5,683 |
| Hawaii | 2 | (3) | 36 | 650 | 38 | 650 |
| Total | 320 | 18,714 | 583 | 7,361 | 903 | 26,075 |
| Inland States or Other |  |  |  |  |  |  |
| Areas (4): Total | 61 | 1,653 | 243 | 2,965 | 304 | 4,618 |
| Grand Total | 830 | 36,624 | 2,409 | 25,227 | 3,239 | 61,851 |

[^15]Plants and Employment
PROCESSORS AND WHOLESALERS: PLANTS AND EMPLOYMENT, 2016

| Area and State | Processing (1) |  | Wholesale (2) |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Plants | Employment | Plants | Employment | Plants | Employment |
|  |  |  |  |  |  |  |
| New England: |  |  |  |  |  |  |
| Maine | 37 | 837 | 180 | 1,339 | 217 | 2,176 |
| New Hampshire | 8 | 201 | 10 | 92 | 18 | 293 |
| Massachusetts | 50 | 2,286 | 150 | 2,304 | 200 | 4,590 |
| Rhode Island | 9 | (3) | 30 | (3) | 39 | (3) |
| Connecticut | 4 | 78 | 18 | 197 | 22 | 275 |
| Total | 108 | 3,399 | 388 | 3,929 | 496 | 7,334 |
| Middle Atlantic: |  |  |  |  |  |  |
| New York | 21 | 419 | 265 | 2,123 | 286 | 2,542 |
| New Jersey | 17 | 612 | 83 | 966 | 100 | 1,578 |
| Pennsylvania | 5 | 83 | 32 | 709 | 37 | 792 |
| Delaware | 3 | (3) | 6 | 19 | 9 | 16 |
| District of Columbia | - | - | - | - | - | (3) |
| Maryland | 18 | 371 | 44 | 729 | 62 | 1,100 |
| Virginia | 33 | 1,448 | 65 | 519 | 98 | 1,967 |
| Total | 97 | 2,930 | 495 | 5,065 | 592 | 7,995 |
| South Atlantic: |  |  |  |  |  |  |
| North Carolina | 29 | 702 | 62 | 627 | 91 | 1,329 |
| South Carolina | 3 | (3) | 23 | 170 | 26 | 167 |
| Georgia | 6 | 769 | 37 | 793 | 43 | 1,562 |
| Florida | 41 | 1,631 | 326 | 2,662 | 367 | 4,293 |
| Total | 79 | 3,099 | 448 | 4,252 | 527 | 7,351 |
| Gulf: |  |  |  |  |  |  |
| Alabama | 34 | 1,423 | 13 | 237 | 47 | 1,660 |
| Mississippi | 23 | 2,425 | 20 | 129 | 43 | 2,554 |
| Louisiana | 60 | 1,626 | 105 | 699 | 165 | 2,325 |
| Texas | 52 | 1,611 | 137 | 1,334 | 189 | 2,945 |
| Total | 169 | 7,085 | 275 | 2,399 | 444 | 9,484 |
| Pacific: |  |  |  |  |  |  |
| Alaska | 149 | 9,750 | 11 | 38 | 160 | 9,788 |
| Washington | 89 | 6,326 | 145 | 1,598 | 234 | 7,924 |
| Oregon | 31 | 1,141 | 26 | 525 | 57 | 1,666 |
| California | 42 | 1,061 | 385 | 4,822 | 427 | 5,883 |
| Hawaii | 2 | (3) | 34 | 688 | 36 | 685 |
| Total | 313 | 18,275 | 601 | 7,671 | 914 | 25,946 |
| Inland States or Other |  |  |  |  |  |  |
| Areas (4): Total | 66 | 1,642 | 244 | 3,100 | 310 | 4,742 |
| Grand Total | 832 | 36,430 | 2,451 | 26,416 | 3,283 | 62,846 |

(1) Data are based on North American Industry Classification System (NAICS) 3117 as reported to the Bureau of Labor Statistics.
(2) Data are based on North American Industry Classification System (NAICS) 42446 as reported to the Bureau of Labor Statistics.
(3) Included with Inland States.
(4) Includes Puerto Rico and Virgin Islands

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## The Magnuson-Stevens Fishery

## Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), amended on January 12, 2007 by Public Law 109-479, provides for the conservation and management of fishery resources within the U.S. Exclusive Economic Zone (EEZ). It also provides for fishery management authority over continental shelf resources and anadromous species beyond the EEZ, except when they are found within a foreign nation's territorial sea or fishery conservation zone (or equivalent).

The EEZ extends from the seaward boundary of each of the coastal States (generally 3 nautical miles from shore) to 200 nautical miles from shore. The seaward boundaries of Texas, Puerto Rico, and the Gulf coast of Florida are 3 marine leagues ( 9 nautical miles). The EEZ encompasses approximately 3.36 million square nautical miles.

## GOVERNING INTERNATIONAL FISHERY AGREEMENT

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

## FOREIGN FISHING PERMITS

Title II of the Magnuson-Stevens Act governs foreign fishing in U.S. waters. As U.S. fishing capacity has grown foreign participation has diminished in directed fisheries, as well as in foreign joint ventures in which U.S. vessels delivered U.S. harvested fish to permitted foreign vessels in the EEZ. The last directed fishing by foreign vessels occurred in 2001 when a small quantity of Atlantic herring was harvested by foreign vessels. The displacement of directed foreign fishing effort in the EEZ marked the achievement of one of the objectives of the Magnuson-Stevens Act: the development of the U.S. fishing industry to take, what were in 1976, underutilized species.

NMFS continues to maintain certain regulations pertaining to foreign fishing should there be a situation in the future in which allowing limited foreign fishing in an underutilized fishery would be advantageous to the U.S. fishing industry.

## FMPS AND PMPS

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

The Secretary, when notified by the Secretary of State that any foreign nation has submitted an application under section 204(b) of the MSA, shall prepare a preliminary fishery management plan (PMP) if the Secretary determines that no fishery management plan for that fishery will be prepared and implemented. Under Section 304(c) of the MSA the Secretary may also prepare an FMP if a Council fails to develop one. In this latter case, the Secretary's FMP covers domestic and foreign fishing.

The Secretary shall prepare FMPs for highly migratory species that are within the geographical area of authority of more than one of the following Councils: New England, Mid-Atlantic, South Atlantic, Gulf, and Caribbean. The Atlantic HMS fisheries are managed by the Secretary under the dual authority of the Magnuson-Stevens Act and the Atlantic Tunas Convention Act (ATCA). Atlantic tunas, Atlantic billfish, and North Atlantic swordfish are managed under the authority of both ATCA and the MagnusonStevens Act. South Atlantic swordfish are managed under the sole authority of ATCA. Atlantic sharks in the HMS management unit are managed under the authority of the Magnuson-Stevens Act.

Under section 304 of the Magnuson-Stevens Act, all Council-prepared FMPs must be reviewed for approval by the Secretary of Commerce. Approved FMPs are implemented by Federal regulations under section 305 of the Act. As of December 31, 2016, there are 46 FMPs in effect. Of these, one is a Secretarial FMP for Atlantic highly migratory species. The FMPs are listed next, under the responsible Council. FMPs may be amended by the Council and the amendments are submitted for approval under the same Secretarial review process as new FMPs. Most FMPs have been amended since initial implementation.

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

1. Northeast Multispecies FMP
2. Northeast Skate Complex FMP
3. Deep-Sea Red Crab FMP
4. Atlantic Herring FMP
5. Atlantic Sea Scallop FMP
6. Monkfish FMP (joint with MAFMC)
7. Atlantic Salmon FMP

## MID-ATLANTIC FISHERY MANAGEMENT COUNCIL

1. Spiny Dogfish FMP (joint with NEFMC)
2. Summer Flounder, Scup, and Black Sea Bass FMP
3. Atlantic Surfclam and Ocean Quahog FMP
4. Atlantic Mackerel, Squid, and Butterfish FMP
5. Bluefish FMP
6. Tilefish FMP

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

1. Pelagic Sargassum Habitat of the South Atlantic Region FMP
2. Snapper-Grouper Fishery of the South Atlantic Region FMP
3. Dolphin and Wahoo Fishery of the Atlantic FMP
4. Shrimp Fishery of the South Atlantic Region FMP
5. Golden Crab Fishery of the South Atlantic Region FMP
6. Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region FMP
GULF OF MEXICO FISHERY
MANAGEMENT COUNCIL
7. Coastal Migratory Pelagics of the Gulf of Mexico and South Atlantic FMP (joint w/ SAFMC.)
8. Coral and Coral Reefs of the Gulf of Mexico FMP
9. Red Drum Fishery of the Gulf of Mexico FMP
10. Shrimp Fishery of the Gulf of Mexico FMP
11. Spiny Lobster in the Gulf of Mexico and South Atlantic FMP (joint w/SAFMC)
12. Reef Fish Resources of the Gulf of Mexico FMP
13. Regulating Offshore Marine Aquaculture in the Gulf of Mexico FMP

CARIBBEAN FISHERY MANAGEMENT COUNCIL

1. Spiny Lobster Fishery of Puerto Rico and the U.S. Virgin Islands FMP
2. Corals and Reef-Associated Plants and Invertebrates of Puerto Rico and the United States Virgin Islands FMP
3. Queen Conch Resources of Puerto Rico and the United States Virgin Islands FMP
4. Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands FMP
PACIFIC FISHERY MANAGEMENT COUNCIL
5. Pacific Coast Groundfish FMP
6. Pacific Coast Salmon FMP
7. Coastal Pelagic Species FMP
8. U.S. West Coast Fisheries for Highly Migratory Species FMP
NORTH PACIFIC FISHERY
MANAGEMENT COUNCIL
9. Groundfish of the Bering Sea and Aleutian Islands FMP
10. Groundfish of the Gulf of Alaska FMP
11. Bering Sea and Aleutian Islands King and Tanner Crab FMP
12. Salmon Fisheries in the EEZ off the Coast of Alaska FMP
13. Scallop Fishery off Alaska FMP
14. Fish Resources of the Arctic Management Area FMP

## WESTERN PACIFIC FISHERY MANAGEMENT COUNCIL

1. American Samoa Archipelago Ecosystem FEP
2. Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem FEP
3. Hawaii Archipelago Ecosystem FEP
4. Mariana Archipelago Ecosystem FEP
5. Pacific Remote Island Areas Ecosystem FEP

HIGHLY MIGRATORY SPECIES PLANS

1. Consolidated Atlantic Highly Migratory Species FMP

## Conservation and Management Act

## REGIONAL FISHERY MANAGEMENT COUNCILS

| Council | Constituent States | Telephone Number | Executive Directors and Addresses |
| :---: | :---: | :---: | :---: |
| NEW ENGLAND | (Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut) | $\begin{gathered} \text { 978-465-0492 } \\ \text { FAX: } 978-465-3116 \end{gathered}$ | Thomas A. Nies 50 Water St., Mill 2 Newburyport, MA 01950 |
| MID-ATLANTIC | (New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, and North Carolina) | $\begin{gathered} \text { 302-674-2331 } \\ \text { FAX: 302-674-5399 } \\ \text { Toll Free: } 877-446-2362 \end{gathered}$ | Christopher M. Moore 800 North State Street Suite 201 <br> Dover, DE 19901-3910 |
| SOUTH ATLANTIC | (North Carolina, South Carolina, Georgia, and Florida) | $\begin{gathered} \text { 843-571-4366 } \\ \text { FAX: 843-769-4520 } \\ \text { Toll Free: } 866-723-6210 \end{gathered}$ | Gregg Waugh 4055 Faber Place Dr., Suite 201 N. Charleston, SC 29405 |
| GULF OF MEXICO | (Texas, Louisiana, Mississippi, Alabama, and Florida) | $\begin{gathered} \text { 813-348-1630 } \\ \text { FAX: 813-348-1711 } \\ \text { Toll Free: 888-833-1844 } \end{gathered}$ | Doug Gregory 2203 North Lois Ave., Suite 1100 Tampa, FL 33607 |
| CARIBBEAN | (U.S. Virgin Islands and Commonwealth of Puerto Rico) | $\begin{gathered} \text { 787-766-5926 } \\ \text { FAX: 787-766-6239 } \end{gathered}$ | Miguel A. Rolón 270 Muñoz Rivera Ave. Suite 401 <br> San Juan, PR 00918 |
| PACIFIC | (California, Washington, Oregon, and Idaho) | $\begin{aligned} & \text { 503-820-2280 } \\ & \text { FAX: 503-820-2299 } \\ & \text { Toll Free: } 866-806-7204 \end{aligned}$ | Chuck Tracy <br> 7700 NE Ambassador Place <br> Suite 101 <br> Portland, OR 97220 |
| NORTH PACIFIC | (Alaska, Washington, and Oregon) | $\begin{gathered} 907-271-2809 \\ \text { FAX: 907-271-2817 } \end{gathered}$ | David Witherell (acting) 605 West 4th Ave., Suite 306 Anchorage, AK 99501 |
| WESTERN PACIFIC | (Hawaii, American Samoa, Guam, and Commonwealth of the Northern Mariana Islands) | $\begin{gathered} \text { 808-522-8220 } \\ \text { FAX: 808-522-8226 } \end{gathered}$ | Kitty M. Simonds 1164 Bishop St. Suite 1400 Honolulu, HI 96813 |

The Magnuson-Stevens Fishery Conservation and Management Act


## General Administrative Information

14th and Constitution Ave., NW
Washington, DC 20230

MAIL
ROUTING
TELEPHONE CODE

| SEC | Secretary of Commerce |  |
| :---: | :---: | :---: |
|  | Wilbur Ross | 202-482-2112 |
| A | Under Secretary of Commerce for Oceans and Atmosphere |  |
|  | Benjamin Friedman (acting) | 202-482-3436 |
|  | NATIONAL MARINE FISHERIES SERVICE |  |
|  | 1315 East-West Highway |  |
|  | Silver Spring Metro Center \#3 (SSMC \#3) |  |
|  | Silver Spring, MD 20910 |  |
| F | Assistant Administrator for Fisheries -- |  |
|  | Chris Oliver | 301-427-8000 |
|  | Deputy Assistant Administrator for Regulatory Programs -- |  |
|  | Deputy Assistant Administrator for Operations -- |  |
|  | Brian Pawlak (acting) | 301-427-8000 |
|  | Director, Scientific Programs \& Chief Science Advisor -- |  |
|  | Director, Office of Policy -- |  |
|  | Jennifer Lukens | 301-427-8004 |
|  | Director, NOAA Aquaculture Program -- |  |
|  | Michael Rubino, Ph.D. | 301-427-8325 |
|  | Chief Information Officer -- |  |
|  | Larry Tyminski | 301-427-8800 |
|  | Director, Office of Communications-- |  |
|  | Kate Naughten | 301-427-8057 |
|  | Equal Employment Opportunity / Diversity Office |  |
|  | Natalie Huff | 301-427-8025 |
|  | Human Capital Management Office -- 301-427-8025 |  |
|  | Denise Fioravante | 301-427-8742 |
| F/SI | International Fisheries and Seafood Inspection |  |
|  | John Henderschedt | 301-427-8350 |
| F/IA1 | International Fisheries Affairs Division | 301-427-8350 |
| F/IA2 | Trade and Stewardship Division | 301-427-8350 |
| F/EN | Office of Law Enforcement -- |  |
|  | Jim Landon | 301-427-2300 |
| F/EN1 | Enforcement Operations Division | 301-427-2300 |
| F/HC | Office of Habitat Conservation -- |  |
|  | Pat Montanio | 301-427-8600 |
| F/HC1 | Chesapeake Bay Program Office | 410-267-5660 |
| F/HC2 | Habitat Protection Division | 301-427-8601 |

## UNITED STATES DEPARTMENT OF COMMERCE

Silver Spring, MD 20910

| MAIL ROUTING CODE |  | TELEPHONE NUMBER |
| :---: | :---: | :---: |
| F/HC3 | Habitat Restoration Division | 301-427-8602 |
| F/MB | Office of Management and Budget -Stuart Merrill (acting) | 301-427-8720 |
| F/MB1 | Budget Execution Division | 301-427-8721 |
| F/MB3 | Strategic Planning and Program Evaluation | 301-427-8720 |
| F/MB4 | Budget Formulation and Planning Division | 301-427-8720 |
| F/MB5 | Financial Services Division | 301-427-8771 |
| F/MB6 | Facilities, Safety, and Logistics Division | 301-427-8720 |
| F/MB7 | Appeals Division | 301-427-8720 |
| F/PR | Office of Protected Resources -- |  |
|  | Donna Wieting | 301-427-8400 |
| F/PR1 | Permits and Conservation Division | 301-427-8401 |
| F/PR2 | Marine Mammal and Sea Turtle Conservation Division | 301-427-8402 |
| F/PR3 | Endangered Species Conservation Division | 301-427-8403 |
| F/PR4 | Planning and Program Coordination Division | 301-427-8404 |
| F/PR5 | Endangered Species Act Interagency Cooperation Division | 301-427-8405 |
| F/SF | Office of Sustainable Fisheries -- |  |
|  | Alan D. Risenhoover | 301-427-8500 |
| F/SF1 | Atlantic Highly Migratory Species Division | 301-427-8503 |
| F/SF3 | Domestic Fisheries Division | 301-427-8504 |
| F/SF5 | Operations and Regulatory Services Division | 301-427-8505 |
| F/SF7 | Seafood Inspection Laboratory | 228-769-8964 |
| F/ST | Office of Science and Technology -- |  |
|  | Ned Cyr, Ph.D. | 301-427-8100 |
| F/ST1 | Fisheries Statistics Division | 301-427-8103 |
| F/ST3 | Operations, Management, and Information Division | 301-427-8100 |
| F/ST4 | Assessment and Monitoring Division | 301-427-8102 |
| F/ST5 | Economics and Social Analysis Division | 301-427-8101 |
| F/ST6 | Science Information Division | 301-427-8101 |
| F/ST7 | Marine Ecosystems Division | 301-427-8102 |
| LA11 | Office of Legislative and Intergovernmental Affairs - Fisheries -- |  |
|  | Robert Moller | 202-482-4981 |
| PAF | Office of Public Affairs - Fisheries -- |  |
|  | John Ewald (acting) | 301-427-8003 |
| GCF | Office of General Counsel - Fisheries and Protected Resource Section |  |
|  | Adam Issenberg | 301-713-9670 |

National Marine Fisheries Service
Regional Facilities

| MAIL ROUTING CODE | OFFICE | TELEPHONE AND FAX NUMBER | LOCATION |
| :---: | :---: | :---: | :---: |
| F/GAR | Greater Atlantic Region 55 Great Republic Dr. Gloucester, MA 01930 | $\begin{aligned} & \text { 978-281-9300 } \\ & \text { Fax: } 978-281-9207 \end{aligned}$ | Gloucester, MA |
| F/NEC | Northeast Fisheries Science Center 166 Water St. - Rm. 312 Woods Hole, MA 02543 | $\begin{aligned} & \text { 508-495-2000 } \\ & \text { Fax: 508-495-2258 } \end{aligned}$ | Woods Hole, MA |
|  | Woods Hole Laboratory 166 Water St. Woods Hole, MA 02543 | $\begin{aligned} & 508-495-2000 \\ & \text { Fax: 508-495-2258 } \end{aligned}$ | Woods Hole, MA |
|  | Narragansett Laboratory 28 Tarzwell Dr. <br> Narragansett, RI 02882 | $\begin{aligned} & \text { 401-782-3200 } \\ & \text { Fax: 401-782-3201 } \end{aligned}$ | Narragansett, RI |
|  | Milford Laboratory 212 Rogers Ave. Milford, CT 06460 | $\begin{aligned} & \text { 203-882-6500 } \\ & \text { Fax: 203-882-6517 } \end{aligned}$ | Milford, CT |
|  | James J. Howard Marine Science Laboratory 74 Magruder Rd., Sandy Hook Highlands, NJ 07732 | $\begin{aligned} & 732-872-3000 \\ & \text { Fax: 732-872-3088 } \end{aligned}$ | Highlands, NJ |
|  | Orono Maine Field Station 17 Godfey Dr.-Suite 1 Orono, ME 04473 | $\begin{aligned} & \text { 207-866-7322 } \\ & \text { Fax: 207-866-7342 } \end{aligned}$ | Orono, ME |
| F/SER | Southeast Region 263 13th Ave., South St. Petersburg, FL 33701 | $\begin{aligned} & \text { 727-824-5301 } \\ & \text { Fax: 727-824-5320 } \end{aligned}$ | St. Petersburg, FL |
| F/SEC | Southeast Fisheries Science Center 75 Virginia Beach Dr. Miami, FL 33149 | $\begin{aligned} & 305-361-4200 \\ & \text { Fax: 305-361-4219 } \end{aligned}$ | Miami, FL |
| F/SEC4 | Miami Laboratory 75 Virginia Beach Dr. Miami, FL 33149 | $\begin{aligned} & 305-361-4225 \\ & \text { Fax: 305-361-4499 } \end{aligned}$ | Miami, FL |
| F/SEC5 | Mississippi Laboratory 3209 Frederick St., P.O. Drawer 1207 Pascagoula, MS 39567 | $\begin{aligned} & \text { 228-762-4591 } \\ & \text { Fax: 228-769-9200 } \end{aligned}$ | Pascagoula, MS |
| F/SEC6 | Panama City Laboratory 3500 Delwood Beach Rd. Panama City, FL 32408 | $\begin{aligned} & \text { 850-234-6541 } \\ & \text { Fax: 850-235-3559 } \end{aligned}$ | Panama City, FL |
| F/SEC7 | Galveston Laboratory 4700 Avenue U Galveston, TX 77551 | $\begin{aligned} & \text { 409-766-3500 } \\ & \text { Fax: } 409-766-3508 \end{aligned}$ | Galveston, TX |
| F/SEC9 | Beaufort Laboratory 101 Pivers Island Rd. Beaufort, NC 28516 | $\begin{aligned} & \text { 252-728-3595 } \\ & \text { Fax: 252-728-8784 } \end{aligned}$ | Beaufort, NC |

# General Administrative Information 

## National Marine Fisheries Service

## Regional Facilities

| MAIL ROUTING CODE | OFFICE | TELEPHONE AND FAX NUMBER | LOCATION |
| :---: | :---: | :---: | :---: |
| F/WCR | West Coast Region 7600 Sand Point Way, N.E., Bldg. 1 Seattle, WA 98115 | $\begin{aligned} & \text { 206-526-6150 } \\ & \text { Fax: 206-526-6426 } \end{aligned}$ | Seattle, WA |
| F/WCR1 | West Coast Region (Long Beach) 501 West Ocean Blvd., Suite 4200 Long Beach, CA 90802 | $\begin{aligned} & 562-980-4000 \\ & \text { Fax: 562-980-4047 } \end{aligned}$ | Long Beach, CA |
| F/NWC | Northwest Fisheries Science Center <br> West Bldg. - Rm. 363 <br> 2725 Montlake Boulevard, East <br> Seattle, WA 98112 | $\begin{aligned} & 206-860-3200 \\ & \text { Fax: 206-860-3217 } \end{aligned}$ | Seattle, WA |
| F/SWC | Southwest Fisheries Science Center 8901 La Jolla Shores Dr. <br> La Jolla, CA 92037 | $\begin{aligned} & 858-546-7000 \\ & \text { Fax: } 858-546-7003 \end{aligned}$ | La Jolla, CA |
| F/SWC3 | Fisheries Ecology Division 110 Shaffer Rd. <br> Santa Cruz, CA 95060 | $\begin{aligned} & 831-420-3900 \\ & \text { Fax: 831-420-3980 } \end{aligned}$ | Santa Cruz, CA |
| F/SWC4 | Environmental Research Division 1352 Lighthouse Ave. <br> Pacific Grove, CA 93950 | $\begin{aligned} & 831-648-8515 \\ & \text { Fax: 831-648-8440 } \end{aligned}$ | Pacific Grove, CA |
| F/AKR | Alaska Region <br> 709 West 9th St., Room 420 <br> P.O. Box 21668 <br> Juneau, AK 99802 | $\begin{aligned} & 907-586-7221 \\ & \text { Fax: 907-586-7249 } \end{aligned}$ | Juneau, AK |
| F/AKC | Alaska Fisheries Science Center, 7600 Sand Point Way, N.E. Building 4 P.O. Box 15700 Seattle, WA 98115 | $\begin{aligned} & \text { 206-526-4000 } \\ & \text { Fax: 206-526-4004 } \end{aligned}$ | Seattle, WA |
|  | Kodiak Laboratory 301 Research Court Kodiak, AK 99615 | $\begin{aligned} & 907-481-1700 \\ & \text { Fax: 907-481-1701 } \end{aligned}$ | Kodiak, AK |
| F/AKC4 | Auke Bay Laboratory 17109 Lena Point Loop Rd. Juneau, AK 99801 | $\begin{aligned} & 907-789-6000 \\ & \text { Fax: 907-789-6094 } \end{aligned}$ | Juneau, AK |
| F/PIR | Pacific Islands Region NOAA Inouye Regional Center NMFS/PIRO <br> 1845 Wasp Blvd., Building 176 Honolulu, HI 96818 | $\begin{aligned} & 808-725-5000 \\ & \text { Fax: 808-725-5215 } \end{aligned}$ | Honolulu, HI |
| F/PIC | Pacific Islands Fisheries Science Center NOAA Inouye Regional Center NMFS/PIFSC <br> 1845 Wasp Blvd., Building 176 Honolulu, HI 96818 | $\begin{aligned} & 808-725-5360 \\ & \text { Fax: 808-725-5475 } \end{aligned}$ | Honolulu, HI |

# NATIONAL MARINE FISHERIES SERVICE 

## NATIONAL FISHERY STATISTICS OFFICES

| CITY | TELEPHONE <br> NUMBER |
| :--- | :--- |
| NEW ENGLAND: |  |
| Portland (2) | $207-780-3322$ |
|  | FAX: 207-780-3340 |
| Gloucester (1) | $978-281-9304$ |
|  | FAX: 978-281-9161 |
| Gloucester | $978-281-9363$ |
|  | FAX: 978-281-9372 |
| New Bedford | $508-717-0210$ |
|  | FAX: 508-717-0301 |
| Point Judith (2) | $401-783-7797$ |
|  | FAX: 401-782-2113 |

MIDDLE ATLANTIC AND CHESAPEAKE:

New York
E. Hampton, NY (2)

FAX: 631-289-2115
$\begin{array}{ll} & \text { FAX: } 631-324-3569 \\ \text { FAX: 631-324-331 }\end{array}$
$\begin{array}{ll}\text { Patchogue } & \text { 631-475-6988 } \\ & \text { FAX: 631-289-8361 }\end{array}$
Toms River (2)
Cape May
Hampton (2)
732-818-1311
FAX: 732-349-4319
609-884-2113
FAX: 609-884-4908
757-723-3369

FAX: 757-728-3947
SOUTH ATLANTIC AND GULF:
Miami (1)
Manteo
Wilmington
South Daytona, FL
Tequesta
Miami (1)

Key West
Naples

305-361-4257
FAX: 305-361-4460
252-473-5734 x 233
910-796-7247
FAX: 910-350-2018
386-310-7954
FAX: SAME
561-575-4461
305-361-4290 x 290
FAX: 305-361-4562
305-361-4565
FAX: 305-361-4460
305-294-1921
FAX: 305-294-1921
239-514-3474
FAX: 239-514-3474

NAME AND ADDRESS

Pamela Thames
312 Fore Street, Portland, ME 04101
Gregory R. Power, Fishery Information Section
55 Great Republic Dr., Gloucester, MA 01930-2276
Don Mason, Caleb Gilbert
55 Great Republic Dr., Gloucester, MA 01930-2276
William Duffy, 53 North Sixth St., Suite 211
New Bedford, MA 02740-6110
Walter Anoushian, 83 State St., 2nd Floor,
P.O. Box 3356, Narragansett, RI 02882-0547

Robert Santangelo, New York Market News, Social Security Building
50 Maple Avenue, Patchogue. L.I. NY 11772
Victor Vecchio, 62 Newtown Ln \#203
East Hampton, NY 11937
David McKernan Social Security Bldg., 50 Maple Ave, Patchogue, NY 11772
Joanne Pellegrino, 26 Main St. Suite O,
Toms River, NJ 08753
Josh O'Connor, 1382 Lafayette St.
Cape May, NJ 08204
Steve Ellis, 1006 N Settlers Landing Rd., P.O. Box 69172, Hampton, VA 23669

David Gloeckner, 75 Virginia Beach Drive, Miami, FL 33149
David Hoke, 1021 Driftwood Dr., Manteo, NC 27954
Scott Van Sant, NCSMF 127 Cardinal Dr.
Wilmington, NC 28405
Claudia Dennis, 1635 South Ridgewood Avenue, Suite 203
South Daytona,FL 32119-8425
Michelle Gamby, 19100 S.E. Federal Highway,
Tequesta, FL 33469
Larry Beerkircher, 75 Virginia Beach Dr., Room 201
Miami, FL 33149
Pam Brown-Eyo, 75 Virginia Beach Dr., Miami, FL 33149-1003
Eddie Pulido, 301 Simonton St., Rm. 208, P.O. Box 269
Key West, FL 33040
Tom Herbert, 5659 Strand Ct., Suite 107
Naples, FL 34110

# General Administrative Information 

## NATIONAL MARINE FISHERIES SERVICE

## NATIONAL FISHERY STATISTICS OFFICES

| SOUTH ATLANTIC AND GULF: |  |  |
| :---: | :---: | :---: |
| St. Petersburg | $\begin{aligned} & \text { 727-551-5793 (Roman) } \\ & \text { 727-551-5792 (Hourihan) } \\ & \text { FAX: 727-824-5349 } \end{aligned}$ | Renee Roman/ Michael Hourihan, 263 13th Avenue, South, St. Petersburg, FL 33701 |
| Panama City | $\begin{aligned} & 850-234-6541 \\ & 850-234-6541, \times 224 \\ & \text { FAX: 850-234-3559 } \end{aligned}$ | John Brusher / Albert Corey Gabel, 3500 Delwood Beach Rd., Panama City, FL 32401 |
| Pascagoula | $\begin{aligned} & 228-569-1611 \\ & \text { FAX: 228-769-9200 } \end{aligned}$ | Charles Armstrong, 3209 Frederic St., Pascagoula, MS 39567 (For Mobile, AL contact Charles Armstrong) |
| New Orleans | $\begin{aligned} & \text { 504-875-4029 (Anderson) } \\ & \text { 985-791-8200 (Jensen) } \\ & \text { FAX: 504-242-0740 } \end{aligned}$ | Debbie Anderson /Jill Jensen, 401 Whitney Avenue, Suite 203, Gretna, LA 70056 |
| Houma | $\begin{aligned} & 985-872-3321 \\ & \text { FAX: 985-872-3321 } \end{aligned}$ | Al LeFort, 425 Lafayette St., Rm. 128, Houma, LA 70360 (For Golden Meadow contact AI LeFort) |
| Lafayette | $\begin{aligned} & 337-291-2117 \\ & \text { FAX: 337-291-2118 } \end{aligned}$ | Beth Bourgeois, NOAA Fisheries Lab., 646 Cajundome Blvd., Room 220, Lafayette, LA 70506 |
| Galveston | $\begin{aligned} & 409-766-3515 \\ & \text { FAX: 409-766-3543 } \end{aligned}$ | Keith Roberts, 4700 Avenue U, Bldg. 302, Room 217, Galveston, TX 77551 |
| Freeport | $\begin{aligned} & 979-233-4551 \\ & \text { FAX: 979-233-4551 } \end{aligned}$ | Michelle Padgett, 200 W. Second Street, Suite 213, P.O.Box 2533 Freeport, TX 77542 |
| Brownsville/ Port Isabel | $\begin{aligned} & 956-548-2516 \\ & \text { FAX: 956-838-1478 } \end{aligned}$ | James Patterson, 2001 Foust Rd., Brownsville, TX 78521 |
| WEST COAST: |  |  |
| Seattle (1) | $\begin{aligned} & \text { 206-526-6113 } \\ & \text { FAX: 206-526-6736 } \end{aligned}$ | Stephen Freese, Bldg. 1, 7600 Sand Point Way, NE, Seattle, WA 98115-6349 |

## ALASKA :

907-586-7010
FAX: 907-586-7465

## PACIFIC ISLANDS:

808-725-5660

FAX: 808-725-5558

Jennifer Mondragon, Federal Building, 4th Floor, 709 West 9th St., Room 401, P.O. Box 21668, Juneau, AK 99801

Kimberly Lowe, NMFS/PIFSC/FRMD/FMB, 1845 Wasp Blvd., Building: 176 Rm. 2239,
Honolulu, HI 96818
(1) Regional or area headquarters for statistics offices.
(2) State partner coordinator.

The NOAA Library and Information Network (NLIN) provides information and research support to NOAA staff and the public through the NOAA Central Library located in Silver Spring, MD; regional libraries in Miami and Seattle; and a number of field libraries located throughout the United States. The library network libraries have collections that cover the research topics of interest to NOAA - weather and atmospheric sciences, marine fisheries, oceanography, ocean engineering, nautical charting, marine ecology, marine resources, ecosystems, coastal studies, aeronomy, geodesy, cartography, mathematics, and statistics.

The NOAA Library and Information Network Catalog (NOAALINC) shows the physical and digital holdings of the NOAA Library System. Currently, NOAALINC contains records for more than 400,000 items with 5,000 to 10,000 items added each year. Users can access the catalog at: http:// library.noaa.gov.

In addition to NOAALINC, the Library and Information Services Division retains digital copies of many NOAA and related agency publications in the NOAA Institutional Repository. Users can search the repository at: https://repository.library. noaa.gov/. The Repository currently contains more than 2,000 records with links to nearly 5,000 documents. The repository recently moved from a pilot
stage into an operational product and will add many more records in the coming years.

NOAA personnel may contact their nearest NOAA Library or the NOAA Central Library and arrange to borrow materials not available online. Members of the general public should contact their local libraries to arrange for an inter-library loan of physical materials. Restrictions apply on circulation of certain materials. Digital resources are for the most part freely available without restriction.

NOAA and the public can contact reference staff of the NOAA Central Library via email, phone, fax, or chat.

Email: Library.Reference@noaa.gov.
Phone: 301-713-2600 x157 (between 9:00 am and 4:00 pm Monday through Friday)

Fax: 301-713-4599
Chat: NOAA staff and the public may also chat with a librarian between the hours of $1: 00 \mathrm{pm}$ and $4: 00 \mathrm{pm}$ EST on Monday through Friday. Access this service from the library homepage http://library.noaa.gov.

## OVERVIEW

In an era of increasing pressures on our oceans, the need for data that supports sound science and effective stewardship of our living marine resources has never been greater. The mission of the Fisheries Information System (FIS) Program is to meet this need by working across the fisheries-dependent data community to facilitate access to comprehensive, high-quality, and timely information on the Nation's fisheries.

The FIS Program is a regionally driven collaboration among state and territorial marine fisheries agencies; Fisheries Information Networks; and NOAA Fisheries Headquarters, Regional Offices, and Science Centers. FIS partners work together to prioritize data improvement needs, identify potential solutions, and fund the testing, verification, and implementation of a wide array of projects and initiatives.

From 2013 through 2017, FIS has provided $\$ 13.5$ million in funding to its partners. Since 2015, FIS funds have been supplemented by contributions from the National Observer Program and the National Catch-Shares Program. These funds are distributed through a competitive process to state and regional teams that work to identify and promote best practices and innovative approaches for managing each step in the data lifecycle. These steps include evaluating and improving how data is collected at its source; ensuring QA/QC throughout information aggregation and analysis; enhancing the way information is managed and shared; and maximizing the value of information for marine stewardship through broader, more efficient, and more accessible dissemination.

In addition to funding pilot studies, FIS convenes and supports Professional Specialty Groups (PSGs) that consist of experts from multiple disciplines and agencies, including NOAA Fisheries Headquarters, Regional Offices, Science Centers, FINs, and state partners. The role of the PSGs is to provide technical expertise about high-priority issues and identify pressing needs and emerging opportunities. Currently, there are three FIS PSGs that focus on Electronic Reporting, Quality Management, and Data Access and Dissemination.

## PROJECT HIGHLIGHT

The biological and catch composition data gathered by independent observers on fishing vessels play a critical role in stock assessments and fisheries
management decision-making. However, on some vessels - like many North Pacific groundfish and Pacific halibut fisheries vessels - space for human observers is limited and safety is a concern.

Although using electronic monitoring (EM) technology can alleviate safety and space concerns, it often requires a costly, time-consuming manual review of video and still image data. A collaboration between the Alaska Fisheries Science Center (AFSC) and FIS is making progress in overcoming these hurdles.

In 2013, the AFSC and FIS began working on a program to integrate EM technologies into fish-eries-dependent data collection as an alternative to on-board observers. The ultimate goal of the AFSC effort is to improve automation of video analysis and effectively integrate EM data into overall catch accounting. The first step is to create a practical tool for measuring halibut bycatch during release from trawler catches.

Chief among the project's objectives is developing software that will eventually automatically detect size and classify fish as they slide by on chutes or conveyor belts. Cameras triggered by sensors capture images that are later sorted by an algorithm into different classes of fish (or manually reviewed in cases of high uncertainty). This identification algorithm, developed and tested using images collected by the chute, will ultimately be implemented on the chute itself for use in the field.

The AFSC piloted the system on a variety of vessels beginning in 2015 and 2016. The chute has been redesigned to be smaller and more portable, with vibration-resistant electronics and hardware incorporated as part of an increasingly robust construction. On the software side, with two years of data, the fish identification algorithm was able to reliably detect the most commonly imaged species with about 94 percent accuracy, and has identified 146 detected classes, including rare species.

The algorithm can now differentiate between species that pose a challenge even for in-person observers, and is now being applied to measuring halibut bycatch as it is sorted from trawl catches.

For more information about the FIS Program visit: http://www.st.nmfs.noaa.gov/data/fis.

## SEA GRANT EXTENSION PROGRAM

The Office of Sea Grant is a major program element of the National Oceanic and Atmospheric Administration. The National Sea Grant College Program is funded jointly by the Federal Government and colleges or universities. Sea Grant's Extension Service offers a broad range of information about the Nation's fisheries to recreational and commercial fishermen, fish processors, and other stakeholders. The following program leaders, listed alphabetically by state, can provide information on Sea Grant activities:

## Paula Cullenberg

Alaska Sea Grant
903 Koyukuk Drive, Suite 201
PO Box 755040 Fairbanks, AK 99775-5040
(907) 274-9692 FAX:(907) 474-7086
paula.cullenberg@alaska.edu

Sylvain De Guise, Director
Connecticut Sea Grant University of Connecticut
1080 Shennecossett Road
Groton, CT 06340-6097
(860) 405-9138 FAX: (860) 405-9109
sylvain.deguise@uconn.edu

Mark Risse, Ph.D.
Georgia Sea Grant School of Marine Programs
220 Marine Sciences Building
Athens, GA 30602-3636
(706) 542-5956
mrisse@uga.edu

Brian K. Miller
Illinois-Indiana Sea Grant
University of Illinois
1101 W. Peabody Drive
376 National Soybean
Research Center, MC-635
Urbana, IL 61801
(217) 333-6444 FAX: (217) 333-8046
millerbk@uiuc.edu
Fredrika Moser, Ph.D.
Maryland Sea Grant
University of Maryland
4321 Hartwick Road
College Park, MD 20740
(301) 405-7500 FAX: (301) 314-5780
moser@mdsg.umd.edu
James Diana
Michigan Sea Grant
University of Michigan
520 E. Liberty St., Suite 310
Ann Arbor, Michigan 48104-2210
(734) 763-5834 FAX: (734) 647-0768
jimd@umich.edu

Dr. James E. Eckman, Director
California Sea Grant
University of California, San Diego
Scripps Institute-9500 Gilman Drive 0232
La Jolla, CA 92093-0232
(858) 534-4440 FAX: (858) 534-2231
jeckman@ucsd.edu
Jim Falk, Acting
Delaware Sea Grant
University of Delaware
111 Robinson Hall
Newark, DE 19716-3501
(302) 645-4235 FAX: (302) 831-4389
jfalk@udel.edu

Darren Lerner, Ph.D.
Hawaii Sea Grant
University of Hawaii
2525 Correa Road, HIG 238
Honolulu, HI 96822
(808) 956-7031 FAX: (808) 956-3014
lerner@hawaii.edu

Robert R. Twilley, Ph.D.
Louisiana Sea Grant Director
LA State University
239 Sea Grant Building
Baton Rouge, LA 70803-7507
(225) 578-6710 FAX: (225) 578-6331
rtwilley@lsu.edu

Chryssostomos Chryssostomidis, Ph.D.
MIT Sea Grant
Massachusetts Institute of Technology
292 Main Street
Cambridge, MA 02139-9910
(617) 253-7131 FAX: (617) 258-5730
chrys@mit.edu
John A. Downing, Ph.D.
Minnesota Sea Grant
Univesity of Minnesota
31 West College Street
Chester Park \#132
Duluth, MN 55812-1445
(218) 726-8715 FAX: (218) 726-6556
downing@umn.edu

Linda E. Duguay<br>University of Southern California<br>Sea Grant Program<br>3616 Trousdale Parkway<br>Los Angeles, CA 90089-0373<br>(213) 821-1335 FAX: (213) 740-5936<br>duguay@usc.edu<br>Karl Havens<br>Florida Sea Grant<br>University of Florida<br>Bldg 803 McCarty Drive<br>Box 110400<br>Gainesville, FL 32611-0400<br>(352) 392-5870 FAX:(352) 392-5113<br>khavens@ufl.edu<br>John Peterson, Ph.D.<br>University of Guam Sea Grant UOG Station<br>Mangilao, Guam 96923-1871<br>(671) 734-6912 FAX: (671) 734-3676<br>lyudin@uguam.uog.edu

## Paul Anderson

Maine Sea Grant
University of Maine
5784 York Complex
Orono, ME 04469-5784
(207) 581-1435 FAX: (207) 581-1426
panderson@maine.edu

Judith E. McDowell<br>Woods Hole Sea Grant<br>Woods Hole Oceanographic Institution<br>193 Oyster Pond Road, MS \#2<br>Woods Hole, MA 02543-1525<br>(508) 289-2557 FAX: (508) 457-2172<br>jmcdowell@whoi.edu<br>LaDon Swann, Ph.D.<br>Mississippi-Alabama Sea Grant Consortium<br>703 East Beach Drive<br>Ocean Springs, MS 39564<br>(228) 818-8843 FAX: (228) 818-8841<br>swannd!@auburn.edu

## SEA GRANT EXTENSION PROGRAM

Jonathan Pennock, Ph.D.
New Hampshire Sea Grant University of New Hampshire 24 Colovos Road
Durham, NH 03824-3505
(603) 862-2921 FAX: (603) 862-0241
jonathan.pennock@unh.edu
Susan White, Ph.D.
North Carolina Sea Grant North Carolina State University 1575 Varsity Drive
Raleigh, NC 27695-8605
(919) 515-2455 FAX: (919) 515-7095
snwhite3@ncsu.edu
Robert W. Light, Ph.D.
Pennsylvania Sea Grant
Pennsylvania State University
301 Peninsula Drive, Suite 3
Erie, PA 16505
(814) 217-9018 FAX: (814) 217-9021
rwl2@psu.edu
M. Richard DeVoe

South Carolina Sea Grant Consortium
287 Meeting Street
Charleston, SC 29401
(843) 727-2078 FAX: (843) 727-2080

Rick.Devoe@scseagrant.org

Troy Hartley, Ph.D.
Virginia Sea Grant
Marine Advisory Services
Virginia Institute of Marine Science Gloucester Pt., VA 23062-1346
(804) 684-7248 FAX: (804) 684-7161 thartley@vims.edu

National Sea Grant Extension<br>Dr. Nikola Garber (Acting)<br>National Sea Grant Office/NOAA<br>1315 East-West Highway, Room 11716<br>Silver Spring, MD 20910-3282<br>(301) 734-1088 FAX:(301) 713-1031<br>nikola.garber@noaa.gov

Claire Antonucci
New Jersey Sea Grant Consortium
22 Magruder Road
Fort Hancock, NJ 07732
(732) 872-1300 ext. 22 FAX: (732) 872-9573
cantonucci@njseagrant.org

Christopher Winslow, Ph.D. (Interim)
Ohio Sea Grant
Ohio State University
1314 Kinnear Road, Room 100
Columbus, OH 43212-1194
(614) 292-8949 FAX: (614) 292-4364
winslow.33@osu.edu

Ruperto Chapparo
Puerto Rico Sea Grant
University Puerto Rico
Mayaguez, PR 00681
(787) 832-3585 FAX: (787) 265-2880
ruperto.chaparro@upr.edu

Pamela Plotkin, Ph.D
Texas Sea Grant
Texas A\&M University
730 Lamar Street
4115 TAMU
College Station, TX 77843-4115
(979) 845-3854 FAX: (979) 845-7525
plotkin@tamu.edu
Penelope D. Dalton
Washington Sea Grant
University of Washington
3716 Brooklyn Avenue, N.E.
Seattle, WA 98105-6716
(206) 543-6600 FAX: (206) 685-0380
pdalton@u.washington.edu


William Wise
New York Sea Grant
State University of New York
121 Discovery Hall
Stony Brook, NY 11794-5001
(631) 632-6905 FAX: (631) 632-6917
william.wise@stonybrook.edu
Shelby Walker, Ph.D.
Oregon Sea Grant
1600 SW Western Blvd. Suite 350
Corvallis, OR 97333
(541) 737-2714 FAX: (541) 737-7958
shelby.walker@oregonstate.edu

Dennis Nixon
Rhode Island Sea Grant
University of Rhode Island
Coastal Institute Room 34
Graduate School of Oceanography
Narragansett, RI 02882
(401) 874-6802 FAX: N/A
dnixon@uri.edu
William "Breck" Bowden, Ph.D.
Lake Champlain Sea Grant
The University of Vermont
81 Carrigan Drive
Burlington, VT 05405-0088
(802) 656-4057 FAX: (802) 656-8683

Jim Hurley, Ph.D.
Wisconsin Sea Grant
University of Wisconsin, Madison
1975 Willow Drive
Madison, WI 53706-1177
(608) 262-0905 FAX: (608) 262-0591
hurley@aqua.wisc.edu

National Sea Grant Law Center
Stephanie Showalter, J.D.
University of Mississippi
P.O. Box 1848

University, MS 38677-1848
(662) 915-7775 FAX: (662) 915-5267
sshowalt@olemiss.edu

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## Federal Inspection Marks for Fishery Products

SEAFOOD INSPECTION PROGRAM. NOAA oversees fisheries management in the United States. Under authority of the 1946 Agricultural Marketing Act, the NOAA Seafood Inspection Program provides inspection services for fish, shellfish, and fishery products to the industry. The NOAA Seafood Inspection Program is often referred to as the U.S. Department of Commerce (USDC) Seafood Inspection Program and uses marks and documents bearing the USDC moniker. The NOAA Seafood Inspection Program offers a variety of services which assure compliance with all applicable food regulations. The Program offers sanitation inspection as well as system and process auditing in facilities, on vessels, or other processing establishments in order to be designated as official establishments. Product quality evaluation, grading and certification services are available on a product lot basis. Certain products may be eligible to bear official marks, such as the U.S. Grade A, Processed Under Federal Inspection (PUFI) and Lot Inspection. All edible product forms ranging from whole fish to formulated products, as well as fish meal products used for animal foods, are eligible for inspection and certification. The U.S. Department of Agriculture recommends that USDC inspected fishery products be purchased for its food feeding programs. The USDC APPROVED ESTABLISHMENTS provides a listing of products and participants who contract with USDC.
USERS OF INSPECTION SERVICES. The users of the voluntary seafood inspection service include vessel owners, processors, distributors, brokers, retailers, food service operators, exporters, importers, and those who have a financial interest in buying and selling seafood products. These services can be provided nationwide, in U.S. territories, and in foreign countries. The program is a competent authority within the U.S. Government for issuance of health certificates for export of fish and fishery products to foreign countries. The official government forms and certificates issued by USDC inspectors are legal documents recognized in any U.S. court.
USDC INSPECTION MARKS. These marks designate the level and the type of inspection performed by the federal inspector. The marks can be used in advertising and labeling under the guidelines provided by the Seafood Inspection Program and in accordance with federal and state regulations regarding advertising and labeling. Products bearing the USDC official marks have been certified as being safe, wholesome, and properly labeled.
US GRADE A MARK. The U.S. GRADE A mark signifies that a product has been processed under federal inspection in a sanitarily approved facility and meets the established level of quality of an existing U.S. grade standard. The U.S. Grade A mark indicates that the product is of high quality, uniform in size, practically free from blemishes and defects, in excellent condition and possessing good flavor and odor.
PROCESSED UNDER FEDERAL INSPECTION MARK. The PUFI mark or statement signifies that the product is certified to be safe, wholesome and properly labeled, conforms to quality and other criteria in the approved specification, and has been officially inspected in a participating establishment under Federal inspection.
LOT INSPECTED MARK. The USDC Lot Inspected mark identifies products that were officially sampled and inspected to conform to an approved specification or criteria. This mark may be used on retail packages and packaging provided the label and specification are approved.


RETAIL MARK. Participants qualify to utilize the Retail Mark by contracting for sanitation services and associated product evaluation. Use of the retail mark gives retail firms the opportunity to advertise on banners, logos, and/or menus that their facility is recognized by the USDC for proper sanitation and handling of fishery products.

USDC HACCP MARK. The USDC HACCP-based service is available to all interested parties on a fee-for-service basis. Label approval, record keeping and analytical testing are program requirements. An industry USDC-certified employee trained in HACCP principles is also required for each facility/site in the program. Compliance ratings determine frequency of official visits. Benefits to participants include increased controls through a more scientific approach, use of established marks, increased efficiency of federal inspection personnel, and enhanced consumer confidence. The USDC has made available a HACCP mark and a "banner" to distinguish products that have been produced under the HACCP-based program. The HACCP mark may be used alone or in conjunction with existing grade marks to distinguish that the product was produced under the HACCP Quality Management Program. Participants receive the marketing benefits of using the HACCP mark on brochures, banners, and company labels.

> FOR FURTHER INFORMATION:
> U.S. Department of Commerce, NOAA/NMFS
> Seafood Inspection Program - F/SI 1315 East-West Highway Silver Spring, MD 20910 (301) 427-8300 FAX: (301) 713-1081 Email: mms.seafood.services@noaa.gov Website: www.seafood.nmfs.noaa.gov


[^0]:    Notes: Certain leading ports have not been included to avoid disclosure of private enterprise information.
    Some Alaskan ports are grouped together to protect confidential information. The procedure for doing this was updated for the 2012 edition of FUS. This table has been updated for 2011 and 2012, but direct comparison to prior editions of FUS will not be possible.
    The record landings for quantity; Dutch Harbor - Unalaska, AK 787.4 million pounds in 2015 and for value; New Bedford, MA \$ 411.1 million in 2012.

[^1]:    (1) All landings are as reported. No adjustments or estimations have been made.

[^2]:    Note: Total marine + freshwater does not match the summary chart on p. 29 because the "Miscellaneous" category has been excluded from this graph.

[^3]:    NOTES: Harvest shown represents Type A+B1 catch. Type A catch are fish brought back to the dock in a form that can be identified by trained interviewers. Type B1 catch are fish that are used for bait, released dead, or filleted; identification is by individual anglers.
    (1) Number or pounds less than 1,000 or less than 1 metric ton
    (2) West Florida state territorial seas extend 0 to 10 miles.
    (3) Includes all Oregon and Washington harvest (where distance from shore is unknown).
    (4) Louisiana harvest is estimated by numbers only (no weight), includes harvest from inland and state territorial seas.
    (5) Alaska data not available for current year.

    Texas estimates only the number harvested (no weight data) and only private and for-hire fisheries are included.
    ${ }^{*}$ Fiscluded in these groups are not equivalent to those with similar names listed in the commercial tables.

[^4]:    Note: Data for marine mammals and aquatic plants are excluded.
    Source: Food and Agriculture Organization of the United Nations (FAO)

[^5]:    NOTE: Data for 2011-2014 are revised and for 2015 are preliminary. Data on imports and exports cover the international trade of 205 countries or areas. Usually, exports are recorded at their free-on-board (FOB) value, while imports are recorded at their cost, insurance, and freight (CIF) value. Therefore, at the world level, the value of imports should be higher than that of exports. However, since 2011, this has not been the case. Work is underway to better understand the reasons for this anomalous trend.
    The seven fishery commodity groups covered by this table are: 1. Fish, fresh, chilled or frozen; 2. Fish, dried, salted, or smoked; 3. Crustaceans and mollusks, fresh, dried, salted, etc.; 4. Fish products and preparations, whether or not in airtight containers; 5. Crustacean and mollusk products preparations, whether or not in airtight containers; 6 . Oils and fats, crude or refined, of aquatic animal origin; and 7. Meals, solubles, and similar animal foodstuffs of aquatic animal origin.

[^6]:    Source: U.S. Department of Commerce, U.S. Census Bureau.

[^7]:    (1) Includes loins and discs.

    Note: Data include imports into the United States and Puerto Rico and landings of tuna by foreign vessels at American Samoa. Statistics on imports are the weight of individual products as exported; i.e., fillets, steaks, headed, etc. Imports and Exports of Fishery Products, Annual Summary, 2015, Current Fishery Statistics No. 2015-2 provides additional information.

[^8]:    (1) Does not include data on fish block and slabs

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

[^9]:    Source: U.S. Department of Commerce, U.S. Census Bureau.

[^10]:    (1) Figures reflect both domestic and foreign (re-exports).

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

[^11]:    (1) Figures reflect both domestic and foreign (re-exports).

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

[^12]:    (1) Includes fillets used to produce blocks. Species include cod, cusk, haddock, hake, pollock, and ocean perch.
    (2) Species include cod and pollock.

[^13]:    (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, sticks and portions; edible (meat) weight of shrimp.

    * Record year

[^14]:    (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.

[^15]:    (1) Data are based on North American Industry Classification System (NAICS) 3117 as reported to the Bureau of Labor Statistics.
    (2) Data are based on North American Industry Classification System (NAICS) 42446 as reported to the Bureau of Labor Statistics.
    (3) Included with Inland States.
    (4) Includes Puerto Rico and Virgin Islands

