NOAA FISHERIES
Office of Science & Technology

Highlights from the Annual Report

Fisheries Economics of the United States, 2016

Black sea bass. Photo: NOAA Fisheries/Scott Steinback

FISHERIES AND THE ECONOMY

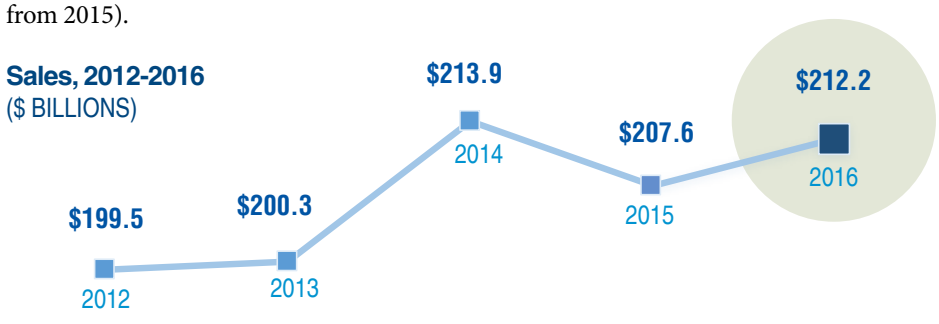
Fishing is a vital part of the cultural heritage of the United States. Our fisheries support millions of jobs and bring in billions of dollars to the broader economy every year. Whether fishing is your livelihood, a favorite pastime, or seafood is your meal of choice, U.S. fisheries are an economic engine that support fishing communities nationwide.

Fisheries Economics of the United States (FEUS) is an annual report that highlights the economic benefits of U.S. fisheries to our national economy and supports one of NOAA Fisheries' core missions: promoting sustainable fisheries that provide maximum economic benefits to the nation. The report tracks economic trends of the commercial fishing and seafood industry, recreational fishing industry, and other marine-related sectors. Analyzing this cross-section of the fishing industry offers an overall picture of the economic benefits provided by each sector.

Herring catch. Photo: NOAA Northeast Fisheries Science Center

A LOOK AT THE NATION

The FEUS 2016 report demonstrates the integral role fisheries play in our economy and the success of our fishery management programs. In 2016, U.S. fisheries supported nearly 1.7 million jobs (a 3% increase from 2015) and contributed $212 billion in sales (a 2% increase from 2015).



National and Regional Highlights

FEUS highlights fishery performance in seven Fishery Management Councils regions around the United States. The Councils create fishery management plans for the sustainable use of federal fisheries and include North Pacific, Pacific, Western Pacific, New England, Mid-Atlantic, South Atlantic, and Gulf of Mexico. The following U.S. and state economic impacts include both commercial and recreational fishing impacts.

U.S. IMPACTS

Jobs

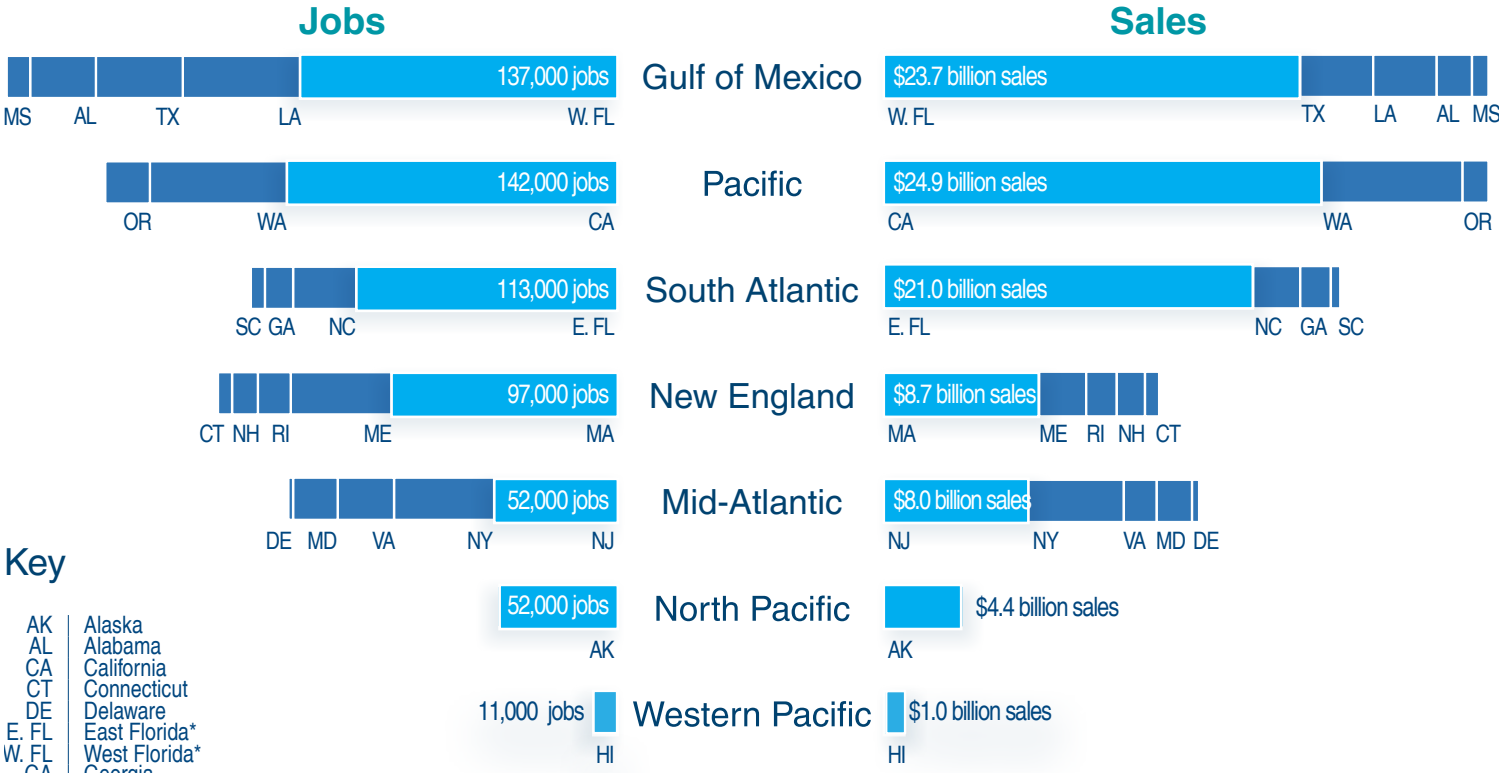
1.7
million jobs
+3% from 2015

Sales

$212
billion sales
+2% from 2015

STATE CONTRIBUTIONS BY REGION

Values for Top State in Each Region



Key

AK	Alaska
AL	Alabama
CA	California
CT	Connecticut
DE	Delaware
E. FL	East Florida*
W. FL	West Florida*
GA	Georgia
HI	Hawaii
LA	Louisiana
MA	Massachusetts
MD	Maryland
ME	Maine
MS	Mississippi
NC	North Carolina
NH	New Hampshire
NJ	New Jersey
NY	New York
OR	Oregon
RI	Rhode Island
SC	South Carolina
TX	Texas
VA	Virginia
WA	Washington

* W. FL and E. FL include recreational impacts for these areas and statewide commercial impacts; it is not possible to separate commercial impacts by sub-area.

DID YOU KNOW?

57%
of U.S. sea scallop landings (23 million lbs) were caught in Massachusetts.

30%
of U.S. landings revenue ($1.6 billion) was earned by Alaska fishermen.

1/2
of U.S. fishing tackle expenditures ($1.8 billion) were made in Florida.

Commercial Fishing and Seafood Industry Highlights

Commercial boat. Photo: Pacific Fishery Management Council

The Commercial Fishing and Seafood Industry section reports on the impact of fishermen who sell their catch for profit. Because a large quantity of seafood is imported into the United States, we estimate economic impacts for this industry both with and without imports. In 2016, the value of U.S. commercial fisheries landings remained strong, supporting nearly 1.2 million jobs and generating $144 billion in sales impacts across the broader economy. Landings revenue totaled $5.3 billion (up 2% from 2015) in 2016.

U.S. SEAFOOD INDUSTRY ECONOMIC IMPACTS, 2015-2016

Commercial economic impacts remained the same relative to 2015, with jobs increasing 1% (or 10,000 jobs) and all other impacts flat. The retail sector generated the largest employment impacts across sectors (583,000 jobs), the largest income impacts ($13.6 billion), and the largest value-added impacts ($18.5 billion). The importers sector generated the largest sales impacts ($57.6 billion). In 2016, the California seafood industry (125,000 jobs) supported the most jobs, followed by Massachusetts (87,000 jobs) and Florida (77,000 jobs). California ($22.8 billion) also generated the highest sales impacts in the industry, followed by Florida and Massachusetts.

Focusing strictly on the economic impacts generated from domestically-harvested seafood (i.e., excluding seafood imports), job impacts, sales impacts, and valued added to GDP all increased 2% from 2015 to 2016. At the state level, the Massachusetts seafood industry (55,384 jobs) supported the most jobs in 2016 followed by Alaska (46,942 jobs) and Maine (40,246 jobs).

U.S. IMPACTS

	WITH IMPORTS	WITHOUT IMPORTS
Jobs	**1.2** million jobs, +1% from 2015	**0.7** million jobs, +2% from 2015
Sales	**$144** billion sales, no change from 2015	**$53** billion sales, +2% from 2015

U.S. Landings Revenue Trend, 2007-2016
($ BILLIONS)

GULF OF MEXICO MENHADEN

How did lower production of sardines and anchovies affect menhaden landings?

Lower global production of sardines and anchovies, falling to their lowest levels since 1991, was partially responsible for a strong demand for menhaden in 2016. All three stocks are used in the production of fishmeal and fish oil. As a result, menhaden landings (up 15% from 2015) were at their highest level since 2011 and, after adjusting for inflation, landings revenue was at its highest level since 1984.

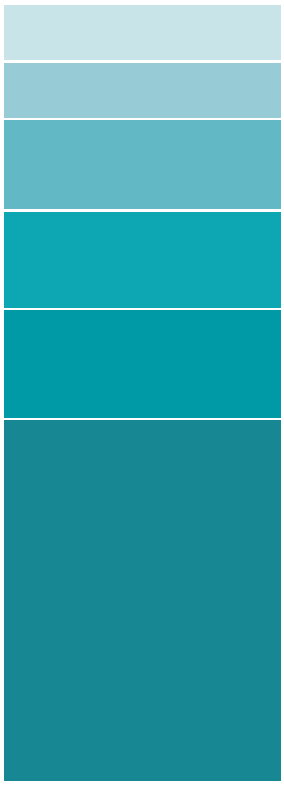
Recreational Fisheries Highlights*

Saltwater recreational fishing is among the nation's favorite pastimes, and it remains a key contributor to the national economy. In 2016, recreational fishing supported 472,000 jobs (up 7% from 2015) and generated nearly $68 billion in sales impacts (up 7% from 2015).

TRIP AND DURABLE EQUIPMENT EXPENDITURES, 2016

In 2016, there were approximately 10 million recreational saltwater anglers across the U.S. These anglers spent $4.3 billion on fishing trips and $27 billion on durable fishing-related equipment. These expenditures contributed $68 billion in sales impacts to the U.S. economy and generated $39 billion in value added impacts. Of total fishing trip expenditures, expenditures for private boat fishing trips were the highest ($1.8 billion), followed by shore-based fishing trips ($1.4 billion), and for-hire fishing trips ($1.1 billion). Of expenditures on fishing-related durable equipment, anglers spent more on boat expenses ($15.4 billion) than any other durable good. Other major expenditures include fishing tackle ($3.7 billion), vehicle expenses ($3.5 billion), and second home expenses ($2.1 billion).

U.S. Recreational Fishing Trip and Durable Expenditures, 2016
($ BILLIONS)



U.S. IMPACTS

Jobs

0.5
million jobs
+7% from 2015

Sales

$68
billion sales
+7% from 2015

Surf fishing on Chincoteague Island, Virginia. Photo: Mid-Atlantic Fishery Management Council/Mary Sabo

*Atlantic and Gulf states estimates rely on pre-calibrated estimates, rather than the revised estimates released in July 2018.

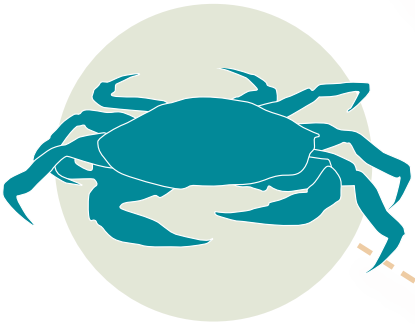
2016 Trends: Resilient Stocks and Rising Revenues

Fishery landings and landings revenue do not always stay constant from year to year. In FEUS, we take a deep dive into the most notable fishery-specific trends to explain why fishery landings and landings revenue change from year to year. In 2016, we saw West Coast crab and whiting bounce back from lower landings and landings revenue in 2015, while landings revenue for brown shrimp in the Gulf decreased due to record high rainfall. We also saw the Mid-Atlantic achieve impressive oyster landings and landings revenue due to surging aquaculture production from 2007 to 2016 even though overall oyster landings and landings revenue declined relative to 2015.

GULF BROWN SHRIMP

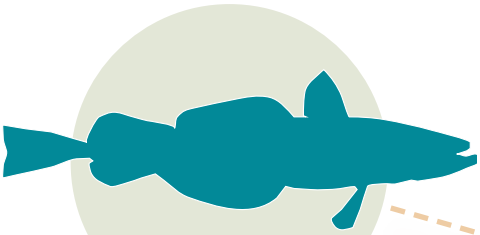
The shrimp fishery is the most important fishery in terms of landings revenue in the Gulf region, with white shrimp and brown shrimp comprising the majority of landings revenue. In 2016, landings revenue was up 11% from the previous year largely due to white shrimp landings revenue surging 33% ($50.8 million) on higher landings.

In contrast, as predicted by NOAA Fisheries, brown shrimp landings revenue declined seven percent ($11.2 million) due to a sharp decline in landings (24%) caused by record high rainfall in Texas and Louisiana in spring 2016. The influx of fresh rainwater into estuaries forced young shrimp out of their nursery habitat prematurely, causing higher mortality rates. Extremely low levels of dissolved oxygen levels in Texas and western Louisiana's shallow coastal water also influenced brown shrimp's harvest predictions.



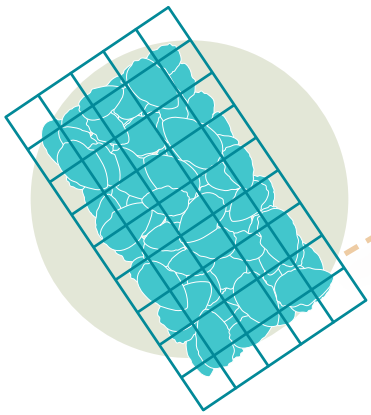
SOUTH ATLANTIC SHRIMP

In the South Atlantic Region, mild weather in the fall of 2016 is among the reasons cited for the 68% increase in North Carolina shrimp landings revenue from 2015 to 2016. This banner year for North Carolina shrimp trawlers resulted in the highest level of production since 1953 and, after adjusting for inflation, the highest shrimp landings revenue in the state since 2000.



WEST COAST CRAB

Landings revenue increased in the Pacific Region (up $131.2 million or 24%) from 2015 to 2016 largely due to the increase in crab landings revenue ($111.7 million). A fishery disaster was declared for the Dungeness crab fishery in California and for the Quileute tribe in Washington State for the 2015 to 2016 season because of closures that were implemented due to high levels of domoic acid, a neurotoxin. As these fisheries re-opened in 2016, landings bounced back to their highest level since 2013.



WEST COAST WHITING

Whiting landings and landings revenue rose 67% and 93%, respectively, in 2016 relative to 2015. While the 2016 whiting total allowable catch (TAC) was unchanged from 2015, the major difference in performance between the two years was a higher utilization rate of the TAC. The 2015 utilization rate (47.4%) of the whiting TAC was the fisheries lowest in the last decade. Anomalously warm ocean conditions as well as less favorable market conditions may have affected the lower utilization rate.

MID-ATLANTIC AQUACULTURE

Even though oysters had a sizable decrease in landings and landings revenue (down 22% and 25%, respectively) from 2015 to 2016, both landings and landings revenue exceeded the 10-year average by 45% and 62%, respectively, due to surging aquaculture production in Virginia during this period.

Commercial and recreational fisheries remain a vital part of our economy.

	TOTAL Commercial & Recreational Fishing		Commercial Fishing		Recreational Fishing
Jobs	**1.7** million jobs	=	**1.2** million jobs	+	**0.5** million jobs
Sales	**$212** billion sales	=	**$144** billion sales	+	**$68** billion sales

Policy Highlights - 2016

RECREATIONAL QUOTA ENTITY

In late 2016, the North Pacific Fishery Management Council approved a plan to allow guided recreational halibut fishermen to purchase commercial halibut individual fishing quota through the newly established recreational quota entity (RQE) program to help ease restrictions on halibut catch for charter anglers in years of low abundance. The rule is necessary to promote social and economic flexibility in the charter halibut fishery, and is intended to promote the goals and objectives of the Northern Pacific Halibut Act of 1982, and other applicable laws.

PROTECTING ESSENTIAL FISH HABITAT

In 2016, the Mid-Atlantic Fishery Management Council created the Frank R. Lautenberg Deep-Sea Coral Protection Area in order to protect deep-sea corals from the impacts of bottom tending gear. Deep-sea corals are fragile, slow-growing marine organisms that provide habitat for marine life, including commercially important species. While bottom tending gear such as trawls are restricted in the protected area (an area roughly the size of Virginia), the rule does not apply to recreational fishing or commercial gear types that do not contact the sea floor; certain other exemptions apply. Further, to minimize impacts on affected fishing operations, vessels may transit through the area if fishing gear is stowed and not available for immediate use.

LEVELING THE PLAYING FIELD: COMBATING ILLEGAL FISHING PRACTICES

In December 2016, NOAA Fisheries issued the final rule establishing the Seafood Import Monitoring Program to further combat Illegal, Unreported and Unregulated (IUU) fishing practices and to identify misrepresented seafood imports before they enter the U.S. market. The data collected under this program will allow certain priority species, identified as especially vulnerable to IUU fishing and seafood fraud, to be traced from the point of entry into U.S. commerce back to the point of harvest or production to verify whether it was lawfully harvested or produced. For 11 of the 13 species/species groups covered in the final rule, the rule went into effect January 1, 2018; shrimp and abalone compliance will be mandatory by December 31, 2018. By not allowing IUU fish products into the U.S., the Seafood Import Monitoring Program helps level the playing field for commercial fishermen by reducing unfair competition in the marketplace.

Learn More
https://www.fisheries.noaa.gov/content/fisheries-economics-united-states-2016

LOOKING FORWARD

NOAA Fisheries is always looking ahead at new developments to continue increasing the strength of our fishing economy and the sustainable use of our fisheries.

Holding king crab. Photo: NOAA/Maria Shawback