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, 2017

by

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September 14, 2018

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/2018/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. 2018 meeting of the Groundfish Plan Teams. A final version of this report will be prepared for the Nov. 2018 meeting of the Groundfish Plan Teams. 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 the data.

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

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1. EXECUTIVE SUMMARY

The commercial FMP groundfish fisheries off Alaska had a total catch of 2.3 million metric tons (mt) in 2017 (including catch in federal and state waters) (Fig. 3.1 and Table 1), a decrease of 0.14% from 2016. Groundfish accounted for 81% of Alaska's 2017 total catch, which was less than typical because of higher than average Pacific salmon catch in 2017 (Table 3). In Alaska total catch in 2017 increased for Alaska pollock, sablefish, and Atka mackerel, with pollock catch at a decadal high. Total catch decreased or was stable for Pacific cod, flatfish and rockfish, with flatfish catches at a decadal low.

The aggregate ex-vessel value of the FMP groundfish fisheries off Alaska was \$949 million, which was 50% of the ex-vessel value of all commercial fisheries off Alaska in 2017 (Table 3). After adjustment for inflation, real ex-vessel value of FMP groundfish increased \$62 million (Table 3), largely due to an aggregate real ex-vessel price increase of 7.3% to \$0.194 per pound in 2017. The increase in the aggregate ex-vessel price was attributable to a rise in ex-vessel prices for most species, with the notable exception of pollock. Notable price increases were observed for Atka mackerel (42%), flatfish (21%), and Pacific cod (18%). Pollock ex-vessel prices showed little change, fallling 2.9% in the Bering Sea and Aleutian Islands (BSAI), and rising 4.5% in the Gulf of Alaska (GOA), and after recent declines prices remain fairly low (Tables 11 and 27). Among the other species that are the focus of the shoreside ex-vessel fisheries: The GOA arrowtooth ex-vessel price rose 27%, GOA Pacific ocean perch prices fell 4%, GOA sablefish prices rose 16%. For Alaska FMP groundfish in aggregate the change in catch was small relative to the change in price, which was the larger factor in determining the increase in ex-vessel value (Figures 5.6 and 5.10). For other fisheries in Alaska, salmon and halibut ex-vessel revenues increase, while shellfish revenue decreased (Table 3).

The gross value of the 2017 groundfish catch after primary processing (first wholesale) was \$2.52 billion (Table 4), a increase of 4.1% in real terms from 2016. This change was primarily the result of an increase in the real aggregate 2017 first-wholesale price, up 5.6% to \$1.2 per pound while aggregate production volumes decreased 1.4% to 959 thousand mt (Table 4). In the BSAI, aggregate first-wholesale value increased 7.1% and value was increasing for all species with the exception of pollock where aggregate value, price, and volume showed little change (Table 15). In the Gulf of Alaska, aggregate first-wholesale value increased only slightly (0.46%) (Table 31). First-wholesale value in the GOA was increasing for flatfish and sablefish with increases in both first-wholesale prices and production volume. The decrease in GOA cod value was the result of decreased production volume. The decrease in the value of GOA pollock was largely the result of a decrease in the average price of products.

The first-wholesale value of Alaska's FMP groundfish fisheries accounted for 52% of Alaska's total first-wholesale value from commercial fisheries (Table 4). First-wholesale value of Alaska's non-FMP groundfish fisheries totaled \$2.34 billion, most of which (\$1.9 billion) came from Pacific salmon. Pacific salmon value increased 47% as a result of the typical increase in salmon production that happens in odd years. Pacific halibut fisheries, which are concentrated in the Gulf of Alaska, saw a

¹The 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.

decrease in production in 2017 after steady declines over the last decade. First-wholesale value in the Pacific halibut fisheries decreased \$3.7 million to \$137 million in 2017.

The groundfish fisheries off Alaska are an important segment of the U.S. fishing industry. In 2016, 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, 2016). Alaska fisheries as a whole (including salmon, halibut, herring, and shellfish) accounted for 58% of the weight of total U.S. domestic landings and 33% 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 2017 crew weeks for both sectors totaled 128,686 with the majority of them (107,716) occurring in the BSAI groundfish fishery (Tables 23, 39, 24, and 40). In the BSAI, the months with the highest employment correspond with peak of the pollock seasons in February-March and July-September. In the Gulf of Alaska, crew weeks peak February-May with the catcher vessel hook and line fisheries targeting sablefish and Pacific cod. Relative to 2016, annual crew weeks in Alaska decreased in 2017 by 1.3%, in part, as a result of a drop in catcher vessel crew weeks in the GOA.

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).² 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 a higher share of their revenues come from high-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 2017.

Alaska pollock

Alaska pollock, the dominant species in terms of catch, accounted for 69% of FMP groundfish retained harvest. 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 revenues. Pollock is targeted exclusively with trawl gear. Pollock catches increased throughout Alaska's regions and sectors and catch levels in both the BSAI and GOA were at the highest level seen in recent history. Retained catch of pollock for all Alaska increased 1% to 1.5 million mt in 2017 (Table 2). This was the combined effect of a 0.51% increase in the BSAI retained catch and a 4.7% increase in the GOA. The ex-vessel value of the BSAI pollock fishery decreased 5.9% to \$352 million despite the increase in retained catch as ex-vessel prices fell 6.3% to \$0.12 per pound (Table 12). A decrease in the price of fillet products was likely a contributing factor in the ex-vessel price decrease. The ex-vessel value of the GOA pollock fishery increased 9.5% to \$36 million as ex-vessel prices rose 4.8% to \$0.088 per pound (Table 28).

²An 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.

Pollock is an abundant whitefish with extensive global markets and is harvested at or very near the Total Allowable Catch (TAC). Hence changes in pollock 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. Pollock first-wholesale value in the BSAI increased 0.3% to \$1.36 billion as the average at-sea first-wholesale price rose 6.3% to \$1.34 and the average shoreside price fell 4% to \$0.97 (Tables 15 and 16). In the GOA first-wholesale value decreased 12% to \$92.7 million as the average first-wholesale price fell 16% to \$0.54 (Tables 31 and 32). Wholesale pollock prices can 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 85.1% in the BSAI and 54.2% in the GOA (GOA processors produce a greater share of H&G products). In the BSAI at-sea sector prices were decreasing for most product forms except for roe and surimi and the increase in first-wholesale value was largely attributable to the increased price and production of surimi. In the BSAI shoreside sector prices were decreasing for most product forms except for roe (notably the surimi price decreased as well) which largely accounted for the decrease in first-wholesale value. Similarly, decreases in all product prices except for roe offset the increased production in the GOA resulting in a decrease in value. First-wholesale value in the pollock fishery remains above the 10 year average, though not at the peak in 2012 when prices were higher.

Pacific cod

The fisheries for Pacific cod are the second largest by volume in Alaska with a retained catch of 298 thousand mt in 2017, a decrease of 7.1% from 2016 (Table 2). 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, although fleets such as Amendment 80 also harvest Pacific cod in the BSAI at-sea sector. 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 typically harvested at or very near the TAC. There was a prominent decrease in the GOA retained catch of 24% to 48 thousand mt as poor fishing conditions from low abundance resulted in roughly 75% of the TAC being harvested. The GOA Pacific cod TAC for 2018 was reduce approximately 80% as the level of the stock remains low following adverse environmental conditions and poor recruitment. In the BSAI catch levels of Pacific cod decreased 3% to 250 thousand mt, however catches remained strong relative to the TAC and were above their ten year average.

In the BSAI ex-vessel value of the Pacific cod fishery increased 14% to \$178 million as ex-vessel prices rose 17% to \$0.32 per pound (Tables 11 and 12). In the GOA, the decrease in catch resulted in a 14% decrease in ex-vessel value to \$35 million despite an ex-vessel price rise of 14% to \$0.33 per pound (Tables 28 and 27). The increase in ex-vessel prices in 2017 value mirrored similar increases the first-wholesale prices as global supplies of cod have become more constrained.

Pacific cod first-wholesale value in the BSAI increased 12.9% to \$436.8 million with increased value in both the at-sea and shoreside sectors as the average at-sea first-wholesale price rose 20% to \$1.57 and the average shoreside price rose 19% to \$1.91 with rising prices for fillet and H&G products (Tables 15 and 16).

Pacific cod is processed into a number of different product forms for wholesale markets, the two most important of which are fillets and H&G. The at-sea sector produces mostly H&G products and the shoreside sector produces fillets, H&G, and other product forms. Cod products face staunch competition in global markets which is also supplied by sizable catches from the Barents Sea. In the GOA the first-wholesale price for cod fillets fell 11% while H&G prices increased 30% helping to buttress the reduction in value in the GOA from reduced catch. In the BSAI first-wholesale prices increased for fillets and H&G. Strong demand and continued constraints on supply in 2017 and 2018 have put upward pressure on 2017 cod prices, particularly starting in late 2017.

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, however in 2016 this trend started to reverse. In 2017 sablefish retained catch increased 17% to 11.5 thousand mt (Table 2).

In the GOA retained catch increased 11% to 10 thousand mt. Sablefish ex-vessel value in the GOA increased 29% to \$115 million with increases in both catch and ex-vessel price which rose 16% to \$5.2 million (Tables 27 and 28). Ex-vessel value in the BSAI increased as well with an increase in retained catch even though prices fell (Tables 11 and 12). Persistent declines in catch through recent years may have been disruptive to revenue growth in the sablefish fishery, but strong prices have maintained value in the fishery as catches have declined. In 2017 ex-vessel prices increased with corresponding wholesale prices where strong demand and depleted inventories have pushed up prices.

Sablefish first-wholesale value in the GOA increased 20.7% to \$111.5 million as the average first-wholesale price rose 14% to \$8.97. In the BSAI first-wholesale value increased 55.7% to \$12.3 million with increased value in the shoreside sectors as production increased with catch but the average at-sea first-wholesale price fell 9.1% to \$6.96 (Tables 15 and 16). At the first-wholesale market level sablefish is primarily processed into the head and gut product form. Most sablefish produced is exported and Japan is the primary export market, but in recent years there has been strong demand for sablefish in the U.S. and foreign demand outside of Japan, including Europe, China and Southeast Asia. U.S. exports as a share of U.S. production has declined over time indicating increased domestic consumption.

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. In the BSAI the yellowfin sole fishery is the largest of the flatfish fisheries. In the BSAI retained catch across all species increased 6%, to 199 thousand mt. Decreased catch occured for yellowfin sole (2%), rock sole (22%), flathead sole (10%), arrowtooth (38%), and Kamchatka flounder (8%), while catch increased for Greenland turbot (26%) and other flatfish (25%). Catches in 2017 were comparable to the average catch level since 2003. Decreases in the BSAI flatfish catch may be

associated with increases in the Atka mackerel TAC and catch as Amendment 80 vessels prioritize the more highly valued Atka mackerel over 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 retained catch for all flatfish species increased 18%. This change was the result of a 40% increase in arrowtooth catch, with catches of other flatfish species in the GOA decreasing. Arrowtooth, the largest flatfish fishery in the GOA, can show considerable year over year catch variability, in part because of regulatory changes.³ However, 2017 catches were above 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 South Korea, though a significant share of this product is re-processed into fillets and re-exported to North American and European markets. First-wholesale value in the BSAI flatfish fisheries increased 15% with a 22% increase in price. Yellowfin sole value rose 18% with a 19% increase in price. Increasing prices for other species in the BSAI flatfish fisheries resulted in increasing value despite decreases in production from reduced catch. First-wholesale value in the GOA flatfish fisheries increased 71% with a 24% increase in price. Arrowtooth value rose 139% with a 40% increase in price. Demand for flatfish in general through 2017 and 2018 has remained stable throughout European and North American markets and there are signs of growth in Asian markets. The strong demand and low inventories that have put upward pressure on flatfish prices.

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 retained catch in the BSAI increased 0.3% to 35.5 thousand mt with all species showing small increases in catch (Table 9). Rockfish retained catch in the GOA fell 12.4% to 27 thousand mt with a small decrease in Pacific ocean perch and moderate decreases for other rockfish species (Table 25). The decrease in GOA catch was concentrated in the shoreside sector. GOA ex-vessel prices fell 1% and ex-vessel value fell 13% (Tables 27 and 28).

First-wholesale value in the BSAI increased 21% to \$42 million with a 22% increase in prices and stable production volumes. These changes were the result of price increases for both Pacific

³In 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).

⁴Because BSAI flatfish are primarily targeted by catcher/processor vessels there is not an substantive ex-vessel market for them.

ocean perch (23%) and northern rockfish (18%). First-wholesale value in the GOA decreased 6% to 35\$ million with a 17% increase in prices as production volumes fell correspondingly with the decrease in catch. These changes were the result of the reduction in production volume associtated with the decreased catch and which was offset by increases in prices for Pacific ocean perch (19%) and dusky rockfish (14%). The majority of rockfish produced are exported, primarily to Asian markets, some of which is re-processed (e.g., as fillets) and re-exported to domestic and international markets.

Atka Mackerel

Atka mackerel is predominantly caught in the BSAI, primarily in the Aleutian Islands, and almost exclusively by the Amendment 80 Fleet.⁵ The catch of Atka mackerel in 2017 increased 18% to 66 thousand t. This level of catch is the highest since 2010 after significant reductions in the TAC in 2013 and 2014. 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.

First-wholesale value in 2017 increased 67% to \$125 million with a 35% increase in prices and increased production volumes corresponding to the increase in catch. Approximately 95% 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 where it undergoes secondary processing into products like surimi, salted-and-split and other consumable product forms. Foreign demand for Atka mackerel as an input to secondary surimi processing abroad has been strong as catch from other sources such Japan has been declining inrecent years.

⁵Because 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, 2017

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, discards, 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. 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. 2017) 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 in 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

¹F.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 Alaska's 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 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; 6) maintaining sustainable fisheries and fishing communities that allow for new entrants into the fisheries; and 7) the response of the fisheries and ecosystem to climatic trends.

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 discards. The North Pacific 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 the lat 1980s. Observer data are collected by NMFS-trained 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), which is used directly in managing fisheries.

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. 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 the sum of retained and discarded catch. In addition, the FMPs describe policy for setting bycatch 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).

In the CAS, at-sea sample and census 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. 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 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 updated every three years based on the estimated condition of halibut sampled by observers (Williams 2012). These rates are applied to the total estimated halibut discards (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). Tables 9 and 25 provide additional information for the BSAI and GOA, respectively, with aggregation of gear types and species specific catch data for flatfish and rockfish. Tables 10 and 26 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 vellowfin 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 5 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 2013-2017.

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 2013-2017 are summarized by area and gear in Table 6.

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.² 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 (COAR) 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

 $^{^2}$ These rules for salmon by catch management were put in place through Amendment 91 to the BSAI FMP. For details see https://www.federalregister.gov/documents/2010/08/30/2010-20618/fisheries-of-the-exclusive-economic-zone-off-alaska-chinook-salmon-by catch-management-in-the-bering

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.

Tables 3 contains data on the real ex-vessel catch of groundfish and non-groundfish species in Alaska, adjusted to 2017 dollars by applying the Personal Consumption Expenditure Index (https://research.stlouisfed.org/fred2/series/PCEPI) to account for effects of inflation on fishermen's revenue. Table 7 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, 73% of the 2017 ex-vessel value was accounted for by vessels with primary owners who indicated that they were not residents of Alaska.

Tables 11 and 27 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 12 and 28 for the BSAI and GOA, respectively. Table 13 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 13 provides these same data for the GOA.

2.2.3 First Wholesale Production, Prices and Value

The first wholesale market as the first sale of fisheries products after initial processing by a commercial processor with a Federal Processor Permit (FPP). 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 4 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 14 for the BSAI and Table 30 for the GOA. First-wholesale value (gross revenue) is presented in Tables 15 and 31 for the BSAI and

³An FPP is required for all processors receiving and/or processing groundfish harvested in Federal waters.

GOA, respectively. Product price-per-pound estimates are presented in Tables 16 and 32, and estimates of total first wholesale product value per round metric ton of retained catch are reported in Table 17 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 18 and 34 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 by area, vessel type, and target are shown in Tables 8. 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 19 and 35.

Tables 21 and 37 provide estimates of vessel weeks for catcher vessels in the BSAI and GOA, respectively, stratified by length class, area, gear, and target fishery. Tables 22 and 38 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 23 and 39, in the BSAI and GOA, respectively. At-sea production reports provide these information for motherships and catcher/processors shown in Tables 24 and 40 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. Under the authority of NMFS, the NPFMC allocates the halibut resource among the user groups (commercial,

⁴www.iphc.int/home.html.

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.⁵ 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 4: "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 10, 26: "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 6: "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.
- TABLE 14, 15, 16, 30, 31, 32: "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 17, 33: "Other" species are primarily skate, squid, octopus, shark, and sculpin.

 $^{^5}$ http://www.adfg.alaska.gov/index.cfm?adfg=halibut.management.

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 11, 12 14, 14, 16, 27, 28 30, 30, and 32. 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 estimates reported in Tables 3. 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 first wholesale value estimates reported in Tables 4. 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 Tables 54-56 of this report, are available in Fisheries of the United States (FUS), published annually by the NMFS Office of Science & Technology. The 2017 FUS is available at: https://www.st.nmfs.noaa.gov/commercial-fisheries/fus/index.
- 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.
- 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. Please contact Ben Fissel at Ben.Fissel@noaa.gov with any comments or suggestions to improve the Economic SAFEs.

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2.5. Acknowledgements

ESSRP wishes to thank the Alaska Fisheries Information Network (AKFIN) for database programming and data management services to support production of the Economic SAFE. Other parties who provided assistance or feedback in the assembly of this report or earlier versions include: Terry Hiatt, Ren Narita, Camille Kohler, Mike Fey (AKFIN); Jennifer Mondragon (NMFS Alaska Region Office, Sustainable Fisheries Division), Mary Furuness (NMFS Alaska Region Office, Sustainable Fisheries Division).

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

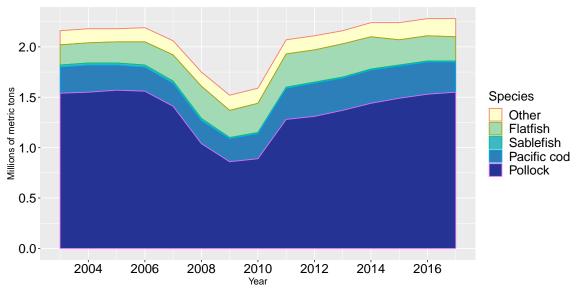


Figure 3.1: Groundfish catch in the commercial fisheries off Alaska by species, 2003-2017.

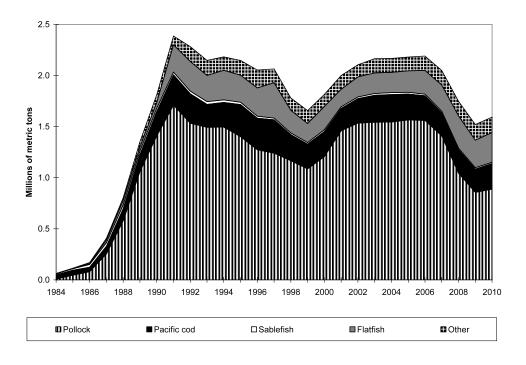


Figure 3.2: Groundfish catch in the commercial fisheries off Alaska by species, (1984-2010). **Notes:** Catch for 2011 and onward are displayed in Figure 3.1.

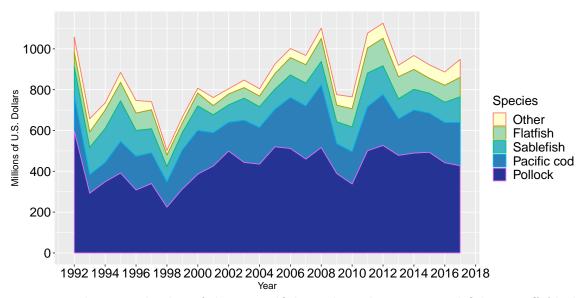


Figure 3.3: Real ex-vessel value of the groundfish catch in the commercial fisheries off Alaska by species, 1992-2017 (base year = 2017).

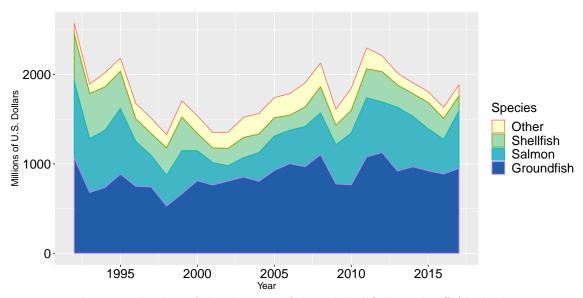


Figure 3.4: Real ex-vessel value of the domestic fish and shellfish catch off Alaska by species group, 1992-2017 (base year = 2017).

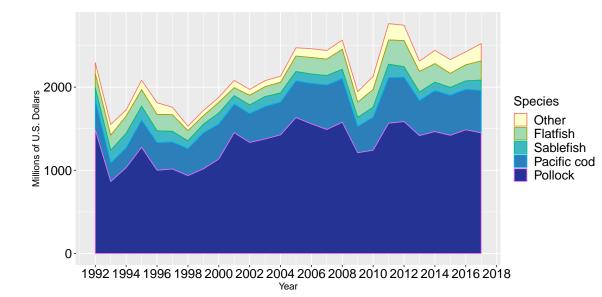


Figure 3.5: Real gross product value of the groundfish catch off Alaska by species, 1992-2017 (base year = 2017).

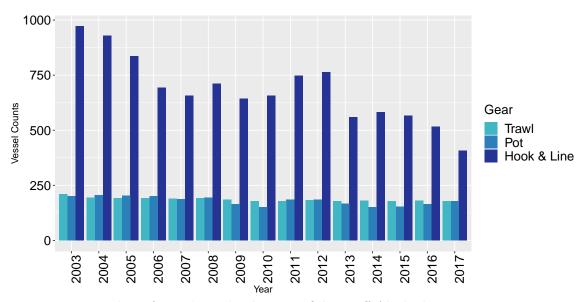


Figure 3.6: Number of vessels in the domestic fishery off Alaska by gear type, 2003-2017.

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

Table 1: Groundfish catch in the commercial fisheries off Alaska by area and species, 2008-2017 (1,000 metric tons, round weight).

	Year	Pollock	Sablefish	Pacific Cod	Flatfish	Rockfish	Atka Mackerel	Total
	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
	2010	811.6	1.8	171.9	253.3	23.5	68.6	1,354.6
Bering Sea and	2011	1,200.4	1.7	220.1	285.9	28.2	51.8	$1,\!818.5$
	2012	1,206.3	1.9	251.0	291.2	28.1	47.8	1,857.9
Aleutian	2013	1,273.8	1.7	250.2	297.2	34.9	23.2	1,914.5
Islands	2014	1,300.2	1.1	249.3	276.0	36.1	31.0	1,928.5
	2015	1,323.2	0.6	242.1	219.2	39.6	53.3	1,914.2
	2016	1,354.9	0.9	260.9	225.2	36.9	54.5	1,969.4
	2017	1,361.0	1.7	253.0	211.1	38.4	64.4	1,969.4
	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	185.6
	2010	76.7	11.0	78.3	37.7	25.5	2.4	238.8
	2011	81.5	12.0	85.3	41.1	23.1	1.6	251.9
Gulf of	2012	104.0	12.7	77.9	29.5	27.4	1.2	258.8
Alaska	2013	96.4	12.8	68.6	33.9	24.9	1.3	250.2
	2014	142.6	11.1	84.8	47.6	28.9	1.0	326.2
	2015	167.6	11.1	79.5	26.7	29.0	1.2	324.6
	2016	177.1	10.0	64.1	28.1	34.0	1.1	324.3
	2017	186.2	11.3	48.7	33.3	31.8	1.1	321.1
	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	12.8	250.2	291.0	49.0	71.1	1,593.3
	2011	1,281.9	13.8	305.4	327.0	51.3	53.4	2,070.3
All	2012	1,310.2	14.7	328.9	320.7	55.5	49.0	$2,\!116.7$
Alaska	2013	$1,\!370.2$	14.5	318.8	331.1	59.9	24.5	$2,\!164.7$
	2014	1,442.9	12.3	334.2	323.6	64.9	32.0	$2,\!254.7$
	2015	1,490.8	11.7	321.5	245.9	68.7	54.5	$2,\!238.8$
	2016	$1,\!532.1$	10.9	325.0	253.3	70.9	55.6	$2,\!293.7$
	2017	1,547.1	13.0	301.8	244.4	70.2	65.5	$2,\!290.5$

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.

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Table 2: Groundfish retained catch off Alaska by area, sector, and species, 2013-2017 (1,000 metric tons, round weight).

		_	a and Aleutia	an						
		I	slands		Gulf of Alaska			All Alaska		
	Year	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total
	2013	660.83	606.22	1,267.05	92.76	1.04	93.80	753.59	607.25	1,360.85
	2014	668.49	616.20	$1,\!284.69$	139.45	1.52	140.97	807.94	617.72	$1,\!425.66$
Pollock	2015	687.14	626.45	$1,\!313.59$	165.08	1.08	166.16	852.22	627.53	$1,\!479.75$
	2016	703.95	641.77	$1,\!345.71$	175.49	0.57	176.06	879.44	642.33	$1,\!521.77$
	2017	710.38	642.24	$1,\!352.61$	183.26	1.07	184.33	893.64	643.31	$1,\!536.94$
	2013	1.01	0.65	1.65	10.95	1.08	12.03	11.96	1.73	13.68
	2014	0.84	0.26	1.09	9.55	0.96	10.51	10.39	1.21	11.61
Sablefish	2015	0.48	0.14	0.62	9.23	0.94	10.17	9.71	1.08	10.79
	2016	0.40	0.39	0.79	8.28	0.78	9.06	8.68	1.17	9.85
	2017	0.69	0.76	1.45	9.05	1.02	10.08	9.74	1.79	11.52
	2013	71.12	172.39	243.51	59.05	4.73	63.78	130.17	177.12	307.30
	2014	79.00	165.39	244.38	72.27	7.15	79.43	151.27	172.54	323.81
Pacific Cod	2015	68.34	170.58	238.92	71.06	6.36	77.41	139.40	176.93	316.33
	2016	85.95	171.64	257.59	57.87	5.20	63.08	143.82	176.84	320.66
	2017	87.74	162.08	249.82	41.84	6.10	47.93	129.57	168.18	297.75
	2013	2.47	255.93	258.40	17.45	8.53	25.99	19.92	264.46	284.39
	2014	3.23	247.78	251.00	17.71	22.89	40.60	20.93	270.67	291.60
Flatfish	2015	11.79	195.96	207.74	11.05	10.51	21.56	22.84	206.47	229.31
	2016	14.63	196.76	211.39	17.71	5.85	23.56	32.34	202.61	234.95
	2017	21.13	177.44	198.58	14.50	14.79	29.29	35.64	192.23	227.87

Continued on next page.

Table 2: Continued

	Bering Sea and Aleutian Islands			an	Gulf	of Alaska		All Alaska		
	Year	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total
	2013	0.27	31.43	31.70	10.66	11.35	22.01	10.93	42.78	53.71
	2014	0.46	31.85	32.31	11.80	14.00	25.79	12.25	45.85	58.10
Rockfish	2015	3.11	34.40	37.52	12.28	14.41	26.69	15.39	48.82	64.21
	2016	2.54	32.79	35.33	15.12	15.64	30.75	17.65	48.43	66.08
	2017	2.52	32.97	35.49	11.28	15.61	26.89	13.80	48.58	62.38
	2013	0.06	20.75	20.81	0	0.77	0.77	0.06	21.52	21.59
	2014	0.10	27.77	27.87	0.01	0.92	0.92	0.11	28.69	28.79
Atka Mack	erel2015	3.21	49.26	52.47	0.03	0.84	0.87	3.25	50.10	53.34
	2016	3.68	50.38	54.06	0.35	0.39	0.75	4.04	50.77	54.81
	2017	4.57	59.48	64.05	0.13	0.52	0.65	4.70	60.00	64.70
	2013	736.13	1,095.03	1,831.16	193.60	27.68	221.28	929.73	1,122.71	2,052.44
	2014	753.02	1,097.43	1,850.45	252.70	47.66	300.36	1,005.72	1,145.10	2,150.82
All Ground	lfish2015	775.67	1,084.56	1,860.22	270.61	34.36	304.98	1,046.28	1,118.92	2,165.20
	2016	811.59	1,100.54	1,912.13	276.29	28.63	304.93	1,087.89	1,129.17	2,217.06
	2017	827.92	1,084.35	1,912.27	261.05	39.39	300.44	1,088.97	1,123.74	2,212.71

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 3: Catch and real ex-vessel value of the commercial fisheries off Alaska by species group and area, 2013-2017; calculations based on COAR (1,000 metric tons and \$ millions, base year = 2017).

		Bering Sea and Aleutian Islands		Gulf of A	laska	All Alaska		
	Species.group	Quantity	Value	Quantity	Value	Quantity	Value	
	Groundfish	1,851.3	\$ 729.6	223.4	\$ 189.8	2,074.6	\$ 919.4	
	Salmon	52.0	\$ 173.6	406.2	\$ 583.9	458.3	\$ 757.5	
	Halibut	1.8	\$ 17.5	8.6	\$ 100.3	10.4	\$ 117.8	
2013	Herring	27.8	\$ 5.5	9.0	\$ 11.6	36.8	\$ 17.1	
	Shellfish	39.2	\$ 259.5	3.6	\$ 33.0	42.8	\$ 292.5	
	Other	-	\$ -	1.2	\$ 7.8	1.2	\$ 7.8	
	All Species	1,972.1	\$ 1,185.6	652.1	\$ 926.3	2,624.2	\$ 2,112.0	
	Groundfish	1,864.4	\$ 752.3	303.7	\$ 215.1	$2,\!168.1$	\$ 967.4	
	Salmon	88.2	\$ 253.0	219.4	\$ 348.7	307.6	\$ 601.7	
	Halibut	1.3	\$ 16.3	6.5	\$ 92.5	7.9	\$ 108.8	
2014	Herring	24.7	\$ 1.9	18.4	\$ 9.8	43.1	\$ 11.7	
	Shellfish	36.5	\$ 252.9	4.3	\$ 35.8	40.8	\$ 288.7	
	Other	-	\$ -	1.1	\$ 5.8	1.1	\$ 5.8	
	All Species	2,015.1	\$ 1,276.4	553.4	\$ 707.7	2,568.6	\$ 1,984.1	
	Groundfish	1,860.3	\$ 708.9	308.0	\$ 212.9	$2,\!168.4$	\$ 921.8	
	Salmon	102.8	\$ 146.7	368.1	\$ 320.7	470.9	\$ 467.4	
2015	Halibut	1.4	\$ 18.2	6.8	\$ 97.1	8.2	\$ 115.3	
2015	Herring	21.3	\$ 1.9	9.4	\$ 5.2	30.7	\$ 7.1	
	Shellfish	41.6	\$ 269.8	3.6	\$ 25.4	45.2	\$ 295.2	
	Other	-	\$ -	1.3	\$ 6.9	1.3	\$ 6.9	
	All Species	2,027.4	\$ 1,145.6	697.3	\$ 668.1	2,724.7	\$ 1,813.7	
	Groundfish	1,912.3	\$ 694.4	307.6	\$ 192.1	2,219.9	\$ 886.5	
	Salmon	110.1	\$ 222.6	134.6	\$ 233.7	244.8	\$ 456.3	
0010	Halibut	1.5	\$ 19.9	6.9	\$ 101.1	8.4	\$ 121.0	
2016	Herring	13.8	\$ 1.8	9.6	\$ 4.8	23.3	\$ 6.6	
	Shellfish	29.2	\$ 250.7 \$ -	3.1	\$ 23.6	32.3	\$ 274.2	
	Other	- 2.066.0		1.2	\$ 7.0	1.2	\$ 7.0	
	All Species	2,066.9	\$ 1,189.3	462.9	\$ 562.3	2,529.8	\$ 1,751.7	
	Groundfish	1,912.7	\$ 739.5	301.8	\$ 209.0	2,214.6	\$ 948.6	
	Salmon	115.4	\$ 244.2	330.0	\$ 399.7	445.4	\$ 643.9	
001=	Halibut	1.7	\$ 18.5	7.7	\$ 97.6	9.4	\$ 116.2	
2017	Herring	17.6	\$ 2.3	13.3	\$ 5.6	30.9	\$ 7.9	
	Shellfish	16.0	\$ 141.6	2.8	\$ 24.2	18.8	\$ 165.8	
	Other	- 0.000 /	\$ -	1.0	\$ 7.8	1.0	\$ 7.8	
	All Species	2,063.4	\$ 1,146.2	656.6	\$ 744.0	2,720.0	\$ 1,890.2	

Notes: These estimates include the value of catch from both federal and state of Alaska fisheries. The data have been adjusted to 2017 dollars by applying the Personal Consumption Expenditure Index at https://research.stlouisfed.org/fred2/series/PCEPI 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 4: Production and real gross value of groundfish and non-groundfish products in the commercial fisheries off Alaska by species group and area of processing, 2013-2017 (1,000 metric tons product weight and $\$ millions, base year = 2017).

		Bering S Aleutian		Gulf of A	Alaska	All Al	aska
	Species	Quantity	Value	Quantity	Value	Quantity	Value
	Groundfish	818.2	\$ 1,963.2	99.4	\$ 349.2	917.5	\$ 2,312.4
	Salmon	34.7	\$ 374.1	290.3	\$ 1,539.0	325.1	\$ 1,913.1
	Halibut	1.4	\$ 18.6	7.5	\$ 120.7	8.9	\$ 139.3
2013	Herring	25.5	\$ 26.5	11.6	\$ 23.3	37.1	\$ 49.8
	Crab	24.7	\$ 345.7	3.0	\$ 47.3	27.7	\$ 393.0
	Other	0	\$ 0.8	1.3	\$ 27.1	1.3	\$ 27.9
	All Species	904.6	\$ 2,728.9	413.0	\$ 2,106.6	1,317.6	\$ 4,835.5
	Groundfish	843.8	\$ 2,038.2	131.1	\$ 403.8	974.9	\$ 2,442.0
	Salmon	58.1	\$ 468.3	176.8	\$ 996.6	234.9	\$ 1,465.0
	Halibut	0.6	\$ 9.2	5.5	\$ 105.2	6.2	\$ 114.4
2014	Herring	19.5	\$ 17.5	20.4	\$ 25.3	39.9	\$ 42.8
	Crab	23.2	\$ 336.9	3.8	\$ 60.6	27.0	\$ 397.5
	Other	0	\$ 0.5	1.2	\$ 19.7	1.2	\$ 20.2
	All Species	945.2	\$ 2,870.6	338.9	\$ 1,611.3	1,284.1	\$ 4,481.9
	Groundfish	819.0	\$ 1,969.8	126.0	\$ 361.0	945.0	\$ 2,330.9
	Salmon	70.9	\$ 432.3	270.8	\$ 1,067.2	341.7	\$ 1,499.5
	Halibut	3.4	\$ 22.2	6.1	\$ 115.6	9.5	\$ 137.8
2015	Herring	17.7	\$ 19.1	10.1	\$ 12.2	27.8	\$ 31.4
	Crab	25.4	\$ 331.3	3.9	\$ 58.2	29.4	\$ 389.5
	Other	0	\$ 0.5	1.0	\$ 18.1	1.0	\$ 18.6
	All Species	936.5	\$ 2,775.3	418.0	\$ 1,632.4	1,354.4	\$ 4,407.7
	Ground fish	838.2	\$ 2,064.4	134.9	\$ 360.3	973.1	\$ 2,424.8
	Salmon	73.6	\$ 531.1	130.3	\$ 757.3	204.0	\$ 1,288.4
	Halibut	2.4	\$ 31.7	5.8	\$ 109.9	8.2	\$ 141.6
2016	Herring	10.2	\$ 15.6	10.7	\$ 13.3	20.9	\$ 29.0
	Crab	18.0	\$ 306.6	3.9	\$ 63.0	22.0	\$ 369.6
	Other	0	\$ 0.3	1.1	\$ 20.7	1.1	\$ 21.0
	All Species	942.5	\$ 2,949.7	286.7	\$ 1,324.5	1,229.2	\$ 4,274.3
	Groundfish	822.3	2,168.5	136.8	\$ 355.7	959.1	\$ 2,524.2
	Salmon	74.6	\$ 608.6	258.0	\$ 1,282.8	332.6	\$ 1,891.3
	Halibut	1.2	\$ 22.5	6.3	\$ 114.1	7.5	\$ 136.6
2017	Herring	16.9	\$ 14.6	14.2	\$ 13.4	31.1	\$ 28.0
	Crab	11.4	\$ 223.0	1.7	\$ 29.2	13.2	\$ 252.2
	Other	*	\$ *	2.1	\$ 32.2	2.1	\$ 32.2
	All Species	926.4	\$ 3,037.2	419.1	\$ 1,827.4	1,345.5	\$ 4,864.6

Notes: These estimates include production resulting from catch in both federal and state of Alaska fisheries. The data have been adjusted to 2017 dollars by applying the GDP: chain-type price index at https://research.stlouisfed.org/fred2/series/GDPCTPI. 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 5: Discards and discard rates for groundfish catch off Alaska by gear, and species, 2013-2017 (1,000 metric tons, round weight).

		Fixe	ed	Trav	vl	All G	All Gear		
	3.7	Total	Discard	Total	Discard	Total	Discard		
	Year	Discards	Rate	Discards	Rate	Discards	Rate		
	2013	0.7	13	7.3	1	7.9	1		
	2014	0.7	11	15.3	1	16.0	1		
Pollock	2015	0.8	10	10.2	1	10.9	1		
	2016	0.8	12	9.4	1	10.2	1		
	2017	0.8	11	9.3	1	10.1	1		
	2013	0.8	6	0	5	0.8	6		
	2014	0.5	5	0.1	8	0.6	5		
Sablefish		0.7	6	0.2	17	0.9	7		
	2016	0.9	9	0.2	14	1.0	10		
	2017	0.8	7	0.6	28	1.4	11		
	2013	5.9	3	3.8	3	9.8	3		
Pacific	2014	5.0	2	4.2	4	9.1	3		
Cod	2015	3.6	2	1.2	1	4.9	2		
Cou	2016	3.6	2	0.6	1	4.2	1		
	2017	2.9	1	1.1	1	3.9	1		
	2013	3.5	82	28.3	9	31.8	10		
	2014	3.9	82	18.6	6	22.5	7		
Flatfish	2015	3.8	76	10.3	4	14.1	6		
	2016	3.1	76	12.9	5	16.1	6		
	2017	2.9	70	12.1	5	15.1	6		
	2013	1.4	50	2.7	5	4.0	7		
	2014	1.0	46	3.5	6	4.5	7		
Rockfish	2015	0.9	42	3.4	5	4.3	6		
	2016	0.8	42	3.8	6	4.7	7		
	2017	0.9	46	6.7	10	7.6	11		
	2013	0	93	1.1	5	1.1	5		
Atka	2014	0	96	0.4	1	0.5	1		
Mackerel	2015	0	100	1.1	2	1.1	2		
Mackerer	2016	0	97	0.5	1	0.6	1		
	2017	0	70	0.7	1	0.8	1		
	2013	36.6	13	53.3	3	90.0	4		
All	2014	35.9	12	50.7	3	86.6	4		
Groundfi	2015	36.3	12	34.2	2	70.4	3		
Groundfi	2016	38.6	13	35.2	2	73.8	3		
	2017	36.6	13	39.1	2	75.8	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 6: Prohibited species catch (PSC) by species, area and gear, 2013-2017 (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)
		2013	538	0	*	-	107	2	247	33
		2014	456	-	0	-	145	5	593	105
	Fixed	2015	326	0	0	0	182	32	633	138
		2016	225	*	0	0	27	16	315	43
		2017	193	0	0	0	35	77	357	168
Bering		2013	3,080	988	16	127	32	32	714	692
Sea and		2014	3,029	186	18	224	33	24	624	484
Aleutian	Trawl	2015	1,999	1,531	25	243	25	15	424	492
Islands		2016	1,910	1,494	33	347	41	15	221	167
		2017	1,179	1,023	36	471	60	11	353	160
		2013	3,618	988	16	127	140	35	961	725
		2014	3,485	186	18	224	178	29	1,217	590
	All Gear	2015	2,324	1,531	25	243	207	48	1,057	630
		2016	2,135	1,494	33	347	68	31	536	210
		2017	1,373	1,023	36	471	95	88	710	327
		2013	15	-	-	-	0	0	570	_
		2014	11	-	_	-	_	0	133	0
	Fixed	2015	22	-	-	-	0	0	128	-
		2016	44	-	_	-	0	0	63	0
		2017	15	-	-	-	-	0	4	0
		2013	1,230	11	23	5	-	0	255	_
Gulf of		2014	1,395	6	16	2	-	0	64	-
Alaska	Trawl	2015	1,411	80	19	1		0	76	-
		2016	1,333	148	22	3		1	92	0
		2017	1,215	6	25	6	-	0	124	-
		2013	1,245	11	23	5	0	0	824	_
		2014	1,405	6	16	2	-	0	198	0
	All Gear	2015	1,433	80	19	1	0	0	204	-
		2016	1,377	148	22	3	0	1	155	0
		2017	1,230	6	25	6	-	0	129	0

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 7: Percentage of ex-vessel value of the groundfish catch off Alaska by area, residency, and species, 2013-2017; calculations based on COAR.

		Bering Sea and Aleutian Islands		Gulf of Al	aska	All Alaska	
	Year	Alaska	Other	Alaska	Other	Alaska	Other
	2013	0.18 %	0.82 %	0.34 %	0.66 %	0.19 %	0.81 %
Pollock	2014	0.18~%	0.82~%	0.42~%	0.58~%	0.20~%	0.80~%
	2015	0.18~%	0.82~%	0.41~%	0.59~%	0.20~%	0.80 %
	2016	0.19~%	0.81~%	0.45~%	0.55~%	0.21~%	0.79~%
	2017	0.19~%	0.81~%	0.48~%	0.52~%	0.22~%	0.78~%
	2013	0.45 %	0.55 %	0.55 %	0.45 %	0.54 %	0.46 %
	2014	0.34~%	0.66~%	0.56~%	0.44~%	0.55~%	0.45~%
Sablefish	2015	0.36~%	0.64~%	0.56~%	0.44~%	0.55~%	0.45~%
	2016	0.32~%	0.68~%	0.59~%	0.41~%	0.58~%	0.42~%
	2017	0.37~%	0.63~%	0.61~%	0.39 %	0.59~%	0.41 %
	2013	0.24~%	0.76~%	0.68~%	0.32~%	0.34~%	0.66~%
	2014	0.26~%	0.74~%	0.72 %	0.28~%	0.37~%	0.63~%
Pacific Cod	2015	0.25~%	0.75~%	0.81~%	0.19~%	0.40~%	0.60 %
	2016	0.28~%	0.72~%	0.80 %	0.20~%	0.39~%	0.61~%
	2017	0.26~%	0.74~%	0.73 %	0.27~%	0.34~%	0.66 %
	2013	0.05~%	0.95~%	0.34~%	0.66~%	0.08~%	0.92~%
	2014	0.06 %	0.94~%	0.24~%	0.76 %	0.08~%	0.92~%
Flatfish	2015	0.06 %	0.94~%	0.32~%	0.68~%	0.09~%	0.91~%
	2016	0.05~%	0.95~%	0.48~%	0.52~%	0.08~%	0.92 %
	2017	0.06 %	0.94 %	0.41 %	0.59 %	0.09 %	0.91 %
Rockfish	2013	0.02~%	0.98~%	0.30~%	0.70~%	0.14~%	0.86~%
	2014	0 %	0.99~%	0.27~%	0.73~%	0.11~%	0.89 %
	2015	0.03~%	0.97~%	0.26~%	0.74~%	0.13~%	0.87~%
	2016	0.01~%	0.99~%	0.28~%	0.72~%	0.14~%	0.86 %
	2017	0.03 %	0.97 %	0.30 %	0.70 %	0.14 %	0.86 %
	2013	0 %	1.00~%	0.02~%	0.98~%	0 %	1.00~%
Atka	2014	0 %	1.00~%	0.04~%	0.96~%	0 %	1.00 %
Mackerel	2015	0 %	1.00 %	0.04~%	0.96~%	0 %	1.00 %
	2016	0 %	1.00~%	0.30 %	0.70 %	0 %	0.99~%
	2017	0 %	1.00 %	0.08 %	0.92 %	0 %	1.00 %
All Groundfish	2013	0.17 %	0.83 %	0.51 %	0.49 %	0.24 %	0.76 %
	2014	0.17 %	0.83 %	0.54~%	0.46~%	0.25~%	0.75 %
	2015	0.17~%	0.83~%	0.56~%	0.44~%	0.26~%	0.74~%
	2016	0.19~%	0.81~%	0.59~%	0.41~%	0.27~%	0.73~%
	2017	0.18~%	0.82~%	0.58~%	0.42~%	0.27~%	0.73~%

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.

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Table 8: Number of vessels that caught groundfish off Alaska by area, vessel category, gear, and target, 2013-2017.

		_	a and Aleutia slands	n	Gulf of Alaska			All Alaska		
	Year	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total
Pollock	2013	87	34	121	68	3	71	136	35	171
	2014	87	34	121	70	2	72	138	34	172
	2015	87	33	120	64	1	65	131	33	164
	2016	88	33	121	70	-	70	137	33	170
	2017	88	31	119	67	-	67	134	31	165
Sablefish	2013	21	8	29	282	7	289	294	13	307
	2014	17	6	23	277	7	284	287	11	298
	2015	16	3	19	272	7	279	281	9	290
	2016	17	6	23	270	5	275	278	10	288
	2017	14	6	20	265	5	270	272	9	281
Pacific Cod	2013	125	50	175	344	6	350	431	51	482
	2014	109	47	156	331	10	341	422	49	471
	2015	100	49	149	371	11	382	451	52	503
	2016	110	52	162	347	11	358	435	53	488
	2017	125	45	170	237	9	246	328	45	373
Flatfish	2013	5	31	36	31	5	36	36	32	68
	2014	4	31	35	27	6	33	31	32	63
	2015	6	28	34	16	5	21	22	29	51
	2016	9	30	39	26	5	31	35	31	66
	2017	9	26	35	19	4	23	27	27	54

Continued on next page.

Table 8: Continued

		_	and Aleutian ands	n	Gulf	of Alaska		All	l Alaska	
	Year	Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Proces- sors	Total	Catcher Vessels	Catcher Proces- sors	Total
	2013	1	19	20	172	13	185	173	22	195
	2014	4	19	23	173	9	182	177	21	198
Rockfish	2015	5	15	20	139	8	147	143	18	161
	2016	3	18	21	130	12	142	133	21	154
	2017	4	16	20	126	11	137	130	19	149
	2013	3	10	13	-	2	2	3	11	14
A +1	2014	3	8	11	_	-	_	3	8	11
Atka Mackere	2015	5	9	14	_	-	_	5	9	14
Mackere	2016	4	9	13	2	-	2	6	9	15
	2017	4	12	16	-	1	1	4	13	17
	2013	189	70	259	665	24	689	787	73	860
A 11	2014	173	68	241	672	24	696	796	72	868
All	2015	165	69	234	671	22	693	787	72	859
Targets	2016	170	71	241	628	26	654	744	73	817
	2017	178	68	246	523	22	545	641	70	711

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.

Table 9: Bering Sea & Aleutian Islands groundfish retained catch by vessel type, gear and species, 2013-2017 (1,000 metric tons, round weight).

		Ca	tcher Vess	els		Catc	her Proces	ssors			Total		
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	-	-	660.8	660.8	-	-	601.7	606.2	-	-	1,262.5	1,267.0
	2014	-	-	668.5	668.5	-	-	610.8	616.2	-	-	$1,\!279.3$	1,284.7
Pollock	2015	-	-	687.1	687.1	-	-	620.1	626.4	-	-	1,307.2	1,313.6
	2016	-	-	703.9	703.9	-	-	636.0	641.8	-	-	$1,\!339.9$	1,345.7
	2017	-	-	710.4	710.4	-	-	635.9	642.2	-	-	$1,\!346.2$	$1,\!352.6$
	2013	1.0	27.0	43.0	71.1	122.0	6.8	43.6	172.4	123.1	33.8	86.6	243.5
D:6 -	2014	2.2	34.8	42.0	79.0	122.4	7.6	35.4	165.4	124.6	42.4	77.4	244.4
Pacific	2015	0.8	29.9	37.7	68.3	127.9	8.0	34.7	170.5	128.7	37.8	72.4	238.9
Cod	2016	0	39.4	46.5	85.9	126.9	7.6	37.1	171.6	126.9	47.0	83.6	257.5
	2017	0.1	43.1	44.5	87.7	124.3	5.8	31.9	162.1	124.4	49.0	76.5	249.8
	2013	0.6	*	*	0.6	0.5	_	0.2	0.6	1.0	*	0.2	1.2
	2014	0.5	*	*	0.5	0.2	_	0.1	0.2	0.7	*	0.1	0.8
Sablefish	2015	0.4	0.1	0	0.5	0.1	-	0	0.1	0.5	0.1	0	0.6
	2016	0.2	*	0	0.2	0.1	-	0.3	0.4	0.3	*	0.3	0.6
	2017	0.2	*	0	0.2	0.1	*	0.5	0.5	0.2	*	0.5	0.7
	2013	_	_	0.1	0.1	*	_	20.7	20.7	*	_	20.8	20.8
A +1	2014	-	-	0.1	0.1	*	-	27.8	27.8	*	-	27.9	27.9
Atka Mackerel	2015	*	-	3.2	3.2	*	-	49.3	49.3	*	-	52.5	52.5
Mackerer	2016	*	-	3.7	3.7	*	-	50.4	50.4	*	-	54.1	54.1
	2017	-	-	4.4	4.4	0	-	59.4	59.4	0	-	63.8	63.8
	2013	-	-	0.7	0.7	-	-	146.4	146.4	-	-	147.1	147.1
	2014	-	-	0.3	0.3	0	-	145.8	145.8	0	-	146.0	146.1
Yellowfin	2015	-	-	8.0	8.0	0	-	115.1	115.1	0	-	123.0	123.1
	2016	-	-	10.8	10.8	*	-	120.4	120.4	*	-	131.2	131.2
	2017	-	-	15.2	15.2	0.1	-	113.3	113.4	0.1	-	128.6	128.6
	2013	-	-	0.7	0.7	*	-	55.4	55.4	*	-	56.2	56.2
	2014	-	-	1.1	1.1	*	-	48.3	48.3	*	-	49.5	49.5
Rock Sole	2015	-	-	1.1	1.1	*	-	43.2	43.2	*	-	44.3	44.3
	2016	-	-	2.3	2.3	*	-	40.9	40.9	*	-	43.2	43.2
	2017	-	-	3.1	3.1	0	-	30.8	30.8	0	-	33.9	33.9

Table 9: Continued

						Table 9: (Continue	1					
		Cat	tcher Vess	els		Catcl	her Proces	ssors			Total		
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	-	-	0.7	0.7	0	-	14.8	14.8	0	-	15.5	15.5
Flathead	2014	*	-	0.9	0.9	0	-	14.1	14.1	0	-	15.0	15.0
Sole	2015	-	-	0.8	0.8	0	-	9.2	9.2	0	-	10.1	10.1
DOIG	2016	-	-	0.4	0.4	-	-	8.6	8.6	-	-	9.0	9.0
	2017	-	-	0.6	0.6	0	-	7.5	7.5	0	-	8.1	8.1
	2013	-	-	0.2	0.2	0.1	-	16.6	16.7	0.1	-	16.8	16.9
	2014	*	-	0.2	0.2	0.1	-	16.4	16.5	0.1	-	16.6	16.7
Arrowtoot		*	-	0.3	0.3	0.1	-	9.1	9.2	0.1	-	9.3	9.4
	2016	*	-	0.2	0.2	0	-	8.8	8.8	0	-	9.0	9.0
	2017	*	-	0.1	0.1	0.2	-	5.2	5.4	0.2	-	5.3	5.6
	2013	-	-	*	*	0	-	7.0	7.0	0	-	7.0	7.0
Kamahatlı	2014	-	-	*	*	0	-	5.9	5.9	0	-	5.9	5.9
Kamchatk Flounder	$^{a}2015$	-	-	0	0	0	-	4.6	4.6	0	-	4.6	4.6
riounder	2016	-	-	0	0	0	-	4.5	4.5	0	-	4.5	4.5
	2017	-	-	0.1	0.1	0	-	4.1	4.1	0	-	4.1	4.2
	2013	*	-	0	0	0.6	-	0.8	1.4	0.6	-	0.8	1.4
	2014	*	-	0	0	0.6	-	0.7	1.4	0.6	-	0.7	1.4
Turbot	2015	*	-	0	0	1.1	-	1.0	2.0	1.1	-	1.0	2.1
	2016	*	-	0	0	0.9	-	1.2	2.1	0.9	-	1.2	2.1
	2017	-	-	0	0	0.9	-	1.8	2.7	0.9	-	1.8	2.7
	2013	-	-	0.1	0.1	*	=	14.2	14.2	*	-	14.3	14.3
Other	2014	-	-	0.4	0.4	*	-	15.7	15.7	*	-	16.0	16.0
Flatfish	2015	-	-	1.5	1.5	0	-	12.6	12.6	0	-	14.1	14.1
riaunsn	2016	-	-	0.9	0.9	*	-	11.4	11.4	*	-	12.3	12.3
	2017	-	-	2.0	2.0	*	-	13.4	13.4	*	-	15.4	15.4
	2013	-	-	0.2	0.2	0	-	28.6	28.6	0	-	28.9	28.9
Pacific	2014	*	-	0.4	0.4	0	-	29.0	29.0	0	-	29.4	29.4
Ocean	2015	*	-	2.8	2.8	0	-	27.2	27.2	0	-	30.0	30.0
Perch	2016	*	-	2.3	2.3	*	-	28.0	28.0	*	-	30.3	30.3
	2017		_	2.3	2.3	0	_	28.0	28.0	0	-	30.3	30.3

Table 9: Continued

		Cat	cher Vess	els		Catc	her Proces	ssors			Total		
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	*	-	0	0	0	-	1.7	1.7	0	-	1.7	1.7
Northern	2014	-	-	0	0	0	-	1.9	1.9	0	-	1.9	1.9
Rockfish	2015	-	-	0.2	0.2	0	-	6.5	6.6	0	-	6.7	6.7
TOCKHSH	2016	*	-	0.2	0.2	0	-	4.0	4.0	0	-	4.2	4.2
	2017	-	-	0.2	0.2	0	-	4.2	4.2	0	-	4.4	4.4
	2013	0	-	0	0	0.1	-	0.9	1.0	0.2	-	0.9	1.1
Othon	2014	0	-	0	0	0.1	-	0.8	0.9	0.1	-	0.8	1.0
Other Rockfish	2015	0	-	0.1	0.1	0.1	-	0.6	0.7	0.1	-	0.7	0.8
ROCKIISII	2016	0	-	0	0.1	0	-	0.7	0.7	0.1	-	0.7	0.8
	2017	0	-	0	0	0	-	0.7	0.8	0.1	-	0.8	0.8
	2013	0	-	0.3	0.4	5.7	-	1.9	7.7	5.7	-	2.2	8.0
Other	2014	0	-	0.8	0.9	6.6	-	1.6	8.2	6.6	-	2.5	9.1
Groundfis	2015	0	-	1.5	1.6	6.6	-	1.1	7.8	6.6	-	2.7	9.4
Groundis	2016	0	-	0.4	0.4	5.1	-	1.7	6.8	5.1	-	2.0	7.3
	2017	*	-	0.8	0.9	7.7	-	1.7	9.4	7.7	-	2.5	10.3
	2013	1.7	-	707.0	735.7	133.6	-	954.6	1,094.9	135.2	-	1,661.5	1,830.6
A 11	2014	2.7	-	714.7	752.3	135.4	-	954.4	1,097.4	138.1	_	1,669.0	1,849.7
All Groundfis	2015	1.2	-	744.5	775.7	142.3	-	934.2	1,084.5	143.4	_	1,678.7	1,860.1
Groundns	^{sn} 2016	0.3	-	771.6	811.4	138.9	-	953.9	1,100.4	139.2	-	1,725.5	1,911.8
	2017	0.3	-	783.8	827.3	139.6	-	938.4	1,083.9	139.9	-	1,722.2	1,911.1

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.

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Table 10: Bering Sea & Aleutian Islands groundfish retained catch by species, gear, and target fishery, 2016-2017, (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
		Sablefish	*	0.1	*	-	-	-	-	*	-	-	*	-	-	0.1
		Pacific Cod	5.8	*	126.8	0	0	-	*	0.1	*	*	0	*	5.1	137.8
		2016 Arrowtooth	-	*	-	*	*	-	-	-	-	-	*	-	-	*
	~ .	Turbot	0	0	0	*	*	-	-	0.9	-	-	0	-	*	1.0
	Catcher Processor	Rockfish s Halibut	*	*	*	*	*	-	-	*	-	-	*	-	*	*
	r rocessor	All Targets	5.8	0.1	126.9	0	0	-	*	0.9	*	*	0	*	5.1	138.9
		Sablefish		0.1		*	*			*			0		*	0.1
Hook an	ıd	Pacific	-		-			-	-		-	-	U	-		
Line		2017 Cod	6.4	0	124.3	0.2	0	0	0	0.1	0.1	*	0	0	7.7	138.7
		Turbot	*	*	*	*	*	-	-	0.8	-	-	*	-	*	0.8
		Halibut	-	-	*	-	-	-	-		-	- *	-	-		*
		All Targets	6.4	0.1	124.3	0.2	0	0	0	0.9	0.1	*	0	0	7.7	139.6
		Sablefish	-	0.1	*	-	-	-	-	*	-	-	0	-	-	0.1
		$^{2016}_{\mathrm{Cod}}^{\mathrm{Pacific}}$	-	-	*	*	-	-	-	-	-	-	*	*	*	*
	Catcher	Halibut	*	0.1	0	*	-	-	-	*	-	-	0	-	0	0.1
	Vessels	All Targets	*	0.2	0	*	-	-	-	*	-	-	0	*	0	0.3
		Sablefish	-	0.1	*	-	-	-	-	-	-	-	0	-	-	0.1
		2017 Pacific Cod	-	-	0.1	-	-	-	-	-	-	-	-	-	-	0.1
		Halibut	-	0.1	0	*	-	-	-	-	-	-	0	-	*	0.1
		All Targets	-	0.2	0.1	*	-	-	-	-	-	-	0	-	*	0.3
		Pacific 2016 Cod	0	-	7.6	-	-	-	-	-	*	-	-	-	0	7.6
	Catcher	All Targets	0	-	7.6	-	-	-	-	-	*	-	-	-	0	7.6
	Processor	Sabiensn	-	*	*	*	*	_	-	*	-	-	*	-	-	*
Pot		2017 Pacific Cod	0	-	5.8	-	-	-	-	-	*	-	-	-	*	5.8
Pot		All Targets	0	*	5.8	*	*	-	-	*	*	-	*	-	*	5.8
		Sablefish	_	*	_	_	_	_	_		_	_	_	_	_	*
		2016 Pacific	0		39.4	*		0	*		0		*	0	0.1	39.5
	Catcher	Cod		-			-			-		-				
	Vessels	All Targets	0	*	39.4	*	-	0	*	-	0	-	*	0	0.1	39.5
		Sablefish	-	*	-	-	-	-	-	-	-	-	-	-	-	*
		2017 Pacific Cod	0	*	43.1	*	-	0	0	-	0	*	0	0	0.1	43.2
		All Targets	0	*	43.1	*	-	0	0	_	0	*	0	0	0.1	43.2

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Table 10: 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	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	2.3	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
	Catcher	Turbot	0.1	0	0	0.3	0.1	0.1	-	0.5	-	0	0	-	*	1.2
Trawl	Processor	Yellowfin	17.4	0	10.8	2.4	0.2	3.8	6.9	0	96.7	6.3	*	-	0.6	145.1
	110000001	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
		Pollock, Bottom	19.7	0	0.3	0.1	0	0.1	0.2	0	0.2	0	1.4	0	0.1	22.1
		Pollock, Pelagic	590.0	0	2.0	0	0	0.4	0.8	0	0.2	0	1.1	0	0.4	595.1
		Sablefish	*	*	*	*	*	*	*	*	*	*	*	-	-	*
		Pacific Cod	0.6	*	4.2	0	0	0	0.8	*	0.2	0.1	0	*	0	5.9
		2017 Arrowtooth	0.5	0.1	0.3	1.8	0.4	0.3	0.1	0.2	0	0.2	0.1	*	0	3.8
		Kamchatka Flounder	0.2	0.1	0	0.5	2.4	0	*	0.3	*	0	0.1	0	*	3.6
		Flathead Sole	1.6	*	0.8	0.4	0.1	2.9	1.1	0.1	2.8	0.7	*	*	0	10.5
		Rock Sole	4.8	0	7.9	0.1	0	0.8	17.6	-	15.2	2.1	*	-	0.1	48.7
		Turbot	0.2	0.1	0	0.6	0.3	0.1	0	1.1	*	0.1	0.1	-	0	2.5
		Yellowfin	16.7	*	12.0	1.0	0.1	2.8	10.1	0	94.6	9.7	*	*	0.6	147.5
		Other Flatfish	0.1	0.1	0.1	0.2	0.1	0.1	0	0	0.1	0.5	0	-	*	1.4
		Rockfish	1.2	0.1	0.7	0.3	0.3	0	0	0	0	0	20.5	5.1	0.1	28.4
		Atka Mackerel	0.4	0	3.6	0.1	0.3	0	0	0	0	0	9.7	54.2	0.4	68.8
		All Targets	635.9	0.5	31.9	5.2	4.1	7.5	30.8	1.8	113.3	13.4	32.9	59.4	1.7	938.4

Table 10: 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	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 Pacific Cod	0.5	*	42.0	0	0	0	0.2	-	0	0	0	0	0	42.8
		Flathead Sole	*	-	*	*	*	*	*	-	*	*	-	-	-	*
		Rock Sole	0.3	-	0.6	0	*	0	1.1	-	1.6	0.2	-	-	*	3.8
Trawl	Catcher	Yellowfin	0.8	-	1.1	0.1	0	0.1	0.8	-	9.2	0.6	-	-	0	12.7
Hawi	Vessels	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	46.5	0.2	0	0.4	2.3	0	10.8	0.9	2.5	3.7	0.4	771.6
		Pollock, Bottom	11.3	0	0.7	0	*	0	0	*	0	0	0.1	*	0	12.1
		Pollock, Pelagic	696.4	0	3.0	0	*	0.3	0.3	0	0	0.1	0.6	0	0.5	701.3
		Pacific 2017 Cod	0.3	*	38.0	0	0	0	0.3	-	0.1	0	0	*	0.1	38.7
		Flathead Sole	*	-	*	*	*	*	*	-	*	*	-	-	*	*
		Rock Sole	0.2	-	0.3	-	*	0	0.7	-	0.9	0.2	-	-	0	2.3
		Yellowfin	1.9	*	2.2	0.1	0	0.2	1.8	*	14.3	1.7	-	-	0.1	22.3
		Other Flatfish	-	-	*	-	-	-	*	-	*	*	-	-	-	*
		Rockfish	0.2	*	0.1	*	*	*	*	*	-	*	1.5	0.3	*	1.9
		Atka Mackerel	0.1	*	0.3	0	0.1	*	0	*	*	*	0.4	4.2	0.1	5.1
		All Targets	710.4	0	44.5	0.1	0.1	0.6	3.1	0	15.2	2.0	2.5	4.4	0.8	783.8
	Catch	2016 All 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
All Gea	Proc.	2017 All Targets	642.2	0.5	162.1	5.4	4.1	7.5	30.8	2.7	113.4	13.4	32.9	59.4	9.4	1,083.9
	Catch	2016 All Targets	703.9	0.2	85.9	0.2	0	0.4	2.3	0	10.8	0.9	2.5	3.7	0.4	811.4
	Vess.	2017 All Targets	710.4	0.2	87.7	0.1	0.1	0.6	3.1	0	15.2	2.0	2.5	4.4	0.9	827.3

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 11: Bering Sea & Aleutian Islands ex-vessel prices in the groundfish fisheries by gear, and species, 2013-2017; 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
	2013	0.092	0.150	0.150	0.092	0.155	0.154	0.092	0.152	0.152
	2014	0.097	0.155	0.155	0.097	0.148	0.148	0.097	0.151	0.151
Pollock	2015	0.170	0.153	0.153	0.170	0.134	0.134	0.170	0.142	0.142
	2016	0.134	0.138	0.138	0.020	0.117	0.117	0.020	0.127	0.126
	2017	0.015	0.137	0.137	0.015	0.105	0.104	0.015	0.119	0.118
	2013	0.247	0.241	0.243	0.291	0.224	0.273	0.283	0.232	0.265
	2014	0.288	0.259	0.274	0.297	0.271	0.291	0.295	0.265	0.286
Pacific Cod	2015	0.263	0.234	0.248	0.297	0.232	0.282	0.290	0.233	0.273
	2016	0.278	0.247	0.263	0.292	0.246	0.280	0.289	0.246	0.275
	2017	0.332	0.294	0.316	0.340	0.283	0.326	0.338	0.288	0.323
	2013	2.838	*	2.838	2.838	1.173	2.361	2.838	1.173	2.650
	2014	4.001	*	4.001	4.001	1.317	3.379	4.001	1.317	3.856
Sablefish	2015	3.720	1.277	3.720	3.720	1.277	3.268	3.720	1.277	3.613
	2016	4.010	1.193	3.978	4.010	1.193	2.032	4.010	1.193	3.016
	2017	3.980	1.171	3.834	3.980	1.171	1.874	3.980	1.171	2.758
	2013	0.017	0.327	0.326	0.017	0.327	0.327	0.017	0.327	0.327
Atka	2014	0.341	0.353	0.352	*	0.353	0.353	0.341	0.353	0.353
Mackerel	2015	0.279	0.257	0.257	*	0.257	0.257	0.279	0.257	0.257
Mackerer	2016	0.016	0.253	0.243	*	0.253	0.253	0.016	0.253	0.253
	2017	0.015	0.361	0.358	0.015	0.361	0.361	0.015	0.361	0.361
	2013	0.015	0.156	0.156	*	0.156	0.156	0.015	0.156	0.156
	2014	*	0.126	0.126	0.131	0.126	0.126	0.131	0.126	0.126
Yellowfin	2015	0.003	0.129	0.129	0.003	0.129	0.129	0.003	0.129	0.129
	2016	0.014	0.147	0.139	*	0.147	0.147	0.014	0.147	0.147
	2017	0.015	0.176	0.156	0.015	0.176	0.176	0.015	0.176	0.176
	2013	*	0.150	0.150	*	0.150	0.150	*	0.150	0.150
	2014	*	0.153	0.153	*	0.153	0.153	*	0.153	0.153
Rock Sole	2015	*	0.146	0.146	*	0.146	0.146	*	0.146	0.146
	2016	*	0.167	0.167	*	0.167	0.167	*	0.167	0.167
	2017	0.015	0.194	0.194	0.015	0.194	0.194	0.015	0.194	0.194

Table 11: Continued

		Sho	oreside		\mathbf{A}	t Sea		All	Sectors	
	Year	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear
	2013	0.015	0.222	0.222	0.015	0.221	0.221	0.015	0.221	0.221
Flathead	2014	0.131	0.176	0.176	0.131	0.176	0.176	0.131	0.176	0.176
Sole	2015	0.015	0.148	0.148	0.003	0.148	0.147	0.003	0.148	0.147
Sole	2016	0.113	0.194	0.193	-	0.193	0.193	0.113	0.193	0.193
	2017	0.015	0.221	0.221	0.015	0.221	0.221	0.015	0.221	0.221
	2013	*	0.154	0.154	0.015	0.154	0.153	0.015	0.154	0.153
	2014	*	0.201	0.201	0.131	0.201	0.201	0.131	0.201	0.201
${\bf Arrowtooth}$		*	0.182	0.182	0.003	0.182	0.181	0.003	0.182	0.181
	2016	0.113	0.213	0.212	0.113	0.213	0.213	0.113	0.213	0.213
	2017	*	0.325	0.325	0.015	0.325	0.313	0.015	0.325	0.313
	2013	-	-	-	0.015	0.137	0.137	0.015	0.137	0.137
Kamchatka	2014	-	-	-	0.131	0.183	0.183	0.131	0.183	0.183
Flounder	2015	_	*	*	0.003	0.165	0.165	0.003	0.165	0.165
riounder	2016	-	-	-	0.113	0.206	0.206	0.113	0.206	0.206
	2017	-	-	-	0.015	0.371	0.369	0.015	0.371	0.369
	2013	*	0.439	0.439	0.015	0.439	0.252	0.015	0.439	0.252
	2014	0.131	0.474	0.225	0.131	0.474	0.318	0.131	0.474	0.318
Turbot	2015	*	0.502	0.502	0.003	0.502	0.249	0.003	0.502	0.250
	2016	*	0.649	0.649	0.113	0.649	0.413	0.113	0.649	0.414
	2017	-	0.689	0.689	0.015	0.689	0.460	0.015	0.689	0.461
	2013	-	0.520	0.520	*	0.145	0.145	*	0.147	0.147
Other	2014	-	0.425	0.425	*	0.141	0.141	*	0.143	0.143
Flatfish	2015	-	0.418	0.418	0.003	0.135	0.135	0.003	0.137	0.137
riadisii	2016	-	0.368	0.368	*	0.145	0.145	*	0.146	0.146
	2017	*	0.437	0.437	*	0.229	0.229	*	0.230	0.230
	2013	-	0.211	0.211	0.975	0.211	0.211	0.975	0.211	0.211
Pacific	2014	*	0.238	0.238	0.630	0.238	0.238	0.630	0.238	0.238
Ocean Perch	2015	*	0.209	0.209	0.833	0.209	0.209	0.833	0.209	0.209
Ocean refu	¹ 2016	*	0.180	0.180	*	0.180	0.180	*	0.180	0.180
	2017	*	0.224	0.224	1.001	0.224	0.224	1.001	0.224	0.224

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Table 11: Continued

		Shor	reside		\mathbf{A}	t Sea		All	Sectors	
	Year	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear
	2013	*	0.139	0.139	0.975	0.139	0.140	0.975	0.139	0.140
Nonthone	2014	-	0.179	0.179	0.630	0.179	0.179	0.630	0.179	0.179
Northern Rockfish	2015	-	0.149	0.149	0.833	0.149	0.149	0.833	0.149	0.149
ROCKIISII	2016	*	0.127	0.127	0.780	0.127	0.127	0.780	0.127	0.127
	2017	*	0.150	0.150	1.001	0.150	0.151	1.001	0.150	0.151
	2013	0.999	0.205	0.974	0.975	0.363	0.430	0.981	0.363	0.450
Other	2014	0.644	0.207	0.599	0.630	0.425	0.444	0.635	0.424	0.452
Rockfish	2015	0.837	0.492	0.800	0.833	0.277	0.344	0.834	0.279	0.366
ROCKIISII	2016	0.749	0.345	0.701	0.780	0.351	0.390	0.772	0.351	0.400
	2017	0.956	0.498	0.906	1.001	0.383	0.426	0.990	0.383	0.438
	2013	0.500	0.023	0.080	0.500	0.050	0.375	0.500	0.047	0.363
Other	2014	0.568	0.150	0.192	0.568	0.150	0.477	0.568	0.150	0.450
Groundfish	2015	0.154	0.112	0.114	0.154	0.049	0.136	0.154	0.081	0.133
Groundish	2016	0.280	0.149	0.174	0.280	0.017	0.213	0.280	0.037	0.211
	2017	0.306	0.207	0.219	0.306	0.015	0.246	0.306	0.055	0.244

Notes: Prices are for catch from both federal and state of Alaska fisheries. The ex-vessel price is calculated as value of landings 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 shoreside. 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. 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 12: Bering Sea & Aleutian Islands ex-vessel value of the groundfish catch by vessel category, gear, and species, 2013-2017; calculations based on COAR (\$ millions).

		\mathbf{C}	atcher Ves	sel		Cato	cher Proce	essor			All Sectors	3	
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	-	_	219.04	219.04	-	_	205.63	206.54	-	_	424.67	425.58
	2014	_	_	226.33	226.33	_	_	200.28	201.43	_	-	426.61	427.76
Pollock	2015	-	-	226.68	226.68	-	-	182.91	185.30	_	-	409.60	411.99
	2016	-	-	208.91	208.91	-	-	165.24	165.50	-	-	374.16	374.41
	2017	-	-	205.09	205.09	-	-	147.13	147.35	-	-	352.22	352.44
	2013	0.57	14.72	21.55	36.83	78.31	4.37	23.48	106.15	78.88	19.08	45.03	142.99
	2014	1.38	22.10	21.13	44.61	80.21	4.99	24.74	109.94	81.59	27.09	45.87	154.55
Pacific Co	d2015	0.45	17.29	16.31	34.05	83.66	5.22	20.84	109.72	84.12	22.51	37.14	143.77
	2016	0.04	24.14	20.25	44.43	81.58	4.89	25.20	111.67	81.62	29.03	45.44	156.09
	2017	0.08	31.59	22.13	53.81	93.24	4.38	26.36	123.98	93.32	35.98	48.49	177.79
	2013	3.57	*	*	3.57	2.94	-	0.49	3.43	6.51	*	0.49	7.00
	2014	4.54	*	*	4.54	1.73	-	0.17	1.90	6.27	*	0.17	6.45
Sablefish	2015	2.92	0.98	0	3.90	0.98	-	0.08	1.06	3.90	0.98	0.08	4.96
	2016	1.95	*	0.01	1.97	1.04	-	0.73	1.76	2.99	*	0.74	3.73
	2017	1.41	*	0.09	1.51	0.73	*	1.61	2.34	2.14	*	1.70	3.84
	2013	-	-	0.04	0.04	-	-	16.15	16.15	-	-	16.19	16.19
Atka	2014	-	-	0.08	0.08	-	-	23.67	23.67	-	-	23.75	23.75
Mackerel	2015		-	0.02	0.02	-	-	29.67	29.67	-	-	29.69	29.69
Mackerer	2016	-	-	0.01	0.01	_	-	30.13	30.13	-	-	30.14	30.14
	2017	-	-	0.01	0.01	=	=	50.93	50.93	=	=	50.94	50.94
	2013	_	-	0.06	0.06	_	_	54.54	54.54	_	_	54.60	54.60
	2014		-	0.07	0.07	0.01	-	42.07	42.08	0.01	-	42.14	42.15
Yellowfin	2015		-	0.03	0.03	0	-	35.07	35.07	0	-	35.10	35.10
	2016	-	-	0.01	0.01	*	-	42.52	42.52	*	-	42.53	42.53
	2017	-	-	0.01	0.01	0	-	50.01	50.01	0	-	50.02	50.02
	2013	-	-	0.21	0.21	*	-	18.51	18.51	*	=	18.72	18.72
	2014	-	-	0.26	0.26	*	-	16.50	16.50	*	-	16.76	16.76
Rock Sole	2015	-	_	0.10	0.10	*	_	14.13	14.13	*	-	14.24	14.24
	2016	-	-	0.09	0.09	*	-	15.86	15.86	*	-	15.95	15.95
	2017	-	-	0.15	0.15	0	-	14.38	14.38	0	-	14.52	14.52

Table 12: Continued

						Table 12:	Continue	a					
		Ca	tcher Vess	sel		Cato	her Proce	ssor		I	All Sectors	3	
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	-	-	0.34	0.34	0	-	7.36	7.36	0	-	7.70	7.70
Flathead	2014	*	-	0.33	0.33	0	-	5.53	5.54	0	-	5.87	5.87
Sole	2015	-	-	0.15	0.15	0	-	3.13	3.13	0	-	3.28	3.28
Sole	2016	-	-	0.10	0.11	-	-	3.74	3.74	-	-	3.84	3.84
	2017	-	-	0.15	0.15	0	-	3.80	3.80	0	-	3.95	3.95
	2013	-	-	0.08	0.08	0	-	5.62	5.62	0	-	5.70	5.70
	2014	*	-	0.09	0.09	0.03	-	7.31	7.34	0.03	-	7.40	7.43
Arrowtoot	h2015	*	-	0.03	0.03	0	-	3.73	3.73	0	-	3.76	3.76
	2016	0	-	0.02	0.02	0.01	-	4.19	4.20	0.01	-	4.21	4.22
	2017	*	-	0.04	0.04	0.01	-	3.84	3.85	0.01	-	3.87	3.88
	2013	-	_	*	*	0	_	2.11	2.11	0	-	2.11	2.11
TZ1 41-	2014	_	-	*	*	0	-	2.38	2.39	0	-	2.38	2.39
Kamchatk Flounder	$^{\rm a}2015$	_	-	0	0	0	-	1.68	1.68	0	-	1.68	1.68
riounder	2016	-	-	*	*	0	-	2.06	2.06	0	-	2.06	2.06
	2017	-	-	*	*	0	-	3.45	3.45	0	-	3.45	3.45
	2013	*	-	0	0	0.02	-	0.75	0.77	0.02	-	0.75	0.77
	2014	0	-	0	0	0.18	-	0.79	0.98	0.18	-	0.80	0.98
Turbot	2015	*	-	0.01	0.01	0.01	_	1.13	1.14	0.01	-	1.14	1.15
	2016	*	-	0	0	0.24	-	1.73	1.96	0.24	-	1.73	1.97
	2017	-	-	0	0	0.03	-	2.74	2.77	0.03	-	2.74	2.77
	2013	-	_	0.08	0.08	*	_	4.85	4.85	*	-	4.92	4.92
0.1	2014	_	-	0.12	0.12	*	_	5.14	5.14	*	-	5.26	5.26
Other	2015	_	-	0.08	0.08	0	-	4.19	4.19	0	-	4.26	4.26
Flatfish	2016	_	-	0.05	0.05	*	-	3.90	3.90	*	-	3.95	3.95
	2017	-	-	0.08	0.08	*	-	7.77	7.77	*	-	7.85	7.85
	2013	_	_	0.10	0.10	0	_	14.20	14.20	0	_	14.30	14.30
Pacific	2014	*	-	0.20	0.20	0	_	16.30	16.30	0	-	16.50	16.50
Ocean	2015	*	-	0.33	0.33	0	-	13.50	13.50	0	-	13.84	13.84
Perch	2016	*	-	0.25	0.25	*	-	11.78	11.78	*	-	12.03	12.03
	2017	_	-	0.32	0.32	0	-	14.64	14.64	0	-	14.96	14.96

Table 12: Continued

		Ca	tcher Ves	sel		Cato	cher Proce	essor		1	All Sectors	S	
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	*	-	0	0	0.01	-	0.55	0.56	0.01	-	0.56	0.56
Northern	2014	-	-	0.01	0.01	0	-	0.85	0.85	0	-	0.86	0.86
Rockfish	2015	-	-	0.01	0.01	0	-	2.21	2.21	0	-	2.22	2.22
TOCKHSH	2016	*	-	0	0	0	-	1.19	1.19	0	-	1.19	1.19
	2017	-	-	0	0	0.01	-	1.44	1.45	0.01	-	1.45	1.45
	2013	0.09	-	0	0.09	0.26	-	0.78	1.04	0.34	-	0.78	1.12
Other	2014	0.06	-	0	0.07	0.12	-	0.81	0.92	0.18	-	0.81	0.99
Rockfish	2015	0.06	-	0	0.07	0.17	-	0.41	0.57	0.23	-	0.41	0.64
ROCKIISII	2016	0.04	-	0	0.05	0.13	-	0.59	0.72	0.17	-	0.60	0.77
	2017	0.04	-	0	0.05	0.13	-	0.69	0.82	0.18	-	0.69	0.86
	2013	0	-	0.02	0.06	6.32	-	0.24	6.56	6.32	-	0.26	6.63
Other	2014	0.01	-	0.26	0.37	8.23	-	0.60	8.83	8.24	-	0.86	9.20
Groundfisi	2015	0	-	0.33	0.36	2.25	-	0.14	2.39	2.25	-	0.48	2.75
Groundis	$^{11}2016$	0	-	0.10	0.15	3.16	-	0.07	3.23	3.16	-	0.17	3.38
	2017	*	-	0.25	0.30	5.19	-	0.07	5.25	5.19	-	0.31	5.55
	2013	4.22	_	241.52	260.50	88.78	_	355.24	448.38	93.00	_	596.76	708.89
	2014	5.99	-	248.89	277.09	91.68	-	347.14	443.81	97.67	-	596.03	720.90
All Specie	s 2015	3.44	-	244.09	265.82	89.46	-	312.82	407.50	92.89	-	556.91	673.32
	2016	2.04	-	229.82	256.05	86.41	-	308.91	400.21	88.45	-	538.73	656.26
	2017	1.53	-	228.32	261.50	99.56	-	328.86	432.80	101.09	_	557.17	694.29

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 13: Bering Sea & Aleutian Islands vessel and permit counts, ex-vessel value, value per vessel, and percent value of BSAI FMP groundfish and all BSAI fisheries by fleet, 2013-2017; 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
	2013	88	15	2,693.15	237.00	33.35	20.72
	2014	88	14	2,784.56	245.04	33.89	19.98
AFA~CV	2015	86	15	2,803.02	241.06	35.84	22.01
	2016	89	18	2,587.79	230.31	35.02	20.18
	2017	86	16	2,643.70	227.36	32.49	26.44
	2013	16	16	12,989.20	207.83	29.24	18.17
	2014	17	17	12,183.89	207.13	28.64	16.88
AFA CP	2015	17	17	10,984.64	186.74	27.76	17.05
	2016	16	16	$10,\!178.78$	162.86	24.76	14.27
	2017	16	16	9,913.38	158.61	22.67	18.45
	2013	18	18	7,251.88	130.53	18.37	11.41
	2014	18	18	$7,\!226.90$	130.08	17.99	10.60
A80	2015	18	18	$6,\!477.65$	116.60	17.33	10.64
	2016	19	19	$6,\!599.26$	125.39	19.07	10.99
	2017	19	19	7,920.72	150.49	21.51	17.50
	2013	15	9	1,424.37	21.37	3.01	1.87
BSAI	2014	12	9	$1,\!129.75$	13.56	1.87	1.11
Trawl	2015	13	12	968.58	12.59	1.87	1.15
mawi	2016	13	12	$1,\!599.99$	20.80	3.16	1.82
	2017	16	15	1,351.10	21.62	3.09	2.51

Table 13: Continued

	Year	Vessels	Permits	Ex-vessel Value Per Vessel \$1,000	Ex-vessel Value \$million	Percent Value, BSAI FMP Groundfish	Percent Value, All BSAI Fisheries
	2013	13	9	*	*	*	*
OT 1 1	2014	6	7	*	*	*	*
CV Hook	2015	5	5	*	*	*	*
and Line	2016	1	1	*	*	*	*
	2017	5	4	*	*	*	*
	2013	31	31	2,766.79	85.77	12.07	7.50
CD Heels	2014	30	30	3,002.73	90.08	12.46	7.34
CP Hook and Line	2015	30	30	2,950.16	88.50	13.16	8.08
and Line	2016	31	31	2,755.96	85.43	12.99	7.49
	2017	28	28	$3,\!535.89$	99.00	14.15	11.51
	2013	26	10	326.48	8.49	1.19	0.74
Sablefish	2014	22	10	391.63	8.62	1.19	0.70
IFQ	2015	18	8	231.84	4.17	0.62	0.38
IF Q	2016	20	7	185.93	3.72	0.57	0.33
	2017	17	10	382.19	6.50	0.93	0.76
	2013	59	13	324.23	19.13	2.69	1.67
	2014	56	18	485.72	27.20	3.76	2.22
Pot	2015	48	18	469.43	22.53	3.35	2.06
	2016	56	17	519.33	29.08	4.42	2.55
	2017	64	17	562.98	36.03	5.15	4.19

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. The category "BSAI Trawl" does not include trawl vessel in the other categories (e.g. "AFA CV", "AFA CP", "A80"). 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 14: Bering Sea & Aleutian Islands production of groundfish products by species, 2013-2017, (1,000 metric tons product weight).

		6	2013		6	2014		6	2015		6	2016		6	2017	
	Product	At Sea	Shoresi	de All												
	Whole Fish	0.16	1.65	1.81	0.31	1.09	1.40	1.11	0.68	1.80	0.10	0.69	0.79	0.04	0.25	0.30
	Head And Gut	37.28	3.69	40.97	34.77	2.77	37.54	25.38	*	25.38	28.61	0.04	28.65	24.21	-	24.21
	Roe	8.37	5.55	13.91	11.71	8.89	20.60	12.01	6.74	18.75	10.44	3.82	14.26	11.71	6.72	18.43
Pollock	Deep-Skin Fillets	36.83	14.76	51.59	32.68	11.01	43.69	34.56	9.22	43.77	38.24	8.55	46.79	45.10	13.03	58.13
	Other Fillets	59.63	59.66	119.28	63.68	68.41	132.09	57.44	65.80	123.24	49.61	64.89	114.50	42.13	56.69	98.82
	Surimi	80.85	80.81	161.66	87.81	83.52	171.33	95.94	91.80	187.74	100.51	90.31	190.82	102.60	94.13	196.73
	Minced Fish	23.47	7.27	30.74	19.98	6.09	26.06	19.71	5.47	25.19	22.38	11.69	34.07	17.05	9.44	26.49
	Fishmeal	20.98	32.89	53.87	23.25	33.60	56.85	26.45	34.59	61.03	27.15	36.25	63.40	27.94	34.69	62.63
	Other Products	12.21	20.78	33.00	13.57	22.40	35.97	12.60	21.44	34.04	14.52	27.09	41.61	13.32	24.88	38.20
	All Products	279.79	227.05	506.84	287.75	237.78	525.54	285.20	235.74	520.94	291.54	243.34	534.89	284.10	239.84	523.94
	Whole Fish	1.99	0.41	2.40	0.19	0.79	0.98	0.12	0.39	0.51	1.36	0.43	1.79	0.22	*	0.22
Pacific Co	Head And Gut	82.45	15.31	97.76	81.36	19.20	100.56	84.84	15.98	100.82	84.44	14.24	98.68	80.06	12.28	92.34
racine Ce	Roe	0.38	2.40	2.78	0.69	2.77	3.46	0.58	1.79	2.37	0.52	1.61	2.13	0.46	1.73	2.20
	Fillets	0.28	8.51	8.79	0.15	8.27	8.42	0.20	6.08	6.28	0.14	9.89	10.03	0.14	9.88	10.01
	Other Products	4.32	5.64	9.96	3.03	7.06	10.10	5.23	5.26	10.48	6.61	7.16	13.77	7.07	7.66	14.72
	All Products	89.43	32.27	121.70	85.42	38.09	123.51	90.97	29.49	120.47	93.06	33.34	126.40	87.95	31.55	119.50
Sablefish	Head And Gut	0.41	0.70	1.11	0.15	0.54	0.69	0.08	0.38	0.46	0.22	0.28	0.50	0.42	0.45	0.87
sabielish	Other Products	0.02	*	0.02	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.02	0.05	0.04	0.08
	All Products	0.43	0.70	1.13	0.16	0.55	0.71	0.09	0.39	0.47	0.23	0.29	0.52	0.46	0.49	0.95

Table 14: Continued

		4	2013		6	2014		4	2015		4	2016		4	2017	
	Product	At Sea	Shoresic	de All	At Sea	Shoresid	le All									
	Whole Fish	2.91	*	2.91	3.17	0.08	3.25	3.31	*	3.31	2.13	0.01	2.14	6.40	*	6.40
Atka Mackerel	Head And Gut	11.14	-	11.14	17.12	-	17.12	29.09	-	29.09	30.53	-	30.53	34.13	-	34.13
	Other Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00
	All Products	14.05	0.00	14.05	20.29	0.08	20.38	32.40	0.00	32.40	32.66	0.01	32.67	40.53	0.00	40.53
	Whole Fish	8.43	*	8.43	16.72	*	16.72	7.18	-	7.18	9.76	-	9.76	9.23	-	9.23
Yellowfin	Head And Gut	85.76	-	85.76	76.69	-	76.69	66.73	-	66.73	68.36	-	68.36	67.77	-	67.77
	Fillets	-	-	-	-	-	-	-	-	-	-	-	-	*	-	*
(I	Other Products	0.37	0.02	0.40	0.36	0.02	0.38	0.08	0.01	0.09	0.16	0.01	0.16	0.09	0.00	0.10
	All Products	94.56	0.02	94.59	93.77	0.02	93.79	73.98	0.01	73.99	78.28	0.01	78.28	77.10	0.00	77.10
	Whole Fish	0.57	*	0.57	2.53	*	2.53	0.47	-	0.47	0.63	*	0.63	1.56	*	1.56
Rock Sole	Head And Gut	29.50	-	29.50	25.87	-	25.87	24.48	-	24.48	23.90	-	23.90	17.33	-	17.33
	Fillets	*	-	*	0.00	-	0.00	0.01	-	0.01	*	-	*	*	*	*
	Other Products	0.46	0.10	0.57	0.31	0.08	0.38	0.12	0.06	0.18	0.08	0.08	0.16	0.13	0.07	0.20
	All Products	30.53	0.10	30.64	28.71	0.08	28.79	25.08	0.06	25.13	24.61	0.08	24.69	19.02	0.07	19.09
	Whole Fish	0.51	*	0.51	0.56	0.13	0.69	0.26	0.01	0.26	0.52	*	0.52	0.10	*	0.10
Flathead	Head And Gut	7.12	-	7.12	6.96	-	6.96	4.45	-	4.45	4.13	-	4.13	4.03	-	4.03
Sole F	Fillets	-	-	-	*	-	*	0.00	-	0.00	-	-	-	-	-	-
	Other Products	0.30	0.11	0.41	0.25	0.09	0.34	0.30	0.08	0.37	0.11	0.05	0.16	0.05	0.05	0.11
	All Products	7.93	0.11	8.04	7.77	0.21	7.99	5.00	0.09	5.09	4.75	0.05	4.81	4.19	0.05	4.25

Table 14: Continued

		4	2013		4	2014		2	2015		4	2016		4	2017	
	Product	At Sea	Shoreside	e All	At Sea	Shoreside	All	At Sea	Shoreside	e All	At Sea	Shoreside	All	At Sea	Shoreside	All
	Whole Fish	*	*	*	0.03	*	0.03	*	*	*	0.25	*	0.25	*	-	*
Arrowtoot	Head And thGut	7.13	-	7.13	6.89	-	6.89	4.73	*	4.73	4.39	-	4.39	3.46	-	3.46
	Fillets	-	*	*	-	-	-	-	-	-	-	-	-	-	-	-
	Other Products	0.06	0.12	0.18	0.05	0.09	0.14	0.03	0.03	0.06	0.01	0.02	0.03	0.01	0.02	0.03
	All Products	7.19	0.12	7.31	6.98	0.09	7.06	4.75	0.03	4.79	4.64	0.02	4.67	3.46	0.02	3.48
TZ111	Whole Fish	*	-	*	-	-	-	-	-	-	*	-	*	-	-	
Flounder	caHead And Gut	6.08	-	6.08	5.33	-	5.33	2.79	-	2.79	2.72	-	2.72	2.05	-	2.05
	Fishmeal	0.01	-	0.01	0.01	-	0.01	0.01	-	0.01	0.00	-	0.00	0.00	-	0.00
	All Products	6.09	_	6.09	5.34	-	5.34	2.80	-	2.80	2.72	-	2.72	2.05	-	2.05
	Whole Fish	-	-	-	-	*	*	-	*	*	0.03	-	0.03	-	-	-
Turbot	Head And Gut	0.78	-	0.78	0.75	*	0.75	1.19	-	1.19	1.29	*	1.29	1.75	-	1.75
	Other Products	0.24	0.00	0.24	0.23	0.00	0.24	0.43	0.00	0.43	0.51	0.00	0.51	0.68	0.00	0.68
	All Products	1.02	0.00	1.02	0.99	0.00	0.99	1.63	0.00	1.63	1.83	0.00	1.83	2.43	0.00	2.43
	Whole Fish	1.03	*	1.03	1.58	*	1.58	2.37	*	2.37	2.05	*	2.05	1.33	0.04	1.37
Other Flatfish	Head And Gut	6.22	-	6.22	6.67	-	6.67	5.73	-	5.73	4.79	*	4.79	7.11	*	7.11
riamsn	Fillets	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*
	Other Products	0.18	0.01	0.18	0.09	0.01	0.11	0.01	0.02	0.02	0.02	0.01	0.03	0.01	0.01	0.02
	All Products	7.42	0.01	7.42	8.34	0.01	8.36	8.11	0.02	8.13	6.87	0.01	6.87	8.45	0.04	8.49
Pacific	Whole Fish	0.11	0.12	0.23	*	0.21	0.21	-	0.37	0.37	0.31	0.43	0.74	0.41	0.41	0.82
Ocean Perch	Head And Gut	15.25	0.00	15.26	15.95	*	15.95	14.90	*	14.90	14.15	*	14.15	13.80	*	13.80
1 CICII	Other Products	0.02	0.01	0.03	0.04	0.01	0.05	0.09	0.07	0.16	0.21	0.02	0.23	0.27	0.03	0.30
	All Products	15.38	0.13	15.51	15.98	0.23	16.21	14.99	0.44	15.42	14.67	0.45	15.12	14.48	0.44	14.92

Table 14: Continued

		4	2013		4	2014		2	2015		2	2016		2	2017	
	Product	At Sea	Shoreside	All	At Sea	Shoreside	e All	At Sea	Shoreside	e All	At Sea	Shoreside	All	At Sea	Shoreside	All
	Whole Fish	*	*	*	*	0.00	0.00	_	0.01	0.01	_	0.00	0.00	_	*	*
Northern Rockfish	Head And Gut	0.75	*	0.75	1.22	-	1.22	3.59	-	3.59	1.96	-	1.96	2.02	-	2.02
	Other Products	0.00	*	0.00	0.01	0.00	0.01	0.01	*	0.01	0.01	0.00	0.01	0.00	*	0.00
	All Products	0.76	*	0.76	1.23	0.01	1.24	3.59	0.01	3.60	1.97	0.00	1.97	2.03	*	2.03
	Whole Fish	0.25	-	0.25	0.24	0.02	0.26	0.10	*	0.10	0.15	*	0.15	0.17	0.00	0.18
Other Rockfish	Head And Gut	0.32	0.02	0.34	0.31	0.02	0.33	0.25	0.02	0.27	0.29	0.02	0.30	0.27	0.01	0.28
	Other Products	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
	All Products	0.57	0.02	0.60	0.55	0.04	0.59	0.35	0.03	0.38	0.44	0.02	0.46	0.45	0.02	0.46
	Whole Fish	*	0.09	0.09	*	0.34	0.34	*	0.38	0.38	0.00	0.15	0.16	*	0.26	0.26
Other	Head And Gut	0.00	-	0.00	0.01	*	0.01	0.01	*	0.01	0.01	-	0.01	0.01	*	0.01
Groundfis	h Fillets	-	-	-	-	-	-	-	-	-	*	-	*	-	-	-
	Fishmeal	0.11	0.05	0.16	0.10	0.17	0.27	0.05	0.48	0.53	0.05	0.15	0.19	0.06	0.17	0.23
	Other Products	1.86	0.03	1.89	2.26	0.12	2.38	2.06	0.31	2.37	1.79	0.02	1.81	2.40	*	2.40
	All Products	1.97	0.17	2.14	2.37	0.63	3.00	2.12	1.17	3.30	1.85	0.32	2.17	2.47	0.43	2.91

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Table 14: Continued

	6	2013		6	2014		6	2015		2	2016		2	2017	
Product	At Sea	Shoresic	de All	At Sea	Shoresi	de All									
Whole Fish	15.97	2.27	18.24	25.34	2.66	28.00	14.90	1.84	16.75	17.29	1.71	19.00	19.48	0.97	20.45
Head And Gut	290.20	19.72	309.92	280.06	22.53	302.58	268.26	16.38	284.64	269.78	14.58	284.36	258.42	12.75	271.17
Roe	8.75	7.94	16.70	12.40	11.66	24.06	12.59	8.52	21.12	10.96	5.43	16.39	12.17	8.46	20.63
Fillets	0.28	8.51	8.79	0.15	8.27	8.42	0.21	6.08	6.28	0.14	9.89	10.03	0.14	9.88	10.01
All Species Deep-Skin Fillets	36.83	14.76	51.59	32.68	11.01	43.69	34.56	9.22	43.77	38.24	8.55	46.79	45.10	13.03	58.13
Other Fillets	59.63	59.66	119.28	63.68	68.41	132.09	57.44	65.80	123.24	49.61	64.89	114.50	42.13	56.69	98.82
Surimi	80.85	80.81	161.66	87.81	83.52	171.33	95.94	91.80	187.74	100.51	90.31	190.82	102.60	94.13	196.73
Minced Fish	23.47	7.27	30.74	19.98	6.09	26.06	19.71	5.47	25.19	22.38	11.69	34.07	17.05	9.44	26.49
Fishmeal	21.09	32.94	54.03	23.36	33.77	57.13	26.50	35.07	61.57	27.20	36.40	63.60	28.01	34.86	62.87
$\begin{array}{c} \text{Other} \\ \text{Products} \end{array}$	20.05	26.84	46.89	20.22	29.91	50.13	20.97	27.28	48.24	24.03	34.48	58.51	24.08	32.76	56.84
All Products	557.13	260.72	817.84	565.67	277.82	843.49	551.07	267.46	818.53	560.13	277.94	838.06	549.18	272.96	822.14

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 15: Bering Sea & Aleutian Islands gross value of groundfish products by species, 2013-2017, (\$ million).

		4	2013		4	2014		6	2015		4	2016		4	2017	
	Product	At Sea	Shoresic	de All	At Sea	Shoresid	e All									
	Whole Fish	0.1	1.8	1.9	0.3	0.8	1.1	1.1	0.8	1.9	0.1	0.5	0.6	0.0	0.2	0.3
	Head And Gut	58.3	5.2	63.5	49.4	3.9	53.4	35.8	*	35.8	49.0	0.1	49.0	29.2	-	29.2
	Roe	68.8	33.2	102.0	85.5	46.9	132.4	69.9	24.8	94.7	72.4	17.1	89.4	86.5	31.5	118.1
Pollock	Deep-Skin Fillets	138.8	45.7	184.5	117.2	36.4	153.6	120.3	29.9	150.2	142.7	27.3	170.1	150.5	41.4	191.9
	Other Fillets	169.5	189.6	359.0	183.3	195.5	378.8	176.1	172.6	348.7	141.9	190.7	332.6	108.4	149.6	257.9
	Surimi	192.4	164.9	357.2	230.8	186.5	417.3	265.8	204.4	470.1	291.9	209.9	501.8	378.0	207.7	585.8
	Minced Fish	35.3	10.4	45.7	26.3	7.9	34.2	29.1	7.9	37.1	39.7	19.7	59.3	26.2	14.7	40.9
	Fishmeal	40.7	52.2	92.9	49.1	47.0	96.1	53.7	47.8	101.5	50.3	52.9	103.3	46.2	50.1	96.4
	Other Products	15.8	19.5	35.3	13.8	20.6	34.3	14.4	18.1	32.5	20.1	25.3	45.4	16.3	18.3	34.6
	All Products	719.5	522.6	1,242.1	755.8	545.4	1,301.2	766.2	506.3	1,272.5	808.1	543.5	1,351.5	841.4	513.6	1,355.0
	Whole Fish	2.2	0.4	2.6	0.1	1.7	1.8	0.1	0.5	0.6	2.1	0.7	2.8	0.4	*	0.4
Pacific Co	Head And Gut	200.1	26.1	226.2	237.4	41.4	278.8	267.0	36.3	303.3	250.8	31.0	281.8	288.5	32.6	321.1
racine Ce	Roe	0.7	4.7	5.4	1.4	6.1	7.5	0.8	3.0	3.8	0.6	2.3	2.8	0.6	2.8	3.4
	Fillets	0.7	54.3	55.0	0.3	49.5	49.8	0.5	36.4	36.9	0.4	72.2	72.7	0.5	82.3	82.8
	Other Products	5.0	9.5	14.6	4.9	10.9	15.9	11.0	9.5	20.4	15.1	11.8	26.9	13.7	15.3	29.1
	All Products	208.6	95.0	303.7	244.1	109.6	353.8	279.3	85.7	365.1	269.0	117.9	386.9	303.8	133.0	436.8
0.11.6.1	Head And Gut	5.1	9.9	15.0	2.5	8.0	10.5	1.5	6.2	7.8	3.0	4.8	7.8	4.7	7.0	11.7
Sablefish	Other Products	0.0	*	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.6
	All Products	5.1	9.9	15.0	2.5	8.0	10.5	1.6	6.3	7.8	3.0	4.9	7.9	4.8	7.5	12.3

Table 15: Continued

		6	2013		6	2014		4	2015		6	2016		6	2017	
	Product	At Sea	Shoresid	e All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	e All
	Whole Fish	5.3	*	5.3	4.6	0.1	4.7	3.9	*	3.9	4.1	0.0	4.1	11.9	*	11.9
Atka Mackerel	Head And Gut	32.4	-	32.4	56.9	-	56.9	69.1	-	69.1	69.6	-	69.6	112.0	-	112.0
	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	37.7	0.0	37.7	61.5	0.1	61.6	73.0	0.0	73.0	73.7	0.0	73.7	124.0	0.0	124.0
	Whole Fish	24.9	*	24.9	17.1	*	17.1	7.0	-	7.0	10.6	-	10.6	12.4	-	12.4
Yellowfin	Head And Gut	95.7	-	95.7	76.9	-	76.9	71.2	-	71.2	83.3	-	83.3	98.2	-	98.2
	Fillets	-	-	-	-	-	-	-	-	-	-	-	-	*	-	*
	Other Products	1.1	0.1	1.1	0.7	0.0	0.8	0.2	0.0	0.2	0.3	0.0	0.3	0.2	0.0	0.2
	All Products	121.7	0.1	121.7	94.7	0.0	94.7	78.4	0.0	78.4	94.2	0.0	94.2	110.8	0.0	110.8
	Whole Fish	0.6	*	0.6	2.9	*	2.9	0.5	-	0.5	0.8	*	0.8	2.0	*	2.0
Rock Sole	Head And Gut	37.1	-	37.1	31.4	-	31.4	29.4	-	29.4	33.0	-	33.0	28.0	-	28.0
	Fillets	*	-	*	0.0	-	0.0	0.0	-	0.0	*	-	*	*	*	*
	Other Products	1.3	0.3	1.6	0.6	0.2	0.8	0.2	0.1	0.3	0.1	0.1	0.3	0.2	0.1	0.3
	All Products	39.1	0.3	39.4	35.0	0.2	35.2	30.2	0.1	30.3	33.9	0.1	34.0	30.2	0.1	30.3
	Whole Fish	1.5	*	1.5	0.8	0.1	0.9	0.3	0.0	0.3	0.6	*	0.6	0.1	*	0.1
Flathead Sole	Head And Gut	13.4	-	13.4	10.8	-	10.8	6.2	-	6.2	6.9	-	6.9	7.7	-	7.7
Sole	Fillets	-	-	-	*	-	*	0.0	-	0.0	-	-	-	-	-	-
	Other Products	0.9	0.3	1.2	0.5	0.2	0.7	0.6	0.1	0.7	0.2	0.1	0.2	0.1	0.1	0.2
	All Products	15.8	0.3	16.1	12.1	0.3	12.4	7.0	0.2	7.2	7.7	0.1	7.8	7.9	0.1	8.0

Table 15: Continued

		6	2013		6	2014			2015			2016			2017	
	Product	At Sea	Shoreside	All												
	Whole Fish	*	*	*	0.0	*	0.0	*	*	*	0.3	*	0.3	*	-	*
Arrowtoot	Head And thGut	9.9	-	9.9	12.5	-	12.5	7.7	*	7.7	8.3	-	8.3	9.9	-	9.9
	Fillets	-	*	*	-	-	-	-	-	-	-	-	-	-	-	-
	Other Products	0.2	0.4	0.5	0.1	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0
	All Products	10.0	0.4	10.4	12.7	0.2	12.8	7.8	0.1	7.8	8.6	0.0	8.7	9.9	0.0	9.9
	Whole Fish	*	-	*	-	-	-	-	-	-	*	-	*	-	-	-
Kamchatk Flounder	xaHead And Gut	7.4	-	7.4	8.7	-	8.7	4.1	-	4.1	5.0	-	5.0	6.8	-	6.8
	Fishmeal	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0
	All Products	7.4	-	7.4	8.7	-	8.7	4.1	-	4.1	5.0	-	5.0	6.8	-	6.8
	Whole Fish	-	-	-	-	*	*	-	*	*	0.1	-	0.1	-	-	_
Turbot	Head And Gut	3.3	-	3.3	3.6	*	3.6	5.7	-	5.7	7.3	*	7.3	9.6	-	9.6
	Other Products	0.8	0.0	0.8	1.0	0.0	1.0	1.7	0.0	1.7	2.0	0.0	2.0	2.2	0.0	2.2
	All Products	4.2	0.0	4.2	4.6	0.0	4.6	7.4	0.0	7.4	9.5	0.0	9.5	11.9	0.0	11.9
	Whole Fish	2.0	*	2.0	2.3	*	2.3	2.7	*	2.7	2.7	*	2.7	2.3	0.1	2.4
Other Flatfish	Head And Gut	6.8	-	6.8	7.2	-	7.2	5.8	-	5.8	5.0	*	5.0	12.8	*	12.8
radisii	Fillets	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*
	Other Products	0.5	0.0	0.5	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All Products	9.3	0.0	9.3	9.7	0.0	9.8	8.4	0.0	8.5	7.7	0.0	7.7	15.1	0.1	15.2
Pacific	Whole Fish	0.1	0.2	0.3	*	0.3	0.3	-	0.5	0.5	0.4	0.5	1.0	0.5	0.5	1.0
Ocean Perch	Head And Gut	36.1	0.0	36.1	42.2	*	42.2	34.9	*	34.9	29.1	*	29.1	35.5	*	35.5
1 CICII	Other Products	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.1	0.3	0.3	0.0	0.3	0.4	0.0	0.4
	All Products	36.3	0.2	36.4	42.3	0.3	42.6	35.1	0.6	35.7	29.8	0.6	30.3	36.4	0.5	36.9

Table 15: Continued

		6	2013		2	2014		6	2015			2016		2	2017	
	Product	At Sea	Shoreside	All												
	Whole Fish	*	*	*	*	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	*	*
Northern Rockfish	Head And Gut	1.2	*	1.2	2.5	-	2.5	5.9	-	5.9	2.8	-	2.8	3.4	-	3.4
	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
	All Products	1.2	*	1.2	2.5	0.0	2.5	5.9	0.0	5.9	2.8	0.0	2.8	3.4	*	3.4
	Whole Fish	0.8	-	0.8	1.1	0.0	1.1	0.4	*	0.4	0.7	*	0.7	0.9	0.0	0.9
Other Rockfish	Head And Gut	1.0	0.2	1.2	0.8	0.1	0.9	0.6	0.2	0.8	0.7	0.1	0.8	0.7	0.1	0.8
	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	0.0	0.0
	All Products	1.9	0.2	2.1	1.9	0.1	2.0	1.0	0.2	1.2	1.4	0.1	1.6	1.6	0.1	1.7
	Whole Fish	*	0.0	0.0	*	0.5	0.5	*	0.4	0.4	0.0	0.3	0.3	*	0.5	0.5
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	h Fillets	-	-	-	-	-	-	-	-	-	*	-	*	-	-	-
	Fishmeal	0.2	0.1	0.2	0.1	0.2	0.3	0.1	0.9	1.0	0.1	0.2	0.3	0.1	0.3	0.4
	Other Products	3.6	0.1	3.7	3.7	0.7	4.3	3.9	1.1	5.1	2.8	0.2	3.0	4.5	*	4.5
	All Products	3.8	0.1	4.0	3.8	1.4	5.2	4.1	2.5	6.6	2.9	0.7	3.6	4.6	0.8	5.3

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Table 15: Continued

							00110111								
	$\begin{array}{c} & 2013 \\ \hline & \text{At} \\ \text{Sea} & \text{Shoreside} \text{A} \end{array}$			2	014		2	2015		2	016		2	2017	
Product		Shoresi	de All	At Sea	Shoresic	de All									
Whole Fish	37.7	2.4	40.1	29.3	3.5	32.8	15.9	2.2	18.1	22.6	2.0	24.6	30.6	1.3	32.0
Head And Gut	507.7	41.3	549.1	542.9	53.3	596.2	544.9	42.7	587.6	553.8	36.0	589.8	646.9	39.7	686.7
Roe	69.4	37.9	107.4	86.8	53.1	139.9	70.7	27.8	98.5	72.9	19.3	92.3	87.2	34.3	121.5
Fillets	0.7	54.3	55.0	0.4	49.5	49.8	0.6	36.4	37.0	0.4	72.2	72.7	0.5	82.3	82.8
All Species Deep-Skin Fillets	138.8	45.7	184.5	117.2	36.4	153.6	120.3	29.9	150.2	142.7	27.3	170.1	150.5	41.4	191.9
$\begin{array}{c} ext{Other} \\ ext{Fillets} \end{array}$	169.5	189.6	359.0	183.3	195.5	378.8	176.1	172.6	348.7	141.9	190.7	332.6	108.4	149.6	257.9
Surimi	192.4	164.9	357.2	230.8	186.5	417.3	265.8	204.4	470.1	291.9	209.9	501.8	378.0	207.7	585.8
Minced Fish	35.3	10.4	45.7	26.3	7.9	34.2	29.1	7.9	37.1	39.7	19.7	59.3	26.2	14.7	40.9
Fishmeal	40.9	52.3	93.1	49.3	47.2	96.5	53.8	48.7	102.5	50.4	53.2	103.6	46.3	50.4	96.8
$\begin{array}{c} \text{Other} \\ \text{Products} \end{array}$	29.3	30.2	59.4	25.6	32.8	58.4	32.3	29.3	61.6	41.0	37.7	78.6	37.6	34.4	72.1
All Products	1,221.5	629.1	1,850.6	1,292.0	665.7	1,957.6	1,309.4	601.9	1,911.4	1,357.4	667.9	2,025.3	1,512.4	655.9	2,168.3

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 16: Bering Sea & Aleutian Islands price per pound of groundfish products by species and processing mode, 2013-2017, (\$/lb).

		201	3	201	4	201	5	201	6	201	7
	Product	At-sea	Shoreside								
	Whole Fish	0.40	0.49	0.47	0.32	0.45	0.51	0.35	0.34	0.28	0.42
	Head And Gut	0.71	0.64	0.65	0.64	0.64	*	0.78	0.57	0.55	-
	Roe	3.73	2.72	3.31	2.39	2.64	1.67	3.14	2.03	3.35	2.13
Pollock	Deep-Skin Fillets	1.71	1.41	1.63	1.50	1.58	1.47	1.69	1.45	1.51	1.44
POHOCK	Other Fillets	1.29	1.44	1.31	1.30	1.39	1.19	1.30	1.33	1.17	1.20
	Surimi	1.08	0.93	1.19	1.01	1.26	1.01	1.32	1.05	1.67	1.00
	Minced Fish	0.68	0.65	0.60	0.59	0.67	0.66	0.80	0.76	0.70	0.71
	Fishmeal	0.88	0.72	0.96	0.63	0.92	0.63	0.84	0.66	0.75	0.66
	Other Products	0.59	0.43	0.46	0.42	0.52	0.38	0.63	0.42	0.56	0.33
	All Products	1.17	1.04	1.19	1.04	1.22	0.97	1.26	1.01	1.34	0.97
	Whole Fish	0.50	0.45	0.36	0.97	0.34	0.57	0.71	0.69	0.87	*
	Head And Gut	1.10	0.77	1.32	0.98	1.43	1.03	1.35	0.99	1.63	1.20
Pacific Co	Roe	0.77	0.89	0.90	1.00	0.60	0.77	0.51	0.63	0.62	0.72
1 acme Co	Fillets	1.07	2.89	0.94	2.71	1.18	2.72	1.37	3.31	1.79	3.78
	Other Products	0.53	0.77	0.74	0.70	0.95	0.82	1.03	0.75	0.88	0.91
	All Products	1.06	1.34	1.30	1.31	1.39	1.32	1.31	1.60	1.57	1.91
	Head And Gut	5.66	6.39	7.46	6.70	8.57	7.43	6.22	7.84	5.12	7.01
Sablefish	Other Products	0.88	*	0.50	2.67	1.93	2.30	0.86	3.17	0.87	6.28
	All Products	5.39	6.39	7.00	6.64	8.31	7.37	6.00	7.66	4.69	6.96
	Whole Fish	0.83	*	0.66	0.60	0.53	*	0.86	0.62	0.85	*
Atka	Head And Gut	1.32	-	1.51	-	1.08	_	1.03	-	1.49	-
Mackerel	Other Products	1.03	1.10	1.21	0.51	0.87	0.88	0.73	0.74	0.55	0.81
	All Products	1.22	1.09	1.37	0.60	1.02	0.88	1.02	0.66	1.39	0.81

Table 16: Continued

		201	3	201	4	201	5	201	6	201	7
	Product	At-sea	Shoreside								
	Whole Fish	1.34	*	0.46	*	0.45	_	0.49	-	0.61	-
	Head And Gut	0.51	-	0.45	-	0.48	-	0.55	-	0.66	-
Yellowfin	Fillets	-	-	-	-	-	-	-	-	*	-
	Other Products	1.30	1.30	0.90	0.92	1.02	0.87	0.86	0.73	0.74	0.80
	All Products	0.58	1.30	0.46	0.92	0.48	0.87	0.55	0.73	0.65	0.80
	Whole Fish	0.50	*	0.53	*	0.50	-	0.59	*	0.59	*
	Head And Gut	0.54	-	0.45	-	0.49	-	0.56	-	0.66	-
Rock Sole	Head And Gut With Roe	0.85	-	0.85	-	0.89	-	1.00	-	1.24	-
	Fillets	*	-	5.70	-	2.78	-	*	-	*	*
	Other Products	1.26	1.30	0.92	0.92	0.87	0.87	0.78	0.73	0.63	0.80
	All Products	0.58	1.30	0.55	0.92	0.55	0.87	0.62	0.73	0.72	0.80
	Whole Fish	1.38	*	0.62	0.37	0.44	0.55	0.57	*	0.61	*
Flathead	Head And Gut	0.85	-	0.70	-	0.63	-	0.76	-	0.87	-
Sole	Fillets	-	-	*	-	2.33	-	-	-	-	-
Doic	Other Products	1.35	1.30	0.93	0.92	0.87	0.87	0.66	0.73	0.59	0.80
	All Products	0.90	1.30	0.70	0.59	0.64	0.84	0.74	0.73	0.86	0.80
	Whole Fish	*	*	0.54	*	*	*	0.56	*	*	
	Head And Gut	0.63	-	0.82	-	0.74	*	0.86	-	1.30	-
Arrowtoot	thFillets	-	*	-	-	-	-	-	-	-	-
	Other Products	1.27	1.30	0.93	0.92	0.87	0.87	0.64	0.73	0.65	0.80
	All Products	0.63	1.30	0.82	0.92	0.74	0.87	0.84	0.73	1.29	0.80
	Whole Fish	*	-	-	-	-	-	*	-	-	_
Kamchatk	a Head And Gut	0.55	-	0.74	-	0.67	-	0.83	-	1.50	-
Flounder	Fishmeal	1.29	-	0.93	-	0.94	-	0.86	-	0.67	-
	All Products	0.55	-	0.74	-	0.67	-	0.83	-	1.49	-

Table 16: Continued

				13	able 16: Cor	ntinued					
		201	3	201	4	201	5	201	6	201	7
	Product	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside
	Whole Fish Head And Gut	1.95	-	2.18	*	2.15	*	1.97 2.57	- *	2.49	-
Turbot	Other										-
	Products	1.56	1.33	1.89	0.93	1.80	0.88	1.81	0.73	1.50	0.80
	All Products	1.86	1.33	2.11	0.93	2.06	0.88	2.35	0.73	2.22	0.80
	Whole Fish	0.90	*	0.67	*	0.51	*	0.59	*	0.78	1.62
Other	Head And Gut	0.49	-	0.49	-	0.46	-	0.47	*	0.81	*
Flatfish	Fillets Other	-	-	-	-	-	-	-	-	-	*
	Otner Products	1.26	1.30	0.91	0.92	0.88	0.87	0.76	0.73	0.65	0.80
	All Products	0.57	1.30	0.53	0.92	0.47	0.87	0.51	0.73	0.81	1.49
	Whole Fish	0.59	0.59	*	0.55	=	0.56	0.64	0.58	0.56	0.54
Pacific	Head And Gut	1.07	0.60	1.20	*	1.06	*	0.93	*	1.17	*
Ocean Per	clOther Products	0.95	1.01	0.80	0.80	0.87	0.87	0.60	0.73	0.60	0.80
	All Products	1.07	0.61	1.20	0.56	1.06	0.61	0.92	0.58	1.14	0.56
	Whole Fish	*	*	*	0.58	-	0.46	-	0.49	-	*
Northern	Head And Gut	0.70	*	0.92	-	0.75	-	0.64	-	0.76	-
Rockfish	Other Products	0.95	*	0.80	0.80	0.87	*	0.59	0.73	0.61	*
	All Products	0.70	*	0.92	0.74	0.75	0.46	0.64	0.62	0.75	*
	Whole Fish	1.47	-	2.08	0.92	1.72	*	2.27	*	2.29	1.20
Other	Head And Gut	1.47	3.80	1.19	2.42	1.09	3.28	1.07	3.52	1.17	3.74
Rockfish	Other Products	1.47	3.07	0.92	0.58	0.99	1.35	0.78	1.40	0.75	0.77
	All Products	1.47	3.68	1.57	1.49	1.27	3.08	1.47	3.36	1.60	2.99
	Whole Fish	*	0.10	*	0.72	*	0.53	1.02	0.76	*	0.80
	Head And Gut	1.14	-	0.76	*	0.64	*	1.83	-	0.77	*
Other	Fillets	- 0.75	- 0.50	- 0.60	- 0.50	- 0.07	- 0.07	*	- 0.70	- 0.71	- 0.70
Groundfish	h Fishmeal Other	0.75	0.53	0.63	0.50	0.87	0.87	0.68	0.73	0.71	0.78
	Products	0.89	1.05	0.74	2.49	0.87	1.69	0.72	4.01	0.84	*
	All Products	0.88	0.40	0.73	1.00	0.87	0.97	0.72	0.93	0.84	0.79

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 17: Bering Sea & Aleutian Islands total product value per round metric ton of retained catch by processor type, species, and year, 2013-2017, (\$/mt).

	Species	2013	2014	2015	2016	2017
M 41 1:	Pollock	808	1,035	971	909	*
Motherships	Pacific Cod	555	388	459	709	*
	Pollock	1,037	1,037	1,044	1,090	1,145
	Sablefish	7,799	9,728	10,625	7,685	5,765
	Pacific Cod	1,180	1,423	1,579	1,486	1,760
Catcher/process	sorsFlatfish	768	694	693	790	972
	Rockfish	1,173	1,370	1,141	977	1,185
	Atka Mackerel	1,681	2,019	1,391	1,363	1,935
	Other	482	460	513	426	474
	Pollock	950	980	887	929	871
	Sablefish	9,901	9,563	$13,\!156$	12,198	10,971
Shoreside	Pacific Cod	1,397	1,489	1,391	1,545	1,738
processors	Flatfish	1,102	553	564	984	709
	Rockfish	1,422	935	1,071	1,138	1,022
	Other	433	1,611	1,776	1,648	1,257

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 18: Bering Sea & Aleutian Islands number of processors, gross product value, value per processor, and percent value of BSAI FMP groundfish of processed groundfish by processor group, 2013-2017 (\$ millions).

	Year	Processors	Wholesale Value (\$million)	Wholesale Value Per Processor (\$1,000)	Percent Value, BSAI FMP Groundfish
	2013	15	643.30	42,886.85	36.58
	2014	16	653.68	$40,\!855.06$	35.03
AFA CP	2015	16	660.43	$41,\!276.92$	36.22
	2016	15	684.27	$45,\!618.25$	35.43
	2017	16	758.41	$47,\!400.34$	36.62
	2013	18	296.23	16,456.97	16.84
	2014	18	309.44	17,191.14	16.58
A80	2015	18	293.51	$16,\!306.20$	16.10
	2016	19	320.59	$16,\!872.94$	16.60
	2017	19	391.03	$20,\!580.62$	18.88
	2013	33	165.80	5,024.32	9.43
CP Hook	2014	31	200.78	$6,\!476.75$	10.76
and Line	2015	31	231.50	$7,\!467.73$	12.70
and Line	2016	32	211.89	6,621.66	10.97
	2017	29	247.00	$8,\!517.32$	11.93
	2013	7	4.11	586.49	0.23
Sablefish	2014	8	2.14	266.97	0.11
IFQ	2015	5	1.43	286.30	0.08
II Q	2016	7	1.39	198.86	0.07
	2017	6	1.69	281.10	0.08
Mothorahin	2013	3	89.54	29,846.03	5.09
Mothership & Inshore	⁸ 2014	3	115.13	$38,\!376.24$	6.17
Floating	2015	3	111.48	37,161.32	6.11
Procs.	2016	4	106.69	$26,\!673.75$	5.52
1 10cs.	2017	2	*	*	*
	2013	9	537.29	59,699.10	30.55
BSAI	2014	8	573.97	71,746.19	30.76
Shoreside	2015	6	513.67	85,611.04	28.17
Processors	2016	7	573.88	81,982.17	29.72
	2017	7	558.44	79,776.97	26.97

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 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 19: 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, 2013-2017.

			Average	Median	Average	Median
	Year	Vessels	Length	Length	Capacity	Capacity
			(feet)	(feet)	(tons)	(tons)
	2013	88	127	124	163	134
	2014	88	128	124	163	133
AFA CV	2015	86	127	124	162	134
	2016	89	126	123	158	133
	2017	86	125	123	156	133
	2013	16	300	296	1,673	1,592
	2014	17	289	285	1,599	1,592
AFA CP	2015	17	289	285	1,617	1,592
	2016	16	302	296	1,711	1,592
	2017	16	290	285	1,565	1,592
	2013	18	180	185	420	426
	2014	18	186	185	426	426
A80	2015	18	184	185	428	426
	2016	19	185	185	444	426
	2017	19	180	185	476	473
	2013	15	140	144	271	276
BSAI	2014	12	127	130	193	148
Trawl	2015	14	118	108	151	132
11aw1	2016	13	133	130	243	132
	2017	16	123	123	175	132
	2013	4	52	56	36	37
CV Hook	2014	3	49	48	35	37
and Line	2015	2	56	58	42	43
	2017	2	57	59	43	47
	2013	31	146	136	323	258
CP Hook	2014	30	146	136	344	260
and Line	2015	30	145	136	333	258
and Line	2016	31	146	136	338	258
	2017	28	148	141	350	296
	2013	31	87	94	96	111
Sablefish	2014	23	91	98	105	111
IFQ	2015	19	77	58	89	98
11. A	2016	21	88	98	105	111
	2017	19	87	72	114	97

Table 19: Continued

	Year	Vessels	Average Length (feet)	Median Length (feet)	Average Capacity (tons)	Median Capacity (tons)
	2013	59	91	58	127	105
	2014	55	84	58	116	105
Pot	2015	48	86	58	123	105
	2016	56	80	58	114	105
	2017	64	83	58	119	105
	2013	6	36	38	14	15
	2014	3	31	32	19	18
Jig	2015	4	32	33	15	14
	2016	2	42	42	25	26
	2017	1	42	42	26	26
	2013	4	30	26	10	5
No Fleet/	2014	2	48	48	28	28
Other	2015	1	48	48	28	28
	2017	2	31	30	14	13

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

Table 20: Bering Sea & Aleutian Islands number of vessels that caught groundfish by month, vessel type, and gear, 2013-2017.

		Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
		2013	5	3	5	5	5	15	12	11	10	4	4	2	33
	Hook &	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
	Line	2016	1	-	1	1	3	5	7	6	7	4	-	-	16
		2017	-	1	2	2	4	2	4	4	9	2	-	-	15
		2013	41	23	10	12	3	3	2	2	9	16	9	21	59
	_	2014	41	22	18	19	14	1	1	1	14	13	11	12	54
	Pot	2015	29	27	21	15	1	2	2	1	13	21	9	16	47
Catcher		2016	28	29	33	31	3	1	1	1	10	21	17	18	54
Vessels		2017	48	21	25	25	7	4	1	-	11	13	15	33	63
		2013	78	91	94	61	3	71	74	69	43	16	4	-	102
	_	2014	42	81	81	65	2	71	72	71	55	4	1	-	100
	Trawl	2015	70	86	88	62	5	73	70	74	65	27	4	-	100
		2016	72	91	91	69	8	60	70	69	53	16	1	-	101
		2017	71	92	79	70	6	68	69	65	46	14	2	-	102
		2013	124	117	109	78	11	89	88	82	62	36	16	23	189
		2014	88	107	104	90	21	79	83	80	78	24	14	14	173
	All Gea	r2015	102	115	113	79	13	81	78	82	86	57	16	17	165
		2016	101	120	125	101	14	66	78	76	70	41	18	18	170
		2017	119	114	106	97	17	74	74	69	66	29	17	33	178
		2013	26	26	25	18	13	13	21	28	27	29	28	26	33
	Hook &	2014	26	26	28	25	18	20	26	25	25	27	27	24	31
	Line	2015	26	27	28	24	22	18	22	25	28	27	27	28	31
	Line	2016	28	29	28	21	11	19	25	25	25	25	26	23	32
		2017	27	27	26	21	11	20	25	26	25	24	24	24	29
		2013	3	2	-	-	-	-	-	-	3	3	3	2	3
	_	2014	4	4	2	1	1	-	-	-	3	3	3	1	4
	Pot	2015	4	4	2	2	1	-	-	1	4	4	4	1	4
Catcher		2016	5	3	3	2	-	-	-	1	3	3	1	3	5
Processor	`S	2017	5	2	2	2	-	-	-	1	5	5	2	3	6
		2013	28	31	32	25	19	33	28	32	31	24	13	6	34
		2014	30	34	34	21	19	31	29	30	28	18	14	4	34
	Trawl	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
		2017	26	33	33	27	19	29	32	32	29	19	14	2	35
		2013	57	59	57	43	32	46	49	60	61	56	44	34	70
		2014	60	64	64	47	38	51	55	55	56	48	44	29	68
	All Gea		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
		2017	58	62	61	50	30	49	57	58	59	48	40	29	68

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

Table 21: Bering Sea & Aleutian Islands catcher vessel (excluding catcher/processors) weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2013-2017.

		Hook Line		F	ot		Tr	awl		All	Gear	
	Year	<60ft	60- 125ft	<60ft	60- 125ft	>= 125ft	<60ft	60- 125ft	>= 125ft	<60ft	60- 125ft	>= 125ft
	2013	-	-	-	-	-	-	902	608	-	902	608
	2014	-	-	-	-	-	-	838	551	-	838	551
Pollock	2015	-	-	-	-	-	-	904	612	-	904	612
	2016	-	-	-	-	-	-	863	568	-	863	568
	2017	-	-	-	-	-	-	862	498	-	862	498
	2013	88	14	-	35	20	-	-	-	88	49	20
	2014	77	19	-	34	15	-	-	-	77	53	15
Sablefish	2015	69	14	6	18	4	-	-	-	75	32	4
	2016	31	13	-	21	8	-	-	-	31	34	8
	2017	26	7	-	25	12	-	-	-	26	32	12
	2013	72	-	221	124	31	8	264	40	301	388	71
Pacific	2014	103	-	345	115	29	13	247	35	461	362	64
Cod	2015	48	-	312	117	15	-	265	32	360	382	47
Cou	2016	13	-	423	149	15	-	278	38	436	427	53
	2017	18	-	393	172	39	-	214	30	411	386	69
	2013	-	-	-	-	-	-	0	47	-	0	47
	2014	-	-	-	-	-	-	2	31	-	2	31
Flatfish	2015	-	-	-	-	-	-	27	30	-	27	30
	2016	-	-	-	-	-	-	42	34	-	42	34
	2017	-	-	-	-	-	-	48	53	-	48	53
	2013	-	-	-	-	-	-	-	9	-	-	9
	2014	1	-	-	-	-	-	-	11	1	-	11
Rockfish	2015	1	-	-	-	-	-	4	9	1	4	9
	2016	-	-	-	-	-	-	2	4	-	2	4
	2017	-	-	-	-	-	-	3	4	-	3	4
	2013	-	-	-	-	-	-	-	7	-	-	7
Atka	2014	-	-	-	-	-	-	-	12	-	-	12
Mackerel	2015	-	-	-	-	-	-	5	10	-	5	10
Mackerer	2016	-	-	-	-	-	-	6	13	-	6	13
	2017	-	-	-	-	-	-	5	15	-	5	15
	2013	160	14	221	159	51	8	1,166	710	389	1,340	761
All	2014	181	19	345	149	44	13	1,086	640	539	$1,\!254$	684
Croundfa	2015	117	14	318	135	19	-	1,205	692	435	1,354	711
Groundfis	2016	43	13	423	170	23	-	1,191	657	466	1,373	680
	2017	44	7	393	197	51	-	$1,\!132$	600	437	1,335	651

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 22: Bering Sea & Aleutian Islands catcher/processor vessel weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2013-2017.

		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
	2013	-	-	-	-	-	-	3	14	309	-	3	14	309
	2014	-	-	-	-	-	-	1	14	305	-	1	14	305
Pollock	2015	-	-	-	-	-	-	1	6	310	-	1	6	310
	2016	-	-	-	-	-	-	1	4	303	-	1	4	303
	2017	-	-	-	-	-	-	0	5	301	-	0	5	301
	2013	-	84	3	-	-	-	0	0	-	-	84	3	_
	2014	-	41	2	-	-	-	-	0	-	-	41	2	-
Sablefish	2015	-	38	0	-	-	-	-	-	-	-	38	0	-
	2016	11	26	0	-	-	-	-	0	-	11	26	0	-
	2017	19	-	1	-	9	-	1	0	-	19	10	1	-
	2013	-	239	718	-	-	54	5	11	5	-	244	783	5
Pacific	2014	7	250	817	-	19	53	0	9	12	7	269	879	12
	2015	9	253	812	-	23	62	1	11	9	9	277	885	9
Cod	2016	9	223	766	17	13	54	1	17	11	26	237	837	11
	2017	8	180	790	13	20	44	1	11	7	21	201	845	7
	2013	-	1	15	-	-	_	105	401	87	-	106	416	87
	2014	_	5	12	_	_	_	92	415	81	-	97	427	81
Flatfish	2015	-	2	26	-	-	-	105	395	51	-	107	421	51
	2016	-	-	25	-	-	-	100	427	60	-	100	452	60
	2017	-	-	26	-	-	-	88	406	52	-	88	432	52
	2013	_	2	0	_	_	_	0	40	16	_	2	40	16
	2014	-	1	-	-	-	-	3	34	12	-	4	34	12
Rockfish	2015	-	0	-	-	-	-	3	36	17	-	3	36	17
	2016	-	2	1	-	-	-	0	39	8	-	2	40	8
	2017	-	-	-	-	-	-	3	45	4	-	3	45	4
	2013	_	_	_	_	_	_	0	33	13	_	0	33	13
Atka	2014	-	-	-	-	-	-	-	40	19	-	-	40	19
Mackerel	2015	-	-	-	-	-	-	-	66	27	-	-	66	27
Mackerei	2016	-	-	-	-	-	-	-	80	23	-	-	80	23
	2017	-	-	-	-	-	-	7	105	11	-	7	105	11
	2013	_	326	736	-	_	54	113	498	428	-	439	1,289	428
A 11	2014	7	298	831	-	19	53	96	513	428	7	413	1,397	428
All	2015	9	293	838	-	23	62	110	513	415	9	426	1,413	415
Groundfis	ⁿ 2016	20	251	792	17	13	54	101	567	405	37	365	1,413	405
	2017	27	180	818	13	29	44	99	574	375	40	308	1,436	375

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 23: Bering Sea & Aleutian Islands catcher vessel crew weeks in the groundfish fisheries by month, 2013-2017.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
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	948	1,901	1,796	1,271	138	692	1,529	1,254	850	521	187	157	11,245
2017	1,340	1,966	1,827	1,314	290	825	1,451	1,144	1,120	346	258	256	12,137

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 24: Bering Sea & Aleutian Islands at-sea processor vessel crew weeks in the groundfish fisheries by month, 2013-2017.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
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	$13,\!126$	11,701	$9,\!298$	7,213	3,109	2,109	96,398
2017	$6,\!262$	12,766	12,818	7,720	3,454	6,229	14,396	11,861	9,409	4,968	3,641	2,055	95,579

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 25: Gulf of Alaska groundfish retained catch by vessel type, gear, and species, 2013-2017 (1,000 metric tons, round weight).

		C	entral Gu	lf		W	estern Gu	ılf		(Other Gul	f	
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	0.1	_	80.6	80.7	*	_	7.6	7.6	*	_	5.5	5.5
	2014	0.1	-	124.1	124.2	0	-	13.1	13.2	0	-	3.7	3.7
Pollock	2015	0.1	-	132.7	132.9	0	-	25.8	25.8	0	-	4.3	4.3
	2016	0.1	-	110.9	111.1	0	-	61.0	61.0	0	-	3.9	3.9
	2017	0.1	-	133.1	133.2	0	-	49.2	49.2	0	-	1.9	1.9
	2013	8.2	15.6	13.2	36.9	4.2	15.5	6.1	25.8	1.2	*	0	1.2
D:C-	2014	10.5	21.0	15.5	47.0	6.5	17.1	7.7	31.2	1.3	*	0	1.3
Pacific	2015	9.4	23.1	14.2	46.7	5.0	17.1	7.2	29.3	1.6	-	0	1.6
Cod	2016	5.1	20.6	7.7	33.4	4.2	17.0	7.4	28.6	1.1	*	0	1.1
	2017	3.8	11.3	5.3	20.5	4.4	15.0	7.6	27.0	0.5	-	0	0.5
	2013	4.3	_	0.6	4.9	1.3	_	*	1.3	5.6	_	*	5.6
	2014	3.8	-	0.7	4.5	1.1	-	0.1	1.2	4.7	-	0.1	4.9
Sablefish	2015	3.6	-	0.6	4.3	0.9	-	0	1.0	4.7	-	0.2	4.9
	2016	3.2	-	0.7	3.8	0.9	-	0	0.9	4.1	-	0.2	4.3
	2017	3.0	0.4	0.7	4.2	0.8	0.2	0.1	1.1	4.3	0.3	0.2	4.8
	2013	-	-	0.5	0.5	-	-	0.2	0.2	-	-	-	_
Atka	2014	-	-	0.7	0.7	-	-	0.2	0.2	-	-	-	-
Mackerel	2015	*	-	0.5	0.5	-	-	0.3	0.3	-	-	-	-
Mackerer	2016	-	-	0.8	0.8	-	-	0.1	0.1	-	-	-	-
	2017	-	-	0.2	0.2	*	-	0.4	0.4	-	-	-	-
	2013	0	-	15.8	15.8	0	-	0.1	0.1	*	-	0	0
	2014	0	-	31.3	31.3	0	-	0.6	0.6	*	-	*	*
Arrowtoo	th2015	0	-	16.7	16.7	*	-	0.3	0.3	*	-	0	0
	2016	0	-	17.5	17.5	0	-	0.2	0.2	0	-	*	0
	2017	0	-	24.8	24.8	0	-	0.1	0.1	*	-	*	*
	2013	*	-	1.9	1.9	-	-	0.1	0.1	-	-	*	*
Flathead	2014	-	-	2.1	2.1	-	-	0.1	0.1	-	-	0	0
Sole	2015	-	-	1.6	1.6	-	-	0.1	0.1	-	-	*	*
DOTE	2016	-	-	2.2	2.2	-	-	0.1	0.1	-	-	*	*
	2017	-	-	1.9	1.9	-	-	0	0	-	-	*	*

Table 25: Continued

		С	entral Gu	lf		W	estern Gu	ılf			Other Gul	f	
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	-	-	3.5	3.5	-	-	0	0	-	-	*	*
	2014	_	-	3.4	3.4	-	_	0	0	-	-	*	*
Rex Sole	2015	-	-	1.9	1.9	-	-	0	0	-	-	*	*
	2016	-	-	1.5	1.5	_	-	0	0	-	-	*	*
	2017	-	-	1.2	1.2	-	-	0	0	-	-	*	*
	2013	*	-	5.2	5.2	-	-	0	0	-	-	-	_
Shallow-	2014	*	-	4.2	4.2	*	-	0	0	-	-	*	*
water	2015	*	-	2.9	2.9	-	_	0	0	-	-	*	*
Flatfish	2016	*	-	3.6	3.6	-	_	0	0	-	-	-	_
	2017	-	-	2.0	2.0	*	-	0	0	*	-	*	*
	2013	0	-	0.1	0.1	0	_	0	0	*	_	-	*
Deep-	2014	*	-	0.2	0.2	*	_	0	0	-	-	*	*
water	2015	*	-	0.1	0.1	_	-	*	*	*	-	_	*
Flatfish	2016	*	-	0.1	0.1	*	-	*	*	*	-	*	*
	2017	*	-	0.1	0.1	0	-	0	0	*	-	*	*
	2013	*	-	10.4	10.4	*	_	0.2	0.2	-	_	0.1	0.1
Pacific	2014	*	_	12.1	12.1	*	_	2.0	2.0	*	-	0	0
Ocean	2015	*	_	14.1	14.1	_	_	1.9	1.9	*	-	*	*
Perch	2016	_	-	16.1	16.1	*	-	2.4	2.4	*	-	*	*
	2017	0	-	14.9	14.9	*	-	2.6	2.6	*	-	*	*
	2013	*	_	2.5	2.5	*	-	2.2	2.2	*	_	-	*
NT /1	2014	0	_	3.3	3.3	*	_	0.8	0.8	*	-	_	*
Northern	2015	*	-	2.8	2.8	*	-	0.9	0.9	-	-	-	-
Rockfish	2016	*	-	3.2	3.2	0	-	0.1	0.1	*	-	*	*
	2017	0	-	1.5	1.5	0	-	0.2	0.2	*	-	-	*

Table 25: Continued

		Co	entral Gu	lf		W	estern Gu	lf		(Other Gulf	Î	
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	0	_	2.8	2.8	-	-	0.2	0.2	0	_	*	0
Dualere	2014	0	-	2.7	2.8	*	-	0.1	0.1	0	-	*	0
Dusky Rockfish	2015	0	-	2.4	2.5	*	-	0.2	0.2	0	-	*	0
ROCKIISII	2016	0	-	3.1	3.1	0	-	0.1	0.1	0	-	*	0
	2017	0	-	2.3	2.3	0	-	0.1	0.1	0	-	*	0
	2013	0.4	-	0.8	1.2	0.1	-	0	0.1	0.7	-	0	0.7
Other	2014	0.3	-	1.5	1.8	0.1	-	0.2	0.3	0.6	-	0.1	0.7
Rockfish	2015	0.4	-	1.1	1.5	0.1	-	0.1	0.2	0.6	-	0.1	0.7
ROCKIISII	2016	0.3	-	1.6	1.9	0.1	-	0.2	0.3	0.6	-	0.2	0.8
	2017	0.3	-	1.2	1.6	0.1	-	0.1	0.2	0.5	-	0.2	0.8
	2013	0.5	-	2.0	2.6	0	-	0	0.2	0.1	-	0	0.2
041	2014	0.5	-	0.9	1.8	0.1	-	0	0.2	0.1	-	0.1	0.2
Other	2015	0.6	-	0.9	1.8	0.1	-	*	0.1	0.1	-	0.1	0.2
Groundfis	^{sn} 2016	0.2	-	1.1	1.4	0.1	-	0	0.2	0.1	-	0	0.1
	2017	0.1	-	0.8	1.0	0.2	-	0	0.2	0	-	*	0

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.

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Table 26: Gulf of Alaska groundfish retained catch by species, gear, and target fishery, 2016-2017, (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	*	-	*	-	-	-	-	-	-	-	-	*
		2016 Sablefish Pacific	*	2.9	0	*	-	-	*	-	0.2	-	0	3.2
	Central	Pacific Cod	0.1	*	5.1	*	-	-	-	*	0	-	0.1	5.4
	Gulf	Rockfish	0	-	0	- *	-	-	- *	- *	0	-	-	0
		All Targets	0.1	3.2	5.1		-	-		*	0.4	-	0.2	9.0
		Sablefish	-	2.8	0	0	-	-	*	-	0.2	-	0	3.1
		2017 Pacific Cod	0.1	0	3.8	-	-	-	-	-	0	-	0.1	3.9
Hook and	d	Rockfish	*	*	0	-	-	-	- *	-	0	-	-	0
Line		All Targets	0.1	3.0	3.8	0	-	-		-	0.3	-	0.1	7.4
		Sablefish	*	0.9	0	*	-	-	*	-	0.1	-	*	1.0
	Western	2016 Pacific Cod	0	*	4.2	*	-	-	-	-	0	-	0.1	4.3
	Gulf	All Targets	0	0.9	4.2	*	-	-	*	-	0.1	-	0.1	5.4
		Sablefish	*	0.8	*	*	-	-	*	-	0.1	-	-	0.8
		2017 Pacific Cod	0	*	4.4	0	-	-	0	*	0.1	*	0.2	4.7
		All Targets	0	0.8	4.4	0	_	-	0	*	0.1	*	0.2	5.5
		Sablefish	_	3.8	0	-	_	_	-	-	0.3	-	0	4.1
		$^{ m Pacific}_{ m Cod}$	0	*	0.9	-	-	-	-	-	0	-	0	1.0
	Other Gu	D1 C .1.	*	-	0	-	_	_	-	-	0.1	-	-	0.1
	Other Gu	All Targets	0	4.1	1.0	0	-	-	*	-	0.5	-	0	5.7
		Sablefish	*	4.1	0	*	-	-	*	-	0.3	-	0	4.4
		2017 Pacific Cod	0	-	0.4	-	-	-	-	-	0	-	0	0.5
		Rockfish	_	0	0	-	_	_	-	-	0.1	-	-	0.1
		All Targets	0	4.3	0.5	*	-	-	*	*	0.5	-	0	5.4
		Pacific 2016 Cod	0	-	20.6	-	-	-	-	*	*	*	0.1	20.8
Pot	Central	All Targets	0	-	20.6	-	-	-	-	*	*	*	0.1	20.8
100	Gulf	Sablefish	-	0.4	*	*	-	-	-	-	0	-	-	0.4
		2017 Pacific Cod	0	*	11.3	*	*	-	-	*	0	-	0.1	11.5
		All Targets	0	0.4	11.3	*	*	-	-	*	0	-	0.1	11.9

Table 26: Continued

						Table	20: Con	umueu						
		Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Flathead Sole	Rex Sole	Flat Deep	Flat Shallow	Rockfish	Atka Mackerel	Other	All Species
		Pacific 2016 Cod	*	-	17.0	*	*	-	-	*	*	*	0.1	17.0
	Western	All Targets	*	-	17.0	*	*	-	-	*	*	*	0.1	17.0
	Gulf	Pollock, Bottom	-	-	*	-	-	-	-	-	-	-	-	*
Pot		2017 Sablefish	-	0.2	-	-	-	-	-	-	*	-	-	0.2
		Pacific Cod	0	-	15.0	*	*	-	-	0	*	*	0.1	15.1
		All Targets	0	0.2	15.0	*	*	-	-	0	*	*	0.1	15.3
		Sablefish	-	*	-	-	-	-	-	-	-	-	-	*
	Other Gu	2016 Pacific lf Cod	-	-	*	-	-	-	-	-	-	-	-	*
		All Targets	-	*	*	-	-	-	-	-	-	-	-	*
		2017 Sablefish All Targets	-	0.3 0.3	-	-	-	-	-	-	0	-	-	0.3 0.3
		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 Sablofish	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
m 1	Central	Rex Sole	0	*	0	0	0	0.1	*	0	0	*	0	0.2
Trawl	Gulf	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
		Pollock, Bottom	6.8	0	0.5	1.0	0.2	0.1	0	0.3	0.1	0	0.1	9.0
		Pollock,	124.7	0	0	0.1	0	0	*	0	0.4	*	0	125.2
		Pelagic Sablefish	*	0.1	*	*	*	*	0	*	0	-	*	0.1
		2017 Pacific Cod	0.4	0	3.3	0.2	0.1	0	*	0.6	0.1	0	0.1	4.8
		Arrowtooth	0.7	0.2		0.4	28.5							
		Flathead Sole	-	-	-	-	*	-	-	-	-	=	-	*
		Rex Sole	*	*	*	*	*	*	*	*	*	*	*	*
		Flatfish, Shallow	0	0	0.1	0.1	0	0	*	0.3	0	*	0	0.6
		Rockfish All Targets	0.5 133.1	0.3 0.7	0.2 5.3	$\frac{1.3}{24.6}$	0.1 1.8	0.1 1.2	$0 \\ 0.1$	0 1.5	18.2 19.9	0.1 0.2	0.1 0.8	20.8 189.1

Table 26: Continued

	Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Flathead Sole	Rex Sole	Flat Deep	Flat Shallow	Rockfish	Atka Mackerel	Other	All Species
	Pollock, Bottom	0.8	-	0	*	*	*	-	*	0	-	0	0.9
	Pollock, Pelagic Pacific	59.8	0	0.1	0.1	0	0	-	0	0	0	0	60.2
	Pacific Cod	*	*	7.2	0	0	*	-	*	*	*	0	7.2
	Arrowtooth	*	*	*	*	*	*	*	*	*	*	*	*
Western	Flathead Sole	*	*	*	*	*	*	-	*	*	-	-	*
Gulf	Rockfish	0.3	0	0	0	0	0	*	0	2.7	0.1	*	3.3
	All Targets	61.0	0	7.4	0.2	0.1	0	*	0	2.8	0.1	0	71.5
rawl	Pollock, Bottom	0.3	*	0	*	*	*	-	-	*	*	*	0.3
	Pollock, Pelagic	48.6	0	0	0.1	0	0	*	0	0	0	0	48.7
	2017 Pacific Cod	0	*	7.5	0	0	*	-	*	*	*	0	7.5
	Arrowtooth	*	*	*	*	*	*	-	*	*	-	*	*
	Flathead Sole	*	-	*	*	*	*	-	-	*	-	*	,
	Rex Sole	*	*	*	*	*	*	-	-	*	-	*	,
	Rockfish	0.3	0.1	0.1	0	0	0	0	0	2.9	0.4	0	3.9
	Atka Mackerel	*	*	*	*	*	*	-	*	*	*	*	*
	All Targets	49.2	0.1	7.6	0.1	0	0	0	0	3.0	0.4	0	60.4
	Pollock, Pelagic	3.9	*	0	*	*	*	-	-	0	-	0	3.9
	2016 Sablefish	-	*	-	-	-	-	-	-	*	-	-	3
	Pool-fish	*	- *	-	*	*	*	-	-	*	-	*	,
Other C	Sulf All Targets	3.9	*	0	*	*	*	*	-	0	-	0	3.9
	Pollock, Pelagic	1.9	-	0	*	*	-	-	*	0	-	*	1.9
	2017 Sablefish	-	*	-	-	-	-	-	-	*	-	-	*
	Rockfish	*	*	* 0	*	*	*	*	*	* 0	-	*	1.6
	All Targets										-		1.9
Ctr. Gu			3.8	33.3	17.0	2.0	1.4	0.1	2.2	24.2	0.6	1.4	197.1
.ll Gear ——	2017 All Targets		4.2	20.5	24.6	1.8	1.2	0.1	1.5	20.3	0.2	1.0	208.4
West. C	Sulf_2016 All Targets	61.0	0.9	28.6	0.2	0.1	0	*	0	2.9	0.1	0.2	93.9
	2017 All Targets	49.2	1.1	27.0	0.1	0	0	0	0	3.1	0.4	0.2	81.2
Other C	2016 All Targets	3.9	4.1	1.0	0	*	*	*	-	0.6	-	0.1	9.6
	2017 All Targets	1.9	4.6	0.5	*	*	*	*	*	0.5	-	0	7.5

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 27: Gulf of Alaska ex-vessel prices in the groundfish fisheries by gear, and species, 2013-2017; calculations based on COAR (\$/lb, round weight).

(' /	,	0 /		
	Year	Fixed	Trawl	All Gear
	2013	0.156	0.175	0.175
	2014	0.115	0.122	0.122
Pollock	2015	0.088	0.119	0.119
	2016	0.053	0.084	0.084
	2017	0.091	0.088	0.088
	2013	0.273	0.243	0.264
	2014	0.307	0.270	0.297
Pacific Cod	2015	0.306	0.260	0.293
	2016	0.302	0.270	0.294
	2017	0.336	0.329	0.334
	2013	3.184	2.434	3.135
	2014	3.878	2.972	3.801
Sablefish	2015	4.064	3.008	3.974
	2016	4.743	1.906	4.471
	2017	5.314	3.926	5.179
	2013	*	0.367	0.367
A +1	2014	0.016	0.377	0.377
Atka	2015	0.010	0.302	0.302
Mackerel	2016	0.016	0.294	0.294
	2017	0.054	0.387	0.387
	2013	0.019	0.084	0.084
	2014	0.241	0.115	0.115
Arrowtooth	2015	0.337	0.113	0.113
	2016	0.105	0.085	0.085
	2017	0.100	0.108	0.108
	2013	0.019	0.149	0.149
Flathead	2014	*	0.156	0.156
	2015	*	0.147	0.147
Sole	2016	*	0.144	0.144
	2017	*	0.135	0.135
	2013	*	0.212	0.212
	2014	*	0.250	0.250
Rex Sole	2015	*	0.219	0.219
	2016	-	0.273	0.273
	2017	-	0.199	0.199
	2013	0.045	0.207	0.207
Shallow-	2014	0.278	0.208	0.208
water	2015	0.133	0.198	0.198
Flatfish	2016	0.105	0.142	0.142
	2017	0.100	0.158	0.158
	2013	0.019	0.104	0.103
Door +:	2014	0.241	0.113	0.113
Deep-water	2015	0.336	0.102	0.102
Flatfish	2016	0.105	0.098	0.098
	2017	0.100	0.110	0.110
	Co	ntinued on n	ort page	

Table 27: Continued

	Year	Fixed	Trawl	All Gear
	2013	0.360	0.207	0.207
Pacific	2014	0.637	0.182	0.182
Ocean Perc	2015	0.193	0.187	0.187
Ocean reic	2016	*	0.186	0.186
	2017	0.441	0.178	0.178
	2013	0.363	0.202	0.202
Northern	2014	0.258	0.176	0.176
Rockfish	2015	*	0.177	0.177
ROCKIISII	2016	0.627	0.171	0.171
	2017	0.748	0.172	0.172
	2013	0.360	0.200	0.202
Duglere	2014	0.443	0.178	0.179
Dusky Rockfish	2015	0.368	0.179	0.181
ROCKIISII	2016	0.422	0.176	0.180
	2017	0.549	0.171	0.177
	2013	0.879	0.239	0.589
Other	2014	0.818	0.229	0.438
Rockfish	2015	0.775	0.216	0.466
TOCKIISII	2016	0.788	0.199	0.398
	2017	0.850	0.195	0.443

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 28: Gulf of Alaska ex-vessel value of the groundfish catch by vessel category, gear, and species, 2013-2017; calculations based on COAR (\$ millions).

		(Central Gu	lf		V	Vestern Gu	ılf		(Other Gul	f	
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	_	_	31.13	31.18	_	_	2.95	2.95	-	_	2.14	2.14
	2014	-	-	33.31	33.36	-	_	3.46	3.46	_	-	0.99	0.99
Pollock	2015	-	-	34.98	35.02	_	-	7.52	7.53	_	-	1.24	1.24
	2016	-	-	20.49	20.51	-	-	11.26	11.26	-	-	0.74	0.74
	2017	-	-	25.70	25.71	-	-	9.50	9.51	-	-	0.37	0.37
	2013	4.91	9.31	7.09	21.31	2.64	9.27	3.29	15.19	0.70	*	0	0.70
D:6 -	2014	7.11	14.24	9.26	30.62	4.41	11.57	4.59	20.57	0.85	*	0	0.85
Pacific Cod	2015	6.36	15.62	8.11	30.09	3.32	11.57	4.17	19.06	1.11	-	0	1.11
Coa	2016	3.41	13.78	4.58	21.77	2.70	11.35	4.41	18.47	0.74	*	0	0.74
	2017	2.82	8.43	3.87	15.13	3.15	11.19	5.50	19.84	0.35	-	0	0.35
	2013	30.18	-	3.48	33.65	9.12	-	0.07	9.19	39.33	-	0.74	40.35
	2014	32.29	-	4.55	36.84	9.37	-	0.39	9.76	40.70	-	0.88	41.59
Sablefish	2015	32.41	-	4.29	36.70	8.25	-	0.23	8.47	42.61	-	1.27	43.87
	2016	33.20	-	3.55	36.76	9.48	-	0.05	9.53	42.80	-	0.05	42.84
	2017	35.51	5.18	6.28	46.97	9.29	2.63	0.56	12.47	50.94	3.17	1.65	55.76
	2013	-	-	0.49	0.49	-	-	0.20	0.20	-	-	-	_
Atka	2014	-	-	0.57	0.57	-	-	0.24	0.24	-	-	-	-
Mackerel	2015	-	-	0.37	0.37	-	-	0.23	0.23	-	-	-	-
Mackerer	2016		-	0.53	0.53	-	-	0.09	0.09	-	-	-	-
	2017	-	-	0.18	0.18	-	-	0.41	0.41	-	-	-	-
	2013	0	-	2.93	2.93	0	-	0.04	0.04	*	-	0	0
	2014	0	-	7.92	7.93	0.01	-	0.39	0.40	*	-	0	0
Arrowtoo	th2015	0.01	-	4.15	4.16	0.01	-	0.08	0.08	0	-	0	0
	2016	0	-	3.27	3.27	0	-	0.13	0.13	0	-	0	0
	2017	0	-	5.91	5.91	0.01	-	0.03	0.03	0	-	0.01	0.01
	2013	*	-	0.70	0.70	-	-	0.11	0.11	-	-	*	*
Flathead	2014	-	-	0.79	0.79	-	-	0.04	0.04	-	-	0	0
Sole	2015	-	-	0.56	0.56	-	-	0.04	0.04	-	-	0	0
Pore	2016	-	-	0.70	0.70	-	-	0.04	0.04	-	-	0	0
	2017	-	-	0.56	0.56	-	-	0.01	0.01	-	-	*	*

Table 28: Continued

		\mathbf{C}	entral Gu	lf		W	estern Gu	lf			Other Gul	f	
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	-	_	1.67	1.67	-	_	0.03	0.03	-	_	*	*
	2014	_	_	1.91	1.91	_	-	0.04	0.04	-	-	0	0
Rex Sole	2015	-	-	0.91	0.91	-	-	0.02	0.02	-	-	*	*
	2016	-	-	0.97	0.97	-	-	0.04	0.04	-	-	0	0
	2017	-	-	0.61	0.61	-	-	0.01	0.01	-	-	*	*
	2013	0	-	2.40	2.40	-	-	0.01	0.01	-	-	-	_
Shallow-	2014	*	-	1.97	1.97	*	-	0.01	0.01	-	-	0	0
water	2015	0	-	1.27	1.27	_	-	0.02	0.02	-	-	*	*
Flatfish	2016	*	-	1.12	1.12	_	-	0	0	-	-	_	-
	2017	-	-	0.71	0.71	*	-	0	0	*	-	*	*
	2013	0	-	0.03	0.03	0	-	0	0	*	_	-	*
Deep-	2014	*	-	0.04	0.04	*	-	0.02	0.02	-	-	*	*
water	2015	*	-	0.02	0.02	-	-	0.01	0.01	*	-	-	*
Flatfish	2016	*	-	0.02	0.02	*	-	0	0	*	-	*	*
	2017	*	-	0.02	0.02	0	-	0	0	*	-	*	*
	2013	*	-	4.78	4.78	*	-	0.09	0.09	-	-	0.70	0.70
Pacific	2014	*	-	4.86	4.86	*	-	0.83	0.83	*	-	0.73	0.73
Ocean	2015	*	-	5.81	5.81	_	-	0.80	0.80	*	-	0.81	0.81
Perch	2016	-	-	6.60	6.60	*	-	1.01	1.01	*	-	1.15	1.15
	2017	0	-	5.86	5.86	*	-	1.02	1.02	*	-	1.08	1.08
	2013	0	-	1.10	1.10	*	-	0.98	0.98	*	_	-	*
NT 41	2014	0	_	1.27	1.27	*	-	0.33	0.33	*	-	_	*
Northern	2015	*	-	1.08	1.08	*	-	0.39	0.39	-	-	-	-
Rockfish	2016	*	-	1.19	1.19	0	-	0.04	0.04	*	-	*	*
	2017	0	-	0.56	0.56	0	-	0.08	0.08	*	-	-	*

Table 28: Continued

		C	entral Gu	lf		W	estern Gu	ılf		C	Other Gulf	Î	
	Year	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
	2013	0.01	-	1.22	1.23	-	-	0.09	0.09	0.01	-	0	0.01
Duglere	2014	0.02	-	1.07	1.09	*	-	0.05	0.05	0	-	*	0
Dusky Rockfish	2015	0.02	-	0.96	0.98	0	-	0.07	0.07	0.01	-	*	0.01
NOCKIISII	2016	0.04	-	1.18	1.23	0	-	0.03	0.03	0.01	-	0	0.01
	2017	0.02	-	0.86	0.88	0.02	-	0.03	0.05	0	-	*	0
	2013	0.72	-	0.45	1.17	0.17	-	0.02	0.19	1.40	-	0.05	1.45
Other	2014	0.60	-	0.79	1.39	0.18	-	0.09	0.27	1.04	-	0.05	1.08
Rockfish	2015	0.65	-	0.53	1.17	0.16	-	0.06	0.22	1.01	-	0.04	1.05
ROCKIISII	2016	0.57	-	0.71	1.28	0.18	_	0.06	0.24	0.97	_	0.09	1.06
	2017	0.56	-	0.55	1.11	0.20	-	0.05	0.24	1.04	-	0.08	1.13
	2013	0.51	-	1.86	2.46	0.05	-	0.01	0.17	0.11	-	0.04	0.15
Othon	2014	0.49	-	0.89	1.81	0.06	-	0.03	0.19	0.09	-	0.08	0.17
Other	2015	0.54	-	0.93	1.80	0.12	-	0.01	0.15	0.13	-	0.09	0.21
Groundfis	^{sn} 2016	0.17	-	1.05	1.36	0.08	-	0.01	0.16	0.05	_	0.02	0.07
	2017	0.10	-	0.81	1.04	0.14	-	0.02	0.22	0.03	-	0	0.03

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 29: 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, 2013-2017; 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
	2013	40	14	197.43	7.90	4.53	0.91
Western	2014	35	13	301.65	10.56	5.25	1.58
Gulf Traw	$^{1}2015$	34	14	401.90	13.66	6.84	2.13
Guii Iiaw	2016	40	16	418.75	16.75	9.48	3.11
	2017	42	15	409.75	17.21	8.55	5.20
	2013	66	22	908.83	59.98	34.40	6.89
Central	2014	69	20	1,011.66	69.80	34.71	10.42
Central Gulf Traw	12015	62	18	1,037.47	64.32	32.19	10.03
Guii Ilaw	$^{1}2016$	63	17	708.97	44.67	25.29	8.28
	2017	58	13	906.44	52.57	26.13	15.89
	2013	116	35	53.09	6.16	3.53	0.71
CV Hook	2014	101	37	72.38	7.31	3.63	1.09
	2015	108	33	66.74	7.21	3.61	1.12
and Line	2016	101	31	31.86	3.22	1.82	0.60
	2017	86	35	34.78	2.99	1.49	0.90
	2013	8	9	429.05	3.43	1.97	0.39
CP Hook	2014	10	10	426.78	4.27	2.12	0.64
and Line	2015	11	11	429.37	4.72	2.36	0.74
and Line	2016	11	11	292.28	3.22	1.82	0.60
	2017	9	9	479.61	4.32	2.15	1.30
	2013	287	42	255.57	73.35	42.06	8.42
Sablefish	2014	277	37	278.29	77.09	38.33	11.50
IFQ	2015	267	37	287.23	76.69	38.38	11.95
11 Q	2016	269	35	297.78	80.10	45.35	14.86
	2017	264	40	382.36	100.94	50.17	30.50
	2013	129	26	145.59	18.78	10.77	2.16
	2014	102	24	261.05	26.63	13.24	3.97
Pot	2015	116	25	237.44	27.54	13.78	4.29
	2016	119	25	215.45	25.64	14.52	4.76
	2017	110	26	180.20	19.82	9.85	5.99
	2013	219	37	5.12	1.12	0.64	0.13
	2014	259	38	10.32	2.67	1.33	0.40
Jig	2015	242	41	9.21	2.23	1.12	0.35
	2016	208	40	7.11	1.48	0.84	0.27
	2017	108	30	1.40	0.15	0.08	0.05

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 30: Gulf of Alaska production of groundfish products by species, 2013-2017, (1,000 metric tons product weight).

	Product	2013	2014	2015	2016	2017
	Whole Fish	0.67	0.27	2.30	14.49	9.34
	Head And Gut	21.28	29.68	30.34	27.81	37.39
	Roe	2.21	3.51	3.12	0.54	1.09
.	Deep-Skin Fillets	*	*	-	*	0.63
Pollock	Other Fillets	5.79	8.19	9.10	14.32	15.09
	Surimi	8.60	12.33	14.65	13.41	10.61
	Minced Fish	0.20	0.19	*	1.25	1.44
	Fishmeal	*	*	*	1.39	*
	Other Products	0.81	0.49	0.27	1.92	2.46
	All Products	39.56	54.66	59.78	75.14	78.06
	Whole Fish	1.24	0.45	0.69	0.25	0.14
	Head And Gut	6.63	13.95	19.05	8.43	6.11
	Salted/Split	*	-	-	-	_
Pacific Cod	Roe	1.59	1.79	1.34	0.78	1.04
	Fillets	9.70	9.85	6.39	7.87	6.52
	Other Products	4.63	5.03	4.52	4.33	3.58
	All Products	23.80	31.07	32.00	21.65	17.39
	Head And Gut	6.24	5.60	5.35	5.03	5.28
Sablefish	Other Products	0.46	0.39	0.24	0.30	0.36
	All Products	6.70	5.99	5.59	5.34	5.64
	Whole Fish	-	*	*	*	*
Atka	Head And Gut	0.53	0.51	0.47	0.45	0.37
Mackerel	Other Products	*	_	*	*	*
	All Products	0.53	0.51	0.47	0.45	0.37
	Whole Fish	0.05	0.16	0.17	1.09	3.22
	Head And Gut	6.44	15.58	7.59	7.05	11.28
Arrowtooth	Kirimi	*	*	*	-	-
71110W (000111	Fillets	0.03	*	*	*	*
	Other Products	0.04	*	0.08	0.14	*
	All Products	6.56	15.75	7.84	8.28	14.50
	Whole Fish	0.51	0.81	0.34	0.74	0.45
	Head And Gut	0.82	0.45	0.40	0.38	0.46
Flathead Sole	Kirimi	*	0.13	0.15	*	*
	Fillets	0.01	0.04	*	*	*
	Other Products	*	*	-	*	*
	All Products	1.33	1.44	0.89	1.11	0.91

Table 30: Continued

		Table 50.	Continued			
	Product	2013	2014	2015	2016	2017
	Whole Fish	3.30	3.18	1.73	1.43	1.27
Flatfish Pacific Ocea Perch Northern Rockfish Dusky	Head And Gut	0.09	0.09	0.08	0.07	0.01
Dow Colo	Kirimi	*	-	-	-	-
nex sole	Fillets	0.01	*	*	*	0.00
	Other Products	*	*	-	*	*
	All Products	3.39	3.27	1.81	1.51	1.43 1.27 0.07 0.01 * 0.00 * 0.00 * 1.51 0.93 0.89 0.66 0.21 * * 0.02 * * 1.61 1.11 0.00 0.05 * * * 0.05 * * * 0.05 * * * 0.03 0.16 3.49 11.06 0.02 0.00 1.42 0.83 0.08 0.01 1.51 0.84 0.22 0.28 1.36 0.97
	Whole Fish	1.32	1.45	0.37	0.93	0.89
Challow	Head And Gut	1.33	0.87	0.60	0.66	0.21
	Kirimi	*	*	0.51	*	*
	Fillets	0.16	0.10	0.04	0.02	*
riadisii	Other Products	*	*	-	*	*
	All Products	2.81	2.42	1.53	1.61	1.11
Deep-water	Whole Fish	0.07	0.06	*	0.00	*
	Head And Gut	0.02	0.06	0.00	0.05	*
	Fillets	0.01	0.02	*	*	*
Deep-water Flatfish Pacific Ocea	Other Products	-	-	-	-	*
	All Products	0.09	0.14	0.08 0.07 0.0 - - - 1.81 1.51 1.2 0.37 0.93 0.89 0.60 0.66 0.2 0.51 * * 0.04 0.02 * - - * 1.53 1.61 1.1 * 0.00 0.05 * * 0.00 0.00 0.05 * 3.13 5.13 2.7 6.96 8.33 8.19 0.05 0.03 0.10 10.14 13.49 11.00 * 0.02 0.00 1.75 1.42 0.8 0.02 0.08 0.0 1.77 1.51 0.8 0.27 0.22 0.2 1.02 1.36 0.9 0.12 0.07 0.0°	*	
	Whole Fish	2.47	2.75	3.13	5.13	2.71
Pacific Ocea	n Head And Gut	4.73	6.31	6.96	8.33	8.19
Perch	Other Products	0.08	0.09	0.05	0.03	0.16
	All Products	7.27	9.15	10.14	13.49	11.06
	Whole Fish	0.08	0.32	*	0.02	0.00
Northern	Head And Gut	2.19	1.84	1.75	1.42	0.83
Rockfish	Other Products	0.07	0.03	0.02	0.08	0.01
	All Products	2.34	2.18	1.77	1.51	0.84
	Whole Fish	0.33	0.26	0.27	0.22	0.28
Dusky	Head And Gut	1.15	1.15	1.02	1.36	0.97
Rockfish	Other Products	0.12	0.15	0.12	0.07	0.07
Perch Northern Rockfish Dusky	All Products	1.60	1.56	1.41	1.65	1.31
		0 1				

Table 30: Continued

Other Whole Fish 0.43 0.48 0.42 0.61 0.54 Rockfish Other Products 0.09 0.10 0.14 0.13 0.13 All Products 1.08 1.34 1.23 1.45 1.34 Whole Fish 0.16 0.07 0.10 0.04 0.01 Head And Gut 0.05 0.28 0.17 0.06 0.07 Kirimi - * * - - Kirimi - * * - - Groundfish Fillets - - - - - Groundfish Fillets - * * * - - - Groundfish Fillets - * <th></th> <th></th> <th>10010 00.</th> <th></th> <th>-</th> <th></th> <th></th>			10010 00.		-		
Other Head And Gut 0.56 0.77 0.67 0.71 0.68 Rockfish Other Products 0.09 0.10 0.14 0.13 0.13 All Products 1.08 1.34 1.23 1.45 1.34 Whole Fish 0.16 0.07 0.10 0.04 0.01 Head And Gut 0.05 0.28 0.17 0.06 0.07 Kirimi - * * - - * Other Roe * -		Product	2013	2014	2015	2016	2017
Rockfish Other Products 0.09 0.10 0.14 0.13 0.13 All Products 1.08 1.34 1.23 1.45 1.34 Whole Fish 0.16 0.07 0.10 0.04 0.01 Head And Gut 0.05 0.28 0.17 0.06 0.07 Kirimi - * * - * Other Roe * - - - - Fishmeal * * * * * * * Other Products 1.04 0.57 0.53 0.49 0.35 All Products 1.24 0.93 0.80 0.59 0.43 Whole Fish 10.61 10.26 9.54 24.94 18.84 Head And Gut 52.06 77.16 74.46 61.82 71.85 Salted/Split * - - - - - - - - - - - - - - </td <td></td> <td>Whole Fish</td> <td>0.43</td> <td>0.48</td> <td>0.42</td> <td>0.61</td> <td>0.54</td>		Whole Fish	0.43	0.48	0.42	0.61	0.54
All Products	Rockfish Other Groundfish	Head And Gut	0.56	0.77	0.67	0.71	0.68
Whole Fish 0.16 0.07 0.10 0.04 0.01 Head And Gut 0.05 0.28 0.17 0.06 0.07 Kirimi - * * - * Other Roe * - - - - Groundfish Fillets - * * - - Fishmeal * * * * * * * Other Products 1.04 0.57 0.53 0.49 0.35 All Products 1.24 0.93 0.80 0.59 0.43 Whole Fish 10.61 10.26 9.54 24.94 18.84		Other Products	0.09	0.10	0.14	0.13	0.13
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		All Products	1.08	1.34	1.23	1.45	1.34
Kirimi - * * - * Groundfish Fillets - * * -		Whole Fish	0.16	0.07	0.10	0.04	0.01
Other Roe *		Head And Gut	0.05	0.28	0.17	0.06	0.07
Groundfish Fillets - * * * *	Rockfish Other Groundfish	Kirimi	-	*	*	-	*
Fishmeal * * * * * * * * * * * * * * * * * * *		Roe	*	-	-	-	-
Other Products 1.04 0.57 0.53 0.49 0.35 All Products 1.24 0.93 0.80 0.59 0.43 Whole Fish 10.61 10.26 9.54 24.94 18.84 Head And Gut 52.06 77.16 74.46 61.82 71.85 Salted/Split * Kirimi * 0.13 0.66 * * Roe 3.80 5.30 4.46 1.32 2.13 Fillets 9.92 10.01 6.43 7.89 6.53 All Species Deep-Skin * * - * - * 0.63 Surimi 8.60 12.33 14.65 13.41 10.61 Minced Fish 0.20 0.19 * 1.25 1.44	Groundfish	Fillets	-	*	*	_	-
All Products 1.24 0.93 0.80 0.59 0.43 Whole Fish 10.61 10.26 9.54 24.94 18.84 Head And Gut 52.06 77.16 74.46 61.82 71.85 Salted/Split * Kirimi * 0.13 0.66 * * Roe 3.80 5.30 4.46 1.32 2.13 Fillets 9.92 10.01 6.43 7.89 6.53 All Species Deep-Skin * * - * - * * 0.63 Other Fillets 5.79 8.19 9.10 14.32 15.09 Surimi 8.60 12.33 14.65 13.41 10.61 Minced Fish 0.20 0.19 * 1.25 1.44		Fishmeal	*	*	*	*	*
Whole Fish 10.61 10.26 9.54 24.94 18.84 Head And Gut 52.06 77.16 74.46 61.82 71.85 Salted/Split *		Other Products	1.04	0.57	0.53	0.49	0.35
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		All Products	1.24	0.93	0.80	0.59	0.43
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Whole Fish	10.61	10.26	9.54	24.94	18.84
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Head And Gut	52.06	77.16	74.46	61.82	71.85
Rimin 0.15 0.00 Roe 3.80 5.30 4.46 1.32 2.13 Fillets 9.92 10.01 6.43 7.89 6.53 All Species Deep-Skin * * * * * 0.63 Fillets Other Fillets 5.79 8.19 9.10 14.32 15.09 Surimi 8.60 12.33 14.65 13.41 10.61 Minced Fish 0.20 0.19 * 1.25 1.44		Salted/Split	*	-	-	-	-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Kirimi	*	0.13	0.66	*	*
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Rockfish Other Groundfish	Roe	3.80	5.30	4.46	1.32	2.13
Fillets Other Fillets 5.79 8.19 9.10 14.32 15.09 Surimi 8.60 12.33 14.65 13.41 10.61 Minced Fish 0.20 0.19 * 1.25 1.44		Fillets	9.92	10.01	6.43	7.89	6.53
Surimi 8.60 12.33 14.65 13.41 10.61 Minced Fish 0.20 0.19 * 1.25 1.44	All Species	•	*	*	-	*	0.63
Minced Fish 0.20 0.19 * 1.25 1.44		Other Fillets	5.79	8.19	9.10	14.32	15.09
Winiced Fish 0.20 0.19 1.29 1.44		Surimi	8.60	12.33	14.65	13.41	10.61
Fishmeal * * * 1.30 *		Minced Fish	0.20	0.19	*	1.25	1.44
1.00		Fishmeal	*	*	*	1.39	*
Other Products 7.34 6.85 5.97 7.49 7.11		Other Products	7.34	6.85	5.97	7.49	7.11
All Products 98.33 130.41 125.26 133.84 134.23		All Products	98.33	130.41	125.26	133.84	134.23

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 31: Gulf of Alaska gross value of groundfish products by species, 2013-2017, (\$ million).

	Product	2013	2014	2015	2016	2017
	Whole Fish	0.9	0.4	2.2	7.2	5.6
	Head And Gut	36.5	40.7	40.6	26.2	33.1
	Roe	13.6	15.8	8.9	1.6	4.0
D II I	Deep-Skin Fillets	*	*	-	*	1.3
Pollock	Other Fillets	20.5	24.4	26.0	35.2	28.5
	Surimi	20.3	24.0	27.4	28.7	16.4
	Minced Fish	0.3	0.2	*	1.5	1.5
	Fishmeal	*	*	*	2.1	*
	Other Products	1.0	0.3	0.2	2.9	2.2
	All Products	93.1	105.8	105.4	105.3	92.7
	Whole Fish	1.3	0.7	0.8	0.5	0.2
	Head And Gut	14.7	38.5	52.6	20.2	19.6
	Salted/Split	*	_	-	-	-
Pacific Cod	Roe	3.7	4.2	2.5	1.3	1.5
	Fillets	67.2	67.4	37.2	58.3	42.8
	Other Products	7.4	7.4	9.7	9.9	7.8
	All Products	94.2	118.1	102.9	90.2	71.9
	Head And Gut	78.6	85.6	81.2	89.9	108.4
Sablefish	Other Products	2.6	2.8	1.9	2.5	3.1
Sablefish Atka	All Products	81.2	88.5	83.1	92.4	111.5
	Whole Fish	-	*	*	*	*
Atka	Head And Gut	1.8	1.7	1.3	1.2	1.2
Mackerel	Other Products	*	-	*	*	*
	All Products	1.8	1.7	1.3	1.2	1.2
	Whole Fish	0.1	0.2	0.1	1.0	4.9
	Head And Gut	5.8	22.1	9.9	12.4	27.4
Arrowtooth	Kirimi	*	*	*	-	-
Allowtooth	Fillets	0.1	*	*	*	*
	Other Products	0.2	*	0.1	0.1	*
	All Products	6.1	22.3	10.2	13.5	32.3
	Whole Fish	1.2	1.0	0.5	0.8	0.6
	Head And Gut	1.4	0.7	0.6	0.7	0.7
Flathead Sol	Kirimi	*	0.4	0.4	*	*
riameau 501	Fillets	0.0	0.1	*	*	*
	Other Products	*	*	-	*	*
	All Products	2.6	2.1	1.5	1.5	1.3

Table 31: Continued

		Table 51.	Continued			
	Product	2013	2014	2015	2016	2017
	Whole Fish	7.9	6.8	3.2	3.2	2.8
Pacific Ocean Perch Northern Rockfish Dusky	Head And Gut	0.3	0.3	0.7	0.2	0.0
	Kirimi	*	_	-	-	-
nex sole	Fillets	0.0	*	*	*	0.0
	Other Products	*	*	-	*	*
	All Products	8.2	7.2	3.9	3.4	.2 2.8 .2 0.0 * 0.0 * .4 .6 0.3 * .1 * .7 .1 * * .1 * .1 .4 3.3 .2 19.9 .1 0.8 .7 24.0 .0 0.0 .5 1.6 .4 0.1 .0 1.7 .4 0.4 .3 2.0
	Whole Fish	3.1	1.9	0.9	1.0	1.2
Rex Sole Shallow- water Flatfish Deep-water Flatfish Pacific Ocean Perch Northern Rockfish Dusky Rockfish	Head And Gut	1.8	1.1	1.0	1.6	
	Kirimi	*	*	1.2	*	*
	Fillets	0.6	0.3	0.2	0.1	*
r latiisii	Other Products	*	*	-	*	*
	All Products	5.5	3.2	3.3	2.7	1.5
Deep-water	Whole Fish	0.1	0.0	*	0.0	*
	Head And Gut	0.0	0.1	0.0	0.1	*
	Fillets	0.0	0.1	*	*	*
riadisii	Other Products	-	-	-	-	*
	All Products	0.1	0.2	0.0	0.1	*
	Whole Fish	3.4	3.7	5.0	7.4	3.3
Pacific Ocea	n Head And Gut	11.1	15.7	16.3	17.2	19.9
Perch	Other Products	0.5	0.4	0.3	0.1	0.8
	All Products	15.0	19.7	21.5	24.7	24.0
	Whole Fish	0.1	0.4	*	0.0	0.0
Northern	Head And Gut	3.9	4.5	3.7	2.5	1.6
Rockfish	Other Products	0.4	0.1	0.1	0.4	0.1
	All Products	4.5	5.0	3.8	3.0	1.7
	Whole Fish	0.9	0.4	0.6	0.4	0.4
Dusky	Head And Gut	1.7	2.8	2.6	2.3	2.0
Rockfish	Other Products	0.6	0.5	0.5	0.4	0.5
Perch Northern Rockfish Dusky	All Products	3.3	3.7	3.7	3.1	2.8
		0 1				

Table 31: Continued

	Product	2013	2014	2015	2016	2017
	Whole Fish	1.9	2.0	1.6	2.3	2.3
Other Rockfish Other Groundfish All Species	Head And Gut	2.8	3.0	2.8	3.0	3.2
Rockfish	Other Products	0.7	0.6	0.7	0.9	0.8
	All Products	5.4	5.7	5.2	6.2	6.3
	Whole Fish	0.3	0.2	0.2	0.1	0.0
	Head And Gut	0.1	0.5	0.4	0.2	0.2
Rockfish Other Groundfish	Kirimi	-	*	*	-	*
	Roe	*	-	-	-	-
Groundfish	Fillets	-	*	*	-	-
	Fishmeal	*	*	*	*	*
Groundfish	Other Products	5.5	2.7	3.0	2.9	1.7
	All Products	5.9	3.3	3.6	3.2	2.0
	Whole Fish	21.2	17.6	15.3	23.9	21.4
	Head And Gut	160.5	217.2	213.7	177.7	217.8
	Salted/Split	*	-	-	-	-
	Kirimi	*	0.4	1.5	*	*
	Roe	17.3	20.0	11.4	2.9	5.5
	Fillets	68.0	67.9	37.4	58.4	42.8
All Species	Deep-Skin Fillets	*	*	-	*	1.3
	Other Fillets	20.5	24.4	26.0	35.2	28.5
	Surimi	20.3	24.0	27.4	28.7	16.4
All Species	Minced Fish	0.3	0.2	*	1.5	1.5
	Fishmeal	*	*	*	2.1	*
	Other Products	18.8	14.9	16.5	20.2	16.9
	All Products	326.9	386.6	349.3	350.5	352.1

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.

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Table 32: Gulf of Alaska price per pound of groundfish products by species, 2013-2017, (\$/lb).

	Product	2013	2014	2015	2016	2017
	Whole Fish	0.60	0.68	0.43	0.23	0.27
	Head And Gut	0.78	0.62	0.61	0.43	0.40
	Roe	2.80	2.03	1.30	1.34	1.68
Pollock	Deep-Skin Fillets	*	*	-	*	0.96
FOHOCK	Other Fillets	1.61	1.35	1.30	1.11	0.86
	Surimi	1.07	0.89	0.85	0.97	0.70
	Minced Fish	0.61	0.56	*	0.53	0.46
	Fishmeal	*	*	*	0.68	*
	Other Products	0.53	0.31	0.39	0.67	0.41
	All Products	1.07	0.88	0.80	0.64	0.54
	Whole Fish	0.47	0.66	0.56	0.92	0.82
	Head And Gut	1.01	1.25	1.25	1.09	1.46
	Salted/Split	*	-	-	-	-
Pacific Cod	Roe	1.05	1.06	0.86	0.79	0.66
	Fillets	3.14	3.10	2.64	3.36	2.97
	Other Products	0.72	0.67	0.97	1.04	0.99
	All Products	1.80	1.72	1.46	1.89	1.88
	Head And Gut	5.71	6.94	6.89	8.10	9.31
Sablefish	Other Products	2.52	3.28	3.55	3.70	3.93
	All Products	5.49	6.70	6.74	7.85	8.97
	Whole Fish	_	*	*	*	*
Atka	Head And Gut	1.50	1.54	1.24	1.21	1.51
Mackerel	Other Products	*	_	*	*	*
	All Products	1.50	1.54	1.24	1.21	1.51
	Whole Fish	0.63	0.53	0.27	0.42	0.69
	Head And Gut	0.41	0.64	0.59	0.80	1.10
Arrowtooth	Fillets	1.74	*	*	*	*
	Other Products	1.70	*	0.63	0.45	*
	All Products	0.42	0.64	0.59	0.74	1.01
	Whole Fish	1.09	0.54	0.71	0.49	0.59
	Head And Gut	0.76	0.69	0.63	0.82	0.74
Flathead Sol	eFillets	1.56	1.36	*	*	*
	Other Products	*	*	_	*	*
	All Products	0.89	0.67	0.74	0.60	0.67
	Whole Fish	1.09	0.98	0.84	1.00	0.99
	Head And Gut	1.39	1.65	4.04	1.33	1.48
Rex Sole	Fillets	1.31	*	*	*	0.33
	Other Products	*	*	-	*	*
	All Products	1.10	0.99	0.98	1.02	0.99
	Whole Fish	1.08	0.58	1.07	0.49	0.62
Shallow-	TT 1 4 1 0 1	0.62	0.56	0.75	1.08	0.66
Shanow-	Head And Gut	0.02	0.00			
water	Head And Gut Fillets	1.62	1.39	2.37	2.42	*
water Flatfish						*

Table 32: Continued

	Product	2013	2014	2015	2016	2017
	Whole Fish	0.45	0.36	*	0.46	*
Perch Northern Rockfish Dusky Rockfish Other	Head And Gut	0.78	0.70	1.09	0.68	*
-	Fillets	1.76	2.04	*	*	*
riatiisii	Other Products	-	-	-	-	*
Perch Northern Rockfish Dusky	All Products	0.61	0.73	1.09	0.67	*
	Whole Fish	0.63	0.60	0.72	0.65	0.56
Pacific Ocea	n Head And Gut	1.07	1.13	1.06	0.94	1.10
Perch	Other Products	2.92	1.96	2.36	1.90	2.28
	All Products	0.94	0.98	0.96	0.83	0.99
	Whole Fish	0.71	0.59	*	0.50	0.92
Northern	Head And Gut	0.81	1.10	0.97	0.81	0.88
	Other Products	2.60	2.03	1.73	2.54	2.11
	All Products	0.86	1.04	0.98	0.89	0.90
Dusky Rockfish	Whole Fish	1.25	0.66	1.07	0.78	0.62
	Head And Gut	0.68	1.09	1.14	0.77	0.93
	Other Products	2.41	1.62	1.97	3.04	3.06
	All Products	0.93	1.07	1.20	0.86	0.98
	Whole Fish	1.98	1.92	1.74	1.72	1.96
Other	Head And Gut	2.27	1.77	1.93	1.90	2.13
Rockfish	Other Products	3.63	3.01	2.48	3.17	2.74
	All Products	2.27	1.91	1.93	1.94	2.12
	Whole Fish	0.98	1.13	1.06	1.25	1.74
	Head And Gut	0.81	0.76	0.93	1.70	1.41
041	Roe	*	-	-	-	-
Other Crown deals	Fillets	-	*	*	-	-
Groundfish	Fishmeal	*	*	*	*	*
	Other Products	2.40	2.12	2.58	2.68	2.21
	All Products	2.16	1.63	2.03	2.48	2.07
Those estim	natas ara basad on di		. fl	L L L C A 1	1 (1 1	Drigon he

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 33: Gulf of Alaska total product value per round metric ton of retained catch by species and year, 2013-2017, (\$/mt).

Species	2013	2014	2015	2016	2017
Pollock	1,003	754	638	608	520
Sablefish	6,742	8,380	8,149	10,185	11,051
Pacific Cod	1,473	1,484	1,324	1,428	1,498
Flatfish	859	826	797	868	1,259
Rockfish	1,280	1,315	1,281	1,203	1,291
Atka Mackerel	2,068	1,813	$1,\!474$	1,258	1,783
Other	2,026	1,531	1,672	1,901	$1,\!522$

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 34: Gulf of Alaska number of processors, gross product value, value per processor, and percent value of GOA FMP groundfish of processed groundfish by processor group, 2013-2017, (\$ millions).

	Year	Processors	Wholesale Value (\$million)	Wholesale Value Per Processor (\$1,000)	Percent Value, GOA FMP Groundfish
	2012	4.4			
C + 1 1	2013	14	27.55	1,967.55	6.53
Central and		11	49.07	4,460.81	10.22
Western	2015	9	34.98	3,886.83	7.97
Gulf Trawl	2016	15	33.40	2,226.97	7.46
	2017	11	50.29	4,571.41	11.09
	2013	9	5.61	623.12	1.33
CP Hook	2014	13	8.38	644.66	1.75
and Line	2015	11	9.61	873.18	2.19
and Eme	2016	12	7.47	622.80	1.67
	2017	11	10.22	929.35	2.25
	2013	5	3.18	636.17	0.75
Sablefish	2014	6	4.75	792.32	0.99
IFQ	2015	5	3.16	631.20	0.72
ΓQ	2016	5	4.46	892.45	1.00
	2017	6	5.18	863.34	1.14
N. (1 1:	2013	4	92.67	23,166.83	21.98
Motherships	2014	4	92.56	23,139.14	19.28
& Inshore	2015	5	89.58	17,915.41	20.40
Floating	2016	5	116.30	23,259.33	25.97
Procs.	2017	5	115.42	23,084.81	25.46
	2013	10	161.89	16,189.03	38.40
Kodiak	2014	9	181.50	20,166.44	37.82
Shoreside	2015	9	168.73	18,747.96	38.42
Procs.	2016	8	141.93	17,740.90	31.69
	2017	8	134.99	16,874.33	29.78
C 11 1	,2013	11	34.55	3,140.68	8.19
Southcentra	¹ 2014	12	38.05	3,170.96	7.93
Gulf Shoreside	2015	11	35.90	3,263.30	8.17
	2016	12	37.61	3,134.54	8.40
Procs.	2017	10	39.17	3,916.67	8.64
G .1	2013	12	29.04	2,419.83	6.89
Southeastern	¹ 2014	11	30.93	2,812.23	6.45
Guii	2015	11	31.57	2,869.83	7.19
Shoreside	2016	11	32.87	2,988.11	7.34
Procs.	2017	14	40.29	2,877.51	8.89
***	2013	3	67.10	22,365.43	15.92
Western	2014	3	74.72	24,905.56	15.57
Gulf	2015	3	65.64	21,878.49	14.95
Shoreside	2016	3	73.78	24,593.47	16.48
Procs.	2017	3	57.79	19,262.29	12.75

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 processors in the Western and Central Gulf. "CP Hook and Line" are the hook and line catcher processors. "Sablefish IFQ" are 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 35: 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, 2013-2017.

	Year	Vessels	Average Length (feet)	Median Length (feet)	Average Capacity (tons)	Median Capacity (tons)
	2013	84	90	88.0	112	94
Central and	12014	82	88	88.0	112	94
Western	2015	78	87	87.5	112	98
Gulf Trawl	2016	84	87	88.0	110	98
	2017	81	90	88.0	122	103
	2013	62	45	42.0	29	24
CV Hook	2014	61	43	42.0	27	24
and Line	2015	64	42	42.0	25	24
and Line	2016	58	44	42.0	28	24
	2017	49	43	42.0	26	24
	2013	7	119	128.0	281	134
CP Hook	2014	9	125	128.0	279	134
and Line	2015	11	130	128.0	285	143
and Line	2016	10	147	136.0	290	132
	2017	9	148	136.0	347	132
	2013	275	57	58.0	46	36
Sablefish	2014	280	57	57.0	49	36
IFQ	2015	261	57	57.0	46	39
11.0	2016	265	57	57.0	48	37
	2017	258	56	57.0	48	36
	2013	128	61	58.0	59	52
	2014	101	61	58.0	58	52
Pot	2015	116	61	58.0	55	48
	2016	118	60	58.0	57	48
	2017	108	61	58.0	56	48
	2013	216	40	41.0	15	14
	2014	247	39	39.0	16	14
Jig	2015	265	40	40.0	16	14
	2016	307	41	41.0	17	16
	2017	189	39	40.0	14	14
	2013	15	43	38.0	15	11
No Fleet/	2014	11	58	51.0	41	23
Other	2015	16	45	40.0	24	10
Other	2016	14	47	48.0	23	24
	2017	8	41	38.0	16	13

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

Table 36: Gulf of Alaska number of vessels that caught groundfish by month, vessel type, and gear, 2013-2017.

		Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
		2013	61	90	167	248	231	197	109	116	97	117	69	40	506
	Hook &	2014	58	96	192	234	286	136	103	121	128	97	74	46	538
	Line	2015	78	122	207	259	298	132	94	107	133	109	57	49	521
	Line	2016	76	115	187	260	243	119	84	108	118	103	42	13	479
		2017	52	81	120	164	168	126	81	72	121	102	53	19	369
		2013	75	73	102	23	-	-	-	-	14	16	13	12	128
		2014	57	40	87	7	2	-	-	3	38	39	22	11	102
	Pot	2015	78	77	100	51	-	-	-	-	13	17	19	24	116
Catcher		2016	80	86	78	66	-	-	-	-	15	24	29	32	118
Vessels		2017	74	86	89	91	16	11	9	5	11	18	15	8	127
, 000010		2013	39	52	58	19	23	18	9	40	42	48	19	2	70
		2014	41	63	61	51	25	20	12	47	59	52	23	4	71
	Trawl	2015	40	60	65	57	30	13	6	15	52	54	18	1	68
		2016	49	54	59	42	29	18	4	45	58	61	34	2	70
		2017	37	47	61	42	21	17	5	4	53	60	35	1	70
		2013	173	212	317	288	254	215	118	156	153	180	101	54	665
		2014	147	199	327	291	313	156	115	171	219	185	119	61	672
	All Gea	r2015	192	254	360	363	328	145	100	122	198	179	94	74	671
		2016	199	246	312	365	272	137	88	152	191	187	102	47	628
		2017	163	210	254	293	203	152	93	80	184	175	102	28	523
		2013	1	2	3	4	3	6	4	2	1	-	2	1	10
	Hook &	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
	Line	2016	1	2	4	5	4	4	1	2	4	4	2	4	12
		2017	-	3	7	7	3	2	3	1	6	3	1	1	11
		2013	-	1	3	3	2	4	13	3	1	2	4	2	14
Catcher		2014	-	-	1	5	4	3	7	6	3	7	5	1	11
Processor	rsTrawl	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
		2017	-	1	2	2	2	4	10	6	4	4	2	1	11
		2013	1	3	6	7	5	10	17	5	2	2	6	3	24
		2014	1	6	9	10	7	5	8	7	6	10	8	2	24
	All Gea	r2015	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
		2017	_	4	9	9	5	6	13	7	10	7	3	2	22

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

Table 37: Gulf of Alaska catcher vessel (excluding catcher/processors) weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2013-2017.

		Hook &	Line	Pot		Traw	[All Ge	ar
	Year	<60ft	60- 125ft	<60ft	60- 125ft	<60ft	60- 125ft	<60ft	60- 125ft
	2013	-	-	-	-	87	384	87	384
	2014	-	-	-	-	181	550	181	550
Pollock	2015	-	-	-	-	237	569	237	569
	2016	-	-	-	-	289	524	289	524
	2017	-	-	-	-	180	527	180	527
	2013	1,265	338	-	-	4	21	1,269	359
	2014	$1,\!162$	307	-	-	2	7	1,164	314
Sablefish	2015	1,242	342	-	-	3	17	1,245	359
	2016	1,270	361	-	-	1	10	1,271	371
	2017	1,301	273	130	45	-	9	1,431	327
	2013	1,200	18	714	201	116	88	2,030	307
	2014	1,525	20	756	216	163	73	2,444	309
Pacific Cod	2015	1,824	14	895	238	145	114	2,864	366
	2016	1,384	7	944	228	117	102	2,445	337
	2017	566	-	879	209	109	60	1,554	269
	2013	-	-	-	-	8	170	8	170
	2014	-	-	-	-	9	151	9	151
Flatfish	2015	-	-	-	-	0	76	0	76
	2016	-	-	-	-	2	159	2	159
	2017	-	-	-	-	-	103	-	103
	2013	508	2	-	-	11	99	519	101
	2014	425	4	-	-	7	101	432	105
Rockfish	2015	370	6	-	-	4	97	374	103
	2016	282	3	-	-	3	120	285	123
	2017	275	2	-	-	7	88	282	90
Atka Macker	el 2016	-	-	-	-	-	1	-	1
	2013	2,987	358	714	201	225	762	3,926	1,320
	2014	3,114	331	756	216	362	881	4,235	1,430
All Groundfis	sh 2015	3,437	362	895	238	391	872	4,722	1,472
	2016	2,942	371	944	228	412	914	4,297	1,514
	2017	2,149	275	1,009	254	297	786	3,455	1,316

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 38: Gulf of Alaska catcher/processor vessel weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2013-2017.

		Hook	& Line		T	rawl			All Gear		
	Year	<60ft	60- 124ft	125- 230ft	60- 124ft	125- 230ft	>230ft	<60ft	60- 124ft	125- 230ft	>230ft
	2013	-	-	-	1	0	-	-	1	0	-
Pollock	2014	-	-	-	0	0	-	-	0	0	-
	2015	-	-	-	-	1	-	-	-	1	_
	2013	11	-	27	-	-	-	11	-	27	_
	2014	7	-	18	0	-	-	7	0	18	-
Sablefish	2015	9	-	19	0	-	-	9	0	19	-
	2016	9	-	17	-	-	-	9	-	17	-
	2017	9	-	20	-	-	-	9	-	20	-
	2013	-	23	13	_	0	-	_	23	13	_
Pacific	2014	2	22	29	-	-	-	2	22	29	_
Cod	2015	4	30	30	0	_	-	4	30	30	_
Cod	2016	0	-	45	2	_	-	0	2	45	_
	2017	-	4	43	1	-	-	-	5	43	-
	2013	-	-	-	48	12	-	-	48	12	_
	2014	-	-	-	62	27	-	-	62	27	-
Flatfish	2015	_	-	-	49	16	-	-	49	16	_
	2016	-	-	-	41	8	-	-	41	8	_
	2017	-	-	-	62	16	-	-	62	16	-
	2013	-	-	-	3	27	1	-	3	27	1
	2014	-	-	-	2	29	3	-	2	29	3
Rockfish	2015	-	-	-	8	30	2	-	8	30	2
	2016	-	-	-	4	33	2	-	4	33	2
	2017	-	-	0	5	32	0	-	5	32	0
Atka	2013	-	-	-	0	0	-	-	0	0	_
Mackerel	2017	-	-	-	1	-	-	-	1	-	-
	2013	11	23	41	52	39	1	11	75	79	1
All	2014	9	22	48	65	56	3	9	87	104	3
Groundfisi	$^{1}_{b}2015$	13	30	49	58	47	2	13	88	96	2
Groundis.	¹¹ 2016	9	-	62	48	41	2	9	48	103	2
	2017	9	4	63	69	48	0	9	73	111	0

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 39: Gulf of Alaska catcher vessel crew weeks in the groundfish fisheries by month, 2013-2017.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
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	1,870	3,276	2,032	2,336	1,162	516	994	1,990	1,820	864	443	18,350
2015	1,843	2,316	$3,\!257$	2,313	2,755	1,048	524	784	1,798	2,124	664	503	19,928
2016	1,692	2,318	2,506	3,069	1,982	1,024	635	903	1,736	2,298	642	371	$19,\!176$
2017	1,500	2,195	$2,\!270$	2,594	1,486	1,191	619	616	1,690	1,858	648	228	16,896

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 40: Gulf of Alaska at-sea processor vessel crew weeks in the groundfish fisheries by month, 2013-2017.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
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
2017	-	112	462	261	135	317	1,130	615	591	295	156	*	4,074

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, 2013-2017, (hundreds of metric tons).

Year	Gulf Of Alaska	Bering Sea And Aleutian Islands	All Alaska
2013	86.39	17.52	103.91
2014	65.15	13.40	78.56
2015	68.30	13.98	82.28
2016	68.76	15.09	83.85
2017	77.12	16.64	93.76

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

Table H2: Catch (net landed weight) and percent of FMP area catch in the commercial Pacific halibut fisheries off Alaska by vessel length (feet) and FMP area, 2013-2017, (hundreds of metric tons).

		Gulf of A	laska	Bering Sea Aleutian Is		All Ala	ska
	Length	Net Tons	Percent	Net Tons	Percent	Net Tons	Percent
	<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
2012	30-39	12.85	0.15	2.28	0.13	15.13	0.15
2013	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
	<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
2014	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
	<20	0.10	0	*	*	0.10	0
	20-29	1.78	0.03	1.25	0.09	3.04	0.04
2015	30-39	10.99	0.16	1.71	0.12	12.70	0.16
2010	40-49	24.34	0.36	2.68	0.19	27.02	0.33
	50-59	21.61	0.32	5.11	0.37	26.72	0.33
	>=60	9.18	0.14	3.18	0.23	12.36	0.15
	< 20	0.11	0	*	*	0.11	0
	20-29	1.95	0.03	1.18	0.08	3.13	0.04
2016	30-39	11.43	0.17	1.75	0.12	13.19	0.16
2010	40-49	25.05	0.37	2.79	0.19	27.84	0.33
	50-59	21.02	0.31	5.76	0.38	26.78	0.32
	>=60	8.83	0.13	3.50	0.23	12.33	0.15
	< 20	0.10	0	*	*	0.10	0
	20-29	1.93	0.03	1.05	0.06	2.97	0.03
2017	30-39	12.79	0.17	2.80	0.17	15.59	0.17
2011	40-49	28.91	0.38	3.27	0.20	32.17	0.35
	50-59	23.15	0.30	5.70	0.35	28.84	0.31
	>=60	9.84	0.13	3.66	0.22	13.51	0.14

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, 2013-2017.

		Year	Bairdi Tanner Crab (Count, K)	Chinook Salmon (Count, K)	Halibut (Tons)	Herring (Tons)	Non- Chinook Salmon (Count, K)	Opilio Tanner (Snow) Crab (Count, K)	Other King Crab (Count, K)	Red King Crab (Count, K)
		2013	570	-	15	_	-	-	0	0
		2014	133	-	11	_	-	0	0	-
	Fixed	2015	128	-	22	_	-		0	0
		2016	63	-	44	-	-	0	0	0
		2017	4	-	15	-	-	0	0	-
		2013	255	23	1,230	11	5	-	0	-
Gulf of Alaska		2014	64	16	$1,\!395$	6	2	-	0	-
Guii of Alaska	Trawl		76	19	1,411	80	1	-	0	-
		2016	92	22	1,333	148	3	0	1	-
		2017	124	25	1,215	6	6	-	0	-
		2013	824	23	1,245	11	5	-	0	0
	All	2014	198	16	$1,\!405$	6	2	0	0	-
	Gear	2015	204	19	1,433	80	1	-	0	0
	Gear	2016	155	22	$1,\!377$	148	3	0	1	0
		2017	129	25	1,230	6	6	0	0	-
		2013	247	*	538	0	-	33	2	107
		2014	593	0	456	-	-	105	5	145
	Fixed	2015	633	0	326	0	0	138	32	182
		2016	315	0	225	*	0	43	16	27
		2017	357	0	193	0	0	168	77	35
D : 0	,	2013	714	16	3,080	988	127	692	32	32
Bering Sea and	1	2014	624	18	3,029	186	224	484	24	33
Aleutian	Trawl	2015	424	25	1,999	1,531	243	492	15	25
Islands		2016	221	33	1,910	1,494	347	167	15	41
		2017	353	36	1,179	1,023	471	160	11	60
		2013	961	16	3,618	988	127	725	35	140
	A 11	2014	1,217	18	3,485	186	224	590	29	178
	All	2015	1,057	25	2,324	1,531	243	630	48	207
	Gear	2016	536	33	$2{,}135$	1,494	347	210	31	68
		2017	710	36	1,373	1,023	471	327	88	95

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 fsiheries off Alaska by FMP area, 2013-2017, (\$ millions and \$/lb net weight, respectively).

	Gulf of Ala	ska	Bering Sea Aleutian Isla		All Alask	a
Year	Value	Price	Value	Price	Value	Price
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	94.33	6.26	17.68	5.74	112.01	6.17
2016	99.37	6.55	19.59	5.89	118.96	6.44
2017	97.63	5.74	18.53	5.05	116.16	5.62

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.

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 H4B: Ex-vessel value and price in the commercial Pacific halibut fisheries off Alaska by IPHC area, 2013-2017, (\$ millions and \$/lb net weight, respectively).

, ,		,	<u> </u>	٠,		
	Variable	2013	2014	2015	2016	2017
2C	Value Price	15.67 5.16	21.55 6.22	23.57 6.30	27.36 6.61	X 5.90
				50.75	50.31	5.80
3A	Value Price	$58.05 \\ 5.09$	$48.58 \\ 6.31$	6.31	6.60	$\frac{x}{5.86}$
3B	Value	20.20	17.83	16.67	17.83	x
	Price	4.82	6.10	6.13	6.43	5.55
4A	Value Price	5.32 4.41	$4.79 \\ 5.76$	7.94 6.00	$8.34 \\ 6.22$	x 5.15
4B	Value	5.14	5.89	6.03	6.30	x
	Price	4.21	5.41	5.69	5.76	5.15
4CDE	Value	8.02	6.65	6.93	8.82	X
	Price	4.34	5.09	5.62	5.83	5.13

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. Calculations for 2017 value by IPHC area will be available in the Nov. finalized verion of this document.

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), 2013-2017, (\$ millions and \$ thousands, respectively).

		Gulf of A	Alaska	Bering Se Aleutian		All Al	aska
	Length	Value	Avg. Value/Vessel	Value	Avg. Value/Vessel	Value	Avg. Value/Vessel
	<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	8.49	*	*	0.18	6.51
	20-29	2.49	23.48	1.43	47.73	3.92	29.04
2015	30-39	15.07	57.73	2.02	81.00	17.09	61.48
2015	40-49	33.48	118.29	3.36	186.52	36.83	128.34
	50-59	29.93	212.25	6.63	255.07	36.56	250.41
	>=60	12.82	320.60	4.19	220.73	17.02	386.77
	<20	0.15	8.00	*	*	0.28	10.03
	20-29	2.81	26.51	1.33	42.99	4.14	30.46
2016	30-39	16.45	65.79	2.16	83.01	18.61	69.17
2010	40-49	36.04	128.25	3.53	220.55	39.57	138.35
	50-59	30.38	215.50	7.67	283.89	38.05	264.24
	>=60	13.03	317.73	4.78	281.20	17.81	414.12
	<20	0.12	10.01	*	*	0.26	12.26
	20-29	2.47	26.82	1.15	39.65	3.62	30.14
2017	30-39	16.18	62.94	3.11	94.17	19.28	68.87
2017	40-49	36.30	131.52	3.65	228.24	39.95	143.20
	50-59	29.37	219.17	6.29	251.55	35.66	266.10
	>=60	12.65	324.31	4.13	243.21	16.78	399.59

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, 2013-2017, (\$ millions and \$/lb net weight).

	Port	2013	2014	2015	2016	2017
	Homer	24.24	18.51	17.25	18.32	13.08
	Kodiak	16.60	15.94	17.28	16.95	19.59
	Seward	14.79	11.56	12.76	13.25	13.44
Б	Dutch Harbor	*	*	*	*	*
Ex-	Sitka	6.02	*	*	8.17	*
vessel	Juneau	6.86	5.79	*	7.50	6.68
Value	St Paul Island	*	*	*	*	*
	Petersburg	5.56	7.62	7.01	9.93	9.97
	Sand Point	*	*	*	*	*
	Yakutat	*	*	4.07	4.33	*
	Homer	4.95	6.05	6.11	6.43	5.82
	Kodiak	4.88	6.32	6.23	6.60	5.59
	Seward	5.07	6.20	6.20	6.46	5.79
	Dutch Harbor	*	*	*	*	*
ъ.	Sitka	5.06	*	*	6.53	*
Price	Juneau	5.44	6.12	*	6.75	6.01
	St Paul Island	*	*	*	*	*
	Petersburg	5.18	6.24	6.52	6.72	5.93
	Sand Point	*	*	*	*	*
	Yakutat	*	*	6.48	6.52	*
-	Homer	22 %	18 %	15 %	15 %	11 %
	Kodiak	15 %	15 %	15~%	14 %	17~%
	Seward	13~%	11 %	11 %	11 %	12~%
ъ.	Dutch Harbor	*	*	*	*	*
Precent	Sitka	5 %	*	*	7 %	*
State	Juneau	6 %	5 %	*	6 %	6~%
Value	St Paul Island	*	*	*	*	*
	Petersburg	5 %	7 %	6 %	8 %	9 %
	Sand Point	*	*	*	*	*
	Yakutat	*	*	4%	4%	*
	Homer	1	1	2	1	3
	Kodiak	2	2	1	2	1
	Seward	3	3	3	3	2
	Dutch Harbor	5	6	4	5	6
D 1	Sitka	6	5	6	6	5
Rank	Juneau	4	7	5	7	7
	St Paul Island	9	13	11	11	10
	Petersburg	7	4	7	$\overline{4}$	4
	Sand Point	14	12	13	16	17
	Yakutat	8	10	9	9	9

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, 2013-2017, (1000s of metric tons, \$ millions and \$/lb net weight, respectively).

	Year	Quantity	Value	Price
	2013	6.46	92.69	6.51
Hand and	2014	4.80	81.92	7.73
Head and Gut	2015	5.38	92.07	7.77
Gui	2016	6.29	94.99	6.85
	2017	5.64	91.84	7.39
	2013	1.66	35.78	9.80
	2014	0.88	25.53	13.23
Fillet	2015	1.11	34.82	14.21
	2016	1.23	39.30	14.50
	2017	1.40	42.04	13.65
	2013	0.83	2.90	1.58
Other	2014	0.50	2.47	2.23
Products	2015	3.05	6.86	1.02
Troducts	2016	0.68	4.61	3.09
	2017	0.46	2.74	2.68
	2013	8.94	131.37	6.66
All	2014	6.18	109.92	8.06
	2015	9.54	133.76	6.36
Products	2016	8.19	138.91	7.69
	2017	7.50	136.62	8.27

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 and median vessel length by FMP area and vessel length class, 2013-2017.

		Gulf of Alaska		Bering Sea and Aleutian Islands		All Alaska	
	Year	Vessels	Median Length	Vessels	Median Length	Vessels	Median Length
	2013	19	17	53	18	71	18
	2014	23	18	16	18	38	18
<20	2015	16	18	12	18	27	18
	2016	19	17	10	18	28	18
	2017	12	18	9	18	21	18
	2013	118	25	156	24	273	24
	2014	121	25	52	26	172	26
20-29	2015	106	25	30	28	135	26
	2016	106	25	31	28	136	26
	2017	92	25	29	28	120	26
	2013	267	34	39	32	297	34
	2014	272	34	33	32	295	34
30-39	2015	261	35	25	33	278	34
	2016	250	34	26	32	269	34
	2017	257	34	33	32	280	33
	2013	313	45	16	49	319	45
	2014	300	45	16	48	303	45
40-49	2015	283	45	18	48	287	45
	2016	281	45	16	48	286	45
	2017	276	45	16	48	279	45
	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
	2017	134	58	25	58	134	58
≥60	2013	48	71	21	76	53	73
	2014	43	72	17	76	46	72
	2015	40	72	19	76	44	73
	2016	41	72	17	76	43	73
	2017	39	72	17	76	42	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, 2013-2017.

Year	Gulf Of Alaska	Bering Sea And Aleutian Islands	All Alaska
2013	14,633	4,339	18,754
2014	12,842	2,894	$15,\!520$
2015	12,549	2,744	15,059
2016	12,757	2,800	$15,\!352$
2017	13,400	2,795	15,801

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, 2013-2017.

	Year	Mar- Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Gulf of Alaska	2013	8,546	10,247	7,777	4,859	7,350	6,589	5,928	1,300
	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	4,964	3,566	5,887	5,078	3,358	627
	2017	10,399	$9,\!558$	5,883	3,704	5,677	$6,\!564$	4,941	814
D : C 1	2013	563	1,042	3,166	5,244	2,428	2,291	1,266	224
	2014	242	1,480	1,611	3,397	2,412	1,373	653	121
Bering Sea and Aleutian Islands	2015	416	1,533	2,111	2,206	2,474	1,536	1,185	133
Aleutian Islands	2016	529	1,525	2,100	2,121	2,686	1,578	809	100
	2017	346	1,384	2,088	1,886	$2,\!857$	1,540	1,104	192
All Alaska	2013	9,109	11,207	10,807	10,011	9,632	8,670	7,029	1,460
	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	6,845	5,642	8,417	6,584	4,098	695
	2017	10,672	10,775	7,845	5,450	7,996	7,814	5,736	1,006

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 the prices of all 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 all 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 the 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 $\tilde{w}(t)=\frac{p_t*q_t}{\sum_i p_t*q_t}$ 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 factor (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. The indices are displayed graphically in Section 5.2 followed by tables with the index values.

5.2. Economic Indices of the Groundfish Fisheries off Alaska

¹U.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.

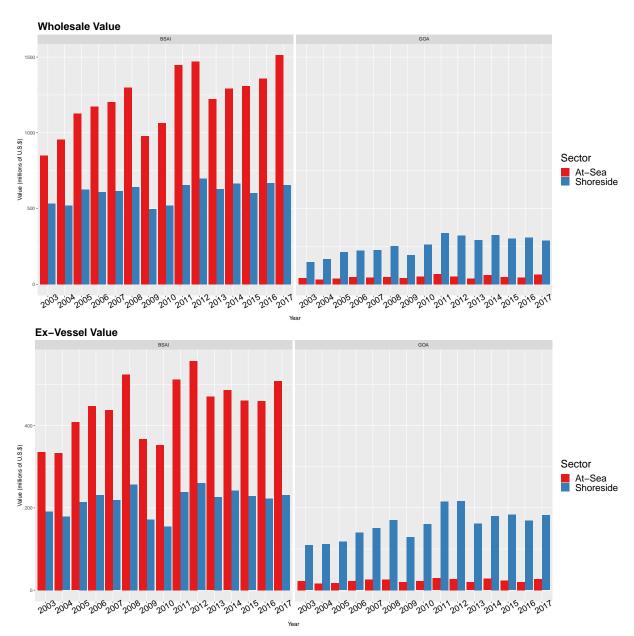


Figure 5.1: Wholesale and ex-vessel value by region and sector 2003-2017. **Source:** NMFS Alaska Region's Catch-accounting system (CAS) and Weekly Production Report (WPR) estimates; Alaska Department of Fish and Game (ADF&G) Commercial Operator's Annual Report (COAR), National Marine Fisheries Service. P.O. Box 15700, Seattle, WA 98115-0070.

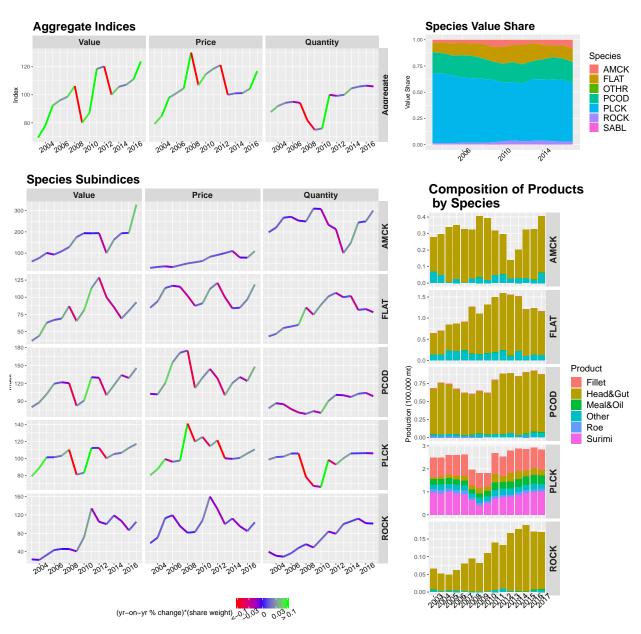


Figure 5.2: BSAI at-sea wholesale market: species decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.1. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

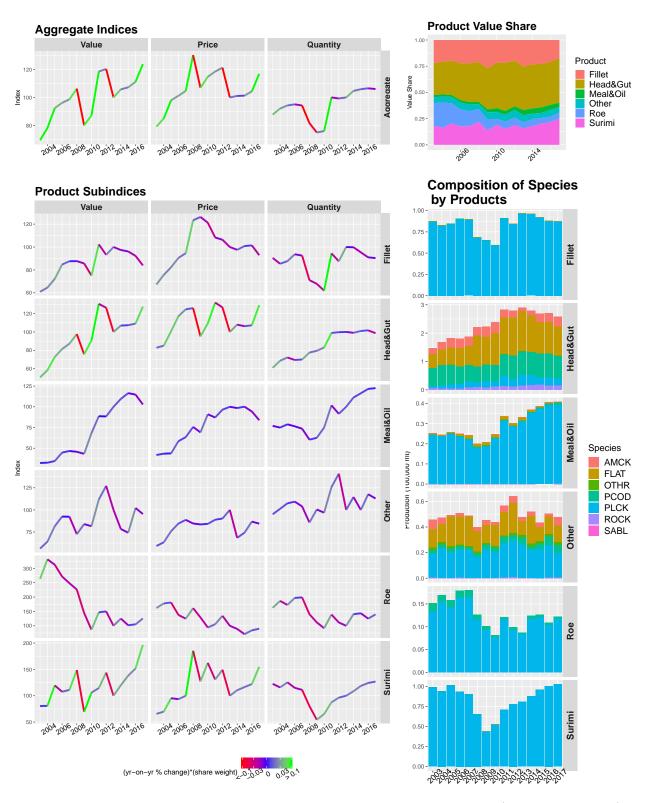


Figure 5.3: BSAI at-sea wholesale market: product decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.2. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

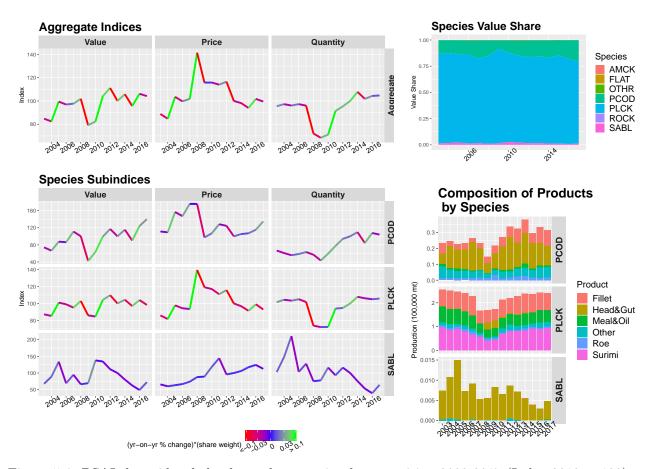


Figure 5.4: BSAI shoreside wholesale market: species decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.3. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

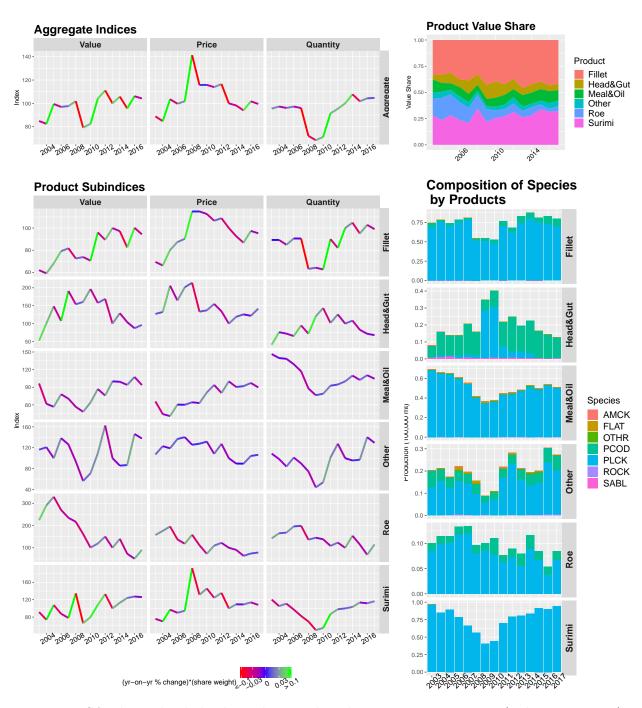


Figure 5.5: BSAI shoreside wholesale market: product decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.4. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

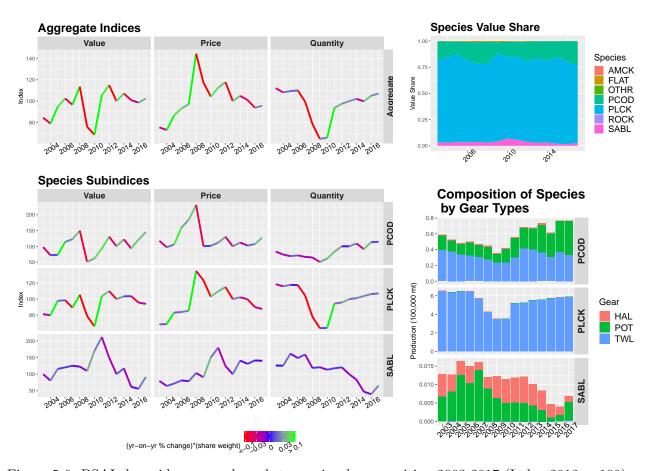


Figure 5.6: BSAI shoreside ex-vessel market: species decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.5. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

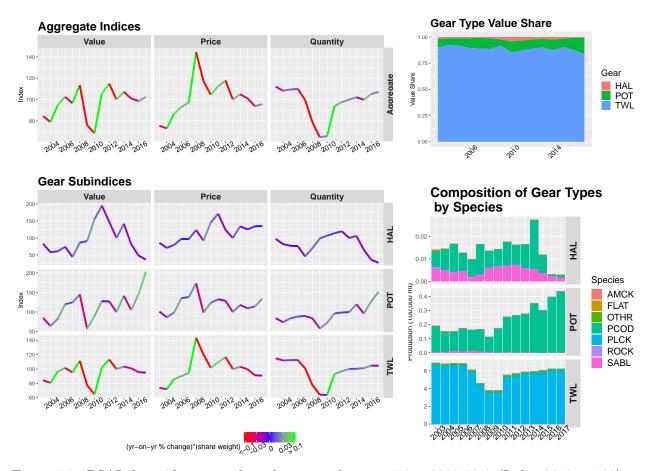


Figure 5.7: BSAI shoreside ex-vessel market: gear decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.6. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

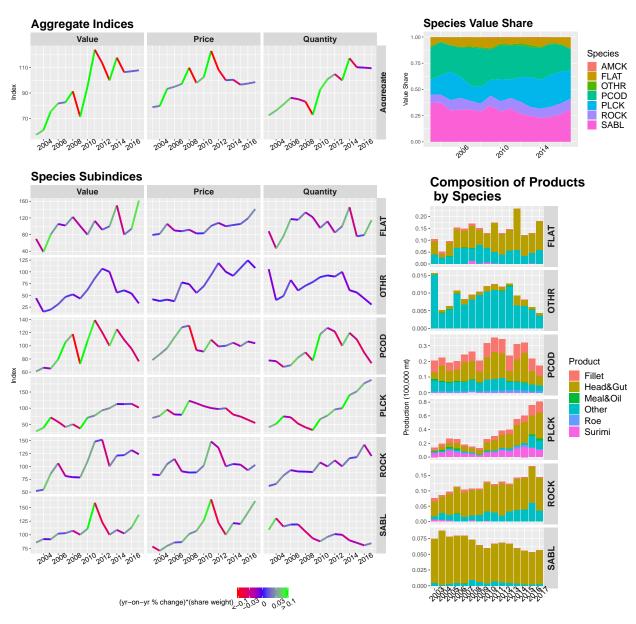


Figure 5.8: GOA wholesale market: species decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.7. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

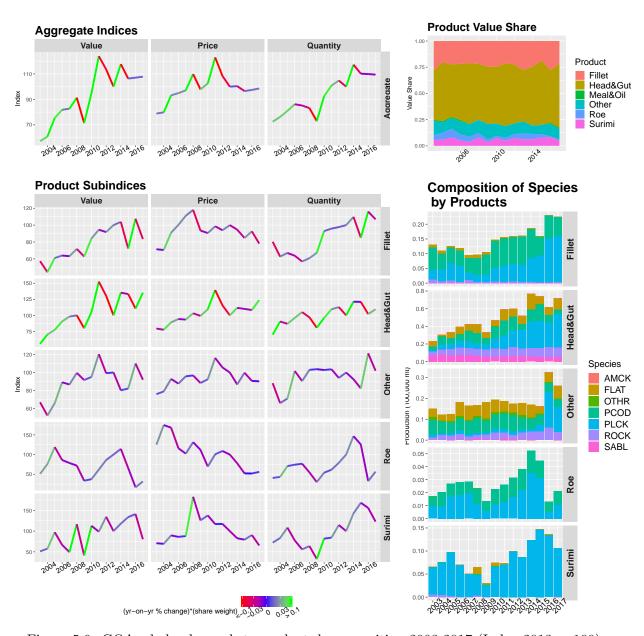


Figure 5.9: GOA wholesale market: product decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.8. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

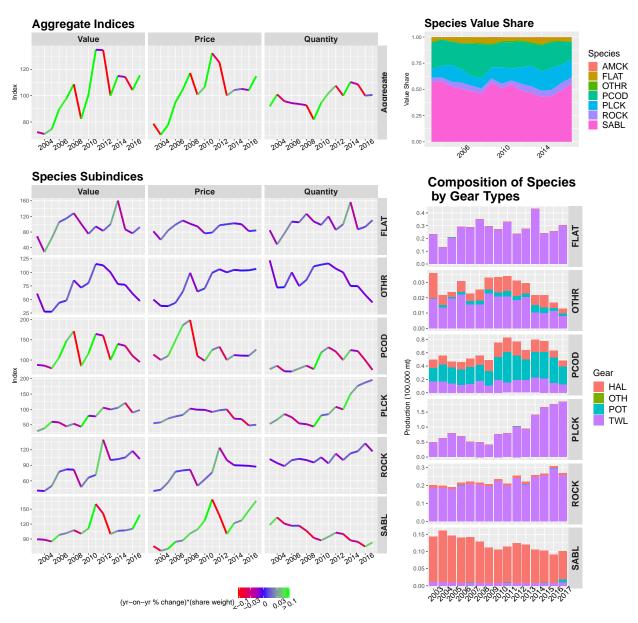


Figure 5.10: GOA ex-vessel market: species decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.9. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

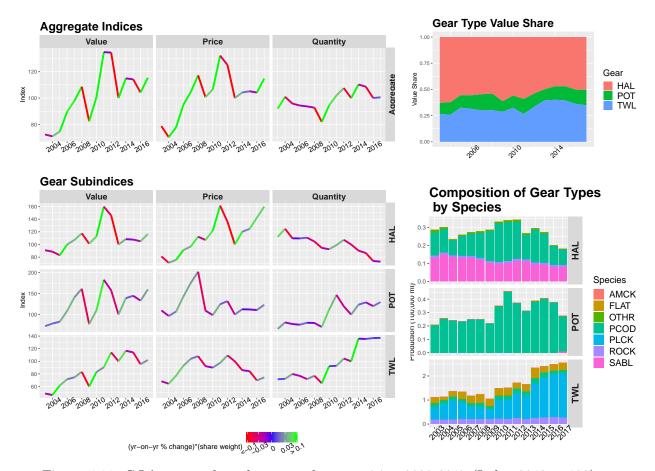


Figure 5.11: GOA ex-vessel market: gear decomposition 2003-2017 (Index 2013 = 100). **Notes:** Index values for 2012-2017, notes and source information for the indices are on Table 5.10. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

Table 5.1: Species Indices and Value Share for the BSAI At-Sea First-Wholesale Market 2012-2017.

Species	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	120.28	100.00	105.76	107.20	111.11	123.80
Aggregate	Price	121.19	100.00	101.06	101.25	104.32	116.83
Aggregate	Quantity	99.24	100.00	104.65	105.87	106.52	105.97
AMCK	Value	194.40	100.00	163.21	193.66	195.54	328.97
AMCK	Price	91.29	100.00	110.08	79.30	78.40	109.42
AMCK	Quantity	212.94	100.00	148.26	244.21	249.40	300.66
AMCK	Value Share	0.05	0.03	0.05	0.06	0.05	0.08
FLAT	Value	128.75	100.00	85.55	69.08	80.34	92.78
FLAT	Price	120.91	100.00	83.95	84.79	96.95	118.68
FLAT	Quantity	106.48	100.00	101.91	81.48	82.86	78.18
FLAT	Value Share	0.18	0.17	0.14	0.11	0.12	0.13
PCOD	Value	129.37	100.00	117.00	133.87	128.92	145.59
PCOD	Price	128.53	100.00	120.58	130.58	123.87	147.93
PCOD	Quantity	100.66	100.00	97.04	102.52	104.07	98.42
PCOD	Value Share	0.18	0.17	0.19	0.21	0.20	0.20
PLCK	Value	112.26	100.00	105.04	106.49	112.31	116.94
PLCK	Price	121.22	100.00	99.33	100.53	105.80	110.46
PLCK	Quantity	92.61	100.00	105.75	105.93	106.15	105.87
PLCK	Value Share	0.55	0.59	0.58	0.59	0.60	0.56
ROCK	Value	105.09	100.00	118.90	106.85	86.49	105.19
ROCK	Price	132.88	100.00	112.30	95.33	84.78	103.94
ROCK	Quantity	79.09	100.00	105.88	112.09	102.01	101.21
ROCK	Value Share	0.03	0.03	0.04	0.03	0.03	0.03

Table 5.2: Product Indices and Value Share for the BSAI At-Sea First-Wholesale Market 2012-2017.

Product	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	120.28	100.00	105.76	107.20	111.11	123.80
Aggregate	Price	121.19	100.00	101.06	101.25	104.32	116.83
Aggregate	Quantity	99.24	100.00	104.65	105.87	106.52	105.97
Fillet	Value	93.13	100.00	97.39	96.15	92.28	83.97
Fillet	Price	106.34	100.00	97.58	100.84	101.42	92.93
Fillet	Quantity	87.58	100.00	99.81	95.34	90.98	90.35
Fillet	Value Share	0.20	0.25	0.23	0.23	0.21	0.17
Head&Gut	Value	126.28	100.00	106.92	107.31	109.07	127.41
Head&Gut	Price	126.66	100.00	107.94	106.22	107.22	129.15
Head&Gut	Quantity	99.70	100.00	99.06	101.02	101.72	98.65
Head&Gut	Value Share	0.44	0.42	0.42	0.42	0.41	0.43
Meal&Oil	Value	88.40	100.00	109.57	116.51	114.75	102.82
Meal&Oil	Price	96.57	100.00	98.53	100.13	94.35	83.90
Meal&Oil	Quantity	91.54	100.00	111.20	116.36	121.62	122.55
Meal&Oil	Value Share	0.04	0.05	0.05	0.05	0.05	0.04
Other	Value	127.15	100.00	78.37	74.23	102.18	95.35
Other	Price	90.25	100.00	68.41	74.27	86.80	84.50
Other	Quantity	140.89	100.00	114.57	99.94	117.72	112.84
Other	Value Share	0.07	0.07	0.05	0.05	0.06	0.05
Roe	Value	150.16	100.00	125.08	101.80	105.05	125.52
Roe	Price	134.64	100.00	89.10	70.88	84.12	89.82
Roe	Quantity	111.52	100.00	140.39	143.61	124.87	139.75
Roe	Value Share	0.07	0.06	0.07	0.05	0.05	0.06
Surimi	Value	144.01	100.00	119.99	138.15	151.74	196.51
Surimi	Price	149.40	100.00	110.48	116.45	122.09	154.89
Surimi	Quantity	96.39	100.00	108.61	118.63	124.28	126.87
Surimi	Value Share	0.19	0.16	0.18	0.20	0.22	0.25

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 2012-2017.

Species	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	111.10	100.00	105.78	95.68	106.13	104.18
Aggregate	Price	116.52	100.00	98.17	93.98	101.75	99.50
Aggregate	Quantity	95.34	100.00	107.75	101.81	104.30	104.70
PCOD	Value	117.00	100.00	115.33	90.19	124.09	140.08
PCOD	Price	124.42	100.00	105.16	107.05	115.30	134.73
PCOD	Quantity	94.04	100.00	109.67	84.26	107.63	103.97
PCOD	Value Share	0.16	0.15	0.16	0.14	0.18	0.20
PLCK	Value	109.69	100.00	104.38	96.94	104.00	98.29
PLCK	Price	115.82	100.00	96.76	91.35	99.04	92.93
PLCK	Quantity	94.71	100.00	107.87	106.11	105.00	105.78
PLCK	Value Share	0.82	0.83	0.82	0.84	0.81	0.78
SABL	Value	111.31	100.00	80.42	62.72	49.19	72.64
SABL	Price	95.71	100.00	105.97	117.46	124.29	112.56
SABL	Quantity	116.29	100.00	75.89	53.40	39.57	64.54
SABL	Value Share	0.02	0.02	0.01	0.01	0.01	0.01

Table 5.4: Product Indices and Value Share for the BSAI Shoreside First-Wholesale Market 2012-2017.

Product	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	111.10	100.00	105.78	95.68	106.13	104.18
Aggregate	Price	116.52	100.00	98.17	93.98	101.75	99.50
Aggregate	Quantity	95.34	100.00	107.75	101.81	104.30	104.70
Fillet	Value	89.37	100.00	97.13	82.47	100.20	94.34
Fillet	Price	108.91	100.00	92.63	86.76	97.41	95.27
Fillet	Quantity	82.06	100.00	104.86	95.05	102.87	99.02
Fillet	Value Share	0.37	0.46	0.42	0.40	0.43	0.42
Head&Gut	Value	168.99	100.00	129.08	104.16	87.21	96.25
Head&Gut	Price	134.47	100.00	119.02	125.82	121.88	141.70
Head&Gut	Quantity	125.68	100.00	108.45	82.79	71.55	67.92
Head&Gut	Value Share	0.10	0.07	0.08	0.07	0.05	0.06
Meal&Oil	Value	75.90	100.00	99.32	94.04	107.46	93.76
Meal&Oil	Price	80.19	100.00	90.48	91.81	97.26	89.78
Meal&Oil	Quantity	94.65	100.00	109.77	102.43	110.49	104.44
Meal&Oil	Value Share	0.08	0.11	0.11	0.11	0.11	0.10
Other	Value	162.68	100.00	85.69	86.87	146.33	137.74
Other	Price	127.41	100.00	89.66	89.46	104.30	106.42
Other	Quantity	127.68	100.00	95.57	97.10	140.30	129.44
Other	Value Share	0.06	0.04	0.03	0.04	0.05	0.05
Roe	Value	150.54	100.00	139.93	73.27	50.96	90.45
Roe	Price	122.13	100.00	90.78	63.88	74.28	78.62
Roe	Quantity	123.26	100.00	154.14	114.70	68.60	115.05
Roe	Value Share	0.08	0.06	0.08	0.05	0.03	0.05
Surimi	Value	132.94	100.00	113.12	123.96	127.30	125.99
Surimi	Price	135.62	100.00	109.45	109.12	113.90	108.16
Surimi	Quantity	98.03	100.00	103.35	113.60	111.76	116.49
Surimi	Value Share	0.31	0.26	0.28	0.34	0.31	0.32

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 2012-2017.

Species	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	114.88	100.00	107.13	100.91	98.64	102.39
Aggregate	Price	117.80	100.00	104.93	101.09	93.85	95.59
Aggregate	Quantity	97.52	100.00	102.10	99.83	105.10	107.12
PCOD	Value	130.43	100.00	122.20	93.33	121.27	145.67
PCOD	Price	130.13	100.00	112.10	102.37	107.10	127.38
PCOD	Quantity	100.23	100.00	109.01	91.17	113.23	114.36
PCOD	Value Share	0.18	0.16	0.18	0.15	0.20	0.23
PLCK	Value	110.01	100.00	103.49	103.66	95.66	94.04
PLCK	Price	115.00	100.00	102.27	99.84	90.01	87.75
PLCK	Quantity	95.65	100.00	101.18	103.83	106.28	107.16
PLCK	Value Share	0.77	0.81	0.78	0.83	0.78	0.74
SABL	Value	149.53	100.00	117.39	61.87	55.95	91.73
SABL	Price	124.09	100.00	140.98	131.07	141.25	140.18
SABL	Quantity	120.50	100.00	83.26	47.20	39.61	65.44
SABL	Value Share	0.04	0.03	0.03	0.02	0.02	0.02

Table 5.6: Gear Indices and Value Share for the BSAI Shoreside Ex-Vessel Market 2012-2017.

Gear	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	114.88	100.00	107.13	100.91	98.64	102.39
Aggregate	Price	117.80	100.00	104.93	101.09	93.85	95.59
Aggregate	Quantity	97.52	100.00	102.10	99.83	105.10	107.12
HAL	Value	147.75	100.00	141.81	81.44	48.23	36.29
HAL	Price	123.58	100.00	134.08	125.17	134.20	134.92
$_{ m HAL}$	Quantity	119.56	100.00	105.76	65.06	35.94	26.90
$_{ m HAL}$	Value Share	0.02	0.02	0.02	0.02	0.01	0.01
POT	Value	127.14	100.00	141.47	105.18	145.47	202.87
POT	Price	128.72	100.00	118.12	109.56	114.14	134.12
POT	Quantity	98.78	100.00	119.78	96.00	127.44	151.26
POT	Value Share	0.09	0.08	0.10	0.08	0.12	0.16
TWL	Value	113.13	100.00	103.42	100.94	95.61	95.01
TWL	Price	116.71	100.00	103.05	99.74	91.25	90.88
TWL	Quantity	96.93	100.00	100.37	101.21	104.78	104.55
TWL	Value Share	0.89	0.90	0.87	0.90	0.87	0.84

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 2012-2017.

Species	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	113.54	100.00	117.72	106.34	107.05	107.81
Aggregate	Price	108.32	100.00	100.40	96.52	97.42	98.53
Aggregate	Quantity	104.82	100.00	117.25	110.18	109.89	109.42
FLAT	Value	91.69	100.00	150.07	80.07	93.73	161.62
FLAT	Price	108.06	100.00	103.02	105.44	118.76	141.20
FLAT	Quantity	84.85	100.00	145.67	75.94	78.93	114.46
FLAT	Value Share	0.06	0.07	0.09	0.05	0.06	0.11
OTHR	Value	106.75	100.00	55.87	60.67	54.05	32.92
OTHR	Price	118.74	100.00	91.57	108.09	124.42	108.28
OTHR	Quantity	89.90	100.00	61.01	56.13	43.44	30.40
OTHR	Value Share	0.02	0.02	0.01	0.01	0.01	0.01
PCOD	Value	120.49	100.00	125.21	109.04	95.64	76.43
PCOD	Price	99.02	100.00	104.72	99.45	106.57	103.88
PCOD	Quantity	121.68	100.00	119.57	109.65	89.74	73.58
PCOD	Value Share	0.30	0.29	0.30	0.29	0.26	0.20
PLCK	Value	93.40	100.00	112.88	112.61	113.62	101.78
PLCK	Price	97.21	100.00	80.33	74.14	64.22	54.27
PLCK	Quantity	96.08	100.00	140.52	151.88	176.93	187.53
PLCK	Value Share	0.24	0.29	0.27	0.30	0.30	0.27
ROCK	Value	151.84	100.00	120.95	121.76	131.46	123.53
ROCK	Price	136.07	100.00	104.53	103.23	92.50	102.83
ROCK	Quantity	111.60	100.00	115.71	117.95	142.12	120.13
ROCK	Value Share	0.11	0.09	0.09	0.10	0.10	0.10
SABL	Value	123.33	100.00	108.99	102.38	113.44	136.89
SABL	Price	121.78	100.00	121.41	120.03	140.72	161.94
SABL	Quantity	101.27	100.00	89.77	85.30	80.62	84.53
SABL	Value Share	0.27	0.25	0.23	0.24	0.26	0.31

Table 5.8: Product Indices and Value Share for the GOA First-Wholesale Market 2012-2017.

Product	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	113.54	100.00	117.72	106.34	107.05	107.81
Aggregate	Price	108.32	100.00	100.40	96.52	97.42	98.53
Aggregate	Quantity	104.82	100.00	117.25	110.18	109.89	109.42
Fillet	Value	91.78	100.00	103.84	72.18	107.50	83.52
Fillet	Price	93.94	100.00	94.63	84.76	92.62	78.15
Fillet	Quantity	97.70	100.00	109.73	85.16	116.06	106.88
Fillet	Value Share	0.23	0.28	0.25	0.19	0.28	0.22
Head&Gut	Value	130.38	100.00	135.36	133.13	110.48	135.37
Head&Gut	Price	115.54	100.00	111.65	110.07	108.30	123.82
Head&Gut	Quantity	112.85	100.00	121.24	120.95	102.01	109.33
Head&Gut	Value Share	0.56	0.49	0.56	0.61	0.50	0.61
Other	Value	99.25	100.00	80.22	82.22	109.99	92.02
Other	Price	105.59	100.00	86.74	99.79	90.68	90.21
Other	Quantity	94.00	100.00	92.49	82.39	121.29	102.00
Other	Value Share	0.10	0.11	0.08	0.09	0.12	0.10
Roe	Value	86.19	100.00	114.42	65.65	16.88	31.71
Roe	Price	109.07	100.00	77.99	52.27	51.93	56.00
Roe	Quantity	79.02	100.00	146.72	125.58	32.51	56.61
Roe	Value Share	0.04	0.05	0.05	0.03	0.01	0.02
Surimi	Value	134.65	100.00	118.10	133.86	141.18	80.51
Surimi	Price	117.35	100.00	82.73	79.46	90.52	65.41
Surimi	Quantity	114.74	100.00	142.75	168.45	155.96	123.07
Surimi	Value Share	0.07	0.06	0.06	0.08	0.08	0.05

Table 5.9: Species Indices and Value Share for the GOA Ex-Vessel Market 2012-2017.

Species	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	134.55	100.00	114.95	114.20	104.24	115.42
Aggregate	Price	125.10	100.00	104.22	105.15	104.20	114.80
Aggregate	Quantity	107.55	100.00	110.29	108.60	100.03	100.54
FLAT	Value	83.07	100.00	160.56	86.85	76.74	92.72
FLAT	Price	97.28	100.00	102.38	100.03	82.27	84.11
FLAT	Quantity	85.40	100.00	156.82	86.82	93.28	110.24
FLAT	Value Share	0.03	0.05	0.07	0.04	0.03	0.04
OTHR	Value	112.94	100.00	78.40	77.01	60.79	47.24
OTHR	Price	105.72	100.00	104.61	103.36	103.83	106.33
OTHR	Quantity	106.82	100.00	74.94	74.51	58.55	44.43
OTHR	Value Share	0.01	0.02	0.01	0.01	0.01	0.01
PCOD	Value	160.36	100.00	139.82	135.16	110.19	94.96
PCOD	Price	132.64	100.00	112.22	110.85	110.62	125.74
PCOD	Quantity	120.90	100.00	124.60	121.93	99.62	75.52
PCOD	Value Share	0.24	0.21	0.25	0.24	0.22	0.17
PLCK	Value	105.87	100.00	105.32	121.44	89.71	98.14
PLCK	Price	97.48	100.00	70.08	68.59	47.84	49.99
PLCK	Quantity	108.61	100.00	150.29	177.04	187.52	196.31
PLCK	Value Share	0.16	0.20	0.18	0.21	0.17	0.17
ROCK	Value	139.44	100.00	101.81	104.98	117.60	102.09
ROCK	Price	124.04	100.00	90.17	89.64	88.94	87.37
ROCK	Quantity	112.42	100.00	112.92	117.11	132.23	116.86
ROCK	Value Share	0.07	0.06	0.06	0.06	0.07	0.06
SABL	Value	141.20	100.00	106.44	107.31	110.36	138.61
SABL	Price	137.29	100.00	121.93	127.29	147.57	166.72
SABL	Quantity	102.85	100.00	87.30	84.30	74.79	83.14
SABL	Value Share	0.49	0.46	0.43	0.44	0.49	0.56

Table 5.10: Gear Indices and Value Share for the GOA Ex-Vessel Market 2012-2017.

Gear	Index Type	2012	2013	2014	2015	2016	2017
Aggregate	Value	134.55	100.00	114.95	114.20	104.24	115.42
Aggregate	Price	125.10	100.00	104.22	105.15	104.20	114.80
Aggregate	Quantity	107.55	100.00	110.29	108.60	100.03	100.54
HAL	Value	145.83	100.00	108.41	107.73	105.06	116.58
HAL	Price	135.87	100.00	120.09	124.49	142.21	159.83
HAL	Quantity	107.33	100.00	90.28	86.54	73.88	72.94
HAL	Value Share	0.54	0.50	0.47	0.47	0.50	0.50
POT	Value	157.80	100.00	139.19	144.85	133.23	160.09
POT	Price	131.99	100.00	112.64	112.19	110.80	123.40
POT	Quantity	119.55	100.00	123.57	129.11	120.24	129.74
POT	Value Share	0.12	0.11	0.13	0.13	0.14	0.15
TWL	Value	114.09	100.00	116.71	114.17	95.44	102.00
TWL	Price	109.32	100.00	85.90	84.29	69.73	74.35
TWL	Quantity	104.36	100.00	135.87	135.45	136.87	137.19
TWL	Value Share	0.33	0.40	0.40	0.39	0.36	0.35

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.