# STOCK ASSESSMENT AND FISHERY EVALUATION REPORT FOR THE GROUNDFISH FISHERIES OF THE GULF OF ALASKA AND BERING SEA/ALEUTIAN ISLANDS AREA:

ECONOMIC STATUS OF THE GROUNDFISH FISHERIES OFF ALASKA, 2016

by

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The authors of the Groundfish SAFE Economic Status Report invite users to provide feedback regarding the quality and usefulness of the Report and recommendations for improvement. AFSC's Economic and Social Sciences Research Program staff continually strive to improve the SAFE Economic Status Reports for Alaska Groundfish and BSAI Crab to incorporate additional analytical content and synthesis, improve online accessibility of public data in electronic formats, and otherwise improve the utility of the reports to users. We welcome any and all comments and suggestions for improvements to the SAFE Economic Status Reports. Please contact Ben Fissel at Ben.Fissel@noaa.gov with any comments or suggestions to improve the Economic SAFEs.

This report will be available at: http://www.afsc.noaa.gov/refm/docs/2017/economic.pdf

Time series of data for the tables presented in this report (in CSV format) are available at: http://www.afsc.noaa.gov/refm/Socioeconomics/SAFE/groundfish.php#data

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Dear Reader,

This preliminary report of the "Economic Status of the Groundfish Fisheries Off Alaska" is compiled for the express purpose of the Sept. 2017 meeting of the Groundfish Plan Teams. A final version of this report will be prepared for the Nov. 2017 meeting of the Groundfish Plan Team. The data contained within this report are the most recent data available. At the time this report was compiled, data continue to be finalized and validated. In some cases, numbers in the final draft of this report may change from those presented in this preliminary draft. As we finalize and validate the data in this report, the Economic and Social Sciences Research Program welcomes any feedback from readers regarding data.

Thank you, Alaska Fisheries Science Center, Economic and Social Sciences Research Program

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#### 1. EXECUTIVE SUMMARY

The commercial groundfish fisheries off Alaska had a total catch of 2.3 million tons (t) in 2016 (including catch in federal and state waters) (Fig. 3.1 and Table 1). This amount was 56 thousand t greater than the catch in 2015. Groundfish accounted for 88% of Alaska's 2016 total catch, which was more than typical because of lower than average Pacific salmon catch in 2016 (Table 2). Increases in 2016 total Alaska catch were observed for most species, with the exception of sablefish. Alaska pollock, Pacific cod, and rockfish catches were at decadal highs, while sablefish catch was at a decadal low.

The aggregate ex-vessel value of the FMP groundfish fisheries off Alaska was \$875 million, which was 54% of the ex-vessel value of all commercial fisheries off Alaska in 2016 (Table 6). After adjustment for inflation, real ex-vessel value of FMP groundfish decreased \$31 million (Table 6) due to an aggregate ex-vessel price decrease of 5.5% to \$0.183 per pound of retained catch in 2016. The drop in the aggregate ex-vessel price was largely attributable to drop in pollock prices which fell 12% to \$0.126 in the BSAI and 30% to \$0.083 in the gulf. The GOA arrowtooth price also fell 25% to \$0.028. Other species that are the focus of the shoreside ex-vessel fisheries such as BSAI Pacific cod, GOA Pacific cod, GOA sablefish, and GOA Pacific ocean perch were relatively unchanged or increasing. Notably, the GOA sablefish price rose \$0.497. (Tables 13 and 29). Because movements in price were generally small, changes in catch were more critical in determining the difference in the way ex-vessel value changed for individual fisheries across regions, sectors, and gear types. FMP groundfish made up a larger share of the ex-vessel value from the fisheries off Alaska than they did in 2015 largely because of the decrease in salmon revenues. Revenues from halibut and shellfish decreased (Table 6).

The gross value of the 2016 groundfish catch after primary processing (first wholesale) was \$2.38 billion (Table 7), a increase of 4% from 2015. This change was the combined effect of an increase in aggregate first-wholesale production, up 3% to 973 thousand t and an aggregate price increase of 1% to \$1.109 per pound in 2016 (Table 7). In the BSAI, value was increasing for all major species with the exception of rockfish where decreases in both production volume and price resulted in a 15% decrease in value. In the Gulf, value was decreasing for pollock and cod. The decrease in cod value was because of a decrease in volume. Decrease in value pollock was largely the result of a decrease in the average price.

The first-wholesale value of Alaska's FMP groundfish fisheries accounted for 56% of Alaska's total first-wholesale value from commercial fisheries (Table 7). First-wholesale value of Alaska's non-FMP groundfish fisheries totaled \$4.19 billion, most of which (\$1.3 billion) came from Pacific salmon. Pacific salmon value decreased 14% as a result of decreased catch levels in the Gulf of Alaska. Salmon prices, which were comparatively low in 2015 with the high supply, rebounded in 2016. Pacific halibut fisheries, which are concentrated in the Gulf of Alaska, saw a modest decrease in production in 2016 after steady declines over the last decade. First-wholesale value in the Pacific halibut fisheries increased \$3.7 million to \$139 million in 2016.

<sup>&</sup>lt;sup>1</sup>The data required to estimate net benefits to either the participants in fisheries or the Nation, such as cost or quota value (where applicable) data, are not available. Unless otherwise noted value should be interpreted as gross revenue.

The groundfish fisheries off Alaska are an important segment of the U.S. fishing industry. In 2015, it accounted for 51% of the weight of total U.S. domestic landings and 17% of the ex-vessel value of total U.S. domestic landings (Fisheries of the United States, 2015). Alaska fisheries as a whole (including salmon, halibut, herring, and shellfish) accounted for 61.6% of the weight of total U.S. domestic landings and 33.2% of the ex-vessel value of total U.S. domestic landings.

NOAA Fisheries collects only limited data on employment in the fisheries off Alaska. The most direct measure available is the number of 'crew weeks' on at-sea processing vessels and catcher vessels of FMP groundfish. These data indicate that in 2016 crew weeks for both sectors totaled 132,824 with the majority of them (108,376) occurring in the BSAI groundfish fishery (Tables 26 and 42). In the BSAI the months with the highest employment correspond with peak of the pollock seasons in February-March and July-September. In Gulf of Alaska crew weeks peak February-May with the catcher vessel hook and line fisheries targeting sablefish and Pacific cod. Relative to 2015, annual crew weeks decreased in 2016 by 1.6%, primarily as a result of a drop in catcher processor crew weeks in the BSAI. Statewide average monthly employment in fish processing (of any species) was 9,600 employees in 2016, down from the previous year. The Alaska Department of Labor reports that the statewide average monthly employment in groundfish harvesting was 1,160 employees and that groundfish harvesting employment shrank by 2.1% in 2015. Groundfish comprised 14% of the total fish harvesting employment in Alaska.

Alaska's FMP groundfish fisheries have six major species (complexes); Alaska pollock, Pacific cod, sablefish, Atka mackerel, the flatfish complex, and the rockfish complex, plus Pacific halibut (which is not an FMP groundfish).<sup>2</sup> The fisheries for these species (complexes) are distributed across two regions: the Bering Sea & Aleutian Islands and the Gulf of Alaska. Each region can be broadly divided into two sectors: catcher vessels which deliver their harvest to shoreside processors, and the at-sea processing sector, whose processed product sells directly to the first-wholesale market. Catcher vessels account for a higher proportion of the ex-vessel value of groundfish landings than total catch because they take larger than average percentages of higher-priced species such as sablefish. The ex-vessel value of the at-sea sector is imputed from observed first-wholesale value to exclude the value added by at-sea processing. The following gives a summary of the economic status of the six FMP groundfish species' (complexes) fisheries in 2016.

#### Alaska pollock

Alaska pollock, the dominant species in terms of catch, accounted for 70% of FMP groundfish harvest with a catch of 1.5 million t in 2016 (Table 3). The ex-vessel value of the Alaska pollock fishery was \$375 million in the BSAI and \$32 million in the GOA (Tables 14 and 30). Pollock ex-vessel prices fell in both the BSAI and GOA, and while retained catch increased (particularly in the GOA), the net effect was decrease in ex-vessel value of 9.2% in the BSAI and 26% in the GOA. Pollock first-wholesale value increased 5.6% in the BSAI to \$1.34 billion, and decreased 1.3% in the GOA to \$104 million (Tables 17 and 33). Ex-vessel and first-wholesale value in the pollock fishery remains above the 10 year average, though not at the peak in 2012 when ex-vessel prices were higher.

The majority of pollock is harvested in the BSAI (approximately 90%) where catch is divided between the shoreside and at-sea sectors. It also comprises a large share of the GOA shoreside

<sup>&</sup>lt;sup>2</sup>An FMP fishery is one where management, including total catch, is carried out under a federal Fishery Management Plan. Pacific halibut is not an FMP groundfish fishery and its total catch is set by the International Pacific Halibut Commission, though allocation of the catch among users is managed by the NPFMC and NMFS.

revenues. Pollock is targeted exclusively with trawl gear. Pollock catches increased throughout Alaska's regions and sectors but most prominently in the Gulf of Alaska where it increased by 6.8% to the highest level seen in recent history. Pollock is an abundant whitefish with extensive global markets and is harvested at or very near the TAC. Hence changes in pollock catch and production largely reflect changes in the annual TAC, which is related to the sustainability of the resource, for which the AFSC carries out extensive annual stock assessments. Because pollock is harvested at the TAC, wholesale pollock prices play a significant role in determining annual revenue and influence the mix of products produced for the wholesale market. Pollock has three primary product forms: fillets, surimi, and roe, whose share of pollock total first-wholesale value was 81.3% in the BSAI and 65.3% in the GOA (GOA processors produce a greater share of H&G products). Roe value decreased in both the regions as the catch of small sized pollock produced lower roe yields. Fillet prices were fairly stable, increasing slightly in the BSAI and decreasing slightly for the GOA processors. GOA fillet production increased 57% with the increase in catch volume but was down slightly in the BSAI and for Alaska as a whole. In solvency of a major European PBO buyer and low Russian pollock prices created uncertainty in the pollock market throughout 2016. Strong surimi markets had been a haven for pollock producers given the difficulty in the pollock fillet markets in recent years. In 2016 surimi value grew at a more modest pace, 6% in the BSAI and 5% in the GOA, as demand plateaued.

#### Pacific cod

The fisheries for Pacific cod are the second largest by volume in Alaska with a catch of 325 thousand t in 2016, increase of 1.3% from 2015 (Table 3). Pacific cod is harvested in the BSAI and the GOA regions by the shoreside and at-sea sectors, by various fleets using different gear types. The largest fishery is located the BSAI at-sea sector, which is primarily prosecuted by the longline catcher/processor fleet. Fisheries in the shoreside sector utilize trawl, hook-and-line, and pot gear types. In the GOA Pacific cod is mostly harvested by the shoreside sector where catch is carried out using hook-and-line, jig, trawl, and pot gear. Like pollock, cod is harvested at or very near the TAC. The increase in catch was focused in the BSAI where retained catch rose particularly in the trawl gear sector, while retained GOA catch decreased slightly. Catch levels of Pacific cod remained strong in 2016, and are at or above their ten year average.

Ex-vessel prices have been trending down since about 2007 which has been disruptive to ex-vessel revenues despite the strong catch levels. The declining ex-vessel prices are largely a reflection of a similar trend in first-wholesale prices. Ex-vessel prices didn't change significantly and changes in value reflected changes in catch. Ex-vessel value rose 8.6% in the BSAI and fell 18% in the GOA.

Pacific cod is processed in a number of different product forms for wholesale markets, the two most important of which are fillets and head-and-gut (H&G). The at-sea sector produced mostly H&G products and the shoreside sector produces fillets, H&G, and other product forms. Whitefish products, such as those produced from cod, have come under increased global competion over the last decade which is reflected in the downward trend in wholesale prices. In 2016 the wholesale price for cod fillets was increasing with strong demand and lower than expected catch and supply from Russian and Norwegian fisheries. This benefited the shoreside fisheries in the BSAI and GOA where fillets are a substantial share of production and helped buttress the reduction in value in the GOA from reduced catch. H&G prices were down slightly for the year and shoreside fisheries increased their share of fillet production. First-wholesale value in the BSAI shoreside sector increased 38% with increased catch and strong fillet prices and decreased 4% in the at-sea sector where production

is focused on H&G. First-wholesale value fell 12% in the GOA where fillets performed well but catch and production were down.

#### Sablefish

Sablefish is primarily harvested by the GOA shoreside sector which typically accounts for upwards of 90% of the annual catch. It is also caught by the BSAI shoreside and GOA at-sea sectors. Most sablefish is caught using the hook-and-line gear type. As a valuable premium high-priced whitefish, sablefish is an important source of revenues for GOA catcher vessels and catches are at or near the TAC. Since the mid-2000s, decreasing biomass has ratcheted down the TAC and catch. This trend continued through 2016 as catches decreased to 10.9 thousand t in 2016, down from 11.7 thousand t in 2015. Despite the decrease in catch, ex-vessel value remained comparable to 2015 levels increasing 1.5% in the GOA and decreasing 7.5% in the BSAI as increasing ex-vessel prices offset the effect of reduced catches on value. Ex-vessel prices increased with corresponding wholesale prices where supply reductions have pushed up prices, particularly in Japan, an important market for sablefish products. The first-wholesale price of sablefish rose 16% in the GOA and value increased 10%. Persistent declines in catch have been disruptive to revenues in the sablefish fishery. Strong prices have maintained value in the fishery as catches have declined; however, the peak price levels were seen in 2010.

#### Flatfish species complex

The flatfish complex is comprised of a number of different species. The species targeted vary substantially by region. In the BSAI the primary target species are yellowfin sole, rock sole, flathead sole, and arrowtooth flounder, which are mostly fished by catcher/processors in the Amendment 80 fleet.<sup>3</sup> In the BSAI retained catch across all species increased 1% to 210 thousand t, however, the increase was focused in the yellowfin sole catch which rose 6.5%. In the BSAI the yellowfin sole fishery is the largest of the flatfish fisheries. Retained catch levels were stable or slightly decreasing for other BSAI flatfish.

In the GOA, arrowtooth is the primary target species though other flatfish (e.g., flathead sole and rex sole) are caught in smaller quantities. GOA flatfish are caught by the western and central gulf trawl fleets which are comprised of both shoreside catcher vessels and at-sea catcher/processors. In the GOA the increase in flatfish catch was similarly, modest rising 9% with arrowtooth and rex sole catch both increasing 1 thousand t. Arrowtooth, the largest flatfish fishery in the GOA, can show considerable year over year catch variability, in part because of regulatory changes. However, 2016 catches were comparable to the average catch level since 2003.

Flatfish are primarily processed into the H&G and whole fish product forms and changes in production largely reflect changes in catch. Processed products are primarily exported to China and

<sup>&</sup>lt;sup>3</sup>Amendment 105 BSAI Flatfish Harvest Specification Flexibility went into effect in 2015 allowing cooperative and CDQ groups to exchange flatfish harvest quota between yellowfin sole, rock sole, and flathead sole under the Allowable Biological Catch (for details see http://federalregister.gov/r/0648-BD23).

<sup>&</sup>lt;sup>4</sup>In 2014, Amendment 95 (regulations to reduce GOA halibut PSC limits) implemented changes to the accounting of halibut PSC sideboard limits for Amendment 80 vessels that allowed the fleet to increase their groundfish catch, mostly arrowtooth flounder. Also, Amendment 95 revised halibut PSC limit apportionments used by trawl catcher vessels from May 15 through June 30 that extended the deep-water species fishery allowing for an increase in arrowtooth flounder catch for this fleet (for details see http://alaskafisheries.noaa.gov/frules/79fr9625.pdf).

South Korea. Strong demand and low inventories have put upward pressure on flatfish prices. First-wholesale value in the BSAI flatfish fisheries increased 16% with a 13% increase in price. Yellowfin sole value rose 19% with a 13% increase in price. Increasing prices for other species in the BSAI flatfish fisheries resulted in increasing value despite minimal changes in production. First-wholesale value in the GOA flatfish fisheries increased 9% with a 5% increase in price. Arrowtooth value rose 29% with a 22% increase in price.

#### Rockfish species complex

The rockfish fisheries target a diverse set of species which can vary by region and sector. By volume, the majority of rockfish (70%) is caught in the BSAI, which is largely attributable to the sizable BSAI fisheries for Pacific ocean perch (which is also the largest rockfish fishery in the GOA). The other five major species (dusky, rougheye, northern, shortraker, and thornyhead) are predominantly caught in the GOA, though most species are caught in both regions. Pacific ocean perch and northern rockfish are the largest of the rockfish fisheries, accounting for roughly 75% and 10% of the total Alaska rockfish revenues respectively.

In the BSAI rockfish are caught by at-sea catcher/processors while in the GOA catch is distributed between the shoreside and at-sea sectors. Rockfish catch in Alaska totaled 64 thousand t in 2016, an increase of 10% with a notable increase the GOA Pacific ocean perch catch (Table 3). In the BSAI Pacific ocean perch catch was stable at 30 thousand t and the catch of northern rockfish down 3 thousand t after a significant increase in 2015. In the GOA, Pacific ocean perch catch increased 16% and at 21 thousand t is the highest level since at least 2003. First-wholesale prices showed little change or were decreasing across all rockfish. In general, prices declined roughly 5-10%. Decreasing prices resulted in decreasing value for all but GOA Pacific ocean perch where production increased. BSAI Pacific ocean perch value decreased \$4 million to \$32 million and northern rockfish value decreased by half to \$3 million with decreases in both price and production. GOA Pacific ocean perch first-wholesale value increased \$4.2 million to \$25.7 million where production increases offset a 9% decrease in the price. First-wholesale value for northern rockfish and dusky rockfish in the GOA both decreased slightly to just over \$3 million.

#### Atka Mackerel

Atka mackerel is predominantly caught in the BSAI, primarily in the Aleutian Islands, and almost exclusively by the Amendment 80 Fleet.<sup>6</sup> The catch of Atka mackerel was close to 2015 levels, increasing 2% to 56 thousand t. This level of catch is roughly comparable to 2011 levels after significant reductions in the TAC in 2012 and 2013. The lower catch was due to area closures for Steller sea lions and survey-based changes in the spatial apportionment of TAC. Recent increases in TAC reflect the continued health of the stock and expanded fishing opportunities in the Aleutian Islands. Approximately 90% of the Atka mackerel production volume is processed as H&G, while the remainder is mostly sold as whole fish. Most of the Atka mackerel produced is exported to Asia. First-wholesale value rose 9% in the BSAI as prices increased 8% with strong foreign demand for Atka mackerel as an input to secondary surimi processing abroad.

 $<sup>^5</sup>$ Because BSAI flatfish are primarily targeted by catcher/processor vessels there is not an substantive ex-vessel market for it.

<sup>&</sup>lt;sup>6</sup>Because Atka mackerel is only targeted by at-sea catcher/processor vessel there is not an effective ex-vessel market for it. Though ex-vessel statistics are computed for national reporting purposes.

#### 2. OVERVIEW OF ECONOMIC STATUS REPORT, 2016

#### 2.1. Introduction

This report presents the economic status of groundfish fisheries off Alaska in terms of economic activity and outputs using estimates of catch, prohibited-species catch (PSC), ex-vessel prices and value (i.e., revenue), effort (as measured by the size and level of activity of the groundfish fleet), and the first wholesale production volume and gross value of (i.e., F.O.B. Alaska revenue from) processed products.<sup>1</sup> The catch, ex-vessel value, fleet size and activity data reported here reflect the fishing industry activities that are accounted for in the groundfish landings and production reports, North Pacific groundfish and halibut observer data, and the State of Alaska Commercial Operator's Annual Reports. Catch data in this report are sourced from the NMFS Alaska Regional Office (AKRO) catch-accounting system (CAS), which is used for in-season monitoring groundfish and PSC quotas. The data descriptions, qualifications, and limitations noted in this overview of the fisheries and the footnotes to the tables are critical to understanding the information in this report. This report updates last year's report (Fissel et al. 2016) and is intended to serve as a reference document for those involved in making decisions with respect to conservation, management, and use of Gulf of Alaska (GOA) and Bering Sea and Aleutian Islands (BSAI) groundfish fishery resources.

In addition to catch that is counted against a federal Total Allowable Catch (TAC) quota (i.e., managed under a federal Fishery Management Plan (FMP), estimates provided in some of the following tables may include catch from other Alaska groundfish fisheries (as indicated by the footnotes). The distinction between catch managed under a federal FMP and catch managed by the State of Alaska is not merely a geographical distinction between catch occurring in the U.S. Exclusive Economic Zone (EEZ) and catch occurring Alaska state waters (3-mile limit). The State of Alaska maintains authority over some rockfish fisheries in the EEZ of the GOA, for example, and parallel fisheries occurring within state waters are managed under federal FMPs. It is not always possible, depending on the data source(s) from which a particular estimate is derived, to definitively identify a unit of catch, or associated units of measure, such as revenue or price, as being part of a federal FMP or otherwise. Users are encouraged to consult table footnotes for clarification on coverage in individual tables with respect to federally-managed and state-managed catch. Additionally, unless explicitly indicated, phrases such as "groundfish fisheries off Alaska" or "Alaska groundfish", as used in this report, should not be construed to precisely include or exclude any category of state or federally managed fishery or to refer to any specific geographic area. These and similar phrases may describe groundfish from both Alaska state waters and the federal EEZ off Alaska, groundfish managed only under federal FMPs, or managed under the authority of both NMFS and the state of Alaska.

The BSAI and GOA groundfish fisheries are widely considered to be among the best managed fisheries in the world. These fisheries produce high levels of catch, ex-vessel revenue, processed product revenue, exports, employment, and other measures of economic activity while maintaining ecological sustainability of the fish stocks. However, the data required to estimate the success of these policies with respect to net benefits to either the participants in these fisheries or the Nation, such

<sup>&</sup>lt;sup>1</sup>F.O.B. refers to the value (or price) excluding transportation costs. The acronym, F.O.B. stands for "Free On Board".

as cost or quota value data (where applicable), are not available for many of the fisheries. Fishery economists began discussing the potential for rent dissipation in fisheries managed with open-access catch policies long ago (Scott 1954, Gordon 1955). The North Pacific region has gradually moved away from such management, as discussed by Holland (2000), and instituted catch share programs in many of its fisheries. Six of the sixteen catch-share programs currently in operation throughout the U.S. operate in the North Pacific, accounting for approximately 75% of groundfish landings. By allocating the catch to individuals, cooperatives, communities, or other entities catch share programs are intended to promote sustainability and increase economic benefits. Research on North Pacific fisheries has examined some of these issues after program implementation (e.g., Feltlhoven 2002, Homans and Wilen 2005, Wilen and Richardson 2008, Abbott et al. 2010, Fell and Haynie 2011, Torres and Felthoven 2014, Abbott et al. 2015).

There is considerable uncertainty concerning the future conditions of stocks, the resulting quotas, and potential changes to the fishery management regimes for the BSAI and GOA groundfish fisheries. The management tools used to allocate the catch between various user groups can significantly affect the economic health of either the fishery as a whole or segments of the fishery. Changes in fishery management measures are expected to result from continued concerns with: 1) the catch of prohibited species; 2) the discard and utilization of groundfish catch; 3) the effects of the groundfish fisheries on marine mammals and sea birds; 4) other effects of the groundfish fisheries on the ecosystem and habitat; 5) the allocations of groundfish quotas among user groups; and 6) maintaining sustainable fisheries and fishing communities that allow for new entrants into the fisheries.

The remainder of this report is structured as follows: Section 2.2 gives a verbal description and important information for understanding the economic data tables in Section 4. Section 5 examines the economic performance of the North Pacific groundfish fisheries through market indices.

#### 2.2. Description of the Economic Data Tables

#### 2.2.1 Groundfish and Prohibited Species Catch Data Description

#### Data Sources

Total catch estimates in the groundfish fisheries off Alaska are generated by NMFS from data collected through an extensive fishery observer program and from information provided through required industry reports of harvest and at-sea discard. The North Pacific Groundfish Observer Program (Observer Program), based at the NMFS Alaska Fisheries Science Center (AFSC), has had a vital role in the management of North Pacific groundfish fisheries since 1989. Observer data are collected by NMFS-certified observers and provide scientific information for managing the groundfish fisheries and minimizing bycatch. Industry-reported data consists of catch and processed product amounts that are electronically recorded and submitted to NMFS through the Interagency Electronic Reporting System, known as eLandings. Observer information and industry reports are integrated into a NMFS application called the Alaska Catch Accounting System (CAS).

The harvest of groundfish in Federal waters are governed under fishery management plans (FMPs) that are specific to the Bering Sea and Aleutian Islands (BSAI) and Gulf of Alaska (GOA) regions. The groundfish TACs are established and monitored in terms of total catch, which is both retained catch and discarded catch. In addition, the FMPs describe policy for setting by catch limits for

some species, such as halibut and salmon, whose retention is prohibited in the groundfish fisheries; bycatch of these species is referred to as Prohibited Species Catch (PSC). The primary purpose of the CAS is to provide estimates of total catch for FMP species (including prohibited species) in the groundfish and halibut fisheries and allow the in-season monitoring of catch against the TACs and PSC limits.

In the CAS, at-sea sample data collected by observers are used to create discard and PSC rates (a ratio of the estimated discarded catch to the estimated total catch in sampled hauls). For trips that are unobserved, the discard and PSC rates are applied to industry-supplied landings of retained catch. Expanding on the observer data that are available, the extrapolation from observed vessels to unobserved vessels is based on varying levels of aggregated data (post-stratification). Data are matched based on processing sector (e.g. catcher/processor or catcher vessel), week, target fishery, gear, and Federal reporting area. Further detail on the estimation procedure, including levels of post-stratification, is available in Cahalan et al. (2014). With the exception of Pacific halibut PSC, all estimated at-sea discard is assumed to have 100% mortality. Halibut mortality rates are generated every three years based on the estimated condition of halibut sampled by observers (Williams 2012). These rates are applied to the total estimated halibut discard (for a gear type, FMP area (GOA or BSAI), fishery, and year).

#### Groundfish Catch Tables

The catch presented throughout these tables is total catch which includes retained and discarded catch. Catch data are sourced from the NMFS Alaska Region Office Catch Accounting System (CAS). Catch for all Alaska including state and federal catches is displayed in Table 1. Retained catch for just FMP-managed groundfish are provided in Table 3 presents catch data by area (BSAI and GOA), gear (trawl, hook and line-used in this report to include longlines and jigs-and pot gear), vessel type (catcher vessels and catcher/processor vessels), and species (complex). Table 11 and 27 provide additional information for the BSAI and GOA, respectively, with aggregation of gear types and species specific catch data for flatfish and rockfish. Tables 12 and 28 provide estimates of total catch by species, gear, and target species for the BSAI and GOA, respectively. In general, the species or species group accounting for the largest proportion of retained catch on the trip or haul is considered the target species, with two exceptions. A target of pelagic pollock is assigned only if 95% or more of the total catch is pollock. In the BSAI, if flatfish species (flathead, rock, and yellowfin sole, and other flatfish) represent the largest amount of retained catch, then a target of yellowfin sole is assigned if this species represents at least 70% of the combined flatfish retained catch; otherwise, the flatfish species accounting for the greatest amount of retained flatfish catch is assigned as the target. Beginning in 2011, Kamchatka flounder was broken out from arrowtooth flounder in the BSAI. As such, the "other flatfish", and/or arrowtooth flounder target categories may not be directly comparable between 2011 and prior years in the historical catch data available online.

#### Groundfish Discards and Discard Rates

Discarded catch is the unretained catch of species that a vessel is legally able to target and retain. Discards are included in a vessel's total catch. Discards can occur for various reasons and in a variety of ways such as discarding of non-targets species, fish falling off of processing conveyor belts, dumping of large portions of nets before bringing them on-board the vessel, dumping fish from the decks, size sorting by crewmen, and quality-control. In each target fishery the discard rates can be high for non-target species. For the most common species (e.g. pollock and cod) retention

requirements can reduce the amount of discards for these species. The discard rate is the percent of total catch of a species that is discarded. Details on discard estimation can be found in Cahalan *et al.* (2014). The discards in the groundfish fisheries have received significant management attention by NMFS, the Council, Congress, and the public at large. Table 4 presents CAS estimates of discarded groundfish catch and discard rates (calculated as the percent of total catch that is discarded) by gear, area, and species for years 2012-2016.

#### Prohibited-Species Catch

Prohibited-species catch (PSC) is the catch of species that a vessel is prohibited from targeting and retaining due to their economic value to users outside the FMP groundfish fisheries. These species include Pacific halibut, king and tanner crab (*Chionoecetes, Lithodes,* and *Paralithodes spp.*), Pacific salmon (*Oncorhynchus spp.*), and Pacific herring (*Clupea pallasi*). Monitoring and minimizing the amount PSC in the Alaska groundfish fisheries has historically been an issue that has received significant management attention. The retention of these species was prohibited first in the foreign groundfish fisheries to ensure that groundfish fishermen had no incentive to target these species. Estimates of PSC for 2012-2016 are summarized by area and gear in Table 5.

The at-sea observer program was developed for the foreign fleets and then extended to the domestic fishery. The observer program, managed by the Fisheries Monitoring and Analysis Division (FMA) of the Alaska Fisheries Science Center, resulted in fundamental changes in the nature of the PSC problem. First, by providing estimates of total groundfish catch and non-groundfish PSC by species, it reduced the concern that total fishing mortality was being vastly underestimated due to fish that were discarded at sea. Second, it made it possible to establish, monitor, and enforce the groundfish quotas in terms of total catch as opposed to only retained catch. Third, it made it possible to implement and enforce PSC quotas for the non-groundfish species that by regulation had to be discarded at sea. Finally, it provided extensive information that managers and the industry could use to assess methods to reduce PSC and PSC mortality. In summary, the observer program provided fishery managers with the information and tools necessary to prevent PSC from adversely affecting the stocks of the PSC species. An example of how this program is being used is the Bering Sea pollock fishery, which became completely observed in 2011. As a result, salmon PSC estimates in the Bering Sea are a census rather than a sample and since 2011, there has been a fixed "hard cap" in the fishery. The information from the observer program helps identify the types of information and management measures that are required to reduce PSC to the extent practicable, as is required by the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

#### 2.2.2 Ex-Vessel Prices and Value

The ex-vessel market is the transaction of catch delivered by vessels to processors. In general, ex-vessel prices are derived from Commercial Operator Annual Report buying reports. Some catcher-vessels minimally processes (e.g., head-and-gut) the catch prior to delivery to the processor. The value of this on-board processing is discounted from the ex-vessel price so that it represents the round-weight (unprocessed) prices of the retained catch. Ex-vessel value is calculated by multiplying ex-vessel prices by retained catch. For the at-sea sector much of catch is both caught and processed for first-wholesale distribution by a single entity and as such a true "ex-vessel" market does not exist. For national accounting purposes the "ex-vessel" value of the at-sea sector are calculated by applying COAR buying prices for the corresponding species (group), region, and gear-type of the retained catch. For a subset of fisheries that are prosecuted primarily by the at-sea catcher/processor

fleet, and for which COAR buying data are sparse, we impute prices as a percentage (40%) of the estimated wholesale value per round weight. This percentage reflects the long-term average of the ratio ex-vessel prices to head-and-gut (H&G) processed-product prices for species (primarily Pacific cod) that are well represented in COAR buying and production reports. Ex-vessel prices and value include post-season adjustments. Additional details on pricing methodology are available in metadata for these tables accessible at http://www.afsc.noaa.gov/REFM/Socioeconomics/SAFE/CSV\_groundfish/metadata/groundfish\_exvessel\_value\_metadata.pdf.

Tables 6 contains data on the real ex-vessel catch of groundfish and non-groundfish species in Alaska, adjusted to 2016 dollars by applying the Personal Consumption Expenditure Index (https://research.stlouisfed.org/fred2/series/PCEPI) to account for affects of inflation on fishermen's revenue. Table 8 provides estimates of ex-vessel value by residency of primary vessel owners, area, and species. Residency of primary vessel owners are determined from the CAS combined with State of Alaska groundfish fish ticket data and vessel registration data, the latter of which includes the stated residency of the primary vessel owner. Residents of Alaska and of other states, particularly Washington and Oregon, are active participants in the BSAI and GOA groundfish fisheries. For the BSAI and GOA combined, 87% of the 2016 ex-vessel value was accounted for by vessels with primary owners who indicated that they were not residents of Alaska.

Tables 13 and 29 contains estimated ex-vessel prices that are used with estimates of retained catch to calculate ex-vessel values (gross revenues) for the BSAI and GOA, respectively. Prices in these tables may include data from both federally-managed and state-managed fisheries. Estimates of ex-vessel value by area, gear, type of vessel, and species are presented in Tables 14 and 30 for the BSAI and GOA, respectively. Table 15 presents estimates of ex-vessel value of catch and value per vessel, vessel and permit counts, in the BSAI and the percent value of BSAI FMP groundfish and all BSAI fisheries by processor group. Table 15 provides these same data for the GOA.

#### 2.2.3 First Wholesale Production, Prices and Value

The first wholesale market is the first sale onto the wholesale market of fisheries products after initial processing by a commercial processor with a Federal Processor Permit (FPP).<sup>2</sup> Groundfish first wholesale production data are sourced from at-sea and shoreside groundfish production reports. Product pricing and value reflect COAR product report price data appended to these production data per the AKFIN product pricing index. While groundfish production reports are a federal reporting requirement, there is typically no distinction made in this reporting between product derived from federally-managed catch and product derived from state-managed catch. Likewise, while COAR production reports include the area of processing, these data are insufficient for identifying the fishery inputs for units of finished production. As such, these tables reflect production volume and pricing from federal and some state-managed fisheries. Wholesale value and prices are given as F.O.B. (Free On Board) Alaska, indicating that transportation costs are not included in values and prices.

Table 7 reports estimates of the weight and first wholesale value of processed products from catch in the groundfish and non-groundfish commercial fisheries of Alaska. Estimates of first wholesale production weight of the processed products sourced from catch of groundfish are presented by species, product form, sector, and type of processor in Table 16 for the BSAI and Table 32 for the

<sup>&</sup>lt;sup>2</sup>An FPP is required for all processors receiving and/or processing groundfish harvested in Federal waters.

GOA. First-wholesale value (gross revenue) is presented in tables Table 17 and 33 for the BSAI and GOA, respectively. Product price-per-pound estimates are presented in Tables 18 and 34, and estimates of total first wholesale product value per round metric ton of retained catch are reported in Table 19 and for the BSAI and GOA, respectively. For these tables we source the round weight of retained catch from CAS data rather than using product recovery rates to derive round weights from production data.

Tables 20 and 36 present number of processors, gross product value and value per processor, and percent value of BSAI FMP groundfish of processed groundfish by processing fleet for the BSAI and GOA, respectively. Data in these tables are summarized from COAR product reporting, and no distinction is made between state-managed and federally-managed groundfish sources of production.

#### 2.2.4 Effort (Fleet Size, Weeks of Fishing, Crew Weeks)

Data on measures of fishing capacity and effort in federally-managed Alaska groundfish fisheries, including fleet size, duration of fishing, and levels of harvesting and processing employment are sourced from catch accounting data, ADF&G groundfish fish tickets, North Pacific groundfish observer data, and at-sea groundfish production reports.

The numbers of vessels that landed groundfish are depicted in Fig. 3.6 by gear type. Vessel participation stratified by area, target, residency of vessel owners, and gear are shown in Tables 9. Vessel participation by area, vessel type, and target are shown in Tables 10. Number of vessels, average and median length, and average and median capacity (registered net tonnage) of vessels by vessel type, and gear are shown in Tables 21, and 37.

Tables 23 and 39 provide estimates of vessel weeks for catcher vessels in the BSAI and GOA, respectively, stratified by length class, area, gear, and target fishery. Tables 24 and 40 provide the same stratification of vessel weeks for catcher/processors in the BSAI and GOA, respectively. Vessel weeks are apportioned by catch volume in cases where a vessel is identified with activity in multiple gears, areas, and/or targets in a given week.

Catcher vessel crew weeks are sourced from ADF&G fish tickets/eLandings, which include data on the number of licensed crew working aboard vessels by month and area shown in Tables 25 and 41, in the BSAI and GOA, respectively. At-sea production reports provide these information for motherships and catcher/processors shown in Tables 26 and 42 for the BSAI and GOA, respectively. A single crew week represents one crew member aboard one vessel for a week. Crew weeks are apportioned by catch volume in cases where a vessel is identified with activity in multiple areas in a given week. These data do not include employment levels in the shoreside and inshore processing sectors. Future versions of this report may include reporting of harvest crew employment in the catcher vessel sector, data which are now collected in groundfish landing reports.

#### 2.2.5 Economic Data Tables for the Commercial Pacific Halibut Fishery

Pacific halibut fisheries in Alaska is managed jointly by the NMFS, the NPFMC, the state of Alaska and the International Pacific Halibut Commission (IPHC). The IPHC was established through a Convention between the United States and Canada to research the biology of Pacific halibut and

conduct stock assessments which are used to establish catch levels in each country.<sup>3</sup> Under the authority of NMFS, the NPFMC allocates the halibut resource among the user groups (commercial, recreational, and subsistence fisheries) and sets by catch limits for fisheries with incidental halibut catch, while NMFS enforces U.S. regulations. The state of Alaska permits fishermen and assists in monitoring and reporting, particularly of recreational and subsistence harvests.<sup>4</sup> Since 1995 the commercial halibut fisheries off Alaska have been managed as a catch share fishery through the Individual Fisheries Quota (IFQ) program and the Community Development Quota (CDQ) program.

Prior to 2014 this report included only limited data on halibut because it is not an FMP managed species and the Alaska Fisheries Science Center does not conduct the Pacific halibut stock assessment. Beginning in 2014, economic data tables for Pacific halibut are included in this report to provide management and the public a consolidated source for economic information of fisheries activity for species harvested in the federal waters off Alaska. Economic data tables in Section 4 for Pacific halibut are provided separate from the FMP managed groundfish because of its unique management status. Moreover, halibut management units (e.g., areas) do not match the definitions used for FMP Groundfish making it infeasible to append halibut data directly to the economic data tables for the FMP groundfish.

The economic data in Tables H1-H10 are only for the commercial fishing sector. Tables H1-H2 display Pacific halibut commercial landings (net weight retained catch). Table H3 displays prohibited species catch (of non-halibut species) on commercial trips where was the halibut target species. Ex-vessel value and price are displayed by various management areas, vessel length and ports in Tables H4A-H6. First-wholesale production, value and prices by product type is displayed in Table H7. Fishing effort as measured by: vessel counts are displayed in Tables H8; days fishing are displayed in Table H9; crew weeks are displayed in Table H10.

#### 2.2.6 Description of the Category "Other" in Data Tables

- TABLE 2: "Other shellfish" comprises shellfish other than crab, including abalone, mussel, clam, oyster, scallop, sea cucumber, sea urchin, shrimp, and snails. Note that octopus and squid are reported as groundfish as they are managed under the BSAI and GOA groundfish FMPs.
- TABLE 7: "Other" includes lingcod, non-crab shellfish (mussel, clam, scallop, shrimp), and various freshwater and anadromous finfish species other than federally managed groundfish, salmon, halibut, and herring (e.g., whitefish, trout, Arctic char).
- TABLE 12, 28: "Other flatfish" in the BSAI include Alaska Plaice and species within the BSAI other flatfish management complex, including starry flounder and dover, rex, butter, English, petrale, and sand sole.
- TABLE 5: "Other salmon" are non-Chinook salmon species (sockeye, coho, pink, chum). "Other King crab" are blue, golden (brown), and scarlet king crab species. "Other Tanner crab" are snow, grooved, and triangle Tanner crab species.

<sup>3</sup>www.iphc.int/home.html.

<sup>4</sup>http://www.adfg.alaska.gov/index.cfm?adfg=halibut.management.

- TABLE 16, 17, 18, 32, 33, 34: "Other fillets" for pollock include fillets with skin and ribs; fillets with skin, no ribs; fillets with ribs, no skin; and skinless/boneless fillets. "Flat Other" includes BSAI Alaska Plaice and species within the BSAI other flatfish management complex (starry flounder and dover, rex, butter, english, petrale, and sand sole).
- TABLE 19, 35: "Other" species are primarily skate, squid, octopus, shark, and sculpin.

#### 2.2.7 Additional Notes

- Confidential values are excluded from the computation of aggregates (e.g. sums and averages) within a table. This is particularly important to remember for highly stratified tables, such as Tables 13, 14 16, 16, 18, 29, 30 32, 32, and 34. Care should be taken when comparing totals from tables containing values suppressed for confidentiality. In general, preference should be given to aggregate numbers from less stratified tables.
- Within the data tables, numbers that are smaller than the level of precision used within the table are printed as '0'. For example, if a table uses the one decimal place level of precision, then an actual value of '0.01' is presented in the table as '0'.
- The Personal Consumption Expenditures: chain-type price index https://research.stlouisfed.org/fred2/series/PCEPI was used to deflate the ex-vessel and first whole-sale value estimates reported in Tables 6. The PCE is used to adjust to fishermen's ex-vessel revenues to account for the change in general US consumption expenditures. The GDP: chain-type price index https://research.stlouisfed.org/fred2/series/GDPCTPI was used to deflate the ex-vessel and first wholesale value estimates reported in Tables 7. The GDP price index is used to adjust to fishermen's wholesale production revenues to account for the change in general US production prices. The use of these indices began in 2014. Before 2014 this annual report used the Producer Price Index (PPI) for unprocessed and packaged fish was used for real adjustments (http://data.bls.gov/cgi-bin/srgate, using the series ID 'WPU0223').
- Estimates of U.S. imports and per-capita consumption of various fisheries products, previously published in Table 54-56 of this report, are available in Fisheries of the United States (FUS), published annually by the NMFS Office of Science & Technology. The 2016 FUS is available at: http://www.st.nmfs.noaa.gov/Assets/commercial/fus/fus12/index.html.
- Annual and monthly U.S. economic indicators (producer and consumer price indices), published in past years in Tables 57 and 58 are available from the U.S. Department of Labor Statistics at: http://www.bls.gov/data/sa.htm.
- Foreign exchange rates, which we've previously published in Tables 59 and 60, are available from the U.S. Federal Reserve Board (for all currencies except the Icelandic kronur) at: www.federalreserve.gov. Exchange rates for Iceland's kronur are available at: www.oanda.com.
- The information provided by the FMA division of the AFSC has had a key role in the monitoring of total allowable catches (TACs), catch of prohibited species. In recent years, observer data for individual vessel accounting has been important in the management of the CDQ program, AFA pollock, BSAI crab, Amendment 80 fisheries, as well as others. In addition, much of the information that is used to assess the status of groundfish stocks, to

monitor the interactions between the groundfish fishery and marine mammals and sea birds, and to analyze fishery management actions is provided by the FMA.

• Observer coverage costs: In previous years, Table 51 provided estimates of the numbers of vessels and plants with observers, the numbers of observer-deployment days, and observer costs by year and type of operation. In 2013, the restructured observer program was implemented and more detailed treatment of observer cost estimates can be found in the Observer Annual Report at: http://alaskafisheries.noaa.gov/fisheries/observer-program-reports.

#### 2.3. Request for Feedback

The data and estimates in this report are intended both to provide information that can be used to describe the Alaska groundfish fisheries and to provide the industry and others an opportunity to comment on the validity of these estimates. We hope that the industry and others will identify any data or estimates in this report that can be improved and provide the information and methods necessary to improve them for both past and future years. There are two reasons why it is important that such improvements be made. First, with better estimates, the report will be more successful in monitoring the economic performance of the fisheries and in identifying changes in economic performance that may be attributable to regulatory actions. Second, the estimates in this report often will be used as the basis for estimating the effects of proposed fishery management actions. Therefore, improved estimates in this report will allow more informed decisions by those involved in managing and conducting the Alaska groundfish fisheries. The industry and other stakeholders in these fisheries can further improve the usefulness of this report by suggesting other measures of economic performance that should be included in the report, or other ways of summarizing the data that are the basis for this report, and participating in voluntary survey efforts NMFS may undertake in the future to improve existing data shortages. An online survey to facilitate user feedback is available at: http://www.afsc.noaa.gov/REFM/Socioeconomics/SAFE/SAFE\_survey.php.

#### 2.4. Citations

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#### 2.5. Acknowledgements

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# 3. FIGURES REPORTING ECONOMIC DATA OF THE GROUNDFISH FISHERIES OFF ALASKA

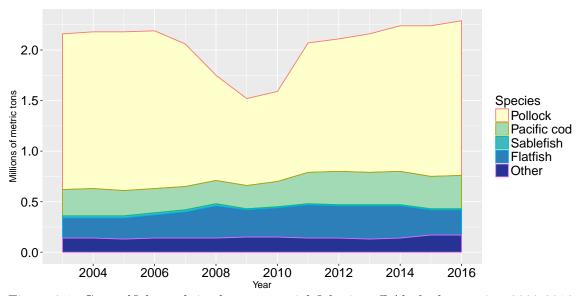


Figure 3.1: Groundfish catch in the commercial fisheries off Alaska by species, 2003-2016.

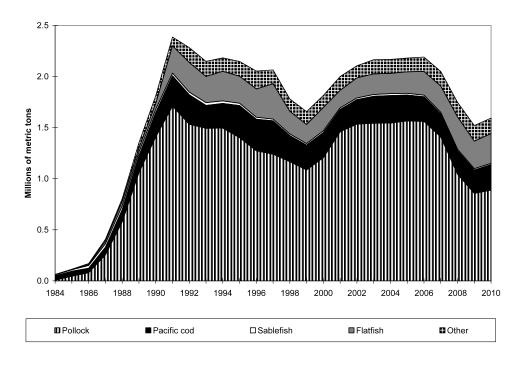


Figure 3.2: Groundfish catch in the domestic commercial fisheries off Alaska by species, (1984-2010). **Notes:** Catch for 2011 and onward are displayed in Figure 3.1.

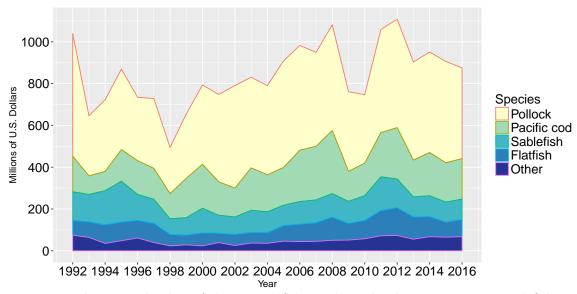


Figure 3.3: Real ex-vessel value of the groundfish catch in the domestic commercial fisheries off Alaska by species, 1992-2016 (base year = 2016).

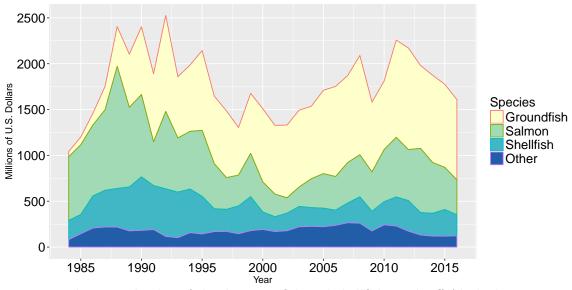


Figure 3.4: Real ex-vessel value of the domestic fish and shellfish catch off Alaska by species group, 1984-2016 (base year = 2016).

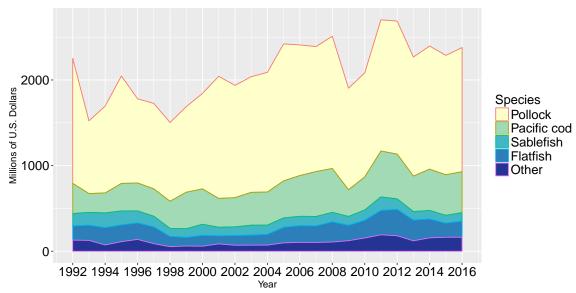


Figure 3.5: Real gross product value of the groundfish catch off Alaska by species, 1992-2016 (base year = 2016).

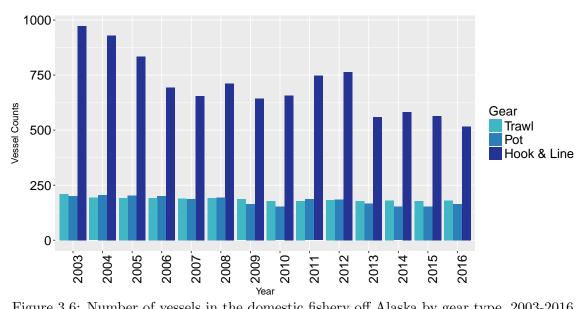


Figure 3.6: Number of vessels in the domestic fishery off Alaska by gear type, 2003-2016.

# 4. TABLES REPORTING ECONOMIC DATA OF THE GROUNDFISH FISHERIES OFF ALASKA

Table 1: Groundfish catch in the commercial fisheries of Alaska by area and species, 2007-2016 (1,000 metric tons, round weight).

2008         52.6         13.6         59.0         45.7         23.1         2.1         202.6           2009         44.2         12.0         53.2         42.3         22.8         2.2         155.6           2010         76.7         10.9         78.3         37.7         25.5         2.4         238.7           Gulf of 2011         81.5         12.0         85.2         41.1         23.1         1.6         251.8           Alaska         2012         104.0         12.7         77.9         29.5         27.4         1.2         258.7           2013         96.4         12.8         68.6         33.9         24.9         1.3         250.1           2014         142.6         11.1         84.8         47.6         28.8         1.0         362.2           2015         167.6         11.1         79.0         26.7         29.0         1.2         324.1           2016         177.1         10.0         64.1         28.1         34.0         1.1         324.2           2007         1,357.0         2.4         174.5         216.2         23.6         58.7         1,860.4           2008         991.9 <th></th> <th>Year</th> <th>Pollock</th> <th>Sablefish</th> <th>Pacific Cod</th> <th>Flatfish</th> <th>Rockfish</th> <th>Atka Mackerel</th> <th>Total</th>		Year	Pollock	Sablefish	Pacific Cod	Flatfish	Rockfish	Atka Mackerel	Total
2009         44.2         12.0         53.2         42.3         22.8         2.2         185.6           Gulf of 2011         81.5         12.0         85.2         41.1         23.1         1.6         251.8           Alaska 2012         104.0         12.7         77.9         29.5         27.4         1.2         258.7           2013         96.4         12.8         68.6         33.9         24.9         1.3         250.1           2014         142.6         11.1         84.8         47.6         28.8         1.0         326.2           2015         167.6         11.1         79.0         26.7         29.0         1.2         324.1           2016         177.1         10.0         64.1         28.1         34.0         1.1         324.3           2007         1,357.0         2.4         174.5         216.2         23.6         58.7         1,860.4           2008         991.9         2.0         171.0         270.0         21.7         58.1         1,545.7           2009         812.5         2.0         175.8         226.3         19.5         72.8         1,337.1           Bering         2010		2007	52.7	14.7	52.3	40.5	23.6	1.5	192.4
Gulf of 2011         76.7         10.9         78.3         37.7         25.5         2.4         238.7           Gulf of 2011         81.5         12.0         85.2         41.1         23.1         1.6         251.8           Alaska         2012         104.0         12.7         77.9         29.5         27.4         1.2         258.7           2013         96.4         12.8         68.6         33.9         24.9         1.3         250.1           2014         142.6         11.1         84.8         47.6         28.8         1.0         336.2           2015         167.6         11.1         79.0         26.7         29.0         1.2         324.1           2016         177.1         10.0         64.1         28.1         34.0         1.1         324.3           2007         1,357.0         2.4         174.5         216.2         23.6         58.7         1,860.4           2008         991.9         2.0         171.0         270.0         21.7         58.1         1,545.7           2008         892.9         2.0         175.8         226.3         19.5         72.8         1,337.4           Sea &		2008	52.6	13.6	59.0	45.7	23.1	2.1	202.6
Gulf of 2011         81.5         12.0         85.2         41.1         23.1         1.6         251.8           Alaska         2012         104.0         12.7         77.9         29.5         27.4         1.2         258.7           2013         96.4         12.8         68.6         33.9         24.9         1.3         250.1           2014         142.6         11.1         84.8         47.6         28.8         1.0         326.2           2015         167.6         11.1         79.0         26.7         29.0         1.2         324.1           2016         177.1         10.0         64.1         28.1         34.0         1.1         324.3           2007         1,357.0         2.4         174.5         216.2         23.6         58.7         1,860.4           2008         991.9         2.0         171.0         270.0         21.7         58.1         1,545.7           2009         812.5         2.0         175.8         226.3         19.5         72.8         1,337.1           Bering         2010         81.6         1.8         171.9         253.3         23.5         68.6         1,354.6		2009	44.2	12.0	53.2	42.3	22.8	2.2	185.6
Alaska         2012         104.0         12.7         77.9         29.5         27.4         1.2         258.7           2013         96.4         12.8         68.6         33.9         24.9         1.3         250.1           2014         142.6         11.1         84.8         47.6         28.8         1.0         326.2           2015         167.6         11.1         79.0         26.7         29.0         1.2         324.1           2016         177.1         10.0         64.1         28.1         34.0         1.1         324.3           2007         1,357.0         2.4         174.5         216.2         23.6         58.7         1,860.4           2008         991.9         2.0         171.0         270.0         21.7         58.1         1,545.7           2009         812.5         2.0         175.8         226.3         19.5         72.8         1,337.1           Bering         2010         811.6         1.8         171.9         253.3         23.5         68.6         1,354.6           Sea &         2011         1,200.4         1.7         220.1         285.9         28.2         51.8         1,818.5		2010	76.7	10.9	78.3	37.7	25.5	2.4	238.7
2013         96.4         12.8         68.6         33.9         24.9         1.3         250.1           2014         142.6         11.1         84.8         47.6         28.8         1.0         326.2           2015         167.6         11.1         79.0         26.7         29.0         1.2         324.1           2016         177.1         10.0         64.1         28.1         34.0         1.1         324.3           2007         1,357.0         2.4         174.5         216.2         23.6         58.7         1,860.4           2008         991.9         2.0         171.0         270.0         21.7         58.1         1,545.7           2009         812.5         2.0         175.8         226.3         19.5         72.8         1,337.1           Bering         2010         811.6         1.8         171.9         253.3         23.5         68.6         1,354.6           Sea & 2011         1,206.3         1.9         251.0         291.2         28.1         47.8         1,887.9           Islands         2012         1,228.1         47.8         1,857.9         297.2         34.9         23.2         1,914.5 <td>Gulf of</td> <td>2011</td> <td>81.5</td> <td>12.0</td> <td>85.2</td> <td>41.1</td> <td>23.1</td> <td>1.6</td> <td>251.8</td>	Gulf of	2011	81.5	12.0	85.2	41.1	23.1	1.6	251.8
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Alaska	2012	104.0	12.7	77.9	29.5	27.4	1.2	258.7
2015         167.6         11.1         79.0         26.7         29.0         1.2         324.1           2016         177.1         10.0         64.1         28.1         34.0         1.1         324.3           2007         1,357.0         2.4         174.5         216.2         23.6         58.7         1,860.4           2008         991.9         2.0         171.0         270.0         21.7         58.1         1,545.7           2009         812.5         2.0         175.8         226.3         19.5         72.8         1,337.1           Bering         2010         811.6         1.8         171.9         253.3         23.5         68.6         1,354.6           Sea & 2011         1,200.4         1.7         220.1         285.9         28.2         51.8         1,818.5           Aleutian         2012         1,206.3         1.9         251.0         291.2         28.1         47.8         1,857.9           Islands         2013         1,273.8         1.7         250.2         297.2         34.9         23.2         1,914.5           2014         1,300.2         1.1         249.3         276.0         36.0         31.0 </td <td></td> <td>2013</td> <td>96.4</td> <td>12.8</td> <td>68.6</td> <td>33.9</td> <td>24.9</td> <td>1.3</td> <td>250.1</td>		2013	96.4	12.8	68.6	33.9	24.9	1.3	250.1
2016         177.1         10.0         64.1         28.1         34.0         1.1         324.3           2007         1,357.0         2.4         174.5         216.2         23.6         58.7         1,860.4           2008         991.9         2.0         171.0         270.0         21.7         58.1         1,545.7           2009         812.5         2.0         175.8         226.3         19.5         72.8         1,337.1           Bering         2010         811.6         1.8         171.9         253.3         23.5         68.6         1,354.6           Sea & 2011         1,200.4         1.7         220.1         285.9         28.2         51.8         1,818.5           Aleutian         2012         1,206.3         1.9         251.0         291.2         28.1         47.8         1,857.9           Islands         2013         1,273.8         1.7         250.2         297.2         34.9         23.2         1,914.5           2014         1,300.2         1.1         249.3         276.0         36.0         31.0         1,928.1           2015         1,323.2         0.6         242.0         219.2         39.7		2014	142.6	11.1	84.8	47.6	28.8	1.0	326.2
2007         1,357.0         2.4         174.5         216.2         23.6         58.7         1,860.4           2008         991.9         2.0         171.0         270.0         21.7         58.1         1,545.7           2009         812.5         2.0         175.8         226.3         19.5         72.8         1,337.1           Bering         2010         811.6         1.8         171.9         253.3         23.5         68.6         1,354.6           Sea & 2011         1,200.4         1.7         220.1         285.9         28.2         51.8         1,818.5           Aleutian         2012         1,206.3         1.9         251.0         291.2         28.1         47.8         1,857.9           Islands         2013         1,273.8         1.7         250.2         297.2         34.9         23.2         1,914.5           2014         1,300.2         1.1         249.3         276.0         36.0         31.0         1,928.1           2015         1,323.2         0.6         242.0         219.2         39.7         53.3         1,914.4           2016         1,355.0         0.9         261.1         225.3         36.9		2015	167.6	11.1	79.0	26.7	29.0	1.2	324.1
2008       991.9       2.0       171.0       270.0       21.7       58.1       1,545.7         2009       812.5       2.0       175.8       226.3       19.5       72.8       1,337.1         Bering       2010       811.6       1.8       171.9       253.3       23.5       68.6       1,354.6         Sea & 2011       1,200.4       1.7       220.1       285.9       28.2       51.8       1,818.5         Aleutian 2012       1,206.3       1.9       251.0       291.2       28.1       47.8       1,857.9         Islands       2013       1,273.8       1.7       250.2       297.2       34.9       23.2       1,914.5         2014       1,300.2       1.1       249.3       276.0       36.0       31.0       1,928.1         2015       1,323.2       0.6       242.0       219.2       39.7       53.3       1,914.4         2016       1,355.0       0.9       261.1       225.3       36.9       54.5       1,970.4         2007       1,409.7       17.0       226.7       256.7       47.2       60.2       2,052.8         2008       1,044.4       15.7       230.0       315.7		2016	177.1	10.0	64.1	28.1	34.0	1.1	324.3
2009         812.5         2.0         175.8         226.3         19.5         72.8         1,337.1           Bering         2010         811.6         1.8         171.9         253.3         23.5         68.6         1,354.6           Sea & 2011         1,200.4         1.7         220.1         285.9         28.2         51.8         1,818.5           Aleutian 2012         1,206.3         1.9         251.0         291.2         28.1         47.8         1,857.9           Islands         2013         1,273.8         1.7         250.2         297.2         34.9         23.2         1,914.5           2014         1,300.2         1.1         249.3         276.0         36.0         31.0         1,928.1           2015         1,323.2         0.6         242.0         219.2         39.7         53.3         1,914.4           2016         1,355.0         0.9         261.1         225.3         36.9         54.5         1,970.4           2007         1,409.7         17.0         226.7         256.7         47.2         60.2         2,052.8           2008         1,044.4         15.7         230.0         315.7         44.8         60.2 <td></td> <td>2007</td> <td>1,357.0</td> <td>2.4</td> <td>174.5</td> <td>216.2</td> <td>23.6</td> <td>58.7</td> <td>1,860.4</td>		2007	1,357.0	2.4	174.5	216.2	23.6	58.7	1,860.4
Bering         2010         811.6         1.8         171.9         253.3         23.5         68.6         1,354.6           Sea & 2011         1,200.4         1.7         220.1         285.9         28.2         51.8         1,818.5           Aleutian 2012         1,206.3         1.9         251.0         291.2         28.1         47.8         1,857.9           Islands         2013         1,273.8         1.7         250.2         297.2         34.9         23.2         1,914.5           2014         1,300.2         1.1         249.3         276.0         36.0         31.0         1,928.1           2015         1,323.2         0.6         242.0         219.2         39.7         53.3         1,914.4           2016         1,355.0         0.9         261.1         225.3         36.9         54.5         1,970.4           2007         1,409.7         17.0         226.7         256.7         47.2         60.2         2,052.8           2008         1,044.4         15.7         230.0         315.7         44.8         60.2         1,748.3           2009         856.8         14.0         229.0         268.6         42.3         75.0 </td <td></td> <td>2008</td> <td>991.9</td> <td>2.0</td> <td>171.0</td> <td>270.0</td> <td>21.7</td> <td>58.1</td> <td>1,545.7</td>		2008	991.9	2.0	171.0	270.0	21.7	58.1	1,545.7
Sea & 2011         1,200.4         1.7         220.1         285.9         28.2         51.8         1,818.5           Aleutian 2012         1,206.3         1.9         251.0         291.2         28.1         47.8         1,857.9           Islands 2013         1,273.8         1.7         250.2         297.2         34.9         23.2         1,914.5           2014         1,300.2         1.1         249.3         276.0         36.0         31.0         1,928.1           2015         1,323.2         0.6         242.0         219.2         39.7         53.3         1,914.4           2016         1,355.0         0.9         261.1         225.3         36.9         54.5         1,970.4           2007         1,409.7         17.0         226.7         256.7         47.2         60.2         2,052.8           2008         1,044.4         15.7         230.0         315.7         44.8         60.2         1,748.3           2009         856.8         14.0         229.0         268.6         42.3         75.0         1,522.7           2010         888.4         12.7         250.2         291.0         49.0         71.1         1,593.3		2009	812.5	2.0	175.8	226.3	19.5	72.8	1,337.1
Aleutian 2012       1,206.3       1.9       251.0       291.2       28.1       47.8       1,857.9         Islands 2013       1,273.8       1.7       250.2       297.2       34.9       23.2       1,914.5         2014       1,300.2       1.1       249.3       276.0       36.0       31.0       1,928.1         2015       1,323.2       0.6       242.0       219.2       39.7       53.3       1,914.4         2016       1,355.0       0.9       261.1       225.3       36.9       54.5       1,970.4         2007       1,409.7       17.0       226.7       256.7       47.2       60.2       2,052.8         2008       1,044.4       15.7       230.0       315.7       44.8       60.2       1,748.3         2009       856.8       14.0       229.0       268.6       42.3       75.0       1,522.7         2010       888.4       12.7       250.2       291.0       49.0       71.1       1,593.3         Allaska       2012       1,310.2       14.6       328.9       320.7       55.5       49.0       2,116.6         2013       1,370.1       14.5       318.8       331.1       59.8	Bering	2010	811.6	1.8	171.9	253.3	23.5	68.6	1,354.6
Islands         2013         1,273.8         1.7         250.2         297.2         34.9         23.2         1,914.5           2014         1,300.2         1.1         249.3         276.0         36.0         31.0         1,928.1           2015         1,323.2         0.6         242.0         219.2         39.7         53.3         1,914.4           2016         1,355.0         0.9         261.1         225.3         36.9         54.5         1,970.4           2007         1,409.7         17.0         226.7         256.7         47.2         60.2         2,052.8           2008         1,044.4         15.7         230.0         315.7         44.8         60.2         1,748.3           2009         856.8         14.0         229.0         268.6         42.3         75.0         1,522.7           2010         888.4         12.7         250.2         291.0         49.0         71.1         1,593.3           All         2011         1,281.9         13.7         305.4         327.0         51.3         53.4         2,070.3           Alaska         2012         1,310.2         14.6         328.9         320.7         55.5         <			1,200.4	1.7	220.1	285.9	28.2	51.8	$1,\!818.5$
2014 1,300.2 1.1 249.3 276.0 36.0 31.0 1,928.1 2015 1,323.2 0.6 242.0 219.2 39.7 53.3 1,914.4 2016 1,355.0 0.9 261.1 225.3 36.9 54.5 1,970.4 2007 1,409.7 17.0 226.7 256.7 47.2 60.2 2,052.8 2008 1,044.4 15.7 230.0 315.7 44.8 60.2 1,748.3 2009 856.8 14.0 229.0 268.6 42.3 75.0 1,522.7 2010 888.4 12.7 250.2 291.0 49.0 71.1 1,593.3 All 2011 1,281.9 13.7 305.4 327.0 51.3 53.4 2,070.3 Alaska 2012 1,310.2 14.6 328.9 320.7 55.5 49.0 2,116.6 2014 1,442.9 12.3 334.1 323.6 64.9 32.0 2,254.3 2015 1,490.8 11.7 321.1 245.9 68.7 54.5 2,238.5		2012	1,206.3	1.9		291.2	28.1		$1,\!857.9$
2015 1,323.2 0.6 242.0 219.2 39.7 53.3 1,914.4 2016 1,355.0 0.9 261.1 225.3 36.9 54.5 1,970.4 2007 1,409.7 17.0 226.7 256.7 47.2 60.2 2,052.8 2008 1,044.4 15.7 230.0 315.7 44.8 60.2 1,748.3 2009 856.8 14.0 229.0 268.6 42.3 75.0 1,522.7 2010 888.4 12.7 250.2 291.0 49.0 71.1 1,593.3 All 2011 1,281.9 13.7 305.4 327.0 51.3 53.4 2,070.3 Alaska 2012 1,310.2 14.6 328.9 320.7 55.5 49.0 2,116.6 2013 1,370.1 14.5 318.8 331.1 59.8 24.5 2,164.6 2014 1,442.9 12.3 334.1 323.6 64.9 32.0 2,254.3 2015 1,490.8 11.7 321.1 245.9 68.7 54.5 2,238.5	Islands	2013	$1,\!273.8$	1.7	250.2	297.2			1,914.5
2016         1,355.0         0.9         261.1         225.3         36.9         54.5         1,970.4           2007         1,409.7         17.0         226.7         256.7         47.2         60.2         2,052.8           2008         1,044.4         15.7         230.0         315.7         44.8         60.2         1,748.3           2009         856.8         14.0         229.0         268.6         42.3         75.0         1,522.7           2010         888.4         12.7         250.2         291.0         49.0         71.1         1,593.3           All         2011         1,281.9         13.7         305.4         327.0         51.3         53.4         2,070.3           Alaska         2012         1,310.2         14.6         328.9         320.7         55.5         49.0         2,116.6           2013         1,370.1         14.5         318.8         331.1         59.8         24.5         2,164.6           2014         1,442.9         12.3         334.1         323.6         64.9         32.0         2,254.3           2015         1,490.8         11.7         321.1         245.9         68.7         54.5         <		2014	1,300.2	1.1	249.3	276.0	36.0	31.0	1,928.1
2007 1,409.7 17.0 226.7 256.7 47.2 60.2 2,052.8 2008 1,044.4 15.7 230.0 315.7 44.8 60.2 1,748.3 2009 856.8 14.0 229.0 268.6 42.3 75.0 1,522.7 2010 888.4 12.7 250.2 291.0 49.0 71.1 1,593.3 All 2011 1,281.9 13.7 305.4 327.0 51.3 53.4 2,070.3 Alaska 2012 1,310.2 14.6 328.9 320.7 55.5 49.0 2,116.6 2013 1,370.1 14.5 318.8 331.1 59.8 24.5 2,164.6 2014 1,442.9 12.3 334.1 323.6 64.9 32.0 2,254.3 2015 1,490.8 11.7 321.1 245.9 68.7 54.5 2,238.5			1,323.2					53.3	1,914.4
2008 1,044.4 15.7 230.0 315.7 44.8 60.2 1,748.3 2009 856.8 14.0 229.0 268.6 42.3 75.0 1,522.7 2010 888.4 12.7 250.2 291.0 49.0 71.1 1,593.3 All 2011 1,281.9 13.7 305.4 327.0 51.3 53.4 2,070.3 Alaska 2012 1,310.2 14.6 328.9 320.7 55.5 49.0 2,116.6 2013 1,370.1 14.5 318.8 331.1 59.8 24.5 2,164.6 2014 1,442.9 12.3 334.1 323.6 64.9 32.0 2,254.3 2015 1,490.8 11.7 321.1 245.9 68.7 54.5 2,238.5		2016	1,355.0	0.9	261.1	225.3	36.9	54.5	1,970.4
2009 856.8 14.0 229.0 268.6 42.3 75.0 1,522.7 2010 888.4 12.7 250.2 291.0 49.0 71.1 1,593.3 All 2011 1,281.9 13.7 305.4 327.0 51.3 53.4 2,070.3 Alaska 2012 1,310.2 14.6 328.9 320.7 55.5 49.0 2,116.6 2013 1,370.1 14.5 318.8 331.1 59.8 24.5 2,164.6 2014 1,442.9 12.3 334.1 323.6 64.9 32.0 2,254.3 2015 1,490.8 11.7 321.1 245.9 68.7 54.5 2,238.5		2007	1,409.7	17.0	226.7	256.7	47.2	60.2	2,052.8
2010     888.4     12.7     250.2     291.0     49.0     71.1     1,593.3       All     2011     1,281.9     13.7     305.4     327.0     51.3     53.4     2,070.3       Alaska     2012     1,310.2     14.6     328.9     320.7     55.5     49.0     2,116.6       2013     1,370.1     14.5     318.8     331.1     59.8     24.5     2,164.6       2014     1,442.9     12.3     334.1     323.6     64.9     32.0     2,254.3       2015     1,490.8     11.7     321.1     245.9     68.7     54.5     2,238.5		2008	1,044.4	15.7	230.0	315.7	44.8	60.2	1,748.3
All       2011       1,281.9       13.7       305.4       327.0       51.3       53.4       2,070.3         Alaska       2012       1,310.2       14.6       328.9       320.7       55.5       49.0       2,116.6         2013       1,370.1       14.5       318.8       331.1       59.8       24.5       2,164.6         2014       1,442.9       12.3       334.1       323.6       64.9       32.0       2,254.3         2015       1,490.8       11.7       321.1       245.9       68.7       54.5       2,238.5		2009	856.8	14.0	229.0	268.6	42.3	75.0	$1,\!522.7$
Alaska     2012     1,310.2     14.6     328.9     320.7     55.5     49.0     2,116.6       2013     1,370.1     14.5     318.8     331.1     59.8     24.5     2,164.6       2014     1,442.9     12.3     334.1     323.6     64.9     32.0     2,254.3       2015     1,490.8     11.7     321.1     245.9     68.7     54.5     2,238.5		2010	888.4	12.7	250.2	291.0	49.0	71.1	1,593.3
2013     1,370.1     14.5     318.8     331.1     59.8     24.5     2,164.6       2014     1,442.9     12.3     334.1     323.6     64.9     32.0     2,254.3       2015     1,490.8     11.7     321.1     245.9     68.7     54.5     2,238.5	All	2011	1,281.9	13.7	305.4	327.0	51.3	53.4	2,070.3
2014     1,442.9     12.3     334.1     323.6     64.9     32.0     2,254.3       2015     1,490.8     11.7     321.1     245.9     68.7     54.5     2,238.5	Alaska	2012	1,310.2	14.6	328.9	320.7	55.5	49.0	$2,\!116.6$
2015 $1,490.8$ $11.7$ $321.1$ $245.9$ $68.7$ $54.5$ $2,238.5$		2013	$1,\!370.1$				59.8		2,164.6
		2014	1,442.9	12.3	334.1	323.6	64.9	32.0	$2,\!254.3$
2016 $1,532.1$ $10.9$ $325.2$ $253.3$ $70.9$ $55.6$ $2,294.7$		2015	1,490.8	11.7	321.1	245.9	68.7	54.5	$2,\!238.5$
		2016	$1,\!532.1$	10.9	325.2	253.3	70.9	55.6	$2,\!294.7$

**Notes:** The estimates are of total catch (i.e., retained and discarded catch). These estimates include catch from both federal and state of Alaska fisheries.

**Source:** NMFS Office of Science and Technology, Fisheries Statistics Division, Fisheries of the United States. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 2: Catch of species other than groundfish in the domestic commercial fisheries, 2002-2016 (1,000 metric tons).

Year	Crab	Other Shellfish	Salmon	Halibut	Herring	Total
2002	26.3	3.8	237.3	35.4	31.7	334.3
2003	25.8	2.5	286.0	34.8	31.3	380.4
2004	23.9	3.6	316.6	34.7	32.2	410.9
2005	25.9	2.9	395.7	33.5	38.9	496.9
2006	31.4	2.5	287.8	31.4	36.2	389.2
2007	32.1	2.1	390.7	30.5	30.5	485.8
2008	45.1	2.3	290.4	29.3	38.2	405.4
2009	40.6	2.2	304.6	26.2	39.4	413.0
2010	36.1	2.1	343.3	24.9	49.2	455.6
2011	36.5	1.7	334.8	18.7	44.7	436.5
2012	50.8	1.9	277.6	14.7	34.0	379.0
2013	39.5	1.8	459.3	13.0	38.6	552.3
2014	38.6	1.8	309.9	9.8	43.9	404.1
2015	44.1	2.2	472.1	10.4	31.0	559.8
2016	31.1	2.1	246.1	10.6	23.5	313.4

Notes: The estimates are of total catch (i.e., retained and discarded catch). These estimates include catch from both federal and state of Alaska fisheries

**Source:** NMFS Office of Science and Technology, Fisheries Statistics Division, Fisheries of the United States. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 3: Groundfish retained catch off Alaska by area, vessel type, gear and species, 2012-2016 (1,000 metric tons, round weight).

			Gulf	of Alaska			ea & Aleutiar slands	1	All	Alaska	
		Year	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total
		2012	10	1	11	1	0	1	11	1	12
		2013	10	1	11	1	0	1	10	1	12
	Sablefish	2014	9	0	9	1	0	1	9	1	10
		2015	8	0	9	0	0	0	9	1	9
		2016	7	0	8	0	0	0	8	0	8
		2012	10	5	15	1	129	130	11	134	145
		2013	8	3	11	1	122	123	9	125	134
	Pacific Coo	12014	9	6	14	2	122	125	11	128	139
		2015	7	5	13	1	128	129	8	133	141
		2016	3	5	8	0	127	127	3	131	135
Hook &	Z	2012	0	0	0	*	3	3	0	3	3
Line		2013	0	0	0	*	1	1	0	1	1
Line	Flatfish	2014	0	0	0	*	1	1	0	1	1
		2015	*	0	0	*	1	1	*	1	1
		2016	*	*	*	*	1	1	*	1	1
		2012	1	0	1	0	0	0	1	0	1
		2013	1	0	1	0	0	0	1	0	1
	Rockfish	2014	1	0	1	0	0	0	1	0	1
		2015	1	0	1	0	0	0	1	0	1
		2016	1	0	1	0	0	0	1	0	1
		2012	22	6	28	1	142	143	23	148	171
	All	2013	20	4	24	2	134	135	21	138	159
	Groundfish	2014	18	7	25	3	135	138	21	142	163
	Groundish	2015	17	6	23	1	142	143	18	148	166
		2016	12	5	17	0	139	139	12	144	156

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Table 3: Continued

			Gulf	of Alaska		Bering Sea & Aleutian Islands			All	l Alaska	
		Year	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total
-		2012	21	*	21	23	5	29	44	5	50
		2013	17	-	17	23	7	30	40	7	47
Pot	Pacific Co	d 2014	20	-	20	23	8	31	43	8	51
		2015	20	-	20	22	8	30	42	8	50
		2016	19	-	19	23	8	31	42	8	50
		2012	98	1	99	632	564	1,196	730	565	1,295
		2013	90	1	91	661	602	1,263	751	603	1,354
	Pollock	2014	137	1	138	668	611	1,279	805	612	1,418
		2015	160	1	161	687	620	1,307	848	621	1,469
		2016	171	1	172	704	636	1,340	875	637	1,512
		2012	0	0	1	*	0	0	0	1	1
		2013	0	0	1	*	0	0	0	1	1
	Sablefish	2014	0	0	1	*	0	0	0	0	1
		2015	0	0	1	0	0	0	0	0	1
Trawl		2016	0	0	1	0	0	0	0	1	1
		2012	18	2	19	46	37	83	64	38	102
		2013	18	1	19	42	44	85	60	45	104
	Pacific Co	d 2014	22	1	23	41	35	76	63	37	99
		2015	20	1	21	38	35	72	58	36	93
		2016	15	0	15	46	37	83	60	38	98
		2012	13	9	22	4	255	259	18	264	281
		2013	17	9	26	2	255	258	20	264	284
	Flatfish	2014	18	23	41	3	247	250	21	270	290
		2015	11	10	22	12	195	207	23	205	228
		2016	18	6	24	15	196	210	32	202	234

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Table 3: Continued

			Gulf	of Alaska		_	ea & Aleutia slands	1	Δ11	l Alaska	
		Year	Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Processors	Total
		2012	11	14	24	0	24	25	11	38	49
		2013	10	11	21	0	31	32	10	43	52
	Rockfish	2014	11	14	25	0	32	32	11	46	57
		2015	11	14	26	3	34	37	14	49	63
		2016	14	16	30	3	33	35	17	48	65
	Atka Mackerel	2012	0	1	1	1	42	43	1	43	43
Trawl		2013	0	1	1	0	21	21	0	22	22
mawi		2014	0	1	1	0	28	28	0	29	29
		2015	0	1	1	3	49	52	3	50	53
		2016	0	0	1	4	50	54	4	51	55
		2012	142	26	168	683	924	1,608	825	951	1,776
	All	2013	137	23	160	706	955	1,660	843	978	1,821
		2014	188	41	229	714	954	1,668	902	995	1,897
	Groundfish	2015	204	28	232	744	934	1,679	949	962	1,911
		2016	220	23	243	771	954	1,725	990	977	1,967
		2012	185	32	217	708	1,072	1,780	893	1,104	1,997
All	All	2013	174	27	201	731	1,095	1,826	905	1,122	2,027
		2014	227	48	275	740	1,097	1,837	967	1,145	2,112
Gear	Groundfish	2015	242	34	276	768	1,084	1,852	1,009	1,119	2,128
		2016	251	28	279	794	1,100	1,895	1,045	1,129	2,174

Notes: The estimates are of retained catch (i.e., excludes discarded catch). All groundfish include additional species categories. These estimates include only catch counted against federal TACs. Includes FMP groundfish catch on halibut targets. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 4: Discards and discard rates for groundfish catch off Alaska by area, gear, and species, 2012-2016 (1,000 metric tons, round weight).

			Fixed		Trawl		All Gear	
		Year	Total Discards	Discard Rate	Total Discards	Discard Rate	Total Discards	Discard Rate
		2012	0	21 %	1.9	2 %	2.0	2 %
		2013	0.1	32~%	2.4	2~%	2.4	3 %
	Pollock	2014	0.1	31~%	1.4	1 %	1.5	1 %
		2015	0.1	31~%	1.2	1 %	1.3	1 %
		2016	0.1	23~%	1.0	1 %	1.0	1 %
	-	2012	0.3	2 %	0.1	8 %	0.3	3 %
		2013	0.7	6~%	0	6~%	0.8	6 %
	Sablefish	2014	0.5	5~%	0.1	8 %	0.6	5 %
		2015	0.7	7~%	0.2	17~%	0.9	8 %
		2016	0.8	9~%	0.2	17~%	1.0	10 %
		2012	0.3	0 %	0.7	3 %	1.0	1 %
Gulf of Alaska	Pacific Cod	2013	2.3	5~%	2.3	11 %	4.6	7 %
		2014	1.7	3~%	3.5	13~%	5.2	6 %
		2015	0.9	2~%	0.8	4~%	1.7	2%
		2016	0.8	2~%	0.1	1 %	0.9	1 %
	Flatfish	2012	0.3	90 %	5.6	19 %	5.9	20 %
		2013	0.6	97~%	5.8	17~%	6.3	19 %
		2014	0.3	96~%	3.9	8 %	4.2	9 %
		2015	0.3	93~%	2.4	9~%	2.7	10 %
		2016	0.2	96~%	2.1	8 %	2.3	8 %
	Rockfish	2012	0.5	33 %	1.6	6 %	2.0	8 %
		2013	1.1	48~%	1.8	8 %	2.9	12 %
		2014	0.7	40~%	2.3	8 %	2.9	10 %
		2015	0.7	38~%	1.6	6~%	2.2	8 %
		2016	0.7	40 %	2.5	8 %	3.2	9 %
	Atka Mackerel	2012	0	86 %	0.5	42 %	0.5	42 %
		2013	0	99~%	0.4	36~%	0.4	36%
		2014	0	97~%	0.1	7~%	0.1	7 %
		2015	0	100 %	0.3	26~%	0.3	27 %
		2016	0	99~%	0.1	10~%	0.1	13 %
	All Groundfish	2012	3.2	4 %	11.5	6 %	14.7	6 %
		2013	12.5	14~%	14.3	8 %	26.8	10 %
		2014	9.7	10~%	12.8	5~%	22.5	7 %
		2015	8.1	9~%	8.3	3~%	16.5	5 %
		2016	8.7	11~%	8.1	3~%	16.8	5 %

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Table 4: Continued

		Year	Fixed		Trawl		All Gear	
			Total Discards	Discard Rate	Total Discards	Discard Rate	Total Discards	Discard Rate
	Pollock	2012	0.5	10 %	5.0	0 %	5.5	0 %
Bering Sea & Aleutian Islands		2013	0.6	12~%	4.9	0 %	5.5	0 %
		2014	0.6	10~%	13.9	1 %	14.5	1 %
		2015	0.7	9~%	9.0	1 %	9.6	1 %
		2016	0.7	11~%	8.5	1 %	9.3	1 %
		2012	0	1 %	0	1 %	0	1 %
		2013	0	3~%	0	1 %	0	2%
	Sablefish	2014	0	5~%	0	2~%	0	5 %
		2015	0	3~%	0	16~%	0	3~%
		2016	0.1	19~%	0	2%	0.1	12~%
	Pacific Cod	2012	1.9	1 %	0.9	1 %	2.8	1 %
		2013	3.6	2~%	1.5	2~%	5.1	2~%
		2014	3.2	2~%	0.6	1 %	3.9	2%
		2015	2.7	2~%	0.4	1 %	3.1	1 %
		2016	3.0	2~%	0.5	1 %	3.5	1 %
		2012	2.6	49 %	18.8	7 %	21.4	7 %
		2013	2.9	79 %	22.5	8 %	25.4	9 %
	Flatfish	2014	3.5	81 %	14.7	5~%	18.2	7 %
		2015	3.5	75~%	7.9	4~%	11.4	5 %
		2016	2.9	74~%	10.9	5 %	13.8	6%
	-	2012	0.1	27 %	1.4	5 %	1.5	5 %
		2013	0.2	60~%	0.9	3~%	1.1	3~%
	Rockfish	2014	0.3	66 %	1.2	3 %	1.5	4 %
		2015	0.2	65~%	1.8	5 %	2.1	5 %
		2016	0.1	60 %	1.3	4 %	1.5	4 %
		2012	0	54 %	1.3	3 %	1.3	3 %
	Atka Mackerel	2013	0	92~%	0.7	3 %	0.7	3 %
		2014	0	96~%	0.4	1 %	0.4	1 %
		2015	0	100~%	0.8	1 %	0.8	1 %
		2016	0	95~%	0.4	1 %	0.4	1 %
	All Groundfish	2012	20.4	10 %	35.7	2 %	56.2	3 %
		2013	24.1	12~%	39.0	2 %	63.1	3 %
		2014	25.7	12 %	37.9	2 %	63.6	3 %
		2015	28.2	13 %	25.8	2 %	54.0	3 %
		2016	30.6	14 %	27.4	$\stackrel{-}{2}\%$	58.0	3 %

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Table 4: Continued

			Fixed		Trawl		All Gear	
		Year	Total Discards	Discard Rate	Total Discards	Discard Rate	Total Discards	Discard Rate
	Pollock	2012	0.5	11 %	6.9	1 %	7.4	1 %
		2013	0.7	13~%	7.3	1 %	7.9	1 %
		2014	0.7	11~%	15.3	1 %	16.0	1 %
		2015	0.8	10~%	10.1	1 %	10.9	1 %
		2016	0.8	12~%	9.5	1 %	10.3	1 %
		2012	0.3	2 %	0.1	6 %	0.3	3 %
		2013	0.8	6~%	0	5~%	0.8	6%
	Sablefish	2014	0.6	5~%	0.1	8 %	0.6	5%
		2015	0.7	7 %	0.2	17~%	0.9	8 %
		2016	0.9	9~%	0.2	14~%	1.0	10 %
	Pacific Cod	2012	2.2	1 %	1.6	1 %	3.7	1 %
		2013	5.9	3~%	3.8	3~%	9.7	3%
		2014	4.9	2~%	4.2	4~%	9.1	3%
		2015	3.6	2~%	1.2	1 %	4.8	2~%
		2016	3.8	2%	0.6	1 %	4.4	1 %
All	Flatfish	2012	2.9	51 %	24.5	8 %	27.3	9 %
Alaska		2013	3.4	82~%	28.3	9~%	31.8	10 %
		2014	3.9	82~%	18.6	6~%	22.5	7 %
		2015	3.8	76%	10.3	4~%	14.1	6%
		2016	3.1	76%	13.0	5%	16.1	6 %
	Rockfish	2012	0.5	32 %	3.0	6 %	3.5	6 %
		2013	1.4	50~%	2.6	5~%	4.0	7 %
		2014	0.9	45~%	3.5	6~%	4.4	7 %
		2015	0.9	43~%	3.4	5~%	4.3	6%
		2016	0.8	43~%	3.8	6%	4.7	7 %
	Atka Mackerel	2012	0	63 %	1.8	4 %	1.8	4 %
		2013	0	93~%	1.1	5~%	1.1	5 %
		2014	0	96~%	0.4	1 %	0.5	1 %
		2015	0	100~%	1.1	2~%	1.1	2%
		2016	0	97~%	0.5	1 %	0.6	1 %
	All Groundfish	2012	23.6	9 %	47.3	3 %	70.9	3 %
		2013	36.5	13~%	53.3	3~%	89.9	4 %
		2014	35.4	12~%	50.7	3~%	86.2	4 %
		2015	36.3	12~%	34.1	2~%	70.5	3%
		2016	39.3	13~%	35.5	2%	74.8	3~%

Notes: All groundfish and all gear may include additional species or gear types. There were substantial changes to the observer program in 2013 that could affect the comparability of 2013 and later years, to previous years. For details on discard estimation see Cahalan, J., J. Gasper, and J. Mondragon. 2014. Catch sampling and estimation in the federal groundfish fisheries off Alaska, 2015 edition. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-286, 46 p.

**Source:** NMFS Alaska Region Blend and Catch-accounting System estimates. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 5: Prohibited species catch (PSC) by species, area and gear, 2012-2016 (metric tons (t) or number in 1,000s).

		Year	Halibut (t)	Herring (t)	Chinook (1,000s)	Other Salmon (1,000s)	Red King Crab (1,000s)	Other King Crab (1,000s)	Bairdi (1,000s)	Other Tanner (1,000s)
		2012	_	-	_	-	-	0	3	0
	Hook &	2013	-	-	-	-	0	0	1	-
	Line	2014	-	-	-	-	-	0	0	0
	Line	2015	-	-	-	-	0	0	0	-
		2016	-	-	-	-	0	0	0	0
		2012	42	-	-	-	-	-	167	-
		2013	15	-	-	-	-	-	577	-
	Pot	2014	11	-	-	-	-	-	133	-
Gulf of		2015	22	-	-	-	-	-	128	-
Alaska		2016	44	-	-	-	0	-	63	
		2012	1,704	1	20	1	-	0	83	-
		2013	1,228	11	23	5	-	0	243	-
	Trawl	2014	1,392	6	16	2	-	*	64	-
		2015	1,410	80	19	1	-	*	73	-
		2016	1,332	148	22	3	-	1	91	0
-		2012	1,746	1	20	1	-	0	254	0
		2013	1,243	11	23	5	0	0	821	-
	All Gear	2014	1,403	6	16	2	-	0	197	0
		2015	1,433	80	19	1	0	0	201	-
		2016	1,376	148	22	3	0	1	154	0
		2012	615	0	0	-	4	2	16	30
	Hook &	2013	521	0	*	-	6	1	17	18
	Line	2014	439	-	0	-	8	2	20	20
	Line	2015	315	0	0	0	4	1	23	16
		2016	220	*	0	0	4	1	18	23
		2012	5	-	-	-	8	*	104	16
		2013	2	-	-	-	101	0	230	14
Bering	Pot	2014	3	-	-	-	136	*	569	83
Sea &		2015	3	-	-	-	171	2	610	121
Aleutian		2016	3	-	-	-	22	*	296	20
Islands		2012	3,117	2,376	13	24	34	26	432	626
		2013	3,079	988	15	127	31	32	714	691
	Trawl	2014	3,028	186	18	224	33	24	624	484
		2015	1,999	1,531	25	243	20	15	424	492
		2016	2,132	1,493	33	347	40	14	220	167
		2012	3,737	$2,\!376$	13	24	45	28	552	672
		2013	3,602	988	15	127	138	33	961	724
	All Gear		3,471	186	18	224	176	25	1,213	587
		2015	2,318	1,531	25	243	194	18	1,056	629
		2016	2,355	1,493	33	347	67	15	534	210

Table 5: Continued

	Year	Halibut (t)	Herring (t)	Chinook (1,000s)	Other Salmon (1,000s)	Red King Crab (1,000s)	Other King Crab (1,000s)	Bairdi (1,000s)	Other Tanner (1,000s)
	2012	5,483	2,377	33	25	45	28	805	672
All	2013	4,845	999	37	132	138	33	1,782	724
	All Gear 2014	4,874	192	34	226	176	26	1,410	587
Alaska	2015	3,750	1,610	44	245	194	18	1,257	629
	2016	3,731	1,641	55	350	67	16	689	210

Notes: These estimates include only catches counted against federal TACs. Totals may include additional categories. Totals include halibut mortality taken by Amendment 80 vessels under the Exempted Fishing Permit No.2015-02. The estimates of halibut bycatch mortality are based on the IPHC discard mortality rates that were used for in-season management. The halibut IFQ program allows retention of halibut in the hook-and-line groundfish fisheries, making true halibut bycatch numbers unavailable for these fisheries. This is particularly a problem in the GOA for all hook-and-line fisheries and in the BSAI for the sablefish hook-and-line fishery. Therefore, estimates of halibut bycatch mortality are not included in this table for those fisheries. There were substantial changes to the observer program in 2013 that could affect the comparability of 2013 and later years, to previous years. Excludes PSC on halibut targets. Excludes PSC in state fisheries (sablefish and P. cod targets in state waters) For details on prohibited species catch estimation see Cahalan, J., J. Gasper, and J. Mondragon. 2014. Catch sampling and estimation in the federal groundfish fisheries off Alaska, 2015 edition. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-286, 46 p. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region Blend and Catch-accounting System estimates. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 6: Real ex-vessel value of the catch in the domestic commercial fisheries off Alaska by species group, 2002-2016; calculations based on COAR (\$ millions, base year = 2016).

Year	Shellfish	Salmon	Herring	Halibut	Groundfish	Total
2002	192.0	167.6	11.7	166.3	793.3	1,330.9
2003	221.9	212.7	11.3	209.9	837.5	1,493.2
2004	204.7	314.9	17.3	208.4	790.8	$1,\!536.0$
2005	202.2	376.8	17.7	204.3	909.5	1,710.5
2006	165.1	367.1	11.6	225.6	983.1	1,752.6
2007	215.1	441.1	17.6	248.0	950.1	$1,\!871.9$
2008	287.4	459.3	28.5	232.0	1,082.5	2,089.6
2009	214.2	430.0	26.5	149.1	761.2	$1,\!581.0$
2010	251.7	568.3	24.1	218.5	747.8	1,810.3
2011	316.7	650.8	11.5	218.3	1,060.4	$2,\!257.6$
2012	332.9	556.1	22.7	151.2	1,108.8	$2,\!171.7$
2013	245.5	699.8	16.8	114.8	903.6	1,980.6
2014	247.9	554.4	11.7	108.3	951.6	$1,\!873.9$
2015	290.2	460.2	7.1	112.0	906.6	1,776.1
2016	229.6	380.5	5.4	117.1	875.4	1,608.0

Notes: These estimates include the value of catch from both federal and state of Alaska fisheries. The data have been adjusted to 2016 dollars by applying the Personal Consumption Expenditure Index at <a href="https://research.stlouisfed.org/fred2/series/PCEPI">https://research.stlouisfed.org/fred2/series/PCEPI</a> to account for affects of inflation on fishermen's revenue.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; NMFS Alaska Region At-sea Production Reports; ADF&G Commercial Operators Annual Reports (COAR); and NMFS Office of Science and Technology, Fisheries Statistics Division, Fisheries of the United States. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 7: Production and real gross value of groundfish and non-groundfish products in the commercial fisheries off Alaska by species group and area of processing, 2012-2016 (1,000 metric tons product weight and \$ millions,base year =2016).

	,	Gulf of A	Alaska	Bering S Aleutian		All Al	aska
	Species	Quantity	Value	Quantity	Value	Quantity	Value
	Groundfish	106.8	\$ 395.1	802.7	\$ 2,291.7	909.5	\$ 2,686.9
	Salmon	166.3	\$ 1,019.7	39.8	\$ 341.4	206.0	\$ 1,361.0
	Halibut	8.5	\$ 136.4	2.0	\$ 35.5	10.5	\$ 171.9
2012	Herring	15.4	\$ 31.0	16.2	\$ 21.3	31.6	\$ 52.3
	Crab	4.6	\$ 71.3	29.0	\$ 387.0	33.6	\$458.2
	Other	1.7	\$ 34.5	0	\$ 0.7	1.7	\$ 35.3
	All Species	303.3	\$ 1,687.9	889.7	\$ 3,077.7	1,193.0	\$ 4,765.6
	Groundfish	99.4	\$ 342.4	818.2	\$ 1,925.1	917.5	\$ 2,267.5
	Salmon	290.3	\$ 1,509.1	34.7	\$ 366.9	325.1	\$ 1,876.0
	Halibut	7.5	\$ 118.4	1.4	\$ 18.2	8.9	\$ 136.6
2013	Herring	11.6	\$ 22.8	25.5	\$ 26.0	37.1	\$ 48.8
	Crab	3.0	\$ 46.4	24.7	\$ 339.0	27.7	\$ 385.4
	Other	1.3	\$ 26.5	0	\$ 0.8	1.3	\$ 27.4
	All Species	413.0	\$ 2,065.7	904.6	\$ 2,676.0	1,317.6	\$ 4,741.7
	Groundfish	131.1	\$ 396.2	843.8	\$ 2,000.3	974.8	2,396.5
	Salmon	176.8	\$ 978.1	58.1	\$ 459.6	234.9	\$ 1,437.7
	Halibut	5.5	\$ 103.3	0.6	\$ 9.0	6.2	\$ 112.3
2014	Herring	20.4	\$ 24.9	19.5	\$ 17.2	39.9	\$ 42.0
	Crab	3.8	\$ 59.5	23.2	\$ 330.6	27.0	\$ 390.1
	Other	1.2	\$ 19.3	0	\$ 0.5	1.2	\$ 19.8
	All Species	338.8	\$ 1,581.3	945.2	\$ 2,817.3	1,284.0	\$ 4,398.6
	Groundfish	126.0	\$ 354.3	819.0	\$ 1,932.6	945.0	\$ 2,286.8
	Salmon	270.8	\$ 1,047.0	70.9	\$ 424.2	341.7	\$ 1,471.2
	Halibut	6.1	\$ 113.5	3.4	\$ 21.7	9.5	\$ 135.2
2015	Herring	10.1	\$ 12.0	17.7	\$ 18.8	27.8	\$ 30.8
	Crab	3.9	\$ 57.1	25.4	\$ 325.0	29.4	\$ 382.1
	Other	1.0	\$ 17.7	0	\$ 0.5	1.0	\$ 18.3
	All Species	418.0	\$ 1,601.6	936.5	\$ 2,722.8	1,354.4	\$ 4,324.4
	Groundfish	134.8	\$ 352.8	838.1	\$ 2,025.6	973.0	2,378.4
	Salmon	130.3	\$ 742.9	73.6	\$ 521.1	204.0	\$ 1,264.0
	Halibut	5.8	\$ 107.9	2.4	\$ 31.1	8.2	\$ 138.9
2016	Herring	10.7	\$ 13.1	10.2	\$ 15.3	20.9	\$ 28.4
	Crab	3.9	\$ 61.8	18.0	\$ 300.8	22.0	\$ 362.6
	Other	1.1	\$ 20.3	0	\$ 0.3	1.1	\$ 20.6
	All Species	286.6	\$ 1,298.7	942.4	\$ 2,894.2	1,229.1	\$ 4,192.9

Notes: These estimates include production resulting from catch in both federal and state of Alaska fisheries. The data have been adjusted to 2016 dollars by applying the GDP: chain-type price index at <a href="https://research.stlouisfed.org/fred2/series/GDPCTPI">https://research.stlouisfed.org/fred2/series/GDPCTPI</a>. to account for affects of inflation on processor's revenue. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 8: Ex-vessel value of the groundfish catch off Alaska by area, residency, and species, 2012-2016; calculations based on COAR (\$ millions).

		Gulf of Al	aska	Bering Se Aleutian Is		All Alas	ka
	Year	Alaska	Other	Alaska	Other	Alaska	Other
	2012	0.1	38.4	77.6	380.9	77.7	419.3
	2013	*	36.3	73.2	346.1	73.2	382.4
Pollock	2014	0.1	38.2	73.1	362.4	73.2	400.5
	2015	0	43.8	76.2	359.5	76.3	403.3
	2016	0	32.3	75.4	326.2	75.4	358.4
	2012	2.8	115.3	*	8.7	2.8	124.0
	2013	1.9	81.8	1.6	8.1	3.5	90.0
Sablefish	2014	2.3	87.1	1.5	5.0	3.7	92.0
	2015	2.5	87.6	0.8	3.2	3.3	90.7
	2016	2.9	89.9	0.7	4.6	3.5	94.5
	2012	3.1	56.6	31.6	144.5	34.6	201.1
	2013	*	36.3	22.0	107.8	22.0	144.1
Pacific Cod	2014	1.1	50.9	25.3	126.4	26.4	177.3
	2015	2.4	47.6	23.9	112.0	26.4	159.6
	2016	2.0	38.9	26.9	125.9	28.9	164.8
	2012	0.6	6.5	1.7	118.3	2.3	124.8
	2013	1.1	7.5	5.0	89.5	6.1	96.9
Flatfish	2014	1.2	12.6	4.5	76.2	5.7	88.9
	2015	1.0	6.5	4.0	59.6	5.0	66.1
	2016	0.8	5.8	3.5	71.9	4.3	77.7
	2012	0.1	16.2	0.1	17.1	0.2	33.3
	2013	0.1	11.6	0.2	15.8	0.4	27.3
Rockfish	2014	0.1	11.8	0.1	18.1	0.2	30.0
	2015	0.1	12.2	0.5	16.1	0.6	28.3
	2016	0.1	13.7	0.1	14.5	0.2	28.1
	2012	-	0.6	0	30.0	0	30.6
Atka	2013	*	0.7	0	16.2	0	16.9
Mackerel	2014	*	0.8	0	23.8	0	24.5
Wackerer	2015	*	0.6	0	29.7	0	30.3
	2016	0.1	0.5	0	32.8	0.1	33.4
	2012	7.0	236.4	111.8	701.3	118.7	937.7
All	2013	3.2	176.9	103.9	588.2	107.1	765.1
Groundfish	2014	4.9	203.4	106.7	618.9	111.5	822.3
Groundish	2015	6.3	200.1	106.1	582.4	112.4	782.5
	2016	6.1	182.6	107.3	578.8	113.4	761.4

Notes: These estimates include only catches counted against federal TACs. Ex-vessel value is calculated using prices on Table 18. Please refer to Table 18 for a description of the price derivation. Catch delivered to motherships is classified by the residency of the owner of the mothership. All other catch is classified by the residence of the owner of the fishing vessel. All groundfish include additional species categories. For catch for which the residence is unknown, there are either no data or the data have been suppressed to preserve confidentiality. Values are not adjusted for inflation.

**Source:** NMFS Alaska Region Blend and Catch-accounting System estimates; NMFS Alaska Region At-sea Production Reports; ADF&G Commercial Operators Annual Reports (COAR); and CFEC gross earnings (fish tickets) file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 9: Number of vessels that caught groundfish off Alaska by area, residency, gear, and target, 2012-2016.

Polloc Sablef	2015 2016 2012 2013 2014 2015 2016 2012	Alaska  1 4 2 2 2 2 1 195 194 184 191	Other	Alaska 19 12	Other 2 2 - 1 - 11 - 11 11	Alaska  1 4 2 2 2 2 2 31	Other 2 2 - 1 - 91
Sablef	2013 2014 2015 2016 2012 2013 ish 2014 2015 2016 2012	2 2 2 2 2 2 2 195 194 184	- - - - 84 77 76		2 - 1 -	4 2 2 2 2 231	1 -
Sablef	k 2014 2015 2016 2012 2013 ish 2014 2015 2016 2012	2 2 2 221 195 194 184	77 76		- 1 -	2 2 2 231	1 -
Sablef	2015 2016 2012 2013 2014 2015 2016 2012	2 221 195 194 184	77 76		1 -	2 2 231	
	2016 2012 2013 2014 2015 2016 2012	2 221 195 194 184	77 76		- 11	231	
	2012 2013 2014 2015 2016 2012	221 195 194 184	77 76			231	91
	2013 2014 2015 2016 2012	195 194 184	77 76				91
	2014 2015 2016 2012	194 184	76	12	11	200	
	2015 2016 2012	184				200	84
	2016			7	11	197	82
D 10	2012	191	75	9	7	187	80
D :0			69	9	7	194	73
D 10		302	27	18	27	312	50
D	2013	166	20	23	24	187	39
	c Cod 2014	192	22	12	25	203	39
Hook &	2015	214	19	13	26	225	37
Line	2016	193	19	8	29	198	38
	2012	-	-	-	7	-	7
	2013	_	-	-	4	-	4
Flatfis	sh 2014	-	-	-	3	-	3
	2015	_	-	-	3	-	3
	2016	-	-	-	6	-	6
	2012	158	16	-	2	158	18
	2013	130	12	-	3	130	15
Rockf	ish 2014	128	16	1	2	129	18
	2015	107	5	1	1	107	6
	2016	99	5	-	2	99	7
	2012	606	121	34	34	622	143
All	2013	413	103	33	33	434	125
Groun	dfish 2014	447	104	20	32	460	122
Groun	2015	438	94	21	32	450	115
	2016	406	86	17	35	413	108
	2012	125	20	21	33	134	47
	2013	108	20	21	38	115	49
Pot Pacific	c Cod 2014	85	15	22	33	102	45
	2015	110	6	23	25	121	31
	2016	106	13	29	27	124	39
	2012	26	42	6	116	27	140
	2013	25	42	6	113	26	139
Trawl Polloc	k 2014	32	38	6	115	33	137
	2015	26	37	5	114	27	134
	2016	31	37	5	116	32	136

Table 9: Continued

			Gulf of Al	aska	Bering Se Aleutian Is		All Alas	ska
		Year	Alaska	Other	Alaska	Other	Alaska	Other
		2012	5	7	-	-	5	7
		2013	6	11	-	2	6	13
	Sablefish	2014	6	7	-	1	6	8
		2015	8	11	-	-	8	11
		2016	7	8	-	3	7	11
		2012	25	38	7	71	25	94
		2013	25	30	5	67	25	88
	Pacific Cod	2014	30	25	2	62	30	81
		2015	28	26	3	61	28	84
		2016	26	25	3	70	26	91
		2012	11	26	-	34	11	56
		2013	12	24	-	32	12	52
	Flatfish	2014	12	21	-	32	12	48
m 1		2015	8	13	-	31	8	40
Trawl		2016	11	20	-	33	11	49
		2012	14	33	1	18	15	38
	Rockfish	2013	14	29	-	17	14	36
		2014	14	24	-	20	14	37
		2015	11	25	-	18	11	38
		2016	12	26	-	20	12	37
		2012	-	-	-	14	-	14
	Atka	2013	-	2	-	13	-	14
	Atka Mackerel	2014	-	-	-	11	-	11
	Mackerei	2015	-	-	-	14	-	14
		2016	1	1	-	13	1	14
		2012	28	59	8	138	29	154
	All	2013	29	55	7	129	30	148
	Groundfish	2014	34	48	6	128	35	146
	Groundish	2015	30	48	6	128	31	147
		2016	31	54	6	130	32	149
		2012	714	190	62	202	740	331
	A 11	2013	522	167	62	197	551	309
All Gear	All	2014	538	158	49	192	565	303
	Groundfish	2015	549	143	51	184	572	287
		2016	512	145	54	191	536	286

Notes: The target is determined based on vessel, week, processing mode, NMFS area, and gear. Vessels are classified by the residency of the owner of the fishing vessel. These estimates include only vessels fishing part of federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; CFEC gross earnings (fish tickets) file; NMFS Alaska Region groundfish observer data; NMFS Alaska Region permit data; CFEC vessel registration file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

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Table 10: Number of vessels that caught groundfish off Alaska by area, vessel category, gear, and target, 2012-2016.

			Gulf	of Alaska		Bering Sea &	z Aleutian Isla	nds	All	Alaska	
		Year	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total
		2012	297	7	304	25	5	30	311	10	321
		2013	265	7	272	17	6	23	273	11	284
	Sablefish	2014	264	6	270	13	5	18	270	9	279
		2015	253	6	259	13	3	16	259	8	267
		2016	255	5	260	13	3	16	260	7	267
		2012	320	9	329	13	32	45	327	35	362
		2013	181	5	186	18	29	47	196	30	226
	Pacific Cod	2014	204	10	214	8	29	37	211	31	242
		2015	223	10	233	9	29	38	230	31	261
		2016	201	10	211	3	30	33	202	30	232
Hook &		2012	-	-	-	-	7	7	-	7	7
Line	Flatfish 2	2013	-	-		-	4	4	-	4	4
Line		2014	_	_	-	-	3	3	-	3	3
		2015	-	-	-	-	3	3	-	3	3
		2016	-	-	-	-	6	6	-	6	6
		2012	174	-	174	-	2	2	174	2	176
		2013	142	-	142	-	3	3	142	3	145
	Rockfish	2014	144	_	144	1	2	3	145	2	147
		2015	112	-	112	1	1	2	112	1	113
		2016	104	-	104	-	2	2	104	2	106
		2012	711	15	726	34	34	68	726	38	764
	All	2013	506	10	516	33	33	66	524	35	559
	Groundfish	2014	538	13	551	21	31	52	548	34	582
	Groundiish	2015	520	12	532	21	31	52	531	33	564
		2016	479	12	491	16	32	48	484	33	517

Table 10: Continued

			Gulf	of Alaska		Bering Sea &	z Aleutian Isla	ands	All	Alaska	
		Year	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total
		2012	144	1	145	49	5	54	176	5	181
		2013	128	-	128	56	3	59	161	3	164
Pot	Pacific Cod	2014	100	-	100	51	4	55	143	4	147
		2015	116	-	116	44	4	48	148	4	152
		2016	118	-	118	51	5	56	157	5	162
		2012	67	1	68	90	32	122	135	32	167
		2013	64	3	67	87	32	119	132	33	165
	Pollock	2014	68	2	70	87	34	121	136	34	170
		2015	62	1	63	87	32	119	129	32	161
		2016	68	-	68	88	33	121	135	33	168
		2012	12	-	12	-	-	-	12	-	12
		2013	17	-	17	-	2	2	17	2	19
	Sablefish	2014	12	1	13	-	1	1	12	2	14
		2015	18	1	19	-	-	-	18	1	19
Trawl		2016	15	-	15	-	3	3	15	3	18
		2012	60	3	63	60	18	78	101	18	119
		2013	54	1	55	54	18	72	95	18	113
	Pacific Cod	2014	55	-	55	50	14	64	97	14	111
		2015	53	1	54	48	16	64	95	17	112
		2016	50	1	51	56	17	73	99	18	117
		2012	32	5	37	4	30	34	36	31	67
		2013	31	5	36	5	27	32	36	28	64
	Flatfish	2014	27	6	33	4	28	32	31	29	60
		2015	16	5	21	6	25	31	22	26	48
		2016	26	5	31	9	24	33	35	25	60

Table 10: Continued

			Gulf	of Alaska		Bering Sea &	z Aleutian Isla	ands	All	Alaska	
		Year	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total
		2012	31	16	47	2	17	19	33	20	53
		2013	30	13	43	1	16	17	31	19	50
	Rockfish	2014	29	9	38	3	17	20	32	19	51
		2015	28	8	36	4	14	18	32	17	49
		2016	26	12	38	4	16	20	30	19	49
		2012	-	-	-	3	11	14	3	11	14
Trawl	Atka	2013	-	2	2	3	10	13	3	11	14
	Mackerel	2014	-	-	-	3	8	11	3	8	11
		2015	-	-	-	5	9	14	5	9	14
		2016	2	-	2	4	9	13	6	9	15
		2012	70	17	87	110	36	146	146	37	183
	All	2013	70	14	84	102	34	136	143	35	178
	Groundfish	2014	71	11	82	100	34	134	146	35	181
	Groundiish	2015	68	10	78	100	34	134	143	35	178
		2016	71	14	85	101	35	136	145	36	181
		2012	870	33	903	191	73	264	991	78	1,069
	A11	2013	665	24	689	189	70	259	787	73	860
All Gear	Groundfish	2014	672	24	696	173	68	241	796	72	868
	Groundish	2015	670	22	692	165	69	234	786	72	858
		2016	629	26	655	170	71	241	744	73	817

Notes: The target is determined based on vessel, week, catching mode, NMFS area, and gear. These estimates include only vessels that fished part of federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; CFEC gross earnings (fish tickets) file; NMFS Alaska Region groundfish observer data; NMFS Alaska Region permit data; CFEC vessel registration file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 11: Bering Sea & Aleutian Islands groundfish retained catch by vessel type, gear and species, 2012-2016 (1,000 metric tons, round weight).

		Cat	tcher Vess	els		Catcher	Processors			Total		
	Year	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear
	2012	-	-	632	632	-	564	564	=	-	1,196	1,196
	2013	-	-	661	661	-	602	602	-	-	1,263	1,263
Pollock	2014	_	-	668	668	-	611	611	-	-	1,279	$1,\!279$
	2015	-	-	687	687	-	620	620	-	-	1,307	1,307
	2016	-	-	704	704	-	636	636	-	-	1,340	1,340
	2012	1	-	46	47	129	37	166	130	-	83	213
Pacific	2013	1	-	42	43	122	44	166	123	-	85	208
Cod	2014	2	-	41	43	122	35	157	125	-	76	201
Cou	2015	1	-	38	39	128	35	163	129	-	72	201
	2016	0	-	46	46	127	37	164	127	-	83	210
	2012	1	*	*	1	0	0	_	1	*	0	1
	2013	1	*	*	1	0	0	-	1	*	0	1
Sablefish	2014	1	*	*	1	0	0	-	1	*	0	1
	2015	0	0	0	-	0	0	-	0	0	0	-
	2016	0	*	0	-	0	0	-	0	*	0	-
	2012	-	-	1	1	*	42	42	*	-	43	43
Atka	2013	-	-	0	-	*	21	21	*	-	21	21
Mackerel	2014	-	-	0	-	*	28	28	*	-	28	28
Mackerer	2015	*	-	3	3	*	49	49	*	-	52	52
	2016	*	-	4	4	*	50	50	*	-	54	54
	2012	-	-	0	-	*	135	135	*	-	136	136
	2013	-	-	1	1	-	146	146	-	-	147	147
Yellowfin	2014	-	-	0	-	0	146	146	0	-	146	146
	2015	-	-	8	8	0	115	115	0	-	123	123
	2016	-	-	11	11	*	120	120	*	-	131	131
	2012	_	_	2	2	0	68	68	0	_	70	70
	2013	-	-	1	1	*	55	55	*	_	56	56
Rock Sole	2014	-	-	1	1	*	48	48	*	-	49	49
	2015	-	-	1	1	*	43	43	*	-	44	44
	2016	-	-	2	2	*	41	41	*	-	43	43

Table 11: Continued

		Cat	tcher Vess	els		Catcher	Processors			Total		
	Year	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear
	2012	-	-	1	1	0	8	8	0	-	9	9
T-1 - 41 1	2013	-	-	1	1	0	15	15	0	_	16	16
Flathead Sole	2014	*	-	1	1	0	14	14	0	-	15	15
Sole	2015	-	-	1	1	0	9	9	0	-	10	10
	2016	-	-	0	-	-	9	9	-	-	9	9
	2012	*	-	0	-	0	19	19	0	-	19	19
	2013	-	-	0	-	0	17	17	0	-	17	17
Arrowtoot		*	-	0	-	0	16	16	0	-	17	17
	2015	*	-	0	-	0	9	9	0	=	9	9
	2016	*	-	0	-	0	9	9	0	=	9	9
	2012	-	-	0	-	0	9	9	0	-	9	9
Komahatk	2013	-	-	*	-	0	7	7	0	-	7	7
Kamchatk Flounder	$^{\rm a}2014$	-	-	*	-	0	6	6	0	-	6	6
riounder	2015	-	-	0	-	0	5	5	0	=	5	5
	2016	-	-	0	-	0	5	5	0	-	5	5
	2012	*	-	0	-	2	3	5	2	-	3	5
	2013	*	-	0	-	1	1	2	1	-	1	2
Turbot	2014	*	-	0	-	1	1	2	1	-	1	2
	2015	*	-	0	-	1	1	2	1	-	1	2
	2016	*	-	0	-	1	1	2	1	-	1	2
	2012	-	-	0	-	0	13	13	0	-	14	14
Other	2013	-	-	0	-	*	14	14	*	-	14	14
Flatfish	2014	-	-	0	-	*	16	16	*	-	16	16
riadiisii	2015	-	-	2	2	0	13	13	0	-	14	14
	2016	-	-	1	1	*	11	11	*	-	12	12
	2012	-	-	0	-	0	22	22	0	-	22	22
Pacific	2013	-	-	0	-	0	29	29	0	_	29	29
Ocean	2014	*	-	0	-	0	29	29	0	-	29	29
Perch	2015	*	-	3	3	0	27	27	0	-	30	30
	2016	*	-	2	2	*	28	28	*	-	30	30

Table 11: Continued

		Cat	cher Vess	els		Catcher	Processors			Total		
	Year	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear
	2012	-	_	0	_	0	2	2	0	_	2	2
NT 41	2013	*	_	0	_	0	2	2	0	_	2	2
Northern Rockfish	2014	-	_	0	-	0	2	2	0	-	2	2
ROCKIISII	2015	-	_	0	_	0	7	7	0	-	7	7
	2016	*	-	0	-	0	4	4	0	-	4	4
	2012	0	-	0	-	0	0	-	0	-	0	_
Rougheye	2013	0	-	*	-	0	0	-	0	-	0	-
Rockfish	2014	*	-	0	-	0	0	-	0	-	0	-
TOCKIISII	2015	0	-	0	-	0	0	-	0	-	0	-
	2016	0	-	0	-	0	0	-	0	-	0	
	2012	0	-	*	-	0	0	-	0	-	0	-
Shortraker	2013	0	-	*	-	0	0	-	0	=	0	-
Rockfish	2014	0	-	0	-	0	0	-	0	=	0	-
TOCKHSH	2015	0	-	0	-	0	0	-	0	-	0	-
	2016	0	-	0	-	0	0	-	0	-	0	_
	2012	0	-	0	-	0	1	1	0	-	1	1
Other	2013	0	-	0	-	0	0	-	0	-	0	-
Rockfish	2014	0	-	0	-	0	1	1	0	-	1	1
TOCKIISH	2015	0	-	0	-	0	0	-	0	-	0	-
	2016	0	-	0	-	0	0	-	0	-	1	1
	2012	*	-	1	1	5	2	7	5	-	2	7
Other	2013	0	-	0	-	6	2	8	6	-	2	8
Groundfiel	$^{h}$ 2014	0	-	1	1	7	2	9	7	-	2	9
Groundfish	<sup>11</sup> 2015	0	-	2	2	7	1	8	7	-	3	10
	2016	0	-	0	-	5	2	7	5	-	2	7
	2012	1	-	683	708	142	924	1,072	143	-	1,608	1,780
All	2013	2	-	706	731	134	955	1,095	135	-	1,660	1,826
Croundfal	$^{2014}$	3	-	714	740	135	954	1,097	138	-	1,668	1,837
Groundfis	<sup>11</sup> 2015	1	-	744	768	142	934	1,084	143	-	1,679	1,852
	2016	0	-	771	794	139	954	1,100	139	-	1,725	1,895

Notes: The estimates are of retained catch (i.e., excludes discarded catch). All groundfish include additional species categories. These estimates include only catch counted against federal TACs. Includes FMP groundfish catch on halibut targets. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 12: Bering Sea & Aleutian Islands groundfish retained catch by species, gear, and target fishery, 2015-2016, (1,000 metric tons, round weight).

		Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Kamchatka Flounder	Flathead Sole	Rock Sole	Turbot	Yellowfin	Flat Other	Rockfish	Atka Mackerel	Other	All Species
		Pollock, Bottom	*	-	-	-	-	-	-	*	-	-	-	-	-	*
		Cablafiah	_	0.1	_	_	_	_	_	*	_	_	*	_	_	0.1
		Pacific Cod	6.4	*	127.9	0.1	0	0	*	0	0	0	0	*	6.6	141.1
		Turbot	*	0	*	0	0	_	_	1.0		*	0	_		1.1
		Rockfish	_	*	_	-	-	_	_	1.0	_	_	*	_	_	*
	Catcher	Halibut	-	*	0	_	_	_	-	-	_	_	-	-	-	0
	Processors	All Targets	6.4	0.1	127.9	0.1	0	0	*	1.1	0	0	0.1	*	6.6	142.3
		Sablefish	*	0.1	*	-	-	-	-	*	-	-	*	-	-	0.1
Hook &		Pacific Cod	5.8	*	126.8	0	0	-	*	0.1	*	*	0	*	5.1	137.8
Line		2016 Arrowtooth	-	*	-	*	*	-	-	-	-	-	*	-	-	*
		Turbot	0	0	0	*	*	-	-	0.9	-	-	0	-	*	1.0
		Rockfish	*	*	*	*	*	-	-	*	-	-	*	-	*	*
		Halibut	-	-	*	-	-	-		-	-	-	-		-	*
		All Targets	5.8	0.1	126.9	0	0	-	*	0.9	*	*	0	*	5.1	138.9
		Sablefish	-	0.3	-	-	-	-	-	*	-	-	0	-	-	0.3
	201	Pacific 2015 Cod	*	-	0.8	-	-	-	-	-	-	-	*	-	0	0.8
	~ .	Rockfish	_	_	*	_	_	_	_	_	_	_	*	*	_	*
	Catcher	Halibut	-	0.1	0	*	_	_	_	*	_	_	0	_	*	0.1
	Vessels	All Targets	*	0.4	0.8	*	-	-	-	*	-	-	0	*	0	1.2
		Sablefish	_	0.1	*	_	_	_	-	*	_	-	0	-	_	0.1
		$2016 \frac{\mathrm{Pacific}}{\mathrm{Cod}}$	-	-	*	*	-	-	-	-	-	-	*	*	*	*
		Halibut	*	0.1	0	*	_	_	_	*	_	_	0	_	0	0.1
		All Targets	*	0.2	0	*	-	-	-	*	-	-	0	*	0	0.3
		Pacific 2015 Cod	0	-	8.0	-	-	-	_	-	-	-	_	-	0	8.0
	Catcher	All Targets	0	-	8.0	_	_	_	_	_	_	_	_	-	0	8.0
	Processors	Pacific 2016 Cod	0	_	7.6		-	_	-	_	*	-	_	_	0	7.6
Pot		All Targets	0	-	7.6	_	_	_	-	_	*	_	_	-	0	7.6
		Sablefish	-	0.1	-	-	-	-	-	-	-	-	*	-	-	0.1
	Catcher Vessels	2015 Pacific Cod	0	-	21.9	*	_	0	*	-	0	_	*	0	0.1	21.9
		All Targets	0	0.1	21.9	*	-	0	*	-	0	_	*	0	0.1	22.1
		Sablefish	-	*	-	-	-	-	-	-	-	-	-	-	-	*
		2016 Pacific Cod	0	-	23.3	*	-	0	*	-	0	-	*	0	0.1	23.4
		All Targets	0	*	23.3	*	_	0	*	_	0	_	*	0	0.1	23.4

Table 12: Continued

		Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Kamchatka Flounder	Flathead Sole	Rock Sole	Turbot	Yellowfin	Flat Other	Rockfish	Atka Mackerel	Other	All Species
		Pollock,	16.1	*	0.5	0	0	0.3	0.6	0	0.3	0.1	0.3	0	0	18.3
		Bottom	10.1		0.5	Ü	Ü	0.5	0.0	U	0.5	0.1	0.5	U	U	10.3
		Pollock, Pelagic	575.2	0	3.0	0.2	0	1.1	0.5	0	0.3	0	0.6	0	0.3	581.4
		Pacific Cod	0.8	-	4.2	0.1	0	0	1.2	*	0.5	0.2	0	0	0	7.1
		Arroustooth	1.0	0	0.3	4.9	0.7	0.6	0	0.8	0	0.4	0.2	*	0	8.8
		2015 Kamchatka Flounder	0.7	0	0.1	1.0	2.6	*	*	0.1	-	0	0.1	0	*	4.6
		Flathead Sole	1.8	*	1.6	0.8	0.2	3.5	0.7	0	2.0	0.4	0	-	0	11.1
		Rock Sole	7.6	0	10.8	0.2	0	0.8	30.8	0	12.3	1.2	-	*	0.1	63.8
		Turbot	*	*	*	*	*	*	-	*	-	-	-	-	-	*
Trawl	Catcher	Yellowfin	15.6	*	11.0	1.1	0.3	2.9	9.2	0	99.0	9.4	*	0	0.3	148.8
	Processor	s Other Flatfish	0.2	*	0.3	0.1	0	0	0.1	*	0.6	0.9	*	-	*	2.2
		Rockfish	0.8	0	0.7	0.6	0.5	0	0	0	*	0	24.3	5.3	0.1	32.4
		Atka Mackerel	0.2	0	2.1	0.1	0.3	0	0	0	-	0	8.8	43.9	0.2	55.6
		All Targets	620.1	0	34.7	9.1	4.6	9.2	43.2	1.0	115.1	12.6	34.3	49.3	1.1	934.2
		Pollock, Bottom	19.4	0	0.5	0.1	0.1	0.3	0.3	0	0.3	0.1	1.1	0	0.1	22.3
		Pollock, Pelagic	584.3	0	1.9	0.1	0	0.7	0.3	0	0.4	0.1	1.1	0	0.4	589.4
		Sablefish	0	0	_	0	0	0	-	*	-	0	0	*	-	0.1
		Pacific Cod	1.2	*	6.8	0.1	0.1	0	1.7	*	0.3	0.1	0.1	0.4	0	10.8
		2016 Arrowtooth	1.0	0.1	0.3	3.6	0.8	0.3	0	0.5	*	0.4	0.3	0.3	0	7.6
		Kamchatka Flounder	0.8	0	0.1	0.9	2.2	*	0	0.1	*	0	0.2	0	0	4.2
		Flathead Sole	1.2	0	0.8	0.4	0.1	2.2	0.6	0.1	2.4	0.5	*	-	*	8.4
		Rock Sole	9.4	0	13.0	0.2	0	1.0	30.9	-	20.1	3.3	*	*	0.1	78.0
		Turbot	0.1	0	0	0.3	0.1	0.1	-	0.5	-	0	0	-	*	1.2
		Yellowfin	17.4	0	10.8	2.4	0.2	3.8	6.9	0	96.7	6.3	*	-	0.6	145.1
		Other Flatfish	0.1	0	0.1	0.1	0	0	0.1	0	0.3	0.7	0	-	*	1.5
		Rockfish	0.7	0	0.6	0.3	0.4	0	0	0	0	0	19.6	4.7	0.1	26.5
		Atka Mackerel	0.4	0	2.3	0.2	0.4	0	0	0	*	0	10.2	44.9	0.4	58.9
		All Targets	636.0	0.3	37.1	8.8	4.5	8.6	40.9	1.2	120.4	11.4	32.7	50.4	1.7	953.9

Table 12: Continued

		Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Kamchatka Flounder	Flathead Sole	Rock Sole	Turbot	Yellowfin	Flat Other	Rockfish	Atka Mackerel	Other	All Species
		Pollock, Bottom	20.2	*	0.4	0	*	0	0.1	0	0	0	0.2	0	0.6	21.5
		Pollock, Pelagic	665.0	0	4.4	0.1	0	0.4	0.3	0	0.1	0.1	0.6	0	0.8	671.6
		2015 Pacific Cod	0.7	-	31.6	0	-	0	0.1	-	0	0	*	*	0	32.5
		Rock Sole	0.1	-	0.1	0	0	0	0.2	*	0.3	0	-	-	0	0.8
		Yellowfin	1.1	-	1.0	0.1	0	0.4	0.5	0	7.5	1.4	*	-	0.1	12.1
Trawl	Catcher	Rockfish	0.1	*	0	0	0	*	0	*	-	0	2.1	0.1	*	2.3
Hawi	Vessels	Atka Mackerel	*	-	0.2	*	-	-	0	-	-	-	0.2	3.1	0.1	3.5
		All Targets	687.1	0	37.5	0.3	0	0.8	1.1	0	8.0	1.5	3.1	3.2	1.5	744.3
		Pollock, Bottom	1.8	*	0	0	-	0	*	-	*	*	*	*	*	1.8
		Pollock, Pelagic	700.6	0	2.5	0	*	0.2	0.2	0	0	0.1	0.6	0	0.3	704.6
		$^{2016}_{\mathrm{Cod}}^{\mathrm{Pacific}}$	0.5	*	41.1	0	0	0	0.2	-	0	0	0	0	0	41.9
		Flathead Sole	*	-	*	*	*	*	*	-	*	*	-	-	-	*
		Rock Sole	0.3	-	0.6	0	*	0	1.1	-	1.6	0.2	-	-	*	3.8
		Yellowfin	0.8	-	1.1	0.1	0	0.1	0.8	-	9.2	0.6	-	-	0	12.7
		Rockfish	0	*	0.1	0	0	*	*	-	-	*	1.4	0.5	*	1.9
		Atka Mackerel	0	*	0.2	0	*	*	0	-	*	*	0.6	3.2	0	4.0
		All Targets	703.9	0	45.6	0.2	0	0.4	2.3	0	10.8	0.9	2.5	3.7	0.4	770.8
	Catch	2015 All Targets	626.4	0.1	170.5	9.2	4.6	9.2	43.2	2.0	115.1	12.6	34.4	49.3	7.8	1,084.5
All Gea	r Proc.	$2016\mathrm{All}\mathrm{Targets}$	641.8	0.4	171.6	8.8	4.5	8.6	40.9	2.1	120.4	11.4	32.8	50.4	6.8	1,100.4
	Catch	2015 All Targets	687.1	0.5	60.2	0.3	0	0.8	1.1	0	8.0	1.5	3.1	3.2	1.6	767.5
	Vess.	$2016\mathrm{All}\mathrm{Targets}$	703.9	0.2	69.0	0.2	0	0.4	2.3	0	10.8	0.9	2.5	3.7	0.4	794.4

Notes: Totals may include additional categories. The target is derived from an algorithm used to determine preponderance of catch, accounting for processor, trip, processing mode, NMFS area, and gear. These estimates include only catch counted against federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 13: Bering Sea & Aleutian Islands ex-vessel prices in the groundfish fisheries by gear, and species, 2012-2016; calculations based on COAR (\$/lb, round weight).

		Sho	oreside		A	t Sea		All	Sectors	
	Year	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear
	2012	0.108	0.171	0.171	0.108	0.184	0.184	0.108	0.179	0.178
	2013	0.092	0.149	0.149	0.092	0.155	0.154	0.092	0.152	0.152
Pollock	2014	0.097	0.155	0.155	0.097	0.148	0.148	0.097	0.151	0.151
	2015	0.170	0.154	0.154	0.170	0.134	0.134	0.170	0.142	0.143
	2016	0.134	0.139	0.139	0.020	0.117	0.117	0.020	0.127	0.126
	2012	0.342	0.311	0.323	0.256	0.324	0.273	0.270	0.318	0.287
	2013	0.247	0.242	0.244	0.291	0.224	0.273	0.283	0.232	0.265
Pacific Cod	2014	0.288	0.260	0.274	0.297	0.271	0.291	0.295	0.266	0.286
	2015	0.263	0.234	0.248	0.297	0.232	0.282	0.290	0.233	0.273
	2016	0.278	0.249	0.264	0.292	0.246	0.280	0.289	0.247	0.275
	2012	3.522	*	3.522	3.522	1.014	2.680	3.522	1.014	3.211
	2013	2.838	*	2.838	2.838	1.173	2.361	2.838	1.173	2.649
Sablefish	2014	4.001	*	4.001	4.001	1.317	3.379	4.001	1.317	3.856
	2015	3.720	*	3.720	3.720	1.277	3.268	3.720	1.277	3.613
	2016	4.010	1.190	3.978	4.010	1.190	2.030	4.010	1.190	3.014
	2012	*	0.293	0.293	*	0.293	0.293	*	0.293	0.293
Atka	2013	*	0.327	0.327	*	0.327	0.327	*	0.327	0.327
Mackerel	2014	*	0.353	0.353	*	0.353	0.353	*	0.353	0.353
wackerer	2015	0.279	0.257	0.257	*	0.257	0.257	0.279	0.257	0.257
	2016	0.016	0.276	0.265	*	0.276	0.276	0.016	0.276	0.276
	2012	*	0.174	0.174	*	0.174	0.174	*	0.174	0.174
	2013	*	0.156	0.156	*	0.156	0.156	*	0.156	0.156
Yellowfin	2014	*	0.126	0.126	0.131	0.126	0.126	0.131	0.126	0.126
	2015	*	0.129	0.129	*	0.129	0.129	*	0.129	0.129
	2016	*	0.146	0.146	*	0.146	0.146	*	0.146	0.146
	2012	0.017	0.248	0.248	*	0.248	0.248	0.017	0.248	0.248
	2013	*	0.150	0.150	*	0.150	0.150	*	0.150	0.150
Rock Sole	2014	*	0.153	0.153	*	0.153	0.153	*	0.153	0.153
	2015	*	0.146	0.146	*	0.146	0.146	*	0.146	0.146
	2016	*	0.168	0.168	*	0.168	0.168	*	0.168	0.168

Table 13: Continued

		Sho	oreside		A	t Sea		All	Sectors	
	Year	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear
	2012	*	0.206	0.206	0.017	0.206	0.206	0.017	0.206	0.206
Elathaad	2013	0.015	0.222	0.222	0.015	0.221	0.221	0.015	0.221	0.221
Flathead Sole	2014	0.131	0.176	0.176	0.131	0.176	0.176	0.131	0.176	0.176
Sole	2015	*	0.148	0.148	*	0.148	0.148	*	0.148	0.148
	2016	*	0.194	0.194	-	0.194	0.194	*	0.194	0.194
	2012	*	0.210	0.210	0.017	0.210	0.206	0.017	0.210	0.206
	2013	*	0.154	0.154	0.015	0.154	0.153	0.015	0.154	0.153
Arrowtooth	2014	*	0.201	0.201	0.131	0.201	0.201	0.131	0.201	0.201
	2015	*	0.182	0.182	0.003	0.182	0.181	0.003	0.182	0.181
	2016	0.113	0.230	0.228	0.113	0.230	0.229	0.113	0.230	0.229
	2012	-	*	*	0.017	0.248	0.244	0.017	0.248	0.244
Kamchatka	2013	-	-	-	0.015	0.137	0.137	0.015	0.137	0.137
Flounder	2014	-	-	-	0.131	0.183	0.183	0.131	0.183	0.183
riounder	2015	-	*	*	0.003	0.165	0.165	0.003	0.165	0.165
	2016	-	-	-	0.113	0.208	0.208	0.113	0.208	0.208
	2012	*	0.601	0.601	0.017	0.601	0.341	0.017	0.601	0.342
	2013	*	0.439	0.439	0.015	0.439	0.252	0.015	0.439	0.252
Turbot	2014	*	0.474	0.474	0.131	0.474	0.318	0.131	0.474	0.319
	2015	*	0.502	0.502	0.003	0.502	0.249	0.003	0.502	0.250
	2016	*	0.654	0.654	0.113	0.654	0.416	0.113	0.654	0.416
	2012	*	0.494	0.494	*	0.170	0.170	*	0.177	0.177
Other	2013	-	0.520	0.520	*	0.145	0.145	*	0.147	0.147
Flatfish	2014	-	0.425	0.425	*	0.141	0.141	*	0.143	0.143
riaunsn	2015	-	0.418	0.418	*	0.135	0.135	*	0.137	0.137
	2016	-	0.370	0.370	*	0.147	0.147	*	0.148	0.148
	2012	-	0.290	0.290	0.687	0.290	0.290	0.687	0.290	0.290
Pacific	2013	-	0.211	0.211	0.975	0.211	0.211	0.975	0.211	0.211
Ocean Perc	b 2014	*	0.238	0.238	0.630	0.238	0.238	0.630	0.238	0.238
Ocean Ferc	<sup>n</sup> 2015	*	0.209	0.209	0.833	0.209	0.209	0.833	0.209	0.209
	2016	*	0.189	0.189	*	0.189	0.189	*	0.189	0.189

Table 13: Continued

		Sho	reside		A	t Sea		All	Sectors	
	Year	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear
	2012	-	0.229	0.229	0.687	0.229	0.230	0.687	0.229	0.230
Northern	2013	*	0.139	0.139	0.975	0.139	0.140	0.975	0.139	0.140
Rockfish	2014	-	0.179	0.179	0.630	0.179	0.179	0.630	0.179	0.179
HOCKIISII	2015	-	0.149	0.149	0.833	0.149	0.149	0.833	0.149	0.149
	2016	*	0.129	0.129	0.780	0.129	0.129	0.780	0.129	0.129
	2012	0.102	*	0.102	0.687	0.277	0.325	0.616	0.277	0.321
Rougheye	2013	0.343	*	0.343	0.975	0.206	0.214	0.815	0.206	0.215
Rockfish	2014	*	*	*	0.630	0.209	0.211	0.630	0.209	0.211
HOCKIISII	2015	*	*	*	0.833	0.197	0.215	0.833	0.197	0.215
	2016	*	*	*	0.780	0.209	0.212	0.780	0.209	0.212
	2012	0.153	*	0.153	0.687	0.494	0.516	0.670	0.494	0.514
Shortraker	2013	0.370	*	0.370	0.975	0.395	0.419	0.912	0.395	0.419
Rockfish	2014	0.335	0.364	0.336	0.630	0.364	0.389	0.544	0.364	0.387
ROCKIISII	2015	*	0.300	0.300	0.833	0.300	0.384	0.833	0.300	0.384
	2016	0.780	0.357	0.518	0.780	0.357	0.388	0.780	0.357	0.390
	2012	0.711	0.229	0.697	0.687	0.398	0.446	0.694	0.398	0.463
Other	2013	1.041	0.182	1.016	0.975	0.434	0.534	0.992	0.433	0.564
Rockfish	2014	0.676	0.196	0.640	0.630	0.497	0.512	0.647	0.495	0.520
ROCKIISII	2015	0.837	0.529	0.807	0.833	0.300	0.375	0.834	0.302	0.405
	2016	0.787	0.383	0.751	0.780	0.406	0.447	0.782	0.406	0.460
	2012	0.205	0.066	0.070	0.205	0.050	0.163	0.205	0.055	0.152
Other	2013	0.500	0.023	0.081	0.500	0.050	0.375	0.500	0.047	0.363
	2014	0.568	0.151	0.193	0.568	0.151	0.477	0.568	0.151	0.451
Groundfish	2015	0.154	0.122	0.123	0.154	0.049	0.136	0.154	0.086	0.134
	2016	0.280	0.150	0.175	0.280	0.017	0.213	0.280	0.037	0.211

Notes: 1) Prices are for catch from both federal and state of Alaska fisheries.

Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; NMFS Alaska Region At-sea Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

<sup>2)</sup> The unfrozen landings price is calculated as landed value divided by estimated or actual round weight.

<sup>3)</sup> Prices for catch processed by an at-sea processor without a COAR buying record (e.g., from catcher processors) are set using the prices for the matching species (group), region and gear-types for which buying records exist.

<sup>4)</sup> Trawl-caught sablefish, rockfish and flatfish in the BSAI and trawl-caught Atka mackerel in both the BSAI and the GOA are not well represented in the COAR buying records. A price was calculated for these categories from product-report prices; the price in this case is the value of the first wholsale products divided by the calculated round weight and multiplied by a constant 0.4 to correct for value added by processing.

<sup>5)</sup> The "All Alaska/All gear" column is the average weighted by retianed catch.

Table 14: Bering Sea & Aleutian Islands ex-vessel value of the groundfish catch by vessel category, gear, and species, 2012-2016; calculations based on COAR (\$ millions).

		Ca	atcher Ves	sel		Cato	her Proce	essor		1	All Sectors	3	
	Year	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear
	2012	_	-	241.3	241.3	-	_	229.6	230.7	-	_	471.0	472.0
	2013	-	-	218.7	218.7	_	-	205.6	206.5	-	_	424.3	425.2
Pollock	2014	_	_	226.5	226.5	-	-	200.3	201.4	-	-	426.8	428.0
	2015	-	-	227.4	227.4	-	-	182.9	185.3	-	-	410.3	412.7
	2016	-	-	209.4	209.4	-	-	165.2	165.5	-	-	374.6	374.9
	2012	0.7	19.6	28.8	49.0	72.9	3.0	32.0	107.9	73.6	22.6	60.8	157.0
	2013	0.6	14.7	21.7	37.0	78.3	*	23.5	101.8	78.9	14.7	45.2	138.8
Pacific Co	d2014	1.4	22.1	21.2	44.7	80.2	5.0	24.7	109.9	81.6	27.1	46.0	154.7
	2015	0.5	17.3	16.3	34.1	83.7	5.2	20.8	109.7	84.1	22.5	37.2	143.8
	2016	0	24.1	20.4	44.6	81.6	4.9	25.2	111.7	81.6	29.0	45.6	156.2
	2012	5.5	*	*	5.5	3.7	-	0.5	4.2	9.2	*	0.5	9.7
	2013	3.6	*	*	3.6	2.9	-	0.5	3.4	6.5	*	0.5	7.0
Sablefish	2014	4.5	*	*	4.5	1.7	-	0.2	1.9	6.3	*	0.2	6.4
	2015	2.9	*	0	2.9	1.0	-	0.1	1.1	3.9	*	0.1	4.0
	2016	2.0	*	0	2.0	1.0	-	0.7	1.8	3.0	*	0.7	3.7
	2012	-	-	0.1	0.1	-	-	29.8	29.8	-	-	30.0	30.0
Atka	2013	-	-	0	0	-	-	16.1	16.1	-	-	16.2	16.2
Mackerel	2014	-	-	0.1	0.1	-	-	23.7	23.7	-	-	23.8	23.8
Mackerer	2015	-	-	0	0	_	-	29.7	29.7	-	-	29.7	29.7
	2016	-	-	0	0	-	-	32.8	32.8	-	-	32.8	32.8
	2012	-	-	0	0	*	-	54.4	54.4	*	-	54.4	54.4
	2013	-	-	0.1	0.1	=	-	54.5	54.5	-	-	54.6	54.6
Yellowfin	2014	-	-	0.1	0.1	0	-	42.1	42.1	0	-	42.1	42.2
	2015	-	-	0	0	*	-	35.1	35.1	*	-	35.1	35.1
	2016	-	-	0	0	*	-	42.3	42.3	*	-	42.3	42.3
	2012	-	-	0.9	0.9	*	-	37.9	37.9	*	-	38.8	38.8
	2013	-	-	0.2	0.2	*	-	18.5	18.5	*	-	18.7	18.7
Rock Sole	2014	-	-	0.3	0.3	*	-	16.5	16.5	*	-	16.8	16.8
	2015	-	-	0.1	0.1	*	-	14.1	14.1	*	-	14.2	14.2
	2016	_	_	0.1	0.1	*	-	15.9	15.9	*	-	16.0	16.0

Table 14: Continued

		Ca	tcher Vess	sel		Cate	her Proce	essor		I	All Sectors	3	
	Year	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear
	2012	-	-	0.6	0.6	0	-	3.8	3.8	0	-	4.4	4.4
Flathead	2013	-	-	0.3	0.3	0	-	7.4	7.4	0	-	7.7	7.7
Sole	2014	*	-	0.3	0.3	0	-	5.5	5.5	0	-	5.9	5.9
Sole	2015	-	-	0.1	0.1	*	-	3.1	3.1	*	-	3.3	3.3
	2016	-	-	0.1	0.1	-	-	3.7	3.7	-	-	3.9	3.9
	2012	*	-	0.2	0.2	0	-	8.6	8.7	0	-	8.8	8.8
	2013	-	-	0.1	0.1	0	-	5.6	5.6	0	-	5.7	5.7
Arrowtoot	h2014	*	-	0.1	0.1	0	-	7.3	7.3	0	-	7.4	7.4
	2015	*	-	0	0	0	-	3.7	3.7	0	-	3.8	3.8
	2016	*	-	0	0	0	-	4.5	4.5	0	-	4.5	4.5
	2012	-	-	*	*	0	-	4.8	4.8	0	-	4.8	4.8
V a ma ala a #1#	2013	_	-	*	*	0	-	2.1	2.1	0	-	2.1	2.1
Kamchatk Flounder	$^{\rm a}2014$	_	-	*	*	0	-	2.4	2.4	0	-	2.4	2.4
riounder	2015	-	-	*	*	0	-	1.7	1.7	0	-	1.7	1.7
	2016	-	-	*	*	0	-	2.1	2.1	0	-	2.1	2.1
	2012	*	-	0	0	0.1	-	3.4	3.5	0.1	-	3.4	3.5
	2013	*	-	0	0	0	-	0.8	0.8	0	-	0.8	0.8
Turbot	2014	*	-	0	0	0.2	-	0.8	1.0	0.2	-	0.8	1.0
	2015	*	-	0	0	0	-	1.1	1.1	0	-	1.1	1.1
	2016	*	-	0	0	0.2	-	1.7	2.0	0.2	-	1.7	2.0
	2012	-	-	0.3	0.3	*	-	5.2	5.2	*	-	5.5	5.5
Other	2013	-	-	0.1	0.1	*	-	4.8	4.8	*	-	4.9	4.9
Flatfish	2014	-	-	0.1	0.1	*	-	5.1	5.1	*	-	5.3	5.3
1 14011511	2015	_	-	0.1	0.1	*	-	4.2	4.2	*	-	4.3	4.3
	2016	-	-	0.1	0.1	*	-	4.0	4.0	*	-	4.0	4.0
	2012	_	-	0.2	0.2	0	-	14.7	14.7	0	-	14.9	14.9
Pacific	2013	-	-	0.1	0.1	0	-	14.2	14.2	0	-	14.3	14.3
Ocean	2014	*	-	0.2	0.2	0	-	16.3	16.3	0	-	16.5	16.5
Perch	2015	*	-	0.3	0.3	0	-	13.5	13.5	0	-	13.8	13.8
	2016	*	-	0.3	0.3	*	-	12.3	12.3	*	-	12.6	12.6

Table 14: Continued

		Ca	tcher Vess	sel		Cate	her Proce	essor		A	All Sectors	S	
	Year	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear
	2012	-	-	0	0	0	-	1.0	1.0	0	-	1.0	1.0
Northern	2013	*	-	0	0	0	-	0.6	0.6	0	-	0.6	0.6
Rockfish	2014	-	-	0	0	0	-	0.8	0.9	0	-	0.9	0.9
ROCKIISII	2015	-	-	0	0	0	-	2.2	2.2	0	-	2.2	2.2
	2016	*	-	0	0	0	-	1.2	1.2	0	-	1.2	1.2
	2012	0	-	0	0	0	-	0.1	0.1	0	-	0.1	0.1
Rougheye	2013	0	-	*	0	0	-	0.1	0.1	0	-	0.1	0.1
Rockfish	2014	*	-	0	0	0	-	0.1	0.1	0	-	0.1	0.1
TOCKHSH	2015	*	-	0	0	0	-	0.1	0.1	0	-	0.1	0.1
	2016	*	-	*	*	0	-	0.1	0.1	0	-	0.1	0.1
	2012	0	-	*	0	0	-	0.3	0.3	0	-	0.3	0.3
Shortraker	2013	0	-	*	0	0	-	0.2	0.2	0	-	0.2	0.2
Rockfish	2014	0	-	0	0	0	-	0.1	0.1	0	-	0.1	0.1
TOCKIISII	2015	*	-	0	0	0	-	0.1	0.1	0	-	0.1	0.1
	2016	0	-	0	0	0	-	0.1	0.1	0	-	0.1	0.1
	2012	0.1	-	0	0.1	0.2	-	0.5	0.7	0.3	-	0.5	0.8
Other	2013	0.1	-	0	0.1	0.2	-	0.4	0.7	0.3	-	0.4	0.8
Rockfish	2014	0.1	-	0	0.1	0.1	-	0.7	0.8	0.2	-	0.7	0.8
TOCKHOH	2015	0.1	-	0	0.1	0.1	-	0.3	0.4	0.2	-	0.3	0.5
	2016	0	_	0	0	0.1	_	0.5	0.6	0.2	_	0.5	0.7
	2012	0	-	0.1	0.1	2.3	-	0.2	2.5	2.3		0.3	2.6
Other	2013	0	-	0	0.1	6.3	-	0.2	6.6	6.3	-	0.3	6.6
Groundfish	$^{2014}$	0	-	0.3	0.4	8.2	-	0.6	8.8	8.2	-	0.9	9.2
Grounding	2015	0	-	0.4	0.4	2.2	-	0.1	2.4	2.2	-	0.5	2.8
	2016	0	-	0.1	0.2	3.2	-	0.1	3.2	3.2	-	0.2	3.4
	2012	6.3	-	272.7	298.5	80.3	-	426.9	510.2	86.6	-	699.6	808.8
	2013	4.2	-	241.3	260.3	88.8	-	355.2	444.0	93.0	-	596.5	704.3
All Species 20		6.0	-	249.2	277.4	91.7	-	347.1	443.8	97.7	-	596.4	721.2
	2015	3.4	-	244.9	265.6	89.5	-	312.8	407.5	92.9	-	557.7	673.1
	2016	2.0	-	230.4	256.7	86.4	-	312.4	403.7	88.4	-	542.9	660.4

Notes: Ex-vessel value is calculated by multiplying ex-vessel prices by the retained round weight catch. Refer to Table 18 for a description of the price derivation. The value added by at-sea processing is not included in these estimates of ex-vessel value. All groundfish includes additional species categories. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; NMFS Alaska Region At-sea Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 15: Bering Sea & Aleutian Islands vessel and permit counts, ex-vessel value, value per vessel, and pecent value of BSAI FMP groundfish and all BSAI fisheries by fleet, 2012-2016; calculations based on COAR (\$ millions).

	Year	Vessels	Permits	Ex-vessel Value Per Vessel \$1,000	Ex-vessel Value \$million	Percent Value, BSAI FMP Groundfish	Percent Value All BSAI Fisheries
	2012	89	15	2,995.20	266.57	32.85	20.82
	2013	88	15	2,690.03	236.72	33.32	20.70
AFA CV	2014	88	14	2,787.98	245.34	33.91	20.04
	2015	86	15	2,812.01	241.83	35.91	22.06
	2016	86	18	2,652.51	228.12	34.47	21.48
	2012	17	17	$14,\!575.99$	247.79	30.54	19.35
	2013	16	16	12,989.20	207.83	29.25	18.17
AFA CP	2014	17	17	$12,\!184.00$	207.13	28.63	16.92
	2015	17	17	10,984.64	186.74	27.73	17.04
	2016	17	17	10,064.54	171.10	25.85	16.11
	2012	20	20	8,279.40	165.59	20.41	12.93
	2013	18	18	$7,\!251.88$	130.53	18.37	11.41
A80	2014	18	18	$7,\!227.05$	130.09	17.98	10.63
	2015	18	18	$6,\!477.65$	116.60	17.31	10.64
	2016	18	18	7,003.97	126.07	19.05	11.87
	2012	21	9	920.92	19.34	2.38	1.51
BSAI	2013	15	9	$1,\!426.47$	21.40	3.01	1.87
Trawl	2014	12	9	$1,\!131.75$	13.58	1.88	1.11
11awi	2015	13	12	968.90	12.60	1.87	1.15
	2016	16	14	1,138.59	18.22	2.75	1.72
	2012	10	5	57.56	0.58	0.07	0.04
CV Hook	2013	13	9	42.68	0.55	0.08	0.05
and Line	2014	6	7	230.26	1.38	0.19	0.11
and Line	2015	5	5	85.99	0.43	0.06	0.04
	2016	5	2	4.74	0.02	0.00	0.00
	2012	31	31	$2,\!477.81$	76.81	9.47	6.00
CP Hook	2013	31	31	2,766.79	85.77	12.07	7.50
and Line	2014	30	30	3,002.73	90.08	12.45	7.36
and Line	2015	30	30	2,950.17	88.50	13.14	8.08
	2016	31	31	2,756.27	85.44	12.91	8.04
	2012	34	13	355.06	12.07	1.49	0.94
Sablefish	2013	26	10	326.25	8.48	1.19	0.74
iFQ	2014	22	10	391.39	8.61	1.19	0.70
11.0	2015	18	8	231.72	4.17	0.62	0.38
	2016	14	6	240.70	3.37	0.51	0.32
	2012	54	17	418.57	22.60	2.79	1.76
	2013	59	13	324.22	19.13	2.69	1.67
Pot	2014	56	18	485.70	27.20	3.76	2.22
	2015	48	18	469.38	22.53	3.35	2.06
	2016	56	17	524.91	29.39	4.44	2.77

**Notes:** These tables include the value of groundfish purchases reported by processing plants, as well as by other entities, such as markets and restaurants, that normally would not report sales of groundfish products. Keep this in mind when comparing ex-vessel values in this table to gross processed-product values. The data are for catch from both federal and state of Alaska fisheries. Values are not adjusted for inflation.

**Source:** ADF&G Commercial Operators Annual Reports (COAR); and ADF&G Intent to Operate (ITO) file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 16: Bering Sea & Aleutian Islands production of groundfish products by species, 2012-2016, (1,000 metric tons product weight).

		4	2012		6	2013		4	2014		4	2015		6	2016	
	Product	At Sea	Shoresi	de All	At Sea	Shoresic	de All									
	Whole Fish	0.24	1.47	1.71	0.16	1.65	1.81	0.31	1.09	1.40	1.11	0.68	1.80	0.10	0.69	0.79
	Head And Gut	25.54	3.61	29.15	37.28	3.69	40.97	34.77	2.77	37.54	25.38	*	25.38	28.61	0.04	28.65
	Roe	9.30	7.18	16.48	8.37	5.55	13.91	11.71	8.89	20.60	12.01	6.74	18.75	10.44	3.82	14.26
Pollock	Deep-Skin Fillets	36.84	18.65	55.49	36.83	14.76	51.59	32.68	11.01	43.69	34.56	9.22	43.77	38.24	8.55	46.79
	Other Fillets	47.55	43.51	91.06	59.63	59.66	119.28	63.68	68.41	132.09	57.44	65.80	123.24	49.61	64.89	114.50
	Surimi	77.93	79.21	157.15	80.85	80.81	161.66	87.81	83.52	171.33	95.94	91.80	187.74	100.51	90.31	190.82
	Minced Fish	25.06	5.96	31.01	23.47	7.27	30.74	19.98	6.09	26.06	19.71	5.47	25.19	22.38	11.69	34.07
	Fishmeal	21.08	31.44	52.52	20.98	32.89	53.87	23.25	33.60	56.85	26.45	34.59	61.03	27.15	36.25	63.40
	Other Products	10.57	27.58	38.15	12.21	20.78	33.00	13.57	22.40	35.97	12.60	21.44	34.04	14.52	27.09	41.61
	All Products	254.12	218.60	472.72	279.79	227.05	506.84	287.75	237.78	525.54	285.20	235.74	520.94	291.54	243.34	534.89
	Whole Fish	1.28	0.17	1.45	1.99	0.41	2.40	0.19	0.79	0.98	0.12	0.39	0.51	1.36	0.43	1.79
	Head And Gut	83.87	20.37	104.24	82.45	15.31	97.76	81.36	19.20	100.56	84.84	15.98	100.82	84.40	14.24	98.65
Pacific Co	odSalted/Split	-	*	*	-	-	-	-	-	-	-	-	-	-	-	_
	Roe	0.60	1.77	2.37	0.38	2.40	2.78	0.69	2.77	3.46	0.58	1.79	2.37	0.52	1.61	2.13
	Fillets	0.32	6.45	6.76	0.28	8.51	8.79	0.15	8.27	8.42	0.20	6.08	6.28	0.14	9.89	10.03
	Other Products	3.09	4.76	7.85	4.32	5.64	9.96	3.03	7.06	10.10	5.23	5.26	10.48	6.60	7.16	13.77
	All Products	89.16	33.51	122.67	89.43	32.27	121.70	85.42	38.09	123.51	90.97	29.49	120.47	93.02	33.34	126.36
Cablafial	Head And Gut	0.42	0.81	1.23	0.41	0.70	1.11	0.15	0.54	0.69	0.08	0.38	0.46	0.22	0.28	0.50
Sablefish	Other Products	0.01	0.06	0.07	0.02	*	0.02	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.02
	All Products	0.43	0.87	1.30	0.43	0.70	1.13	0.16	0.55	0.71	0.09	0.39	0.47	0.23	0.29	0.52

Table 16: Continued

		6	2012		4	2013		4	2014		4	2015		4	2016	
	Product	At Sea	Shoresic	de All	At Sea	Shoresid	le All									
	Whole Fish	5.43	0.20	5.63	2.91	*	2.91	3.17	0.08	3.25	3.31	*	3.31	2.13	0.01	2.14
Atka Mackerel	Head And Gut	24.15	-	24.15	11.14	-	11.14	17.12	-	17.12	29.09	-	29.09	30.53	-	30.53
	Other Products	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
	All Products	29.58	0.23	29.81	14.05	0.00	14.05	20.29	0.08	20.38	32.40	0.00	32.40	32.66	0.01	32.67
	Whole Fish	17.53	*	17.53	8.43	*	8.43	16.72	*	16.72	7.18	-	7.18	9.76	-	9.76
Yellowfin	Head And Gut	70.32	-	70.32	85.76	-	85.76	76.69	-	76.69	66.73	-	66.73	68.36	-	68.36
	Fillets	*	-	*	-	-	-	-	-	-	-	-	-	-	-	-
( I	Other Products	0.37	0.01	0.38	0.37	0.02	0.40	0.36	0.02	0.38	0.08	0.01	0.09	0.16	0.01	0.16
	All Products	88.22	0.01	88.23	94.56	0.02	94.59	93.77	0.02	93.79	73.98	0.01	73.99	78.28	0.01	78.28
	Whole Fish	3.07	*	3.07	0.57	*	0.57	2.53	*	2.53	0.47	-	0.47	0.63	*	0.63
Rock Sole	Head And Gut	36.15	-	36.15	29.50	-	29.50	25.87	-	25.87	24.48	-	24.48	23.90	-	23.90
	Fillets	-	-	-	*	-	*	0.00	-	0.00	0.01	-	0.01	*	-	*
	Other Products	0.40	0.29	0.68	0.46	0.10	0.57	0.31	0.08	0.38	0.12	0.06	0.18	0.08	0.08	0.16
	All Products	39.62	0.29	39.90	30.53	0.10	30.64	28.71	0.08	28.79	25.08	0.06	25.13	24.61	0.08	24.69
	Whole Fish	0.21	*	0.21	0.51	*	0.51	0.56	0.13	0.69	0.26	0.01	0.26	0.52	*	0.52
Flathead Sole	Head And Gut	3.36	-	3.36	7.12	-	7.12	6.96	-	6.96	4.45	-	4.45	4.13	-	4.13
Sole	Fillets	*	-	*	-	-	-	*	-	*	0.00	-	0.00	-	-	-
	Other Products	0.29	0.22	0.50	0.30	0.11	0.41	0.25	0.09	0.34	0.30	0.08	0.37	0.11	0.05	0.16
	All Products	3.85	0.22	4.07	7.93	0.11	8.04	7.77	0.21	7.99	5.00	0.09	5.09	4.75	0.05	4.81

Table 16: Continued

		4	2012		6	2013		6	2014		6	2015		6	2016	
	Product	At Sea	Shoresid	e All	At Sea	Shoresid	e All	At Sea	Shoreside	e All	At Sea	Shoreside	e All	At Sea	Shoreside	All
	Whole Fish	*	*	*	*	*	*	0.03	*	0.03	*	*	*	0.25	*	0.25
Arrowtoot	Head And thGut	11.70	-	11.70	7.13	-	7.13	6.89	-	6.89	4.73	*	4.73	4.39	-	4.39
	Fillets	-	-	-	-	*	*	-	-	-	-	-	-	-	-	-
	Other Products	0.02	0.28	0.30	0.06	0.12	0.18	0.05	0.09	0.14	0.03	0.03	0.06	0.01	0.02	0.03
	All Products	11.73	0.28	12.01	7.19	0.12	7.31	6.98	0.09	7.06	4.75	0.03	4.79	4.64	0.02	4.67
	Whole Fish	_	-	-	*	_	*	-	-	-	-	_	-	*	-	*
Kamchatk Flounder	xaHead And Gut	3.71	-	3.71	6.08	-	6.08	5.33	-	5.33	2.79	-	2.79	2.72	-	2.72
	Fishmeal	0.00	*	0.00	0.01	-	0.01	0.01	-	0.01	0.01	-	0.01	0.00	-	0.00
	All Products	3.72	*	3.72	6.09	-	6.09	5.34	-	5.34	2.80	-	2.80	2.72	-	2.72
	Whole Fish	-	-	-	-	-	-	-	*	*	-	*	*	0.03	-	0.03
Turbot	Head And Gut	2.92	-	2.92	0.78	-	0.78	0.75	*	0.75	1.19	-	1.19	1.29	*	1.29
	Other Products	1.00	0.00	1.01	0.24	0.00	0.24	0.23	0.00	0.24	0.43	0.00	0.43	0.51	0.00	0.51
	All Products	3.92	0.00	3.93	1.02	0.00	1.02	0.99	0.00	0.99	1.63	0.00	1.63	1.83	0.00	1.83
	Whole Fish	1.71	*	1.71	1.03	*	1.03	1.58	*	1.58	2.37	*	2.37	2.05	*	2.05
Other Flatfish	Head And Gut	5.61	-	5.61	6.22	-	6.22	6.67	-	6.67	5.73	-	5.73	4.79	*	4.79
	Other Products	0.15	0.04	0.20	0.18	0.01	0.18	0.09	0.01	0.11	0.01	0.02	0.02	0.02	0.01	0.03
	All Products	7.47	0.04	7.52	7.42	0.01	7.42	8.34	0.01	8.36	8.11	0.02	8.13	6.87	0.01	6.87
Pacific	Whole Fish	0.94	0.21	1.15	0.11	0.12	0.23	*	0.21	0.21	_	0.37	0.37	0.31	0.43	0.74
Ocean	Head And Gut	10.78	*	10.78	15.25	0.00	15.26	15.95	*	15.95	14.90	*	14.90	14.15	*	14.15
Perch	Other Products	0.02	0.03	0.05	0.02	0.01	0.03	0.04	0.01	0.05	0.09	0.07	0.16	0.21	0.02	0.23
	All Products	11.75	0.24	11.98	15.38	0.13	15.51	15.98	0.23	16.21	14.99	0.44	15.42	14.67	0.45	15.12

Table 16: Continued

		4	2012		6	2013		4	2014		4	2015		6	2016	
	Product	At Sea	Shoreside	All												
	Whole Fish	*	*	*	*	*	*	*	0.00	0.00	-	0.01	0.01	-	0.00	0.00
Northern Rockfish	Head And Gut	0.98	-	0.98	0.75	*	0.75	1.22	-	1.22	3.59	-	3.59	1.96	-	1.96
	Other Products	0.00	0.01	0.01	0.00	*	0.00	0.01	0.00	0.01	0.01	*	0.01	0.01	0.00	0.01
	All Products	0.98	0.01	0.99	0.76	*	0.76	1.23	0.01	1.24	3.59	0.01	3.60	1.97	0.00	1.97
	Whole Fish	*	*	*	-	-	-	-	-	-	*	-	*	-	-	-
Rougheye Rockfish	Head And Gut	0.07	0.00	0.07	0.09	*	0.09	0.08	*	0.08	0.06	*	0.06	0.06	*	0.06
	Other Products	0.00	0.00	0.00	*	*	*	0.00	*	0.00	0.00	0.00	0.00	0.00	*	0.00
	All Products	0.07	0.00	0.07	0.09	*	0.09	0.08	*	0.08	0.06	0.00	0.06	0.06	*	0.06
	Whole Fish	*	-	*	-	-	-	*	*	*	*	-	*	-	*	*
Shortraker Rockfish	Head And Gut	0.11	0.00	0.11	0.10	-	0.10	0.04	*	0.04	0.03	-	0.03	0.02	-	0.02
	Other Products	0.01	0.00	0.01	0.00	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	All Products	0.12	0.00	0.12	0.11	*	0.11	0.04	0.00	0.04	0.03	0.00	0.03	0.02	0.00	0.02
	Whole Fish	0.11	0.00	0.11	0.25	-	0.25	0.24	0.01	0.25	0.10	*	0.10	0.15	*	0.15
Other Rockfish	Head And Gut	0.27	0.03	0.30	0.12	0.02	0.14	0.18	0.02	0.20	0.16	0.02	0.18	0.21	0.02	0.22
	Other Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
	All Products	0.38	0.03	0.41	0.37	0.02	0.40	0.42	0.03	0.45	0.26	0.03	0.28	0.36	0.02	0.38
	Whole Fish	0.00	0.26	0.26	*	0.09	0.09	*	0.34	0.34	*	0.38	0.38	0.00	0.15	0.16
Other	Head And Gut	0.01	*	0.01	0.00	-	0.00	0.01	*	0.01	0.01	*	0.01	0.01	-	0.01
Groundfish		-	*	*	-	-	-	-	-	-	-	-	-	*	-	*
	Fishmeal	0.10	0.26	0.37	0.11	0.05	0.16	0.10	0.17	0.27	0.05	0.48	0.53	0.05	0.15	0.19
	Other Products	1.79	0.07	1.86	1.86	0.03	1.89	2.26	0.12	2.38	2.06	0.31	2.37	1.79	0.02	1.81
	All Products	1.90	0.60	2.50	1.97	0.17	2.14	2.37	0.63	3.00	2.12	1.17	3.30	1.85	0.32	2.17

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Table 16: Continued

						010 10.	Commi								
	4	2012		6	2013		2	2014		2	2015		6	2016	
Product	At Sea	Shoresi	de All	At Sea	Shoresi	de All	At Sea	Shoresi	de All	At Sea	Shoresi	de All	At Sea	Shoresic	de All
Whole Fish	30.53	2.31	32.84	15.97	2.27	18.24	25.34	2.65	27.99	14.90	1.84	16.74	17.29	1.71	19.00
Head And Gut	279.98	24.82	304.80	290.20	19.72	309.92	280.06	22.53	302.58	268.26	16.38	284.64	269.74	14.58	284.32
Salted/Split	-	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Roe	9.90	8.95	18.85	8.75	7.94	16.70	12.40	11.66	24.06	12.59	8.52	21.12	10.96	5.43	16.39
All Species Fillets	0.32	6.45	6.76	0.28	8.51	8.79	0.15	8.27	8.42	0.21	6.08	6.28	0.14	9.89	10.03
Deep-Skin Fillets	36.84	18.65	55.49	36.83	14.76	51.59	32.68	11.01	43.69	34.56	9.22	43.77	38.24	8.55	46.79
Other Fillets	47.55	43.51	91.06	59.63	59.66	119.28	63.68	68.41	132.09	57.44	65.80	123.24	49.61	64.89	114.50
$\operatorname{Surimi}$	77.93	79.21	157.15	80.85	80.81	161.66	87.81	83.52	171.33	95.94	91.80	187.74	100.51	90.31	190.82
Minced Fish	25.06	5.96	31.01	23.47	7.27	30.74	19.98	6.09	26.06	19.71	5.47	25.19	22.38	11.69	34.07
Fishmeal	21.19	31.70	52.89	21.09	32.94	54.03	23.36	33.77	57.13	26.50	35.07	61.57	27.20	36.40	63.60
$\begin{array}{c} \text{Other} \\ \text{Products} \end{array}$	17.72	33.38	51.10	20.05	26.84	46.89	20.22	29.91	50.13	20.97	27.28	48.24	24.03	34.48	58.51
All Products	547.03	254.93	801.96	557.13	260.72	817.84	565.67	277.81	843.48	551.07	267.46	818.53	560.09	277.94	838.03

Notes: Total includes additional species not listed in the production details as well as confidential data from Tables 28 and 29. These estimates are for catch from both federal and state of Alaska fisheries. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea and Shoreside Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

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Table 17: Bering Sea & Aleutian Islands gross value of groundfish products by species, 2012-2016, (\$ million).

		6	2012			2013		2	2014			2015			2016	
	Product	At Sea	Shoresi	de All	At Sea	Shoresic	de All	At Sea	Shoresi	de All	At Sea	Shoresi	de All	At Sea	Shoresid	e All
	Whole Fish	0.3	1.3	1.6	0.1	1.8	1.9	0.3	0.8	1.1	1.1	0.8	1.9	0.1	0.5	0.5
	Head And Gut	41.4	4.8	46.2	58.3	5.2	63.5	49.4	3.9	53.4	35.8	*	35.8	48.9	0.0	48.9
	Roe	103.2	53.8	156.9	68.8	33.2	102.0	85.5	46.9	132.4	69.9	24.8	94.7	72.7	16.7	89.4
Pollock	Deep-Skin Fillets	137.8	68.7	206.5	138.8	45.7	184.5	117.2	36.4	153.6	120.3	29.9	150.2	143.3	23.6	166.9
	Other Fillets	148.8	145.0	293.8	169.5	189.6	359.0	183.3	195.5	378.8	176.1	172.6	348.7	139.0	199.5	338.5
	Surimi	277.0	219.2	496.2	192.4	164.9	357.2	230.8	186.5	417.3	265.8	204.4	470.1	286.9	209.9	496.7
	Minced Fish	43.6	9.8	53.4	35.3	10.4	45.7	26.3	7.9	34.2	29.1	7.9	37.1	40.7	19.7	60.3
	Fishmeal	40.0	38.8	78.8	40.7	52.2	92.9	49.1	47.0	96.1	53.7	47.8	101.5	44.4	52.9	97.3
	Other Products	15.6	31.9	47.5	15.8	19.5	35.3	13.8	20.6	34.3	14.4	18.1	32.5	20.0	24.8	44.8
	All Products	807.7	573.2	1,381.0	719.5	522.6	$1,\!242.1$	755.8	545.4	$1,\!301.2$	766.2	506.3	$1,\!272.5$	795.7	547.6	1,343.3
	Whole Fish	1.6	0.3	1.9	2.2	0.4	2.6	0.1	1.7	1.8	0.1	0.5	0.6	2.1	0.6	2.7
D'C.	Head And Gut	260.0	53.9	313.9	200.1	26.1	226.2	237.4	41.4	278.8	267.0	36.3	303.3	247.3	32.3	279.6
Pacific Cod	Salted/Split	-	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Cou	Roe	1.1	3.3	4.4	0.7	4.7	5.4	1.4	6.1	7.5	0.8	3.0	3.8	0.6	2.3	2.9
	Fillets	1.1	45.2	46.2	0.7	54.3	55.0	0.3	49.5	49.8	0.5	36.4	36.9	0.5	69.9	70.3
	Other Products	6.2	8.2	14.4	5.0	9.5	14.6	4.9	10.9	15.9	11.0	9.5	20.4	18.5	13.0	31.5
	All Products	269.9	110.9	380.9	208.6	95.0	303.7	244.1	109.6	353.8	279.3	85.7	365.1	268.9	118.0	387.0
Sablefish	Head And Gut	5.5	10.9	16.5	5.1	9.9	15.0	2.5	8.0	10.5	1.5	6.2	7.8	3.0	4.8	7.8
Sabielish	Other Products	0.0	0.2	0.2	0.0	*	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1
	All Products	5.6	11.1	16.7	5.1	9.9	15.0	2.5	8.0	10.5	1.6	6.3	7.8	3.0	4.9	7.9

Table 17: Continued

		4	2012		4	2013		4	2014		4	2015		4	2016	
	Product	At Sea	Shoreside	e All	At Sea	Shoreside	e All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
	Whole Fish	7.5	0.3	7.9	5.3	*	5.3	4.6	0.1	4.7	3.9	*	3.9	4.1	0.0	4.1
$\begin{array}{c} {\rm Atka} \\ {\rm Mackerel} \end{array}$	Head And Gut	65.7	-	65.7	32.4	-	32.4	56.9	-	56.9	69.1	-	69.1	75.7	-	75.7
	Other Products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All Products	73.2	0.3	73.6	37.7	0.0	37.7	61.5	0.1	61.6	73.0	0.0	73.0	79.8	0.0	79.8
	Whole Fish	24.2	*	24.2	24.9	*	24.9	17.1	*	17.1	7.0	-	7.0	9.4	-	9.4
Yellowfin	Head And Gut	97.4	-	97.4	95.7	-	95.7	76.9	-	76.9	71.2	-	71.2	83.8	-	83.8
	Fillets	*	-	*	-	-	-	-	-	-	-	-	-	-	-	-
	Other Products	0.7	0.0	0.7	1.1	0.1	1.1	0.7	0.0	0.8	0.2	0.0	0.2	0.3	0.0	0.3
	All Products	122.3	0.0	122.4	121.7	0.1	121.7	94.7	0.0	94.7	78.4	0.0	78.4	93.5	0.0	93.5
	Whole Fish	4.4	*	4.4	0.6	*	0.6	2.9	*	2.9	0.5	-	0.5	0.8	*	0.8
Rock Sole	Head And e Gut	74.2	-	74.2	37.1	-	37.1	31.4	-	31.4	29.4	-	29.4	32.9	-	32.9
	Fillets	-	-	-	*	-	*	0.0	-	0.0	0.0	-	0.0	*	-	*
	Other Products	0.6	0.2	0.8	1.3	0.3	1.6	0.6	0.2	0.8	0.2	0.1	0.3	0.1	0.1	0.3
	All Products	79.3	0.2	79.5	39.1	0.3	39.4	35.0	0.2	35.2	30.2	0.1	30.3	33.8	0.1	34.0
	Whole Fish	0.4	*	0.4	1.5	*	1.5	0.8	0.1	0.9	0.3	0.0	0.3	0.6	*	0.6
Flathead	Head And Gut	6.9	-	6.9	13.4	-	13.4	10.8	-	10.8	6.2	-	6.2	7.0	-	7.0
Sole	Fillets	*	-	*	-	-	-	*	-	*	0.0	-	0.0	-	-	-
	Other Products	0.5	0.2	0.6	0.9	0.3	1.2	0.5	0.2	0.7	0.6	0.1	0.7	0.1	0.1	0.2
	All Products	7.7	0.2	7.9	15.8	0.3	16.1	12.1	0.3	12.4	7.0	0.2	7.2	7.8	0.1	7.9

Table 17: Continued

		4	2012		4	2013			2014		4	2015		4	2016	
	Product	At Sea	Shoreside	All												
	Whole Fish	*	*	*	*	*	*	0.0	*	0.0	*	*	*	0.3	*	0.3
Arrowtoo	Head And tlGut	22.0	-	22.0	9.9	-	9.9	12.5	-	12.5	7.7	*	7.7	9.0	-	9.0
	Fillets	-	-	-	-	*	*	-	-	-	-	-	-	-	-	-
	Other Products	0.0	0.2	0.3	0.2	0.4	0.5	0.1	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.1
	All Products	22.0	0.2	22.2	10.0	0.4	10.4	12.7	0.2	12.8	7.8	0.1	7.8	9.3	0.0	9.4
	Whole Fish	-	-	-	*	-	*	-	_	-	-	-	-	*	-	*
Kamchatl Flounder	kaHead And Gut	8.2	-	8.2	7.4	-	7.4	8.7	-	8.7	4.1	-	4.1	5.0	-	5.0
	Fishmeal	0.0	*	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0
	All Products	8.2	*	8.2	7.4	_	7.4	8.7	-	8.7	4.1	_	4.1	5.0	-	5.0
	Whole Fish	-	-	-	-	-	-	-	*	*	-	*	*	0.1	-	0.1
Turbot	Head And Gut	13.5	-	13.5	3.3	-	3.3	3.6	*	3.6	5.7	-	5.7	6.7	*	6.7
	Other Products	3.5	0.0	3.5	0.8	0.0	0.8	1.0	0.0	1.0	1.7	0.0	1.7	1.6	0.0	1.6
	All Products	17.0	0.0	17.0	4.2	0.0	4.2	4.6	0.0	4.6	7.4	0.0	7.4	8.5	0.0	8.5
	Whole Fish	3.1	*	3.1	2.0	*	2.0	2.3	*	2.3	2.7	*	2.7	2.7	*	2.7
Other Flatfish	Head And Gut	7.1	-	7.1	6.8	-	6.8	7.2	-	7.2	5.8	-	5.8	5.1	*	5.1
	Other Products	0.3	0.0	0.3	0.5	0.0	0.5	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
	All Products	10.5	0.0	10.5	9.3	0.0	9.3	9.7	0.0	9.8	8.4	0.0	8.5	7.8	0.0	7.9
Pacific	Whole Fish	1.6	0.3	1.9	0.1	0.2	0.3	*	0.3	0.3	-	0.5	0.5	0.4	0.7	1.1
Ocean Perch	Head And Gut	34.9	*	34.9	36.1	0.0	36.1	42.2	*	42.2	34.9	*	34.9	30.4	*	30.4
r ercii	Other Products	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.1	0.3	0.3	0.0	0.3
	All Products	36.5	0.4	36.9	36.3	0.2	36.4	42.3	0.3	42.6	35.1	0.6	35.7	31.1	0.7	31.8

Table 17: Continued

		6	2012		2	2013		4	2014		2	2015		6	2016	
	Product	At Sea	Shoreside	All												
	Whole Fish	*	*	*	*	*	*	*	0.0	0.0	-	0.0	0.0	-	0.0	0.0
Northern Rockfish		2.5	-	2.5	1.2	*	1.2	2.5	-	2.5	5.9	-	5.9	2.8	-	2.8
	Other Products	0.0	0.0	0.0	0.0	*	0.0	0.0	0.0	0.0	0.0	*	0.0	0.0	0.0	0.0
	All Products	2.5	0.0	2.5	1.2	*	1.2	2.5	0.0	2.5	5.9	0.0	5.9	2.8	0.0	2.8
	Whole Fish	*	*	*	-	-	-	-	-	-	*	-	*	-	-	-
Rougheye Rockfish	e Head And Gut	0.2	0.0	0.2	0.2	*	0.2	0.2	*	0.2	0.1	*	0.1	0.1	*	0.1
	Other Products	0.0	0.0	0.0	*	*	*	0.0	*	0.0	0.0	0.0	0.0	0.0	*	0.0
	All Products	0.2	0.0	0.2	0.2	*	0.2	0.2	*	0.2	0.1	0.0	0.1	0.1	*	0.1
	Whole Fish	*	-	*	-	-	-	*	*	*	*	-	*	-	*	*
Shortrake Rockfish	erHead And Gut	0.6	0.0	0.6	0.4	-	0.4	0.2	*	0.2	0.1	-	0.1	0.1	-	0.1
	Other Products	0.0	0.0	0.0	0.0	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All Products	0.6	0.0	0.6	0.4	*	0.4	0.2	0.0	0.2	0.1	0.0	0.1	0.1	0.0	0.1
	Whole Fish	0.5	0.0	0.5	0.8	-	0.8	1.1	0.0	1.1	0.4	*	0.4	0.8	*	0.8
Other Rockfish	Head And Gut	1.0	0.2	1.2	0.4	0.2	0.5	0.5	0.1	0.5	0.4	0.2	0.6	0.5	0.1	0.6
	Other Products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All Products	1.6	0.2	1.7	1.2	0.2	1.4	1.6	0.1	1.7	0.8	0.2	0.9	1.3	0.1	1.4
	Whole Fish	0.0	0.3	0.3	*	0.0	0.0	*	0.5	0.5	*	0.4	0.4	0.0	0.3	0.3
Other	Head And Gut	0.0	*	0.0	0.0	-	0.0	0.0	*	0.0	0.0	*	0.0	0.0	-	0.0
Groundfis		-	*	*	-	-	-	-	-	-	-	-	-	*	-	*
	Fishmeal	0.1	0.2	0.3	0.2	0.1	0.2	0.1	0.2	0.3	0.1	0.9	1.0	0.1	0.2	0.3
	Other Products	4.2	0.2	4.4	3.6	0.1	3.7	3.7	0.7	4.3	3.9	1.1	5.1	4.5	0.0	4.6
	All Products	4.4	0.8	5.1	3.8	0.1	4.0	3.8	1.4	5.2	4.1	2.5	6.6	4.6	0.5	5.2

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Table 17: Continued

		2	012		2	013		2	2014		2	015		2	016	
	Product	At Sea	Shoresi	de All	At Sea	Shoresic	de All	At Sea	Shoresic	de All	At Sea	Shoresi	de All	At Sea	Shoresic	de All
	Whole Fish	43.6	2.6	46.2	37.7	2.4	40.1	29.3	3.5	32.8	15.9	2.2	18.1	21.4	2.0	23.4
	Head And Gut	641.2	69.8	711.0	507.7	41.3	549.1	542.9	53.3	596.2	544.9	42.7	587.6	558.3	37.3	595.6
	Salted/Split	-	*	*	-	-	-	-	-	-	-	-	-	-	-	-
	Roe	104.3	57.1	161.3	69.4	37.9	107.4	86.8	53.1	139.9	70.7	27.8	98.5	73.3	19.0	92.3
All	Fillets	1.1	45.2	46.2	0.7	54.3	55.0	0.4	49.5	49.8	0.6	36.4	37.0	0.5	69.9	70.3
Species	Deep-Skin Fillets	137.8	68.7	206.5	138.8	45.7	184.5	117.2	36.4	153.6	120.3	29.9	150.2	143.3	23.6	166.9
	Other Fillets	148.8	145.0	293.8	169.5	189.6	359.0	183.3	195.5	378.8	176.1	172.6	348.7	139.0	199.5	338.5
	Surimi	277.0	219.2	496.2	192.4	164.9	357.2	230.8	186.5	417.3	265.8	204.4	470.1	286.9	209.9	496.7
	Minced Fish	43.6	9.8	53.4	35.3	10.4	45.7	26.3	7.9	34.2	29.1	7.9	37.1	40.7	19.7	60.3
	Fishmeal	40.2	38.9	79.1	40.9	52.3	93.1	49.3	47.2	96.5	53.8	48.7	102.5	44.5	53.2	97.6
	Other Products	31.7	41.3	73.1	29.3	30.2	59.4	25.6	32.8	58.4	32.3	29.3	61.6	45.5	38.2	83.7
	All Products	$1,\!469.2$	697.7	$2,\!166.9$	$1,\!221.5$	629.1	1,850.6	$1,\!292.0$	665.7	1,957.6	$1,\!309.4$	601.9	1,911.4	$1,\!353.2$	672.2	2,025.4

Notes: Total includes additional species not listed in the production details as well as confidential data from Tables 28 and 29. These estimates are for catch from both federal and state of Alaska fisheries. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea and Shoreside Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

 $\underline{\text{Table 18: Bering Sea \& Aleutian Islands price per pound of groundfish products by species and processing mode, 2012-2016, (\$/\text{lb})}.$ 

		201	2	201	3	201	4	201	5	201	6
	Product	At-sea	Shoreside								
	Whole Fish	0.53	0.40	0.40	0.49	0.47	0.32	0.45	0.51	0.33	0.30
	Head And Gut	0.74	0.60	0.71	0.64	0.65	0.64	0.64	*	0.77	0.44
	Roe	5.03	3.40	3.73	2.72	3.31	2.39	2.64	1.67	3.16	1.99
Pollock	Deep-Skin Fillets	1.70	1.67	1.71	1.41	1.63	1.50	1.58	1.47	1.70	1.25
FOHOCK	Other Fillets	1.42	1.51	1.29	1.44	1.31	1.30	1.39	1.19	1.27	1.39
	Surimi	1.61	1.26	1.08	0.93	1.19	1.01	1.26	1.01	1.29	1.05
	Minced Fish	0.79	0.75	0.68	0.65	0.60	0.59	0.67	0.66	0.82	0.76
	Fishmeal	0.86	0.56	0.88	0.72	0.96	0.63	0.92	0.63	0.74	0.66
	Other Products	0.67	0.52	0.59	0.43	0.46	0.42	0.52	0.38	0.62	0.42
	All Products	1.44	1.19	1.17	1.04	1.19	1.04	1.22	0.97	1.24	1.02
	Whole Fish	0.57	0.83	0.50	0.45	0.36	0.97	0.34	0.57	0.70	0.64
	Head And Gut	1.41	1.20	1.10	0.77	1.32	0.98	1.43	1.03	1.33	1.03
	Salted/Split	-	*	-	-	-	-	-	-	-	-
Pacific Co		0.81	0.86	0.77	0.89	0.90	1.00	0.60	0.77	0.53	0.64
	Fillets	1.51	3.18	1.07	2.89	0.94	2.71	1.18	2.72	1.60	3.20
	Other Products	0.91	0.78	0.53	0.77	0.74	0.70	0.95	0.82	1.27	0.82
	All Products	1.37	1.50	1.06	1.34	1.30	1.31	1.39	1.32	1.31	1.61
	Head And Gut	5.96	6.13	5.66	6.39	7.46	6.70	8.57	7.43	6.19	7.84
Sablefish	Other Products	1.29	1.38	0.88	*	0.50	2.67	1.93	2.30	0.81	2.67
	All Products	5.84	5.81	5.39	6.39	7.00	6.64	8.31	7.37	5.98	7.64
A . 1	Whole Fish	0.63	0.70	0.83	*	0.66	0.60	0.53	*	0.86	0.75
Atka	Head And Gut	1.23	_	1.32	-	1.51	-	1.08	-	1.12	-
Mackerel	Other Products	0.71	0.36	1.03	1.10	1.21	0.51	0.87	0.88	0.73	0.74
	All Products	1.12	0.66	1.22	1.09	1.37	0.60	1.02	0.88	1.11	0.75

Table 18: Continued

		201	2	201	3	201	4	201	5	201	6
	Product	At-sea	Shoreside								
	Whole Fish	0.63	*	1.34	*	0.46	*	0.45	_	0.44	-
	Head And Gut	0.63	-	0.51	-	0.45	-	0.48	-	0.56	-
Yellowfin	Fillets	*	-	-	-	-	-	-	-	-	-
	Other Products	0.87	0.88	1.30	1.30	0.90	0.92	1.02	0.87	0.77	0.73
	All Products	0.63	0.88	0.58	1.30	0.46	0.92	0.48	0.87	0.54	0.73
	Whole Fish	0.66	*	0.50	*	0.53	*	0.50	-	0.59	*
	Head And Gut	0.80	-	0.54	-	0.45	-	0.49	-	0.56	-
Rock Sole	Head And Gut With Roe	1.28	-	0.85	-	0.85	-	0.89	-	1.02	-
	Fillets	-	-	*	-	5.70	-	2.78	-	*	-
	Other Products	0.71	0.37	1.26	1.30	0.92	0.92	0.87	0.87	0.74	0.73
	All Products	0.91	0.37	0.58	1.30	0.55	0.92	0.55	0.87	0.62	0.73
	Whole Fish	0.76	*	1.38	*	0.62	0.37	0.44	0.55	0.57	*
Flathead	Head And Gut	0.93	-	0.85	-	0.70	-	0.63	-	0.77	-
Sole	Fillets	*	-	-	-	*	-	2.33	-	-	-
Doic	Other Products	0.75	0.37	1.35	1.30	0.93	0.92	0.87	0.87	0.61	0.73
	All Products	0.91	0.37	0.90	1.30	0.70	0.59	0.64	0.84	0.74	0.73
	Whole Fish	*	*	*	*	0.54	*	*	*	0.56	*
	Head And Gut	0.85	-	0.63	-	0.82	-	0.74	*	0.93	-
Arrowtoot	thFillets	-	-	-	*	-	-	-	-	-	-
	Other Products	0.75	0.37	1.27	1.30	0.93	0.92	0.87	0.87	0.60	0.73
	All Products	0.85	0.37	0.63	1.30	0.82	0.92	0.74	0.87	0.91	0.73
	Whole Fish	-	-	*	-	-	-	-	-	*	
Kamchatk	a Head And Gut	1.00	-	0.55	-	0.74	-	0.67	-	0.84	-
Flounder	Fishmeal	0.66	*	1.29	-	0.93	-	0.94	-	0.76	-
	All Products	1.00	*	0.55	-	0.74	-	0.67	-	0.84	=

Table 18: Continued

		201	2	201	3	201	4	201	5	201	6
	Product	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside
Turbot	Whole Fish Head And Gut	2.09		- 1.95		2.18	*	2.15	* -	1.97 2.36	-
Turbot	Other Products	1.59	0.37	1.56	1.33	1.89	0.93	1.80	0.88	1.45	0.73
	All Products	1.96	0.37	1.86	1.33	2.11	0.93	2.06	0.88	2.10	0.73
Other	Whole Fish Head And Gut	$0.81 \\ 0.58$	*	$0.90 \\ 0.49$	*	$0.67 \\ 0.49$	*	$0.51 \\ 0.46$	*	$0.60 \\ 0.48$	*
Flatfish	Other Products	0.87	0.37	1.26	1.30	0.91	0.92	0.88	0.87	0.66	0.73
	All Products	0.64	0.37	0.57	1.30	0.53	0.92	0.47	0.87	0.52	0.73
Pacific	Whole Fish Head And Gut	$0.76 \\ 1.47$	0.75	$0.59 \\ 1.07$	$0.59 \\ 0.60$	* 1.20	0.55	1.06	0.56	$0.64 \\ 0.97$	0.69
Ocean Per	clOther Products	1.30	0.52	0.95	1.01	0.80	0.80	0.87	0.87	0.60	0.73
	All Products	1.41	0.72	1.07	0.61	1.20	0.56	1.06	0.61	0.96	0.69
Northern	Whole Fish Head And Gut	* 1.14	*	* 0.70	*	* 0.92	0.58	0.75	0.46	0.65	0.49
Rockfish	Other Products	0.90	0.52	0.95	*	0.80	0.80	0.87	*	0.59	0.73
	All Products	1.14	0.52	0.70	*	0.92	0.74	0.75	0.46	0.65	0.62
Rougheye	Whole Fish Head And Gut	* 1.34	* 0.81	1.04	- *	1.04	- *	* 0.94	-	1.04	- *
Rockfish	Other Products	1.52	0.52	*	*	0.80	*	0.99	0.89	0.73	*
	All Products	1.34	0.54	1.04	*	1.04	*	0.94	0.89	1.04	*

Table 18: Continued

		2012		2013		2014		2015		2016	
	Product	At-sea	Shoreside								
Shortraker Rockfish	Whole Fish	*	_	_	_	*	*	*	-	_	*
	Head And Gut	2.25	1.95	1.89	-	1.78	*	1.43	-	1.87	-
	Other Products	1.43	0.52	1.44	*	0.95	0.79	1.01	0.88	0.77	0.73
	All Products	2.21	1.61	1.87	*	1.77	0.79	1.39	0.88	1.79	0.72
Other Rockfish	Whole Fish	2.17	1.00	1.47	_	2.08	1.27	1.72	*	2.34	*
	Head And Gut	1.73	3.17	1.45	3.80	1.11	2.43	1.09	3.29	1.05	3.60
	Other Products	1.43	0.17	1.99	3.13	0.80	0.53	0.87	1.43	0.73	0.78
	All Products	1.85	2.77	1.47	3.70	1.66	1.80	1.32	3.12	1.58	3.44
Other Groundfish	Whole Fish	1.12	0.60	*	0.10	*	0.72	*	0.53	0.99	0.76
	Head And Gut	0.88	*	1.14	-	0.76	*	0.64	*	1.83	-
	Fillets	-	*	-	-	-	-	-	-	*	-
	r Fishmeal	0.67	0.33	0.75	0.53	0.63	0.50	0.87	0.87	0.68	0.73
	Other Products	1.06	1.50	0.89	1.05	0.74	2.49	0.87	1.69	1.15	0.64
	All Products	1.04	0.59	0.88	0.40	0.73	1.00	0.87	0.97	1.14	0.74

Notes: These estimates are based on data from both federal and state of Alaska fisheries. Prices based on confidential data have been excluded. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea and Shoreside Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

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Table 19: Bering Sea & Aleutian Islands total product value per round metric ton of retained catch by processor type, species, and year, 2012-2016, (\$/mt).

	Species	2012	2013	2014	2015	2016
M - + l l- :	Pollock	1,153	808	1,035	971	972
Motherships	Pacific Cod	965	555	388	459	895
	Pollock	1,206	1,037	1,037	1,044	1,059
	Sablefish	7,853	7,799	9,728	10,625	7,653
	Pacific Cod	1,501	1,180	1,423	1,579	1,485
Catcher process	ors Flatfish	1,004	768	694	693	786
	Rockfish	$1,\!572$	1,173	1,370	1,141	1,018
	Atka Mackerel	1,584	1,681	2,019	1,391	1,476
	Other	624	482	460	513	674
	Pollock	1,089	950	980	887	936
	Sablefish	$9,\!152$	9,913	9,570	13,167	12,174
Shoreside	Pacific Cod	1,630	1,398	1,489	1,392	1,547
processors	Flatfish	741	1,102	553	564	981
	Rockfish	1,661	1,424	936	1,071	1,305
	Other	888	433	1,611	1,776	1,305

Notes: These estimates include the product value of catch from both federal and state of Alaska fisheries. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region At-sea and Shoreside Production Reports; ADF&G Commercial Operators Annual Reports (COAR); and NMFS Alaska Region Blend and Catch-accounting System estimates. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 20: Bering Sea & Aleutian Islands number of catcher processors, gross product value, value per processor, and percent value of BSAI FMP groundfish of processed groundfish by processor group, 2012-2016 (\$ millions).

	Year	Processors	Wholesale Value Per Processor (\$1,000)	Wholesale Value (\$million)	Percent Value, BSAI FMP Groundfish
	2012	16	719.81	44,988.23	33.19
	2013	15	643.30	$42,\!886.85$	34.75
AFA CP	2014	16	653.68	40,855.06	33.38
	2015	16	660.43	$41,\!276.92$	34.54
	2016	16	683.97	42,747.90	33.77
	2012	20	394.75	19,737.60	18.20
	2013	18	296.23	$16,\!456.97$	16.00
A80	2014	18	309.44	17,191.14	15.80
	2015	18	293.51	16,306.20	15.35
	2016	18	323.94	17,996.75	15.99
	2012	33	220.95	6,695.31	10.19
CP Hook	2013	33	165.80	5,024.32	8.96
and Line	2014	31	200.78	$6,\!476.75$	10.25
and Line	2015	31	231.50	7,467.73	12.11
	2016	30	209.63	6,987.75	10.35
	2012	11	4.48	407.36	0.21
Sablefish	2013	7	4.11	586.49	0.22
IFQ	2014	8	2.14	266.97	0.11
11.0	2015	5	1.43	286.30	0.07
	2016	5	1.35	269.90	0.07

Notes: The data are for catch from both federal and state of Alaska fisheries. The processor groups are defined as follows: "AFA CP" are the AFA catcher processors. "A80" are the catcher processors as defined under Amendment 80 of the BSAI FMP. "CP Hook and Line" are the hook and line catcher processors. "Sablefish IFQ" are catcher processors processing sablefish IFQ. Values are not adjusted for inflation.

**Source:** ADF&G Commercial Operators Annual Reports (COAR); and ADF&G Intent to Operate (ITO) file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 21: Bering Sea & Aleutian Islands number of vessels, average and median length, and average and median capacity (tonnage) of vessels that caught groundfish by vessel type, and gear, 2012-2016.

			Average	Median	Average	Median
	Year	Vessels	Length	Length	Capacity	Capacity
			(feet)	(feet)	(tons)	(tons)
	2012	89	128	124	166	134.0
	2013	88	127	124	164	134.0
AFA CV	2014	88	128	124	164	133.0
	2015	86	127	124	163	134.0
	2016	86	126	123	160	133.0
	2012	17	288	285	1,612	1,592.0
	2013	16	300	296	1,673	1,592.0
AFA CP	2014	17	289	285	1,599	1,592.0
	2015	17	289	285	1,617	1,592.0
	2016	17	289	285	1,568	1,303.0
	2012	20	176	166	403	380.0
	2013	18	180	185	420	426.0
A80	2014	18	186	185	426	426.0
	2015	18	184	185	428	426.0
	2016	18	184	185	432	426.0
	2012	16	122	123	178	132.0
BSAI	2013	14	142	144	277	276.0
Trawl	2014	10	132	130	203	148.0
11awi	2015	13	118	108	151	132.0
	2016	10	119	123	151	132.0
	2012	7	51	56	30	36.0
CV Hook	2013	4	52	56	36	37.0
and Line	2014	3	49	48	35	37.0
and Line	2015	2	56	58	42	43.0
	2016	1	32	32	16	16.0
	2012	31	143	136	288	258.0
CP Hook	2013	31	146	136	307	258.0
and Line	2014	30	146	136	332	260.0
and Line	2015	30	145	136	322	258.0
	2016	30	146	136	320	258.0
	2012	34	82	94	94	111.0
Sablefish	2013	27	90	98	101	111.0
IFQ	2014	22	91	98	106	111.0
11, 0	2015	18	79	58	93	98.0
	2016	14	88	98	100	111.0

Table 21: Continued

	Year	Vessels	Average Length (feet)	Median Length (feet)	Average Capacity (tons)	Median Capacity (tons)
	2012	51	94	101	133	105.0
	2013	56	92	58	128	105.0
Pot	2014	53	85	58	117	105.0
	2015	47	87	58	127	105.0
	2016	46	81	58	121	105.0
	2012	6	46	46	26	29.0
	2013	6	36	38	14	15.0
Jig	2014	3	31	32	19	18.5
	2015	4	32	33	15	14.0
	2016	2	42	42	25	26.0
	2012	11	55	58	46	43.0
N - 171 4 /	2013	12	47	48	27	28.0
No Fleet/	2014	7	57	48	48	28.0
Other	2015	5	53	56	32	36.0
	2016	22	105	90	241	98.0

**Notes:** These estimates include only vessels fishing part of federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Table 22: Bering Sea & Aleutian Islands number of vessels that caught groundfish by month, vessel type, and gear, 2012-2016.

		Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
		2012	3	4	4	3	11	15	18	15	13	7	4	-	34
	Hook &	2013	5	3	5	5	5	15	12	11	10	4	4	2	33
	Line	2014	5	4	5	6	5	7	10	8	9	7	4	2	21
	Line	2015	3	2	4	3	7	6	6	7	8	9	3	1	21
		2016	1	-	1	1	3	5	7	6	7	4	-	-	16
		2012	38	18	9	9	5	5	3	1	22	19	5	8	52
		2013	41	23	10	12	3	3	2	2	9	16	9	21	59
	Pot	2014	41	22	18	19	14	1	1	1	14	13	11	12	54
Catcher		2015	29	27	21	15	1	2	2	1	13	21	9	16	47
Vessels		2016	28	29	33	31	3	1	1	1	10	21	17	18	54
		2012	66	88	101	56	2	71	74	76	60	29	16	-	110
		2013	78	91	94	61	3	71	74	69	43	16	4	-	102
	Trawl	2014	42	81	81	65	2	71	72	71	55	4	1	-	100
		2015	70	86	88	62	5	73	70	74	65	27	4	-	100
	-	2016	73	91	91	69	8	60	70	69	53	16	1	-	101
		2012	107	110	114	68	18	91	95	92	95	55	25	8	191
		2013	124	117	109	78	11	89	88	82	62	36	16	23	189
	All Gea	r2014	88	107	104	90	21	79	83	80	78	24	14	14	173
		2015	102	115	113	79	13	81	78	82	86	57	16	17	165
		2016	102	120	125	101	14	66	78	76	70	41	18	18	170
		2012	24	27	29	25	14	22	30	30	31	28	27	29	34
	Hook &	2013	26	26	25	18	13	13	21	28	27	29	28	26	33
	Line	2014	26	26	28	25	18	20	26	25	25	27	27	24	31
		2015	26	27	28	24	22	18	22	25	28	27	27	28	31
		2016	28	29	28	21	11	19	25	25	25	25	26	23	32
		2012	5	2	1	1	1	1	1	1	3	3	3	-	5
	ъ.	2013	3	2	-	-	-	-	-	-	3	3	3	2	3
	Pot	2014	4	4	2	1	1	-	-	-	3	3	3	1	4
Catcher		2015	4	4	2	2	1	-	-	1	4	4	4	1	4
Processor	rs	2016	5	3	3	2	-		-	1	3	3	1	3	5
		2012	28	33	33	19	20	33	28	30	33	20	14	4	36
	. T	2013	28	31	32	25	19	33	28	32	31	24	13	6	34
	Trawl	2014	30	34	34	21	19	31	29	30	28	18	14	4	34
		2015	34	34	33	21	19	30	27	28	28	20	14	3	34
		2016	32	32	33	25	20	29	30	30	32	24	12	4	35
		2012	57	62	63	45	35	56	59	61	67	51	44	33	73
	A 11. C	2013	57	59	57	43	32	46	49	60	61	56	44	34	70
	All Gea		60	64	64	47	38	51	55	55	56	48	44	29	68
		2015	64	65	63	47	42	48	49	54	60	51	45	32	69
		2016	65	64	64	48	31	48	55	56	60	52	39	30	71

Notes: These estimates include only vessels fishing part of federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Table 23: Bering Sea & Aleutian Islands catcher vessel (excluding catcher-processors) weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2012-2016.

		Hook Line		F	ot		Tr	awl		All	Gear	
	Year	<60ft	60- 125ft	<60ft	60- 125ft	>=125f	€60ft	60- 125ft	>=12	5f <b>≮</b> 60ft	60- 125ft	>=125f
	2012	_	-	_	-	_	_	945	644	_	945	644
	2013	-	-	-	-	-	-	902	608	-	902	608
Pollock	2014	-	-	_	-	-	-	838	551	_	838	551
	2015	-	-	_	-	-	-	904	612	_	904	612
	2016	-	-	-	-	-	-	865	568	-	865	568
	2012	118	15	-	-	-	-	-	_	118	15	_
	2013	87	14	-	-	-	-	-	-	87	14	-
Sablefish	2014	77	19	-	-	-	-	-	-	77	19	-
	2015	69	14	-	-	-	-	-	-	69	14	-
	2016	31	13	-	-	-	-	-	-	31	13	-
	2012	74	-	196	110	42	18	285	48	288	395	90
Pacific	2013	72	-	221	124	31	8	264	40	301	388	71
Cod	2014	103	-	345	115	29	13	247	35	461	362	64
Coa	2015	48	-	312	117	15	-	265	32	360	382	47
	2016	13	-	423	149	15	-	279	38	436	428	53
	2012	-	_	-	_	-	_	1	28	-	1	28
	2013	-	-	-	-	-	-	0	47	-	0	47
Flatfish	2014	-	-	-	-	-	-	2	31	-	2	31
	2015	-	-	-	-	-	-	27	30	-	27	30
	2016	-	-	-	-	-	-	42	34	-	42	34
	2012	-	-	-	_	-	_	-	6	-	-	6
	2013	-	-	-	-	-	-	-	9	-	-	9
Rockfish	2014	1	-	-	-	-	-	-	11	1	-	11
	2015	1	-	-	-	-	-	4	9	1	4	9
	2016	-	-	-	-	-	-	1	5	-	1	5
	2012	-	-	-	-	-	-	-	22	-	-	22
Atka	2013	-	-	-	-	-	-	-	7	-	-	7
Mackerel	2014	-	-	-	-	-	-	-	12	-	-	12
Mackerer	2015	-	-	-	-	-	-	5	10	-	5	10
	2016	-	-	-	-	-	-	6	13	-	6	13
	2012	192	15	-	-		18	1,231	747	406	1,393	800
A 11	2013	160	14	-	-	-	8	1,166	710	389	1,340	761
All	2014	181	19	-	-	-	13	1,086	640	539	1,254	684
Groundfis	<sup>11</sup> 2015	117	14	-	-	-	-	1,205	692	435	1,354	711
	2016	43	13	-	-	-	-	1,195	657	466	1,377	680

Notes: These estimates include only vessels fishing part of federal TACs. A vessel that fished more than one category in a week is apportioned a partial week based on catch weight. A target is determined based on vessel, week, processing mode, NMFS area, and gear. All groundfish include additional target categories. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Table 24: Bering Sea & Aleutian Islands catcher/processor vessel weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2012-2016.

		Hook	& Line		]	Pot		T	rawl			All Gear		
	Year	<60ft	60- 124ft	125- 230ft	<60ft	60- 124ft	125- 230ft	60- 124ft	125- 230ft	>230ft	<60ft	60- 124ft	125- 230ft	>230ft
	2012	_	-	_	_	_	-	2	5	313	-	2	5	313
	2013	-	-	-	-	-	-	3	14	309	-	3	14	309
Pollock	2014	-	-	-	-	-	-	1	14	305	-	1	14	305
	2015	-	-	-	-	-	-	1	6	310	-	1	6	310
	2016	-	-	-	-	-	-	1	4	303	-	1	4	303
	2012	-	75	6	-	-	-	-	-	-	-	75	6	-
	2013	-	84	3	-	-	-	0	0	-	-	84	3	-
Sablefish	2014	-	41	2	-	-	-	-	0	-	-	41	2	-
	2015	-	38	0	-	-	-	-	-	-	-	38	0	-
	2016	11	26	0	-	-	-	-	0	-	11	26	0	
	2012	10	319	732	-	22	38	6	3	5	10	347	773	5
Pacific	2013	-	239	718	-	-	54	5	11	5	-	244	783	5
Cod	2014	7	250	817	-	19	53	0	9	12	7	269	879	12
Cou	2015	9	253	812	-	23	62	1	11	9	9	277	885	9
	2016	9	223	766	17	13	54	1	17	11	26	237	837	11
	2012	-	7	45	-	-	-	125	402	69	-	132	447	69
	2013	-	1	15	-	-	-	105	401	87	-	106	416	87
Flatfish	2014	-	5	12	-	-	-	92	415	81	-	97	427	81
	2015	-	2	26	-	-	-	105	395	51	-	107	421	51
	2016	-	-	25	-	-	-	100	427	60	-	100	452	60
	2012	-	1	0	-	-	-	5	25	10	-	6	25	10
	2013	-	2	0	-	-	-	0	40	16	-	2	40	16
Rockfish	2014	-	1	-	-	-	-	3	34	12	-	4	34	12
	2015	-	0	-	-	-	-	3	36	17	-	3	36	17
	2016	-	2	1	-	-	-	0	39	8	-	2	40	8
	2012	-	-	-	-	-	-	1	63	24	-	1	63	24
Atka	2013	-	-	-	-	-	-	0	33	13	-	0	33	13
Mackerel	2014	-	-	-	-	-	-	-	40	19	-	-	40	19
Mackerer	2015	-	-	-	-	-	-	-	66	27	-	-	66	27
	2016	-	-	-	-	-	-	-	80	23	-	-	80	23
	2012	10	402	784	-	-	-	140	498	422	10	576	1,319	422
All	2013	-	326	736	-	-	-	113	498	428	-	439	1,289	428
Groundfis	$^{2014}$	7	298	831	-	-	-	96	513	428	7	413	1,397	428
Groundis	<sup>11</sup> 2015	9	293	838	-	-	-	110	513	415	9	426	1,413	415
	2016	20	251	792	-	-	-	101	567	405	37	365	1,413	405

Notes: These estimates include only vessels fishing part of federal TACs. A vessel that fished more than one category in a week is apportioned a partial week based on catch weight. A target is determined based on vessel, week, processing mode, NMFS area, and gear. All groundfish include additional target categories. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Table 25: Bering Sea & Aleutian Islands catcher vessel crew weeks in the groundfish fisheries by month, 2012-2016.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2012	951	1,823	1,848	710	216	1,280	1,412	1,451	1,495	694	169	0	12,048
2013	883	1,639	1,964	841	164	1,070	1,402	1,530	863	518	184	33	11,090
2014	790	1,519	1,968	858	293	907	1,290	1,602	972	374	218	106	10,896
2015	972	1,656	1,724	567	132	854	1,240	1,722	1,114	644	142	136	10,904
2016	978	1,992	2,080	1,382	144	735	1,575	$1,\!254$	850	573	253	157	11,974

**Notes:** Crew weeks are calculated by summing weekly reported crew size over vessels and time period. These estimates include only vessels targeting groundfish counted toward federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea Production Reports. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 26: Bering Sea & Aleutian Islands at-sea processor vessel crew weeks in the groundfish fisheries by month, 2012-2016.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2012	6,434	13,755	15,928	4,383	3,621	10,683	11,700	12,300	11,670	5,207	3,661	2,757	102,099
2013	4,694	13,341	16,032	4,875	3,756	8,744	9,974	13,745	8,716	5,773	$4,\!581$	2,506	96,737
2014	4,472	$13,\!482$	16,511	4,776	4,981	8,841	11,722	14,986	8,523	4,935	4,706	2,384	100,319
2015	7,843	13,467	12,837	$5,\!523$	5,003	7,875	10,938	14,849	9,239	6,836	3,458	2,228	100,096
2016	7,231	13,368	12,458	6,661	3,785	6,339	13,126	11,705	9,298	7,213	3,109	2,109	96,402

Notes: Crew weeks are calculated by summing weekly reported crew size over vessels and time period. These estimates include only vessels targeting groundfish counted toward federal TACs. Catcher processors typically account for 90-95% of the total at-sea crew weeks in all areas. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea Production Reports. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 27: Gulf of Alaska groundfish retained catch by vessel type, gear, and species, 2012-2016 (1,000 metric tons, round weight).

		Catche	er Vessels		Catcher	Processors		7	Total	
	Year	Hook & Line	Trawl	All Gear	Hook & Line	Trawl	All Gear	Hook & Line	Trawl	All Gear
	2012	-	98	98	-	1	1	_	99	99
	2013	-	90	90	-	1	1	-	91	91
Pollock	2014	-	137	137	-	1	1	-	138	138
	2015	-	160	160	-	1	1	-	161	161
	2016	-	171	171	-	1	1	-	172	172
	2012	10	18	28	5	2	7	15	19	34
Pacific	2013	8	18	26	3	1	4	11	19	30
Cod	2014	9	22	31	6	1	7	14	23	37
Cou	2015	7	20	27	5	1	6	13	21	34
	2016	3	15	18	5	0	5	8	15	23
	2012	10	0	10	1	0	1	11	1	12
	2013	10	0	10	1	0	1	11	1	12
Sablefish	2014	9	0	9	0	0	-	9	1	10
	2015	8	0	8	0	0	-	9	1	10
	2016	7	0	7	0	0	-	8	1	9
	2012	-	0	-	-	1	1	-	1	1
Atka	2013	-	0	-	-	1	1	-	1	1
Mackerel	2014	-	0	-	-	1	1	-	1	1
Mackerer	2015	*	0	-	-	1	1	*	1	1
	2016	-	0	-	-	0	-	-	1	1
	2012	0	8	8	0	7	7	0	15	15
	2013	0	10	10	0	6	6	0	16	16
Arrowtoot	:h2014	0	11	11	0	22	22	0	32	32
	2015	*	7	7	0	9	9	0	17	17
	2016	*	13	13	*	5	5	*	18	18
	2012	*	1	1	-	1	1	*	2	2
Flathead	2013	*	1	1	-	1	1	*	2	2
Sole	2014	-	2	2	-	0	-	_	2	2
Sole	2015		1	1		0	-		2	2
	2016	-	2	2	-	0	-	-	2	2

Table 27: Continued

		Catche	er Vessels		Catcher	Processors		7	Total	
	Year	Hook & Line	Trawl	All Gear	Hook & Line	Trawl	All Gear	Hook & Line	Trawl	All Gear
	2012	_	1	1	-	1	1	-	2	2
	2013	-	2	2	_	2	2	_	4	4
Rex Sole	2014	-	2	2	_	1	1	_	3	3
	2015	-	1	1	-	1	1	-	1	1
	2016	-	1	1	-	0	-	-	2	2
	2012	0	3	3	-	0	-	0	3	3
Shallow-	2013	*	4	4	-	0	-	*	4	4
water	2014	*	3	3	*	0	-	*	3	3
Flatfish	2015	*	2	2	*	0	-	*	2	2
	2016	*	2	2	-	0	-	*	2	2
	2012	*	0	-	*	0	-	*	0	_
Deep-	2013	*	0	-	0	0	-	0	0	-
water	2014	-	0	-	*	0	-	*	0	-
Flatfish	2015	*	0	-	*	0	-	*	0	-
	2016	*	0	-	*	0	-	*	0	-
	2012	0	0	-	0	0	-	0	0	_
Thornyhea	2013	0	0	-	0	0	-	0	0	-
Rockfish		0	0	-	0	0	-	0	0	-
HOCKHSH	2015	0	0	-	0	0	-	0	0	-
	2016	0	0	-	0	0	-	0	0	_
	2012	*	7	7	-	8	8	*	14	14
Pacific	2013	*	6	6	*	6	6	*	12	12
Ocean	2014	*	7	7	-	9	9	*	16	16
Perch	2015	*	8	8	-	9	9	*	18	18
	2016	*	10	10	-	11	11	*	21	21
	2012	*	2	2	-	3	3	*	5	5
Northern	2013	*	1	1	*	3	3	*	5	5
Rockfish	2014	0	2	2	*	2	2	0	4	4
TOCKHSH	2015	_	1	1	*	2	2	*	4	4
	2016	*	2	2	*	1	1	*	3	3

Table 27: Continued

		Catche	er Vessels		Catcher	Processors		Ī	Total	
	Year	Hook & Line	Trawl	All Gear	Hook & Line	Trawl	All Gear	Hook & Line	Trawl	All Gear
	2012	0	2	2	-	2	2	0	4	4
Dusky	2013	0	2	2	-	1	1	0	3	3
Rockfish	2014	0	1	1	*	2	2	0	3	3
TOCKIISII	2015	0	1	1	*	1	1	0	3	3
	2016	0	2	2	*	1	1	0	3	3
	2012	0	0	-	0	0	-	0	0	
Rougheye	2013	0	0	-	0	0	-	0	0	-
Rockfish	2014	0	0	-	0	0	-	0	1	1
TOCKHSH	2015	0	0	-	0	0	-	0	0	-
	2016	0	0	-	*	0	-	0	0	_
	2012	0	0	-	0	0	-	0	0	_
Chantralra	2013	0	0	-	0	0	-	0	0	-
Shortraker Rockfish	2014	0	0	-	0	0	-	0	0	-
TOCKIISII	2015	0	0	-	0	0	-	0	0	-
	2016	0	0	-	0	0	-	0	0	-
	2012	0	0	-	0	0	-	0	0	_
Other	2013	0	0	-	0	0	-	0	0	-
Rockfish	2014	0	0	-	0	0	-	0	1	1
TOCKHSH	2015	0	0	-	0	0	-	0	0	-
	2016	0	0	-	0	1	1	0	1	1
	2012	1	1	2	0	0	-	1	2	3
Other	2013	1	2	3	0	0	-	1	2	3
Groundfisl	$^{2014}$	0	1	1	0	0	-	1	1	2
Groundisi	2015	1	1	2	0	0	-	1	1	2
	2016	0	1	1	0	0	-	0	1	1
	2012	22	142	185	6	26	32	28	168	217
All	2013	20	137	174	4	23	27	24	160	201
Groundfisl	$^{2014}$	18	188	227	7	41	48	25	229	275
Groundisi	$^{12}015$	17	204	242	6	28	34	23	232	276
	2016	12	220	251	5	23	28	17	243	279

Notes: The estimates are of retained catch (i.e., excludes discarded catch). All groundfish include additional species categories. These estimates include only catch counted against federal TACs. Includes FMP groundfish catch on halibut targets. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 28: Gulf of Alaska groundfish retained catch by species, gear, and target fishery, 2015-2016, (1,000 metric tons, round weight).

		Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Flathead Sole	Rex Sole	Flat Deep	Flat Shallow	Rockfish	Atka Mackerel	Other	All Species
		Pollock, Bottom	*	-	-	-	-	-	-	-	*	-	-	*
		Sablefish Pacific	*	3.3	0	0	_	_	*	-	0.3	-	0	3.6
		Pacific Pacific	0.1	*	7.5	*	_	_	*	*	0	*	0.5	8.2
	Central	Cod Rockfish	0	_	0	_	_	_	_	_	0	*	_	0
	Gulf	All Targets	0.1	3.6	7.7	0	-	-	*	*	0.4	*	0.6	12.4
		Pollock, Bottom	*	-	*	-	-	-	-	-	-	-	-	*
		2016 Sablefish Pacific	*	2.9	0	*	-	-	*	_	0.2	-	0	3.2
		Pacific Cod	0.1	*	3.5	*	-	-	-	*	0	-	0.1	3.8
Hook & Line		Rockfish	0	-	0	-	-	-	-	-	0	-	-	0
Line		All Targets	0.1	3.1	3.5	*	-	-	*	*	0.4	-	0.2	7.3
		Sablefish	-	0.9	0	*	-	-	-	-	0.1	-	-	1.0
	Western	$2015 \frac{\text{Pacific}}{\text{Cod}}$	0	*	3.9	*	-	-	-	-	0	-	0.1	4.0
	Gulf	Rockfish All Targets	-	-	- 2.0	*	-	-	-	-	* 0.1	-	- 0.1	* 5.1
			0	0.9	3.9	*	-		*	-		-	0.1	
		Sablefish 2016 Pacific	0	0.9	0 3.9	*	-	-	-	-	0.1	-	0.1	1.0 4.0
		Cod All Targets	0	0.9	3.9	*	_	_	*	_	0.1	_	0.1	5.0
		Sablefish		3.9	0	*					0.3		*	4.1
		2015 Pacific Cod	-	-	0.7	-	-	-	-	-	*	-	*	0.7
	Other	Rockfish	_	-	*	_	_	_	_	_	0	-	_	0
	Other	All Targets	-	4.1	0.7	*	-	-	*	-	0.4	-	0	5.3
		Sablefish	-	3.3	0	-	-	-	-	-	0.3	-	0	3.6
		$^{2016}_{\mathrm{Cod}}^{\mathrm{Pacific}}$	-	-	0.4	-	-	-	-	-	*	-	-	0.4
		Rockfish	-	-	*	-	-	-	-	-	0	-	-	0
		All Targets	-	3.6	0.4	*	-	-	-	-	0.4	-	0	4.4
	Central	Pacific 2015 Cod	0	-	13.4	*	*	*	-	*	*	-	0.3	13.7
	Gulf	All Targets	0	-	13.4	*	*	*	-	*	*	-	0.3	13.7
Pot		Pacific 2016 Cod	0	-	12.3	-	-	-	-	*	*	*	0.1	12.5
		All Targets	0	-	12.3	-	-	-	-	*	*	*	0.1	12.5
		Pacific 2015 Cod	0	-	7.1	-	*	-	-	-	-	*	0	7.1
	Western Gulf	All Targets	0	-	7.1	-	*	-	-	-	-	*	0	7.1
	Guil	Pacific 2016 Cod	*	-	6.8	*	*	-	-	*	*	*	0.1	6.9
		All Targets	*	_	6.8	*	*	_	_	*	*	*	0.1	6.9

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Table 28: Continued

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		Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Flathead Sole	Rex Sole	Flat Deep	Flat Shallow	Rockfish	Atka Mackerel	Other	All Species
		Pollock, Bottom	9.3	0	1.0	0.7	0.2	0.1	0	0.3	0.1	0	0.2	11.9
		Pollock, Pelagic	121.0	0	0.4	0.2	0.1	0	0	0	0.1	*	0.2	122.1
		Sablefish	*	0.2	*	*	-	0	0	-	0	-	*	0.2
		2015 Pacific Cod	0.7	0	10.5	0.7	0.2	0.1	0	0.7	0.1	*	0.2	13.3
		Arrowtooth	0.7	0.1	1.1	13.3	0.8	0.9	0	0.1	0.8	0	0.2	18.1
		Flathead Sole	*	*	*	*	*	*	-	*	*	-	*	*
Trawl	Central	Rex Sole	*	*	*	*	*	*	*	*	*	*	*	*
llawi	Gulf	Flatfish, Shallow	0.2	0	0.4	0.1	0	0	*	0.9	0	*	0	1.6
		Rockfish All Targets	0.8 $132.6$	0.2 0.6	0.5 13.9	$\frac{1.2}{16.2}$	$0 \\ 1.4$	0.1 1.2	$0 \\ 0.1$	$0 \\ 2.1$	19.2 20.3	$0.5 \\ 0.5$	0 0.9	22.6 189.8
			132.0	0.0	13.9	10.2	1.4	1.2	0.1	2.1	20.3	0.5	0.9	109.0
		Pollock, Bottom	8.5	0.1	0.6	0.7	0.2	0.1	0	0.2	0.2	0.2	0.1	10.9
		Pollock, Pelagic	101.5	0	0.1	0.2	0	0	0	0	0.2	0	0.1	102.3
		Sablefish	-	0.1	0	0	*	0	0	*	0	-	*	0.2
		2016 Pacific Cod	0.2	0	5.1	0.8	0.2	0.1	0	0.6	0	0	0.2	7.2
		Arrowtooth	0.5	0.1	1.3	14.1	1.2	0.9	0	0.4	0.9	0	0.5	20.0
		Flathead Sole	0	0	0	0.1	0.2	*	*	0	0	-	0	0.3
		Rex Sole	0	*	0	0	0	0.1	*	0	0	*	0	0.2
		Flatfish, Shallow	0	0	0.2	0.1	0.1	0	0	0.9	0	0	0.1	1.4
		Rockfish	0.1	0.3	0.3	1.1	0	0.1	0	0	22.4	0.4	0	24.8
		Atka Mackerel	-	*	*	*	*	*	*	*	*	*	*	*
		All Targets	110.9	0.6	7.6	17.0	2.0	1.4	0.1	2.2	23.8	0.6	1.1	167.3

Table 28: Continued

		Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Flathead Sole	Rex Sole	Flat Deep	Flat Shallow	Rockfish	Atka Mackerel	Other	All Specie
		Pollock, Bottom	*	*	*	*	*	*	*	*	*	-	*	3
		Pollock, Pelagic	25.4	*	0.2	0.1	0.1	*	-	*	0	*	*	25.8
		2015 Pacific Cod	0.1	*	6.8	*	*	*	*	*	*	*	*	6.8
		Arrowtooth	0	0	0	0.1	0	0	*	*	0	-	-	0.5
	Western Gulf	Rex Sole	*	*	*	*	*	*	-	*	*	*	*	
(	JUII	Flatfish,	*	-	-	*	-	*	*	-	*	-	-	
		Deep Rockfish	0.3	0	0.2	0	0	0	*	0	3.2	0.3	*	4.
		All Targets	25.8	0	7.1	0.3	0.1	0	*	0	3.2	0.3	*	36.
rawl		Pollock, Bottom	0.8	-	0	*	*	*	-	*	0	-	0	0.
		$\begin{array}{c} {\rm Pollock,} \\ {\rm Pelagic} \\ {\rm Pacific} \end{array}$	59.8	0	0.1	0.1	0	0	-	0	0	0	0	60.
		Pacific Cod	*	*	7.2	0	0	*	-	*	*	*	0	7.
		Arrowtooth	*	*	*	*	*	*	*	*	*	*	*	
		Flathead Sole	*	*	*	*	*	*	-	*	*	-	-	
		Rockfish	0.3	0	0	0	0	0	*	0	2.7	0.1	*	3.
_		All Targets	61.0	0	7.4	0.2	0.1	0	*	0	2.8	0.1	0	71.
		Pollock, Bottom	*	-	*	*	*	-	-	-	*	-	*	
		$2015 \frac{\text{Pollock}}{\text{Pelagic}}$	*	-	0	*	*	-	-	*	*	-	*	
	241	Sablefish	*	*	*	*	-	*	-	-	*	-	-	
(	Other	Rockfish	*	*	*	*	*	-	-	-	*	-	-	
		All Targets	*	*	0	*	*	*	-	*	*	-	*	
		Pollock, Pelagic	-	-	0	-	-	-	-	-	-	-	-	
		2016 Rex Sole	*	-	-	*	*	*	-	-	*	-	-	
		Rockfish	*	*	-	*	-	*	*	-	*	-	*	
		All Targets	*	*	0	*	*	*	*	-	*	-	*	
(	Ctr. Gulf	2015 All Targets	132.8	4.2	34.9	16.2	1.4	1.2	0.1	2.1	20.7	0.5	1.8	215.
		2016 All Targets	111.0	3.8	23.4	17.0	2.0	1.4	0.1	2.2	24.2	0.6	1.4	187.
ll Gear \	West. G11	lf_2015 All Targets	25.8	1.0	18.1	0.3	0.1	0	*	0	3.3	0.3	0.1	49
,		2016 All Targets	61.0	0.9	18.1	0.2	0.1	0	*	0	2.9	0.1	0.2	83.
-	Other	2015 All Targets	*	4.1	0.7	*	*	*	*	*	0.4	-	0	5.
,	O UIICI	2016 All Targets	*	3.6	0.4	*	*	*	*	-	0.4	-	0	4.

Notes: Totals may include additional categories. The target is derived from an algorithm used to determine preponderance of catch, accounting for processor, trip, processing mode, NMFS area, and gear. These estimates include only catch counted against federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 29: Gulf of Alaska ex-vessel prices in the groundfish fisheries by gear, and species, 2012-2016; calculations based on COAR (\$/lb, round weight).

	Year	Fixed	Trawl	All Gear
	2012	0.144	0.171	0.171
	2013	0.156	0.176	0.176
Pollock	2014	0.115	0.122	0.122
	2015	0.088	0.119	0.119
	2016	0.053	0.083	0.083
	2012	0.360	0.326	0.352
	2013	0.273	0.244	0.264
Pacific Cod	2014	0.307	0.271	0.297
	2015	0.306	0.260	0.293
	2016	0.302	0.270	0.294
	2012	4.338	3.231	4.267
	2013	3.185	2.434	3.136
Sablefish	2014	3.878	2.972	3.801
	2015	4.064	3.008	3.974
	2016	4.743	1.906	4.471
	2012	0.131	0.388	0.387
A +1-0	2013	*	0.367	0.367
Atka	2014	*	0.377	0.377
Mackerel	2015	*	0.302	0.302
	2016	*	0.309	0.309
	2012	0.228	0.097	0.098
	2013	0.019	0.084	0.084
Arrowtooth	2014	0.241	0.115	0.115
	2015	0.337	0.113	0.113
	2016	0.088	0.085	0.085
	2012	0.160	0.144	0.144
Flathead	2013	*	0.150	0.150
	2014	*	0.157	0.157
Sole	2015	*	0.147	0.147
	2016	*	0.144	0.144
	2012	*	0.193	0.193
	2013	*	0.213	0.213
Rex Sole	2014	*	0.250	0.250
	2015	*	0.219	0.219
	2016	-	0.273	0.273
	2012	0.236	0.219	0.219
Shallow-	2013	0.046	0.207	0.207
water	2014	*	0.209	0.209
Flatfish	2015	*	0.198	0.198
	2016	*	0.142	0.142
	2012	0.223	0.109	0.109
Deep-water	2013	0.019	0.104	0.103
Flatfish	2014	*	0.113	0.113
raunsii	2015	0.336	0.102	0.102
	2016	*	0.098	0.098
	0-			

Table 29: Continued

	Year	Fixed	Trawl	All Gear
	2012	0.918	0.426	0.802
Th1 1	2013	0.971	0.359	0.802
Thornyhead Rockfish	2014	0.853	0.379	0.627
ROCKIISII	2015	0.832	0.329	0.639
	2016	0.807	0.291	0.573
	2012	0.438	0.266	0.266
Pacific	2013	*	0.208	0.208
Ocean Perch	2014	0.637	0.182	0.182
Ocean i erch	2015	0.193	0.187	0.187
	2016	*	0.186	0.186
	2012	*	0.263	0.263
Northern	2013	0.363	0.202	0.202
Rockfish	2014	0.258	0.176	0.176
ROCKIISII	2015	*	0.177	0.177
	2016	0.627	0.171	0.171
	2012	0.415	0.263	0.264
Dusky	2013	0.360	0.201	0.202
Rockfish	2014	0.443	0.178	0.180
ROCKIISII	2015	0.368	0.179	0.182
	2016	0.422	0.176	0.180
	2012	0.430	0.257	0.305
Rougheye	2013	0.362	0.211	0.254
Rockfish	2014	0.395	0.186	0.224
TOCKIISII	2015	0.408	0.187	0.251
	2016	0.386	0.184	0.226
	2012	0.490	0.260	0.350
Shortraker	2013	0.439	0.212	0.297
	2014	0.493	0.188	0.285
Rockfish	2015	0.452	0.185	0.283
	2016	0.428	0.188	0.257
	2012	1.278	0.263	0.702
Other	2013	1.149	0.204	0.841
Rockfish	2014	1.178	0.164	0.476
TOCKHSH	2015	1.027	0.172	0.507
	2016	1.050	0.167	0.381
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Notes: Prices are for catch from both federal and state of Alaska fisheries. The unfrozen landings price is calculated as landed value divided by estimated or actual round weight. Prices for catch processed by an at-sea processor without a COAR buying record (e.g., from catcher processors) are set using the prices for the matching species (group), region and gear-types for which buying records exist. Trawl-caught sablefish, rockfish and flatfish in the GOA and trawl-caught Atka mackerel in both the GOA and the GOA are not well represented in the COAR buying records. A price was calculated for these categories from product-report prices; the price in this case is the value of the first wholsale products divided by the calculated round weight and multiplied by a constant 0.4 to correct for value added by processing. The "All Alaska/All gear" column is the average weighted by retianed catch. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region Blend and Catch-accounting System estimates; NMFS Alaska Region At-sea Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 30: Gulf of Alaska ex-vessel value of the groundfish catch by vessel category, gear, and species, 2012-2016; calculations based on COAR (\$ millions).

		C	entral Gu	lf		W	estern Gu	ılf		(	Other Gul	f	
	Year	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear
	2012	-	-	26.2	26.3	-	-	10.3	10.3	-	-	1.9	1.9
	2013	-	-	31.3	31.3	-	-	3.0	3.0	-	-	2.1	2.1
Pollock	2014	-	-	33.3	33.4	-	-	3.5	3.5	-	-	1.0	1.0
	2015	-	-	34.8	34.9	-	-	7.5	7.5	-	-	1.2	1.2
	2016	-	-	20.3	20.4	-	-	11.2	11.2	-	-	0.7	0.7
	2012	11.9	18.1	9.1	39.0	3.7	11.3	4.8	19.8	0.8	*	*	0.8
Pacific	2013	4.9	9.3	7.1	21.3	2.6	9.3	3.3	15.2	0.7	*	0	0.7
Cod	2014	7.1	14.2	9.3	30.6	4.4	11.6	4.6	20.6	0.9	*	0	0.9
Cou	2015	6.4	15.6	8.1	30.1	3.3	11.6	4.2	19.1	0.8	-	0	0.8
	2016	3.4	13.8	4.6	21.8	2.7	11.4	4.4	18.5	0.7	*	*	0.7
	2012	42.9	_	4.8	47.7	11.8	_	0.4	12.2	55.3	_	*	55.3
	2013	30.2	-	3.5	33.6	9.1	-	0.1	9.2	39.2	-	*	39.4
Sablefish	2014	32.3	-	4.5	36.8	9.4	-	0.4	9.8	40.7	-	0.9	41.6
	2015	32.4	-	4.3	36.7	8.2	-	0.2	8.5	42.6	-	*	42.6
	2016	33.2	-	3.6	36.7	9.5	-	0.1	9.5	42.9	-	0	42.9
	2012	_	_	0.2	0.2	_	_	0.4	0.4	-	_	_	
A +1	2013	-	-	0.5	0.5	-	_	0.2	0.2	-	-	_	_
Atka Mackerel	2014	-	-	0.6	0.6	-	-	0.2	0.2	-	-	-	-
Mackerei	2015	-	-	0.4	0.4	-	-	0.2	0.2	-	-	-	-
	2016	-	-	0.6	0.6	-	-	0.1	0.1	-	-	-	-
	2012	0	-	3.1	3.1	0	-	0.2	0.2	*	-	0	0
	2013	0	-	2.9	2.9	*	-	0	0	*	-	0	0
Arrowtoo	th2014	0	-	8.0	8.0	0	-	0.4	0.4	*	-	0	0
	2015	0	-	4.2	4.2	*	-	0.1	0.1	*	-	0	0
	2016	0	-	3.3	3.3	0	-	0.1	0.1	0	-	0	0
	2012	*	_	0.6	0.6	_	-	0.1	0.1	-	-	*	*
Flathead	2013	*	-	0.7	0.7	_	-	0.1	0.1	_	-	*	*
	2014	_	-	0.8	0.8	-	-	0	0	-	-	0	0
Sole	2015	-	-	0.6	0.6	-	-	0	0	-	-	*	*
	2016	-	-	0.7	0.7	-	-	0	0	-	-	*	*

Table 30: Continued

		C	entral Gu	lf		W	estern Gu	lf		(	Other Gul	f	
	Year	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear
	2012	_	_	0.9	0.9	_	_	0.1	0.1	_	_	*	*
	2013	-	_	1.7	1.7	-	_	0	0	-	_	*	*
Rex Sole	2014	_	-	1.9	1.9	_	-	0	0	_	-	0	0
	2015	-	-	0.9	0.9	-	-	0	0	-	-	*	*
	2016	-	-	1.0	1.0	-	-	0	0	-	-	*	*
	2012	0	-	1.8	1.8	-	-	0	0	*	-	*	*
Shallow-	2013	0	-	2.4	2.4	_	-	0	0	-	-	-	-
water	2014	*	-	2.0	2.0	*	-	0	0	-	-	*	*
Flatfish	2015	*	-	1.3	1.3	-	-	0	0	-	-	*	*
	2016	*	-	1.1	1.1	-	-	0	0	-	-	-	-
	2012	*	-	0	0	*	-	0	0	*	_	-	*
Deep-	2013	*	-	0	0	*	-	*	*	*	-	-	*
water	2014	*	-	0	0	*	-	0	0	-	-	*	*
Flatfish	2015	*	-	0	0	-	-	0	0	*	-	-	*
	2016	*	-	0	0	*	-	0	0	*	-	*	*
	2012	0.3	-	0.1	0.4	0.2	-	0	0.2	0.4	-	0	0.4
Thornyhea	2013	0.5	-	0.2	0.7	0.1	-	*	0.1	0.5	-	*	0.5
Rockfish	2014	0.4	-	0.3	0.8	0.1	-	0	0.2	0.4	-	0	0.4
ROCKIISII	2015	0.4	-	0.2	0.6	0.1	-	0	0.2	0.4	-	*	0.4
	2016	0.4	-	0.2	0.6	0.2	-	0	0.2	0.3	-	*	0.3
	2012	*	-	6.2	6.2	-	-	1.3	1.3	*	-	0.9	0.9
Pacific	2013	*	-	4.8	4.8	*	-	0.1	0.1	-	-	0.7	0.7
Ocean	2014	*	-	4.9	4.9	*	-	0.8	0.8	*	-	0.7	0.7
Perch	2015	*	-	5.8	5.8	_	-	0.8	0.8	*	-	0.8	0.8
	2016	-	-	6.6	6.6	*	-	1.0	1.0	*	-	*	*
	2012	*	-	1.8	1.8	-	-	1.1	1.1	-	-	*	*
NT 4 1	2013	*	_	1.1	1.1	*	-	1.0	1.0	*	-	_	*
Northern	2014	0	-	1.3	1.3	*	-	0.3	0.3	*	-	-	*
Rockfish	2015	*	-	1.1	1.1	*	-	0.4	0.4	-	_	-	-
	2016	*	-	1.2	1.2	*	-	0	0	*	-	*	*

Table 30: Continued

		С	Central Gulf			W	estern Gu	lf		(	Other Gul	f	
	Year	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear	Hook & Line	Pot	Trawl	All Gear
	2012	0	-	2.0	2.0	_	_	0.2	0.2	0	_	0	0
Dl	2013	0	-	1.2	1.2	_	-	0.1	0.1	0	-	*	0
Dusky	2014	0	-	1.1	1.1	*	-	0	0	0	-	*	0
Rockfish	2015	0	-	1.0	1.0	0	-	0.1	0.1	0	_	*	0
	2016	0	-	1.2	1.2	0	-	0	0	0	-	0	0
	2012	0	-	0.2	0.2	0	-	0	0	0.1	-	0	0.1
Doughous	2013	0	-	0.1	0.2	0	-	0	0	0.1	-	0	0.1
Rougheye Rockfish	2014	0	-	0.2	0.2	0	-	0	0	0.1	-	0	0.1
ROCKIISII	2015	0	-	0.1	0.1	0	-	0	0	0.1	-	0	0.1
	2016	0	-	0.1	0.2	0	-	0	0	0.1	-	0	0.1
	2012	0.1	-	0.1	0.2	0	-	0	0.1	0.1	-	0	0.2
Shortrake	2013	0.1	-	0.1	0.1	0	-	0	0	0.1	-	0	0.1
Rockfish	r 2014	0	-	0.1	0.1	0	-	0	0	0.1	-	0	0.1
ROCKIISII	2015	0.1	-	0.1	0.1	0	-	0	0	0.1	-	0	0.1
	2016	0	-	0.1	0.1	0	-	0	0	0.1	-	0.1	0.1
	2012	0.1	-	0.2	0.3	0	-	0.1	0.1	0.7	-	0	0.7
Other	2013	0.1	-	0.1	0.2	0	-	0	0	0.8	-	*	0.8
Rockfish	2014	0.1	-	0.2	0.3	0	-	0	0	0.5	-	*	0.5
ROCKIISII	2015	0.1	-	0.1	0.3	0	-	0	0	0.4	-	-	0.4
	2016	0.1	-	0.3	0.4	0	-	0	0.1	0.5	-	*	0.5
	2012	0.9	-	1.8	2.9	0.1	-	0	0.1	0.1	-	0	0.1
Other	2013	0.5	-	1.9	2.5	0	-	0	0.2	0.1	-	0	0.2
Groundfis	2014	0.5	-	0.9	1.8	0.1	-	0	0.2	0.1	-	0.1	0.2
Groundins	$^{ m n}2015$	0.5	-	0.9	1.8	0.1	-	0	0.1	0.1	-	0.1	0.2
	2016	0.2	-	1.0	1.4	0.1	-	0	0.2	0.1	-	0	0.1

Notes: Ex-vessel value is calculated by multiplying ex-vessel prices by the retained round weight catch. Refer to Table 18 for a description of the price derivation. The value added by at-sea processing is not included in these estimates of ex-vessel value. All groundfish includes additional species categories. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; NMFS Alaska Region At-sea Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 31: Gulf of Alaska vessel and permit counts, ex-vessel value, value per vessel, and percent value of GOA FMP groundfish and all GOA fisheries by processor group, 2012-2016; calculations based on COAR (\$ millions).

	Year	Vessels	Permits	Ex-vessel Value Per Vessel \$1,000	Ex-vessel Value \$million	Percent Value, GOA FMP Groundfish	Percent Value, All GOA Fisheries
	2012	46	20	414.40	19.06	8.19	2.44
Western	2013	40	14	198.15	7.93	4.54	0.91
Gulf Traw	,12014	35	13	302.18	10.58	5.26	1.58
Ouli IIaw	2015	34	14	401.21	13.64	6.84	2.15
	2016	40	16	416.73	16.67	9.44	3.31
	2012	70	21	848.28	59.38	25.51	7.60
Central	2013	66	22	911.81	60.18	34.50	6.91
Gulf Traw	,12014	69	20	1,013.13	69.91	34.74	10.43
Guii IIaw	2015	62	18	1,035.28	64.19	32.19	10.09
	2016	63	17	706.90	44.54	25.23	8.85
	2012	141	42	67.61	9.53	4.10	1.22
CV Hook	2013	116	35	53.09	6.16	3.53	0.71
and Line	2014	101	37	72.37	7.31	3.63	1.09
and Line	2015	107	33	64.91	6.95	3.48	1.09
	2016	114	35	61.95	7.06	4.00	1.40
	2012	9	11	463.40	4.17	1.79	0.53
CP Hook	2013	8	9	429.05	3.43	1.97	0.39
and Line	2014	10	10	426.78	4.27	2.12	0.64
and Line	2015	11	11	429.37	4.72	2.37	0.74
	2016	11	11	397.94	4.38	2.48	0.87
	2012	307	41	336.64	103.35	44.40	13.23
Sablefish	2013	287	42	255.01	73.19	41.95	8.40
IFQ	2014	277	37	278.25	77.07	38.31	11.50
11.0	2015	267	37	287.20	76.68	38.46	12.06
	2016	249	33	303.17	75.49	42.77	15.00
	2012	146	27	203.28	29.68	12.75	3.80
	2013	129	26	145.56	18.78	10.76	2.16
Pot	2014	102	24	260.98	26.62	13.23	3.97
	2015	116	25	237.39	27.54	13.81	4.33
	2016	118	25	214.68	25.33	14.35	5.03
	2012	383	43	11.12	4.26	1.83	0.55
	2013	219	37	5.12	1.12	0.64	0.13
Jig	2014	259	38	10.32	2.67	1.33	0.40
	2015	242	41	9.21	2.23	1.12	0.35
	2016	209	42	7.09	1.48	0.84	0.29

**Notes:** These tables include the value of groundfish purchases reported by processing plants, as well as by other entities, such as markets and restaurants, that normally would not report sales of groundfish products. Keep this in mind when comparing ex-vessel values in this table to gross processed-product values. The data are for catch from both federal and state of Alaska fisheries. Values are not adjusted for inflation.

**Source:** ADF&G Commercial Operators Annual Reports (COAR); and ADF&G Intent to Operate (ITO) file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 32: Gulf of Alaska production of groundfish products by species, 2012-2016, (1,000 metric tons product weight).

	Product	2012	2013	2014	2015	2016
	Whole Fish	0.48	0.67	0.27	2.30	14.49
	Head And Gut	19.00	21.28	29.68	30.34	27.78
	Roe	1.68	2.21	3.51	3.12	0.54
D II I	Deep-Skin Fillets	*	*	*	-	*
Pollock	Other Fillets	5.90	5.79	8.19	9.10	14.32
	Surimi	9.90	8.60	12.33	14.65	13.41
	Minced Fish	0.57	0.20	0.19	*	1.25
	Fishmeal	*	*	*	*	1.39
	Other Products	0.64	0.81	0.49	0.27	1.92
	All Products	38.17	39.56	54.66	59.78	75.11
	Whole Fish	1.83	1.24	0.45	0.69	0.25
	Head And Gut	15.37	6.63	13.95	19.05	8.43
	Salted/Split	-	*	-	-	-
Pacific Cod	Roe	1.50	1.59	1.79	1.34	0.78
	Fillets	9.08	9.70	9.85	6.39	7.87
	Other Products	6.32	4.63	5.03	4.52	4.33
	All Products	34.09	23.80	31.07	32.00	21.65
	Head And Gut	6.29	6.24	5.60	5.35	5.03
Sablefish	Other Products	0.56	0.46	0.39	0.25	0.30
	All Products	6.86	6.70	5.99	5.59	5.34
	Whole Fish	*	-	*	*	*
Atka	Head And Gut	0.36	0.53	0.51	0.47	0.45
Mackerel	Other Products	*	*	-	*	*
	All Products	0.36	0.53	0.51	0.47	0.45
	Whole Fish	0.04	0.05	0.16	0.17	1.09
	Head And Gut	7.19	6.44	15.54	7.59	7.03
Arrowtooth	Kirimi	*	*	*	*	-
Allowtooth	Fillets	*	0.03	*	*	*
	Other Products	0.05	0.04	*	0.08	0.16
	All Products	7.29	6.56	15.70	7.84	8.28
	Whole Fish	0.48	0.51	0.81	0.34	0.74
	Head And Gut	0.59	0.82	0.45	0.40	0.38
Flathead Sol	Kirimi	*	*	0.13	0.15	*
Tauncau 301	Fillets	0.02	0.01	0.04	*	*
	Other Products	*	*	*	-	*
	All Products	1.10	1.33	1.44	0.89	1.11

Table 32: Continued

		Table 52.	Continued			
	Product	2012	2013	2014	2015	2016
	Whole Fish	2.02	3.30	3.18	1.73	1.43
	Head And Gut	0.04	0.09	0.09	0.08	0.07
Rex Sole	Kirimi	*	*	-	-	_
Rex Sole	Fillets	*	0.01	*	*	*
	Other Products	*	*	*	-	*
	All Products	2.06	3.39	3.27	1.81	1.51
	Whole Fish	0.96	1.32	1.45	0.37	0.93
Shallow-	Head And Gut	0.65	1.33	0.87	0.60	0.66
water	Kirimi	*	*	*	0.51	*
Flatfish	Fillets	0.17	0.16	0.10	0.04	0.02
Taunsn	Other Products	*	*	*	-	*
	All Products	1.78	2.81	2.42	1.53	1.61
	Whole Fish	0.01	0.07	0.06	*	0.00
Deep-water	Head And Gut	0.02	0.02	0.06	0.00	0.05
Flatfish	Fillets	*	0.01	0.02	*	*
	All Products	0.03	0.09	0.14	0.00	0.05
	Whole Fish	0.11	0.11	0.28	0.23	0.31
Thornyhead	Head And Gut	0.18	0.23	0.25	0.22	0.24
Rockfish	Other Products	0.03	0.00	0.02	0.06	0.05
	All Products	0.33	0.34	0.55	0.51	0.59
	Whole Fish	1.24	2.47	2.75	3.13	5.13
Pacific Ocean	nHead And Gut	5.99	4.73	6.31	6.96	8.33
Perch	Other Products	0.21	0.08	0.09	0.05	0.03
	All Products	7.44	7.27	9.15	10.14	13.49
	Whole Fish	0.18	0.08	0.32	*	0.02
Northern	Head And Gut	2.31	2.19	1.84	1.75	1.42
Rockfish	Other Products	0.11	0.07	0.03	0.02	0.08
	All Products	2.60	2.34	2.18	1.77	1.51
	Whole Fish	0.13	0.33	0.26	0.27	0.22
Dusky	Head And Gut	1.51	1.15	1.15	1.02	1.36
Rockfish	Other Products	0.21	0.12	0.15	0.12	0.07
	All Products	1.85	1.60	1.56	1.41	1.65
		Continued				

Table 32: Continued

		10010 J <b>2</b> .	Collegia	-		
	Product	2012	2013	2014	2015	2016
	Whole Fish	0.02	0.02	0.02	0.01	0.01
Rougheye	Head And Gut	0.17	0.16	0.25	0.15	0.19
Rockfish	Other Products	0.02	0.01	0.01	0.02	0.02
	All Products	0.20	0.19	0.28	0.18	0.22
	Whole Fish	0.04	0.05	0.03	0.03	0.03
Shortraker	Head And Gut	0.17	0.14	0.21	0.14	0.14
Rockfish	Other Products	0.02	0.02	0.02	0.03	0.02
	All Products	0.23	0.21	0.27	0.20	0.19
	Whole Fish	0.21	0.25	0.14	0.15	0.26
Other	Head And Gut	0.08	0.04	0.06	0.16	0.15
Rockfish	Other Products	0.02	0.05	0.04	0.03	0.05
	All Products	0.31	0.33	0.24	0.34	0.46
	Whole Fish	0.05	0.16	0.07	0.10	0.04
	Head And Gut	0.11	0.05	0.28	0.17	0.06
	Kirimi	-	-	*	*	-
Other	Roe	-	*	-	-	-
Groundfish	Fillets	*	-	*	*	-
	Fishmeal	*	*	*	*	*
	Other Products	1.02	1.04	0.57	0.53	0.49
	All Products	1.18	1.24	0.93	0.80	0.59
	Whole Fish	7.82	10.61	10.26	9.54	24.94
	Head And Gut	60.02	52.06	77.11	74.46	61.77
	Salted/Split	-	*	-	-	-
	Kirimi	*	*	0.13	0.66	*
	Roe	3.17	3.80	5.30	4.46	1.32
	Fillets	9.27	9.92	10.01	6.43	7.89
All Species	Deep-Skin	*	*	*	_	*
	Fillets	<b>-</b> 00		0.40	0.10	1 4 00
	Other Fillets	5.90	5.79	8.19	9.10	14.32
	Surimi	9.90	8.60	12.33	$14.65 \\ *$	13.41
	Minced Fish	0.57	0.20	0.19	*	1.25
	Fishmeal					1.39
	Other Products	9.22	7.34	6.85	5.97	7.51
	All Products	105.88	98.33	130.37	125.26	133.81

Notes: Total includes additional species not listed in the production details as well as confidential data from Tables 28 and 29. These estimates are for catch from both federal and state of Alaska fisheries. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea and Shoreside Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 33: Gulf of Alaska gross value of groundfish products by species, 2012-2016, (\$ million).

	Product	2012	2013	2014	2015	2016
	Whole Fish	0.6	0.9	0.4	2.2	5.5
	Head And Gut	25.0	36.5	40.7	40.6	24.4
	Roe	12.2	13.6	15.8	8.9	1.6
D II I	Deep-Skin Fillets	*	*	*	-	*
Pollock	Other Fillets	20.3	20.5	24.4	26.0	37.6
	Surimi	27.4	20.3	24.0	27.4	28.7
	Minced Fish	0.8	0.3	0.2	*	1.5
	Fishmeal	*	*	*	*	2.1
	Other Products	1.1	1.0	0.3	0.2	2.6
	All Products	87.4	93.1	105.8	105.4	104.0
	Whole Fish	2.9	1.3	0.7	0.8	0.5
	Head And Gut	40.2	14.7	38.5	52.6	20.1
	Salted/Split	-	*	-	-	-
Pacific Cod	Roe	2.7	3.7	4.2	2.5	1.3
	Fillets	56.9	67.2	67.4	37.2	58.8
	Other Products	10.9	7.4	7.4	9.7	10.1
	All Products	113.6	94.2	118.1	102.9	90.8
	Head And Gut	96.9	78.6	85.6	81.2	89.4
Sablefish	Other Products	3.2	2.6	2.8	2.0	2.4
	All Products	100.1	81.2	88.5	83.2	91.8
	Whole Fish	*	-	*	*	*
Atka	Head And Gut	1.3	1.8	1.7	1.3	1.2
Mackerel	Other Products	*	*	-	*	*
	All Products	1.3	1.8	1.7	1.3	1.2
	Whole Fish	0.0	0.1	0.2	0.1	1.0
	Head And Gut	10.1	5.8	22.1	9.9	12.0
A magazzat a a t la	Kirimi	*	*	*	*	-
Arrowtooth	Fillets	*	0.1	*	*	*
	Other Products	0.1	0.2	*	0.1	0.2
	All Products	10.2	6.1	22.3	10.2	13.2
	Whole Fish	0.7	1.2	1.0	0.5	0.7
	Head And Gut	1.1	1.4	0.7	0.6	0.6
Flathead Sol	Kirimi	*	*	0.4	0.4	*
riathead 501	e Fillets	0.1	0.0	0.1	*	*
	Other Products	*	*	*	-	*
	All Products	1.9	2.6	2.1	1.5	1.4

Table 33: Continued

		Table 33:	Continued			
	Product	2012	2013	2014	2015	2016
	Whole Fish	5.0	7.9	6.8	3.2	3.1
	Head And Gut	0.1	0.3	0.3	0.7	0.2
Rex Sole	Kirimi	*	*	_	-	-
nex sole	Fillets	*	0.0	*	*	*
	Other Products	*	*	*	-	*
	All Products	5.1	8.2	7.2	3.9	3.3
	Whole Fish	1.3	3.1	1.9	0.9	1.0
Shallow- water	Head And Gut	1.0	1.8	1.1	1.0	1.4
	Kirimi	*	*	*	1.2	*
Flatfish	Fillets	0.8	0.6	0.3	0.2	0.1
1 16011511	Other Products	*	*	*	-	*
	All Products	3.2	5.5	3.2	3.3	2.6
	Whole Fish	0.0	0.1	0.0	*	0.0
Deep-water Flatfish	Head And Gut	0.0	0.0	0.1	0.0	0.1
	Fillets	*	0.0	0.1	*	*
	All Products	0.0	0.1	0.2	0.0	0.1
	Whole Fish	0.4	0.3	1.1	0.8	1.2
Thornyhead	Head And Gut	1.5	1.7	1.6	1.4	1.7
Rockfish	Other Products	0.1	0.0	0.0	0.1	0.1
	All Products	1.9	2.1	2.7	2.4	3.1
	Whole Fish	2.3	3.4	3.7	5.0	6.9
Pacific Ocean	nHead And Gut	19.9	11.1	15.7	16.3	18.7
Perch	Other Products	1.8	0.5	0.4	0.3	0.1
	All Products	24.1	15.0	19.7	21.5	25.7
	Whole Fish	0.3	0.1	0.4	*	0.0
Northern	Head And Gut	6.4	3.9	4.5	3.7	2.6
Rockfish	Other Products	1.0	0.4	0.1	0.1	0.4
	All Products	7.7	4.5	5.0	3.8	3.1
	Whole Fish	0.2	0.9	0.4	0.6	0.3
Dusky	Head And Gut	4.1	1.7	2.8	2.6	2.4
Rockfish	Other Products	1.8	0.6	0.5	0.5	0.5
	All Products	6.0	3.3	3.7	3.7	3.2

Table 33: Continued

	Product	2012	2013	2014	2015	2016
	Whole Fish	0.0	0.1	0.1	0.0	0.0
Rougheye	Head And Gut	0.5	0.5	0.5	0.3	0.4
Rockfish	Other Products	0.1	0.1	0.1	0.2	0.2
	All Products	0.6	0.7	0.6	0.4	0.6
	Whole Fish	0.1	0.1	0.1	0.1	0.1
Shortraker	Head And Gut	0.7	0.5	0.8	0.5	0.7
Rockfish	Other Products	0.1	0.2	0.2	0.2	0.2
	All Products	1.0	0.7	1.1	0.8	0.9
	Whole Fish	1.1	1.4	0.7	0.7	0.9
Other	Head And Gut	0.2	0.1	0.1	0.6	0.2
Rockfish	Other Products	0.2	0.4	0.3	0.2	0.5
	All Products	1.4	1.9	1.2	1.6	1.6
	Whole Fish	0.1	0.3	0.2	0.2	0.1
	Head And Gut	0.3	0.1	0.5	0.4	0.2
	Kirimi	-	-	*	*	-
Other	Roe	-	*	-	-	-
Groundfish	Fillets	*	-	*	*	-
	Fishmeal	*	*	*	*	*
	Other Products	6.0	5.5	2.7	3.0	2.8
	All Products	6.4	5.9	3.3	3.6	3.2
	Whole Fish	15.2	21.2	17.6	15.3	21.5
	Head And Gut	209.2	160.5	217.2	213.7	176.5
	Salted/Split	-	*	-	-	-
	Kirimi	*	*	0.4	1.5	*
	Roe	15.0	17.3	20.0	11.4	3.0
	Fillets	57.8	68.0	67.9	37.4	58.9
All Species	Deep-Skin Fillets	*	*	*	_	*
	Other Fillets	20.3	20.5	24.4	26.0	37.6
	Surimi	$\frac{20.3}{27.4}$	$\frac{20.5}{20.3}$	$\frac{24.4}{24.0}$	$\frac{26.0}{27.4}$	28.7
	Minced Fish	0.8	0.3	0.2	∠1.4 *	1.5
	Fishmeal	*	*	*	*	$\frac{1.5}{2.1}$
	Other Products	26.2	18.8	14.9	16.6	20.1
	All Products	371.9	326.9	386.6	349.4	349.8

Notes: Total includes additional species not listed in the production details as well as confidential data from Tables 28 and 29. These estimates are for catch from both federal and state of Alaska fisheries. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea and Shoreside Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 34: Gulf of Alaska price per pound of groundfish products by species, 2012-2016, (\$/lb).

	Product	2012	2013	2014	2015	2016
	Whole Fish	0.59	0.60	0.68	0.43	0.17
	Head And Gut	0.60	0.78	0.62	0.61	0.40
	Roe	3.31	2.80	2.03	1.30	1.37
D-111-	Deep-Skin Fillets	*	*	*	-	*
Pollock	Other Fillets	1.56	1.61	1.35	1.30	1.19
	Surimi	1.26	1.07	0.89	0.85	0.97
	Minced Fish	0.67	0.61	0.56	*	0.53
	Fishmeal	*	*	*	*	0.68
	Other Products	0.76	0.53	0.31	0.39	0.61
	All Products	1.04	1.07	0.88	0.80	0.63
	Whole Fish	0.72	0.47	0.66	0.56	0.94
	Head And Gut	1.19	1.01	1.25	1.25	1.08
	Salted/Split	-	*	-	-	-
Pacific Cod	Roe	0.83	1.05	1.06	0.86	0.79
	Fillets	2.84	3.14	3.10	2.64	3.39
	Other Products	0.78	0.72	0.67	0.97	1.06
	All Products	1.51	1.80	1.72	1.46	1.90
	Head And Gut	6.99	5.71	6.94	6.89	8.06
Sablefish	Other Products	2.55	2.52	3.28	3.65	3.62
	All Products	6.62	5.49	6.70	6.74	7.80
	Whole Fish	*	-	*	*	*
Atka	Head And Gut	1.59	1.50	1.54	1.24	1.26
Mackerel	Other Products	*	*	-	*	*
	All Products	1.59	1.50	1.54	1.24	1.26
	Whole Fish	0.47	0.63	0.53	0.27	0.40
	Head And Gut	0.63	0.41	0.64	0.59	0.78
Arrowtooth	Fillets	*	1.74	*	*	*
	Other Products	0.94	1.70	*	0.63	0.63
	All Products	0.64	0.42	0.64	0.59	0.72
	Whole Fish	0.62	1.09	0.54	0.71	0.45
	Head And Gut	0.86	0.76	0.69	0.63	0.76
Flathead Sole	eFillets	2.00	1.56	1.36	*	*
	Other Products	*	*	*	-	*
	All Products	0.78	0.89	0.67	0.74	0.56
	Whole Fish	1.12	1.09	0.98	0.84	0.99
	Head And Gut	1.32	1.39	1.65	4.04	1.33
Rex Sole	Fillets	*	1.31	*	*	*
	Other Products	*	*	*	-	*
	All Products	1.12	1.10	0.99	0.98	1.00
	Whole Fish	0.63	1.08	0.58	1.07	0.49
Shallow-	Head And Gut	0.73	0.62	0.56	0.75	0.99
water	Fillets	2.15	1.62	1.39	2.37	2.63
Flatfish	Other Products	*	*	*	-	*

Table 34: Continued

		Table 94.	Commuda			
	Product	2012	2013	2014	2015	2016
	Whole Fish	0.42	0.45	0.36	*	0.46
Deep-water	Head And Gut	0.65	0.78	0.70	1.09	0.68
Flatfish	Fillets	*	1.76	2.04	*	*
	All Products	0.56	0.61	0.73	1.09	0.67
	Whole Fish	1.53	1.38	1.79	1.56	1.82
Thornyhead	Head And Gut	3.62	3.38	2.85	3.02	3.30
Rockfish	Other Products	1.00	1.93	0.55	1.01	1.36
	All Products	2.64	2.73	2.24	2.11	2.37
	Whole Fish	0.85	0.63	0.60	0.72	0.61
Pacific Ocean	nHead And Gut	1.51	1.07	1.13	1.06	1.02
Perch	Other Products	3.95	2.92	1.96	2.36	2.01
	All Products	1.47	0.94	0.98	0.96	0.87
	Whole Fish	0.82	0.71	0.59	*	0.50
Northern	Head And Gut	1.26	0.81	1.10	0.97	0.84
Rockfish	Other Products	4.06	2.60	2.03	1.73	2.54
	All Products	1.35	0.86	1.04	0.98	0.92
	Whole Fish	0.66	1.25	0.66	1.07	0.68
Dusky	Head And Gut	1.24	0.68	1.09	1.14	0.80
Rockfish	Other Products	3.74	2.41	1.62	1.97	3.07
	All Products	1.48	0.93	1.07	1.20	0.88
	Whole Fish	1.00	0.98	1.14	0.82	1.16
Rougheye	Head And Gut	1.31	1.57	0.87	0.80	0.97
Rockfish	Other Products	3.51	3.60	3.78	3.12	3.78
	All Products	1.46	1.65	1.02	1.09	1.23
	Whole Fish	1.22	1.25	1.45	1.04	1.24
Shortraker	Head And Gut	1.92	1.48	1.78	1.55	2.18
Rockfish	Other Products	2.79	3.09	3.58	3.82	3.47
	All Products	1.88	1.61	1.90	1.78	2.16
	Whole Fish	2.26	2.48	2.41	2.19	1.55
Other	Head And Gut	0.89	1.31	0.84	1.84	0.68
Rockfish	Other Products	3.31	4.05	3.36	3.96	4.62
	All Products	2.00	2.59	2.19	2.17	1.57
	Whole Fish	1.26	0.98	1.13	1.06	1.21
	Head And Gut	1.07	0.81	0.76	0.93	1.70
Other	Roe	-	*	-	-	-
Groundfish	Fillets	*	-	*	*	-
Groundini	Fishmeal	*	*	*	*	*
	Other Products	2.66	2.40	2.12	2.58	2.66
	All Products	2.45	2.16	1.63	2.03	2.46
• These estim	nates are based on d					

Notes: These estimates are based on data from both federal and state of Alaska fisheries. Prices based on confidential data have been excluded. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea and Shoreside Production Reports; and ADF&G Commercial Operators Annual Reports (COAR). Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 35: Gulf of Alaska total product value per round metric ton of retained catch by species and year, 2012-2016, (\$/mt).

Species	2012	2013	2014	2015	2016
Pollock	863	1,003	754	638	601
Sablefish	8,116	6,757	8,381	8,158	10,109
Pacific Cod	1,476	1,473	1,484	1,331	1,437
Flatfish	924	859	825	797	845
Rockfish	1,689	1,280	1,316	1,281	1,240
Atka Mackerel	1,843	2,068	1,813	1,474	1,301
Other	2,035	2,028	1,535	1,669	1,889

**Notes:** These estimates include the product value of catch from both federal and state of Alaska fisheries. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea and Shoreside Production Reports; ADF&G Commercial Operators Annual Reports (COAR); and NMFS Alaska Region Blend and Catch-accounting System estimates. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 36: Gulf of Alaska number of catcher processors, gross product value, value per processor, and percent value of GOA FMP groundfish of processed groundfish by processor group, 2012-2016, (\$ millions).

	Year	Processors	Wholesale Value (\$million)	Wholesale Value Per Processor (\$1,000)	Percent Value, GOA FMP Groundfish
Central	2012	17	37.66	$2,\!215.25$	10.07
and	2013	14	27.55	1,967.55	8.37
Western Gulf Traw	2014	11	49.07	4,460.81	12.65
	2015	9	34.98	3,886.83	9.98
	2016	14	34.95	$2,\!496.51$	9.91
	2012	13	7.66	588.98	2.05
CD IIl-	2013	9	5.61	623.12	1.70
CP Hook and Line	2014	12	7.38	614.84	1.90
and Line	2015	11	9.61	873.18	2.74
	2016	12	9.01	750.72	2.55
	2012	7	5.33	760.77	1.42
C-1-1-C-1-	2013	5	3.18	636.17	0.97
Sablefish	2014	6	4.75	792.32	1.23
IFQ	2015	5	3.16	631.20	0.90
	2016	4	2.90	724.29	0.82

Notes: The data are for catch from both federal and state of Alaska fisheries. The processor groups are defined as follows: "Western and Central Gulf Trawl" are the catcher processors in the Western and Central Gulf. "CP Hook and Line" are the hook and line catcher processors. "Sablefish IFQ" are catcher processors processing sablefish IFQ. Values are not adjusted for inflation.

**Source:** ADF&G Commercial Operators Annual Reports (COAR); and ADF&G Intent to Operate (ITO) file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 37: Gulf of Alaska number of vessels, average and median length, and average and median capacity (tonnage) of vessels that caught groundfish by vessel type, and gear, 2012-2016.

	Year	Vessels	Average Length (feet)	Median Length (feet)	Average Capacity (tons)	Median Capacity (tons)
	2012	85	87	87.0	109	94.0
Central and	12013	83	90	88.0	112	94.0
Western	2014	80	88	88.0	113	94.0
Gulf Trawl	2015	78	87	87.5	112	98.0
	2016	77	86	88.0	109	98.0
	2012	75	43	42.0	29	24.0
CV Hook	2013	62	45	42.0	30	24.0
and Line	2014	61	43	42.0	28	24.0
and Line	2015	63	42	42.0	26	24.0
	2016	51	42	41.0	26	24.0
	2012	7	100	76.0	161	134.0
CP Hook	2013	7	119	128.0	281	134.0
and Line	2014	9	125	128.0	254	134.0
and Line	2015	11	130	128.0	274	143.0
	2016	10	151	152.0	355	133.0
	2012	300	58	58.0	50	39.5
Sablefish	2013	269	58	58.0	47	39.0
IFQ	2014	267	58	58.0	50	39.0
11.0	2015	256	57	58.0	45	39.0
	2016	237	58	58.0	45	39.0
	2012	96	65	58.0	64	53.0
	2013	92	63	58.0	63	53.0
Pot	2014	73	63	58.0	63	53.0
	2015	91	61	58.0	57	49.0
	2016	83	61	58.0	58	49.0
	2012	248	41	41.0	16	14.0
	2013	167	40	41.0	15	14.0
Jig	2014	213	39	39.0	16	14.0
	2015	171	40	40.0	16	14.0
	2016	120	41	41.0	16	15.0
<u> </u>	2012	217	45	43.0	25	21.0
No Fleet/	2013	124	46	46.0	24	21.0
Other	2014	94	50	47.0	31	25.0
Other	2015	146	47	45.0	24	21.0
	2016	253	48	47.0	31	22.0

**Notes:** These estimates include only vessels fishing part of federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Table 38: Gulf of Alaska number of vessels that caught groundfish by month, vessel type, and gear, 2012-2016.

		Year	Jan	Feb	Mar	$\operatorname{Apr}$	May	$\operatorname{Jun}$	$\operatorname{Jul}$	Aug	Sep	Oct	Nov	Dec	Year
		2012	89	129	246	335	337	204	134	148	190	137	66	41	711
	Hook &	2013	61	90	167	248	231	197	109	116	97	117	69	40	506
	Line	$^{2014}$	58	96	192	234	286	136	103	121	128	97	74	46	538
	Line	2015	78	122	207	258	298	131	94	107	133	109	57	49	520
		2016	76	115	187	260	243	119	84	108	118	103	42	13	479
		2012	64	91	132	1	1	-	-	-	42	40	27	19	145
		2013	75	73	102	23	-	-	-	-	14	16	13	12	128
	Pot	2014	57	40	87	7	2	-	-	3	38	39	22	11	102
Catcher		2015	78	77	100	51	-	-	-	-	13	17	19	24	116
Vessels		2016	80	86	78	66	-	-	-	-	15	24	29	32	118
		2012	33	57	54	36	20	18	13	23	59	57	23	6	70
		2013	39	52	58	19	23	18	9	40	42	48	19	2	70
	Trawl	2014	41	63	61	51	25	20	12	47	59	52	23	4	71
		2015	40	60	65	57	30	13	6	15	52	54	18	1	68
		2016	49	55	59	42	29	18	4	45	58	61	34	2	71
		2012	186	270	412	370	358	222	147	170	291	231	114	66	870
		2013	173	212	317	288	254	215	118	156	153	180	101	54	665
	All Gea		147	199	327	291	313	156	115	171	219	185	119	61	672
	2015 2016		192	254	360	362	328	144	100	122	198	179	94	74	670
			199	247	312	365	272	137	88	152	191	187	102	47	629
		2012	7	4	4	7	4	3	2	1	2	4	2	1	15
	Hook &	2013	1	2	3	4	3	6	4	$^2$	1	-	2	1	10
	Line	2014	1	6	8	5	3	2	1	1	3	3	3	1	13
	Line	2015	3	5	6	4	6	3	2	1	3	3	2	1	12
		2016	1	2	4	5	4	4	1	2	4	4	2	4	12
	Pot	2012	1	-	-	-	-	-	-	-	-	-	-	-	1
Catcher		2012	2	1	-	5	1	1	17	6	1	2	1	1	17
Processor	'S	2013	-	1	3	3	2	4	13	3	1	2	4	2	14
	Trawl	2014	-	-	1	5	4	3	7	6	3	7	5	1	11
		2015	-	1	1	4	4	3	9	4	4	1	2	1	10
		2016	-	1	-	2	2	2	12	7	4	2	2	2	14
		2012	10	5	4	12	5	4	19	7	3	6	3	2	33
		2013	1	3	6	7	5	10	17	5	2	2	6	3	24
	All Gea		1	6	9	10	7	5	8	7	6	10	8	2	24
		2015	3	6	7	8	10	6	11	5	7	4	4	2	22
		2016	1	3	4	7	6	6	13	9	8	6	4	6	26

Notes: These estimates include only vessels fishing part of federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Table 39: Gulf of Alaska Catcher vessel (excluding catcher-processors) weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2012-2016.

		Hook &	Line	Pot		Traw	l	All Ge	ar
	Year	<60ft	60- 125ft	<60ft	60- 125ft	<60ft	60- 125ft	<60ft	60- 125ft
	2012	-	-	-	-	198	398	198	398
	2013	-	-	-	-	87	384	87	384
Pollock	2014	-	-	-	-	181	550	181	550
	2015	-	-	-	-	237	569	237	569
	2016	-	-	-	-	289	524	289	524
	2012	1,301	314	-	-	-	10	1,301	324
	2013	1,266	338	-	-	4	21	1,270	359
Sablefish	2014	1,162	307	-	-	2	7	1,164	314
	2015	1,241	342	_	-	3	17	1,244	359
	2016	1,269	361	-	-	1	10	1,270	371
	2012	2,285	55	862	280	87	144	3,234	479
	2013	1,200	18	714	201	116	88	2,030	307
Pacific Cod	2014	1,525	20	756	216	163	73	2,444	309
	2015	1,818	14	895	238	145	114	2,858	366
	2016	1,382	9	944	228	117	102	2,443	339
	2012	-	-	-	-	5	140	5	140
	2013	-	_	_	-	8	170	8	170
Flatfish	2014	-	-	-	-	9	151	9	151
	2015	-	-	-	-	0	76	0	76
	2016	-	-	-	-	2	159	2	159
	2012	571	3	-	-	12	120	583	123
	2013	508	2	-	-	11	99	519	101
Rockfish	2014	425	4	_	-	7	101	432	105
	2015	371	6	_	-	4	97	375	103
	2016	281	4	-	-	3	120	284	124
Atka Macker	el 2016	-	-	-	-	-	1	-	1
	2012	4,161	372	-	-	302	812	5,326	1,465
	2013	2,987	358	-	-	225	762	3,926	1,320
All Groundfis	sh 2014	3,114	331	_	_	362	881	4,235	1,430
	2015	3,431	362	_	_	391	872	4,716	1,472
	2016	2,939	374	-	-	412	914	4,294	$1,\!517$

**Notes:** These estimates include only vessels fishing part of federal TACs. A vessel that fished more than one category in a week is apportioned a partial week based on catch weight. A target is determined based on vessel, week, processing mode, NMFS area, and gear. All groundfish include additional target categories. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Table 40: Gulf of Alaska catcher/processor vessel weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2012-2016.

		Hook	& Line		Pot	T	rawl			All Gear		
	Year	<60ft	60- 124ft	125- 230ft	125- 230ft	60- 124ft	125- 230ft	>230ft	<60ft	60- 124ft	125- 230ft	>230ft
	2012	-	-	-	-	0	-	-	-	0	_	
Pollock	2013	-	-	-	-	1	0	-	-	1	0	-
FOHOCK	2014	-	-	-	-	0	0	-	-	0	0	-
	2015	-	-	-	-	-	1	-	-	-	1	-
	2012	8	-	25	-	-	-	-	8	-	25	
	2013	11	-	27	-	-	-	-	11	-	27	-
Sablefish	2014	7	-	18	-	0	-	_	7	0	18	-
	2015	9	-	19	-	0	-	-	9	0	19	-
	2016	9	-	17	-	-	-	-	9	-	17	-
	2012	11	45	9	0	4	0	_	11	49	9	
Pacific	2013	-	23	13	-	-	0	_	_	23	13	-
	2014	2	22	29	-	_	-	_	2	22	29	_
Cod	2015	4	30	30	-	0	-	_	4	30	30	-
	2016	0	-	45	-	2	-	-	0	2	45	-
	2012	-	-	-	-	39	10	-	-	39	10	
	2013	_	-	_	-	48	12	_	-	48	12	_
Flatfish	2014	-	-	-	-	62	27	_	_	62	27	-
	2015	-	-	-	-	49	16	_	_	49	16	-
	2016	-	-	-	-	41	8	-	-	41	8	-
	2012	_	-	-	-	3	26	1	-	3	26	1
	2013	_	-	_	-	3	27	1	-	3	27	1
Rockfish	2014	_	-	_	-	2	29	3	-	2	29	3
	2015	-	-	-	-	8	30	2	_	8	30	2
	2016	-	-	-	-	4	33	2	-	4	33	2
Atka	2013	-	-	-	-	0	0	-	-	0	0	_
Mackerel	2012	19	45	34	-	46	36	1	19	91	71	1
A 11	2013	11	23	41	-	52	39	1	11	75	79	1
All	2014	9	22	48	-	65	56	3	9	87	104	3
Groundfis	<sup>n</sup> 2015	13	30	49	-	58	47	2	13	88	96	2
	2016	9	-	62	-	48	41	2	9	48	103	2

Notes: These estimates include only vessels fishing part of federal TACs. A vessel that fished more than one category in a week is apportioned a partial week based on catch weight. A target is determined based on vessel, week, processing mode, NMFS area, and gear. All groundfish include additional target categories. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Table 41: Gulf of Alaska catcher vessel crew weeks in the groundfish fisheries by month, 2012-2016.

Year	Jan	Feb	Mar	$\operatorname{Apr}$	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2012	1,656	2,414	3,419	2,174	2,208	1,681	722	880	2,485	2,126	752	558	21,075
2013	1,220	1,994	3,066	1,798	1,872	1,605	614	1,090	1,477	1,534	746	390	17,406
2014	1,049	1,860	$3,\!266$	2,032	2,336	1,162	516	994	1,990	1,820	864	443	18,330
2015	1,843	2,316	$3,\!257$	2,313	2,758	1,046	524	784	1,798	2,124	664	507	19,933
2016	1,718	2,372	$2,\!506$	$3,\!172$	$2,\!106$	1,109	1,318	1,208	1,813	2,400	712	424	20,860

**Notes:** Crew weeks are calculated by summing weekly reported crew size over vessels and time period. These estimates include only vessels targeting groundfish counted toward federal TACs. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea Production Reports. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 42: Gulf of Alaska at-sea processor vessel crew weeks in the groundfish fisheries by month, 2012-2016.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2012	370	186	86	471	220	144	1,161	396	128	178	110	*	3,450
2013	*	98	214	326	204	433	951	341	*	*	283	96	2,946
2014	*	190	358	638	233	201	834	526	312	427	415	*	4,134
2015	155	280	270	499	348	188	846	689	302	247	192	*	4,016
2016	*	107	97	320	215	293	1,229	504	254	228	152	189	$3,\!588$

Notes: Crew weeks are calculated by summing weekly reported crew size over vessels and time period. These estimates include only vessels targeting groundfish counted toward federal TACs. Catcher processors typically account for 90-95% of the total at-sea crew weeks in all areas. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Region At-sea Production Reports. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table H1: Catch (net landed weight) in the commercial Pacific halibut fisheries off Alaska by FMP area, 2012-2016, (hundreds of metric tons).

Year	Gulf Of Alaska	Bering Sea & Aleutian Islands	All Alaska
2012	93.03	23.69	116.72
2013	86.39	17.52	103.91
2014	65.15	13.40	78.56
2015	68.29	13.98	82.27
2016	68.76	15.09	83.85

Notes: These estimates include catch from both federal and state of Alaska commercial fisheries. Net weight is dressed, head-off, slime and ice deducted.

**Source:** ADF&G fish tickets; CFEC gross earnings (fish tickets) file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table H2: Catch (net landed weight) and percent of FMP area catch in the commercial Pacific halibut off Alaska by vessel length (feet) and FMP area, 2012-2016, (hundreds of metric tons).

			1 1	Bering S		A 11 A 1	1	
		Gulf of Alaska		Aleutian Islands		All Alaska		
	Length	Net Tons	Percent	Net Tons	Percent	Net Tons	Percent	
2012	< 20	0.10	0	0.29	0.01	0.39	0	
	20-29	1.61	0.02	2.34	0.10	3.95	0.03	
	30-39	12.63	0.14	2.82	0.12	15.45	0.13	
	40-49	33.37	0.36	4.62	0.19	37.99	0.33	
	50-59	28.73	0.31	8.08	0.34	36.81	0.32	
	>=60	16.37	0.18	5.54	0.23	21.91	0.19	
2013	< 20	0.09	0	0.24	0.01	0.33	0	
	20-29	1.79	0.02	2.17	0.12	3.95	0.04	
	30-39	12.85	0.15	2.28	0.13	15.13	0.15	
2010	40-49	30.42	0.35	2.61	0.15	33.03	0.32	
	50-59	26.49	0.31	5.96	0.34	32.45	0.31	
	>=60	14.50	0.17	4.26	0.24	18.76	0.18	
2014	< 20	0.10	0	0.19	0.01	0.29	0	
	20-29	1.92	0.03	1.52	0.11	3.44	0.04	
	30-39	10.44	0.16	1.96	0.15	12.40	0.16	
2014	40-49	23.77	0.37	1.94	0.14	25.70	0.33	
	50-59	19.46	0.30	4.68	0.35	24.14	0.31	
	>=60	9.11	0.14	3.12	0.23	12.23	0.16	
2015	< 20	0.10	0	*	*	0.10	0	
	20-29	1.78	0.03	1.25	0.09	3.03	0.04	
	30-39	10.98	0.16	1.71	0.12	12.70	0.15	
	40-49	24.33	0.36	2.68	0.19	27.02	0.33	
	50-59	21.61	0.32	5.11	0.37	26.71	0.33	
	>=60	9.18	0.14	3.18	0.23	12.36	0.15	
2016	< 20	0.11	0	*	*	0.11	0	
	20-29	1.94	0.03	1.18	0.08	3.12	0.04	
	30-39	11.43	0.17	1.75	0.12	13.18	0.16	
	40-49	25.05	0.37	2.78	0.19	27.84	0.33	
	50-59	21.03	0.31	5.76	0.38	26.79	0.32	
	>=60	8.84	0.13	3.50	0.23	12.34	0.15	

Notes: Excludes vessels in the Annette Island commercial Pacific halibut fishery. These estimates include catch from both federal and state of Alaska fisheries. Net weight is dressed, head-off, slime and ice deducted. Source: ADF&G fish tickets; CFEC gross earnings (fish tickets) file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table H3: Non-halibut prohibited species catch on commercial Pacific halibut target trips off Alaska by PSC species and area, 2013-2016.

	Year	Bairdi Tanner Crab (Count)	Opilio Tanner (Snow) Crab (Count)	Other King Crab (Count)	Red King Crab (Count)
	2013	-	-	*	-
Gulf of Alaska	2014	21	-	-	382
Guii oi Alaska	2015	-	-	*	-
	2016	37	-	18	178
Bering Sea &	2013	-	-	641	-
Aleutian	2014	-	-	307	-
Islands	2015	-	-	516	-
isianus	2016	0	0	234	18
	2013	-	-	641	-
All Alaska	2014	21	-	307	382
All Alaska	2015	-	-	516	-
	2016	37	0	251	195

Notes: These estimates include trips from both federal and state of Alaska fisheries. For details on prohibited species catch estimation see Cahalan, J., J. Gasper, and J. Mondragon. 2014. Catch sampling and estimation in the federal groundfish fisheries off Alaska, 2015 edition. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-286, 46 p. "\*" indicates a confidential value; "-" indicates no applicable data or value.

**Source:** NMFS Alaska Regional Office Prohibited Species Catch database. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table H4A: Ex-vessel value and price in the commercial Pacific halibut off Alaska by FMP area, 2012-2016, (\$ millions and \$/lb net weight, respectively).

	Gulf of Ala	ska	Bering Sea Aleutian Isla		All Alaska	
Year	Value	Price	Value	Price	Value	Price
2012	117.32	5.72	26.80	5.13	144.13	5.60
2013	95.75	5.03	16.66	4.32	112.41	4.91
2014	89.54	6.23	15.77	5.34	105.31	6.08
2015	94.32	6.26	17.68	5.74	112.00	6.17
2016	96.81	6.39	19.50	5.86	116.31	6.29

**Notes:** Values and prices are for catch from both federal and state of Alaska fisheries. Price is calculated as landed value divided by net weight. Values are not adjusted for inflation. Net weight is dressed, head-off, slime and ice deducted.

Table H4B: Ex-vessel value and price in the commercial Pacific halibut fisheries off Alaska by IPHC area, 2012-2016, (\$ millions and \$/lb net weight, respectively).

/ (			O / 1	• /		
		2012	2013	2014	2015	2016
2C	Value Price	16.24 5.98	15.67 5.16	$21.55 \\ 6.22$	$23.56 \\ 6.30$	25.49 6.16
3A	Value Price	$70.08 \\ 5.74$	$58.05 \\ 5.09$	$48.58 \\ 6.31$	$50.75 \\ 6.31$	$49.62 \\ 6.51$
3B	Value Price	$28.62 \\ 5.57$	$20.20 \\ 4.82$	17.83 6.10	$16.67 \\ 6.13$	17.83 6.43
4A	Value Price	8.23 5.32	5.32 4.41	4.79 5.76	7.94 6.00	8.33 6.21
4B	Value Price	8.60 5.04	5.14 4.21	5.89 5.41	6.03 5.69	6.29 5.75
4CDE	Value Price	12.35 5.12	8.02 4.34	6.65 5.09	6.93 5.62	8.75 5.78

**Notes:** Values and prices are for catch from both federal and state of Alaska fisheries. Price is calculated as landed value divided by net weight. Values are not adjusted for inflation. Net weight is dressed, head-off, slime and ice deducted.

Table H5: Ex-vessel value and average annual revenue per vessel in the commercial Pacific halibut fisheries off Alaska by FMP area and vessel length (feet), 2012-2016, (\$ millions and \$ thousands, respectively).

		Gulf of A	Alaska	Bering S Aleutian		All Al	aska
	Length	Value	Avg. Value/Vessel	Value	Avg. Value/Vessel	Value	Avg. Value/Vesse
	<20	0.13	5.31	0.31	6.44	0.44	6.14
	20-29	2.07	17.42	2.27	15.77	4.34	16.58
2012	30-39	15.87	53.61	3.17	67.39	19.03	57.33
2012	40-49	42.26	123.56	5.31	230.97	47.57	136.70
	50-59	36.25	249.99	9.24	318.73	45.49	301.27
	>=60	20.46	401.22	6.50	282.65	26.96	464.88
	<20	0.10	5.26	0.20	3.84	0.30	4.27
	20-29	2.00	16.98	2.09	13.40	4.09	15.00
2013	30-39	14.18	53.11	2.10	53.87	16.28	54.82
2013	40-49	33.60	107.34	2.42	151.31	36.02	112.91
	50-59	29.45	216.58	5.66	195.28	35.12	247.31
	>=60	16.16	336.65	4.18	199.28	20.34	383.85
	<20	0.14	6.01	0.19	12.00	0.33	8.69
	20-29	2.64	21.84	1.39	26.73	4.03	23.44
2014	30-39	14.24	52.34	2.17	65.86	16.41	55.62
2014	40-49	32.39	107.97	2.30	143.81	34.69	114.49
	50-59	26.92	197.96	5.74	249.69	32.67	233.32
	>=60	12.73	295.98	3.97	233.41	16.70	362.94
	<20	0.14	8.48	*	*	0.18	6.50
	20-29	2.49	23.47	1.43	47.72	3.92	29.03
2015	30-39	15.06	57.71	2.02	80.98	17.09	61.47
2019	40-49	33.47	118.28	3.36	186.50	36.83	128.32
	50-59	29.92	212.23	6.63	255.05	36.56	250.39
	>=60	12.82	320.58	4.19	220.72	17.02	386.74
	< 20	0.14	7.50	*	*	0.26	9.33
	20-29	2.70	25.47	1.35	43.46	4.05	29.76
2016	30-39	16.00	64.01	2.15	82.54	18.15	67.47
2010	40-49	34.88	124.13	3.50	219.03	38.38	134.21
	50-59	29.59	209.88	7.64	282.88	37.23	258.55
	>=60	12.98	316.69	4.75	279.19	17.73	412.33

Notes: Values are for catch from both federal and state of Alaska fisheries. Excludes vessels in the Annette Island commercial Pacific halibut fishery. Length is measured in feet. Values are not adjusted for inflation. Source: ADF&G fish tickets; CFEC gross earnings (fish tickets) file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table H6: Ex-vessel value port ranking, annual ex-vessel value, price and percent of statewide value in the commercial Pacific halibut fisheries off Alaska by port, 2012-2016, (\$ millions and \$/lb net weight).

	Port	2012	2013	2014	2015	2016
'	Homer	2	1	1	2	1
	Kodiak	1	2	2	1	2
	Seward	3	3	3	3	3
	Dutch	4	-	C	4	4
D 1	Harbor	4	5	6	4	4
Rank	Sitka	5	6	5	6	6
	Juneau	8	4	7	5	7
	St Paul	-	0	10	11	11
	Island	7	9	13	11	11
	Petersburg	6	7	4	7	5
	Sand Point	9	14	12	13	16
	Yakutat	10	8	10	9	9
	Homer	26.93	24.24	18.51	17.25	18.31
	Kodiak	27.59	16.60	15.94	17.28	16.95
	Seward	15.77	14.79	11.56	12.76	13.25
Б	Dutch	10.04	*	*	*	*
Ex-	Harbor	10.94	<b>~</b>	Ψ.	Ψ.	Α
vessel	Sitka	*	6.02	*	*	7.27
Value	Juneau	5.90	6.86	5.79	*	6.76
	St Paul	*	*	*	*	*
	Island	7	4	4	4	4
	Petersburg	6.36	5.56	7.62	7.01	9.20
	Sand Point	*	*	*	*	*
	Yakutat	*	*	*	4.07	4.31
	Homer	5.50	4.95	6.05	6.11	6.43
	Kodiak	5.64	4.88	6.32	6.23	6.60
	Seward	5.83	5.07	6.20	6.20	6.46
	Dutch	F 0F	*	*	*	*
D:.	Harbor	5.25	-1-	-1-	-1-	
Price	Sitka	*	5.06	*	*	5.81
	Juneau	5.69	5.44	6.12	*	6.09
	St Paul	*	*	*	*	*
	Island	-1-	717	-1-	-1-	٠,٠
	Petersburg	6.07	5.18	6.24	6.52	6.23
	Sand Point	*	*	*	*	*
	Yakutat	*	*	*	6.48	6.50

Continued on next page.

Table H6: Continued

	Port	2012	20	13	20	14	2015	5	20	16
	Homer	19 %	22	%	18	%	15 %	0	16	%
	Kodiak	19~%	15	%	15	%	15 %	0	15	%
	Seward	11 %	13	%	11	%	11 %	0	11	%
Precen	t Dutch Harbor	8 %		*		*	>	*		*
State	Sitka	*	5	%		*	>	*	6	%
Value	Juneau	4 %	6	%	5	%	>	*	6	%
	St Paul Island	*		*		*	>	*		*
	Petersburg	4 %	5	%	7	%	6 %	0	8	%
	Sand Point	*		*		*	>	*		*
	Yakutat	*		*		*	4 %	ó	4	%

**Notes:** Displays only the 10 Alaska ports of landing with the highest average ex-vessel value. Values and prices are for catch from both federal and state of Alaska fisheries. Price is calculated as landed value divided by net weight. Net weight is dressed, head-off, slime and ice deducted. Values are not adjusted for inflation. "\*" indicates a confidential value; "-" indicates no applicable data or value.

Table H7: First wholesale production volume, value and price in the commercial Pacific halibut fisheries off Alaska by product, 2012-2016, (1000s of metric tons, millions \$ and \$/lb net weight, respectively).

	Year	Quantity	Value	Price
	2012	6.70	105.24	7.12
Head and	2013	6.46	92.69	6.51
Gut	2014	4.80	81.92	7.73
	2015	5.38	92.07	7.77
	2016	6.29	94.99	6.85
	2012	1.94	53.20	12.47
Fillet	2013	1.66	35.78	9.80
	2014	0.88	25.53	13.23
	2015	1.11	34.82	14.21
	2016	1.23	39.30	14.50
	2012	1.85	4.22	1.03
Other	2013	0.83	2.90	1.58
Products	2014	0.50	2.47	2.23
Froducts	2015	3.05	6.86	1.02
	2016	0.68	4.61	3.09
	2012	10.49	162.65	7.03
A11	2013	8.94	131.37	6.66
	2014	6.18	109.92	8.06
Products	2015	9.54	133.76	6.36
	2016	8.19	138.91	7.69

Notes: Landings, values and prices include both federal and state of Alaska fisheries. Price is calculated as landed value divided by net weight. Net weight is dressed, head-off, slime and ice deducted. Values are not adjusted for inflation.

Table H8: Number of vessels catching Pacific halibut commercially off Alaska by FMP area and thousands of pounds caught, 2012-2016.

		Gulf of A	Alaska	Bering S Aleutian 1		All Alaska	
	Year	Vessels	Median Length	Vessels	Median Length	Vessels	Median Length
	2012	25	17	48	18	72	18
	2013	19	17	53	18	71	18
< 20	2014	23	18	16	18	38	18
	2015	16	18	12	18	27	18
	2016	19	17	10	18	28	18
	2012	119	25	144	24	262	24
	2013	118	25	156	24	273	24
20-29	2014	121	25	52	26	172	26
	2015	106	25	30	28	135	26
	2016	106	25	31	28	136	26
	2012	296	34	47	32	332	34
	2013	267	34	39	32	297	34
30-39	2014	272	34	33	32	295	34
	2015	261	35	25	33	278	34
	2016	250	34	26	32	269	34
	2012	342	45	23	48	348	45
	2013	313	45	16	49	319	45
40-49	2014	300	45	16	48	303	45
	2015	283	45	18	48	287	45
	2016	281	45	16	48	286	45
	2012	145	58	29	58	151	58
	2013	136	58	29	58	142	58
50-59	2014	136	57	23	58	140	57
	2015	141	57	26	58	146	57
	2016	141	58	27	58	144	58
	2012	51	72	23	78	58	74
	2013	48	71	21	76	53	73
$\geq$ 60	2014	43	72	17	76	46	72
	2015	40	72	19	76	44	73
	2016	41	72	17	76	43	73

**Notes:** Excludes vessels in the Annette Island commercial Pacific halibut fishery. "-" indicates no applicable data or value.

Table H9: Total vessel days fishing Pacific halibut commercially off Alaska by area, 2012-2016.

Year	Gulf Of Alaska	Bering Sea & Aleutian Islands	All Alaska
2012	14,818	5,110	19,747
2013	14,633	4,339	18,754
2014	12,842	2,894	15,520
2015	12,549	2,744	15,059
2016	12,754	2,800	15,349

Notes: Excludes vessels in the Annette Island commercial Pacific halibut fishery.

**Source:** ADF&G fish tickets; CFEC gross earnings (fish tickets) file. Data compiled and provided by the Alaska Fisheries Information Network (AKFIN). National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table H10: Crew days fishing Pacific halibut commercially off Alaska by month and area, 2012-2016.

	Year	Mar- Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
	2012	8,304	9,431	8,200	5,796	8,708	6,495	6,243	814
	2013	8,546	10,247	7,777	4,859	7,350	$6,\!589$	5,928	1,300
Gulf of Alaska	2014	9,918	9,426	5,754	3,601	6,301	$5,\!476$	4,179	499
	2015	$9,\!274$	10,725	4,904	3,028	5,018	$6,\!386$	4,433	733
	2016	10,309	10,111	4,968	3,562	5,887	5,078	3,358	627
	2012	455	1,429	3,391	5,338	4,693	2,758	1,067	212
Daning Cas fr	2013	563	1,042	3,166	5,244	2,428	2,291	1,266	224
Bering Sea & Aleutian Islands	2014	242	1,480	1,611	3,397	2,412	1,373	653	121
Aleutian Islands	2015	416	1,533	2,111	2,206	2,474	1,536	1,185	133
	2016	529	$1,\!525$	2,100	$2,\!121$	2,686	1,578	809	100
	2012	8,759	10,822	11,483	10,938	13,131	9,133	7,271	1,026
	2013	9,109	11,207	10,807	10,011	9,632	8,670	7,029	1,460
All Alaska	2014	10,160	10,670	$7,\!224$	6,904	8,497	6,775	4,754	620
	2015	9,618	12,126	6,894	5,139	$7,\!252$	7,787	5,459	866
	2016	10,741	$11,\!397$	6,849	5,638	8,417	$6,\!584$	4,098	695

**Notes:** Excludes vessels in the Annette Island commercial Pacific halibut fishery because crew size is not reported for this fishery. Minimal fishing occurs in March to enusre confidentiality it is combined with April.

## 5. ECONOMIC PERFORMANCE INDICES FOR THE NORTH PACIFIC GROUNDFISH FISHERIES

## 5.1. Introduction

Fisheries markets are complex. A multitude of factors influence demand, supply, price, catch composition, product types produced and other market activity. Indices are a common method used by agencies to synthesize market information in a digestible format. Indices establish a baseline that helps characterize trends in the market for values, prices and quantities of fisheries goods. Market indices have many uses. From a management perspective indices can both retrospectively characterize changes in the market that may be related to policy decisions, or allow managers to evaluate current market conditions in the context of future policy change. Indices may also be useful to market participants when making business decisions.

This section of the Economic Status of the Groundfish Fisheries off Alaska attempts to distill the numerous factors that affect the North Pacific groundfish markets into a simple set of indices that can be used to track performance. Indices of value, price and quantity are presented for the Bering Sea and Aleutian Island (BSAI) at-sea, the BSAI shoreside, and the Gulf of Alaska (GOA). For the BSAI at-sea sector, index analysis will focus on the wholesale market; for the BSAI shoreside and GOA sectors, index analysis will consider the wholesale and ex-vessel markets. To help understand and evaluate the indices, we plot the value share stratified by species and product type for wholesale markets, and by species and gear type for the ex-vessel markets. Value share is the proportion of total value from each of the stratified components, such as the proportion of total value that comes from pollock. Additionally, bar graphs provide detail on the division of production among species, product types and gear types. Specifically, for the wholesale market, these graphs show species by product type and product type by species, and in the ex-vessel market, they show species by gear type and gear type by species.

Aggregate indices, by their very nature, cumulate over the many species, products types, and gear types in a sector. The values, prices, and quantities from individual components of these factors (e.g., individual species) may contribute to the movements of the aggregate indices in very different ways. The myriad of market influences make it difficult to disentangle the relative importance of different species or products when monitoring aggregate performance, a problem that can be approached by using a value-share decomposition to examine the influence of these different components on the aggregate index. Decomposition relates the indices for each of the components of a single factor to the aggregate through its value share. For example, consider an aggregate price index for a sector. The aggregate price index is a function of all the prices for each of the species sold (e.g., pollock, Pacific cod, sablefish). Here, species type is the factor and the component indices of this factor are the price indices for each of the species (e.g., pollock price index, Pacific cod price index). The importance of each individual species price index is determined by the proportion of total value in the sector for each species. By decomposing the aggregate index in this way, one can see how each of the species price indices influence the movement in the aggregate price index. Similar value-share decompositions are also constructed for product types in the wholesale market, and for gear types in the ex-vessel market.

The primary tools we will use to analyze market performance are Figures 5.2-5.11. The index figures in Figures 5.2-5.11 are designed to help the reader visualize changes in the indices and relate the changes to shifts in aggregate value, prices, and quantities. All indices use 2013 as the base year for the index. All calculations and statistics are made using nominal U.S. dollars (i.e., not adjusted for inflation). Aggregate indices are located in the upper-left panel and the value share decomposition of the aggregate index is below in the lower-left panels of the figures. Changes in the indices have been color coded to indicate the relevance in determining aggregate index movements. The relevance of a change in the price index in year t is calculated by  $(year - on - year \ growth \ rate) * (share \ weight) =$  $(I_t/I_{t-1}-1)*\tilde{w}(t)$  where  $I_t$  is the level of the index and  $\tilde{w}^i(t)=\frac{p_t*q_t}{\sum_i p_t*q_t}$  is the year t value share. When the value  $(year - on - year \ growth \ rate) * (share \ weight)$  is roughly zero, indicating little to no change or influence on the aggregate index, it is colored blue. When this value is less than -0.1, the index is colored red to indicate that it has had a significant negative impact on the aggregate index. When this value is greater than 0.1, the index is colored green, indicating a significant positive impact on the aggregate index. Shades in between these colors indicate intermediate impacts. The indices can take on these "significant colors" if the percentage change is large and/or the value share is large. The value share plot in the upper-right corner of each figure helps to discern the difference. For each sector and market, two decompositions are presented. The wholesale market is decomposed by species and product type, and the ex-vessel market is decomposed by species and gear type. To help relate the different decompositions, bar graphs in the lower-right panel of each figure show the composition of one factor (e.g., product type) for each relevant category of the other factors (e.g., species) as measured by production. The height of the bars shows the annual output in that market. Only the components of a factor with a value share greater than 1% have been plotted. although all prices and quantities were used in the construction of the aggregate index. Ex-vessel indices are constructed using catch that is counted against a federal total allowable catch (TAC). Hereafter, "wholesale value" and "ex-vessel value" refer to the revenue from production at the first wholesale level or from sales of catch on the ex-vessel market, respectively. Walleye pollock will often be referred to simply as "pollock"; similarly, Pacific cod will often be referred to as "cod". The "other" product type contains all products that are not fillets, H&G, surimi, meal and oil, or roe. In particular, the "other" product type include whole fish and minced fish.

Understanding the indices and their construction facilitates accurate interpretation. To properly interpret the indices, the reader must realize that the indices are merely descriptive and characterize the state of the market relative to other periods, and display the co-movement of different species, product types, or gear types both individually and in aggregate. The indices have no inherent causal interpretation. For example, it would be wrong to assert from these indices that a change in surimi prices "caused" a change in pollock price. Nor could we say the opposite. We can say that they are connected, as surimi is a significant portion of the value from pollock in some regions, but causality is beyond the scope of indices. Carefully designed regression analysis is better suited for addressing such causality questions.

<sup>&</sup>lt;sup>1</sup>U.S. nominal dollars are used so price indices capture unadjusted changes in prices throughout time, allowing them to be used as deflator indices. For readers comparing these indices to other figures in the SAFE denominated in inflation adjusted terms, this adjustment should be kept in mind.

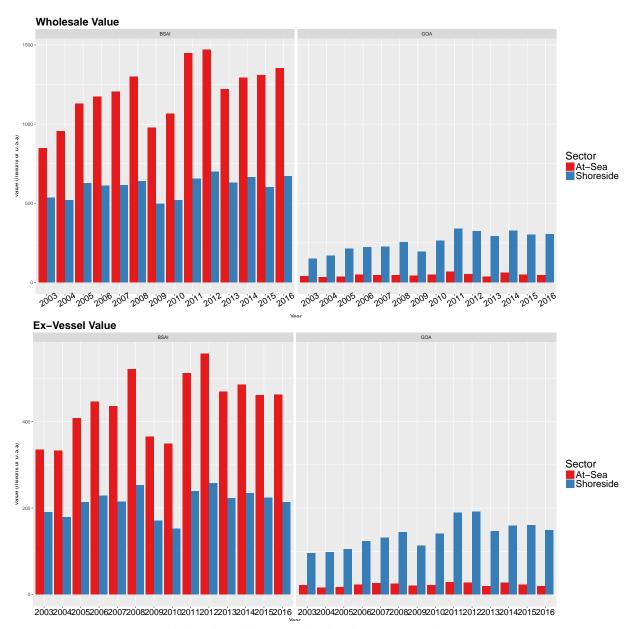


Figure 5.1: Wholesale and ex-vessel value by region and sector 2003-2016. **Source:** NMFS Alaska Region's Catch-accounting system (CAS) and Weekly Production Report (WPR) estimates; Alaska Department of Fish and Game (ADF&G) Commercial Operator's Annual Report (COAR), National Marine Fisheries Service. P.O. Box 15700, Seattle, WA 98115-0070.

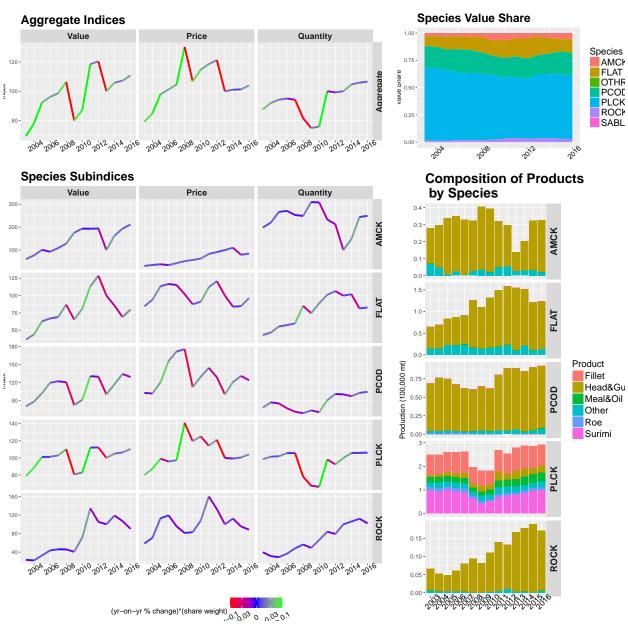


Figure 5.2: BSAI at-sea wholesale market: species decomposition 2003-2016 (Index 2013 = 100). **Notes:** Index values for 2011-2016, notes and source information for the indices are on Table 5.1. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

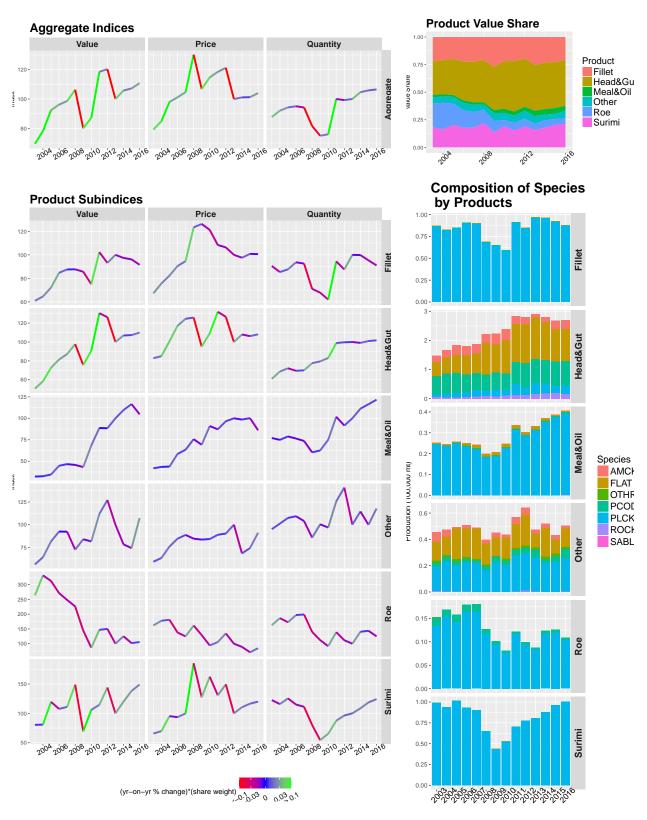


Figure 5.3: BSAI at-sea wholesale market: product decomposition 2003-2016 (Index 2013 = 100). **Notes:** Index values for 2011-2016, notes and source information for the indices are on Table 5.2. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

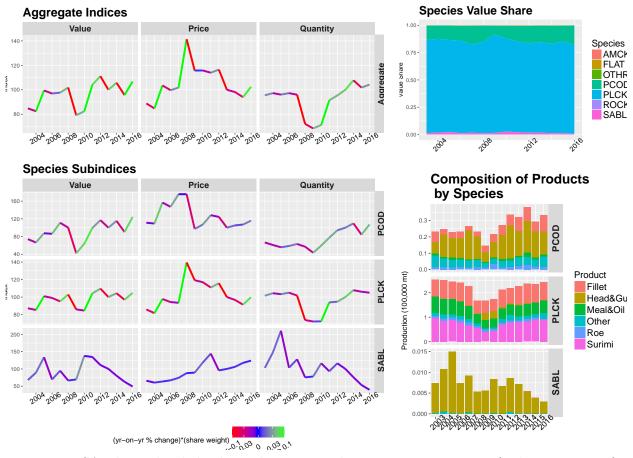


Figure 5.4: BSAI shoreside wholesale market: species decomposition 2003-2016 (Index 2013 = 100). **Notes:** Index values for 2011-2016, notes and source information for the indices are on Table 5.3. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

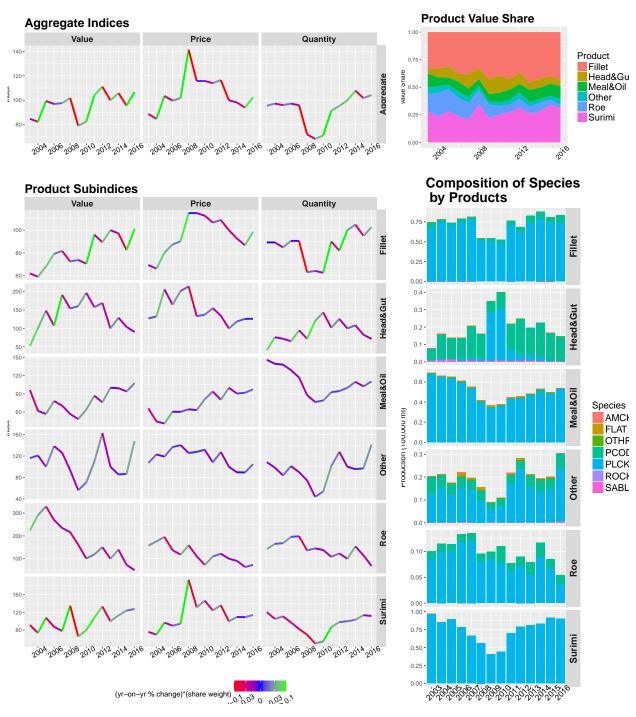


Figure 5.5: BSAI shoreside wholesale market: product decomposition 2003-2016 (Index 2013 = 100). **Notes:** Index values for 2011-2016, notes and source information for the indices are on Table 5.4. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

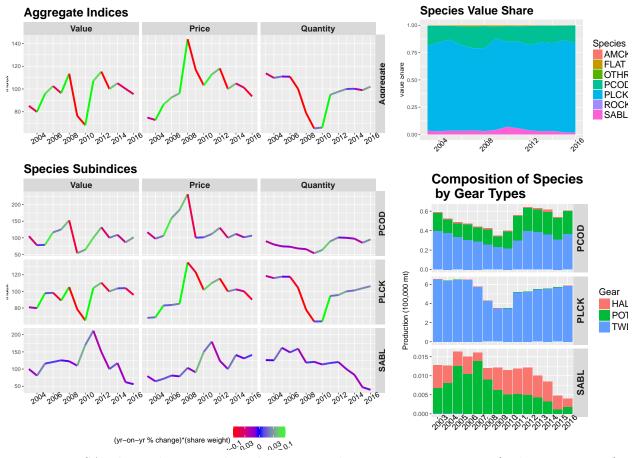


Figure 5.6: BSAI shoreside ex-vessel market: species decomposition 2003-2016 (Index 2013 = 100). **Notes:** Index values for 2011-2016, notes and source information for the indices are on Table 5.5. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

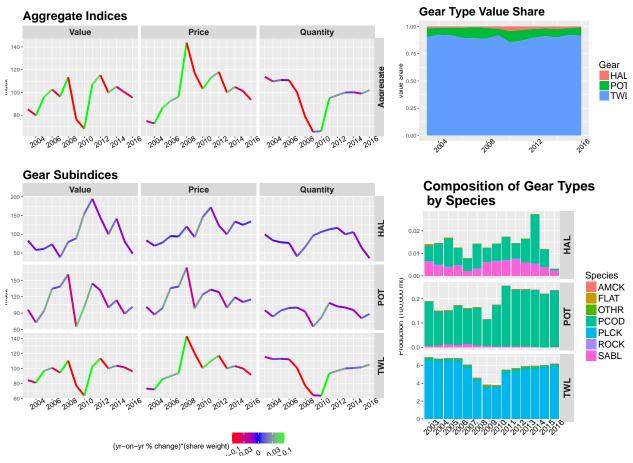


Figure 5.7: BSAI shoreside ex-vessel market: gear decomposition 2003-2016. **Notes:** Index values for 2011-2016, notes and source information for the indices are on Table 5.6. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

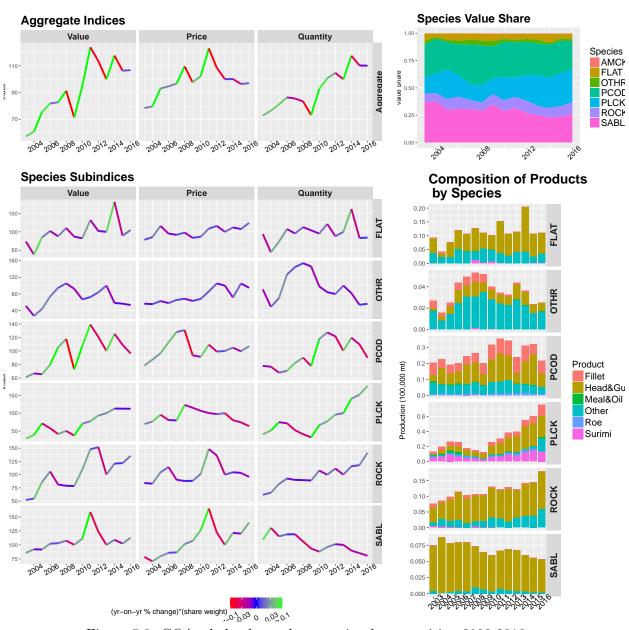
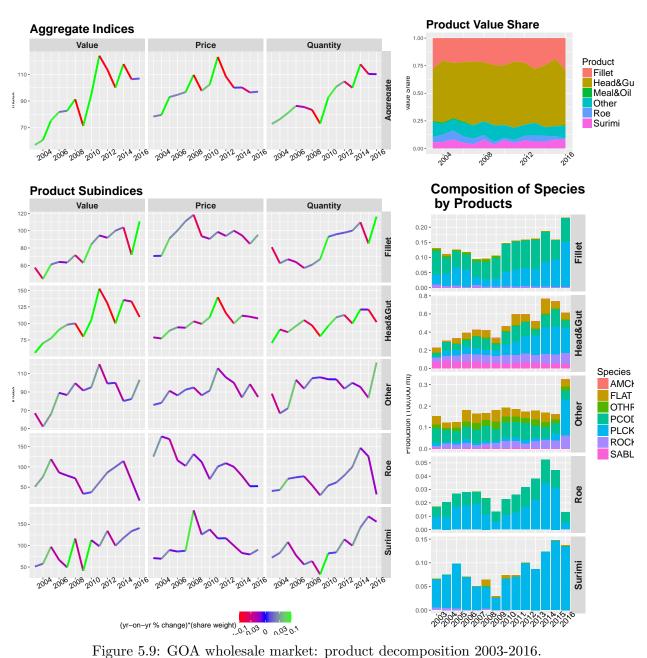


Figure 5.8: GOA wholesale market: species decomposition 2003-2016.

Notes: Index values for 2011-2016, notes and source information for the indices are on Table 5.7. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.



Notes: Index values for 2011-2016, notes and source information for the indices are on Table 5.8. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

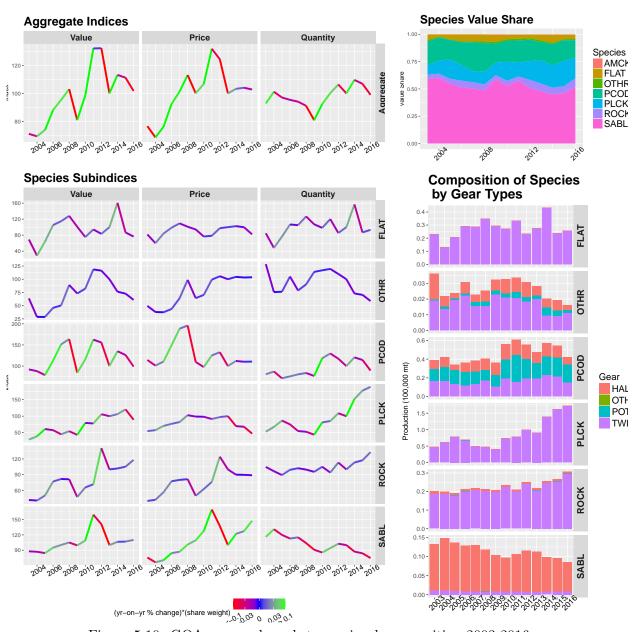


Figure 5.10: GOA ex-vessel market: species decomposition 2003-2016. **Notes:** Index values for 2011-2016, notes and source information for the indices are on Table 5.9. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

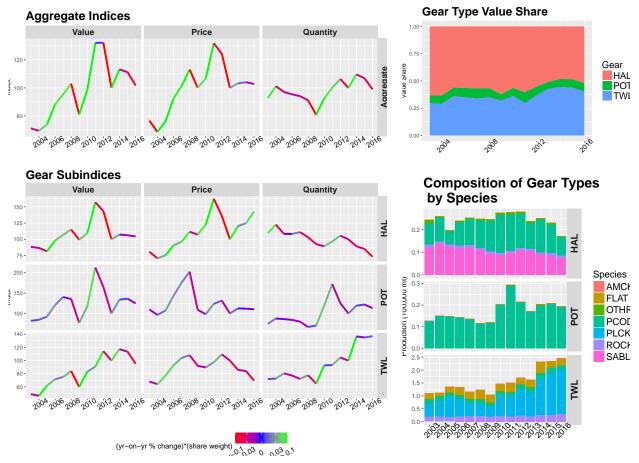


Figure 5.11: GOA ex-vessel market: gear decomposition 2003-2016 (Index 2013 = 100). **Notes:** Index values for 2011-2016, notes and source information for the indices are on Table 5.10. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

Table 5.1: Species Indices and Value Share for the BSAI At-Sea First-Wholesale Market 2011-2016.

Species	Index Type	2011	2012	2013	2014	2015	2016
Aggregate	Value	118.49	120.28	100.00	105.76	107.20	110.77
Aggregate	Price	118.48	121.19	100.00	101.06	101.25	103.99
Aggregate	Quantity	100.00	99.24	100.00	104.65	105.87	106.52
AMCK	Value	193.35	194.40	100.00	163.21	193.66	211.71
AMCK	Price	82.80	91.29	100.00	110.08	79.30	84.78
AMCK	Quantity	233.50	212.94	100.00	148.26	244.21	249.72
AMCK	Value Share	0.05	0.05	0.03	0.05	0.06	0.06
FLAT	Value	113.41	128.75	100.00	85.55	69.08	79.89
FLAT	Price	112.12	120.91	100.00	83.95	84.79	96.50
FLAT	Quantity	101.15	106.48	100.00	101.91	81.48	82.78
FLAT	Value Share	0.16	0.18	0.17	0.14	0.11	0.12
PCOD	Value	130.24	129.37	100.00	117.00	133.87	128.89
PCOD	Price	144.11	128.53	100.00	120.58	130.58	123.62
PCOD	Quantity	90.37	100.66	100.00	97.04	102.52	104.26
PCOD	Value Share	0.19	0.18	0.17	0.19	0.21	0.20
PLCK	Value	112.14	112.26	100.00	105.04	106.49	110.59
PLCK	Price	114.32	121.22	100.00	99.33	100.53	104.20
PLCK	Quantity	98.09	92.61	100.00	105.75	105.93	106.13
PLCK	Value Share	0.56	0.55	0.59	0.58	0.59	0.59
ROCK	Value	134.25	105.09	100.00	118.90	106.85	90.10
ROCK	Price	159.92	132.88	100.00	112.30	95.33	88.36
ROCK	Quantity	83.95	79.09	100.00	105.88	112.09	101.97
ROCK	Value Share	0.04	0.03	0.03	0.04	0.03	0.03

Table 5.2: Product Indices and Value Share for the BSAI At-Sea First-Wholesale Market 2011-2016.

Product	Index Type	2011	2012	2013	2014	2015	2016
Aggregate	Value	118.49	120.28	100.00	105.76	107.20	110.77
Aggregate	Price	118.48	121.19	100.00	101.06	101.25	103.99
Aggregate	Quantity	100.00	99.24	100.00	104.65	105.87	106.52
Fillet	Value	102.34	93.13	100.00	97.39	96.15	91.53
Fillet	Price	108.35	106.34	100.00	97.58	100.84	100.60
Fillet	Quantity	94.45	87.58	100.00	99.81	95.34	90.98
Fillet	Value Share	0.22	0.20	0.25	0.23	0.23	0.21
Head&Gut	Value	130.52	126.28	100.00	106.92	107.31	109.96
Head&Gut	Price	131.95	126.66	100.00	107.94	106.22	108.12
Head&Gut	Quantity	98.91	99.70	100.00	99.06	101.02	101.71
Head&Gut	Value Share	0.46	0.44	0.42	0.42	0.42	0.41
Meal&Oil	Value	88.67	88.40	100.00	109.57	116.51	104.68
Meal&Oil	Price	87.13	96.57	100.00	98.53	100.13	86.05
Meal&Oil	Quantity	101.77	91.54	100.00	111.20	116.36	121.65
Meal&Oil	Value Share	0.04	0.04	0.05	0.05	0.05	0.05
Other	Value	111.78	127.15	100.00	78.37	74.23	107.28
Other	Price	88.88	90.25	100.00	68.41	74.27	91.10
Other	Quantity	125.77	140.89	100.00	114.57	99.94	117.76
Other	Value Share	0.06	0.07	0.07	0.05	0.05	0.07
Roe	Value	146.82	150.16	100.00	125.08	101.80	105.54
Roe	Price	105.47	134.64	100.00	89.10	70.88	84.52
Roe	Quantity	139.21	111.52	100.00	140.39	143.61	124.87
Roe	Value Share	0.07	0.07	0.06	0.07	0.05	0.05
Surimi	Value	114.53	144.01	100.00	119.99	138.15	149.11
Surimi	Price	130.79	149.40	100.00	110.48	116.45	119.98
Surimi	Quantity	87.57	96.39	100.00	108.61	118.63	124.28
Surimi	Value Share	0.15	0.19	0.16	0.18	0.20	0.21

Notes: Products types 'Minced', 'Other' and those with a value share less than 1% were not included in this table. All product types were used to contruct aggregate indices and value share. The Fisher index method was used to construct the indices. Further details can be found in the text or by contacting Ben.Fissel@NOAA.gov.

Table 5.3: Species Indices and Value Share for the BSAI Shoreside First-Wholesale Market 2011-2016.

Species	Index Type	2011	2012	2013	2014	2015	2016
Aggregate	Value	104.13	111.10	100.00	105.78	95.68	106.80
Aggregate	Price	113.96	116.52	100.00	98.17	93.98	102.43
Aggregate	Quantity	91.37	95.34	100.00	107.75	101.81	104.27
PCOD	Value	99.23	117.00	100.00	115.33	90.19	124.21
PCOD	Price	128.15	124.42	100.00	105.16	107.05	115.92
PCOD	Quantity	77.43	94.04	100.00	109.67	84.26	107.15
PCOD	Value Share	0.14	0.16	0.15	0.16	0.14	0.18
PLCK	Value	104.16	109.69	100.00	104.38	96.94	104.79
PLCK	Price	110.90	115.82	100.00	96.76	91.35	99.80
PLCK	Quantity	93.92	94.71	100.00	107.87	106.11	105.00
PLCK	Value Share	0.83	0.82	0.83	0.82	0.84	0.81
SABL	Value	134.57	111.31	100.00	80.42	62.72	49.06
SABL	Price	144.34	95.71	100.00	105.97	117.46	124.08
SABL	Quantity	93.23	116.29	100.00	75.89	53.40	39.54
SABL	Value Share	0.02	0.02	0.02	0.01	0.01	0.01

Table 5.4: Product Indices and Value Share for the BSAI Shoreside First-Wholesale Market 2011-2016.

Product	Index Type	2011	2012	2013	2014	2015	2016
Aggregate	Value	104.13	111.10	100.00	105.78	95.68	106.80
Aggregate	Price	113.96	116.52	100.00	98.17	93.98	102.43
Aggregate	Quantity	91.37	95.34	100.00	107.75	101.81	104.27
Fillet	Value	95.97	89.37	100.00	97.13	82.47	101.12
Fillet	Price	106.63	108.91	100.00	92.63	86.76	98.53
Fillet	Quantity	90.00	82.06	100.00	104.86	95.05	102.63
Fillet	Value Share	0.42	0.37	0.46	0.42	0.40	0.44
Head&Gut	Value	157.82	168.99	100.00	129.08	104.16	90.42
Head&Gut	Price	154.99	134.47	100.00	119.02	125.82	126.21
Head&Gut	Quantity	101.83	125.68	100.00	108.45	82.79	71.64
Head&Gut	Value Share	0.10	0.10	0.07	0.08	0.07	0.06
Meal&Oil	Value	86.91	75.90	100.00	99.32	94.04	107.72
Meal&Oil	Price	93.82	80.19	100.00	90.48	91.81	97.49
Meal&Oil	Quantity	92.63	94.65	100.00	109.77	102.43	110.49
Meal&Oil	Value Share	0.09	0.08	0.11	0.11	0.11	0.11
Other	Value	109.47	162.68	100.00	85.69	86.87	147.89
Other	Price	108.29	127.41	100.00	89.66	89.46	104.66
Other	Quantity	101.09	127.68	100.00	95.57	97.10	141.30
Other	Value Share	0.04	0.06	0.04	0.03	0.04	0.06
Roe	Value	119.06	150.54	100.00	139.93	73.27	50.06
Roe	Price	109.70	122.13	100.00	90.78	63.88	72.94
Roe	Quantity	108.54	123.26	100.00	154.14	114.70	68.64
Roe	Value Share	0.07	0.08	0.06	0.08	0.05	0.03
Surimi	Value	108.15	132.94	100.00	113.12	123.96	127.30
Surimi	Price	124.39	135.62	100.00	109.45	109.12	113.90
Surimi	Quantity	86.94	98.03	100.00	103.35	113.60	111.76
Surimi	Value Share	0.27	0.31	0.26	0.28	0.34	0.31

Notes: Products types 'Minced', 'Other' and those with a value share less than 1% were not included in this table. All product types were used to contruct aggregate indices and value share. The Fisher index method was used to construct the indices. Further details can be found in the text or by contacting Ben.Fissel@NOAA.gov.

Table 5.5: Species Indices and Value Share for the BSAI Shoreside Ex-Vessel Market 2006-2016.

Species Index Type	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	2016
Aggregat&alue	102.56 96.43113.35 76.44 68.24107.11115.25100.00105.09100.18 9	95.48
Aggregat@rice	92.56 96.29143.74116.95103.20112.85118.07100.00104.87101.20 9	93.52
Aggregat Quantity	110.81100.15 78.86 65.36 66.13 94.92 97.62100.00100.21 98.9910	)2.09
PCOD Value	116.52125.09152.41 53.78 64.26 99.97131.59100.00108.93 86.3410	)1.47
PCOD Price	159.38184.13231.42100.39101.41111.59130.23100.00111.72101.4910	)6.62
PCOD Quantity	73.10 67.93 65.86 53.57 63.36 89.59101.04100.00 97.51 85.07 9	95.17
PCOD Value Share	0.17 0.20 0.20 0.11 0.14 0.14 0.17 0.15 0.16 0.13	0.16
PLCK Value	98.37 89.02105.12 78.52 65.10104.09110.45100.00103.66103.95 9	95.78
PLCK Price	83.64 85.23134.84123.11101.75110.14115.47100.00102.45100.12 9	90.12
PLCK Quantity	117.62104.45 77.95 63.78 63.98 94.50 95.65100.00101.18103.8310	)6.28
PLCK Value Share	0.78 0.75 0.76 0.84 0.78 0.79 0.78 0.82 0.80 0.85	0.82
SABL Value	120.59125.47122.71109.79170.05211.62149.56100.00117.44 61.89 5	55.99
SABL Price	81.10 78.77103.38 90.66149.98179.87124.09100.00140.98131.0714	41.25
SABL Quantity	148.68159.29118.69121.10113.38117.65120.52100.00 83.30 47.22 3	39.64
SABL Value Share	0.03 0.04 0.03 0.04 0.07 0.06 0.04 0.03 0.03 0.02	0.02

Table 5.6: Gear Indices and Value Share for the BSAI Shoreside Ex-Vessel Market 2006-2016.

Gear	Index Type	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Aggrega	at&alue	102.56	96.43	113.35	76.44	68.24	107.11	115.251	100.001	105.09	100.18	95.48
Aggrega	at <b>P</b> rice	92.56	96.29	143.74	116.95	103.20	112.85	118.071	100.001	104.87	101.20	93.52
Aggrega	atQuantity	110.81	100.15	78.86	65.36	66.13	94.92	97.621	100.001	100.21	98.99	102.09
HAL	Value	73.26	38.72	79.45	89.16	154.90	194.72	144.601	100.001	41.93	81.50	48.29
HAL	Price	95.20	94.13	120.68	92.26	145.94	171.941	123.511	100.001	34.08	125.17	134.20
HAL	Quantity	76.96	41.14	65.84	96.64	106.14	113.25	117.081	100.001	105.85	65.11	35.98
HAL	Value Share	0.01	0.01	0.01	0.02	0.04	0.03	0.02	0.02	0.03	0.02	0.01
POT	Value	134.57	138.37	160.86	64.34	101.37	144.25	131.381	100.001	13.58	88.73	101.45
POT	Price	135.68	138.36	173.44	98.82	124.10	132.89	128.581	100.001	18.89	110.17	114.94
POT	Quantity	99.19	100.01	92.75	65.10	81.68	108.55	102.181	100.00	95.53	80.54	88.27
POT	Value Share	0.09	0.10	0.10	0.06	0.10	0.09	0.08	0.07	0.08	0.06	0.07
TWL	Value	100.69	94.39	110.37	77.11	63.88	102.41	113.391	100.001	103.67	101.45	96.00
TWL	Price	89.77	93.65	142.86	119.95	100.42	109.71	117.111	100.001	03.18	99.95	91.35
TWL	Quantity	112.17	100.79	77.26	64.29	63.61	93.35	96.831	100.001	100.47	101.50	105.09
TWL	Value Share	0.89	0.89	0.89	0.92	0.85	0.87	0.90	0.91	0.90	0.92	0.92

**Notes:** The Fisher index method was used to construct the indices. Further details on index construction and gear decomposition can be found in the text or by contacting Ben.Fissel@NOAA.gov.

Table 5.7: Species Indices and Value Share for the GOA First-Wholesale Market 2011-2016.

Species	Index Type	2011	2012	2013	2014	2015	2016
Aggregate	Value	123.94	113.54	100.00	117.70	106.36	106.83
Aggregate	Price	123.03	108.44	100.00	100.13	96.43	97.02
Aggregate	Quantity	100.74	104.71	100.00	117.54	110.30	110.11
FLAT	Value	131.88	102.20	100.00	181.40	89.67	104.73
FLAT	Price	108.73	116.01	100.00	111.95	107.63	124.26
FLAT	Quantity	121.28	88.10	100.00	162.03	83.31	84.28
FLAT	Value Share	0.06	0.05	0.05	0.08	0.05	0.05
OTHR	Value	72.55	84.04	100.00	58.56	56.72	53.56
OTHR	Price	86.12	105.11	100.00	71.54	105.02	94.93
OTHR	Quantity	84.25	79.95	100.00	81.86	54.02	56.42
OTHR	Value Share	0.02	0.03	0.04	0.02	0.02	0.02
PCOD	Value	138.99	120.49	100.00	125.21	109.04	96.22
PCOD	Price	109.23	99.02	100.00	104.72	99.45	106.94
PCOD	Quantity	127.25	121.68	100.00	119.57	109.65	89.97
PCOD	Value Share	0.32	0.30	0.29	0.30	0.29	0.26
PLCK	Value	77.41	93.40	100.00	112.88	112.61	112.30
PLCK	Price	100.40	97.21	100.00	80.33	74.14	63.66
PLCK	Quantity	77.11	96.08	100.00	140.52	151.88	176.40
PLCK	Value Share	0.18	0.24	0.29	0.27	0.30	0.30
ROCK	Value	148.01	151.84	100.00	120.95	121.76	135.43
ROCK	Price	148.26	136.07	100.00	104.53	103.23	95.78
ROCK	Quantity	99.83	111.60	100.00	115.71	117.95	141.40
ROCK	Value Share	0.10	0.11	0.09	0.09	0.10	0.11
SABL	Value	158.64	123.33	100.00	108.99	102.47	112.71
SABL	Price	164.94	121.78	100.00	121.41	120.16	139.85
SABL	Quantity	96.18	101.27	100.00	89.77	85.28	80.59
SABL	Value Share	0.32	0.27	0.25	0.23	0.24	0.26

Table 5.8: Product Indices and Value Share for the GOA First-Wholesale Market 2011-2016.

Product	Index Type	2011	2012	2013	2014	2015	2016
Aggregate	Value	123.94	113.54	100.00	117.70	106.36	106.83
Aggregate	Price	123.03	108.44	100.00	100.13	96.43	97.02
Aggregate	Quantity	100.74	104.71	100.00	117.54	110.30	110.11
Fillet	Value	94.53	91.79	100.00	103.84	72.18	110.75
Fillet	Price	98.61	93.94	100.00	94.64	84.75	95.25
Fillet	Quantity	95.86	97.71	100.00	109.72	85.17	116.27
Fillet	Value Share	0.21	0.23	0.28	0.25	0.19	0.29
Head&Gut	Value	152.47	130.38	100.00	135.33	133.13	109.73
Head&Gut	Price	139.56	115.67	100.00	111.74	110.17	107.54
Head&Gut	Quantity	109.25	112.72	100.00	121.11	120.85	102.04
Head&Gut	Value Share	0.60	0.56	0.49	0.56	0.61	0.50
Other	Value	120.37	99.25	100.00	80.21	82.37	103.27
Other	Price	115.98	106.03	100.00	83.97	98.60	84.56
Other	Quantity	103.79	93.61	100.00	95.52	83.54	122.12
Other	Value Share	0.11	0.10	0.11	0.08	0.09	0.11
Roe	Value	61.87	86.19	100.00	114.42	65.65	17.05
Roe	Price	100.67	109.07	100.00	77.99	52.27	52.55
Roe	Quantity	61.46	79.02	100.00	146.72	125.58	32.44
Roe	Value Share	0.03	0.04	0.05	0.05	0.03	0.01
Surimi	Value	98.65	134.65	100.00	118.10	133.86	141.18
Surimi	Price	116.98	117.35	100.00	82.73	79.46	90.52
Surimi	Quantity	84.33	114.74	100.00	142.75	168.45	155.96
Surimi	Value Share	0.05	0.07	0.06	0.06	0.08	0.08

Table 5.9: Species Indices and Value Share for the GOA Ex-Vessel Market 2006-2016.

Species Index Type	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016
AggregateValue	88.14 95.35103.04 80.96 98.55132.12132.24100.00113.20111.21101.73
Aggregat@rice	92.41101.33113.11100.10106.66131.88124.35100.00103.25104.06102.77
Aggregat@uantity	95.38 94.10 91.10 80.88 92.40100.18106.35100.00109.63106.87 98.98
FLAT Value	105.18114.83128.04100.93 75.26 94.20 83.20100.00160.69 86.69 76.54
FLAT Price	98.63109.41101.02 94.31 76.60 78.43 97.43100.00102.48 99.84 82.06
FLAT Quantity	$106.65104.95126.75107.02 \ 98.25120.11 \ 85.39100.00156.81 \ 86.82 \ 93.28$
FLAT Value Share	0.06 0.06 0.06 0.06 0.04 0.04 0.03 0.05 0.07 0.04 0.04
OTHR Value	45.86 50.34 89.14 73.08 82.14118.50116.22100.00 76.39 72.74 60.95
OTHR Price	43.63 63.97 98.77 64.21 70.27 99.15105.70100.00104.49103.26103.70
OTHR Quantity	105.10 78.69 90.25113.82116.89119.51109.95100.00 73.11 70.44 58.77
OTHR Value Share	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.02 0.01 0.01
PCOD Value	112.80151.42163.73  84.06115.65162.47155.75100.00135.10126.13  98.80
PCOD Price	$149.15188.42195.90109.65 \ \ 97.63125.19132.70100.00112.03110.20110.56$
PCOD Quantity	75.63 80.36 83.58 76.66118.46129.77117.37100.00120.60114.46 89.37
PCOD Value Share	0.21 0.26 0.26 0.17 0.19 0.20 0.20 0.17 0.20 0.19 0.16
PLCK Value	57.72 45.10 54.46 43.45 79.58 77.95105.88100.00106.16120.50 89.15
PLCK Price	76.82 82.12103.02 98.71 98.25 91.44 97.27100.00 69.84 67.99 47.26
PLCK Quantity	75.14 54.92 52.86 44.01 80.99 85.25108.85100.00152.01177.24188.63
PLCK Value Share	0.14 0.10 0.11 0.12 0.17 0.13 0.17 0.21 0.20 0.23 0.19
ROCK Value	76.80 81.73 81.09 47.32 65.56 71.57140.52100.00101.77105.22118.18
ROCK Price	77.40 79.96 81.36 49.61 62.41 76.12124.26100.00 89.94 89.60 88.85
ROCK Quantity	99.23102.21 99.67 95.38105.04 94.03113.09100.00113.16117.43133.02
ROCK Value Share	0.06 0.06 0.05 0.04 0.05 0.04 0.07 0.07 0.06 0.07 0.08
SABL Value	95.03100.29105.13 99.40108.96159.42141.01100.00106.43106.88110.18
SABL Price	84.24 87.07101.13109.35127.38169.58137.27100.00121.93127.27147.51
SABL Quantity	112.81115.19103.95 90.91 85.54 94.01102.72100.00 87.29 83.98 74.69
SABL Value Share	0.51 0.50 0.49 0.59 0.53 0.58 0.51 0.48 0.45 0.46 0.52

Table 5.10: Gear Indices and Value Share for the GOA Ex-Vessel Market 2006-2016.

Gear	Index Type	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Aggrega	at&alue	88.14	95.35	103.04	80.96	98.55	132.12	132.241	100.001	113.201	111.211	101.73
Aggrega	at <b>e</b> Price	92.41	101.33	113.11	100.10	106.66	131.88	124.351	100.001	103.251	104.06	102.77
Aggrega	at <b>Q</b> uantity	95.38	94.10	91.10	80.88	92.40	100.18	106.351	100.001	109.63	106.87	98.98
HAL	Value	97.94	106.79	114.95	99.21	109.26	157.04	143.43	100.001	107.241	106.191	104.40
HAL	Price	90.51	96.21	111.59	107.24	122.47	162.44	135.981	100.001	120.251	124.791	142.92
HAL	Quantity	108.21	110.99	103.01	92.51	89.21	96.68	105.471	100.00	89.18	85.09	73.05
HAL	Value Share	0.56	0.57	0.57	0.62	0.56	0.60	0.55	0.51	0.48	0.49	0.52
POT	Value	120.72	140.47	135.37	76.77	117.292	212.84	165.001	100.001	134.071	136.421	124.74
POT	Price	143.24	175.872	202.67	109.10	98.11	123.80	131.661	100.001	112.441	111.821	110.26
POT	Quantity	84.28	79.87	66.80	70.37	119.55	171.921	125.321	100.001	119.231	121.991	113.13
POT	Value Share	0.09	0.09	0.08	0.06	0.07	0.10	0.08	0.06	0.07	0.08	0.08
TWL	Value	71.67	75.09	84.10	59.93	83.10	90.76	114.191	100.001	117.201	13.46	95.19
TWL	Price	92.78	103.99	108.16	91.93	89.69	97.34	109.31	100.00	85.91	84.03	69.59
TWL	Quantity	77.25	72.21	77.76	65.19	92.65	93.24	104.471	100.001	136.431	135.031	136.79
TWL	Value Share	0.35	0.34	0.35	0.32	0.36	0.29	0.37	0.43	0.44	0.44	0.40

**Notes:** The Fisher index method was used to construct the indices. Further details on index construction and gear decomposition can be found in the text or by contacting Ben.Fissel@NOAA.gov.