

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

ECONOMIC STATUS OF THE GROUND FISH FISHERIES OFF ALASKA, 2019

by

Ben Fissel, Michael Dalton, Brian Garber-Yonts, Alan Haynie, Stephen Kasperski, Jean Lee, Dan
Lew, Chang Seung, Kim Sparks, Marysia Szymkowiak, Sarah Wise.

Economic and Social Sciences Research Program
Resource Ecology and Fisheries Management Division
Alaska Fisheries Science Center
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
7600 Sand Point Way N.E.
Seattle, Washington 98115-6349

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

This report will be available at:

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Time series and plots of data presented in this report are available at:

<https://psesv.psmfc.org/PSESV2.html>

For additional information concerning this report contact:

Ben Fissel
Resource Ecology and Fisheries Management Division
Alaska Fisheries Science Center
7600 Sand Point Way N.E.
Seattle, Washington 98115-6349
(206) 526-4226
ben.fissel@noaa.gov

Dear Reader,

This preliminary report of the “Economic Status of the Groundfish Fisheries Off Alaska” is compiled for the express purpose of the Sept. 2021 meeting of the Groundfish Plan Teams. A final version of this report will be subsequently prepared for meeting of the Groundfish Plan Teams and NPFMC. 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 Economic SAFE report contains detailed information about economic aspects of the groundfish fisheries, including figures and tables, economic performance indices, 2020 product price and ex-vessel price projections, year-to-date information on volume and value, an Amendment 80 fishery economic data report (EDR) summary, an Amendment 91 fishery EDR summary, a Gulf Trawl fishery EDR summary, and market profiles for the most commercially valuable species. Data tables are organized into four sections: (1) All Alaska, (2) BSAI, (3) GOA, and (4) Pacific halibut. The figures and tables in the report provide estimates of total groundfish catch, groundfish discards and discard rates, prohibited species catch (PSC) and PSC rates, the ex-vessel value of the groundfish catch, the ex-vessel value of the catch in other Alaska fisheries, the gross product value of the resulting groundfish seafood products, the number and sizes of vessels that participated in the groundfish fisheries off Alaska, vessel activity, and employment on at-sea processors. Generally, the data presented in this report cover 2015-2020, but limited catch and ex-vessel value data are reported for earlier years to illustrate the rapid development of the domestic groundfish fishery in the 1980s, and to provide a more complete historical perspective on catch. The data behind the tables from this and past Economic SAFE reports will be available online at: <https://reports.psmfc.org/akfin> and <https://psesev.psmfc.org/PSESV-2/>.

The commercial FMP groundfish fisheries off Alaska had a total catch of 2.1 million metric tons (mt) in 2020 (including catch in federal and state waters) (Fig. 3.1 and Table 1), a decrease of 4.3% from 2019. Groundfish accounted for 89% of Alaska's 2020 total catch (Table 4). Total catches of Alaska's FMP groundfish fisheries increased in 2020 for sablefish, Atka mackerel, and the flatfish species complex, and decreased for pollock, Pacific cod, and the rockfish species complex (Table 1). The contributions of the major groundfish species or species groups to the total catch are depicted in Fig. 3.1.

The aggregate ex-vessel value of the FMP groundfish fisheries off Alaska was \$835 million, which was 54% of the ex-vessel value of all commercial fisheries off Alaska in 2020 (Table 4).¹ After adjustment for inflation, the real ex-vessel value of FMP groundfish decreased \$159 million in 2020 was also due to an aggregate real ex-vessel price decrease of 12% to \$0.19 per pound (Table 4). Nominal pollock ex-vessel prices decreased 10% to \$0.13 per pound in the Bering Sea and Aleutian Islands (BSAI), and 14% to \$0.12 per pound in the Gulf of Alaska (GOA) (Tables 12 and 28). Pacific cod nominal ex-vessel prices increased 18% to \$0.51 per pound in the BSAI, and decreased 20% to \$0.39 per pound in the GOA. Among the other species that are the focus of the shoreside ex-vessel fisheries: The GOA flatfish ex-vessel price fell 10%, GOA rockfish prices fell 34%, and GOA sablefish prices fell 35% (in nominal terms). For Alaska FMP groundfish in aggregate, the change in catch was larger than the change in price (Tables 5.6 and 5.10). For other fisheries in Alaska, halibut, salmon, and shellfish ex-vessel revenues decreased and herring revenue increased (Table 4).

The gross value of the 2020 groundfish catch after primary processing (first-wholesale) was \$2.12 billion (Table 5), a decrease of 16% in real terms from 2019. This change was the combined effect of a 3% decrease in the real aggregate 2020 first-wholesale price to \$1.1 per pound while aggregate

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.

production volumes decreased 10% to 835.4 thousand mt (Table 5). In the BSAI, aggregate first-wholesale value decreased 14% and value was decreasing for nearly all species including pollock, Pacific cod, sablefish, rockfish, and most flatfish except for Kamchatka flounder (Table 16). The average first-wholesale price for all products was decreasing for all species (Table 17). In the GOA aggregate first-wholesale value decreased (25%) with decreases in value for all species except for shallow-water flatfish (Table 32). Prices were decreasing for most species with the exception of marginal price increases for pollock and Pacific cod which were more than offset by substantial decreases in production volume (Tables 31 and 33).

Starting in 2020, COVID-19 has had an unprecedented impact on fisheries in Alaska. Undoubtedly, one of the significant economic impacts experienced by the industry were the mitigation costs experienced by the fishing and processing industries to continue to supply national and global markets for seafood. This report does not provide a comprehensive accounting of these costs, as they are not a part of our existing EDR data collections. The core economic data tables in this report focus on catch, revenues, and effort and changes occurring during the most recent year.

While catch was down substantially, the reductions were generally the result of anticipated reductions in the TAC, and for most species and regions, catch levels relative to TAC were within a typical range. One notable exception is BSAI pollock, however there have been media reports that indicate the unharvested pollock was largely related to a dispersed stock and difficult fishing conditions, coupled with small fish size that generate lower returns. At the first wholesale market level, production for most species was stable given changes in catch. Pollock was an exception, where there was an increase in fishmeal and minced fish production, related to small fish size. Correspondingly, pollock fillet production was down. In contrast to changes in landings, however, there was a notable decrease in prices for many of the products with significant exports to China for reprocessing and Japan, which ultimately go to foodservice sectors. This includes H&G pollock and cod, flatfish, rockfish, Atka mackerel, and sablefish. The downward pressure on these prices is likely the result of COVID-19 related logistical difficulties in international shipping and inspections, as well as foodservice closures, and compounded the downward pressure on prices from tariffs. This downward pressure on fish product prices in the first-wholesale market coupled with cost pressure from COVID-19 mitigation efforts likely had upstream impacts on ex-vessel prices that decreased for these species.

The first-wholesale value of Alaska's FMP groundfish fisheries accounted for 57% of Alaska's total first-wholesale value from commercial fisheries (Table 5). First-wholesale value of Alaska's fisheries products other than FMP groundfish fisheries totaled \$1.6 billion, most of which (\$1.2 billion) came from Pacific salmon. Pacific salmon value decreased 31%, in part, because of the typical cycle in salmon returns and production, though year-over-year prices were up. Pacific halibut fisheries, which are concentrated in the Gulf of Alaska, saw a decrease of 24% in value in 2020 to \$84 million.

The groundfish fisheries off Alaska are an important segment of the U.S. fishing industry. In 2019, it accounted for 50% of the weight of total U.S. domestic landings and 18% of the ex-vessel value of total U.S. domestic landings (Fisheries of the United States, 2019). Alaska fisheries as a whole (including salmon, halibut, herring, and shellfish) accounted for 60% of the weight of total U.S. domestic landings and 37% 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 2020 crew weeks for both sectors totaled 143,451 with the majority of them (120,326) occurring in the BSAI groundfish fishery (Tables 24,

40, 25, and 41). 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 2019, annual crew weeks in Alaska decreased in 2020 by 4.5%.

2. OVERVIEW OF ECONOMIC STATUS REPORT, 2020

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.¹ 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 of 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.* 2020) 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 in state waters are managed under federal FMPs. It is not always possible, depending on data source(s), to definitively identify a unit of catch, or associated units, such as revenue or price, as being part of a federal FMP or otherwise, as noted in the footnotes. Additionally, unless explicitly indicated, phrases such as “groundfish fisheries off Alaska” or “Alaska groundfish”, as used in this report, should not be construed to include 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 management policies with respect to net benefits to either the participants in these fisheries or the Nation, such 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

¹F.O.B. refers to the value (or price) excluding transportation costs. The acronym, F.O.B. stands for “Free On Board”.

gradually moved away from such management, as discussed by Holland (2000), and instituted catch share programs in many of its fisheries. Seven of the seventeen catch-share programs currently in operation in 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., Felthoven 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 among 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 late 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 harvests 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 CAS. Catch for all Alaska including state and federal catches is displayed in Table 1. Retained catch for just FMP-managed groundfish is provided in Table 4 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 10 and 26 provide additional information for the BSAI and GOA, respectively, with aggregation of gear types and species specific catch data for flatfish and rockfish. Tables 11 and 27 provide estimates of total catch by species, gear, and target species for the BSAI and GOA, respectively. In general, the species or species complex accounting for the largest proportion of retained catch on the trip or haul is considered the target species, with two exceptions. A target of pelagic pollock is assigned only if 95% or more of the total catch is pollock. In the BSAI, if flatfish species (flathead, rock, and yellowfin sole, and other flatfish) represent the largest amount of retained catch, then a target of yellowfin sole is assigned if this species represents at least 70% of the combined flatfish retained catch; otherwise, the flatfish species accounting for the greatest amount of retained flatfish catch is assigned as the target. Beginning in 2011, Kamchatka flounder was broken out from arrowtooth flounder in the BSAI. As such, the “other flatfish”, and/or arrowtooth flounder target categories may not be directly comparable between 2011 and prior years in the historical catch data available online.

Groundfish Discards and Discard Rates

Discarded catch is the unretained catch of species that a vessel is, in general, legally able to target and retain (and thus does not include PSC). 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. Discard rates can be high for non-target species. For the most common species (e.g. pollock and cod) retention requirements 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 6 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 2016-2020.

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 pallasii*). 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 2016-2020 are summarized by area and gear in Table 7.

The at-sea observer program was developed for 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 pollock fishery 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 process (e.g., head-and-gut) the catch prior to delivery to the processor. The value of this on-board processing is discounted from the ex-vessel price so that it represents the round-weight (unprocessed) prices of the retained catch. Ex-vessel value is calculated by multiplying ex-vessel prices by retained catch. For the at-sea sector much of catch is both caught and processed for first-wholesale distribution by a single entity and as such a true “ex-vessel” market does not exist. For national accounting purposes the “ex-vessel” value of the at-sea sector are calculated by applying COAR buying prices for the corresponding species (complex), 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

²These rules for salmon bycatch 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-bycatch-management-in-the-bering>

a percentage (40%) of the estimated wholesale value per round weight. This percentage reflects the long-term average of the ratio of 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 4 contains data on the real ex-vessel value and catch of groundfish and non-groundfish species in Alaska, adjusted to 2020 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 8 provides estimates of ex-vessel value by residency (Alaska compared to the rest of the U.S., labeled 'Other') 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, 78% of the 2020 groundfish ex-vessel value was accounted for by vessels with primary owners who indicated that they were not residents of Alaska.

Tables 12 and 28 contain 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 13 and 29 for the BSAI and GOA, respectively. Table 14 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 14 provides these same data for the GOA.

2.2.3 First Wholesale Production, Prices and Value

The first wholesale market is the first sale of fisheries products after initial processing by a commercial processor with a Federal Processor Permit (FPP).³ 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 5 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 15 for the BSAI and Table 31 for the GOA. First-wholesale value (gross revenue) is presented in Tables 16 and 32 for the BSAI and GOA, respectively. Product price-per-pound estimates are presented in Tables 17 and 33, and estimates of total first wholesale product value per round metric ton of retained catch are reported

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

in Table 18 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 19 and 35 present number of processors, gross product value and value per processor, and percent of total wholesale value of processed groundfish accounted for by different processing groups, 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 CAS 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 Table 9. 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 20 and 36.

Tables 22 and 38 provide estimates of vessel weeks for catcher vessels in the BSAI and GOA, respectively, stratified by length class, area, gear, and target fishery. Tables 23 and 39 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 24 and 40, in the BSAI and GOA, respectively. At-sea production reports provide that information for motherships and catcher/processors shown in Tables 25 and 41 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.

2.2.5 Description of the Category “Other” in Data Tables

The category ‘Other’ has different meanings in different tables, as described below.

- Table 5: “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).
- Tables 11, 27: “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 7: “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.
- Tables 15, 16, 17, 31, 32, 33: “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).
- Tables 18, 34: “Other” species are primarily skate, squid, octopus, shark, and sculpin.

2.2.6 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 12, 13, 15, 17, 28, 29, 31, and 33. 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 Table 4. The PCE is used to adjust 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 Table 5. 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 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 most recent FUS is available at: <https://www.fisheries.noaa.gov/national/sustainable-fisheries/fisheries-united-states>.
- 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 industry representatives 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 useful 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 SAFE.

2.4. Citations

Abbott, J.K., B. Garber-Yonts and J.E. Wilen. 2010. "Employment and Remuneration Effects of IFQs in the Bering Sea/Aleutian Islands Crab Fisheries." *Marine Resource Economics* 25(4): 333-354.

Abbott, J., A. Haynie, and M. Reimer. 2015. "Hidden Flexibility: Institutions, Incentives and the Margins of Selectivity in Fishing." *Land Economics* 91 (1): 169-195.

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. Available at: <http://www.afsc.noaa.gov/Publications/AFSC-TM/NOAA-TM-AFSC-286.pdf>.

Fell, H. and A. Haynie. 2011. "Estimating Time-varying Bargaining Power: A Fishery Application." *Economic Inquiry* 49(3): 685-696.

Fell, H. and A. Haynie. 2012. "Spatial Competition with Changing Market Institutions." *Journal of Applied Econometrics*, DOI: 10.1002/jae.2272.

Felthoven, R.G. 2002. "Effects of the American Fisheries Act on capacity, utilization and technical efficiency." *Marine Resources Economics* 17(3): 181-206.

Fissel, B., M. Dalton, B. Garber-Yonts, A. Haynie, S. Kasperski, J. Lee, D. Lew, C. Seung, K. Sparks, M. Szymkowiak, and S. Wise. 2020. "Stock Assessment and Fishery Evaluation Report for the Groundfish Fisheries of the Gulf of Alaska and Bering Sea/Aleutian Island Area: Economic Status of the Groundfish Fisheries off Alaska, 2019", NPFMC, November, 2020. <https://www.fisheries.noaa.gov/alaska/ecosystems/economic-status-reports-gulf-alaska-and-bering-sea-aleutian-islands>.

Gordon, H.S. 1954. "The Economic Theory of a Common-Property Resource: The Fishery." *The Journal of Political Economy* 62(2): 124-142.

Holland, D. 2000. "Fencing the Commons: Regulatory Barbed Wire in the Alaskan Groundfish Fisheries." *Marine Resource Economics* 15(2): 141-149.

Homans, F., and J. Wilen. 2005. "Markets and rent dissipation in regulated open access fisheries." *Journal of Environmental Economics and Management*, 49: 381-404.

National Marine Fisheries Service, 2019. Fisheries of the United States, 2020. <https://www.fisheries.noaa.gov/national/sustainable-fisheries/fisheries-united-states#current-report>

Scott, A.. 1955. "The fishery: the objectives of sole ownership." *Journal of Political Economy* 63(2): 116-124.

Torres, M. and R. Felthoven. 2014. "Productivity growth and product choice in catch share fisheries: The case of Alaska pollock." *Marine Policy*, 50: 280-289.

Williams, G.H. 2015. Recommendations for Pacific halibut discard mortality rates in the 2016-2018 groundfish fisheries off Alaska. Int. Pac. Halibut Comm. Report of Assessment and Research Activities 2015: 381-397. Available at: http://www.iphc.int/publications/rara/2015/RARA2015_21DMR.pdf.

Wilen, J.E., E. Richardson. 2008 "Rent generation in the Alaskan pollock conservation cooperative." *FAO Fisheries Technical Paper*, 361.

2.5. Acknowledgements

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

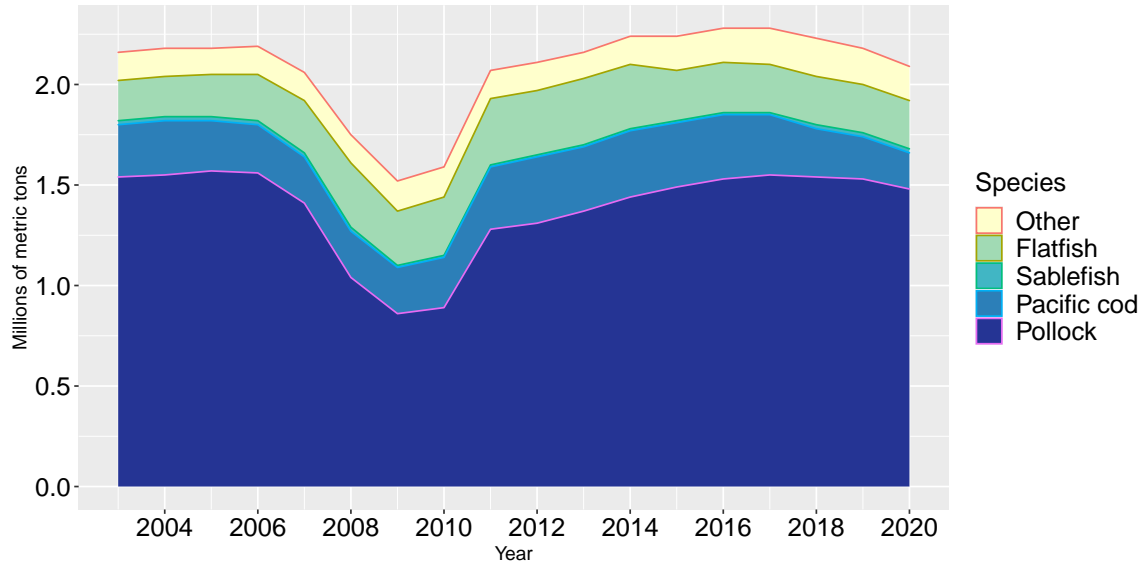


Figure 3.1: Groundfish catch in the commercial fisheries off Alaska by species, 2003-2020.

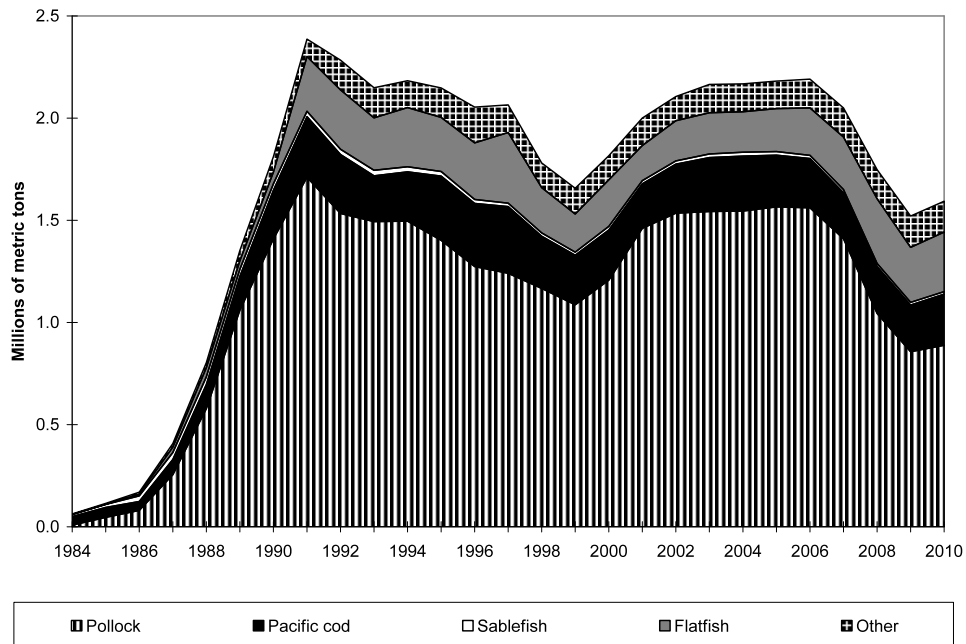


Figure 3.2: Groundfish catch in the commercial fisheries off Alaska by species, (1984-2010).
Notes: Catch for 2011 and onward are displayed in Figure 3.1.

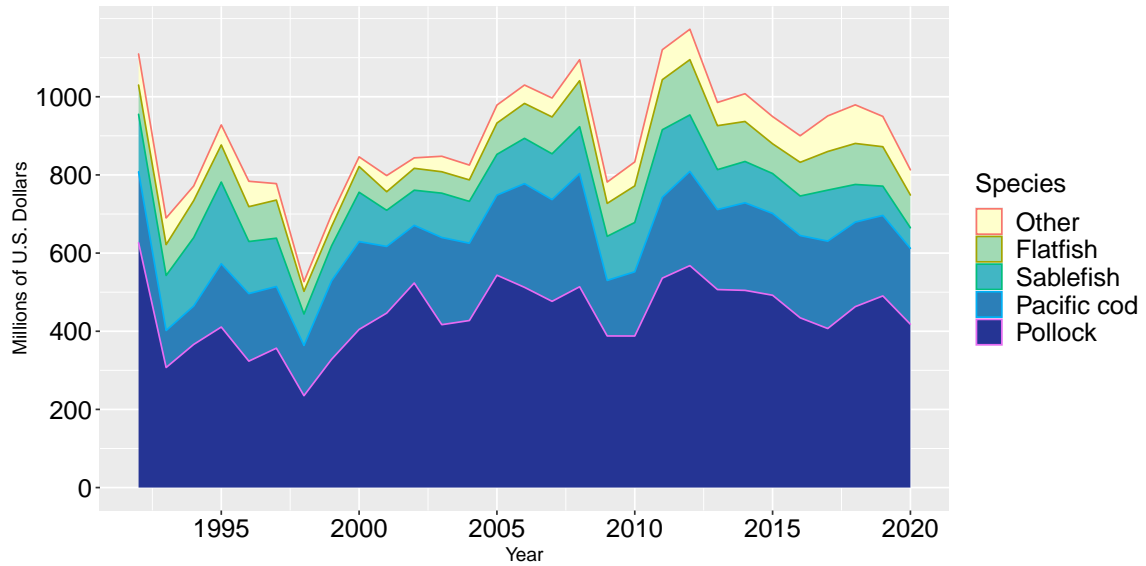


Figure 3.3: Real ex-vessel value of the groundfish catch in the commercial fisheries off Alaska by species, 1992-2020 (base year = 2020).

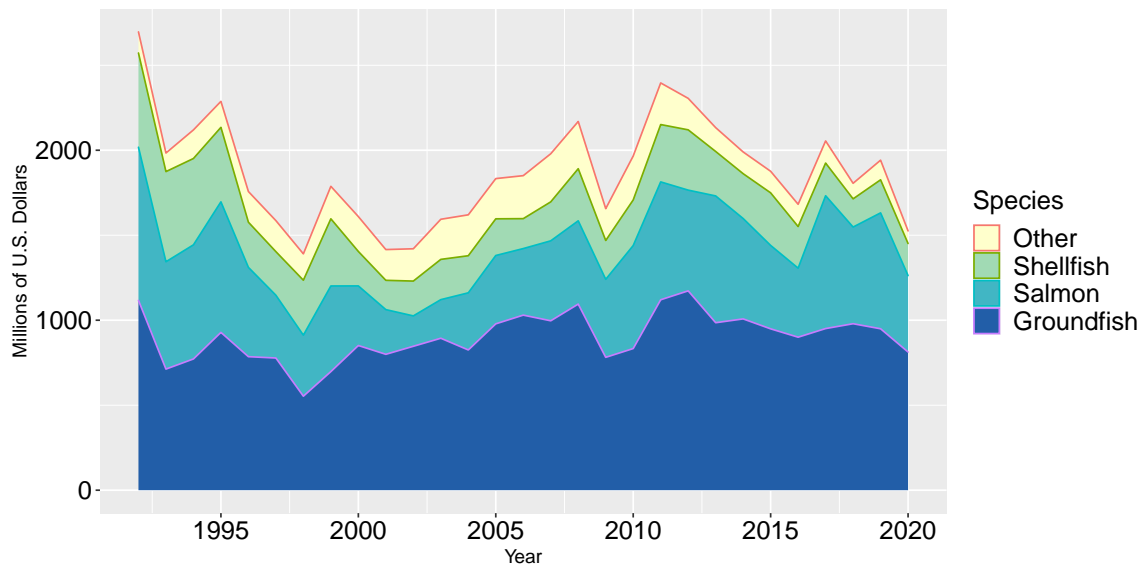


Figure 3.4: Real ex-vessel value of the domestic fish and shellfish catch off Alaska by species group, 1992-2020 (base year = 2020).

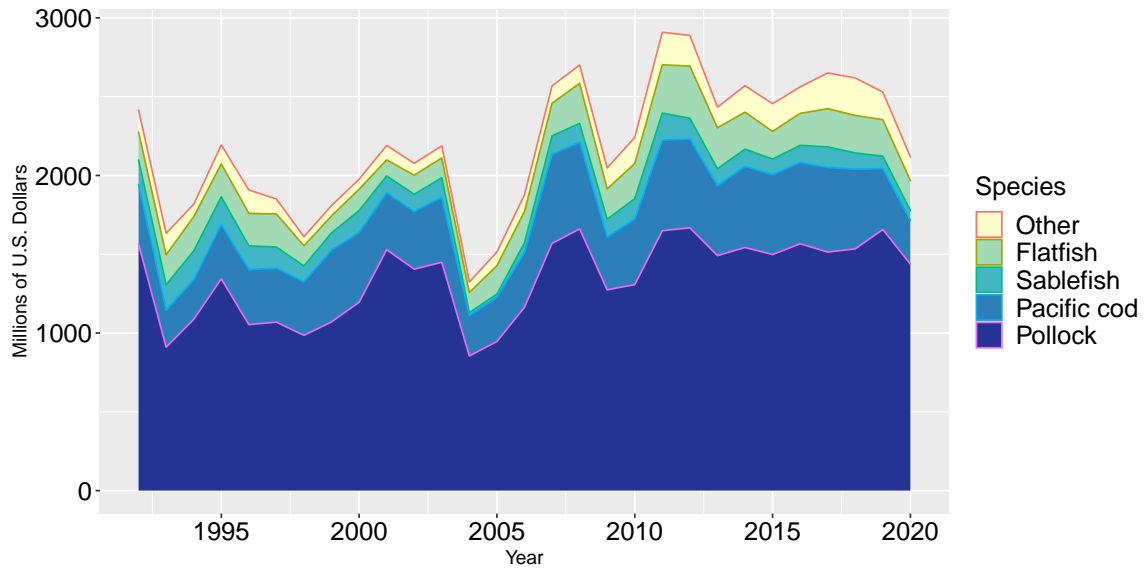


Figure 3.5: Real gross product value of the groundfish catch off Alaska by species, 1992-2020 (base year = 2020).

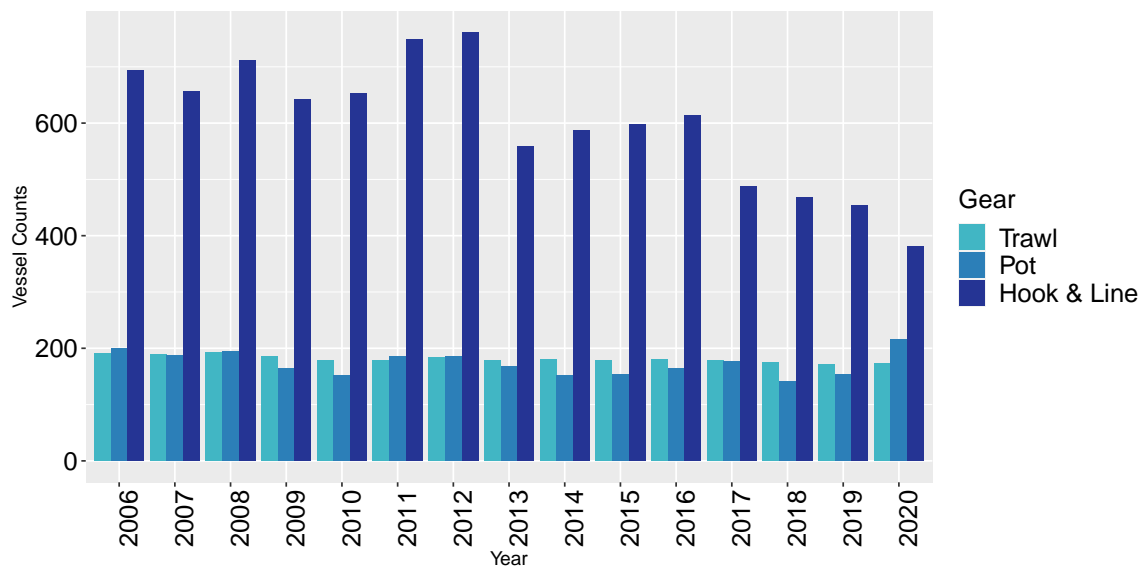


Figure 3.6: Number of vessels in the domestic fishery off Alaska by gear type, 2006-2020.

4. TABLES REPORTING ECONOMIC DATA OF THE GROUND FISH FISHERIES OFF ALASKA

Table 1: Groundfish catch in the commercial fisheries off Alaska by area and species, 2011-2020 (1,000 metric tons, round weight).

	Year	Pollock	Sablefish	Pacific Cod	Flatfish	Rockfish	Atka Mackerel	Total
Bering Sea and Aleutian Islands	2011	1,200.4	1.7	220.1	285.9	28.2	51.8	1,818.4
	2012	1,206.3	2.0	251.0	291.2	28.1	47.8	1,857.9
	2013	1,273.8	1.7	250.3	297.2	34.9	23.2	1,914.6
	2014	1,300.2	1.1	249.3	276.1	36.1	31.0	1,928.5
	2015	1,323.2	0.6	242.1	219.2	39.7	53.3	1,914.3
	2016	1,354.9	0.9	260.9	225.1	36.8	54.5	1,969.0
	2017	1,360.9	1.7	253.0	210.9	38.1	64.4	1,968.4
	2018	1,381.2	2.2	220.3	211.9	41.7	70.4	1,965.9
	2019	1,411.0	3.8	198.1	208.3	54.3	57.5	1,959.2
	2020	1,370.4	6.5	169.9	213.8	50.8	58.9	1,895.5
Gulf of Alaska	2011	81.5	12.1	85.4	41.0	23.1	1.6	252.1
	2012	104.0	12.7	77.9	29.5	27.4	1.2	258.9
	2013	96.4	12.8	68.6	33.9	24.9	1.3	250.1
	2014	142.6	11.1	85.0	47.6	28.9	1.0	326.5
	2015	167.5	11.1	79.5	26.7	29.0	1.2	324.6
	2016	177.1	10.0	64.1	28.1	33.9	1.1	324.2
	2017	186.2	11.3	48.7	33.3	31.8	1.1	321.5
	2018	158.1	13.0	15.2	25.8	34.2	1.4	255.6
	2019	120.2	13.8	15.7	31.9	34.2	1.3	224.0
	2020	107.5	13.4	6.7	28.8	32.3	0.6	194.1
All Alaska	2011	1,281.9	13.8	305.5	326.9	51.3	53.4	2,070.6
	2012	1,310.2	14.7	328.9	320.7	55.5	49.0	2,116.8
	2013	1,370.2	14.5	318.9	331.1	59.8	24.5	2,164.7
	2014	1,442.9	12.3	334.3	323.6	65.0	32.0	2,255.0
	2015	1,490.8	11.7	321.5	245.9	68.7	54.5	2,238.9
	2016	1,532.1	10.9	325.0	253.1	70.7	55.6	2,293.1
	2017	1,547.0	13.0	301.8	244.2	69.8	65.5	2,289.9
	2018	1,539.2	15.2	235.4	237.7	75.9	71.8	2,221.5
	2019	1,531.3	17.6	213.8	240.2	88.5	58.7	2,183.2
	2020	1,477.9	19.9	176.6	242.6	83.0	59.5	2,089.5

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. As such, totals may be slightly larger than retained catch estimates provided in later tables.

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

Table 2: Groundfish retained catch off Alaska by area, sector, and species, 2016-2020 (1,000 metric tons, round weight).

	Year	Bering Sea and Aleutian Islands			Gulf of Alaska			All Alaska		
		Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total
Pollock	2016	703.95	641.77	1,345.72	175.50	0.57	176.07	879.45	642.33	1,521.78
	2017	710.38	642.25	1,352.63	183.26	1.07	184.33	893.65	643.31	1,536.96
	2018	718.33	651.43	1,369.77	155.28	0.60	155.88	873.61	652.04	1,525.65
	2019	735.60	666.24	1,401.84	118.56	0.33	118.89	854.16	666.57	1,520.73
	2020	725.04	633.32	1,358.36	106.29	0.34	106.63	831.32	633.66	1,464.98
Sablefish	2016	0.40	0.39	0.80	8.28	0.78	9.06	8.69	1.17	9.86
	2017	0.70	0.76	1.46	9.05	1.02	10.08	9.76	1.79	11.54
	2018	0.83	0.95	1.78	9.51	1.02	10.53	10.34	1.97	12.31
	2019	1.56	0.61	2.17	9.78	1.10	10.88	11.34	1.71	13.05
	2020	1.66	1.05	2.71	10.41	0.95	11.35	12.07	2.00	14.07
Pacific Cod	2016	86.05	171.64	257.69	57.90	5.20	63.11	143.95	176.84	320.79
	2017	87.97	162.10	250.07	41.87	6.10	47.97	129.84	168.20	298.04
	2018	82.48	135.53	218.01	12.66	1.75	14.40	95.14	137.27	232.41
	2019	77.58	118.40	195.98	12.90	1.55	14.45	90.47	119.95	210.43
	2020	68.34	99.04	167.38	4.77	0.07	4.84	73.11	99.12	172.23
Flatfish	2016	14.68	196.76	211.44	17.76	5.85	23.61	32.44	202.61	235.05
	2017	21.15	177.45	198.60	14.52	14.79	29.30	35.67	192.24	227.91
	2018	16.56	180.84	197.40	17.71	4.89	22.60	34.27	185.73	220.00
	2019	23.58	174.51	198.09	21.32	6.84	28.16	44.90	181.35	226.25
	2020	23.86	179.61	203.47	19.06	5.31	24.37	42.91	184.92	227.84

Continued on next page.

Table 2: Continued

	Year	Bering Sea and Aleutian Islands			Gulf of Alaska			All Alaska		
		Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total
Rockfish	2016	2.54	32.79	35.34	15.19	15.64	30.83	17.74	48.43	66.17
	2017	2.53	32.97	35.49	11.31	15.61	26.93	13.84	48.58	62.42
	2018	3.51	35.27	38.78	14.70	16.71	31.41	18.21	51.98	70.19
	2019	4.89	44.98	49.87	14.91	15.88	30.79	19.80	60.86	80.66
	2020	5.31	40.70	46.00	15.52	14.76	30.28	20.83	55.46	76.29
Atka Mackerel	2016	3.68	50.38	54.06	0.41	0.39	0.80	4.09	50.77	54.86
	2017	4.57	59.48	64.05	0.13	0.52	0.65	4.70	60.00	64.71
	2018	5.65	63.86	69.51	0.18	1.10	1.28	5.83	64.96	70.78
	2019	3.25	53.59	56.85	0.11	0.79	0.90	3.36	54.39	57.75
	2020	5.63	52.49	58.13	*	0.51	0.51	5.63	53.00	58.64
All Groundfish	2016	811.84	1,100.54	1,912.38	276.53	28.64	305.16	1,088.37	1,129.17	2,217.54
	2017	828.42	1,084.39	1,912.80	261.14	39.40	300.54	1,089.56	1,123.78	2,213.34
	2018	829.18	1,079.90	1,909.08	210.97	26.17	237.14	1,040.15	1,106.06	2,146.21
	2019	847.14	1,067.46	1,914.60	178.71	26.57	205.28	1,025.85	1,094.03	2,119.88
	2020	830.45	1,014.65	1,845.11	156.87	21.95	178.82	987.32	1,036.60	2,023.93

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: Groundfish ex-vessel value off Alaska by area, sector, and species, 2016-2020 (\$ millions).

	Year	Bering Sea and Aleutian Islands			Gulf of Alaska			All Alaska		
		Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total
Pollock	2016	209.9	165.0	374.9	32.2	0.1	32.2	242.0	165.1	407.1
	2017	206.1	146.8	352.9	35.0	0.2	35.2	241.2	147.0	388.1
	2018	237.1	171.1	408.2	42.0	0.2	42.2	279.2	171.3	450.4
	2019	260.5	187.8	448.3	36.0	0.1	36.1	296.5	187.9	484.4
	2020	234.5	155.7	390.1	27.6	0.1	27.7	262.1	155.7	417.9
Sablefish	2016	3.5	1.8	5.3	85.6	3.8	89.4	89.2	5.6	94.7
	2017	5.8	3.3	9.1	106.0	9.1	115.1	111.8	12.4	124.2
	2018	3.1	2.7	5.8	81.4	6.4	87.8	84.5	9.1	93.6
	2019	4.4	1.4	5.8	61.8	5.7	67.6	66.3	7.1	73.4
	2020	2.7	2.3	4.9	43.2	2.5	45.7	45.9	4.8	50.7
Pacific Cod	2016	49.7	106.6	156.3	37.6	3.3	40.9	87.3	109.9	197.2
	2017	60.4	117.5	178.0	30.9	4.3	35.2	91.3	121.9	213.2
	2018	71.5	124.7	196.2	12.5	1.7	14.2	84.0	126.4	210.4
	2019	69.9	117.7	187.6	14.1	1.6	15.7	84.0	119.3	203.3
	2020	57.4	132.2	189.6	4.2	0.1	4.2	61.6	132.3	193.9
Flatfish	2016	4.9	69.6	74.5	4.2	1.5	5.7	9.2	71.1	80.3
	2017	8.7	77.5	86.2	3.7	3.9	7.6	12.4	81.4	93.8
	2018	7.8	87.9	95.7	4.7	1.4	6.1	12.5	89.2	101.8
	2019	10.8	82.7	93.5	4.3	1.5	5.7	15.0	84.2	99.2
	2020	9.0	69.5	78.5	3.4	1.0	4.5	12.4	70.5	82.9

Continued on next page.

Table 3: Continued

	Year	Bering Sea and Aleutian Islands			Gulf of Alaska			All Alaska		
		Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total
Rockfish	2016	1.0	12.9	13.9	7.4	6.4	13.9	8.5	19.3	27.8
	2017	1.2	15.6	16.8	5.7	6.3	12.0	7.0	21.9	28.8
	2018	1.7	16.5	18.1	7.7	7.1	14.8	9.3	23.6	32.9
	2019	1.7	16.0	17.8	7.6	6.9	14.5	9.3	22.9	32.3
	2020	1.7	13.0	14.7	5.3	4.2	9.5	7.0	17.2	24.2
Atka Mackerel	2016	2.1	28.1	30.1	0.3	0.3	0.5	2.3	28.3	30.7
	2017	3.6	46.7	50.2	0.1	0.4	0.6	3.7	47.1	50.8
	2018	4.3	48.9	53.3	0.1	0.9	1.0	4.5	49.8	54.3
	2019	2.0	33.5	35.5	0.1	0.5	0.6	2.1	34.0	36.1
	2020	3.2	29.7	32.9	*	0.3	0.3	3.2	30.0	33.2
All Groundfish	2016	271.3	387.2	658.4	168.8	15.4	184.3	440.1	402.6	842.7
	2017	286.3	412.5	698.8	182.5	24.5	207.0	468.8	437.1	905.8
	2018	326.2	458.7	784.9	149.4	17.7	167.1	475.6	476.4	952.0
	2019	349.6	445.6	795.2	125.1	16.3	141.4	474.6	462.0	936.6
	2020	308.6	408.3	716.9	84.6	8.2	92.7	393.1	416.5	809.6

Notes: Ex-vessel value is calculated by multiplying ex-vessel prices by the retained round weight catch. 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 4: Catch and real ex-vessel value of the commercial fisheries off Alaska by species group and area, 2016-2020; calculations based on COAR (1,000 metric tons and \$ millions, base year = 2020).

Species.group	Bering Sea and Aleutian Islands		Gulf of Alaska		All Alaska		
	Quantity	Value	Quantity	Value	Quantity	Value	
2016	Groundfish	1,912.5	\$ 728.5	307.7	\$ 201.2	2,220.3	\$ 929.7
	Salmon	110.1	\$ 233.3	134.7	\$ 245.1	244.8	\$ 478.4
	Halibut	1.5	\$ 20.9	6.9	\$ 106.0	8.4	\$ 126.9
	Herring	13.8	\$ 1.9	9.6	\$ 5.0	23.3	\$ 6.9
	Shellfish	29.2	\$ 262.7	3.0	\$ 22.6	32.2	\$ 285.3
	Other	-	\$ -	1.2	\$ 7.4	1.2	\$ 7.4
	All Species	2,067.1	\$ 1,247.3	463.0	\$ 587.4	2,530.1	\$ 1,834.7
2017	Groundfish	1,913.2	\$ 774.2	301.9	\$ 218.9	2,215.2	\$ 993.0
	Salmon	115.4	\$ 323.4	330.0	\$ 456.3	445.4	\$ 779.7
	Halibut	1.7	\$ 20.3	7.7	\$ 102.5	9.3	\$ 122.8
	Herring	17.6	\$ 2.5	13.3	\$ 5.8	30.9	\$ 8.4
	Shellfish	16.0	\$ 169.2	2.7	\$ 22.9	18.8	\$ 192.1
	Other	-	\$ -	1.0	\$ 8.5	1.0	\$ 8.5
	All Species	2,063.9	\$ 1,289.6	656.6	\$ 815.0	2,720.6	\$ 2,104.6
2018	Groundfish	1,909.4	\$ 849.8	238.9	\$ 173.1	2,148.2	\$ 1,022.9
	Salmon	116.2	\$ 309.7	133.7	\$ 256.2	249.8	\$ 565.9
	Halibut	1.6	\$ 15.1	6.8	\$ 75.3	8.4	\$ 90.4
	Herring	16.8	\$ 2.4	3.7	\$ 4.4	20.5	\$ 6.8
	Shellfish	14.6	\$ 153.8	4.6	\$ 33.0	19.2	\$ 186.7
	Other	-	\$ -	1.4	\$ 11.5	1.4	\$ 11.5
	All Species	2,058.6	\$ 1,330.8	389.0	\$ 553.5	2,447.6	\$ 1,884.3
2019	Groundfish	1,914.7	\$ 850.0	207.8	\$ 144.1	2,122.5	\$ 994.1
	Salmon	116.7	\$ 370.4	256.7	\$ 322.5	373.4	\$ 693.0
	Halibut	1.7	\$ 15.3	7.1	\$ 80.0	8.8	\$ 95.3
	Herring	22.3	\$ 2.5	0.9	\$ 3.0	23.2	\$ 5.4
	Shellfish	17.7	\$ 154.7	5.8	\$ 41.7	23.5	\$ 196.4
	Other	-	\$ -	1.5	\$ 11.8	1.5	\$ 11.8
	All Species	2,073.2	\$ 1,392.9	479.8	\$ 603.0	2,552.9	\$ 1,995.9
2020	Groundfish	1,846.5	\$ 741.5	182.2	\$ 93.8	2,028.7	\$ 835.4
	Salmon	98.9	\$ 317.0	122.9	\$ 132.0	221.8	\$ 448.9
	Halibut	1.6	\$ 11.8	6.4	\$ 54.9	8.0	\$ 66.7
	Herring	3.0	\$ 2.3	1.8	\$ 5.1	4.8	\$ 7.4
	Shellfish	19.5	\$ 153.8	6.9	\$ 34.8	26.4	\$ 188.6
	Other	-	\$ -	1.2	\$ 6.7	1.2	\$ 6.7
	All Species	1,969.5	\$ 1,226.4	321.5	\$ 327.3	2,291.0	\$ 1,553.7

Notes: These estimates include the value of catch from both federal and state of Alaska fisheries. The data have been adjusted to 2020 dollars by applying the Personal Consumption Expenditure Index at <https://research.stlouisfed.org/fred2/series/PCEPI> to account for affects of inflation on fishery 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 5: Production and real gross value of groundfish and non-groundfish products in the commercial fisheries off Alaska by species group and area of processing, 2016-2020 (1,000 metric tons product weight and \$ millions, base year = 2020).

Species	Bering Sea and Aleutian Islands		Gulf of Alaska		All Alaska	
	Quantity	Value	Quantity	Value	Quantity	Value
2016 Groundfish	838.2	\$ 2,174.6	134.9	\$ 387.4	973.1	\$ 2,562.0
Salmon	73.6	\$ 559.1	130.3	\$ 797.2	204.0	\$ 1,356.4
Halibut	2.4	\$ 33.3	5.8	\$ 115.7	8.2	\$ 149.0
Herring	10.2	\$ 16.4	10.7	\$ 14.0	20.9	\$ 30.5
Shellfish	18.0	\$ 322.8	3.9	\$ 66.3	22.0	\$ 389.1
Other	0	\$ 0.3	1.1	\$ 21.9	1.1	\$ 22.2
All Species	942.5	\$ 3,106.6	286.7	\$ 1,402.6	1,229.2	\$ 4,509.2
2017 Groundfish	823.7	\$ 2,264.4	136.8	\$ 385.9	960.5	\$ 2,650.3
Salmon	74.6	\$ 640.8	258.0	\$ 1,350.5	332.7	\$ 1,991.3
Halibut	1.2	\$ 23.7	6.3	\$ 120.1	7.5	\$ 143.8
Herring	16.9	\$ 15.4	14.2	\$ 14.1	31.1	\$ 29.5
Shellfish	11.4	\$ 234.7	1.7	\$ 30.8	13.2	\$ 265.5
Other	*	\$ *	2.1	\$ 34.0	2.1	\$ 34.0
All Species	927.8	\$ 3,179.0	419.1	\$ 1,935.4	1,347.0	\$ 5,114.3
2018 Groundfish	823.2	\$ 2,312.7	113.5	\$ 305.8	936.7	\$ 2,618.5
Salmon	79.8	\$ 765.6	133.1	\$ 845.6	212.9	\$ 1,611.2
Halibut	0.9	\$ 15.9	5.6	\$ 97.9	6.5	\$ 113.8
Herring	12.7	\$ 10.9	3.7	\$ 8.6	16.4	\$ 19.5
Shellfish	9.6	\$ 178.6	2.7	\$ 54.4	12.2	\$ 233.0
Other	*	\$ *	1.5	\$ 19.3	1.5	\$ 19.3
All Species	926.1	\$ 3,283.7	260.2	\$ 1,331.6	1,186.3	\$ 4,615.3
2019 Groundfish	831.4	\$ 2,274.9	99.9	\$ 253.9	931.3	\$ 2,528.9
Salmon	83.5	\$ 740.5	205.2	\$ 1,013.4	288.7	\$ 1,753.9
Halibut	1.1	\$ 14.2	6.0	\$ 95.8	7.1	\$ 110.0
Herring	19.2	\$ 16.5	0.9	\$ 4.7	20.2	\$ 21.1
Shellfish	12.8	\$ 236.3	3.2	\$ 63.3	16.0	\$ 299.6
Other	0	\$ 0.1	1.6	\$ 24.3	1.6	\$ 24.5
All Species	948.1	\$ 3,282.5	316.9	\$ 1,455.4	1,264.9	\$ 4,737.8
2020 Groundfish	753.0	\$ 1,930.1	82.4	\$ 187.1	835.4	\$ 2,117.2
Salmon	60.5	\$ 522.6	104.0	\$ 682.7	164.5	\$ 1,205.2
Halibut	1.2	\$ 12.8	4.4	\$ 70.8	5.6	\$ 83.6
Herring	0.5	\$ 0.5	4.1	\$ 7.8	4.6	\$ 8.3
Shellfish	14.0	\$ 225.4	4.0	\$ 68.1	18.0	\$ 293.5
Other	-	\$ -	1.1	\$ 13.7	1.1	\$ 13.7
All Species	829.1	\$ 2,691.4	200.0	\$ 1,030.1	1,029.1	\$ 3,721.5

Notes: These estimates include production resulting from catch in both federal and state of Alaska fisheries. The data have been adjusted to 2020 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 6: Discards and discard rates for groundfish catch off Alaska by gear, and species, 2016-2020 (1,000 metric tons, round weight).

	Year	Fixed		Trawl		All Gear	
		Total Discards	Discard Rate	Total Discards	Discard Rate	Total Discards	Discard Rate
Pollock	2016	0.8	12	9.4	1	10.2	1
	2017	0.8	11	9.2	1	10.0	1
	2018	0.6	10	12.8	1	13.4	1
	2019	0.7	11	9.7	1	10.4	1
	2020	0.5	11	12.1	1	12.6	1
Sablefish	2016	0.9	9	0.2	14	1.0	10
	2017	0.8	7	0.6	27	1.4	11
	2018	1.0	8	1.9	51	2.9	19
	2019	1.7	14	2.7	52	4.4	25
	2020	1.0	8	4.1	56	5.1	26
Pacific Cod	2016	3.5	2	0.5	1	4.1	1
	2017	2.8	1	0.9	1	3.7	1
	2018	2.2	1	0.7	1	2.9	1
	2019	2.0	1	1.2	2	3.3	2
	2020	1.8	1	2.3	4	4.1	2
Flatfish	2016	3.2	76	12.7	5	15.9	6
	2017	3.0	70	11.9	5	14.9	6
	2018	3.1	83	13.3	6	16.5	7
	2019	2.3	76	9.6	4	12.0	5
	2020	1.7	79	9.7	4	11.4	5
Rockfish	2016	0.8	42	3.6	5	4.4	6
	2017	0.9	46	6.3	9	7.2	10
	2018	1.1	50	4.5	6	5.6	7
	2019	0.9	47	6.5	8	7.5	8
	2020	0.7	46	5.7	7	6.4	8
Atka Mackerel	2016	0	97	0.5	1	0.6	1
	2017	0	70	0.7	1	0.8	1
	2018	0	79	0.7	1	0.7	1
	2019	0	68	0.7	1	0.7	1
	2020	0	49	0.8	1	0.8	1
All Groundfish	2016	38.4	13	34.4	2	72.8	3
	2017	37.0	13	37.6	2	74.6	3
	2018	32.1	14	41.2	2	73.2	3
	2019	21.4	10	38.7	2	60.1	3
	2020	19.0	11	41.5	2	60.6	3

Notes: All groundfish and all gear may include additional species or gear types. Discards rates are calculated as $100 \times \text{discards} / (\text{total catch})$. See the seventh bullet in Section efsec:additional-notes for an explanation of 0 discards with positive discard rates. 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 7: Prohibited species catch (PSC) by species, area and gear, 2016-2020 (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)
Fixed	2016	225	*	0.04	0.25	26.73	16.28	315.22	43.10
	2017	193	0	0.03	0.21	34.93	77.39	357.21	167.71
	2018	133	0	0.07	0.18	338.84	48.31	271.57	66.52
	2019	88	0	0.02	0.33	47.28	12.58	126.44	88.20
	2020	93	0	0.02	0.13	23.27	9.91	87.21	154.29
Bering Sea and Aleutian Islands	2016	2,132	1,494	32.88	347.10	41.36	14.77	221.19	166.97
	2017	1,775	1,021	36.25	471.25	60.42	10.59	353.01	159.68
	2018	1,952	540	17.33	308.84	30.74	16.03	183.83	1,582.43
	2019	2,267	1,182	31.44	358.48	70.14	33.95	344.00	941.30
	2020	1,577	3,934	34.97	322.90	64.60	13.82	598.05	780.57
All Gear	2016	2,357	1,494	32.93	347.36	68.09	31.05	536.42	210.08
	2017	1,968	1,021	36.28	471.45	95.35	87.98	710.22	327.39
	2018	2,085	540	17.40	309.02	369.58	64.35	455.40	1,648.95
	2019	2,355	1,182	31.47	358.81	117.42	46.54	470.44	1,029.50
	2020	1,671	3,934	34.99	323.04	87.87	23.73	685.26	934.86
Fixed	2016	44	-	0.11	0.49	0.03	0.04	62.91	0
	2017	15	-	0.07	0.08	-	0.09	4.14	0
	2018	1	-	0.08	0.09	0	0.07	18.19	-
	2019	1	-	0	0.27	-	0.21	29.96	-
	2020	*	-	-	0.11	-	0.11	0.11	0.01
Gulf of Alaska	2016	1,331	144	21.87	2.76	-	0.72	91.80	0.18
	2017	1,214	6	24.93	5.67	-	0.24	122.82	-
	2018	1,192	45	17.00	9.15	-	0.32	235.73	-
	2019	1,100	81	23.89	6.41	-	0.36	245.17	-
	2020	788	67	11.80	2.91	*	0.06	623.01	-
All Gear	2016	1,374	144	21.98	3.25	0.03	0.76	154.70	0.19
	2017	1,229	6	25.00	5.75	-	0.33	126.96	0
	2018	1,193	45	17.08	9.24	0	0.40	253.92	-
	2019	1,101	81	23.89	6.68	-	0.56	275.13	-
	2020	788	67	11.80	3.02	*	0.17	623.13	0.01

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 8: Percentage of ex-vessel value of the groundfish catch off Alaska by area, residency, and species, 2016-2020; calculations based on COAR.

	Year	Bering Sea and Aleutian Islands		Gulf of Alaska		All Alaska	
		Alaska	Other	Alaska	Other	Alaska	Other
Pollock	2016	17 %	83 %	45 %	55 %	19 %	81 %
	2017	13 %	87 %	49 %	51 %	16 %	84 %
	2018	13 %	87 %	48 %	52 %	16 %	84 %
	2019	12 %	88 %	50 %	50 %	15 %	85 %
	2020	9 %	91 %	53 %	47 %	12 %	88 %
Sablefish	2016	32 %	68 %	61 %	39 %	59 %	41 %
	2017	38 %	62 %	61 %	39 %	60 %	40 %
	2018	27 %	73 %	63 %	37 %	61 %	39 %
	2019	36 %	64 %	62 %	38 %	60 %	40 %
	2020	29 %	71 %	66 %	34 %	62 %	38 %
Pacific Cod	2016	26 %	74 %	79 %	21 %	37 %	63 %
	2017	27 %	73 %	71 %	29 %	34 %	66 %
	2018	26 %	74 %	70 %	30 %	29 %	71 %
	2019	30 %	70 %	72 %	28 %	33 %	67 %
	2020	30 %	70 %	85 %	15 %	31 %	69 %
Flatfish	2016	16 %	84 %	47 %	53 %	18 %	82 %
	2017	20 %	80 %	42 %	58 %	22 %	78 %
	2018	22 %	78 %	59 %	41 %	24 %	76 %
	2019	24 %	76 %	63 %	37 %	26 %	74 %
	2020	22 %	78 %	60 %	40 %	24 %	76 %
Rockfish	2016	3 %	97 %	28 %	72 %	16 %	84 %
	2017	22 %	78 %	41 %	59 %	30 %	70 %
	2018	21 %	79 %	40 %	60 %	29 %	71 %
	2019	23 %	77 %	39 %	61 %	30 %	70 %
	2020	22 %	78 %	45 %	55 %	31 %	69 %
Atka Mackerel	2016	0 %	100 %	30 %	70 %	0 %	99 %
	2017	27 %	73 %	29 %	71 %	27 %	73 %
	2018	27 %	73 %	17 %	83 %	26 %	74 %
	2019	27 %	73 %	15 %	85 %	27 %	73 %
	2020	27 %	73 %	14 %	86 %	27 %	73 %
All Groundfish	2016	18 %	82 %	59 %	41 %	27 %	73 %
	2017	19 %	81 %	59 %	41 %	28 %	72 %
	2018	18 %	82 %	57 %	43 %	25 %	75 %
	2019	19 %	81 %	58 %	42 %	24 %	76 %
	2020	17 %	83 %	60 %	40 %	22 %	78 %

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

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

Table 9: Number of vessels that caught groundfish off Alaska by area, vessel category, and target, 2016-2020.

	Year	Bering Sea and Aleutian Islands			Gulf of Alaska			All Alaska		
		Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total
Pollock	2016	89	33	122	70	-	70	138	33	171
	2017	87	31	118	65	-	65	133	31	164
	2018	85	27	112	69	2	71	133	28	161
	2019	84	30	114	62	-	62	125	30	155
	2020	88	29	117	60	1	61	131	29	160
Sablefish	2016	17	6	23	270	5	275	278	10	288
	2017	15	6	21	265	5	270	272	9	281
	2018	17	9	26	273	6	279	282	13	295
	2019	12	5	17	247	6	253	253	10	263
	2020	13	7	20	246	5	251	251	10	261
Pacific Cod	2016	110	52	162	349	11	360	437	53	490
	2017	128	45	173	237	9	246	330	45	375
	2018	144	49	193	151	3	154	267	50	317
	2019	149	47	196	173	3	176	301	47	348
	2020	151	38	189	102	-	102	248	38	286
Flatfish	2016	9	30	39	27	5	32	36	31	67
	2017	8	26	34	19	4	23	27	27	54
	2018	9	26	35	34	4	38	42	27	69
	2019	9	26	35	30	4	34	39	27	66
	2020	8	25	33	22	5	27	30	26	56

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Table 9: Continued

	Year	Bering Sea and Aleutian Islands			Gulf of Alaska			All Alaska		
		Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total	Catcher Vessels	Catcher Processors	Total
Rockfish	2016	3	18	21	233	12	245	236	21	257
	2017	3	16	19	208	11	219	211	19	230
	2018	4	21	25	190	9	199	194	24	218
	2019	4	22	26	182	9	191	186	24	210
	2020	6	18	24	157	8	165	163	22	185
Atka Mackerel	2016	4	9	13	2	-	2	6	9	15
	2017	4	12	16	-	1	1	4	13	17
	2018	4	14	18	1	2	3	5	16	21
	2019	4	14	18	-	-	-	4	14	18
	2020	3	13	16	-	-	-	3	13	16
All Targets	2016	170	71	241	724	26	750	840	73	913
	2017	182	68	250	599	22	621	721	70	791
	2018	196	66	262	547	16	563	668	68	736
	2019	194	65	259	539	19	558	665	67	732
	2020	206	59	265	473	14	487	615	61	676

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

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

Table 10: Bering Sea & Aleutian Islands groundfish retained catch by vessel type, gear and species, 2016-2020 (1,000 metric tons, round weight).

	Year	Catcher Vessels				Catcher Processors				Total			
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Pollock	2016	-	-	703.9	704.0	-	-	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
	2018	-	-	718.3	718.3	-	-	646.2	651.4	-	-	1,364.5	1,369.8
	2019	-	-	735.6	735.6	-	-	660.6	666.2	-	-	1,396.2	1,401.8
	2020	-	-	725.0	725.0	-	-	629.0	633.3	-	-	1,354.0	1,358.4
Pacific Cod	2016	0	39.4	46.5	86.0	126.9	7.6	37.1	171.6	126.9	47.1	83.7	257.6
	2017	0.1	43.2	44.7	88.0	124.3	5.8	31.9	162.1	124.4	49.0	76.7	250.0
	2018	0.9	42.2	39.3	82.5	100.9	4.3	30.3	135.5	101.8	46.5	69.6	217.9
	2019	1.2	43.1	33.3	77.6	88.6	4.2	25.6	118.3	89.8	47.3	58.8	195.9
	2020	1.0	35.8	31.6	68.3	73.6	3.4	22.1	99.0	74.5	39.2	53.6	167.4
Sablefish	2016	0.2	*	0	0.2	0.1	-	0.3	0.4	0.3	*	0.3	0.6
	2017	0.2	*	0.1	0.2	0.1	*	0.5	0.5	0.2	*	0.5	0.8
	2018	0.2	0.3	0.3	0.8	0.1	*	0.6	0.7	0.3	0.3	0.9	1.5
	2019	0.2	0.5	0.8	1.6	0	*	0.4	0.4	0.2	0.5	1.2	2.0
	2020	0.1	0	1.6	1.7	0	*	0.7	0.7	0.1	0	2.2	2.3
Atka Mackerel	2016	-	-	3.7	3.7	-	-	50.4	50.4	-	-	54.1	54.1
	2017	-	-	4.4	4.4	-	-	59.4	59.4	-	-	63.8	63.8
	2018	-	-	5.6	5.7	-	-	63.8	63.9	-	-	69.5	69.5
	2019	-	-	3.3	3.3	-	-	53.6	53.6	-	-	56.8	56.8
	2020	-	-	5.6	5.6	-	-	52.5	52.5	-	-	58.1	58.1
Yellowfin	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
	2018	-	-	12.2	12.3	0.2	-	114.9	115.0	0.2	-	127.1	127.3
	2019	-	-	17.3	17.3	0	-	108.8	108.8	0	-	126.1	126.1
	2020	-	-	16.1	16.1	*	-	115.6	115.6	*	-	131.6	131.6
Rock Sole	2016	-	-	2.4	2.4	*	-	40.9	40.9	*	-	43.3	43.3
	2017	-	-	3.1	3.1	0	-	30.8	30.8	0	-	33.9	33.9
	2018	*	-	1.6	1.6	0	-	25.6	25.6	0	-	27.1	27.1
	2019	*	-	2.4	2.4	0	-	22.0	22.0	0	-	24.4	24.4
	2020	-	-	2.6	2.6	*	-	22.0	22.0	*	-	24.7	24.7

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Table 10: Continued

	Year	Catcher Vessels			Catcher Processors				Total				
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Flathead Sole	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
	2018	-	-	0.8	0.8	*	-	9.4	9.4	*	-	10.2	10.2
	2019	*	-	0.8	0.8	0	-	14.1	14.1	0	-	14.9	14.9
	2020	-	-	1.0	1.1	0	-	7.2	7.2	0	-	8.3	8.3
Arrowtooth	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	-	5.4	5.6
	2018	0	-	0.2	0.2	0.1	-	5.6	5.7	0.1	-	5.8	5.9
	2019	-	-	0.6	0.6	0.1	-	8.3	8.4	0.1	-	8.8	8.9
	2020	*	-	0.3	0.3	0.1	-	9.4	9.5	0.1	-	9.7	9.8
Kamchatka Flounder	2016	-	-	0	0	0	-	4.5	4.5	0	-	4.5	4.5
	2017	-	-	0.1	0.1	0	-	4.1	4.1	0	-	4.2	4.2
	2018	-	-	0	0	0	-	2.8	2.8	0	-	2.9	2.9
	2019	-	-	0.1	0.1	0	-	4.1	4.1	0	-	4.2	4.2
	2020	*	-	0.2	0.2	0	-	6.9	6.9	0	-	7.2	7.2
Turbot	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
	2018	-	-	0	0	0.3	-	1.5	1.7	0.3	-	1.5	1.7
	2019	*	-	0	0	0.5	-	2.2	2.8	0.5	-	2.3	2.8
	2020	*	-	0	0	0.3	-	1.9	2.1	0.3	-	1.9	2.1
Other Flatfish	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
	2018	-	-	1.7	1.7	*	-	20.5	20.5	*	-	22.2	22.2
	2019	-	-	2.4	2.4	0	-	14.3	14.3	0	-	16.7	16.7
	2020	*	-	3.5	3.5	0	-	16.2	16.2	0	-	19.7	19.7
Pacific Ocean 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
	2018	*	-	3.0	3.0	0	-	29.4	29.4	0	-	32.4	32.4
	2019	*	-	4.4	4.4	0	-	35.4	35.4	0	-	39.8	39.8
	2020	*	-	4.4	4.4	*	-	33.1	33.1	*	-	37.5	37.5

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Table 10: Continued

	Year	Catcher Vessels			Catcher Processors				Total				
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Northern Rockfish	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
	2018	*	-	0.4	0.4	0	-	4.8	4.9	0	-	5.2	5.2
	2019	-	-	0.4	0.4	*	-	8.2	8.2	*	-	8.6	8.6
	2020	-	-	0.8	0.8	0	-	6.5	6.5	0	-	7.3	7.3
Other Rockfish	2016	0	-	0	0.1	0	-	0.7	0.7	0.1	-	0.7	0.8
	2017	0	-	0	0.1	0	-	0.7	0.8	0.1	-	0.8	0.8
	2018	0	-	0.1	0.1	0	-	1.0	1.0	0.1	-	1.0	1.1
	2019	0	-	0.1	0.1	0	-	1.3	1.3	0	-	1.3	1.4
	2020	0	-	0.1	0.1	0	-	1.1	1.1	0	-	1.1	1.2
Other Groundfish	2016	0	-	0.5	0.5	5.1	-	1.7	6.8	5.1	-	2.1	7.3
	2017	*	-	1.0	1.1	7.7	-	1.7	9.4	7.7	-	2.7	10.5
	2018	0	-	1.6	1.8	9.5	-	2.5	12.0	9.5	-	4.2	13.8
	2019	0	-	0.5	0.7	6.3	-	2.7	9.1	6.4	-	3.2	9.7
	2020	0	-	0.5	0.6	6.6	-	1.9	8.4	6.6	-	2.3	9.1
All Groundfish	2016	0.3	-	771.8	811.6	138.9	-	953.9	1,100.4	139.2	-	1,725.7	1,912.1
	2017	0.3	-	784.2	827.8	139.6	-	938.4	1,083.9	139.9	-	1,722.7	1,911.7
	2018	1.2	-	785.2	829.2	116.3	-	959.0	1,079.5	117.4	-	1,744.2	1,908.7
	2019	1.4	-	801.9	847.1	101.3	-	961.5	1,067.0	102.7	-	1,763.4	1,914.1
	2020	1.1	-	793.4	830.4	84.9	-	925.9	1,014.2	86.0	-	1,719.3	1,844.7

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 11: Bering Sea & Aleutian Islands groundfish retained catch by species, gear, and target fishery, 2019-2020, (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		
Catcher Processors	Sablefish	*	*	-	*	*	-	-	*	-	-	*	-	-	*		
	Pacific Cod	5.7	0	88.6	0.1	0	0	0	0	0	0	0	*	6.3	100.8		
	2019 Arrowtooth	-	-	-	*	*	-	-	*	-	-	*	-	-	*		
	Turbot	*	*	*	*	*	-	-	0.5	-	-	0	-	0	0.5		
	Rockfish	*	*	-	-	*	-	-	*	-	-	*	-	-	*		
	Halibut	-	-	*	-	-	-	-	-	-	-	-	-	-	-	*	
	All Targets	5.7	0	88.6	0.1	0	0	0	0.5	0	0	0	*	6.3	101.3		
	Hook and Line	Pollock, Bottom	*	-	*	-	-	-	-	-	-	-	-	-	-	*	
		Sablefish	*	0	*	*	*	-	-	*	-	*	*	-	*	0	
		2020 Pacific Cod	4.3	*	73.6	0.1	0	0	*	0.1	*	0	0	0	6.6	84.7	
		Turbot	*	*	*	*	*	-	-	0.2	-	-	0	-	*	0.2	
		Rockfish	-	-	-	-	-	*	-	*	-	-	*	-	-	*	
		Halibut	-	-	*	-	-	-	-	-	-	-	-	-	-	-	*
		All Targets	4.3	0	73.6	0.1	0	0	*	0.3	*	0	0	0	6.6	84.9	
Catcher Vessels	Sablefish	-	0.1	*	-	-	-	-	-	-	-	*	-	-	0.1		
	2019 Pacific Cod	*	*	1.1	-	-	*	*	-	-	-	*	-	0	1.2		
	Halibut	-	0.1	0	-	-	-	-	*	-	-	0	-	0	0.2		
	All Targets	*	0.2	1.2	-	-	*	*	*	-	-	0	-	0	1.4		
	2020	Sablefish	-	*	-	-	-	-	-	-	-	-	*	-	-	*	
Pacific Cod		*	*	0.9	*	-	-	-	-	-	*	*	-	*	0.9		
Halibut		-	0.1	0	*	*	-	-	*	-	-	0	-	0	0.2		
All Targets		*	0.1	1.0	*	*	-	-	*	-	*	0	-	0	1.1		
Catcher Processors	Sablefish	*	*	*	*	*	-	-	*	-	-	*	-	-	*		
	2019 Pacific Cod	0	*	4.2	-	-	-	-	-	-	-	-	-	*	4.2		
	All Targets	0	*	4.2	*	*	-	-	*	-	-	*	-	*	4.2		
Pot	Sablefish	-	*	-	-	-	-	-	-	-	-	*	-	*	*		
	2020 Pacific Cod	*	*	3.4	-	-	-	-	-	-	-	-	-	*	3.4		
	All Targets	*	*	3.4	-	-	-	-	-	-	-	*	-	*	3.4		
Catcher Vessels	Sablefish	-	0.5	-	-	-	-	-	-	-	-	-	-	-	0.5		
	2019 Pacific Cod	0	*	43.1	*	-	0	0	-	0	0	0	0	0.1	43.3		
	All Targets	0	0.5	43.1	*	-	0	0	-	0	0	0	0	0.1	43.8		
	Sablefish	-	*	*	*	-	-	-	*	-	-	*	-	-	*		
	2020 Pacific Cod	0	0	35.8	*	-	0	*	*	0	0	0	0	0.1	36.0		
	Rockfish	-	-	-	-	-	-	-	-	-	-	*	-	-	*		
Halibut	-	*	-	-	-	-	-	-	-	-	*	-	-	*			
All Targets	0	0	35.8	*	-	0	*	*	0	0	0	0	0.1	36.0			

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Table 11: Continued

	Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Kamchatka Flounder	Flathead Sole	Rock Sole	Turbot	Yellowfin	Flat Other	Rockfish	Atka Mackerel	Other	All Species		
Trawl	Catcher Processors	Pollock, Bottom	22.2	0	0.3	0.1	0	0.1	0	0.3	0.1	2.4	0.1	0	25.8		
		Pollock, Pelagic	610.5	0	2.6	0.1	0	0.5	0.6	0	0.1	0.1	1.3	0	0.1	615.9	
		Sablefish	*	*	-	*	*	*	-	*	*	*	*	-	*	*	
		Pacific Cod	0.3	-	2.8	0.2	0	0.1	0.5	*	0.2	0	*	*	0	4.0	
		2019 Arrowtooth	0.2	0	0.1	1.1	0.3	0.1	0	0.2	0	0	0.1	*	0.1	2.2	
		Kamchatka Flounder	0.1	0.1	0	0.4	1.4	0.1	0	0.3	*	0	0.3	0.1	0	2.8	
		Flathead Sole	4.5	*	2.7	2.7	0.4	8.3	1.3	0.2	5.2	1.2	0.1	*	0.5	27.0	
		Rock Sole	2.6	-	4.2	0.3	0	0.5	11.8	-	8.4	1.3	*	*	0.2	29.4	
		Turbot	0.2	0	0	0.2	0.9	0.5	*	1.3	*	0.2	0.3	-	0	3.7	
		Yellowfin	17.2	-	9.8	2.6	0.2	3.7	7.5	0	94.4	10.6	0	0	1.4	147.5	
		Other Flatfish	0.3	0	0.1	0.1	0.1	0.1	0.1	0	0.2	0.5	0	-	0	1.6	
		Rockfish	1.9	0.2	0.9	0.4	0.4	0.1	0	0.1	0	0.1	29.5	7.9	0.1	41.7	
		Atka Mackerel	0.5	0	2.0	0.1	0.4	0	0.1	0	*	0	10.9	45.5	0.3	59.9	
		All Targets	660.6	0.4	25.6	8.3	4.1	14.1	22.0	2.2	108.8	14.3	44.9	53.6	2.7	961.5	
		2020	Pollock, Bottom	23.4	0	0.6	0.4	0.1	0.4	0.3	0.1	0.8	0.2	1.6	0	0.1	28.0
			Pollock, Pelagic	574.6	0	2.6	0.1	0	0.7	0.2	0	0.1	0.1	0.7	0	0.2	579.4
			Sablefish	0	0	-	0	0	0	-	0	-	0	0	-	-	0.1
			Pacific Cod	0.2	-	1.1	0	0	0	0.3	*	0	0	0	0	0	1.7
			Arrowtooth	0.6	0.1	0.2	3.9	1.0	0.5	0	0.2	0.1	0.3	0.4	0	0.1	7.5
			Kamchatka Flounder	0.6	0.4	0	1.6	4.7	0.1	0	0.8	*	0.1	1.1	*	0	9.3
Flathead Sole	1.0		*	0.7	0.8	0.1	1.9	0.2	0	0.7	0.4	0	*	0.2	6.0		
Rock Sole	4.5		*	4.1	0.1	0	0.3	11.7	*	9.0	1.9	0	-	0.1	31.7		
Turbot	0.1		0	0	0.1	0.3	0.2	0	0.5	*	0	0	-	0	1.4		
Yellowfin	21.9		0	10.1	1.8	0.1	3.0	9.0	0	104.7	12.7	*	-	0.9	164.3		
Other Flatfish	0.1		*	0.1	*	*	0.1	0.1	*	0.1	0.4	*	*	*	0.9		
Rockfish	1.6		0.1	0.8	0.5	0.5	0.1	0	0.1	0	0.1	27.1	7.9	0.1	38.8		
Atka Mackerel	0.4		0	1.7	0.2	0.2	0	0	*	*	0	9.8	44.5	0.2	57.0		
All Targets	629.0		0.7	22.1	9.4	6.9	7.2	22.0	1.9	115.6	16.2	40.7	52.5	1.9	925.9		

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Table 11: Continued

		Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Kamchatka Flounder	Flathead Sole	Rock Sole	Turbot	Yellowfin	Flat Other	Rockfish	Atka Mackerel	Other	All Species			
Trawl	Catcher Vessels	Pollock, Bottom	11.2	0.1	0.2	0	*	0	0	*	0	0	0.6	0.1	0	12.3			
		Pollock, Pelagic	721.8	0.7	3.1	0.1	0	0.3	0.1	0	0	0	0.1	1.4	0.1	0.2	727.9		
		2019 Pacific Cod	0.6	*	27.5	0.1	0	0.1	0.2	0.2	*	0.2	0.1	0	*	0.1	28.8		
		Flathead Sole	0.1	-	0.1	0.1	*	0.1	0	0	*	0.1	0	-	-	*	0.5		
		Rock Sole	0.1	-	0.2	*	-	0	0.8	-	-	1.2	0.2	-	-	0	2.5		
		Yellowfin	1.7	-	1.8	0.2	0	0.4	1.2	-	-	15.8	1.9	*	-	0.3	23.3		
		Other Flatfish	*	-	*	*	*	*	*	-	-	*	*	-	-	*	*		
		Rockfish	0.1	0	0.3	0	0.1	*	0	0	*	-	0	2.7	0.7	*	4.0		
		Atka Mackerel	0	0	0.2	*	*	-	0	-	-	-	-	0.2	2.3	0	2.7		
		All Targets	735.6	0.8	33.3	0.6	0.1	0.8	2.4	0	0	17.3	2.4	4.9	3.3	0.5	801.9		
		2020	Catcher Vessels	Pollock, Bottom	27.4	0.4	0.8	0	*	0.1	0	0	0.1	0.1	0.8	0.3	0	30.2	
				Pollock, Pelagic	694.5	1.0	4.3	0.2	0	0.6	0.2	0	0	0.3	1.1	0.1	0.2	702.5	
				2020 Pacific Cod	0.3	0	23.7	0	*	0	0.1	0.1	*	0.1	0	*	*	0	24.3
				Flathead Sole	*	-	*	-	*	*	*	-	-	*	*	-	-	*	*
				Rock Sole	0.4	-	0.5	0	*	0	0.9	-	-	1.1	0.5	-	-	0	3.3
				Yellowfin	2.1	-	1.8	0.1	0	0.3	1.5	*	*	14.7	2.6	-	-	0.1	23.3
				Other Flatfish	*	-	*	-	-	*	*	-	-	*	*	-	-	*	*
				Rockfish	0.2	0.1	0.1	0	0.2	*	*	*	*	-	0	2.2	0.5	0	3.4
				Atka Mackerel	0.1	0	0.5	0	0	-	0	0	*	*	*	1.1	4.7	0.1	6.5
All Targets	725.0			1.6	31.6	0.3	0.2	1.0	2.6	0	0	16.1	3.5	5.3	5.6	0.5	793.4		
All Gear	Catch Proc.	2019 All Targets	666.2	0.4	118.3	8.4	4.1	14.1	22.0	2.8	108.8	14.3	44.9	53.6	9.1	1,067.0			
		2020 All Targets	633.3	0.7	99.0	9.5	6.9	7.2	22.0	2.1	115.6	16.2	40.7	52.5	8.4	1,014.2			
	Catch Vess.	2019 All Targets	735.6	1.6	77.6	0.6	0.1	0.8	2.4	0	17.3	2.4	4.9	3.3	0.7	847.1			
		2020 All Targets	725.0	1.7	68.3	0.3	0.2	1.1	2.6	0	16.1	3.5	5.3	5.6	0.6	830.4			

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

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

Table 12: Bering Sea & Aleutian Islands ex-vessel prices in the groundfish fisheries by gear, and species, 2016-2020; calculations based on COAR (\$/lb, round weight).

	Year	Shoreside			At Sea			All Sectors		
		Fixed	Trawl	All Gear	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear
Pollock	2016	0.134	0.139	0.139	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
	2018	0.145	0.156	0.156	0.145	0.119	0.119	0.145	0.135	0.135
	2019	0.157	0.167	0.167	0.157	0.128	0.128	0.157	0.145	0.145
	2020	0.015	0.154	0.154	0.015	0.112	0.112	0.015	0.131	0.130
Pacific Cod	2016	0.278	0.249	0.264	0.292	0.246	0.280	0.288	0.247	0.275
	2017	0.332	0.294	0.316	0.340	0.283	0.326	0.338	0.288	0.323
	2018	0.410	0.383	0.399	0.437	0.349	0.413	0.429	0.364	0.408
	2019	0.443	0.369	0.418	0.478	0.351	0.443	0.467	0.358	0.434
	2020	0.418	0.346	0.389	0.691	0.308	0.587	0.603	0.325	0.514
Sablefish	2016	4.010	1.193	3.976	4.010	1.193	2.032	4.010	1.193	3.017
	2017	3.980	1.172	3.769	3.980	1.172	1.875	3.980	1.172	2.741
	2018	2.121	0.809	1.690	2.121	0.809	1.276	2.121	0.809	1.467
	2019	1.915	0.751	1.297	1.915	0.751	1.018	1.915	0.751	1.214
	2020	1.505	0.674	0.939	1.505	0.674	0.961	1.505	0.674	0.947
Atka Mackerel	2016	0.016	0.253	0.243	*	0.253	0.253	0.016	0.253	0.253
	2017	0.015	0.356	0.352	0.015	0.356	0.356	0.015	0.356	0.356
	2018	0.203	0.348	0.347	0.203	0.348	0.348	0.203	0.348	0.348
	2019	0.015	0.283	0.283	*	0.283	0.283	0.015	0.283	0.283
	2020	0.015	0.257	0.256	0.015	0.257	0.256	0.015	0.257	0.256
Yellowfin	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
	2018	0.015	0.216	0.175	0.015	0.216	0.216	0.015	0.216	0.216
	2019	0.015	0.206	0.094	0.015	0.206	0.206	0.015	0.206	0.206
	2020	0.015	0.162	0.114	*	0.162	0.162	0.015	0.162	0.162
Rock Sole	2016	0.113	0.167	0.167	*	0.167	0.167	0.113	0.167	0.167
	2017	0.015	0.194	0.194	0.015	0.194	0.194	0.015	0.194	0.194
	2018	0.015	0.237	0.237	0.015	0.237	0.237	0.015	0.237	0.237
	2019	0.015	0.221	0.221	0.015	0.221	0.221	0.015	0.221	0.221
	2020	*	0.201	0.201	*	0.201	0.201	*	0.201	0.201

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Table 12: Continued

	Year	Shoreside			At Sea			All Sectors		
		Fixed	Trawl	All Gear	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear
Flathead Sole	2016	0.113	0.194	0.193	-	0.193	0.193	0.113	0.193	0.193
	2017	0.015	0.221	0.220	0.015	0.221	0.221	0.015	0.221	0.221
	2018	0.016	0.255	0.254	*	0.255	0.255	0.016	0.255	0.254
	2019	0.015	0.222	0.220	0.015	0.222	0.222	0.015	0.222	0.222
	2020	0.015	0.165	0.164	0.015	0.165	0.165	0.015	0.165	0.165
Arrowtooth	2016	0.113	0.213	0.211	0.113	0.213	0.213	0.113	0.213	0.213
	2017	*	0.324	0.324	0.015	0.324	0.312	0.015	0.324	0.312
	2018	0.016	0.218	0.217	0.015	0.218	0.214	0.015	0.218	0.214
	2019	*	0.216	0.216	0.015	0.216	0.214	0.015	0.216	0.214
	2020	0.018	0.178	0.177	0.015	0.178	0.176	0.015	0.178	0.176
Kamchatka Flounder	2016	-	-	-	0.113	0.206	0.206	0.113	0.206	0.206
	2017	-	-	-	0.015	0.367	0.365	0.015	0.367	0.365
	2018	-	*	*	0.015	0.316	0.314	0.015	0.316	0.314
	2019	-	*	*	0.015	0.246	0.245	0.015	0.246	0.245
	2020	*	*	*	0.015	0.218	0.218	0.015	0.218	0.218
Turbot	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	0.460
	2018	-	0.685	0.685	0.015	0.685	0.589	0.015	0.685	0.589
	2019	*	0.700	0.700	0.015	0.700	0.572	0.015	0.700	0.572
	2020	*	0.649	0.649	0.015	0.649	0.571	0.015	0.649	0.571
Other Flatfish	2016	0.113	0.366	0.364	*	0.145	0.145	0.113	0.146	0.146
	2017	*	0.406	0.406	*	0.229	0.229	*	0.229	0.229
	2018	0.015	0.208	0.204	0.015	0.169	0.169	0.015	0.169	0.169
	2019	0.015	0.580	0.551	0.015	0.188	0.188	0.015	0.192	0.191
	2020	0.015	0.398	0.397	0.015	0.168	0.167	0.015	0.171	0.171
Pacific Ocean Perch	2016	0.780	0.180	0.180	*	0.180	0.180	0.780	0.180	0.180
	2017	*	0.218	0.218	1.001	0.218	0.218	1.001	0.218	0.218
	2018	*	0.217	0.217	0.771	0.217	0.217	0.771	0.217	0.217
	2019	0.016	0.160	0.160	0.742	0.160	0.160	0.221	0.160	0.160
	2020	*	0.151	0.151	*	0.151	0.151	*	0.151	0.151

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Table 12: Continued

	Year	Shoreside			At Sea			All Sectors		
		Fixed	Trawl	All Gear	Fixed	Trawl	All Gear	Fixed	Trawl	All Gear
Northern Rockfish	2016	*	0.127	0.127	0.780	0.127	0.127	0.780	0.127	0.127
	2017	*	0.152	0.152	1.001	0.152	0.153	1.001	0.152	0.153
	2018	*	0.156	0.156	0.771	0.156	0.157	0.771	0.156	0.157
	2019	*	0.137	0.137	*	0.137	0.137	*	0.137	0.137
	2020	-	0.095	0.095	0.363	0.095	0.095	0.363	0.095	0.095
Other Rockfish	2016	0.721	0.301	0.646	0.780	0.351	0.390	0.764	0.351	0.400
	2017	0.933	0.327	0.802	1.001	0.381	0.424	0.984	0.381	0.436
	2018	0.894	0.296	0.722	0.771	0.296	0.313	0.819	0.296	0.325
	2019	0.765	0.268	0.478	0.742	0.349	0.355	0.751	0.348	0.358
	2020	0.449	0.211	0.305	0.363	0.288	0.290	0.409	0.286	0.290
Other Groundfish	2016	0.280	0.150	0.171	0.280	0.017	0.213	0.280	0.042	0.210
	2017	0.306	0.207	0.217	0.306	0.015	0.246	0.306	0.067	0.243
	2018	0.324	0.181	0.198	0.324	0.024	0.253	0.324	0.072	0.248
	2019	0.451	0.087	0.248	0.451	0.027	0.313	0.451	0.031	0.311
	2020	0.407	0.025	0.158	0.407	0.021	0.314	0.407	0.021	0.307

Notes: Prices are for catch from both federal and 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 wholesale products divided by the calculated round weight and multiplied by a constant 0.4, a coarse estimate of the value added by processing based. The “All Alaska/All gear” column is the average weighted by retained 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 13: Bering Sea & Aleutian Islands ex-vessel value of the groundfish catch by vessel category, gear, and species, 2016-2020; calculations based on COAR (\$ millions).

	Year	Catcher Vessel			Catcher Processor				All Sectors				
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Pollock	2016	-	-	209.36	209.36	-	-	165.24	165.50	-	-	374.61	374.86
	2017	-	-	205.54	205.54	-	-	147.13	147.35	-	-	352.68	352.89
	2018	-	-	236.67	236.67	-	-	169.89	171.57	-	-	406.56	408.24
	2019	-	-	259.81	259.81	-	-	186.49	188.45	-	-	446.31	448.26
	2020	-	-	233.70	233.70	-	-	156.30	156.44	-	-	390.00	390.14
Pacific Cod	2016	0.04	24.16	20.42	44.62	81.58	4.89	25.20	111.67	81.62	29.05	45.62	156.29
	2017	0.08	31.63	22.28	53.98	93.25	4.38	26.36	123.99	93.33	36.01	48.64	177.98
	2018	0.84	38.16	26.00	65.00	97.20	4.12	29.90	131.22	98.04	42.28	55.90	196.22
	2019	1.16	42.04	19.06	62.26	93.51	4.49	27.39	125.40	94.67	46.53	46.45	187.65
	2020	0.89	33.04	19.51	53.43	112.05	5.21	18.98	136.25	112.93	38.25	38.49	189.68
Sablefish	2016	1.96	*	0.01	1.97	1.04	-	0.73	1.76	2.99	*	0.74	3.73
	2017	1.41	*	0.14	1.55	0.73	*	1.61	2.34	2.14	*	1.75	3.89
	2018	1.01	1.59	0.49	3.08	0.28	*	1.11	1.38	1.28	1.59	1.59	4.47
	2019	0.87	2.19	1.36	4.41	0.30	*	0.83	1.13	1.17	2.19	2.18	5.54
	2020	0.41	1.89	2.19	4.49	0.20	*	1.13	1.34	0.61	1.89	3.33	5.83
Atka Mackerel	2016	-	-	0.01	0.01	-	-	30.13	30.13	-	-	30.14	30.14
	2017	-	-	0.01	0.01	-	-	50.24	50.24	-	-	50.25	50.25
	2018	-	-	0.39	0.39	-	-	53.02	53.03	-	-	53.42	53.42
	2019	-	-	0.14	0.14	-	-	35.36	35.36	-	-	35.50	35.50
	2020	-	-	0.24	0.24	-	-	32.65	32.65	-	-	32.89	32.89
Yellowfin	2016	-	-	0.01	0.01	*	-	42.52	42.52	*	-	42.53	42.53
	2017	-	-	0.01	0.01	0	-	50.00	50.00	0	-	50.01	50.01
	2018	-	-	0.13	0.13	0.01	-	60.38	60.38	0.01	-	60.51	60.52
	2019	-	-	0.01	0.01	0	-	57.24	57.24	0	-	57.25	57.25
	2020	-	-	0.01	0.01	*	-	47.17	47.17	*	-	47.18	47.18
Rock Sole	2016	-	-	0.09	0.09	*	-	15.86	15.86	*	-	15.95	15.95
	2017	-	-	0.15	0.15	0	-	14.37	14.37	0	-	14.52	14.52
	2018	*	-	0.19	0.19	0	-	14.02	14.02	0	-	14.21	14.21
	2019	*	-	0.09	0.09	0	-	11.78	11.78	0	-	11.87	11.87
	2020	-	-	0.08	0.08	*	-	10.86	10.86	*	-	10.94	10.94

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Table 13: Continued

	Year	Catcher Vessel			Catcher Processor				All Sectors				
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Flathead Sole	2016	-	-	0.11	0.11	-	-	3.74	3.74	-	-	3.85	3.85
	2017	-	-	0.15	0.15	0	-	3.80	3.80	0	-	3.95	3.95
	2018	-	-	0.21	0.21	*	-	5.50	5.50	*	-	5.71	5.71
	2019	*	-	0.15	0.15	0	-	7.15	7.15	0	-	7.31	7.31
	2020	-	-	0.24	0.24	0	-	2.78	2.79	0	-	3.02	3.02
Arrowtooth	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	-	3.82	3.83	0.01	-	3.86	3.87
	2018	0	-	0.05	0.05	0	-	2.73	2.74	0	-	2.78	2.78
	2019	-	-	0.06	0.06	0	-	4.16	4.17	0	-	4.22	4.23
	2020	*	-	0.07	0.07	0	-	3.77	3.78	0	-	3.84	3.85
Kamchatka Flounder	2016	-	-	*	*	0	-	2.06	2.06	0	-	2.06	2.06
	2017	-	-	*	*	0	-	3.41	3.41	0	-	3.41	3.41
	2018	-	-	0	0	0	-	1.99	1.99	0	-	1.99	1.99
	2019	-	-	0	0	0	-	2.28	2.28	0	-	2.28	2.28
	2020	*	-	0	0	0	-	3.47	3.47	0	-	3.47	3.47
Turbot	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
	2018	-	-	0.01	0.01	0.01	-	2.27	2.28	0.01	-	2.28	2.29
	2019	*	-	0	0	0.02	-	3.51	3.52	0.02	-	3.51	3.53
	2020	*	-	0.01	0.01	0.01	-	2.81	2.82	0.01	-	2.81	2.82
Other Flatfish	2016	-	-	0.06	0.06	*	-	3.90	3.90	*	-	3.96	3.96
	2017	-	-	0.08	0.08	*	-	7.76	7.76	*	-	7.84	7.84
	2018	-	-	0.07	0.07	0	-	8.19	8.19	0	-	8.26	8.26
	2019	-	-	0.20	0.20	0	-	6.87	6.87	0	-	7.07	7.07
	2020	*	-	0.30	0.30	0	-	7.16	7.16	0	-	7.46	7.46
Pacific Ocean Perch	2016	0	-	0.25	0.25	*	-	11.78	11.78	0	-	12.03	12.03
	2017	-	-	0.31	0.31	0	-	14.24	14.24	0	-	14.56	14.56
	2018	*	-	0.54	0.54	0	-	14.98	14.98	0	-	15.52	15.52
	2019	*	-	0.68	0.68	0	-	13.35	13.35	0	-	14.03	14.03
	2020	*	-	0.62	0.62	*	-	11.86	11.86	*	-	12.47	12.47

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Table 13: Continued

	Year	Catcher Vessel			Catcher Processor				All Sectors				
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Northern Rockfish	2016	*	-	0	0	0	-	1.19	1.19	0	-	1.19	1.19
	2017	-	-	0	0	0.01	-	1.46	1.47	0.01	-	1.47	1.48
	2018	*	-	0.01	0.01	0.01	-	1.80	1.81	0.01	-	1.81	1.81
	2019	-	-	0.01	0.01	*	-	2.60	2.60	*	-	2.61	2.61
	2020	-	-	0.01	0.01	0.01	-	1.51	1.52	0.01	-	1.53	1.54
Other Rockfish	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	-	0.68	0.82	0.18	-	0.69	0.86
	2018	0.04	-	0.01	0.05	0.06	-	0.68	0.74	0.11	-	0.68	0.80
	2019	0.02	-	0.01	0.04	0.03	-	1.04	1.08	0.06	-	1.06	1.12
	2020	0.02	-	0.01	0.03	0.01	-	0.73	0.74	0.03	-	0.74	0.78
Other Groundfish	2016	0	-	0.13	0.18	3.16	-	0.07	3.23	3.16	-	0.20	3.41
	2017	*	-	0.34	0.40	5.19	-	0.07	5.25	5.19	-	0.41	5.65
	2018	0	-	0.51	0.64	6.78	-	0.15	6.93	6.78	-	0.67	7.56
	2019	0.02	-	0.03	0.17	6.38	-	0.19	6.57	6.40	-	0.22	6.74
	2020	0	-	0.02	0.15	5.90	-	0.10	5.99	5.90	-	0.11	6.14
All Species	2016	2.05	-	230.50	256.75	86.41	-	308.91	400.21	88.46	-	539.41	656.96
	2017	1.54	-	229.06	262.28	99.57	-	327.70	431.65	101.10	-	556.75	693.92
	2018	1.89	-	265.28	307.05	106.03	-	366.60	476.75	107.92	-	631.88	783.80
	2019	2.06	-	281.61	328.02	102.22	-	360.24	466.95	104.28	-	641.85	794.97
	2020	1.32	-	257.00	293.38	118.33	-	301.29	424.83	119.64	-	558.29	718.20

Notes: Ex-vessel value is calculated by multiplying ex-vessel prices by the retained round weight catch. Refer to Table 12 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 14: 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, 2016-2020; 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
AFA CV	2016	89	18	2,594.43	230.90	35.11	20.24
	2017	86	16	2,651.04	227.99	32.64	19.23
	2018	86	17	3,042.97	261.70	33.35	21.01
	2019	82	22	3,444.55	282.45	35.54	21.26
	2020	86	20	2,977.18	256.04	35.61	21.27
AFA CP	2016	16	16	10,173.61	162.78	24.75	14.27
	2017	16	16	9,877.42	158.04	22.63	13.33
	2018	15	15	11,002.72	165.04	21.04	13.25
	2019	16	16	11,924.39	190.79	24.00	14.36
	2020	13	13	11,612.49	150.96	21.00	12.54
A80	2016	19	19	6,593.72	125.28	19.05	10.98
	2017	19	19	7,877.29	149.67	21.43	12.62
	2018	19	19	8,731.60	165.90	21.15	13.32
	2019	20	20	7,396.82	147.94	18.61	11.14
	2020	19	19	6,516.80	123.82	17.22	10.29
BSAI Trawl	2016	13	12	1,572.62	20.44	3.11	1.79
	2017	16	15	1,316.03	21.06	3.01	1.78
	2018	21	18	1,868.62	39.24	5.00	3.15
	2019	18	18	1,148.34	20.67	2.60	1.56
	2020	15	16	1,831.48	27.47	3.82	2.28

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Table 14: 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
CV Hook and Line	2016	1	1	*	*	*	*
	2017	5	4	*	*	*	*
	2018	7	6	*	*	*	*
	2019	8	6	*	*	*	*
	2020	12	5	*	*	*	*
CP Hook and Line	2016	31	31	2,755.96	85.43	12.99	7.49
	2017	28	28	3,536.34	99.02	14.18	8.35
	2018	25	25	4,239.21	105.98	13.51	8.51
	2019	23	23	4,438.82	102.09	12.85	7.68
	2020	20	20	5,911.20	118.22	16.44	9.82
Sablefish IFQ	2016	19	7	193.19	3.67	0.56	0.32
	2017	17	10	382.16	6.50	0.93	0.55
	2018	21	9	167.95	3.53	0.45	0.28
	2019	14	8	219.10	3.07	0.39	0.23
	2020	16	5	199.78	3.20	0.44	0.27
Pot	2016	56	17	519.72	29.10	4.43	2.55
	2017	64	17	563.56	36.07	5.16	3.04
	2018	78	17	543.57	42.40	5.40	3.40
	2019	83	18	562.04	46.65	5.87	3.51
	2020	94	17	408.39	38.39	5.34	3.19

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”), for example TLAS. The column “permits” is a count of federal groundfish processor permits. 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 15: Bering Sea & Aleutian Islands production of groundfish products by species, 2016-2020, (1,000 metric tons product weight).

	Product	2016			2017			2018			2019			2020		
		At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Pollock	Whole Fish	0.10	0.69	0.79	0.04	0.25	0.30	0.01	0.27	0.28	0.15	0.22	0.37	0.01	0.36	0.37
	Head And Gut	28.61	0.04	28.65	24.21	-	24.21	21.47	*	21.47	17.68	*	17.68	16.22	*	16.22
	Roe	10.44	3.82	14.26	11.71	6.72	18.43	13.00	7.64	20.64	16.18	11.77	27.95	15.73	8.96	24.68
	Deep-Skin Fillets	38.24	8.55	46.79	45.10	13.03	58.13	40.96	15.75	56.72	39.34	18.81	58.15	34.16	15.98	50.14
	Other Fillets	49.61	64.89	114.50	42.13	56.69	98.82	53.94	56.97	110.91	66.04	62.60	128.63	48.87	50.37	99.24
	Surimi	100.51	90.31	190.82	102.60	94.13	196.73	104.36	92.16	196.53	104.67	87.57	192.24	91.22	80.54	171.77
	Minced Fish	22.38	11.69	34.07	17.05	9.44	26.49	13.06	7.35	20.41	12.25	7.35	19.59	15.73	11.38	27.11
	Fishmeal	27.15	36.25	63.40	27.94	34.69	62.63	28.22	38.36	66.58	30.51	39.33	69.84	29.37	40.03	69.40
	Other Products	14.52	27.09	41.61	13.32	24.88	38.20	13.97	24.93	38.90	16.34	27.13	43.47	10.41	23.40	33.81
	All Products	291.54	243.34	534.88	284.10	239.84	523.94	289.00	243.43	532.44	303.17	254.76	557.93	261.72	231.02	492.74
Pacific Cod	Whole Fish	1.36	0.43	1.79	0.22	*	0.22	0.16	0.15	0.32	0.01	0.28	0.29	0.01	0.11	0.11
	Head And Gut	84.44	14.24	98.68	80.09	12.28	92.38	66.10	12.94	79.04	58.78	11.47	70.25	47.28	7.74	55.03
	Roe	0.52	1.61	2.13	0.47	1.73	2.20	1.05	2.50	3.55	1.31	1.69	3.01	0.85	2.02	2.87
	Fillets	0.14	9.89	10.03	0.14	9.88	10.01	0.14	10.23	10.36	0.23	7.80	8.02	0.18	7.33	7.51
	Other Products	6.61	7.16	13.77	7.07	7.66	14.73	6.81	7.33	14.14	7.39	6.01	13.40	6.21	5.87	12.08
	All Products	93.06	33.34	126.40	87.99	31.55	119.54	74.26	33.15	107.41	67.72	27.25	94.97	54.53	23.07	77.60
Sablefish	Head And Gut	0.22	0.28	0.50	0.42	0.45	0.87	0.56	0.40	0.96	0.34	0.58	0.92	0.56	0.55	1.12
	Other Products	0.01	0.01	0.02	0.05	0.04	0.08	0.09	0.03	0.13	0.04	0.02	0.05	0.01	0.02	0.03
	All Products	0.23	0.29	0.52	0.46	0.49	0.95	0.65	0.43	1.09	0.38	0.59	0.97	0.57	0.57	1.15

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Table 15: Continued

	Product	2016			2017			2018			2019			2020		
		At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Atka Mackerel	Whole Fish	2.13	0.01	2.14	6.40	*	6.40	6.62	0.29	6.91	0.47	*	0.47	0.49	0.06	0.54
	Head And Gut	30.53	-	30.53	35.45	-	35.45	36.21	*	36.21	32.82	*	32.82	33.35	*	33.35
	Other Products	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.01	0.02	0.00	0.04	0.04
	All Products	32.66	0.01	32.67	41.85	0.00	41.85	42.83	0.30	43.13	33.29	0.01	33.30	33.84	0.10	33.94
Yellowfin	Whole Fish	9.76	-	9.76	9.23	-	9.23	6.88	0.20	7.08	4.88	-	4.88	8.00	-	8.00
	Head And Gut	68.36	-	68.36	67.77	-	67.77	69.59	-	69.59	70.31	-	70.31	73.20	-	73.20
	Fillets	-	-	-	*	-	*	-	-	-	-	-	-	-	-	-
	Other Products	0.16	0.01	0.16	0.09	0.00	0.10	0.05	0.02	0.08	0.04	0.00	0.04	0.08	0.01	0.09
All Products	78.28	0.01	78.28	77.10	0.00	77.10	76.53	0.23	76.75	75.22	0.00	75.23	81.27	0.01	81.28	
Rock Sole	Whole Fish	0.63	*	0.63	1.56	*	1.56	0.43	0.06	0.49	0.49	*	0.49	0.92	*	0.92
	Head And Gut	23.90	-	23.90	17.33	-	17.33	14.21	*	14.21	12.57	-	12.57	12.17	-	12.17
	Fillets	*	-	*	*	*	*	0.00	-	0.00	-	*	*	*	-	*
	Other Products	0.08	0.08	0.16	0.13	0.07	0.20	0.07	0.03	0.10	0.15	0.05	0.20	0.07	0.06	0.13
All Products	24.61	0.08	24.69	19.02	0.07	19.09	14.72	0.08	14.80	13.22	0.05	13.27	13.16	0.06	13.22	
Flathead Sole	Whole Fish	0.52	*	0.52	0.10	*	0.10	0.37	0.06	0.43	0.05	-	0.05	0.31	*	0.31
	Head And Gut	4.13	-	4.13	4.03	-	4.03	5.09	*	5.09	7.88	-	7.88	3.54	-	3.54
	Fillets	-	-	-	-	-	-	*	*	*	-	-	-	*	-	*
	Other Products	0.11	0.05	0.16	0.05	0.05	0.11	0.05	0.04	0.10	0.12	0.10	0.21	0.13	0.23	0.36
All Products	4.75	0.05	4.80	4.19	0.05	4.25	5.52	0.10	5.62	8.04	0.10	8.14	3.99	0.23	4.21	

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Table 15: Continued

	Product	2016			2017			2018			2019			2020		
		At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Arrowtooth	Whole Fish	0.25	*	0.25	*	-	*	*	-	*	-	-	-	*	-	*
	Head And Gut	4.39	-	4.39	3.46	-	3.46	2.92	-	2.92	4.86	-	4.86	5.43	-	5.43
	Fillets	-	-	-	-	-	-	-	-	-	*	-	*	-	-	-
	Other Products	0.01	0.02	0.03	0.01	0.02	0.03	0.01	0.04	0.05	0.02	0.05	0.07	0.02	0.10	0.12
	All Products	4.64	0.02	4.67	3.46	0.02	3.48	2.93	0.04	2.97	4.88	0.05	4.93	5.45	0.10	5.55
Kamchatka Flounder	Whole Fish	*	-	*	-	-	-	-	-	-	-	-	-	*	-	*
	Head And Gut	2.72	-	2.72	2.05	-	2.05	1.40	-	1.40	2.13	-	2.13	3.97	-	3.97
	Fishmeal	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	*	0.00	0.01	-	0.01
	Other Products	-	-	-	-	-	-	*	-	*	-	-	-	*	-	*
	All Products	2.72	-	2.72	2.05	-	2.05	1.40	-	1.40	2.13	*	2.13	3.97	-	3.97
Turbot	Whole Fish	0.03	-	0.03	-	-	-	-	-	-	*	-	*	-	-	-
	Head And Gut	1.29	*	1.29	1.75	-	1.75	1.19	-	1.19	1.92	-	1.92	1.45	-	1.45
	Other Products	0.51	0.00	0.51	0.68	0.00	0.68	0.42	0.00	0.42	0.74	0.00	0.74	0.57	0.00	0.57
	All Products	1.83	0.00	1.83	2.43	0.00	2.43	1.61	0.00	1.61	2.66	0.00	2.67	2.02	0.00	2.02
Other Flatfish	Whole Fish	2.05	*	2.05	1.33	0.04	1.37	0.36	*	0.36	0.61	0.06	0.67	0.58	0.10	0.68
	Head And Gut	4.79	*	4.79	7.11	*	7.11	11.55	*	11.55	8.75	*	8.75	10.29	-	10.29
	Fillets	-	-	-	-	*	*	-	*	*	-	-	-	-	*	*
	Other Products	0.02	0.01	0.03	0.01	0.01	0.02	0.04	0.01	0.05	0.38	0.02	0.40	0.02	0.08	0.10
	All Products	6.87	0.01	6.87	8.45	0.04	8.49	11.94	0.01	11.96	9.74	0.07	9.82	10.89	0.17	11.06
Pacific Ocean Perch	Whole Fish	0.31	0.43	0.74	0.41	0.41	0.82	2.08	0.13	2.21	0.67	0.39	1.06	0.49	0.28	0.77
	Head And Gut	14.15	*	14.15	13.82	*	13.82	14.17	*	14.17	17.31	*	17.31	16.59	-	16.59
	Other Products	0.21	0.02	0.23	0.27	0.03	0.30	0.19	0.06	0.25	0.66	0.20	0.86	0.28	0.40	0.67
	All Products	14.67	0.45	15.12	14.50	0.44	14.94	16.44	0.19	16.63	18.63	0.59	19.22	17.36	0.67	18.03

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Table 15: Continued

		2016			2017			2018			2019			2020		
Product		At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Northern Rockfish	Whole Fish	-	0.00	0.00	-	*	*	*	*	*	-	*	*	-	*	*
	Head And Gut	1.96	-	1.96	2.03	-	2.03	2.26	*	2.26	3.89	*	3.89	3.05	-	3.05
	Other Products	0.01	0.00	0.01	0.00	*	0.00	0.00	*	0.00	0.01	0.00	0.01	0.01	0.03	0.03
	All Products	1.97	0.00	1.97	2.03	*	2.03	2.27	*	2.27	3.90	0.00	3.90	3.05	0.03	3.08
Other Rockfish	Whole Fish	0.15	*	0.15	0.17	0.00	0.18	0.15	*	0.15	0.42	*	0.42	0.21	*	0.21
	Head And Gut	0.29	0.02	0.30	0.27	0.01	0.28	0.35	0.01	0.36	0.27	0.01	0.28	0.30	0.01	0.31
	Other Products	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.16	0.00	0.17	0.00	0.00	0.01
	All Products	0.44	0.02	0.46	0.45	0.02	0.46	0.50	0.01	0.51	0.86	0.01	0.87	0.52	0.01	0.53
Other Groundfish	Whole Fish	0.00	0.15	0.16	*	0.26	0.26	0.02	0.50	0.52	0.00	0.34	0.35	*	0.04	0.04
	Head And Gut	0.01	-	0.01	0.01	*	0.01	0.04	0.07	0.12	0.02	0.06	0.08	0.01	0.09	0.09
	Roe	-	-	-	-	-	-	*	-	*	-	-	-	-	-	-
	Fillet	*	-	*	-	-	-	*	-	*	-	-	-	-	-	-
	Fillets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fishmeal	0.05	0.15	0.19	0.06	0.17	0.23	0.04	0.07	0.12	0.17	0.60	0.77	0.10	1.59	1.69
	Other Products	1.79	0.02	1.81	2.40	*	2.40	3.42	0.02	3.44	2.65	*	2.65	2.17	*	2.17
All Products	1.85	0.32	2.17	2.48	0.43	2.91	3.52	0.67	4.19	2.84	1.00	3.84	2.28	1.72	3.99	

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Table 15: Continued

Product	2016			2017			2018			2019			2020		
	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Whole Fish	17.29	1.71	19.00	19.48	0.97	20.45	17.09	1.66	18.75	7.76	1.29	9.05	11.01	0.94	11.95
Head And Gut	269.77	14.58	284.36	259.81	12.75	272.56	247.12	13.42	260.54	239.53	12.12	251.64	227.41	8.39	235.80
Roe	10.96	5.43	16.39	12.17	8.46	20.63	14.06	10.14	24.19	17.50	13.46	30.96	16.58	10.97	27.55
Fillets	0.14	9.89	10.03	0.14	9.88	10.01	0.14	10.23	10.36	0.23	7.80	8.02	0.18	7.33	7.51
All Species Deep-Skin Fillets	38.24	8.55	46.79	45.10	13.03	58.13	40.96	15.75	56.72	39.34	18.81	58.15	34.16	15.98	50.14
Other Fillets	49.61	64.89	114.50	42.13	56.69	98.82	53.94	56.97	110.91	66.04	62.60	128.63	48.87	50.37	99.24
Surimi	100.51	90.31	190.82	102.60	94.13	196.73	104.36	92.16	196.53	104.67	87.57	192.24	91.22	80.54	171.77
Minced Fish	22.38	11.69	34.07	17.05	9.44	26.49	13.06	7.35	20.41	12.25	7.35	19.59	15.73	11.38	27.11
Fishmeal	27.20	36.40	63.60	28.01	34.86	62.87	28.26	38.43	66.70	30.68	39.93	70.62	29.48	41.62	71.09
Other Products	24.03	34.48	58.51	24.09	32.76	56.85	25.13	32.55	57.68	28.70	33.60	62.30	19.98	30.24	50.22
All Products	560.12	277.94	838.06	550.57	272.96	823.54	544.13	278.66	822.79	546.69	284.51	831.20	494.62	257.76	752.38

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 16: Bering Sea & Aleutian Islands gross value of groundfish products by species, 2016-2020, (\$ million).

	Product	2016			2017			2018			2019			2020		
		At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Pollock	Whole Fish	0.1	0.5	0.6	0.0	0.2	0.3	0.0	0.3	0.3	0.2	0.5	0.6	0.0	0.4	0.4
	Head And Gut	48.9	0.0	48.9	29.0	-	29.0	27.5	*	27.5	24.5	*	24.5	20.2	*	20.2
	Roe	72.4	17.1	89.4	85.9	31.0	116.9	90.5	40.9	131.4	89.9	42.3	132.2	81.9	27.2	109.1
	Deep-Skin Fillets	142.7	26.3	169.0	150.1	41.3	191.4	136.7	49.5	186.2	137.9	67.2	205.1	133.5	56.9	190.5
	Other Fillets	141.9	191.3	333.2	107.8	145.8	253.5	154.2	164.4	318.6	218.7	203.2	421.9	163.5	161.0	324.5
	Surimi	291.9	210.2	502.1	370.2	207.2	577.4	316.7	234.1	550.8	341.5	240.6	582.2	262.4	215.6	478.0
	Minced Fish	39.7	19.2	58.9	26.1	13.1	39.2	19.7	10.8	30.4	21.8	12.0	33.8	31.7	20.5	52.1
	Fishmeal	50.3	53.4	103.7	45.7	50.7	96.4	48.1	51.8	99.9	67.3	42.9	110.2	106.9	49.5	156.4
	Other Products	20.4	25.2	45.6	16.1	17.9	34.0	17.2	20.7	37.9	18.5	21.4	39.9	13.9	20.5	34.4
	All Products	808.3	543.2	1,351.5	830.8	507.3	1,338.1	810.5	572.6	1,383.1	920.3	630.2	1,550.5	814.0	551.6	1,365.5
Pacific Cod	Whole Fish	2.1	0.7	2.8	0.4	*	0.4	0.3	0.3	0.5	0.0	0.3	0.3	0.0	0.1	0.2
	Head And Gut	250.6	30.7	281.4	287.9	32.5	320.4	276.0	48.5	324.5	216.8	31.1	247.9	155.8	14.6	170.4
	Roe	0.6	2.3	2.8	0.6	2.7	3.4	2.5	7.2	9.7	2.3	3.4	5.7	1.5	4.9	6.4
	Fillets	0.4	74.1	74.5	0.5	81.2	81.7	0.9	93.3	94.2	1.6	67.6	69.2	1.3	61.0	62.3
	Other Products	15.0	11.8	26.9	13.6	15.2	28.7	11.8	18.0	29.8	11.3	12.1	23.4	9.9	14.1	24.0
	All Products	268.8	119.5	388.3	303.1	131.6	434.7	291.6	167.3	458.8	232.0	114.5	346.5	168.5	94.7	263.2
Sablefish	Head And Gut	3.0	4.9	7.9	4.7	7.2	11.9	4.2	5.0	9.3	2.3	4.7	7.0	3.3	3.6	6.9
	Other Products	0.0	0.1	0.1	0.1	0.5	0.6	0.1	0.6	0.8	0.1	0.1	0.1	0.0	0.3	0.3
	All Products	3.0	5.0	8.0	4.8	7.7	12.5	4.4	5.7	10.0	2.4	4.8	7.1	3.3	3.8	7.1

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Table 16: Continued

	Product	2016			2017			2018			2019			2020		
		At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Atka Mackerel	Whole Fish	4.1	0.0	4.1	11.9	*	11.9	15.0	0.5	15.5	1.0	*	1.0	0.8	0.1	0.8
	Head And Gut	69.6	-	69.6	114.8	-	114.8	112.7	*	112.7	84.0	*	84.0	77.6	*	77.6
	Other Products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	All Products	73.7	0.0	73.7	126.6	0.0	126.6	127.7	0.5	128.1	85.0	0.0	85.0	78.4	0.1	78.5
Yellowfin	Whole Fish	10.6	-	10.6	12.4	-	12.4	10.8	0.3	11.1	6.9	-	6.9	7.2	-	7.2
	Head And Gut	83.3	-	83.3	98.2	-	98.2	125.4	-	125.4	121.9	-	121.9	100.4	-	100.4
	Fillets	-	-	-	*	-	*	-	-	-	-	-	-	-	-	-
	Other Products	0.3	0.0	0.3	0.2	0.0	0.2	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.0	0.2
	All Products	94.2	0.0	94.2	110.8	0.0	110.8	136.3	0.3	136.6	128.8	0.0	128.8	107.8	0.0	107.8
Rock Sole	Whole Fish	0.8	*	0.8	2.0	*	2.0	0.7	0.1	0.8	1.0	*	1.0	1.0	*	1.0
	Head And Gut	33.0	-	33.0	28.0	-	28.0	28.2	*	28.2	23.2	-	23.2	19.8	-	19.8
	Fillets	*	-	*	*	*	*	0.0	-	0.0	-	*	*	*	-	*
	Other Products	0.1	0.1	0.3	0.2	0.1	0.3	0.1	0.0	0.2	0.2	0.1	0.3	0.1	0.1	0.2
	All Products	33.9	0.1	34.0	30.2	0.1	30.3	29.0	0.1	29.1	24.3	0.1	24.4	20.9	0.1	21.0
Flathead Sole	Whole Fish	0.6	*	0.6	0.1	*	0.1	0.7	0.1	0.7	0.1	-	0.1	0.4	*	0.4
	Head And Gut	6.9	-	6.9	7.7	-	7.7	11.0	*	11.0	14.9	-	14.9	5.0	-	5.0
	Fillets	-	-	-	-	-	-	*	*	*	-	-	-	*	-	*
	Other Products	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.5
	All Products	7.7	0.1	7.8	7.9	0.1	8.0	11.8	0.1	11.9	15.2	0.1	15.3	5.6	0.3	5.9

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Table 16: Continued

		2016			2017			2018			2019			2020		
	Product	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Arrowtooth	Whole Fish	0.3	*	0.3	*	-	*	*	-	*	-	-	-	*	-	*
	Head And Gut	8.3	-	8.3	9.9	-	9.9	5.6	-	5.6	9.4	-	9.4	8.6	-	8.6
	Fillets	-	-	-	-	-	-	-	-	-	*	-	*	-	-	-
	Other Products	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
	All Products	8.6	0.0	8.7	9.9	0.0	9.9	5.6	0.1	5.7	9.4	0.1	9.5	8.6	0.1	8.8
Kamchatka Flounder	Whole Fish	*	-	*	-	-	-	-	-	-	-	-	-	*	-	*
	Head And Gut	5.0	-	5.0	6.7	-	6.7	3.9	-	3.9	4.7	-	4.7	7.7	-	7.7
	Fishmeal	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	*	0.0	0.0	-	0.0
	Other Products	-	-	-	-	-	-	*	-	*	-	-	-	*	-	*
	All Products	5.0	-	5.0	6.7	-	6.7	3.9	-	3.9	4.7	*	4.7	7.7	-	7.7
Turbot	Whole Fish	0.1	-	0.1	-	-	-	-	-	-	*	-	*	-	-	-
	Head And Gut	7.2	*	7.2	9.3	-	9.3	6.4	-	6.4	10.7	-	10.7	6.9	-	6.9
	Other Products	2.0	0.0	2.0	2.2	0.0	2.2	1.0	0.0	1.0	1.7	0.0	1.7	1.5	0.0	1.5
	All Products	9.3	0.0	9.3	11.5	0.0	11.5	7.4	0.0	7.4	12.3	0.0	12.3	8.4	0.0	8.4
Other Flatfish	Whole Fish	2.7	*	2.7	2.3	0.1	2.4	0.5	*	0.5	1.7	0.2	1.9	1.3	0.1	1.5
	Head And Gut	5.0	*	5.0	12.7	*	12.7	16.4	*	16.4	12.5	*	12.5	13.6	-	13.6
	Fillets	-	-	-	-	*	*	-	*	*	-	-	-	-	*	*
	Other Products	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.5	0.0	0.5	0.0	0.1	0.1
	All Products	7.7	0.0	7.7	15.0	0.1	15.2	17.0	0.0	17.0	14.6	0.2	14.8	14.9	0.2	15.2
Pacific Ocean Perch	Whole Fish	0.4	0.5	1.0	0.5	0.5	1.0	2.8	0.2	3.0	1.1	0.4	1.4	0.8	0.2	1.0
	Head And Gut	29.1	*	29.1	34.6	*	34.6	34.5	*	34.5	31.2	*	31.2	27.5	-	27.5
	Other Products	0.3	0.0	0.3	0.4	0.0	0.4	0.3	0.1	0.4	0.8	0.6	1.4	0.5	0.5	1.0
	All Products	29.8	0.6	30.3	35.5	0.5	36.1	37.6	0.3	37.9	33.0	1.0	34.0	28.8	0.7	29.5

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Table 16: Continued

	Product	2016			2017			2018			2019			2020		
		At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Northern Rockfish	Whole Fish	-	0.0	0.0	-	*	*	*	*	*	-	*	*	-	*	*
	Head And Gut	2.8	-	2.8	3.4	-	3.4	3.9	*	3.9	5.9	*	5.9	3.2	-	3.2
	Other Products	0.0	0.0	0.0	0.0	*	0.0	0.0	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All Products	2.8	0.0	2.8	3.4	*	3.4	3.9	*	3.9	5.9	0.0	5.9	3.2	0.0	3.2
Other Rockfish	Whole Fish	0.7	*	0.7	0.9	0.0	0.9	0.6	*	0.6	1.6	*	1.6	0.7	*	0.7
	Head And Gut	0.7	0.1	0.8	0.7	0.1	0.7	0.9	0.0	0.9	0.8	0.0	0.8	0.6	0.0	0.7
	Other Products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0
	All Products	1.4	0.1	1.5	1.6	0.1	1.6	1.4	0.0	1.5	2.6	0.1	2.6	1.4	0.0	1.4
Other Groundfish	Whole Fish	0.0	0.3	0.3	*	0.5	0.5	0.0	1.2	1.2	0.0	0.5	0.5	*	0.1	0.1
	Head And Gut	0.0	-	0.0	0.0	*	0.0	0.1	0.4	0.5	0.1	0.1	0.2	0.0	0.1	0.2
	Roe	-	-	-	-	-	-	*	-	*	-	-	-	-	-	-
	Fillets	*	-	*	-	-	-	*	-	*	-	-	-	-	-	-
	Fishmeal	0.1	0.2	0.3	0.1	0.3	0.4	0.1	0.1	0.2	0.2	0.8	1.0	0.2	1.8	2.0
	Other Products	2.8	0.2	3.0	4.5	*	4.5	7.6	0.1	7.7	5.2	*	5.2	4.0	*	4.0
	All Products	2.9	0.7	3.7	4.6	0.8	5.3	7.8	1.8	9.6	5.5	1.4	6.9	4.2	2.1	6.3

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Table 16: Continued

Product	2016			2017			2018			2019			2020		
	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All	At Sea	Shoreside	All
Whole Fish	22.6	2.0	24.6	30.6	1.3	31.9	31.4	2.8	34.2	13.5	1.8	15.3	12.2	1.0	13.2
Head And Gut	553.4	35.8	589.1	647.6	39.8	687.4	656.8	54.0	710.8	562.7	36.0	598.6	450.2	18.3	468.5
Roe	72.9	19.3	92.3	86.6	33.7	120.3	93.0	48.1	141.2	92.2	45.7	137.9	83.5	32.1	115.5
Fillets	0.4	74.1	74.5	0.5	81.2	81.7	0.9	93.3	94.2	1.6	67.6	69.2	1.3	61.0	62.3
All Species Deep-Skin Fillets	142.7	26.3	169.0	150.1	41.3	191.4	136.7	49.5	186.2	137.9	67.2	205.1	133.5	56.9	190.5
Other Fillets	141.9	191.3	333.2	107.8	145.8	253.5	154.2	164.4	318.6	218.7	203.2	421.9	163.5	161.0	324.5
Surimi	291.9	210.2	502.1	370.2	207.2	577.4	316.7	234.1	550.8	341.5	240.6	582.2	262.4	215.6	478.0
Minced Fish	39.7	19.2	58.9	26.1	13.1	39.2	19.7	10.8	30.4	21.8	12.0	33.8	31.7	20.5	52.1
Fishmeal	50.4	53.6	104.0	45.8	51.0	96.8	48.2	51.9	100.1	67.5	43.6	111.1	107.1	51.3	158.4
Other Products	41.2	37.6	78.8	37.1	33.9	71.1	38.4	39.8	78.2	38.7	34.4	73.1	30.4	36.0	66.4
All Products	1,357.1	669.4	2,026.5	1,502.3	648.4	2,150.7	1,495.9	748.7	2,244.7	1,496.1	752.3	2,248.4	1,275.7	653.7	1,929.4

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

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

Table 17: Bering Sea & Aleutian Islands price per pound of groundfish products by species and processing mode, 2016-2020, (\$/lb).

	Product	2016		2017		2018		2019		2020	
		At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside
Pollock	Whole Fish	0.35	0.34	0.29	0.42	0.42	0.55	0.47	0.95	0.71	0.45
	Head And Gut	0.78	0.41	0.54	-	0.58	*	0.63	*	0.56	*
	Roe	3.14	2.03	3.33	2.09	3.16	2.43	2.52	1.63	2.36	1.38
	Deep-Skin Fillets	1.69	1.39	1.51	1.44	1.51	1.43	1.59	1.62	1.77	1.62
	Other Fillets	1.30	1.34	1.16	1.17	1.30	1.31	1.50	1.47	1.52	1.45
	Surimi	1.32	1.06	1.64	1.00	1.38	1.15	1.48	1.25	1.30	1.21
	Minced Fish	0.80	0.74	0.69	0.63	0.68	0.66	0.81	0.74	0.91	0.82
	Fishmeal	0.84	0.67	0.74	0.66	0.77	0.61	1.00	0.49	1.65	0.56
	Other Products	0.64	0.42	0.55	0.33	0.56	0.38	0.51	0.36	0.60	0.40
	All Products	1.26	1.01	1.33	0.96	1.27	1.07	1.38	1.12	1.41	1.08
Pacific Cod	Whole Fish	0.71	0.69	0.87	*	0.83	0.74	0.28	0.54	0.97	0.58
	Head And Gut	1.35	0.98	1.63	1.20	1.89	1.70	1.67	1.23	1.49	0.85
	Roe Fillets	0.51	0.64	0.62	0.71	1.08	1.31	0.81	0.90	0.81	1.10
	Other Products	1.03	0.75	0.87	0.90	0.79	1.11	0.69	0.91	0.72	1.09
	All Products	1.31	1.63	1.56	1.89	1.78	2.29	1.55	1.91	1.40	1.86
	Sablefish	Head And Gut	6.24	7.93	5.12	7.22	3.42	5.70	3.07	3.70	2.65
Other Products		0.83	3.17	0.87	6.31	0.61	8.58	0.90	1.67	1.12	5.30
All Products		6.02	7.74	4.68	7.16	3.02	5.92	2.85	3.64	2.62	3.02
Atka Mackerel	Whole Fish	0.86	0.62	0.84	*	1.03	0.70	0.94	*	0.73	0.50
	Head And Gut	1.03	-	1.47	-	1.41	*	1.16	*	1.06	*
	Other Products	0.73	0.73	0.55	0.80	0.77	0.70	0.58	0.56	0.87	0.52
	All Products	1.02	0.65	1.37	0.80	1.35	0.70	1.16	0.56	1.05	0.51

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Table 17: Continued

	Product	2016		2017		2018		2019		2020	
		At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside
Yellowfin	Whole Fish	0.49	-	0.61	-	0.71	0.61	0.64	-	0.41	-
	Head And Gut	0.55	-	0.66	-	0.82	-	0.79	-	0.62	-
	Fillets	-	-	*	-	-	-	-	-	-	-
	Other Products	0.86	0.73	0.74	0.80	0.83	0.70	0.63	0.56	0.87	0.52
	All Products	0.55	0.73	0.65	0.80	0.81	0.62	0.78	0.56	0.60	0.52
Rock Sole	Whole Fish	0.59	*	0.59	*	0.75	0.46	0.90	*	0.47	*
	Head And Gut	0.56	-	0.65	-	0.83	*	0.79	-	0.64	-
	Head And Gut With Roe	1.00	-	1.24	-	1.50	-	1.32	-	1.28	-
	Fillets	*	-	*	*	2.73	-	-	*	*	-
	Other Products	0.78	0.73	0.63	0.80	0.72	0.70	0.58	0.56	0.85	0.52
	All Products	0.62	0.73	0.72	0.80	0.89	0.53	0.83	0.56	0.72	0.52
Flathead Sole	Whole Fish	0.57	*	0.61	*	0.82	0.52	0.80	-	0.58	*
	Head And Gut	0.76	-	0.87	-	0.98	*	0.86	-	0.64	-
	Fillets	-	-	-	-	*	*	-	-	*	-
	Other Products	0.66	0.73	0.59	0.80	0.70	0.70	0.57	0.56	0.85	0.52
	All Products	0.74	0.73	0.86	0.80	0.97	0.60	0.86	0.56	0.64	0.52
Arrowtooth	Whole Fish	0.56	*	*	-	*	-	-	-	*	-
	Head And Gut	0.86	-	1.30	-	0.87	-	0.88	-	0.72	-
	Fillets	-	-	-	-	-	-	*	-	-	-
	Other Products	0.64	0.73	0.65	0.80	0.70	0.70	0.58	0.56	0.85	0.52
	All Products	0.84	0.73	1.30	0.80	0.87	0.70	0.87	0.56	0.72	0.52
Kamchatka Flounder	Whole Fish	*	-	-	-	-	-	-	-	*	-
	Head And Gut	0.83	-	1.48	-	1.27	-	0.99	-	0.88	-
	Fishmeal	0.86	-	0.67	-	0.82	-	0.57	*	0.87	-
	Other Products	-	-	-	-	*	-	-	-	*	-
	All Products	0.83	-	1.48	-	1.27	-	0.99	*	0.88	-
Turbot	Whole Fish	1.97	-	-	-	-	-	*	-	-	-
	Head And Gut	2.52	*	2.41	-	2.44	-	2.51	-	2.17	-
	Other Products	1.76	0.73	1.45	0.80	1.04	0.70	1.03	0.56	1.18	0.52
	All Products	2.30	0.73	2.14	0.80	2.08	0.70	2.10	0.56	1.89	0.52

Continued on next page.

Table 17: Continued

		2016		2017		2018		2019		2020	
	Product	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside	At-sea	Shoreside
Other Flatfish	Whole Fish	0.59	*	0.78	1.62	0.68	*	1.26	1.37	1.03	0.68
	Head And Gut	0.47	*	0.81	*	0.64	*	0.65	*	0.60	-
	Fillet	-	-	-	*	-	*	-	-	-	*
	Other Products	0.76	0.73	0.65	0.80	0.82	0.71	0.57	0.57	0.84	0.54
	All Products	0.51	0.73	0.81	1.49	0.64	0.71	0.68	1.19	0.62	0.62
Pacific Ocean Percoid	Whole Fish	0.65	0.58	0.57	0.54	0.61	0.61	0.72	0.44	0.73	0.41
	Head And Gut	0.93	*	1.14	*	1.11	*	0.82	*	0.75	-
	Other Products	0.60	0.73	0.60	0.80	0.70	0.70	0.57	1.33	0.87	0.52
	All Products	0.92	0.58	1.11	0.56	1.04	0.64	0.80	0.74	0.75	0.48
Northern Rockfish	Whole Fish	-	0.68	-	*	*	*	-	*	-	*
	Head And Gut	0.64	-	0.77	-	0.79	*	0.69	*	0.47	-
	Other Products	0.59	0.73	0.61	*	0.63	*	0.57	0.69	0.87	0.52
	All Products	0.64	0.70	0.77	*	0.79	*	0.69	0.69	0.47	0.52
Other Rockfish	Whole Fish	2.27	*	2.29	0.69	1.72	*	1.71	*	1.58	*
	Head And Gut	1.06	2.95	1.14	2.42	1.14	1.74	1.26	2.00	0.94	1.80
	Other Products	0.78	1.39	0.75	0.76	0.87	0.82	0.57	0.77	0.62	0.84
	All Products	1.47	2.83	1.58	1.93	1.31	1.58	1.35	1.71	1.21	1.55
Other Groundfish	Whole Fish	1.02	0.96	*	0.80	0.12	1.08	1.54	0.64	*	1.15
	Head And Gut	1.83	-	0.78	*	0.81	2.70	1.19	1.10	0.71	0.80
	Roe	-	-	-	-	*	-	-	-	-	-
	Fillet	*	-	-	-	*	-	-	-	-	-
	Fishmeal	0.68	0.73	0.71	0.78	0.74	0.70	0.57	0.57	0.83	0.52
	Other Products	0.72	4.01	0.84	*	1.01	1.43	0.89	*	0.84	*
	All Products	0.72	1.03	0.84	0.79	1.00	1.23	0.88	0.62	0.84	0.55

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 18: Bering Sea & Aleutian Islands total product value per round metric ton of retained catch by processor type, species, and year, 2016-2020, (\$/mt).

	Species	2016	2017	2018	2019	2020
Motherships	Pollock	909	*	974	1,007	918
	Pacific Cod	709	*	397	331	292
Catcher/processors	Pollock	1,090	1,128	1,063	1,192	1,104
	Sablefish	7,707	5,760	4,529	3,655	2,850
	Pacific Cod	1,484	1,756	2,024	1,807	1,603
	Flatfish	789	969	1,077	1,061	859
	Rockfish	977	1,162	1,142	864	753
	Atka Mackerel	1,363	1,977	1,845	1,501	1,357
	Other	426	473	629	575	486
Shoreside processors	Pollock	929	860	959	1,032	919
	Sablefish	12,282	11,007	6,856	3,089	1,763
	Pacific Cod	1,564	1,714	2,268	1,706	1,535
	Flatfish	968	690	621	625	565
	Rockfish	1,142	958	867	732	460
	Other	1,501	934	1,246	4,647	5,218

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 19: 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, 2016-2020 (\$ millions).

	Year	Processors	Wholesale Value (\$million)	Wholesale Value Per Processor (\$1,000)	Percent Value, BSAI FMP Groundfish
AFA CP	2016	15	684.55	45,636.64	35.41
	2017	16	747.99	46,749.63	36.34
	2018	14	678.20	48,442.66	31.91
	2019	15	808.70	53,913.09	37.89
	2020	13	684.76	52,673.95	36.11
A80	2016	19	320.59	16,872.90	16.58
	2017	19	392.40	20,652.76	19.07
	2018	19	426.16	22,429.62	20.05
	2019	20	373.07	18,653.72	17.48
	2020	19	311.26	16,382.05	16.41
CP Hook and Line	2016	32	211.38	6,605.54	10.93
	2017	29	246.04	8,484.03	11.95
	2018	26	225.39	8,668.79	10.61
	2019	24	183.18	7,632.61	8.58
	2020	21	138.46	6,593.51	7.30
Sablefish IFQ	2016	7	1.40	200.11	0.07
	2017	6	1.68	280.05	0.08
	2018	8	1.84	230.39	0.09
	2019	5	0.70	139.83	0.03
	2020	4	1.62	403.81	0.09
Motherships & Inshore Floating Procs.	2016	4	106.69	26,673.69	5.52
	2017	2	*	*	*
	2018	3	116.49	38,828.46	5.48
	2019	4	123.52	30,879.46	5.79
	2020	3	111.94	37,314.38	5.90
BSAI Shoreside Processors	2016	7	576.25	82,321.86	29.81
	2017	7	555.74	79,391.83	27.00
	2018	7	629.17	89,881.78	29.60
	2019	7	638.29	91,184.38	29.91
	2020	7	620.52	88,645.41	32.72

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 20: 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, 2016-2020.

	Year	Vessels	Average Length (feet)	Median Length (feet)	Average Capacity (tons)	Median Capacity (tons)
AFA CV	2016	89	126	124	159	133
	2017	86	126	123	157	132
	2018	86	127	123	159	132
	2019	82	127	123	158	132
	2020	86	128	124	162	133
AFA CP	2016	16	302	296	1,717	1,592
	2017	16	290	285	1,571	1,592
	2018	15	302	285	1,850	1,778
	2019	16	292	296	1,654	1,592
	2020	13	307	300	1,922	1,778
A80	2016	19	186	185	437	426
	2017	19	182	185	463	473
	2018	19	182	185	454	473
	2019	20	186	185	468	473
	2020	19	191	186	497	586
BSAI Trawl	2016	13	132	130	242	132
	2017	16	122	112	171	132
	2018	21	150	144	301	276
	2019	18	127	130	188	132
	2020	15	150	144	298	276
CV Hook and Line	2017	3	55	59	40	47
	2018	6	53	56	75	95
	2019	8	44	38	27	29
	2020	9	44	39	26	21
CP Hook and Line	2016	31	146	136	338	258
	2017	28	148	141	350	296
	2018	25	148	141	336	258
	2019	23	152	150	372	308
	2020	20	151	140	378	303
Sablefish IFQ	2016	23	88	98	106	111
	2017	22	85	58	110	96
	2018	27	93	98	128	127
	2019	19	93	98	146	105
	2020	18	85	58	127	105

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Table 20: Continued

	Year	Vessels	Average Length (feet)	Median Length (feet)	Average Capacity (tons)	Median Capacity (tons)
Pot	2016	56	80	58	114	105
	2017	64	83	58	119	105
	2018	78	80	58	108	105
	2019	83	76	58	102	105
	2020	94	74	58	100	99
Jig	2016	2	42	42	25	26
	2017	1	42	42	26	26
	2018	1	42	42	26	26
	2019	3	46	42	29	26
	2020	3	41	42	28	26
No Fleet/ Other	2017	2	31	30	14	13
	2018	1	34	34	17	17
	2020	1	34	34	17	17

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

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

Table 21: Bering Sea & Aleutian Islands number of vessels that caught groundfish by month, vessel type, and gear, 2016-2020.

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Hook & Line	2016	1	-	1	1	3	5	7	6	7	4	-	-	16
	2017	-	1	2	2	4	2	7	4	9	3	-	-	18
	2018	-	-	4	5	2	3	4	5	7	4	5	1	19
	2019	2	4	6	6	4	3	3	4	5	4	4	1	16
	2020	1	5	6	10	6	2	4	5	2	2	1	-	17
Pot	2016	28	29	33	31	3	1	1	1	10	21	17	18	54
	2017	48	21	25	25	7	4	1	-	11	13	15	33	63
	2018	58	37	37	6	5	3	-	-	19	25	17	11	76
	2019	72	41	42	5	3	2	1	1	28	12	12	10	80
	2020	77	47	48	6	3	5	4	2	30	7	2	2	96
Trawl	2016	71	91	91	69	8	61	70	69	53	16	1	-	101
	2017	71	92	79	70	6	68	69	65	46	14	2	-	102
	2018	77	96	91	62	8	61	67	70	60	3	3	-	105
	2019	80	92	90	66	6	56	66	74	58	26	6	-	100
	2020	81	85	87	59	14	60	72	74	73	62	6	-	99
All Gear	2016	100	120	125	101	14	67	78	76	70	41	18	18	170
	2017	119	114	106	97	17	74	77	69	66	30	17	33	182
	2018	135	132	129	73	15	67	71	75	86	32	24	12	196
	2019	154	137	138	77	13	61	70	79	91	42	22	11	194
	2020	159	137	141	75	23	67	77	79	104	71	9	2	206
Hook & 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
	2018	22	24	21	14	6	16	18	20	20	21	21	18	27
	2019	17	18	20	14	6	10	17	21	21	19	16	14	25
	2020	15	16	15	13	7	7	13	16	17	15	15	8	21
Pot	2016	5	3	3	2	-	-	-	1	3	3	1	3	5
	2017	5	2	2	2	-	-	-	1	5	5	2	3	6
	2018	5	2	2	2	1	1	-	1	5	2	-	1	6
	2019	5	2	2	-	-	-	-	-	5	1	3	2	6
	2020	5	1	2	2	1	-	-	1	5	2	-	-	5
Trawl	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
	2018	29	33	35	25	21	29	30	33	33	22	14	4	35
	2019	27	34	35	25	22	30	29	32	30	29	15	3	35
	2020	27	34	34	24	19	22	28	31	30	28	16	6	34
All Gear	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
	2018	56	59	58	41	28	46	48	54	58	45	35	23	66
	2019	49	54	57	39	28	40	46	53	56	49	34	19	65
	2020	47	51	51	38	27	29	41	48	52	45	31	14	59

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

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

Table 22: Bering Sea & Aleutian Islands catcher vessel (excluding catcher/processors) weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2016-2020.

	Year	Hook & Line		Pot			Trawl			All Gear		
		<60ft	60-124ft	<60ft	60-124ft	>=125ft	<60ft	60-124ft	>=125ft	<60ft	60-124ft	>=125ft
Pollock	2016	-	-	-	-	-	-	863	569	-	863	569
	2017	-	-	-	-	-	-	864	498	-	864	498
	2018	-	-	-	-	-	-	900	521	-	900	521
	2019	-	-	-	-	-	0	945	534	0	945	534
	2020	-	-	-	-	-	-	1,206	697	-	1,206	697
Sablefish	2016	30	13	-	22	8	-	-	-	30	35	8
	2017	30	6	-	25	12	-	-	-	30	31	12
	2018	13	14	15	20	6	-	-	-	28	34	6
	2019	5	14	18	13	7	-	-	-	23	27	7
	2020	2	2	32	9	5	-	-	-	34	11	5
Pacific Cod	2016	13	-	428	149	15	-	279	38	441	428	53
	2017	21	-	395	173	39	-	211	31	416	384	70
	2018	46	1	373	152	29	37	199	44	456	352	73
	2019	82	-	458	153	24	6	143	40	546	296	64
	2020	86	1	486	148	22	7	108	23	579	257	45
Flatfish	2016	-	-	-	-	-	-	42	33	-	42	33
	2017	-	-	-	-	-	-	48	53	-	48	53
	2018	-	-	-	-	-	-	32	46	-	32	46
	2019	1	-	-	-	-	-	59	72	1	59	72
	2020	-	-	-	-	-	-	48	51	-	48	51
Rockfish	2016	-	-	-	-	-	-	2	4	-	2	4
	2017	-	-	-	-	-	-	3	4	-	3	4
	2018	0	-	-	-	-	-	3	3	0	3	3
	2019	-	-	-	-	-	-	4	11	-	4	11
	2020	-	-	-	-	-	-	5	13	-	5	13
Atka Mackerel	2016	-	-	-	-	-	-	6	13	-	6	13
	2017	-	-	-	-	-	-	5	15	-	5	15
	2018	-	-	-	-	-	-	9	21	-	9	21
	2019	-	-	-	-	-	-	4	8	-	4	8
	2020	-	-	-	-	-	-	7	18	-	7	18
All Groundfish	2016	43	13	-	-	-	-	1,192	657	471	1,375	680
	2017	51	6	-	-	-	-	1,131	600	446	1,334	651
	2018	59	15	-	-	-	37	1,143	635	485	1,330	670
	2019	88	14	-	-	-	6	1,154	664	570	1,334	695
	2020	88	3	-	-	-	7	1,374	802	614	1,534	829

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.

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

Table 23: Bering Sea & Aleutian Islands catcher/processor vessel weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2016-2020.

	Year	Hook & Line			Pot			Trawl			All Gear			
		<60ft	60-124ft	125-230ft	<60ft	60-124ft	125-230ft	60-124ft	125-230ft	>230ft	<60ft	60-124ft	125-230ft	>230ft
Pollock	2016	-	-	-	-	-	-	1	4	303	-	1	4	303
	2017	-	-	-	-	-	-	0	5	301	-	0	5	301
	2018	-	-	-	-	-	-	0	6	317	-	0	6	317
	2019	-	-	-	-	-	-	2	7	312	-	2	7	312
	2020	-	-	-	-	-	-	0	10	332	-	0	10	332
Sablefish	2016	11	26	0	-	-	-	-	0	-	11	26	0	-
	2017	19	-	1	-	9	-	0	0	-	19	9	1	-
	2018	0	6	2	-	17	-	-	3	-	0	23	5	-
	2019	7	-	2	-	-	7	-	0	-	7	-	9	-
	2020	-	-	2	-	-	9	0	1	-	-	0	12	-
Pacific Cod	2016	9	223	765	18	13	54	1	17	11	27	237	836	11
	2017	8	172	797	13	20	44	1	11	7	21	193	852	7
	2018	9	108	658	-	28	23	2	17	7	9	138	698	7
	2019	7	57	599	15	21	21	1	11	8	22	79	631	8
	2020	2	62	482	-	19	21	0	5	2	2	81	508	2
Flatfish	2016	-	-	25	-	-	-	100	427	60	-	100	452	60
	2017	-	-	26	-	-	-	88	406	52	-	88	432	52
	2018	-	-	13	-	-	-	94	421	56	-	94	434	56
	2019	-	-	16	-	-	-	95	436	76	-	95	452	76
	2020	-	-	10	-	-	-	57	425	70	-	57	435	70
Rockfish	2016	-	2	1	-	-	-	0	39	8	-	2	40	8
	2017	-	-	-	-	-	-	3	45	4	-	3	45	4
	2018	-	-	1	-	-	-	3	43	6	-	3	44	6
	2019	-	-	0	-	-	-	5	60	8	-	5	60	8
	2020	-	-	0	-	-	-	5	61	7	-	5	61	7
Atka Mackerel	2016	-	-	-	-	-	-	-	80	23	-	-	80	23
	2017	-	-	-	-	-	-	7	105	11	-	7	105	11
	2018	-	-	-	-	-	-	7	122	12	-	7	122	12
	2019	-	-	-	-	-	-	5	88	12	-	5	88	12
	2020	-	-	-	-	-	-	5	96	6	-	5	96	6
All Groundfish	2016	20	252	791	18	13	54	101	567	405	38	366	1,412	405
	2017	27	172	825	13	29	44	99	574	375	40	301	1,443	375
	2018	9	114	675	-	45	23	106	611	397	9	266	1,309	397
	2019	14	57	618	15	21	28	108	601	416	29	186	1,247	416
	2020	2	62	494	-	19	30	67	599	418	2	148	1,123	418

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.

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

Table 24: Bering Sea & Aleutian Islands catcher vessel crew weeks in the groundfish fisheries by month, 2016-2020.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2016	948	1,901	1,796	1,271	138	692	1,529	1,254	850	521	187	157	11,245
2017	1,102	1,768	1,660	989	238	739	1,430	1,116	872	340	236	242	10,732
2018	1,229	2,049	2,043	708	201	822	1,168	1,314	1,254	427	169	120	11,504
2019	1,082	2,014	2,116	649	225	729	1,050	1,475	1,254	466	346	94	11,499
2020	1,124	2,644	1,843	793	308	601	1,031	1,702	1,676	1,276	53	-	13,050

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 25: Bering Sea & Aleutian Islands at-sea processor vessel crew weeks in the groundfish fisheries by month, 2016-2020.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2016	7,231	13,368	12,457	6,660	3,785	6,325	13,134	11,704	9,298	7,214	3,108	2,108	96,392
2017	6,262	12,765	12,817	7,719	3,454	6,229	14,410	11,861	9,408	4,966	3,641	2,055	95,587
2018	5,792	13,559	15,843	5,232	3,750	8,022	11,726	12,878	12,374	4,982	3,201	1,897	99,256
2019	3,705	13,534	16,009	4,825	3,979	6,887	11,256	15,040	11,163	7,559	4,094	1,198	99,249
2020	3,824	16,312	12,475	4,929	4,013	4,183	9,344	13,599	11,198	10,443	3,071	834	94,225

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 26: Gulf of Alaska groundfish retained catch by vessel type, gear, and species, 2016-2020 (1,000 metric tons, round weight).

	Year	Central Gulf			Western Gulf				All Gulf				
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Pollock	2016	-	-	110.9	111.1	-	-	61.0	61.0	-	-	175.8	176.0
	2017	-	-	133.1	133.2	-	-	49.2	49.2	-	-	184.2	184.3
	2018	-	-	118.3	118.3	-	-	30.5	30.5	-	-	155.7	155.8
	2019	-	-	87.8	87.8	-	-	21.7	21.7	-	-	118.7	118.7
	2020	-	-	80.5	80.5	-	-	19.0	19.0	-	-	106.8	106.8
Pacific Cod	2016	5.1	20.6	7.7	33.5	4.2	17.0	7.4	28.6	10.5	37.6	15.1	63.2
	2017	3.8	11.3	5.3	20.5	4.4	15.0	7.6	27.0	8.7	26.4	12.9	48.0
	2018	1.5	3.1	2.1	6.7	1.4	4.5	1.4	7.3	3.3	7.6	3.5	14.4
	2019	1.5	3.2	2.1	6.8	1.3	4.3	1.6	7.2	3.3	7.5	3.7	14.4
	2020	0.4	1.0	2.2	3.6	0.2	0.7	0.1	1.1	1.0	1.7	2.3	5.1
Sablefish	2016	3.2	-	0.7	3.8	0.9	-	0	0.9	8.2	-	0.9	9.0
	2017	3.0	0.4	0.7	4.2	0.8	0.2	0.1	1.1	8.2	0.9	1.0	10.1
	2018	2.9	0.5	0.6	4.0	0.7	0.4	0.1	1.2	8.4	1.1	0.9	10.5
	2019	2.5	1.1	0.7	4.3	0.7	0.4	0.3	1.3	7.8	1.9	1.1	10.9
	2020	1.2	2.5	0.8	4.6	0.2	1.1	0.2	1.4	5.6	4.7	1.0	11.3
Atka Mackerel	2016	-	-	0.8	0.8	-	-	0.1	0.1	-	-	1.0	1.0
	2017	-	-	0.2	0.2	-	-	0.4	0.4	-	-	0.7	0.7
	2018	-	-	0.7	0.7	-	-	0.6	0.6	-	-	1.3	1.3
	2019	-	-	0.5	0.5	-	-	0.6	0.6	-	-	1.1	1.1
	2020	-	-	0	0	-	-	0.5	0.5	-	-	0.5	0.5
Arrowtooth	2016	0	-	17.5	17.5	0	-	0.2	0.2	0	-	17.7	17.7
	2017	0	-	24.8	24.8	0	-	0.1	0.1	0	-	24.9	24.9
	2018	0	-	16.2	16.2	0	-	0	0.1	0	-	16.3	16.3
	2019	*	-	22.4	22.4	*	-	0.2	0.2	0	-	22.6	22.6
	2020	*	-	19.5	19.5	0	-	0.2	0.2	0	-	19.8	19.8
Flathead Sole	2016	-	-	2.2	2.2	-	-	0.1	0.1	-	-	2.2	2.2
	2017	-	-	1.9	1.9	-	-	0	0	-	-	1.9	1.9
	2018	-	-	2.0	2.0	-	-	0	0	-	-	2.0	2.0
	2019	-	-	2.1	2.1	*	-	0	0	*	-	2.2	2.2
	2020	-	-	1.8	1.8	-	-	0.1	0.1	-	-	1.8	1.8

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Table 26: Continued

	Year	Central Gulf				Western Gulf				All Gulf			
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Rex Sole	2016	-	-	1.5	1.5	-	-	0	0	-	-	1.5	1.5
	2017	-	-	1.2	1.2	-	-	0	0	-	-	1.2	1.2
	2018	-	-	1.1	1.1	-	-	0	0	-	-	1.2	1.2
	2019	-	-	1.1	1.1	-	-	0	0	-	-	1.1	1.1
	2020	-	-	1.0	1.0	-	-	0	0	-	-	1.0	1.0
Shallow- water Flatfish	2016	*	-	3.6	3.6	-	-	0	0	*	-	3.6	3.6
	2017	-	-	2.0	2.0	*	-	0	0	*	-	2.0	2.0
	2018	-	-	2.5	2.5	*	-	0	0	*	-	2.5	2.5
	2019	-	-	2.5	2.5	-	-	0	0	-	-	2.5	2.5
	2020	*	-	4.1	4.1	-	-	0	0	*	-	4.1	4.1
Deep- water Flatfish	2016	*	-	0.1	0.1	*	-	*	*	*	-	0.1	0.1
	2017	*	-	0.1	0.1	0	-	0	0	0	-	0.1	0.1
	2018	*	-	0.1	0.1	*	-	*	*	*	-	0.1	0.1
	2019	-	-	0	0	*	-	*	*	*	-	0	0
	2020	*	-	0.1	0.1	*	-	*	*	*	-	0.1	0.1
Pacific Ocean Perch	2016	-	-	16.1	16.1	*	-	2.5	2.5	*	-	18.6	18.6
	2017	0	-	14.9	14.9	*	-	2.6	2.6	0	-	17.5	17.5
	2018	0	-	17.1	17.1	-	-	3.1	3.1	0	-	20.3	20.3
	2019	*	-	17.3	17.3	*	-	3.1	3.1	*	-	20.5	20.5
	2020	-	-	21.3	21.3	*	-	1.3	1.3	*	-	22.6	22.6
Northern Rockfish	2016	*	-	3.2	3.2	0	-	0.1	0.1	0	-	3.2	3.2
	2017	0	-	1.5	1.5	0	-	0.2	0.2	0	-	1.7	1.7
	2018	*	-	2.0	2.0	*	-	0.3	0.3	*	-	2.3	2.3
	2019	-	-	1.8	1.8	*	-	0.8	0.8	*	-	2.6	2.6
	2020	*	-	1.6	1.6	-	-	0.8	0.8	*	-	2.4	2.4

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Table 26: Continued

	Year	Central Gulf				Western Gulf				All Gulf			
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Dusky Rockfish	2016	0	-	3.1	3.1	0	-	0.1	0.1	0.1	-	3.1	3.2
	2017	0	-	2.3	2.3	0	-	0.1	0.1	0	-	2.4	2.4
	2018	0	-	2.8	2.8	0	-	0	0	0	-	2.8	2.8
	2019	0	-	2.0	2.0	0	-	0.2	0.2	0	-	2.2	2.2
	2020	0	-	1.8	1.8	*	-	0.2	0.2	0	-	2.1	2.1
Other Rockfish	2016	0.3	-	1.6	1.9	0.1	-	0.2	0.3	1.0	-	2.0	2.9
	2017	0.3	-	1.2	1.6	0.1	-	0.1	0.2	1.0	-	1.6	2.5
	2018	0.3	-	1.4	1.7	0.1	-	0.2	0.2	1.0	-	1.7	2.7
	2019	0.2	-	1.0	1.2	0.1	-	0.2	0.2	0.9	-	1.4	2.3
	2020	0.1	-	0.8	0.9	0	-	0.1	0.1	0.7	-	0.9	1.7
Other Groundfish	2016	0.2	-	1.1	1.4	0.1	-	0	0.2	0.4	-	1.1	1.7
	2017	0.1	-	0.8	1.0	0.2	-	0	0.2	0.3	-	0.8	1.3
	2018	0	-	0.8	0.9	0	-	0	0.1	0.1	-	0.8	1.0
	2019	0.1	-	0.9	1.1	0	-	0	0.1	0.1	-	0.9	1.3
	2020	0	-	0.8	0.8	0	-	0	0	0	-	0.8	0.8

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 27: Gulf of Alaska groundfish retained catch by species, gear, and target fishery, 2019-2020, (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
Central Gulf	Sablefish	-	2.3	0	*	-	-	-	-	0.2	-	0	2.4
	2019 Pacific Cod	0	*	1.3	*	-	-	-	-	0	-	0	1.3
	Rockfish	-	-	0	-	-	-	-	-	0	-	*	0
	All Targets	0	2.5	1.3	*	-	-	-	-	0.2	-	0	4.1
Hook and Line	Sablefish	-	1.1	0	*	-	-	*	-	0.1	-	0	1.2
	2020 Pacific Cod	0	-	0.4	-	-	-	-	*	0	-	*	0.4
	Rockfish	-	-	0	-	-	-	-	-	0	-	-	0
	All Targets	0	1.2	0.4	*	-	-	*	*	0.1	-	0	1.8
Western Gulf	Sablefish	*	0.7	0	*	-	-	-	-	0.1	-	-	0.7
	2019 Pacific Cod	*	*	1.3	*	*	-	*	-	*	-	*	1.3
	All Targets	*	0.7	1.3	*	*	-	*	-	0.1	-	0	2.0
	Sablefish	-	0.2	*	*	-	-	*	-	0	-	*	0.2
All Gulf	2020 Pacific Cod	-	-	0.2	-	-	-	-	-	*	-	-	0.2
	All Targets	-	0.2	0.2	0	-	-	*	-	0	-	0	0.4
	Sablefish	*	7.2	0	*	-	-	-	-	0.6	-	0	7.8
	2019 Pacific Cod	0	*	2.9	*	*	-	*	-	0	-	0	3.0
Pot	Rockfish	-	-	0	-	-	-	-	-	0.1	-	*	0.1
	All Targets	0	7.8	3.0	0	*	-	*	-	0.9	-	0.1	11.9
	Pollock, Bottom	*	-	-	-	-	-	-	-	*	-	-	*
	2020 Sablefish	*	5.2	0	*	-	-	*	-	0.5	-	0	5.7
Central Gulf	Pacific Cod	0	-	0.9	-	-	-	-	*	0	-	0	0.9
	Rockfish	-	*	0	-	-	-	-	-	0	-	-	0
	All Targets	0	5.6	1.0	0	-	-	*	*	0.8	-	0	7.4
	Sablefish	-	1.1	0	*	-	-	-	-	0	-	-	1.1
Pot	2019 Pacific Cod	0	*	3.2	*	-	-	-	-	*	-	0.1	3.3
	All Targets	0	1.1	3.2	*	-	-	-	-	0	-	0.1	4.4
	Sablefish	-	2.5	0	*	-	-	-	-	0	-	*	2.5
	2020 Pacific Cod	*	-	1.0	-	-	-	-	-	-	-	0	1.0
All Targets	*	2.5	1.0	*	-	-	-	-	0	-	0	3.5	

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Table 27: Continued

	Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Flathead Sole	Rex Sole	Flat Deep	Flat Shallow	Rockfish	Atka Mackerel	Other	All Species	
Pot	Western Gulf	Sablefish	-	0.4	*	-	-	-	-	0	-	-	0.4	
		2019 Pacific Cod	*	*	4.3	-	*	-	-	-	*	-	0.1	4.4
		All Targets	*	0.4	4.3	-	*	-	-	-	0	-	0.1	4.8
	2020	Pollock, Bottom	-	-	*	-	-	-	-	-	-	-	-	*
		Sablefish	-	1.0	0	-	-	-	-	-	0	-	*	1.0
		Pacific Cod	0	-	0.7	-	-	-	-	-	-	-	*	0.7
	All Gulf	All Targets	0	1.0	0.7	-	-	-	-	-	0	-	*	1.7
		Sablefish	-	1.9	0	*	-	-	-	-	0	-	*	1.9
		2019 Pacific Cod	0	*	7.5	*	*	-	-	-	*	-	0.2	7.7
	All Gulf	All Targets	0	1.9	7.5	*	*	-	-	-	0	-	0.2	9.6
		Pollock, Bottom	-	-	*	-	-	-	-	-	-	-	-	*
		2020 Sablefish	-	4.5	0	*	-	-	-	-	0	-	*	4.6
All Gulf	Pacific Cod	0	-	1.7	-	-	-	-	-	-	-	0	1.8	
	All Targets	0	4.6	1.7	*	-	-	-	-	0	-	0	6.4	
	Pollock, Bottom	8.3	0	0.6	1.7	0.2	0.1	0	0.3	0.3	0.1	0.1	11.6	
Trawl	Central Gulf	Pollock, Pelagic	78.0	0	0.1	0.1	0	*	0	0.2	0	0	78.4	
		Sablefish	*	0.1	0	*	*	*	0	*	0	-	*	0.2
		2019 Pacific Cod	*	*	0.1	0	0	*	-	0	*	-	0	0.1
	Central Gulf	Arrowtooth	1.2	0.2	1.0	19.7	1.8	0.9	0	0.7	1.4	0	0.7	27.7
		Flathead Sole	*	*	*	*	*	*	-	*	*	-	*	*
		Rex Sole	*	*	*	*	*	*	-	*	*	*	*	*
	Central Gulf	Flatfish, Shallow	0.1	0	0.2	0.2	0.1	0	*	1.0	0	0	0	1.7
		Rockfish	0.2	0.4	0.1	0.5	0	0.1	0	0	20.2	0.2	0	21.7
		All Targets	87.8	0.7	2.1	22.3	2.1	1.1	0	2.0	22.1	0.3	0.9	141.3
	2020	Pollock, Bottom	9.5	0	0.7	1.6	0.2	0.1	0	0.1	0.4	*	0.1	12.7
		Pollock, Pelagic	69.7	0	0.1	0.1	0	0	*	0	0.3	*	0	70.3
		Sablefish	0	0.2	0	0	0	0	*	-	0.1	-	0	0.3
2020	Pacific Cod	*	*	0	*	*	-	*	*	*	-	*	0	
	Arrowtooth	0.6	0.2	0.8	16.5	1.3	0.7	0	0.7	0.9	*	0.6	22.3	
	Rex Sole	*	*	*	*	*	*	-	*	*	*	-	*	
2020	Flatfish, Shallow	0	0	0.3	0.3	0.1	0	*	1.3	0	*	0.1	2.1	
	Rockfish	0.4	0.4	0.1	0.7	0	0.1	0	0	23.7	*	0	25.5	
	All Targets	80.2	0.8	2.0	19.3	1.6	0.9	0.1	2.1	25.4	*	0.8	133.1	

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Table 27: Continued

	Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Flathead Sole	Rex Sole	Flat Deep	Flat Shallow	Rockfish	Atka Mackerel	Other	All Species	
Trawl	Western Gulf	Pollock, Bottom	0.9	*	0	0	*	*	-	*	*	-	*	1.0
		Pollock, Pelagic	20.6	0	0	0.1	0	0	-	0	0	*	0	20.8
		2019 Pacific Cod	*	*	1.4	0	0	*	-	*	*	*	*	1.4
		Arrowtooth	*	*	*	*	*	*	*	*	*	*	*	*
		Flathead Sole	*	*	*	*	*	*	-	*	*	-	*	*
		Rockfish	0.2	0.2	0.2	0.1	0	0	*	0	4.2	0.6	0	5.6
		All Targets	21.7	0.3	1.6	0.2	0	0	*	0	4.2	0.6	0	28.7
		Pollock, Bottom	1.1	*	0	0	0	*	-	0	*	-	0	1.2
		2020 Pollock, Pelagic	17.7	0	0.1	0.1	0	0	-	0	0	*	0	17.9
		Rockfish	0.2	0.2	0	0	0.1	0	*	0	2.4	0.5	*	3.4
		All Targets	19.0	0.2	0.1	0.2	0.1	0	*	0	2.4	0.5	0	22.5

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Table 27: Continued

	Target	Pollock	Sablefish	Pacific Cod	Arrowtooth	Flathead Sole	Rex Sole	Flat Deep	Flat Shallow	Rockfish	Atka Mackerel	Other	All Species	
Trawl	All Gulf	Pollock, Bottom	9.2	0	0.6	1.7	0.2	0.1	0	0.3	0.3	0.1	0.1	12.5
		Pollock, Pelagic	107.7	0	0.1	0.2	0	0	*	0	0.4	0	0	108.4
		Sablefish	*	0.1	0	*	*	*	0	*	0	-	*	0.2
		2019 Pacific Cod	*	*	1.4	0	0	*	-	0	*	*	0	1.5
		Arrowtooth	1.2	0.2	1.0	19.7	1.8	0.9	0	0.7	1.4	0	0.7	27.7
		Flathead Sole	*	*	*	*	*	*	-	*	*	-	*	*
		Rex Sole	*	*	*	*	*	*	-	*	*	*	*	*
		Flatfish, Shallow	0.1	0	0.2	0.2	0.1	0	*	1.0	0	0	0	1.7
		Rockfish	0.4	0.6	0.3	0.6	0	0.1	0	0	24.4	0.8	0	27.3
		All Targets	118.7	1.0	3.7	22.5	2.1	1.1	0	2.0	26.5	0.9	0.9	179.3
		Pollock, Bottom	10.6	0	0.7	1.6	0.2	0.1	0	0.1	0.4	*	0.1	13.9
		Pollock, Pelagic	94.8	0	0.1	0.3	0	0	*	0	0.4	*	0	95.6
		Sablefish	0	0.2	0	0	0	0	*	-	0.1	-	0	0.3
		2020 Pacific Cod	*	*	0	*	*	-	*	*	*	-	*	0
		Arrowtooth	0.6	0.2	0.8	16.5	1.3	0.7	0	0.7	0.9	*	0.6	22.3
		Rex Sole	*	*	*	*	*	*	-	*	*	*	-	*
		Flatfish, Shallow	0	0	0.3	0.3	0.1	0	*	1.3	0	*	0.1	2.1
		Rockfish	0.5	0.5	0.1	0.7	0.1	0.2	0	0	26.1	0.5	0	28.8
		All Targets	106.6	1.0	2.1	19.5	1.7	1.0	0.1	2.1	27.9	0.5	0.8	163.1
		All Gear	Ctr. Gulf	2019 All Targets	87.8	4.3	6.6	22.3	2.1	1.1	0	2.0	22.4	0.3
2020 All Targets	80.2			4.5	3.4	19.3	1.6	0.9	0.1	2.1	25.6	*	0.8	138.5
West. Gulf	2019 All Targets		21.7	1.3	7.2	0.2	0	0	*	0	4.3	0.6	0.1	35.5
	2020 All Targets		19.0	1.4	1.1	0.2	0.1	0	*	0	2.4	0.5	0	24.6
All Gulf	2019 All Targets		118.7	10.7	14.2	22.5	2.1	1.1	0	2.0	27.4	0.9	1.1	200.8
	2020 All Targets		106.6	11.2	4.8	19.5	1.7	1.0	0.1	2.1	28.6	0.5	0.8	176.9

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 28: Gulf of Alaska ex-vessel prices in the groundfish fisheries by gear, and species, 2016-2020; calculations based on COAR (\$/lb, round weight).

	Year	Fixed	Trawl	All Gear
Pollock	2016	0.053	0.083	0.083
	2017	0.091	0.087	0.087
	2018	0.036	0.123	0.123
	2019	0.122	0.138	0.138
	2020	0.026	0.118	0.118
Pacific Cod	2016	0.302	0.269	0.294
	2017	0.335	0.328	0.333
	2018	0.457	0.411	0.446
	2019	0.504	0.456	0.492
	2020	0.424	0.358	0.394
Sablefish	2016	4.743	1.910	4.471
	2017	5.314	3.926	5.179
	2018	3.929	2.344	3.783
	2019	2.988	1.311	2.814
	2020	1.950	0.603	1.821
Atka Mackerel	2016	0.016	0.294	0.294
	2017	0.016	0.387	0.387
	2018	*	0.355	0.355
	2019	-	0.294	0.294
	2020	-	0.268	0.268
Arrowtooth	2016	0.105	0.085	0.085
	2017	0.088	0.108	0.108
	2018	0.245	0.102	0.102
	2019	0.060	0.073	0.073
	2020	0.016	0.067	0.067
Flathead Sole	2016	*	0.144	0.144
	2017	*	0.135	0.135
	2018	0.245	0.142	0.142
	2019	*	0.139	0.139
	2020	-	0.107	0.107
Rex Sole	2016	-	0.273	0.273
	2017	-	0.199	0.199
	2018	-	0.254	0.254
	2019	-	0.221	0.221
	2020	-	0.208	0.208
Shallow-water Flatfish	2016	0.105	0.142	0.142
	2017	0.088	0.158	0.158
	2018	0.245	0.160	0.160
	2019	-	0.155	0.155
	2020	*	0.116	0.116
Deep-water Flatfish	2016	0.105	0.098	0.098
	2017	0.088	0.110	0.110
	2018	*	0.108	0.108
	2019	*	0.101	0.101
	2020	0.016	0.135	0.135

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Table 28: Continued

	Year	Fixed	Trawl	All Gear
Pacific Ocean Perch	2016	0.010	0.186	0.186
	2017	0.440	0.178	0.178
	2018	1.174	0.192	0.192
	2019	0.415	0.196	0.196
	2020	0.291	0.128	0.128
Northern Rockfish	2016	0.627	0.171	0.171
	2017	0.747	0.172	0.172
	2018	0.843	0.180	0.180
	2019	*	0.187	0.187
	2020	*	0.129	0.129
Dusky Rockfish	2016	0.422	0.176	0.180
	2017	0.549	0.171	0.177
	2018	0.576	0.185	0.188
	2019	0.575	0.187	0.190
	2020	0.766	0.128	0.131
Other Rockfish	2016	0.788	0.200	0.397
	2017	0.850	0.195	0.443
	2018	0.906	0.186	0.449
	2019	0.823	0.190	0.442
	2020	0.657	0.144	0.363

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 wholesale 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 retained 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 29: Gulf of Alaska ex-vessel value of the groundfish catch by vessel category, gear, and species, 2016-2020; calculations based on COAR (\$ millions).

	Year	Central Gulf				Western Gulf				All Gulf			
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Pollock	2016	-	-	20.33	20.35	-	-	11.17	11.17	-	-	32.24	32.26
	2017	-	-	25.45	25.47	-	-	9.41	9.42	-	-	35.23	35.25
	2018	-	-	32.03	32.04	-	-	8.28	8.28	-	-	42.24	42.25
	2019	-	-	26.68	26.68	-	-	6.59	6.59	-	-	36.12	36.12
	2020	-	-	20.92	20.92	-	-	4.94	4.94	-	-	27.80	27.80
Pacific Cod	2016	3.41	13.77	4.57	21.75	2.70	11.34	4.41	18.45	6.85	25.11	8.98	40.95
	2017	2.82	8.41	3.86	15.09	3.15	11.16	5.49	19.80	6.32	19.57	9.35	35.24
	2018	1.55	3.16	1.93	6.63	1.34	4.59	1.33	7.25	3.29	7.74	3.26	14.29
	2019	1.69	3.60	2.18	7.47	1.36	4.84	1.59	7.79	3.54	8.44	3.77	15.74
	2020	0.39	0.95	1.74	3.08	0.18	0.71	0.11	1.00	0.91	1.66	1.85	4.42
Sablefish	2016	33.21	-	3.56	36.76	9.48	-	0.07	9.55	85.48	-	3.67	89.16
	2017	35.51	5.18	6.28	46.97	9.29	2.63	0.57	12.49	95.74	10.98	8.50	115.22
	2018	24.86	4.72	3.07	32.65	6.32	3.10	0.81	10.22	72.86	10.03	5.02	87.90
	2019	16.60	7.18	2.17	25.95	4.86	2.60	0.76	8.21	52.09	12.67	3.29	68.05
	2020	5.36	10.89	1.13	17.38	0.79	4.52	0.22	5.53	24.08	20.27	1.35	45.70
Atka Mackerel	2016	-	-	0.54	0.54	-	-	0.09	0.09	-	-	0.63	0.63
	2017	-	-	0.18	0.18	-	-	0.41	0.41	-	-	0.59	0.59
	2018	-	-	0.56	0.56	-	-	0.53	0.53	-	-	1.09	1.09
	2019	-	-	0.31	0.31	-	-	0.42	0.42	-	-	0.73	0.73
	2020	-	-	0	0	-	-	0.30	0.30	-	-	0.30	0.30
Arrowtooth	2016	0	-	3.27	3.28	0	-	0.13	0.13	0	-	3.41	3.41
	2017	0	-	5.91	5.91	0.01	-	0.03	0.03	0.01	-	5.94	5.95
	2018	0	-	3.67	3.67	0	-	0.20	0.20	0	-	3.88	3.88
	2019	0	-	3.67	3.67	0	-	0.07	0.07	0	-	3.75	3.76
	2020	*	-	2.89	2.89	0	-	0.03	0.03	0	-	2.92	2.92
Flathead Sole	2016	-	-	0.70	0.70	-	-	0.04	0.04	-	-	0.74	0.74
	2017	-	-	0.56	0.56	-	-	0.01	0.01	-	-	0.57	0.57
	2018	-	-	0.63	0.63	-	-	0.04	0.04	-	-	0.67	0.67
	2019	-	-	0.74	0.74	*	-	0.04	0.04	*	-	0.77	0.77
	2020	-	-	0.42	0.42	-	-	0.02	0.02	-	-	0.44	0.44

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Table 29: Continued

	Year	Central Gulf				Western Gulf				All Gulf			
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Rex Sole	2016	-	-	0.97	0.97	-	-	0.04	0.04	-	-	1.01	1.01
	2017	-	-	0.61	0.61	-	-	0.01	0.01	-	-	0.63	0.63
	2018	-	-	0.89	0.89	-	-	0.05	0.05	-	-	0.94	0.94
	2019	-	-	0.74	0.74	-	-	0.01	0.01	-	-	0.75	0.75
	2020	-	-	0.53	0.53	-	-	0.01	0.01	-	-	0.54	0.54
Shallow- water Flatfish	2016	*	-	1.12	1.12	-	-	0	0	*	-	1.12	1.12
	2017	-	-	0.71	0.71	*	-	0	0	*	-	0.72	0.72
	2018	-	-	0.88	0.88	*	-	0.01	0.01	*	-	0.89	0.89
	2019	-	-	0.86	0.86	-	-	0.01	0.01	-	-	0.87	0.87
	2020	*	-	1.06	1.06	-	-	0	0	*	-	1.06	1.06
Deep- water Flatfish	2016	*	-	0.02	0.02	*	-	0	0	*	-	0.02	0.02
	2017	*	-	0.02	0.02	0	-	0	0	0	-	0.02	0.02
	2018	*	-	0.02	0.02	*	-	0	0	*	-	0.02	0.02
	2019	-	-	0.01	0.01	*	-	0	0	*	-	0.01	0.01
	2020	*	-	0.02	0.02	*	-	*	*	*	-	0.02	0.02
Pacific Ocean Perch	2016	-	-	6.61	6.61	*	-	1.03	1.03	*	-	8.79	8.79
	2017	0	-	5.89	5.89	*	-	1.03	1.03	0	-	8.00	8.00
	2018	0	-	7.29	7.29	-	-	1.33	1.33	0	-	9.99	9.99
	2019	*	-	7.53	7.53	*	-	1.32	1.32	*	-	10.18	10.18
	2020	-	-	5.99	5.99	*	-	0.37	0.37	*	-	6.76	6.76
Northern Rockfish	2016	*	-	1.19	1.19	0	-	0.04	0.04	0	-	1.23	1.23
	2017	0	-	0.57	0.57	0	-	0.08	0.08	0	-	0.64	0.64
	2018	0	-	0.78	0.78	*	-	0.12	0.12	0	-	0.90	0.90
	2019	-	-	0.73	0.73	*	-	0.34	0.34	*	-	1.07	1.07
	2020	*	-	0.45	0.45	-	-	0.21	0.21	*	-	0.67	0.67

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Table 29: Continued

	Year	Central Gulf			Western Gulf				All Gulf				
		Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear	Hook And Line	Pot	Trawl	All Gear
Dusky Rockfish	2016	0.04	-	1.18	1.23	0	-	0.03	0.03	0.05	-	1.21	1.27
	2017	0.02	-	0.86	0.88	0.02	-	0.03	0.05	0.04	-	0.89	0.94
	2018	0.01	-	1.13	1.14	0.01	-	0.02	0.02	0.03	-	1.15	1.18
	2019	0.02	-	0.83	0.85	0.01	-	0.08	0.09	0.03	-	0.91	0.94
	2020	0.01	-	0.51	0.53	*	-	0.06	0.06	0.02	-	0.58	0.59
Other Rockfish	2016	0.57	-	0.71	1.28	0.18	-	0.07	0.25	1.72	-	0.86	2.59
	2017	0.56	-	0.55	1.12	0.20	-	0.05	0.24	1.80	-	0.68	2.49
	2018	0.56	-	0.58	1.14	0.15	-	0.07	0.22	2.03	-	0.73	2.77
	2019	0.40	-	0.42	0.83	0.13	-	0.07	0.20	1.71	-	0.60	2.32
	2020	0.19	-	0.25	0.45	0.03	-	0.03	0.06	1.09	-	0.33	1.45
Other Groundfish	2016	0.17	-	1.05	1.36	0.08	-	0.01	0.16	0.30	-	1.09	1.59
	2017	0.10	-	0.83	1.05	0.14	-	0.02	0.23	0.27	-	0.85	1.31
	2018	0.04	-	0.76	0.86	0.03	-	0.05	0.16	0.11	-	0.81	1.05
	2019	0.07	-	0.95	1.13	0.02	-	0.02	0.14	0.11	-	0.98	1.30
	2020	0.01	-	0.78	0.79	0	-	0.01	0.01	0.02	-	0.78	0.81

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 30: 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, 2016-2020; 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
Western Gulf Trawl	2016	40	16	428.44	17.14	9.61	3.18
	2017	42	15	407.88	17.13	8.54	2.24
	2018	36	12	355.95	12.81	7.92	2.41
	2019	35	10	323.27	11.31	8.21	1.92
	2020	33	10	190.86	6.30	6.92	1.94
Central Gulf Trawl	2016	63	17	727.30	45.82	25.68	8.50
	2017	58	13	901.66	52.30	26.07	6.85
	2018	61	14	889.06	54.23	33.53	10.21
	2019	62	16	771.38	47.83	34.69	8.12
	2020	62	15	591.88	36.70	40.31	11.32
CV Hook and Line	2016	99	31	32.95	3.26	1.83	0.61
	2017	85	34	35.74	3.04	1.51	0.40
	2018	69	27	39.69	2.74	1.69	0.52
	2019	73	30	32.20	2.35	1.71	0.40
	2020	27	18	20.69	0.56	0.61	0.17
CP Hook and Line	2016	11	11	292.58	3.22	1.80	0.60
	2017	9	9	478.93	4.31	2.15	0.56
	2018	3	3	460.40	1.38	0.85	0.26
	2019	3	3	554.33	1.66	1.21	0.28
Sablefish IFQ	2016	268	36	297.96	79.85	44.75	14.82
	2017	261	40	385.90	100.72	50.21	13.19
	2018	261	39	297.96	77.77	48.08	14.63
	2019	249	42	243.80	60.71	44.03	10.31
	2020	241	46	176.64	42.57	46.76	13.13
Pot	2016	119	26	215.28	25.62	14.36	4.75
	2017	110	26	179.75	19.77	9.86	2.59
	2018	58	21	135.68	7.87	4.87	1.48
	2019	59	16	146.60	8.65	6.27	1.47
	2020	38	17	49.20	1.87	2.05	0.58
Jig	2016	317	45	4.64	1.47	0.82	0.27
	2017	196	36	0.84	0.16	0.08	0.02
	2018	193	38	1.99	0.38	0.24	0.07
	2019	193	42	3.34	0.64	0.47	0.11
	2020	173	48	2.97	0.51	0.56	0.16

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 column "permits" is a count of federal groundfish processor permits. 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 31: Gulf of Alaska production of groundfish products by species, 2016-2020, (1,000 metric tons product weight).

	Product	2016	2017	2018	2019	2020
Pollock	Whole Fish	14.49	9.34	0.56	3.12	0.42
	Head And Gut	27.81	37.39	39.83	28.41	22.62
	Roe	0.54	1.09	2.39	1.89	1.55
	Deep-Skin	*	0.63	*	*	0.23
	Fillets					
	Other Fillets	14.32	15.09	13.08	8.80	7.60
	Surimi	13.41	10.61	9.77	6.95	5.43
	Minced Fish	1.25	1.44	0.98	0.84	1.80
	Fishmeal	1.39	*	1.11	*	*
	Other Products	1.92	2.46	1.34	1.07	0.30
	All Products	75.14	78.06	69.06	51.09	39.95
Pacific Cod	Whole Fish	0.25	0.14	0.25	0.26	0.03
	Head And Gut	8.43	6.11	1.92	3.02	1.15
	Salted/Split	-	-	-	-	*
	Roe	0.78	1.04	0.37	0.38	0.19
	Fillets	7.87	6.52	2.00	2.36	1.12
	Other Products	4.33	3.58	1.04	1.44	0.47
		All Products	21.65	17.39	5.58	7.47
Sablefish	Head And Gut	5.03	5.28	5.84	6.05	6.05
	Other Products	0.30	0.36	0.29	0.38	0.31
		All Products	5.34	5.64	6.13	6.43
Atka Mackerel	Whole Fish	*	*	0.08	-	-
	Head And Gut	0.45	0.37	0.73	0.63	0.25
	Other Products	*	*	*	*	*
		All Products	0.45	0.37	0.81	0.63
Arrowtooth	Whole Fish	1.09	3.22	2.28	2.04	1.97
	Head And Gut	7.05	11.28	6.24	8.97	7.31
	Kirimi	-	-	-	-	*
	Fillets	*	*	*	*	-
	Other Products	0.14	*	0.01	*	*
	All Products	8.28	14.50	8.53	11.01	9.28
Flathead Sole	Whole Fish	0.74	0.45	1.02	1.09	1.09
	Head And Gut	0.38	0.46	0.28	0.27	0.20
	Kirimi	*	*	*	*	*
	Fillets	*	*	*	*	*
	Other Products	*	*	*	*	*
		All Products	1.11	0.91	1.29	1.35

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Table 31: Continued

	Product	2016	2017	2018	2019	2020
Rex Sole	Whole Fish	1.43	1.27	1.55	1.44	1.04
	Head And Gut	0.07	0.01	0.04	0.01	*
	Kirimi	-	-	*	-	-
	Fillets	*	0.00	*	*	*
	Other Products	*	*	*	*	*
	All Products	1.51	1.28	1.59	1.46	1.04
Shallow-water Flatfish	Whole Fish	0.93	0.89	0.82	0.91	1.52
	Head And Gut	0.66	0.21	0.58	0.43	1.00
	Kirimi	*	*	*	*	*
	Fillets	0.02	*	*	*	*
	Other Products	*	*	*	*	*
	All Products	1.61	1.11	1.40	1.33	2.51
Deep-water Flatfish	Whole Fish	0.00	*	0.00	*	*
	Head And Gut	0.05	*	0.01	*	*
	Fillets	*	*	*	*	*
	Other Products	-	*	-	-	-
	All Products	0.05	*	0.02	*	*
Pacific Ocean Perch	Whole Fish	5.13	2.71	3.38	2.75	4.87
	Head And Gut	8.33	8.19	10.26	10.00	9.26
	Other Products	0.03	0.16	0.09	0.25	0.16
	All Products	13.49	11.06	13.73	13.01	14.29
Northern Rockfish	Whole Fish	0.02	0.00	0.01	*	*
	Head And Gut	1.42	0.83	1.23	1.39	1.26
	Other Products	0.08	0.01	0.00	0.00	0.00
	All Products	1.51	0.84	1.25	1.39	1.26
Dusky Rockfish	Whole Fish	0.22	0.28	0.06	0.14	0.32
	Head And Gut	1.36	0.97	1.42	1.17	0.88
	Other Products	0.07	0.07	0.02	0.01	0.02
	All Products	1.65	1.31	1.50	1.32	1.22

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Table 31: Continued

	Product	2016	2017	2018	2019	2020
Other Rockfish	Whole Fish	0.61	0.54	0.62	0.45	0.31
	Head And Gut	0.71	0.68	0.76	0.58	0.42
	Other Products	0.13	0.13	0.09	0.09	0.09
	All Products	1.45	1.34	1.46	1.12	0.82
Other Groundfish	Whole Fish	0.04	0.01	0.01	0.23	0.04
	Head And Gut	0.06	0.07	0.02	0.05	0.01
	Kirimi	-	*	-	-	-
	Fillets	-	-	*	-	-
	Fishmeal	*	*	*	*	*
	Other Products	0.49	0.35	0.32	0.40	0.31
	All Products	0.59	0.43	0.36	0.68	0.36
All Species	Whole Fish	24.94	18.84	10.64	12.43	11.60
	Head And Gut	61.82	71.85	69.16	60.97	50.42
	Salted/Split	-	-	-	-	*
	Kirimi	*	*	*	*	*
	Roe	1.32	2.13	2.76	2.27	1.74
	Fillets	7.89	6.53	2.00	2.36	1.12
	Deep-Skin Fillets	*	0.63	*	*	0.23
	Other Fillets	14.32	15.09	13.08	8.80	7.60
	Surimi	13.41	10.61	9.77	6.95	5.43
	Minced Fish	1.25	1.44	0.98	0.84	1.80
	Fishmeal	1.39	*	1.11	*	*
	Other Products	7.49	7.11	3.20	3.65	1.66
	All Products	133.84	134.23	112.71	98.28	81.61

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 32: Gulf of Alaska gross value of groundfish products by species, 2016-2020, (\$ million).

	Product	2016	2017	2018	2019	2020
Pollock	Whole Fish	7.0	5.7	0.5	1.9	0.3
	Head And Gut	23.3	30.1	36.2	32.6	26.0
	Roe	1.7	4.3	9.7	5.9	3.7
	Deep-Skin	*	2.1	*	*	0.8
	Fillets					
	Other Fillets	39.8	32.9	33.6	26.9	23.3
	Surimi	28.7	17.7	20.7	16.6	12.7
	Minced Fish	1.5	1.5	1.3	1.4	3.4
	Fishmeal	2.2	*	1.5	*	*
	Other Products	2.2	2.5	1.4	0.7	0.3
All Products	106.4	96.7	104.9	85.9	70.6	
Pacific Cod	Whole Fish	0.5	0.2	0.5	0.8	0.0
	Head And Gut	22.7	20.3	8.6	8.5	3.5
	Salted/Split	-	-	-	-	*
	Roe	1.3	1.6	1.1	0.9	0.4
	Fillets	57.3	45.3	19.2	21.5	10.2
	Other Products	9.9	8.0	2.6	3.5	0.9
	All Products	91.8	75.5	31.9	35.2	15.1
Sablefish	Head And Gut	91.6	108.2	88.0	66.1	51.2
	Other Products	2.4	3.1	1.9	5.0	3.6
	All Products	94.1	111.3	89.9	71.2	54.8
Atka Mackerel	Whole Fish	*	*	0.2	-	-
	Head And Gut	1.2	1.2	2.3	1.6	0.6
	Other Products	*	*	*	*	*
	All Products	1.2	1.2	2.5	1.6	0.6
Arrowtooth	Whole Fish	1.1	4.9	1.5	0.8	1.6
	Head And Gut	12.1	26.7	9.3	11.0	7.8
	Kirimi	-	-	-	-	*
	Fillets	*	*	*	*	-
	Other Products	0.1	*	0.0	*	*
	All Products	13.3	31.5	10.8	11.7	9.4
Flathead Sole	Whole Fish	0.8	0.6	1.2	0.9	0.9
	Head And Gut	0.7	0.7	0.6	0.5	0.2
	Kirimi	*	*	*	*	*
	Fillets	*	*	*	*	*
	Other Products	*	*	*	*	*
	All Products	1.5	1.3	1.8	1.4	1.1

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Table 32: Continued

	Product	2016	2017	2018	2019	2020
Rex Sole	Whole Fish	3.2	2.8	3.3	3.1	1.4
	Head And Gut	0.2	0.0	0.1	0.0	*
	Kirimi	-	-	*	-	-
	Fillets	*	0.0	*	*	*
	Other Products	*	*	*	*	*
	All Products	3.4	2.8	3.4	3.2	1.4
Shallow-water Flatfish	Whole Fish	1.1	1.2	1.1	0.9	1.5
	Head And Gut	1.5	0.3	1.2	0.9	1.1
	Kirimi	*	*	*	*	*
	Fillets	0.1	*	*	*	*
	Other Products	*	*	*	*	*
	All Products	2.7	1.5	2.3	1.8	2.6
Deep-water Flatfish	Whole Fish	0.0	*	0.0	*	*
	Head And Gut	0.1	*	0.0	*	*
	Fillets	*	*	*	*	*
	Other Products	-	*	-	-	-
	All Products	0.1	*	0.0	*	*
Pacific Ocean Perch	Whole Fish	7.4	3.3	4.0	2.8	4.7
	Head And Gut	17.0	24.1	27.7	19.1	15.9
	Other Products	0.2	0.8	0.4	1.9	1.6
	All Products	24.6	28.1	32.1	23.8	22.2
Northern Rockfish	Whole Fish	0.0	0.0	0.0	*	*
	Head And Gut	4.1	1.8	2.8	2.5	1.7
	Other Products	0.5	0.1	0.0	0.0	0.0
	All Products	4.6	1.9	2.8	2.5	1.7
Dusky Rockfish	Whole Fish	0.4	0.4	0.1	0.2	0.5
	Head And Gut	3.9	2.1	3.6	2.3	1.5
	Other Products	0.5	0.5	0.1	0.1	0.2
	All Products	4.8	3.0	3.8	2.6	2.2

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Table 32: Continued

	Product	2016	2017	2018	2019	2020
Other Rockfish	Whole Fish	2.3	2.4	2.5	1.8	1.1
	Head And Gut	2.9	3.0	3.2	1.9	1.3
	Other Products	0.8	0.8	1.0	1.1	0.7
	All Products	6.0	6.2	6.7	4.8	3.1
Other Groundfish	Whole Fish	0.1	0.0	0.0	0.8	0.1
	Head And Gut	0.2	0.2	0.1	0.2	0.0
	Kirimi	-	*	-	-	-
	Filletts	-	-	*	-	-
	Fishmeal	*	*	*	*	*
	Other Products	2.9	1.7	1.4	1.7	1.3
	All Products	3.2	1.9	1.5	2.7	1.4
All Species	Whole Fish	24.0	21.4	14.9	14.0	12.2
	Head And Gut	181.6	218.9	183.6	147.3	110.8
	Salted/Split	-	-	-	-	*
	Kirimi	*	*	*	*	*
	Roe	3.0	5.9	10.7	6.8	4.1
	Filletts	57.4	45.3	19.2	21.5	10.2
	Deep-Skin Filletts	*	2.1	*	*	0.8
	Other Filletts	39.8	32.9	33.6	26.9	23.3
	Surimi	28.7	17.7	20.7	16.6	12.7
	Minced Fish	1.5	1.5	1.3	1.4	3.4
	Fishmeal	2.2	*	1.5	*	*
	Other Products	19.5	17.4	8.8	13.9	8.5
	All Products	357.8	363.0	294.4	248.3	186.1

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.

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 price per pound of groundfish products by species, 2016-2020, (\$/lb).

	Product	2016	2017	2018	2019	2020
Pollock	Whole Fish	0.22	0.28	0.37	0.27	0.32
	Head And Gut	0.38	0.36	0.41	0.52	0.52
	Roe	1.39	1.80	1.83	1.42	1.08
	Deep-Skin	*	1.49	*	*	1.61
	Fillets					
	Other Fillets	1.26	0.99	1.16	1.39	1.39
	Surimi	0.97	0.76	0.96	1.08	1.07
	Minced Fish	0.53	0.46	0.61	0.75	0.87
	Fishmeal	0.71	*	0.62	*	*
	Other Products	0.51	0.45	0.49	0.28	0.40
All Products	0.64	0.56	0.69	0.76	0.80	
Pacific Cod	Whole Fish	0.95	0.81	0.86	1.42	0.59
	Head And Gut	1.22	1.51	2.04	1.28	1.39
	Roe	0.78	0.68	1.28	1.04	0.99
	Fillets	3.30	3.15	4.35	4.12	4.10
	Other Products	1.04	1.02	1.12	1.09	0.88
	All Products	1.92	1.97	2.59	2.14	2.30
Sablefish	Head And Gut	8.26	9.30	6.83	4.96	3.83
	Other Products	3.64	3.92	2.99	5.94	5.28
	All Products	7.99	8.95	6.65	5.02	3.90
Atka Mackerel	Whole Fish	*	*	0.97	-	-
	Head And Gut	1.21	1.47	1.42	1.17	1.10
Mackerel	Other Products	*	*	*	*	*
	All Products	1.21	1.47	1.38	1.17	1.10
Arrowtooth	Whole Fish	0.46	0.69	0.30	0.17	0.37
	Head And Gut	0.78	1.07	0.67	0.55	0.48
	Fillets	*	*	*	*	-
	Other Products	0.45	*	0.38	*	*
	All Products	0.73	0.99	0.57	0.48	0.46
Flathead Sole	Whole Fish	0.49	0.59	0.53	0.39	0.38
	Head And Gut	0.86	0.74	0.95	0.87	0.50
	Fillets	*	*	*	*	*
	Other Products	*	*	*	*	*
	All Products	0.62	0.67	0.62	0.49	0.40
Rex Sole	Whole Fish	1.01	0.99	0.97	0.98	0.63
	Head And Gut	1.33	1.45	1.35	1.44	*
	Fillets	*	0.34	*	*	*
	Other Products	*	*	*	*	*
	All Products	1.02	0.99	0.98	0.98	0.63
Shallow-water Flatfish	Whole Fish	0.55	0.61	0.61	0.44	0.43
	Head And Gut	1.03	0.68	0.90	0.93	0.51
	Fillets	2.08	*	*	*	*
	Other Products	*	*	*	*	*
	All Products	0.77	0.63	0.73	0.60	0.47

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Table 33: Continued

	Product	2016	2017	2018	2019	2020
Deep-water Flatfish	Whole Fish	0.50	*	0.45	*	*
	Head And Gut	0.73	*	0.39	*	*
	Fillets	*	*	*	*	*
	Other Products	-	*	-	-	-
	All Products	0.72	*	0.40	*	*
Pacific Ocean Perch	Whole Fish	0.65	0.55	0.54	0.46	0.44
	Head And Gut	0.93	1.33	1.22	0.87	0.78
	Other Products	2.70	2.18	2.02	3.36	4.29
	All Products	0.83	1.15	1.06	0.83	0.70
Northern Rockfish	Whole Fish	0.72	0.76	0.42	*	*
	Head And Gut	1.32	1.01	1.04	0.83	0.63
	Other Products	2.82	2.11	1.96	2.81	2.44
	All Products	1.38	1.03	1.03	0.83	0.63
Dusky Rockfish	Whole Fish	0.87	0.62	0.72	0.77	0.71
	Head And Gut	1.30	1.00	1.14	0.88	0.77
	Other Products	3.08	2.98	2.48	3.04	4.87
	All Products	1.31	1.02	1.15	0.88	0.82
Other Rockfish	Whole Fish	1.72	1.98	1.86	1.80	1.66
	Head And Gut	1.85	2.01	1.93	1.50	1.35
	Other Products	2.87	2.91	4.76	5.41	3.61
	All Products	1.89	2.08	2.08	1.95	1.71
Other Groundfish	Whole Fish	1.26	2.19	0.94	1.66	0.92
	Head And Gut	1.61	1.41	1.84	1.79	0.79
	Fillets	-	-	*	-	-
	Fishmeal	*	*	*	*	*
	Other Products	2.71	2.18	2.01	1.89	1.89
All Products	2.50	2.06	1.96	1.81	1.76	

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 34: Gulf of Alaska total product value per round metric ton of retained catch by species and year, 2016-2020, (\$/mt).

Species	2016	2017	2018	2019	2020
Pollock	616	542	684	735	664
Sablefish	10,363	11,032	8,526	6,488	4,801
Pacific Cod	1,452	1,571	2,194	2,421	2,957
Flatfish	863	1,233	795	641	557
Rockfish	1,297	1,451	1,443	1,091	963
Atka Mackerel	1,243	1,734	1,785	1,443	1,167
Other	1,907	1,496	1,440	2,085	1,669

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 35: 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, 2016-2020, (\$ millions).

	Year	Processors	Wholesale Value (\$million)	Wholesale Value Per Processor (\$1,000)	Percent Value, GOA FMP Groundfish
Central and Western Gulf Trawl	2016	15	33.46	2,230.49	7.36
	2017	11	50.35	4,576.89	10.96
	2018	9	34.64	3,849.20	8.30
	2019	11	28.78	2,616.46	7.88
	2020	9	20.97	2,330.19	9.49
CP Hook and Line	2016	12	7.47	622.09	1.64
	2017	11	10.22	929.25	2.22
	2018	7	2.94	420.58	0.71
	2019	7	2.46	351.83	0.67
	2020	4	0.08	19.50	0.04
Sablefish IFQ	2016	5	4.48	895.40	0.99
	2017	6	5.38	896.88	1.17
	2018	5	4.35	870.40	1.04
	2019	7	3.89	555.68	1.06
	2020	5	2.13	426.96	0.97
Motherships & Inshore Floating Procs.	2016	5	116.70	23,339.44	25.68
	2017	5	114.39	22,878.90	24.90
	2018	3	113.17	37,724.78	27.12
	2019	3	106.14	35,379.37	29.04
	2020	3	26.10	8,701.65	11.82
Kodiak Shoreside Procs.	2016	8	145.15	18,143.79	31.94
	2017	8	139.67	17,458.44	30.40
	2018	8	138.62	17,328.11	33.22
	2019	6	110.54	18,423.03	30.25
	2020	7	97.80	13,971.22	44.27
Southcentral Gulf Shoreside Procs.	2016	12	38.33	3,194.44	8.43
	2017	10	39.29	3,929.12	8.55
	2018	11	29.05	2,640.61	6.96
	2019	10	23.91	2,391.07	6.54
	2020	9	14.54	1,615.10	6.58
Southeastern Gulf Shoreside Procs.	2016	11	33.46	3,041.43	7.36
	2017	14	40.24	2,874.21	8.76
	2018	14	34.41	2,458.15	8.25
	2019	16	26.43	1,652.10	7.23
	2020	14	20.37	1,455.09	9.22
Western Gulf Shoreside Procs.	2016	3	75.43	25,144.97	16.60
	2017	3	59.88	19,959.23	13.03
	2018	2	*	*	*
	2019	3	63.28	21,092.43	17.32
	2020	4	38.91	9,727.17	17.61

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 36: 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, 2016-2020.

	Year	Vessels	Average Length (feet)	Median Length (feet)	Average Capacity (tons)	Median Capacity (tons)
Central and Western Gulf Trawl	2016	84	87	88	111	103.0
	2017	79	90	88	122	112.0
	2018	78	89	88	114	105.0
	2019	76	89	88	128	115.0
	2020	70	90	87	134	115.0
CV Hook and Line	2016	58	44	42	28	24.0
	2017	49	43	42	26	24.0
	2018	33	44	42	27	24.0
	2019	32	44	42	26	24.0
	2020	2	47	47	20	19.5
CP Hook and Line	2016	10	141	128	290	133.0
	2017	10	141	128	344	133.0
	2018	3	101	119	245	153.0
	2019	2	135	119	262	133.0
Sablefish IFQ	2016	265	57	57	48	37.0
	2017	259	57	57	48	36.0
	2018	261	57	57	48	39.0
	2019	252	57	57	48	36.0
	2020	240	57	57	50	39.0
Pot	2016	118	60	58	57	48.0
	2017	108	61	58	57	48.0
	2018	58	66	58	62	51.0
	2019	59	66	58	66	51.0
	2020	38	52	55	43	41.0
Jig	2016	305	41	41	17	16.0
	2017	186	39	40	15	14.0
	2018	182	39	40	14	12.0
	2019	188	40	41	15	15.0
	2020	162	40	40	15	14.0
No Fleet/Other	2016	14	47	48	23	24.0
	2017	8	41	38	15	11.0
	2018	8	39	35	14	10.0
	2019	8	43	40	14	11.0
	2020	4	39	40	16	16.0

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

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

Table 37: Gulf of Alaska number of vessels that caught groundfish by month, vessel type, and gear, 2017-2021.

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year		
Catcher Vessels	Hook & Line	2017	58	91	130	199	179	149	137	99	136	120	69	24	448	
		2018	12	53	104	125	185	135	126	146	190	118	110	19	433	
		2019	32	61	148	173	152	135	125	131	116	114	74	11	423	
		2020	6	19	90	98	149	103	95	115	116	117	39	5	350	
	Pot	2017	74	86	89	91	16	11	9	5	11	18	15	8	127	
		2018	24	30	46	10	14	11	5	6	16	14	13	5	78	
		2019	24	24	39	15	18	13	4	7	22	25	18	3	88	
		2020	-	8	37	22	35	28	20	33	55	62	36	3	137	
		2021	-	-	-	-	-	-	-	-	-	-	-	1	1	
	Trawl	2017	37	45	61	42	21	17	5	4	53	60	35	1	68	
		2018	12	53	51	25	19	14	2	35	59	61	28	2	69	
		2019	32	47	50	25	25	22	1	20	47	50	21	-	65	
		2020	28	37	43	19	24	16	4	33	44	51	11	-	61	
	All Gear	2017	169	218	264	328	213	175	149	107	199	193	118	33	599	
		2018	48	136	193	158	217	158	133	185	264	192	148	26	547	
		2019	88	132	229	209	193	168	129	157	183	185	111	14	539	
		2020	34	64	165	134	197	140	112	170	191	199	75	8	473	
		2021	-	-	-	-	-	-	-	-	-	-	-	1	1	
	Catcher Processors	Hook & Line	2017	-	3	7	7	3	2	3	1	6	3	1	1	11
			2018	-	2	5	3	1	2	1	1	3	-	1	-	7
2019			-	1	1	1	2	2	2	1	4	2	2	-	8	
2020			-	-	1	1	2	1	-	1	1	-	-	-	4	
Pot		2020	-	-	-	-	-	-	-	-	-	1	1	-	1	
Trawl		2017	-	1	2	2	2	4	10	6	4	4	2	1	11	
		2018	-	-	1	2	1	5	8	4	4	1	1	1	9	
		2019	-	-	1	1	1	3	6	6	5	4	2	1	11	
		2020	-	-	1	3	2	4	7	5	2	1	1	-	9	
All Gear		2017	-	4	9	9	5	6	13	7	10	7	3	2	22	
		2018	-	2	6	5	2	7	9	5	7	1	2	1	16	
		2019	-	1	2	2	3	5	8	7	9	6	4	1	19	
		2020	-	-	2	4	4	5	7	6	3	2	2	-	14	

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

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

Table 38: Gulf of Alaska catcher vessel (excluding catcher/processors) weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2017-2021.

	Year	Hook & Line		Pot		Trawl		All Gear	
		<60ft	60-124ft	<60ft	60-124ft	<60ft	60-124ft	<60ft	60-124ft
Pollock	2017	-	-	-	-	180	526	180	526
	2018	-	-	-	-	187	487	187	487
	2019	-	-	-	-	142	389	142	389
	2020	-	-	-	-	144	422	144	422
Sablefish	2017	1,312	274	129	45	-	9	1,441	328
	2018	1,461	287	134	57	-	18	1,595	362
	2019	1,318	298	198	62	-	12	1,516	372
	2020	1,002	164	466	202	1	10	1,469	376
Pacific Cod	2017	572	-	880	209	109	58	1,561	267
	2018	373	1	190	93	29	3	592	97
	2019	392	1	171	80	41	7	604	88
	2020	256	-	79	5	-	2	335	7
	2021	-	-	1	-	-	-	1	-
Flatfish	2017	-	-	-	-	-	102	-	102
	2018	-	-	-	-	26	136	26	136
	2019	-	-	-	-	17	165	17	165
	2020	-	-	-	-	2	150	2	150
Rockfish	2017	655	2	-	-	7	90	662	92
	2018	521	7	-	-	5	98	526	105
	2019	466	1	-	-	6	113	472	114
	2020	387	-	-	-	6	112	393	112
Atka Mackerel	2018	-	-	-	-	-	0	-	0
All Groundfish	2017	2,547	276	-	-	297	786	3,853	1,317
	2018	2,366	295	-	-	247	742	2,940	1,187
	2019	2,180	299	-	-	207	686	2,756	1,127
	2020	1,652	164	-	-	152	696	2,350	1,067
	2021	-	-	-	-	-	-	1	-

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.

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

Table 39: Gulf of Alaska catcher/processor vessel weeks of fishing groundfish by vessel-length class (feet), gear, and target, 2016-2020.

	Year	Hook & Line			Trawl			All Gear			
		<60ft	60-124ft	125-230ft	60-124ft	125-230ft	>230ft	<60ft	60-124ft	125-230ft	>230ft
Pollock	2018	-	-	-	0	0	-	-	0	0	-
	2020	-	-	-	-	0	-	-	-	0	-
Sablefish	2016	9	-	17	-	-	-	9	-	17	-
	2017	9	-	20	-	-	-	9	-	20	-
	2018	10	-	21	0	-	-	10	0	21	-
	2019	8	-	23	0	-	-	8	0	23	-
	2020	9	-	11	-	-	-	9	-	18	-
Pacific Cod	2016	0	17	27	2	-	-	0	19	27	-
	2017	-	23	24	1	-	-	-	24	24	-
	2018	7	7	1	-	-	-	7	7	1	-
	2019	1	6	3	-	-	-	1	6	3	-
Flatfish	2016	-	-	-	41	8	-	-	41	8	-
	2017	-	-	-	62	16	-	-	62	16	-
	2018	-	-	-	34	4	-	-	34	4	-
	2019	-	-	-	45	10	-	-	45	10	-
	2020	-	-	-	28	10	3	-	28	10	3
Rockfish	2016	-	-	-	4	33	2	-	4	33	2
	2017	-	-	0	5	32	0	-	5	32	0
	2018	-	-	-	7	35	-	-	7	35	-
	2019	-	-	-	5	34	1	-	5	34	1
	2020	-	-	-	1	33	4	-	1	33	4
Atka Mackerel	2017	-	-	-	1	-	-	-	1	-	-
	2018	-	-	-	0	0	-	-	0	0	-
All Groundfish	2016	9	17	45	48	41	2	9	65	86	2
	2017	9	24	44	69	48	0	9	92	92	0
	2018	17	7	22	42	40	-	17	48	62	-
	2019	9	6	25	50	44	1	9	56	69	1
	2020	9	-	11	29	43	7	9	29	61	7

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.

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

Table 40: Gulf of Alaska catcher vessel crew weeks in the groundfish fisheries by month, 2016-2020.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2016	1,692	2,318	2,506	3,065	1,982	1,021	635	903	1,736	2,298	642	371	19,168
2017	1,500	2,191	2,262	2,556	1,486	1,185	598	616	1,682	1,858	648	228	16,810
2018	352	1,144	1,378	1,323	1,721	1,270	494	808	2,240	1,842	926	156	13,654
2019	428	1,055	1,492	1,394	1,642	1,209	442	924	1,456	1,712	729	72	12,556
2020	116	640	1,018	970	1,525	846	458	911	1,395	1,999	512	34	10,424

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 41: Gulf of Alaska at-sea processor vessel crew weeks in the groundfish fisheries by month, 2016-2020.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2016	*	107	98	321	215	307	1,221	501	254	227	153	190	3,594
2017	-	113	463	262	135	317	1,116	615	592	297	156	*	4,066
2018	-	*	146	194	116	490	877	408	247	*	*	*	2,478
2019	-	*	*	*	134	332	604	556	526	346	312	*	2,810
2020	-	-	*	203	318	571	670	429	86	*	*	-	2,277

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.

5. ECONOMIC PERFORMANCE INDICES FOR THE NORTH PACIFIC GROUND FISH 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 (such as a change in TAC), 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). Figure 5.1 displays the ex-vessel and first-wholesale values for the BSAI and GOA at-sea and shoreside sectors. 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 the composition of species within product types and the composition of product type for a given species, and in the ex-vessel market, they show composition of species harvested by a given gear type and the composition of gear types used to harvest a 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 2018 as the base year for the index. All calculations and statistics are made using nominal U.S. dollars (i.e., not adjusted for inflation).¹ 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 $(year - on - year\ growth\ rate) * (share\ weight) = (I_{i,t}/I_{i,t-1} - 1) * \tilde{w}(i,t)$ where $I_{i,t}$ is the level of the index and $\tilde{w}(i,t) = \frac{p_{i,t} * q_{i,t}}{\sum_j p_{j,t} * q_{j,t}}$ is the year t value share and i, j enumerates species, products, or gear types depending on the index. 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.

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.

5.2. Economic Indices of the Groundfish Fisheries off Alaska

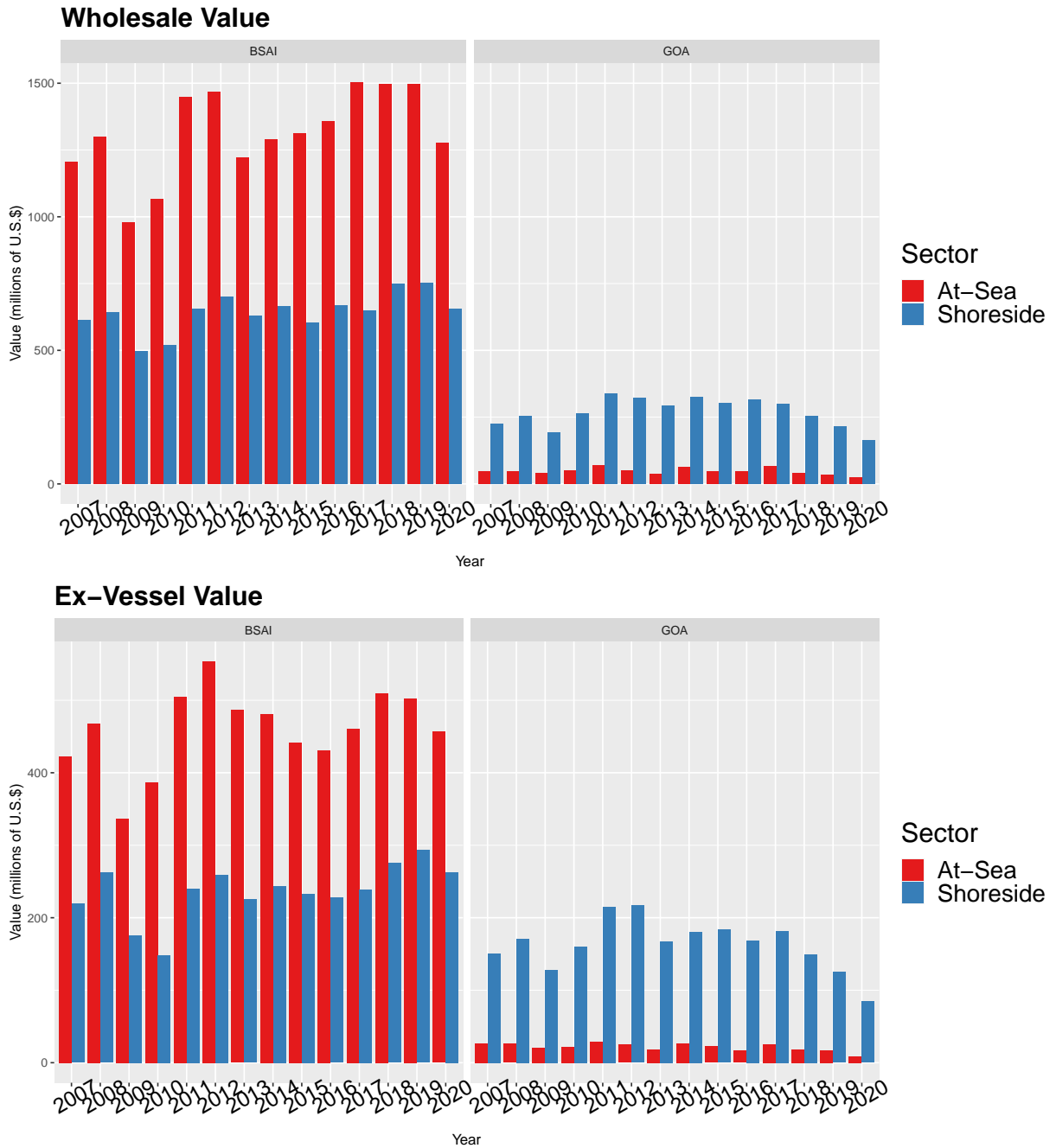


Figure 5.1: Wholesale and ex-vessel value by region and sector 2007-2020.

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.

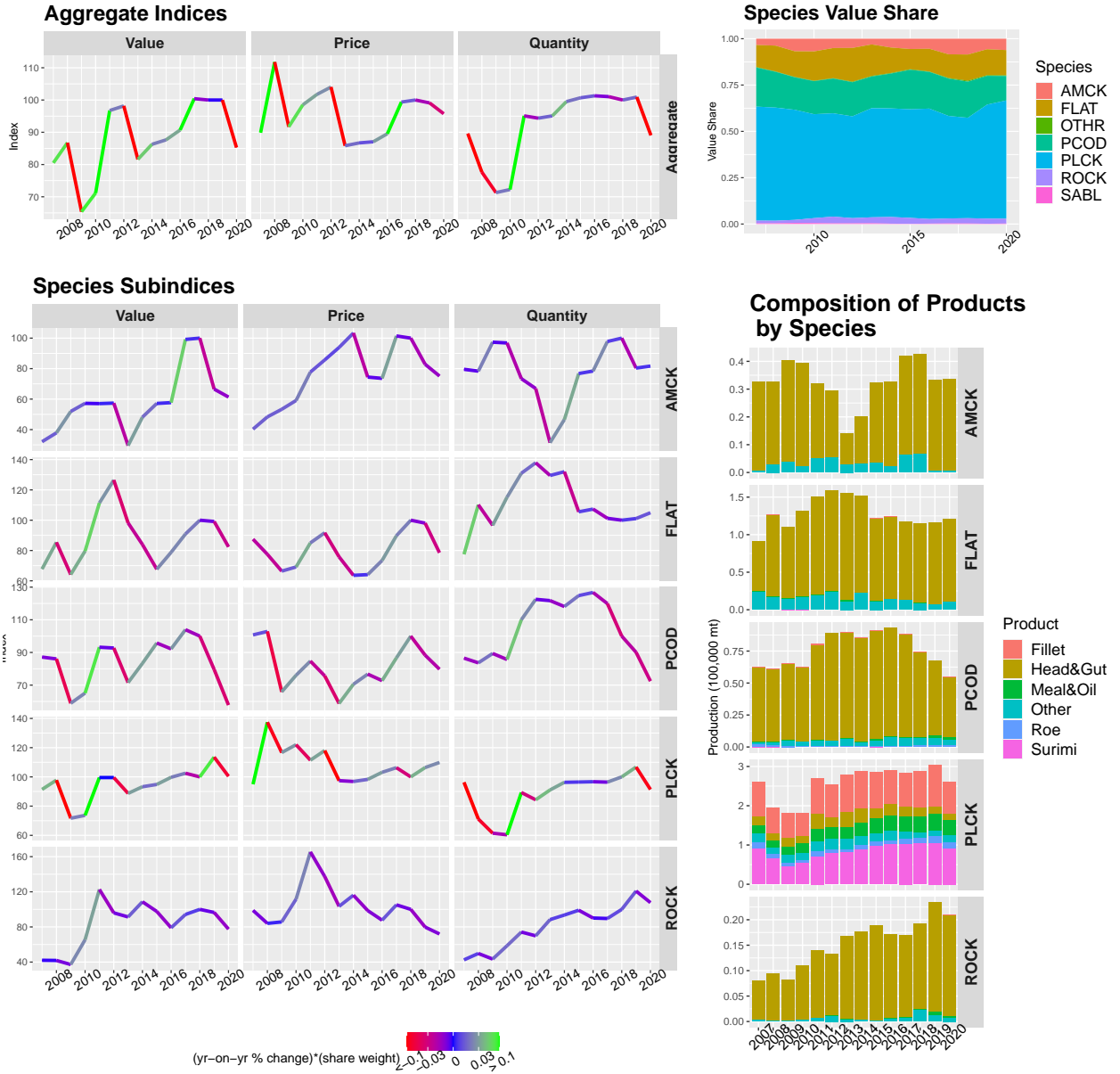


Figure 5.2: BSAI at-sea wholesale market: species decomposition 2007-2020 (Index 2018 = 100). **Notes:** Index values for 2015-2020, notes and source information for the indices are on Table 5.1. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

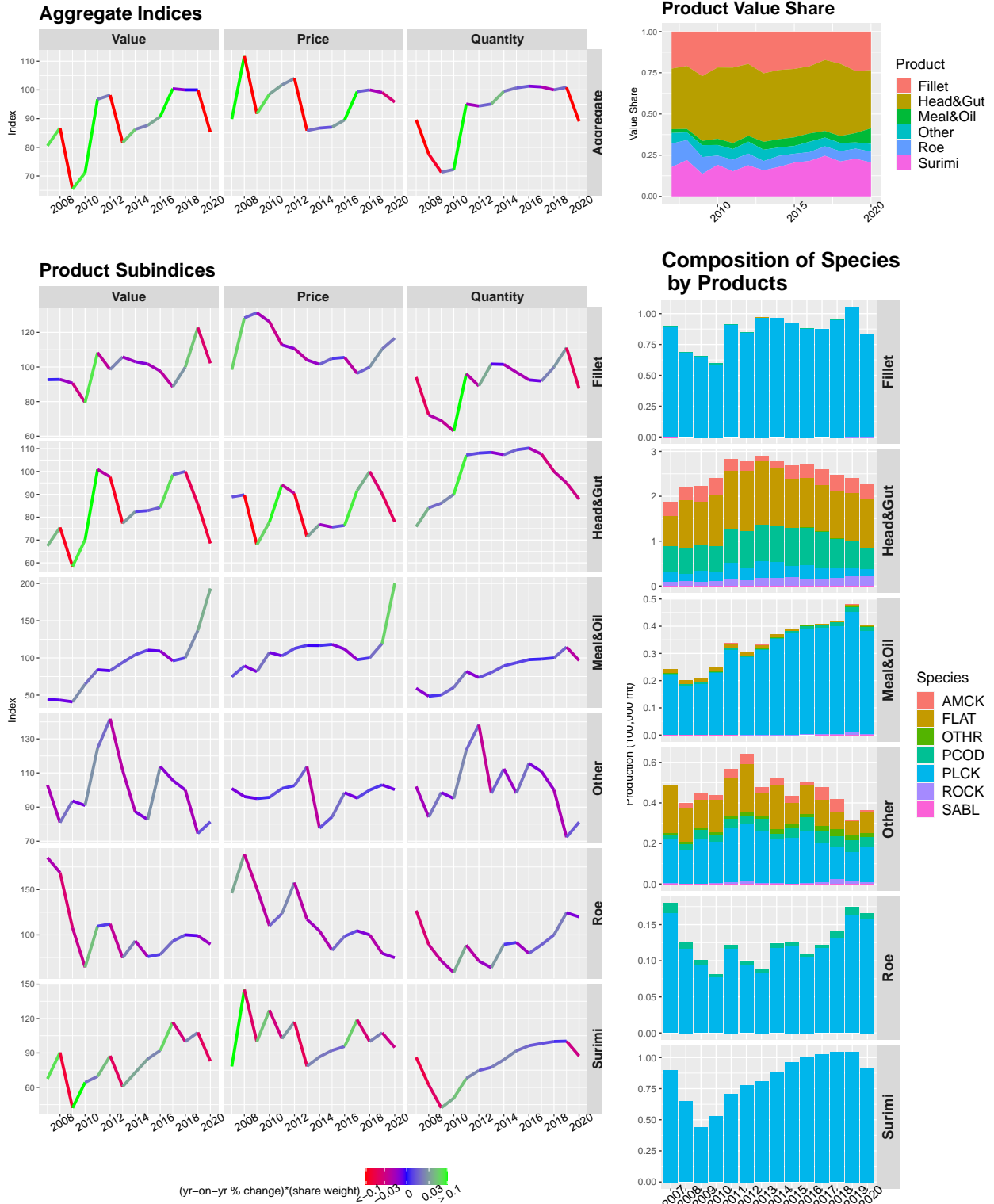


Figure 5.3: BSAI at-sea wholesale market: product decomposition 2007-2020 (Index 2018 = 100). **Notes:** Index values for 2015-2020, notes and source information for the indices are on Table 5.2. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

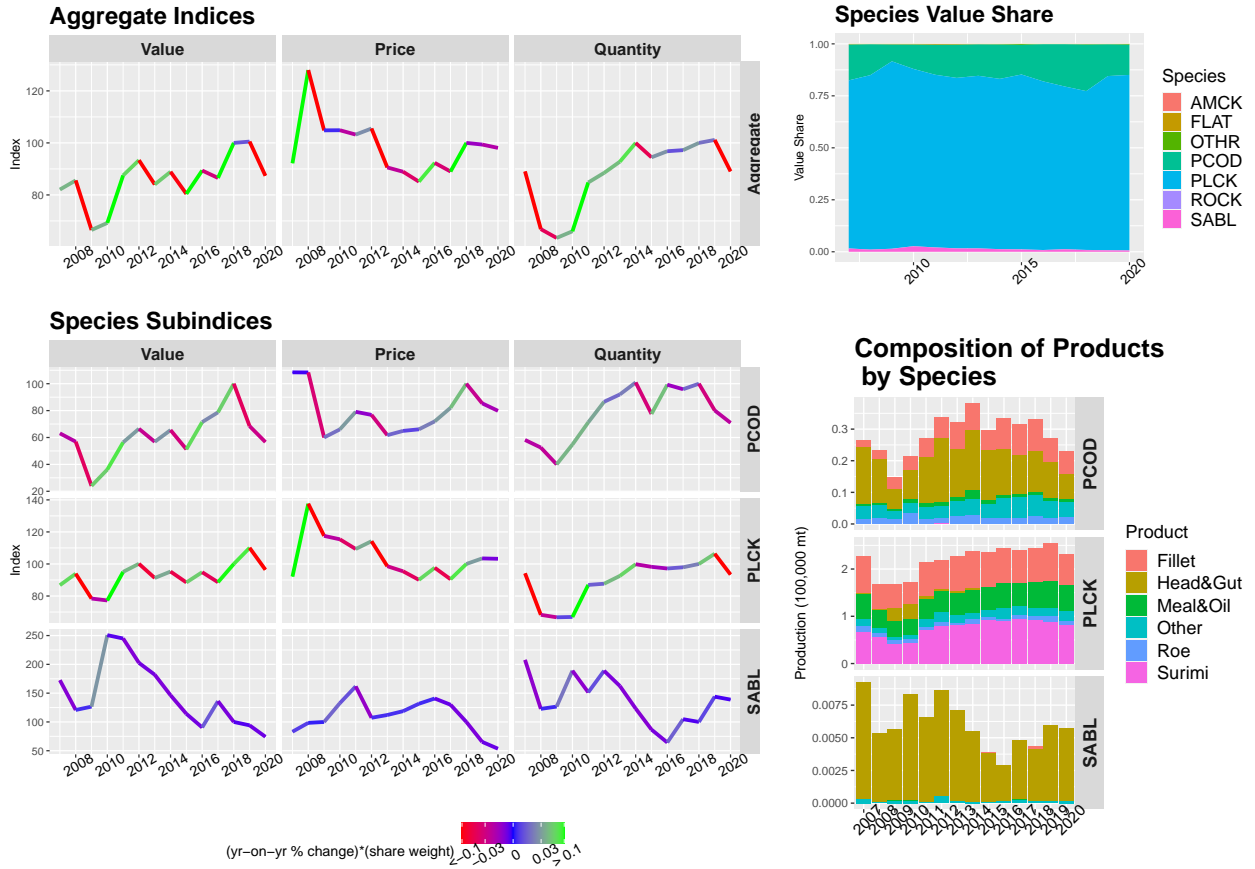


Figure 5.4: BSAI shoreside wholesale market: species decomposition 2007-2020 (Index 2018 = 100). **Notes:** Index values for 2015-2020, notes and source information for the indices are on Table 5.3. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

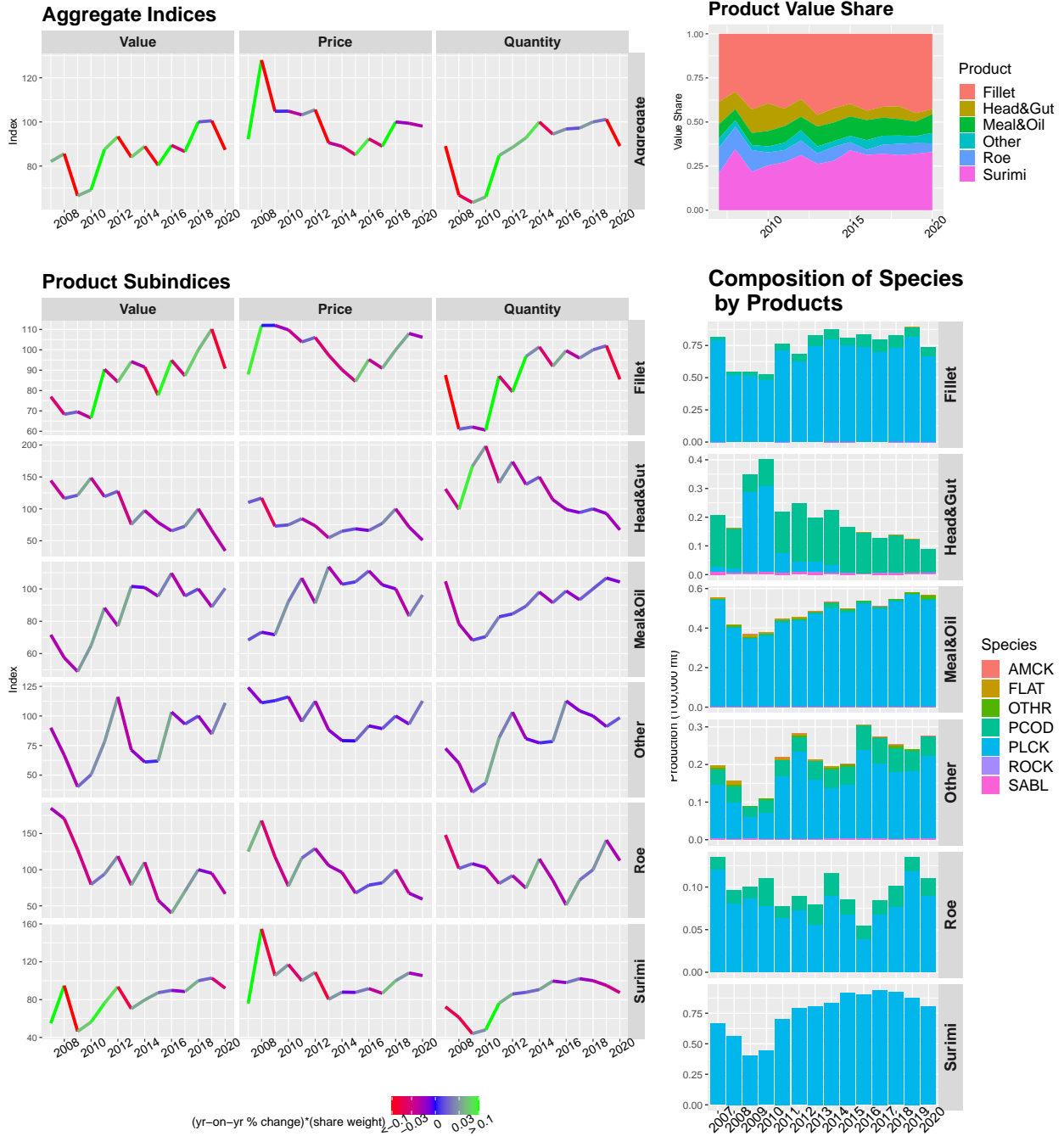


Figure 5.5: BSAI shoreside wholesale market: product decomposition 2007-2020 (Index 2018 = 100). **Notes:** Index values for 2015-2020, notes and source information for the indices are on Table 5.4. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

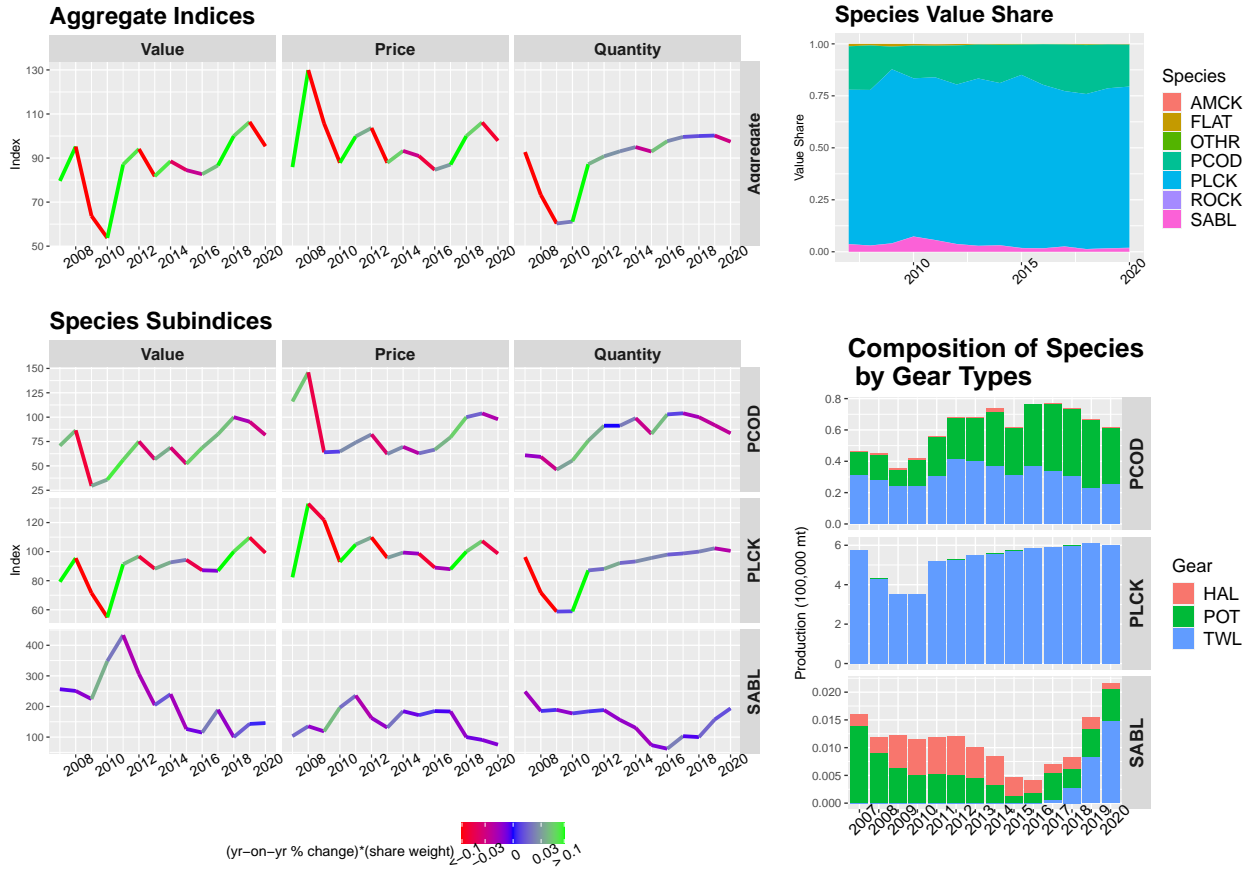


Figure 5.6: BSAI shoreside ex-vessel market: species decomposition 2007-2020 (Index 2018 = 100). **Notes:** Index values for 2015-2020, notes and source information for the indices are on Table 5.5. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.



Figure 5.7: BSAI shoreside ex-vessel market: gear decomposition 2007-2020 (Index 2018 = 100). **Notes:** Index values for 2015-2020, 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.

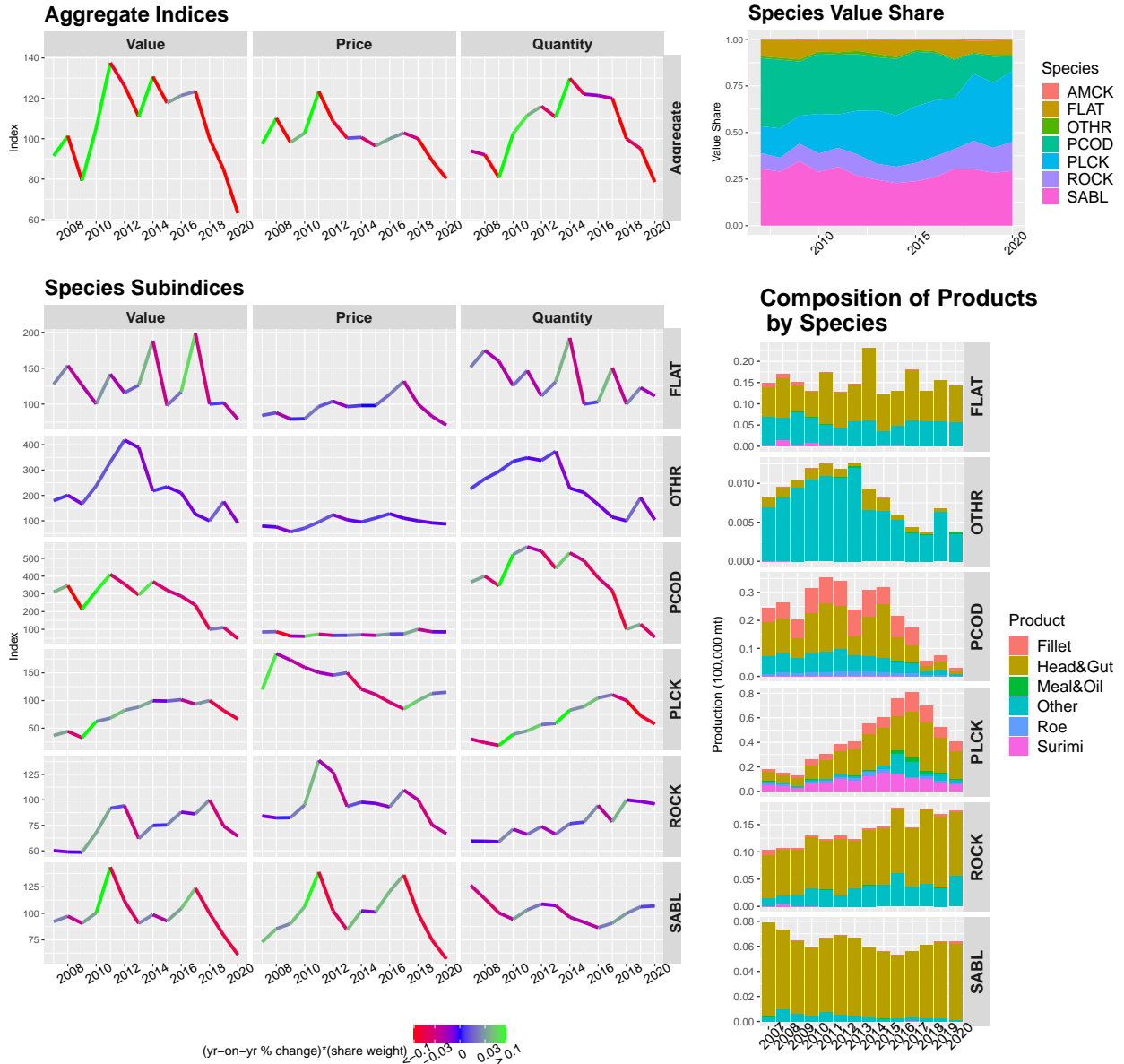


Figure 5.8: GOA wholesale market: species decomposition 2007-2020 (Index 2018 = 100).
Notes: Index values for 2015-2020, notes and source information for the indices are on Table 5.7. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

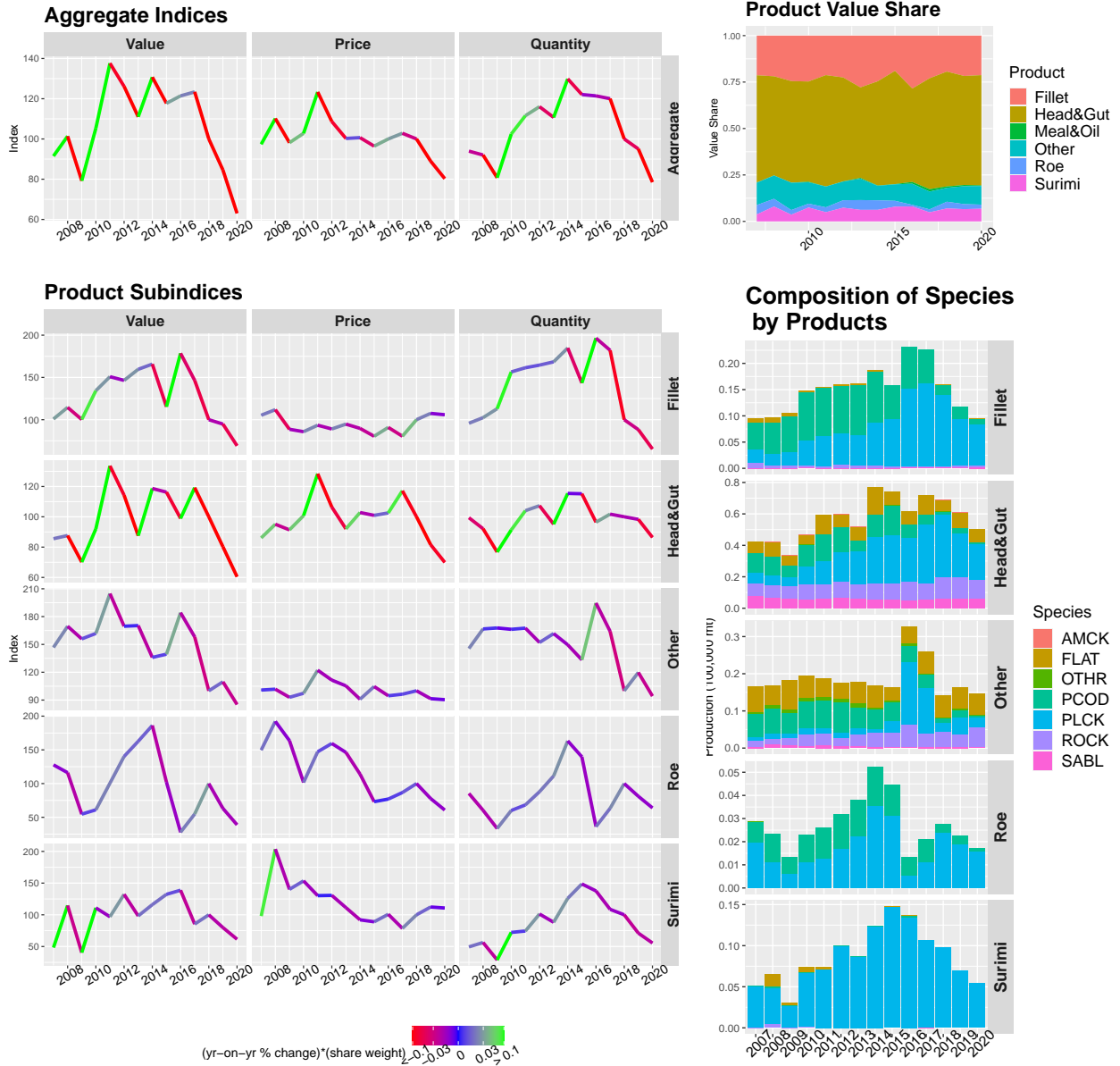


Figure 5.9: GOA wholesale market: product decomposition 2007-2020 (Index 2018 = 100).
Notes: Index values for 2015-2020, notes and source information for the indices are on Table 5.8. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

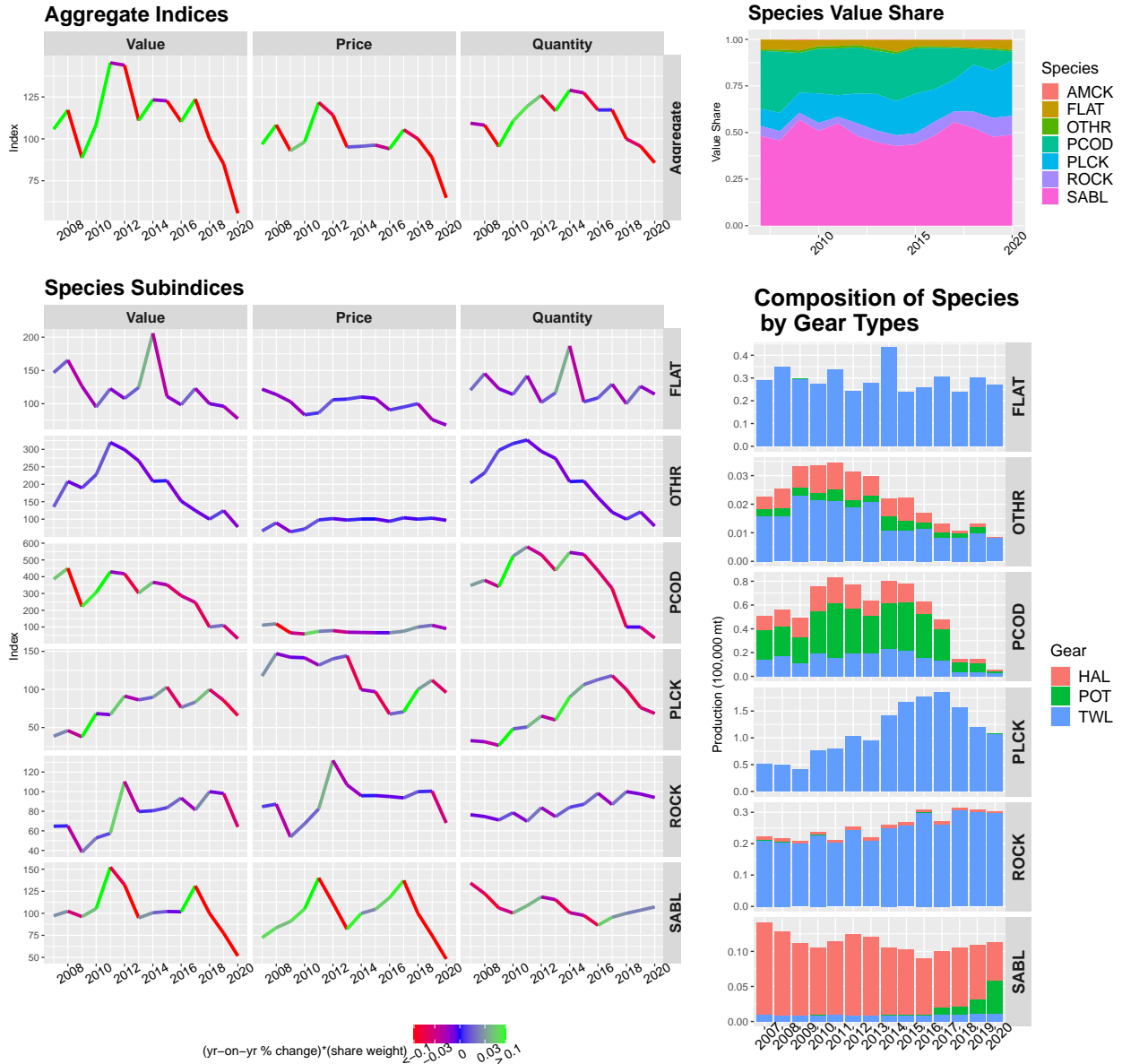


Figure 5.10: GOA ex-vessel market: species decomposition 2007-2020 (Index 2018 = 100). **Notes:** Index values for 2015-2020, notes and source information for the indices are on Table 5.9. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

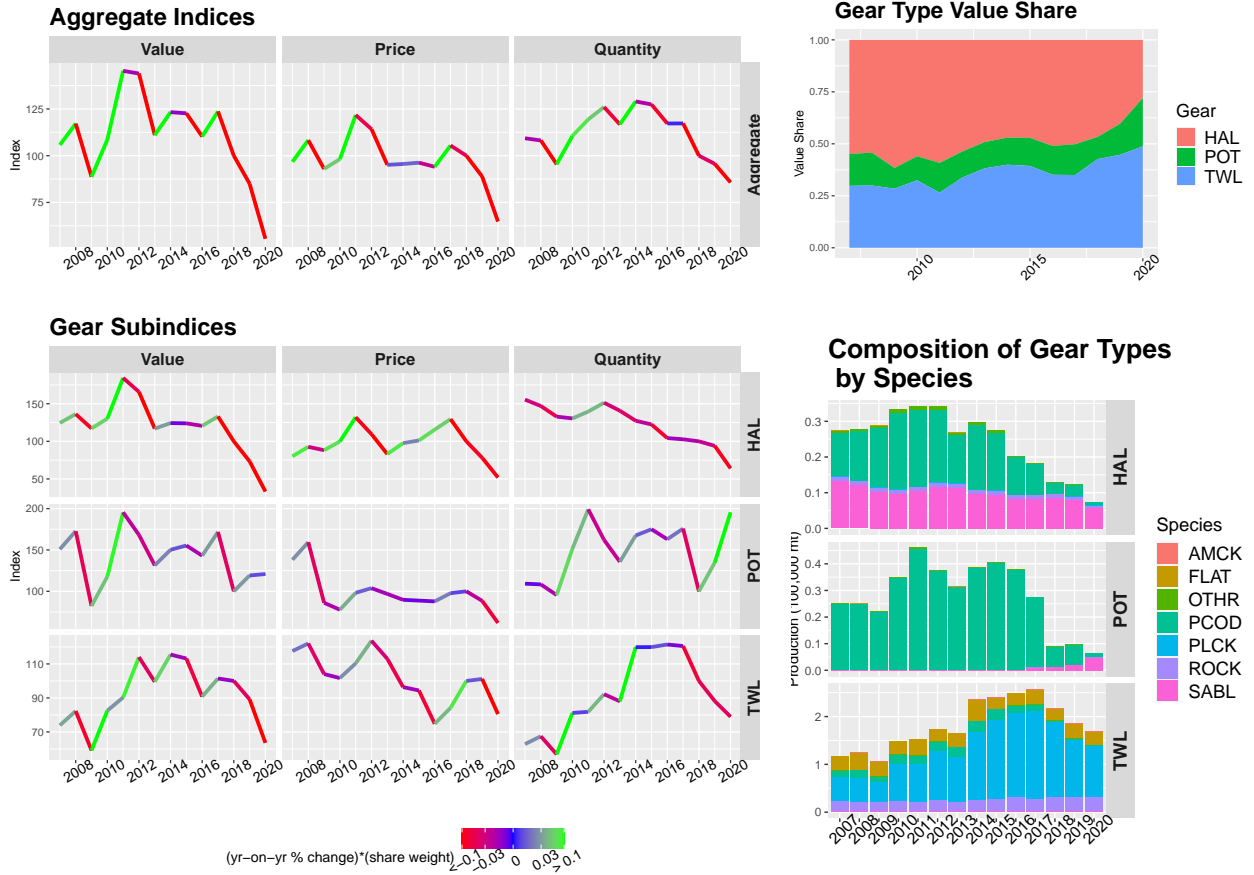


Figure 5.11: GOA ex-vessel market: gear decomposition 2007-2020 (Index 2018 = 100).
Notes: Index values for 2015-2020, notes and source information for the indices are on Table 5.10. Index coloring indicates its influence on aggregate index movements, see Section 5.1 for details.

Table 5.1: Species indices and value share for the BSAI at-sea first-wholesale market 2015-2020.

Species	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	87.65	90.71	100.42	100.00	100.00	85.27
Aggregate	Price	87.05	89.54	99.37	100.00	99.10	95.75
Aggregate	Quantity	100.68	101.31	101.05	100.00	100.91	89.05
AMCK	Value	57.15	57.71	99.17	100.00	66.57	61.38
AMCK	Price	74.44	73.60	101.42	100.00	82.85	75.15
AMCK	Quantity	76.77	78.40	97.78	100.00	80.35	81.67
AMCK	Value Share	0.06	0.05	0.08	0.09	0.06	0.06
FLAT	Value	67.64	78.81	90.90	100.00	99.13	82.43
FLAT	Price	64.09	73.44	89.77	100.00	98.06	78.56
FLAT	Quantity	105.53	107.32	101.25	100.00	101.09	104.92
FLAT	Value Share	0.11	0.12	0.13	0.14	0.14	0.14
PCOD	Value	95.78	92.19	103.95	100.00	79.58	57.79
PCOD	Price	76.74	72.75	86.69	100.00	88.34	79.76
PCOD	Quantity	124.82	126.72	119.91	100.00	90.08	72.46
PCOD	Value Share	0.21	0.20	0.20	0.19	0.16	0.13
PLCK	Value	94.83	99.72	102.50	100.00	113.55	100.42
PLCK	Price	98.30	103.15	106.31	100.00	106.38	109.86
PLCK	Quantity	96.47	96.68	96.42	100.00	106.73	91.41
PLCK	Value Share	0.59	0.60	0.55	0.54	0.62	0.64
ROCK	Value	97.63	79.02	94.22	100.00	96.49	77.56
ROCK	Price	98.58	87.67	105.16	100.00	79.84	72.02
ROCK	Quantity	99.03	90.13	89.60	100.00	120.86	107.68
ROCK	Value Share	0.03	0.03	0.03	0.03	0.03	0.03

Notes: Species with a value share less than 1% were not included in this table. All groundfish species were used to calculate 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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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 5.2: Product indices and value share for the BSAI at-sea first-wholesale market 2015-2020.

Product	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	87.65	90.71	100.42	100.00	100.00	85.27
Aggregate	Price	87.05	89.54	99.37	100.00	99.10	95.75
Aggregate	Quantity	100.68	101.31	101.05	100.00	100.91	89.05
Fillet	Value	101.74	97.64	88.52	100.00	122.70	102.17
Fillet	Price	104.92	105.53	96.34	100.00	110.40	116.67
Fillet	Quantity	96.96	92.53	91.89	100.00	111.14	87.57
Fillet	Value Share	0.23	0.21	0.17	0.20	0.24	0.23
Head&Gut	Value	82.84	84.26	98.61	100.00	85.67	68.54
Head&Gut	Price	75.66	76.42	91.64	100.00	90.14	77.95
Head&Gut	Quantity	109.49	110.25	107.61	100.00	95.04	87.93
Head&Gut	Value Share	0.41	0.41	0.43	0.44	0.38	0.35
Meal&Oil	Value	110.50	109.22	96.13	100.00	136.97	193.10
Meal&Oil	Price	118.19	111.77	97.62	100.00	119.54	199.99
Meal&Oil	Quantity	93.49	97.72	98.48	100.00	114.57	96.55
Meal&Oil	Value Share	0.05	0.05	0.04	0.04	0.06	0.09
Other	Value	82.70	113.81	105.67	100.00	74.55	81.34
Other	Price	84.26	98.43	95.31	100.00	103.05	100.25
Other	Quantity	98.15	115.62	110.86	100.00	72.35	81.14
Other	Value Share	0.05	0.06	0.05	0.05	0.04	0.05
Roe	Value	75.96	78.39	93.06	100.00	99.13	89.70
Roe	Price	82.99	98.50	104.47	100.00	79.64	74.82
Roe	Quantity	91.53	79.59	89.07	100.00	124.46	119.90
Roe	Value Share	0.05	0.05	0.06	0.06	0.06	0.07
Surimi	Value	84.76	92.18	116.89	100.00	107.84	82.86
Surimi	Price	92.21	95.72	118.90	100.00	107.52	94.79
Surimi	Quantity	91.92	96.31	98.31	100.00	100.30	87.41
Surimi	Value Share	0.20	0.22	0.25	0.21	0.23	0.21

Notes: Products types ‘Minced’, ‘Other’ and those with a value share less than 1% were not included in this table. All product types were used to construct 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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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 5.3: Species indices and value share for the BSAI shoreside first-wholesale market 2015-2020.

Species	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	80.40	89.38	86.54	100.00	100.51	87.36
Aggregate	Price	85.11	92.33	89.01	100.00	99.37	98.08
Aggregate	Quantity	94.47	96.81	97.22	100.00	101.15	89.07
PCOD	Value	51.24	71.46	78.72	100.00	68.45	56.61
PCOD	Price	66.08	72.01	82.10	100.00	85.42	79.84
PCOD	Quantity	77.54	99.25	95.89	100.00	80.12	70.91
PCOD	Value Share	0.14	0.18	0.20	0.22	0.15	0.14
PLCK	Value	88.47	94.86	88.60	100.00	110.06	96.41
PLCK	Price	90.08	97.62	90.48	100.00	103.47	103.23
PLCK	Quantity	98.21	97.18	97.93	100.00	106.38	93.39
PLCK	Value Share	0.84	0.81	0.78	0.76	0.84	0.84
SABL	Value	114.16	90.46	136.09	100.00	94.09	74.30
SABL	Price	131.62	140.76	129.86	100.00	65.40	53.54
SABL	Quantity	86.73	64.27	104.80	100.00	143.88	138.77
SABL	Value Share	0.01	0.01	0.01	0.01	0.01	0.01

Notes: Species with a value share less than 1% were not included in this table. All groundfish species were used to calculate 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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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 5.4: Product indices and value share for the BSAI shoreside first-wholesale market 2015-2020.

Product	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	80.40	89.38	86.54	100.00	100.51	87.36
Aggregate	Price	85.11	92.33	89.01	100.00	99.37	98.08
Aggregate	Quantity	94.47	96.81	97.22	100.00	101.15	89.07
Fillet	Value	77.69	94.85	87.23	100.00	110.17	90.80
Fillet	Price	84.49	95.21	90.95	100.00	108.03	106.16
Fillet	Quantity	91.95	99.62	95.91	100.00	101.98	85.53
Fillet	Value Share	0.40	0.44	0.41	0.41	0.45	0.43
Head&Gut	Value	78.69	65.53	72.83	100.00	66.27	34.30
Head&Gut	Price	68.73	66.17	77.29	100.00	71.51	51.05
Head&Gut	Quantity	114.49	99.02	94.23	100.00	92.67	67.20
Head&Gut	Value Share	0.07	0.05	0.06	0.07	0.05	0.03
Meal&Oil	Value	95.47	109.68	95.62	100.00	88.86	100.33
Meal&Oil	Price	104.34	111.12	102.49	100.00	83.26	96.22
Meal&Oil	Quantity	91.49	98.70	93.29	100.00	106.73	104.27
Meal&Oil	Value Share	0.11	0.11	0.10	0.09	0.08	0.11
Other	Value	61.95	103.30	93.14	100.00	84.82	111.01
Other	Price	78.96	91.65	89.27	100.00	93.15	112.66
Other	Quantity	78.46	112.71	104.33	100.00	91.05	98.53
Other	Value Share	0.04	0.05	0.05	0.05	0.04	0.06
Roe	Value	57.75	40.17	70.07	100.00	95.02	66.70
Roe	Price	67.60	78.62	81.78	100.00	67.42	59.21
Roe	Quantity	85.42	51.10	85.68	100.00	140.93	112.65
Roe	Value Share	0.05	0.03	0.05	0.06	0.06	0.05
Surimi	Value	87.30	89.76	88.51	100.00	102.78	92.09
Surimi	Price	87.64	91.60	86.66	100.00	108.18	105.38
Surimi	Quantity	99.61	97.99	102.14	100.00	95.01	87.39
Surimi	Value Share	0.34	0.31	0.32	0.31	0.32	0.33

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 construct 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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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 5.5: Species indices and value share for the BSAI shoreside ex-vessel market 2015-2020.

Species	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	84.51	82.69	86.69	100.00	106.38	95.37
Aggregate	Price	90.92	84.66	87.05	100.00	106.16	97.89
Aggregate	Quantity	92.94	97.66	99.58	100.00	100.21	97.43
PCOD	Value	52.10	68.55	82.55	100.00	95.36	81.68
PCOD	Price	62.87	66.65	79.39	100.00	103.87	97.86
PCOD	Quantity	82.86	102.84	103.97	100.00	91.81	83.46
PCOD	Value Share	0.15	0.20	0.22	0.24	0.21	0.20
PLCK	Value	94.34	87.18	86.83	100.00	109.75	99.17
PLCK	Price	98.61	89.02	87.93	100.00	107.30	98.65
PLCK	Quantity	95.68	97.94	98.75	100.00	102.29	100.52
PLCK	Value Share	0.83	0.79	0.75	0.75	0.77	0.78
SABL	Value	126.61	114.84	189.16	100.00	143.06	145.83
SABL	Price	171.65	184.98	183.56	100.00	90.83	75.24
SABL	Quantity	73.76	62.08	103.05	100.00	157.50	193.82
SABL	Value Share	0.02	0.02	0.02	0.01	0.02	0.02

Notes: Species with a value share less than 1% were not included in this table. All groundfish species were used to calculate 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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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 5.6: Gear indices and value share for the BSAI shoreside ex-vessel market 2015-2020.

Gear	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	84.51	82.69	86.69	100.00	106.38	95.37
Aggregate	Price	90.92	84.66	87.05	100.00	106.16	97.89
Aggregate	Quantity	92.94	97.66	99.58	100.00	100.21	97.43
HAL	Value	181.87	108.30	81.27	100.00	109.10	69.68
HAL	Price	143.16	153.48	154.34	100.00	98.85	86.78
HAL	Quantity	127.05	70.56	52.65	100.00	110.37	80.30
HAL	Value Share	0.01	0.01	0.01	0.01	0.01	0.01
POT	Value	45.93	64.63	90.17	100.00	111.20	87.90
POT	Price	69.11	73.32	86.20	100.00	107.25	100.36
POT	Quantity	66.46	88.16	104.60	100.00	103.68	87.58
POT	Value Share	0.08	0.11	0.15	0.14	0.15	0.13
TWL	Value	90.30	85.56	86.14	100.00	105.54	96.86
TWL	Price	94.01	86.17	86.83	100.00	106.03	97.57
TWL	Quantity	96.05	99.30	99.21	100.00	99.54	99.27
TWL	Value Share	0.91	0.88	0.84	0.85	0.84	0.86

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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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 5.7: Species indices and value share for the GOA first-wholesale market 2015-2020.

Species	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	117.73	121.40	123.39	100.00	84.57	63.05
Aggregate	Price	96.43	100.00	102.82	100.00	88.99	80.29
Aggregate	Quantity	122.08	121.40	120.01	100.00	95.03	78.53
FLAT	Value	97.91	117.17	198.71	100.00	101.66	78.88
FLAT	Price	97.95	113.60	131.88	100.00	82.72	70.82
FLAT	Quantity	99.96	103.14	150.68	100.00	122.90	111.38
FLAT	Value Share	0.05	0.06	0.10	0.06	0.08	0.08
OTHR	Value	234.00	209.86	126.32	100.00	175.41	91.24
OTHR	Price	110.63	127.84	110.11	100.00	91.90	87.84
OTHR	Quantity	211.52	164.16	114.73	100.00	190.88	103.86
OTHR	Value Share	0.01	0.01	0.01	0.01	0.01	0.01
PCOD	Value	320.34	286.81	236.48	100.00	110.13	47.44
PCOD	Price	65.78	73.30	74.18	100.00	85.92	85.04
PCOD	Quantity	487.00	391.30	318.80	100.00	128.18	55.79
PCOD	Value Share	0.29	0.25	0.21	0.11	0.14	0.08
PLCK	Value	99.04	101.56	93.52	100.00	81.82	66.45
PLCK	Price	110.93	96.87	84.68	100.00	112.78	114.88
PLCK	Quantity	89.28	104.84	110.44	100.00	72.55	57.84
PLCK	Value Share	0.30	0.30	0.27	0.36	0.35	0.38
ROCK	Value	75.46	88.07	86.21	100.00	74.20	64.31
ROCK	Price	96.55	93.13	109.68	100.00	75.43	66.86
ROCK	Quantity	78.16	94.57	78.60	100.00	98.38	96.19
ROCK	Value Share	0.10	0.11	0.11	0.15	0.13	0.16
SABL	Value	92.82	104.51	123.70	100.00	79.21	60.94
SABL	Price	101.32	120.73	136.28	100.00	74.56	56.98
SABL	Quantity	91.61	86.57	90.77	100.00	106.25	106.95
SABL	Value Share	0.24	0.26	0.30	0.30	0.28	0.29

Notes: Species with a value share less than 1% were not included in this table. All groundfish species were used to calculate 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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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 5.8: Product indices and value share for the GOA first-wholesale market 2015-2020.

Product	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	117.73	121.40	123.39	100.00	84.57	63.05
Aggregate	Price	96.43	100.00	102.82	100.00	88.99	80.29
Aggregate	Quantity	122.08	121.40	120.01	100.00	95.03	78.53
Fillet	Value	115.34	178.51	146.49	100.00	94.80	69.15
Fillet	Price	80.40	90.87	80.44	100.00	107.47	105.85
Fillet	Quantity	143.45	196.45	182.11	100.00	88.21	65.33
Fillet	Value Share	0.19	0.28	0.23	0.19	0.22	0.21
Head&Gut	Value	116.26	98.93	119.22	100.00	80.23	60.46
Head&Gut	Price	100.94	102.57	117.17	100.00	81.62	69.95
Head&Gut	Quantity	115.18	96.45	101.75	100.00	98.30	86.43
Head&Gut	Value Share	0.61	0.50	0.60	0.62	0.59	0.59
Other	Value	139.49	184.19	158.11	100.00	109.65	85.25
Other	Price	104.61	94.64	96.33	100.00	91.53	90.43
Other	Quantity	133.34	194.62	164.14	100.00	119.79	94.28
Other	Value Share	0.09	0.11	0.10	0.07	0.10	0.10
Roe	Value	102.16	27.88	54.87	100.00	63.15	38.85
Roe	Price	73.16	77.03	86.71	100.00	77.84	60.77
Roe	Quantity	139.64	36.19	63.28	100.00	81.12	63.93
Roe	Value Share	0.03	0.01	0.02	0.04	0.03	0.02
Surimi	Value	132.30	138.75	85.46	100.00	79.87	61.49
Surimi	Price	88.99	100.80	78.67	100.00	112.30	110.71
Surimi	Quantity	148.68	137.65	108.63	100.00	71.12	55.55
Surimi	Value Share	0.08	0.08	0.05	0.07	0.07	0.07

Notes: Products types ‘Minced’ and those with a value share less than 1% were not included in this table. All product types were used to construct 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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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 5.9: Species indices and value share for the GOA ex-vessel market 2015-2020.

Species	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	122.68	110.27	123.68	100.00	85.01	55.58
Aggregate	Price	96.28	94.07	105.47	100.00	88.88	64.83
Aggregate	Quantity	127.43	117.22	117.27	100.00	95.65	85.74
FLAT	Value	110.98	98.37	122.98	100.00	96.13	77.66
FLAT	Price	108.03	90.52	95.10	100.00	76.16	67.91
FLAT	Quantity	102.72	108.67	129.32	100.00	126.22	114.36
FLAT	Value Share	0.03	0.03	0.04	0.04	0.04	0.05
OTHR	Value	210.30	151.88	124.73	100.00	124.48	77.79
OTHR	Price	100.52	93.82	104.07	100.00	102.94	96.73
OTHR	Quantity	209.21	161.88	119.86	100.00	120.92	80.42
OTHR	Value Share	0.01	0.01	0.01	0.01	0.01	0.01
PCOD	Value	351.77	286.57	246.64	100.00	110.19	30.95
PCOD	Price	65.98	65.80	74.83	100.00	110.42	90.68
PCOD	Quantity	533.15	435.51	329.60	100.00	99.79	34.13
PCOD	Value Share	0.24	0.22	0.17	0.09	0.11	0.05
PLCK	Value	103.20	76.36	83.43	100.00	85.50	65.80
PLCK	Price	97.03	67.66	70.64	100.00	112.14	96.03
PLCK	Quantity	106.37	112.86	118.11	100.00	76.24	68.52
PLCK	Value Share	0.21	0.17	0.17	0.25	0.25	0.30
ROCK	Value	83.59	93.48	81.36	100.00	98.08	64.03
ROCK	Price	95.99	95.00	93.65	100.00	100.46	68.08
ROCK	Quantity	87.08	98.40	86.88	100.00	97.63	94.05
ROCK	Value Share	0.06	0.07	0.06	0.09	0.10	0.10
SABL	Value	102.04	101.77	131.07	100.00	77.42	51.72
SABL	Price	104.52	117.75	137.19	100.00	74.81	48.23
SABL	Quantity	97.63	86.43	95.54	100.00	103.48	107.23
SABL	Value Share	0.44	0.48	0.56	0.52	0.48	0.49

Notes: Species with a value share less than 1% were not included in this table. All groundfish species were used to calculate 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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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 5.10: Gear indices and value share for the GOA ex-vessel market 2015-2020.

Gear	Index Type	2015	2016	2017	2018	2019	2020
Aggregate	Value	122.68	110.27	123.68	100.00	85.01	55.58
Aggregate	Price	96.28	94.07	105.47	100.00	88.88	64.83
Aggregate	Quantity	127.43	117.22	117.27	100.00	95.65	85.74
HAL	Value	123.89	120.57	133.03	100.00	73.40	33.34
HAL	Price	101.19	115.58	129.52	100.00	78.10	51.99
HAL	Quantity	122.44	104.31	102.71	100.00	93.99	64.13
HAL	Value Share	0.47	0.51	0.50	0.47	0.40	0.28
POT	Value	155.36	143.11	171.77	100.00	119.15	120.87
POT	Price	88.77	87.80	97.72	100.00	88.49	61.83
POT	Quantity	175.02	162.99	175.77	100.00	134.65	195.47
POT	Value Share	0.14	0.14	0.15	0.11	0.15	0.23
TWL	Value	113.18	90.79	101.43	100.00	89.18	63.59
TWL	Price	94.39	74.78	84.17	100.00	101.14	80.54
TWL	Quantity	119.91	121.41	120.51	100.00	88.17	78.95
TWL	Value Share	0.39	0.35	0.35	0.43	0.45	0.49

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.

Source: NMFS Alaska Region Blend and Catch-accounting System estimates; 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.