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Economic Status of the Groundfish Fisheries Off Alaska, 1991

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Abstract: The North Pacific groundfish fishery in the U.S. Exclusive Economic Zone (EEZ) off Alaska hit a milestone in 1991, when the domestic fishery completely replaced the foreign and joint venture fisheries. A major expansion of the wholly domestic groundfish catch began in 1987, and the catch grew to 1.8 million t by 1990. The report presents groundfish catch, ex-vessel value, price, and vessel participation data by area, species, gear, residency, and mode of operation. The trends in North Pacific groundfish exports, U.S. groundfish imports, prices of competing products, consumption, foreign exchange rates, and holdings are also reviewed.

ABSTRACT

The North Pacific groundfish fishery in the U.S. Exclusive Economic Zone (EEZ) off Alaska hit a milestone in 1991, when the domestic fishery completely replaced the foreign and joint venture fisheries. From the early 1960s to 1985, the foreign fishery dominated the catch. The joint venture fishery, where the domestic fleet delivers their catch directly to foreign processors, took the largest share of the catch from 1986 to 1988. Joint venture fisheries peaked in 1987 at 1.4 million metric tons (t) and ended in 1990. A major expansion of the wholly domestic groundfish catch began in 1987, and the catch grew to 1.8 million t by 1990. The domestic catch in 1991 totaled 1.76 million t, a drop of 2.5% from 1990, while the ex-vessel value increased by 16.5% to \$521 million. The groundfish fishery off Alaska also surpassed the value of the Alaska Pacific salmon-fishery for the first time in 1991, and groundfish exports from Washington and Alaska customs districts were up by 35% to over \$1 billion.

This report presents groundfish catch, ex-vessel value, price, and vessel participation data by area, species, gear, residency, and mode of operation. The trends in North Pacific groundfish exports, U.S. groundfish imports, prices of competing products, consumption, foreign exchange rates, and holdings are also reviewed.

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INTRODUCTION

The groundfish fishery off Alaska is an important part of the U.S. fishing industry. In 1991, it accounted for 40% of the commercial catch in U.S. waters and nearly 16% of the ex-vessel value of that catch. This report describes the economic status of groundfish fisheries off Alaska in terms of catch, ex-vessel prices and value, the number of vessels, wholesale prices, exports, and cold storage holdings. Also discussed are external factors that, in part, may contribute to the economic status of the fisheries. These include foreign exchange rates, the prices and price indexes of products that compete with products from these fisheries, and fishery imports. This report updates last year's document (Kinoshita et al. 1992) and is intended to serve as a reference document for those involved in making decisions with respect to conservation, management, and utilization of these fishery resources. The report also includes an appendix which describes the sources and the nature of the data presented in this report. The appendix expands on the qualifications made in both the description of the fisheries and the footnotes to the tables. The appendix is critical in avoiding any misunderstanding of the data contained in this report.

The 1991 data from the Pacific Coast Fisheries Information Network (PacFIN) were extracted on 15 July 1992. Data from the Alaska Department of Fish and Game (ADF&G) fish tickets were updated on 7 August 1992. The description of the economic status is not complete as information on fishing effort (except the number of vessels), employment, and harvesting and processing costs are not included. Efforts to collect additional data from the industry concerning the economic well-being of the fisheries will be pursued to provide a more complete profile of the industry.

OVERVIEW

The total catch in the commercial groundfish fisheries off Alaska increased from 1.55 million metric tons (t) in 1982 to 2.1 million t in 1988, an overall increase of 352 (Fig. 1 and Table 1). Since 1988, the total groundfish catch has declined with the 1991 catch at 1.76 million t. In 1982, foreign vessels took 86% of the catch; however, by 1988 the foreign fishery had been completely phased out. The joint venture fishery ended in 1990, and domestic fishing vessels operating in the domestic fishery took 100% of the catch in 1991 (Table 2).

Through 1986, the rapid increase in the catch by domestic vessels was due principally to the expansion of the joint venture fishery. In 1987, the domestic fishery catch increased more than did the joint venture catch, and from 1988 to 1990 the joint venture catch declined as the domestic fishery replaced the joint venture fishery. At its peak in 1987, the joint venture catch of just under 1.4 million t accounted for almost 75% of the total groundfish catch off Alaska in the U.S. Exclusive Economic Zone (EEZ), including Alaska State waters. With the expansion of the large domestic catcher-processor and mothership fleets, the joint venture share of the catch declined and came to an end in 1990. All of the 1991 catch was taken in the domestic fishery.

Walleye (Alaska) pollock (*Theragra chalcogramma*) was the dominant species in the groundfish catch. The pollock catch in 1991 was just over 1.27 million t and accounted for 72% of the total groundfish harvest of 1.76 million t. (Fig.2 and Table 3). The second major species was Pacific cod (*Gadus macrocephalus*), with a catch of 256,900 t which comprised 14.5% of the 1991 catch. The other species or species groups observed were flatfish

(mostly yellowfin sole (Pleuronectes asper) and rock sole (P. bilineata)), sablefish (Anoplopoma fimbria), rockfish (Sebastes and Sebastolobus spp.), and Atka mackerel (Pleurogrammus monopterygius). Pacific halibut (Hippoglossus stenolepis) was also an important groundfish; however, the halibut fishery is managed separately, so it was not included as a groundfish in this report, except for exports. Exports of fresh halibut were included with Greenland turbot, while frozen halibut exports became a separate category in 1991.

The ex-vessel value of the groundfish catch off Alaska, including value of foreign and joint venture fisheries, but excluding the value added by at-sea processing, increased from \$211 million in 1982 to \$521 million in 1991 (Table 4). The 1991 ex-vessel value was 10% greater than the 1990 value of \$475 million, primarily due to the increase of ex-vessel prices. The value of the resulting fishery products based on average selling price, F.O.B. plant was estimated at over \$1.5 billion in 1991. The groundfish fishery accounted for 42% of the ex-vessel value of all commercial fisheries off Alaska in 1991, which surpassed the Pacific salmon (Oncorhynchus spp.) fishery for the first time (Table 5).

Exports of groundfish products from the Pacific Northwest and Alaska afford another measure of the importance of the groundfish fisheries off Alaska. The value of finfish exports, excluding Pacific herring (Clupea pallasii), Pacific salmon, and other nongroundfish species, increased from only \$25 million in 1982 to \$1.07 billion in 1991 (Table 6). The groundfish exports in 1991 accounted for 48.4% of the total Pacific Northwest and Alaska fishery exports. Figure 3 illustrates fishery exports including joint venture sales.

The rapid expansion of the domestic fishery that began in 1987 continued through 1990 as it replaced the foreign and joint venture fisheries. The

expansion was dominated by the large catcher-processor fleet. Their numbers increased from only 3 in 1986 to 45 in 1990 to 50 in 1991. The increase dramatically slowed in 1991 as the harvesting and processing capacity surpassed the total allowable catch. Market conditions changed during 1991 as wholesale prices of major groundfish products declined slightly from their record highs in the second quarter, while surimi prices continued to increase.

Factors that are expected to continue to be important in determining the economic status of the groundfish fisheries off Alaska include the following: 1) fishery management actions intended to protect groundfish resources, other fishery resources (e.g., halibut, crab, herring, and salmon), or other living marine resources (e.g., marine mammals and seabirds); 2) fishery management actions intended to address user conflicts; 3) changes in the domestic and foreign demand for Alaska groundfish products; and 4) changes in the cost of harvesting and processing Alaska groundfish. The third factor will be the product of changes in foreign exchange rates, the supply of competing products, international trade agreements, demographics, national income levels, and beliefs concerning the relative merits of Alaska groundfish as a consumer good. Together these four interdependent factors will have effects on the amounts of groundfish that are caught, the amounts of different groundfish products that are produced, the cost of harvesting the catch and processing it, the total income generated by the groundfish fishery, the methods used to harvest and process the catch, the numbers and types of entities involved in harvesting and processing the catch, and the distribution of benefits derived from the groundfish fishery.

DOMESTIC FISHERY

Trawl, longline and other hook and line, pot, and other gear are used in the domestic groundfish fishery. Annual catch for virtually every gear group, area, and species increased dramatically from 1982 to 1990 (Table 7). In 1991, the catch by trawls declined by 4%, while the catch by longline and pots rose by 25% and 116%, respectively, from 1990. In the last 3 years, the catch by trawls has averaged 94.6% of the total catch, while the catch by longline and other hook-and-line gear accounted for 4.9%. Most species are harvested predominately by one type of gear, which typically accounts for 90% or more of the catch. The one exception is Pacific cod, where 62.9% was taken by trawls, 30.3% by hook-and-line gear, and 6.8% by pots in 1991.

Catch for at-sea processing has been the largest and fastest growing component of catch. It increased from 106,200 t in 1986 to 1,371,100 t in 1990, then fell slightly to 1,301,500 t in 1991 (Fig. 4 and Table 8). The catch for shore-based processing increased from 61,500 t in 1986 to 463,400 t in 1991, and was up 6% from 1990. The relative catch of these two types of operations varies by area and by species. In the Bering Sea/Aleutian Islands region, catch for at-sea processing exceeds that taken for shore-based processing for each species. The opposite is true in the Gulf of Alaska, with the exceptions being rockfish and flatfish.

Catch by residency of vessel owner is presented in Table 9. These data were extracted from the National Marine Fisheries Service (NMFS) groundfish fish ticket data base and from the state of Alaska vessel registration file. The latter includes the stated residency of each vessel owner. The PacFIN data base does not include residency information. Due to differences in the two data bases, the catch reported by each differs. For 1990-91, the percent

of the catch by residency from the fish tickets was applied to the PacFIN catch. For the domestic groundfish fishery as a whole, the majority of the catch was taken by vessels whose owners indicated that they were not residents of Alaska. In 1991, the catch by residents of Alaska and other states was 169,100 t (9.6%), and 1,594,700 t (90.4%), respectively.

The ex-vessel value of the domestic catch, excluding the value added by at-sea processing, increased from \$447 million in 1990 to \$521 million in 1991 (Fig. 5 and Table 10). This 16.5% increase in ex-vessel value was in contrast to the 2.5% decline in the catch. Pollock was the dominant species with 48.7% of the total ex-vessel value, while accounting for 72% of the quantity. Sablefish accounted for 11.9% of the value compared to only 1.6% of the catch, while Pacific cod represented about 25% of the value and 14.5% of the catch.

In 1991, the ex-vessel value of catch for at-sea processing and shore-based processing was \$358 million and \$163 million, respectively (Table 11). The dominance of catch for at-sea processing is less when it is measured in terms of ex-vessel value than when it is measured in terms of catch weight. This is because the shore-based processors received a larger proportion of higher priced species, including sablefish.

The percentage of catch taken by vessels owned by Alaska residents is also greater when measured in terms of ex-vessel value rather than in terms of weight. The estimated ex-vessel value of the 1991 catch of vessels owned by Alaska residents and other residents was \$87.6 million (16.9%) and \$431.8 million (83.1%), respectively (Table 12).

The overall weighted average ex-vessel price, excluding the value added by at-sea processing, declined each year from 1984 to 1989, but increased in 1990 and 1991 (Table 13). The average ex-vessel price in 1991 was up by nearly 20% from \$0.112 per pound in 1990 to \$0.134 per pound, round weight.

The average price of pollock increased from \$0.087 in 1990 to \$0.09 in 1991. Average prices of other species in 1991 were up 24-42% from 1990. The ex-vessel price of Pacific cod in 1991 jumped by 34% from \$0.173 in 1990 to \$0.232 per pound in 1991. The price of sablefish increased 42.6% from \$0.70 per pound, round weight, in 1990 to \$1.00 per pound in 1991.

The percentage distributions of landings and ex-vessel value among species, areas of catch, and gear groups are presented in Tables 14 to 19. These data summarize changes in the relative size of different components of the domestic groundfish fishery off Alaska.

The total number of domestic vessels harvesting groundfish off Alaska did not consistently increase on an annual basis, as did catch. The number of vessels increased from 1,449 in 1986 to 1,859 in 1987, declined to 1,576 in 1989, and then increased to 2,223 in 1991 (Table 20). During this period, the number of vessels using trawl gear increased from 80 in 1986 to 262 in 1991. From 1989 to 1991, these vessels harvested nearly 95% of the domestic catch. The most rapid growth was for the largest vessel size classes (Fig. 6). The number of trawlers greater than 185 feet in length increased from only 3 in 1986 to 30 in 1989, to 50 in 1991 (Table 21). Vessels using longline and other hook-and-line gear represented 84% of the total number of vessels in the groundfish fishery, but accounted for just under 5% of the catch for 1989-91. In 1991, 1,873 vessels used hook-and-line gear, of which 1,627 vessels were under 60 feet in length. Many of these vessels were employed principally in other fisheries such as salmon, crab, and halibut, and landed very small amounts of groundfish.

The numbers of vessels harvesting groundfish for at-sea and shore-based processing are presented by area and species in Table 22 and by area and residency in Table 23. The seasonality of vessel deployment is depicted in

Table 24, which gives the number of vessels that harvested groundfish by month, area, and gear. Table 25 gives the number of catcher-processors and motherships by month, area, and gear.

Data on production of groundfish products by species are shown in Tables 26 to 28. The production of groundfish products on a product weight basis was up slightly from 1990, but the value increased by nearly 44% to \$1.54 billion, up from \$1.07 billion in 1990. The doubling in production of flatfish products and the increase of cod and Atka mackerel products more than offset the declines in pollock, rockfish, and sablefish products. The single most important product, pollock surimi, fell by 21% to 139,795 t, but increased by 58% in value to \$438.7 million.

MARKETS

Annual and monthly wholesale prices for selected groundfish products, F.O.B. East Coast, are reported in Tables 29 and 30, respectively. Wholesale prices hit record highs in the first half of 1991, then fell back in the second half. The price of cod blocks hit a new high of \$2.52 per pound in March 1991, then declined in the second and third quarters before increasing slightly in the fourth quarter. Cod fillet price in January 1991 of \$2.65 per pound, just below the record high of \$2.72 in November 1990, dropped to \$2.35 by August, before rebounding to \$2.48 per pound in September. Annual average prices of cod fillets and blocks in 1991 were up about 15% from 1990 to \$2.51 and \$2.30 per pound, respectively. The wholesale price of pollock blocks peaked at \$1.57 per pound in the second quarter of 1991, then pulled back in the second half of 1991. The price in December 1991 (\$1.12 per pound) was the same as in January 1991, but hit record highs in April-May (\$1.58 per pound),

up 40% from January. For 1991, the annual average price of pollock blocks rose by 45% to \$1.37 per pound from the previous year.

Wholesale prices, F.O.B. Seattle, of Alaska cod and pollock products followed similar trends in prices as they reached record highs in the first half of 1991, then retreated in the second half (Fig. 7 and Table 31). The Japanese landed and wholesale prices in Tables 32 and 33 also indicate higher prices for many products. Tokyo wholesale prices of sablefish in 1991 were 45% above a year earlier (Table 34). A major concern of the U.S. groundfish industry in 1990 was the decline in Japanese wholesale price of sea-processed surimi, down about 6% in 1990 from the previous year. However, this concern vanished as surimi prices jumped in 1991 due to reduced catches of pollock, lower U.S. surimi production, and a strong fillet and block market. Based on Japanese import values, average surimi prices increased from about \$1.05 per pound in the first quarter of 1991 to an average \$2.20 in the fourth quarter. The annual average price of surimi more than doubled, increasing from \$0.79 per pound in 1990 to \$1.65 in 1991.

The value of exports of groundfish from Washington and Alaska customs districts in 1991 was 34.6% above 1990 exports and has risen 778% since 1986. Except for increases in the quantities of Pacific cod and flatfish exports, most of the change in 1991 came from higher prices. Groundfish exports in 1991 were made up of \$142 million of cod, \$92 million of sablefish, \$204 million of other whole or dressed fish, \$31 million of fillets, \$22 million of dried or salted fish, \$190 million of roe, and \$379 million of "other" fishery products, mostly surimi (Tables 35 and 36). The 47% increase of "other" fishery products was attributed to higher export prices of surimi. Because surimi was not identified in the U.S. schedule of exports, it could be reported under five or six different product codes. U.S. exports can be

compared directly to Japanese surimi imports for the first time in 1991. In previous years, Japanese imports also included U.S. joint venture surimi production. Japanese imports from the United States totaled 101,962 t or 225 million pounds in 1991 compared to the 216 million pounds in the "other" category (Sonu 1992).

Japan imported \$751 million of Northwest and Alaska groundfish or 70.8% of the total value (Kinoshita et al. 1993). The Republic of Korea was the second largest importer with purchases of \$139 million or 13% of the total. Canada was the third largest importer with \$38.6 million, followed by the Federal Republic of Germany with \$35.9 million. The top four countries purchased nearly 91% of total exports. Due to the heavy dependence on foreign markets for many groundfish products, the export market greatly influenced the economic status of the groundfish fisheries off Alaska.

The economic status of these fisheries is also dependent on U.S. imports of competing fishery products. U.S. imports of groundfish fillets and blocks peaked in 1987 at 812 million pounds, but have subsequently declined by one-third to around 535 million pounds in 1990-91 (Table 37). The decline partially reflects the substitution of domestic groundfish products for imports.

Changes in the size of the domestic market are reflected by the upward trend in U.S. per capita consumption of fishery products from 12.5 pounds per capita in 1980 to 16.2 pounds in 1987. Since then, per capita consumption has dropped back slightly to 14.9 pounds in 1991. Per capita consumption of fresh and frozen fish increased from 7.9 pounds in 1980 to 9.7 pounds in 1991. In 1991, there was a 0.1 pound increase in per capita consumption of fresh and frozen fish (Table 38). The consumption of groundfish products is reflected in consumption of fillets and steaks, and fish sticks and portions. While per

capita consumption of fillets and steaks increased by 25% between 1980 and 1991, consumption of fish sticks and portions decreased by 48% (Table 39).

Fishery products from the groundfish fisheries off Alaska compete in domestic markets with other fishery products, meat, poultry, and other food products. The producer and consumer price indexes for these products are presented in Tables 40 and 41. In 1991, the producer price index (PPI) increased by just 0.26% from 1990, while the consumer price index (CPI) rose 4.3%. The increase in the CPI was lower than the annual average increase of 4.7% in the 1980s. In 1991, the CPI for meat increased by 3.7%, poultry prices fell 0.75%, and fish prices gained 1.1%.

With the large amount of groundfish that is exported from the fisheries off Alaska and the large quantities of imported products that compete in the domestic market, foreign exchange rates can have significant effects on groundfish prices. In 1991, the value of the dollar relative to foreign currencies of major trading countries was mixed (Tables 42 and 43). The annual value of the dollar relative to the Japanese yen in 1991 fell 7.0%, thereby making U.S. exports less expensive in Japan. The U.S. dollar was up 3.6% relative to the Republic of Korea's won, while the U.S. dollar declined in value by 1.8% relative to the Canadian dollar from 1990.

The levels of fishery product inventories provide another measure of the condition of groundfish markets. In an established market, increased inventories typically indicate an imbalance in supply and demand that will result in declining prices. In a new or rapidly growing market, an increase in inventories may be simply a reflection of the increasing market size. U.S. holdings of selected groundfish blocks and fillets are reported in Tables 44 and 45. There was an increase in holdings of groundfish blocks and fillets in 1989, a decline in 1990 and first half of 1991, and a return to more moderate

levels by the fourth quarter of 1991 relative to the 1986-90 average monthly holdings (Figure 8). U.S. cold storage holdings of groundfish blocks and fillets on 31 December 1991 were up 35% from a year earlier and nearly equal the 1986-90 average 31 December holdings.

While U.S. holdings offers an overall view of the U.S. groundfish market, West Coast holdings provide a regional view of the supply of West coast groundfish products (Table 46). Holdings of pollock fillets, cod fillets, surimi, and analog products on the West Coast have grown with increases in production over the last 5 years. Holdings of pollock fillets on 31 December 1991 were down 23% from a year earlier, cod fillets were nearly double, surimi holdings were 19% below a year earlier, and analog products were 20% lower.

CITATIONS

- Kinoshita, R. K., B. M. K. Brooke, L. E. Queirolo, and J. M. Terry. 1992. Economic status of the groundfish fisheries off Alaska, 1991. U.S. Dep. Commer., NOAA Tech. Memo. F/NWC-215, 99 p.
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- National Marine Fisheries Service. 1992. Fisheries of the United States, 1991. U.S. Dep. Commer., Current Fish. Stat. No. 9100, May 1992, 111 p. Available Sup. Doc., U.S. Gov. Print. Off., Washington, DC 20402.
- Sonu, S. C. 1992. Natl. Mar. Fish. Serv., Southwest Regional Office, 501 W. Ocean Blvd. Suite 4200, Long Beach, CA 90802-4213. In NMFS Fisheries Market News Report, Urner Barry Pub., Inc., P.O. Box 389, Toms River, NJ 08754-0389. Various issues.

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APPENDIX

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THE SOURCES AND NATURE OF THE DATA

The Pacific Coast Fisheries Information Network (PacFIN) is the source of most of the groundfish catch, landings, ex-vessel value, and ex-vessel price data in this report. Exceptions are the estimates of the ex-vessel values of the joint venture and foreign fisheries. They were provided by the National Marine Fisheries Service, Alaska Regional Office. The Alaska Regional Office is also the source of the estimates of the ex-vessel values of the nongroundfish fisheries. Catch and value data by residency are generated from Alaska Department of Fish and Game (ADF&G) fish ticket and vessel registration data using PacFIN prices and catches.

PacFIN reports catch data for the joint venture and foreign fisheries. These data are provided to PacFIN by the Alaska Fisheries Science Center Vessel Observer Program. For the domestic fisheries, PacFIN reports the estimated round weight equivalent of the landed catch. Therefore, discarded catch is not included for the domestic fisheries. The domestic landings data are provided to PacFIN by the Alaska Regional Office's Processor Weekly Reporting Program and ADF&G Fish Ticket Program.

All the ex-vessel price and value data reported in PacFIN are from the ADF&G fish ticket data base. Typically, price or value data are provided for catch taken for shore-based processing, but not for catch taken for at-sea processing. The limited price and value fish ticket data for the latter type of operations are not used by PacFIN. Therefore, PacFIN contains estimates of ex-vessel prices for landings at shore-based processing plants. These prices are applied to all landings for at-sea and shore-based processing to estimate the ex-vessel value of all catch in the domestic fisheries excluding the value added by at-sea processing,

The prices reported are in terms of dollars per pound round weight. This means, for example, if the landed weight of sablefish is, on average, 65% of its round weight, the price per pound landed weight equals the round weight price reported in PacFIN and this report divided by 0.65.

The catch and value reports that include information on the mode of operation (i.e., catch for shore-based and at-sea processing) were extracted from the PacFIN data base. The catch for at-sea processing was set equal to all the catch reported from the Alaska Regional Office's Processor Weekly Reporting Program plus all additional catch from the ADF&G Fish Ticket Program that contained a port code that indicated that the catch was not landed for shore-based processing. This method is expected to provide good estimates of the catch of these two types of operations. More accurate estimates can be generated, but only with considerably more effort.

The PacFIN data base does not include data by vessel nor residency of the vessel owner; therefore, it cannot be used to estimate catch by residency. The groundfish fish ticket data base maintained at the Alaska Regional Office, the vessel registration file and condensed gross earnings file maintained by the Alaska Commercial Fisheries Entry Commission, and PacFIN ex-vessel prices were used to generate catch and value by residency. For 1990-91, the catch by residency from the fish ticket data base were applied proportionally to the

PacFIN catch. The vessel registration file indicates which vessel owners have declared themselves to be residents of Alaska, and the fish ticket file includes the vessel for which the catch is reported. This is the method used to distinguish between catch by Alaska residents and other residents. The category of unknown residency occurs when the gear permit associated with catch on a fish ticket is unknown or when the permit file does not indicate residency.

With the exception of Table 25, all the reports on the number of vessels are based on fish ticket data. The vessel counts are counts of unique ADF&G vessel numbers and are, therefore, estimates of the numbers of vessels that caught fish. They do not include vessels that only processed fish. The information in Table 25 is based on data from the Alaska Regional Office Processor Weekly Reporting Program and does include the numbers of catcher-processors and motherships reporting catch to that program. The coverage of that program increased annually from 1986 when it was initiated. The increased coverage is the result of annual changes in reporting requirements.

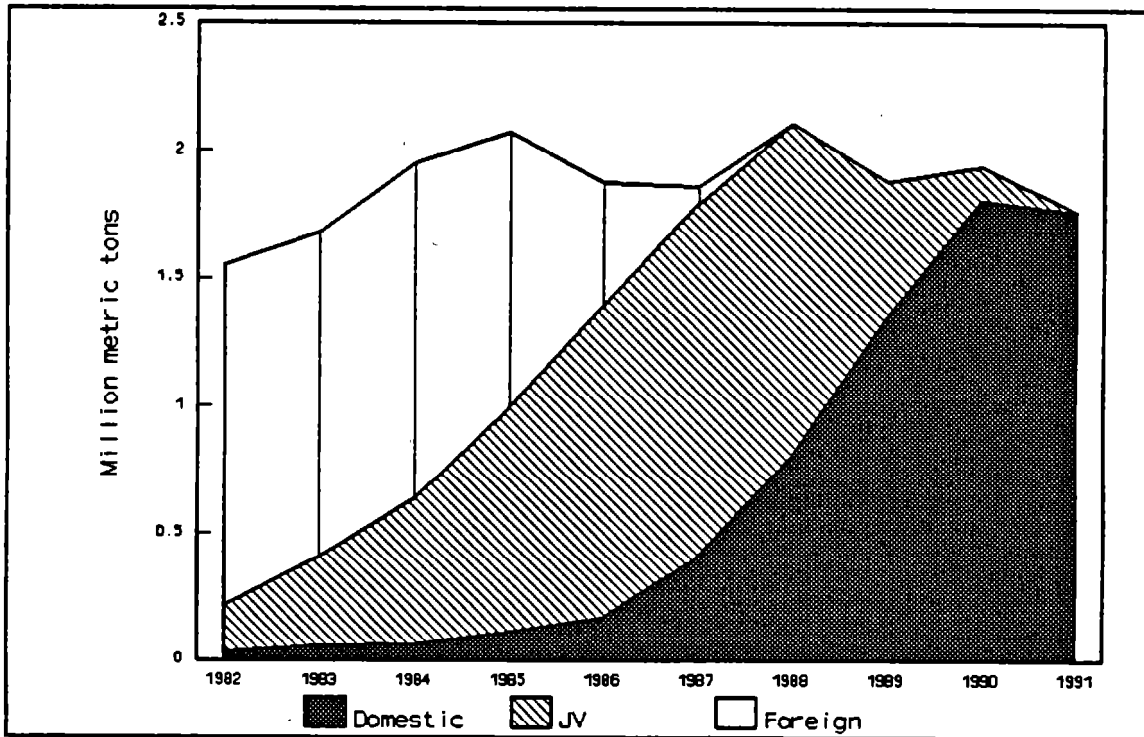


Figure 1. --Groundfish catch in the commercial fisheries off Alaska by fishery, 1982-91.

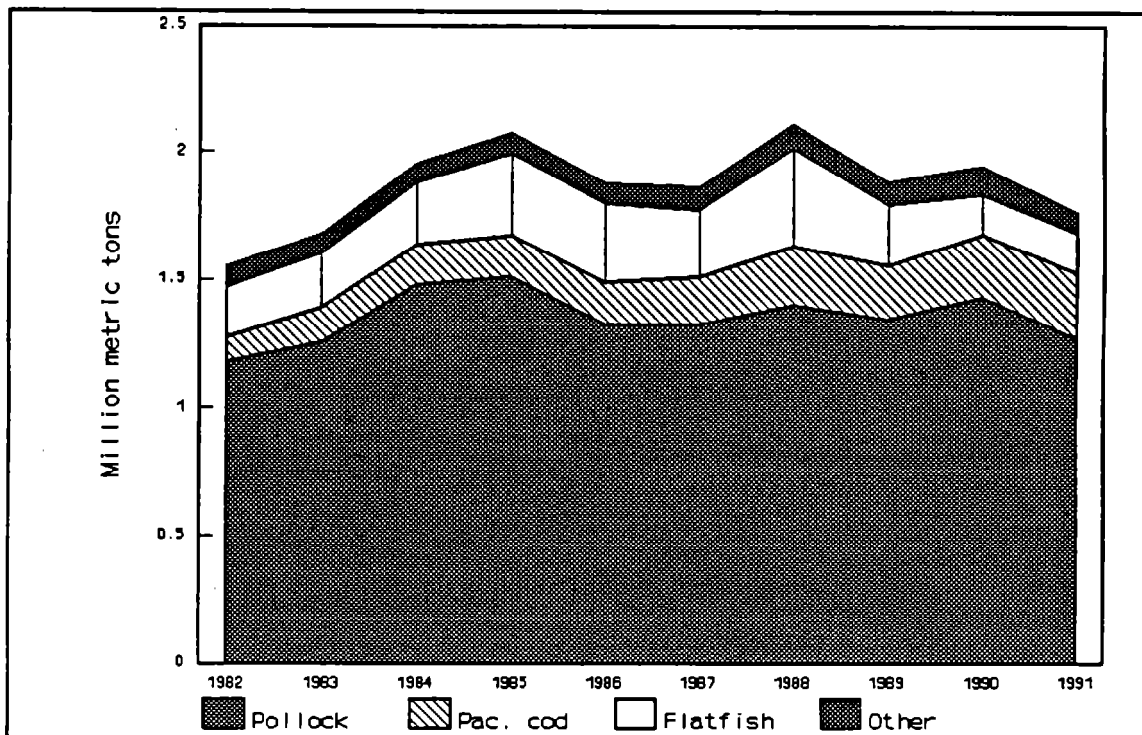


Figure 2. --Groundfish catch in the commercial fisheries off Alaska by species, 1982-91.

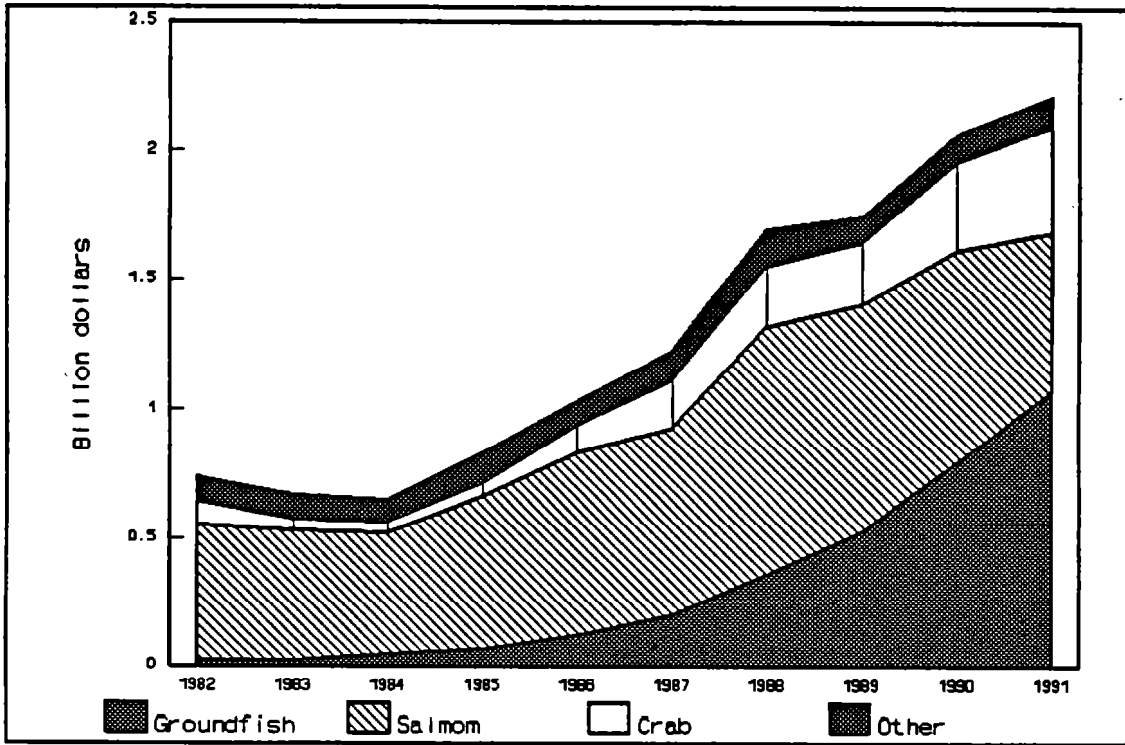


Figure 3.--Pacific Northwest and Alaska exports of edible fishery products by major product groups, 1982-91.

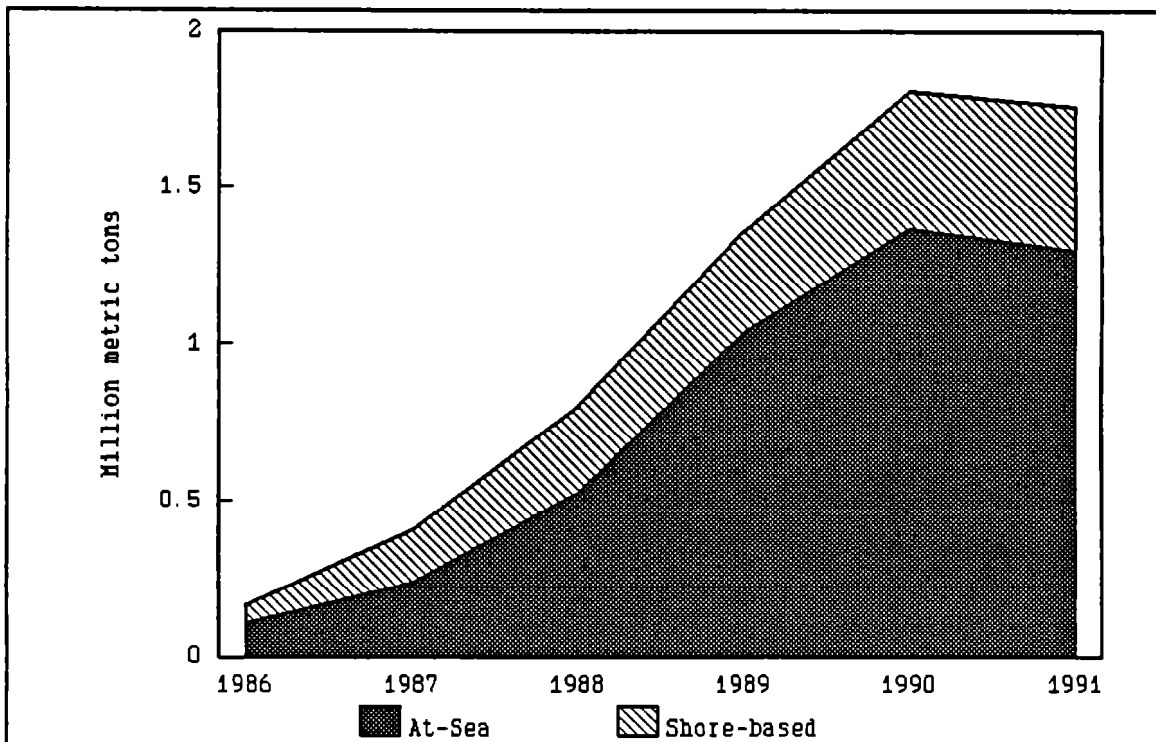


Figure 4.--Groundfish catch in the domestic fishery off Alaska by mode of operation, 1986-91.

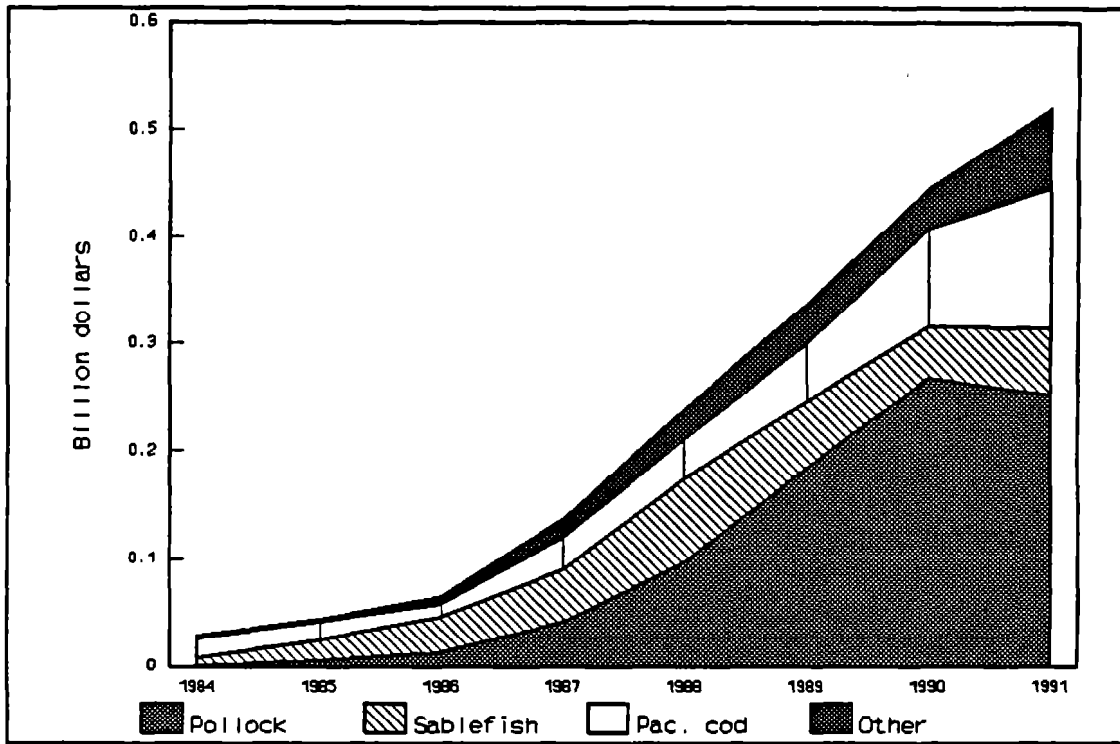


Figure 5. --Ex-vessel value of the domestic groundfish catch off Alaska by species, 1984-91.

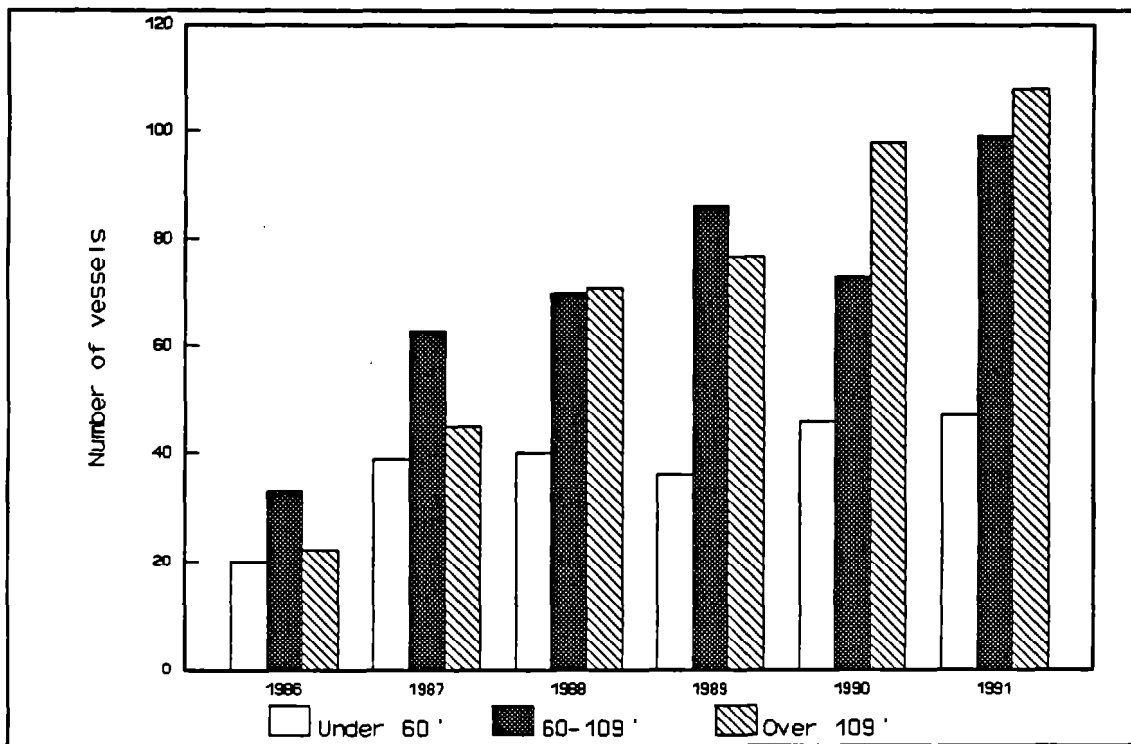


Figure 6. --Number of vessels that landed groundfish in the domestic fishery off Alaska using trawl gear by length class, 1986-91.

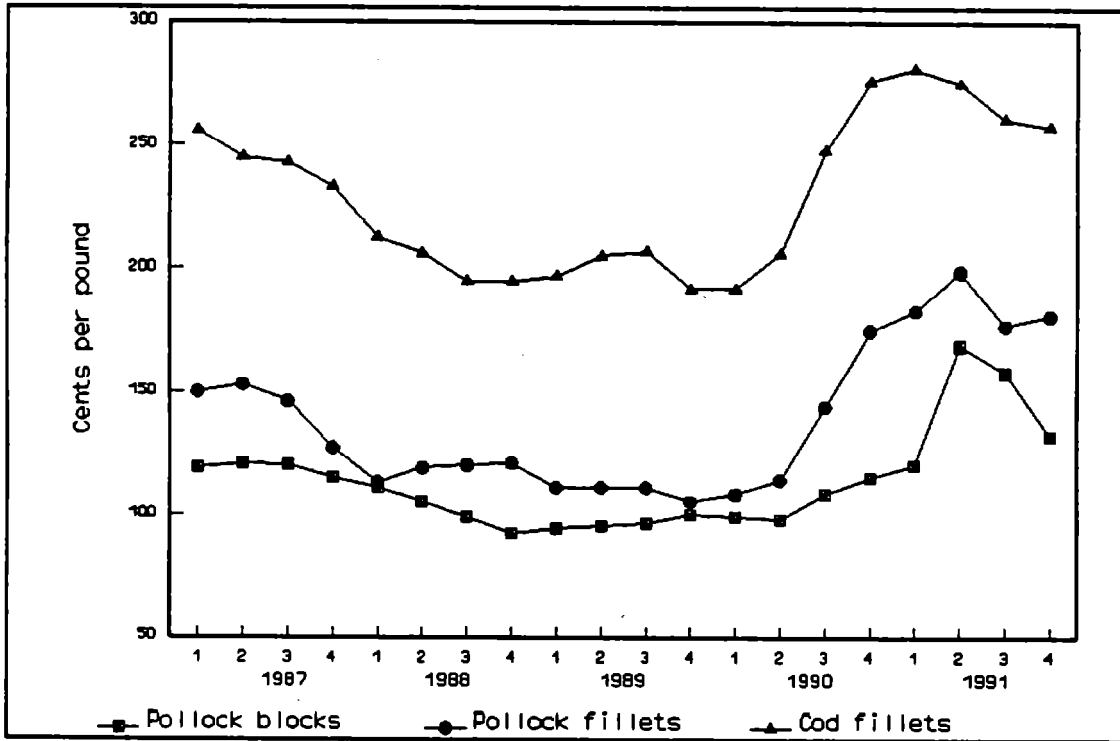


Figure 7.--Quarterly producer prices of Alaska groundfish products, F.O.B. Seattle, WA, 1987-91.

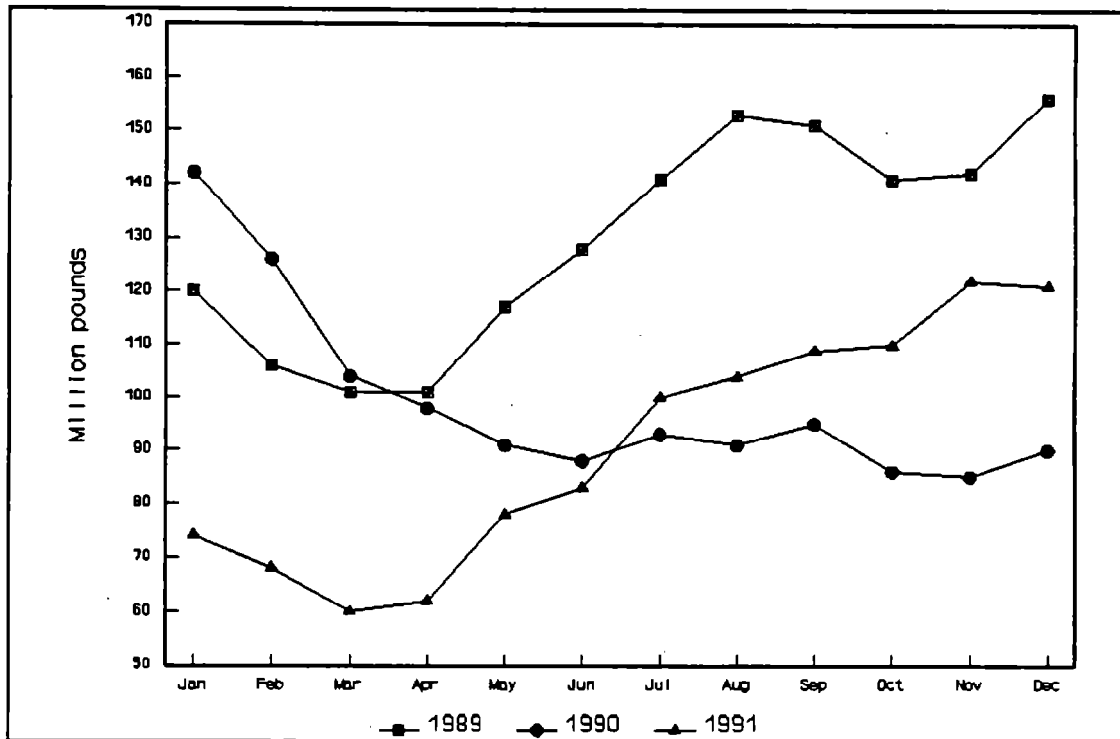


Figure 8. --Monthly U.S. cold storage holdings of groundfish blocks and fillets, 1989-91.

Table 1.--Groundfish catch in the commercial fisheries off Alaska by area and fishery, 1982-91 (1,000 metric tons, round weight).

Year	Fishery			Total
	Domestic	Joint venture	Foreign	
Gulf of Alaska				
1982	8.0	74.4	153.7	236.2
1983	9.1	143.0	147.5	299.5
1984	14.8	219.6	123.7	358.1
1985	33.2	247.2	41.0	321.4
1986	61.0	65.3	15.5	141.8
1987	111.4	32.5	0.0	143.9
1988	143.8	3.8	0.0	147.6
1989	167.4	0.0	0.0	167.4
1990	219.8	0.0	0.0	219.8
1991	228.2	0.0	0.0	228.2
Bering Sea/Aleutians				
1982	25.2	108.3	1,186.2	1,319.8
1983	46.5	210.0	1,123.8	1,380.4
1984	48.4	357.5	1,191.2	1,597.2
1985	81.5	636.4	1,033.4	1,751.3
1986	106.0	1,156.5	475.2	1,737.7
1987	295.9	1,355.4	68.7	1,720.0
1988	659.9	1,301.1	0.0	1,961.0
1989	1,185.1	531.0	0.0	1,716.1
1990	1,591.0	133.3	0.0	1,724.3
1991	1,536.1	0.0	0.0	1,536.1
All Alaska				
1982	33.3	182.8	1,339.9	1,556.0
1983	55.5	353.0	1,271.3	1,679.9
1984	63.2	577.2	1,314.9	1,955.3
1985	114.7	883.6	1,074.4	2,072.6
1986	167.7	1,221.7	490.7	1,880.1
1987	407.3	1,388.0	68.7	1,864.0
1988	803.7	1,304.8	0.0	2,108.6
1989	1,352.6	531.0	0.0	1,883.6
1990	1,811.2	133.3	0.0	1,944.5
1991	1,764.9	0.0	0.0	1,764.9

Notes: Domestic catch statistics reflect only the amounts that were landed.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 2.--Percentage distribution of commercial groundfish catch off Alaska among fisheries by area, 1982-91.

Year	Fishery		
	Domestic	Joint venture	Foreign
Gulf of Alaska			
1982	3.4	31.5	65.1
1983	3.0	47.7	49.2
1984	4.1	61.3	34.5
1985	10.3	76.9	12.8
1986	43.0	46.0	11.0
1987	77.4	22.6	0.0
1988	97.4	2.6	0.0
1989	100.0	0.0	0.0
1990	100.0	0.0	0.0
1991	100.0	0.0	0.0
Bering Sea/Aleutians			
1982	1.9	8.2	89.9
1983	3.4	15.2	81.4
1984	3.0	22.4	74.6
1985	4.7	36.3	59.0
1986	6.1	66.6	27.3
1987	17.2	78.8	4.0
1988	33.7	66.3	0.0
1989	69.1	30.9	0.0
1990	92.3	7.7	0.0
1991	100.0	0.0	0.0
All Alaska			
1982	2.1	11.7	86.1
1983	3.3	21.0	75.7
1984	3.2	29.5	67.3
1985	5.5	42.6	51.8
1986	8.9	65.0	26.1
1987	21.9	74.5	3.7
1988	38.1	61.9	0.0
1989	71.8	28.2	0.0
1990	93.1	6.9	0.0
1991	100.0	0.0	0.0

Notes: Domestic catch statistics reflect only the amounts that were landed.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 3.--Groundfish catch in the commercial fisheries off Alaska by area, fishery, and species, 1982-91
(1,000 metric tons, round weight).

Species/ Year	Gulf of Alaska				Bering Sea/Aleutians				All Alaska			
	Domestic	Joint venture	Foreign	Total	Domestic	Joint venture	Foreign	Total	Domestic	Joint venture	Foreign	Total
Pollock												
1982	2.2	73.9	92.6	168.7	0.2	54.5	959.3	1,014.0	2.4	128.4	1,051.9	1,182.8
1983	0.1	134.1	81.4	215.6	1.1	149.0	891.5	1,041.6	1.2	283.1	972.8	1,257.2
1984	1.0	207.1	99.3	307.4	7.3	237.0	933.0	1,177.3	8.4	444.1	1,032.2	1,484.7
1985	15.4	237.9	31.6	284.8	30.8	377.5	820.3	1,228.6	46.1	615.4	851.9	1,513.4
1986	21.3	62.6	0.1	84.0	57.9	835.1	352.3	1,245.3	79.8	897.7	352.4	1,329.9
1987	39.9	22.8	0.0	62.7	215.5	1,044.5	3.6	1,263.6	255.3	1,067.3	3.6	1,326.3
1988	55.7	0.2	0.0	55.9	522.6	826.4	0.0	1,349.0	578.3	826.6	0.0	1,404.9
1989	66.6	0.0	0.0	66.6	993.7	287.8	0.0	1,281.5	1,060.4	287.8	0.0	1,348.2
1990	77.8	0.0	0.0	77.8	1,330.5	22.4	0.0	1,352.9	1,408.7	22.4	0.0	1,431.1
1991	82.1	0.0	0.0	82.1	1,189.8	0.0	0.0	1,189.8	1,272.0	0.0	0.0	1,272.0
Sablefish												
1982	2.9	0.0	5.6	8.6	0.2	0.1	3.8	4.1	3.1	0.1	9.5	12.7
1983	3.8	0.3	5.0	9.0	0.1	0.1	3.2	3.4	3.9	0.4	8.1	12.4
1984	8.9	0.5	1.1	10.5	1.1	0.3	1.9	3.3	9.9	0.9	3.0	13.8
1985	11.4	0.2	0.0	11.6	3.4	0.1	0.3	3.8	14.7	0.3	0.4	15.4
1986	21.7	0.0	0.0	21.7	6.0	0.4	0.1	6.6	27.8	0.5	0.1	28.4
1987	26.3	0.2	0.0	26.5	7.8	0.1	0.0	7.9	34.1	0.3	0.0	34.5
1988	31.0	0.0	0.0	31.0	6.6	0.0	0.0	6.6	37.6	0.1	0.0	37.6
1989	29.8	0.0	0.0	29.8	4.5	0.0	0.0	4.5	34.3	0.0	0.0	34.3
1990	27.3	0.0	0.0	27.3	4.5	0.0	0.0	4.5	31.8	0.0	0.0	31.8
1991	24.6	0.0	0.0	24.6	3.3	0.0	0.0	3.3	28.3	0.0	0.0	28.3
Pacific Cod												
1982	2.2	0.2	26.9	29.4	24.9	13.5	28.2	66.5	27.1	13.7	55.1	95.9
1983	4.2	2.4	29.8	36.4	42.0	14.4	41.5	97.8	46.2	16.8	71.3	134.2
1984	3.2	4.6	15.9	23.8	38.7	30.8	58.5	127.9	41.9	35.4	74.4	151.7
1985	3.0	2.3	9.1	14.3	45.8	41.3	57.2	144.3	48.8	43.5	66.3	158.6
1986	8.0	1.4	15.2	24.6	34.2	64.0	39.9	138.1	42.3	65.3	55.1	162.7
1987	29.5	2.0	0.0	31.4	44.7	58.2	54.7	157.6	74.2	60.1	54.7	189.1
1988	30.9	1.7	0.0	32.6	87.2	109.9	0.0	197.1	118.1	111.6	0.0	229.6
1989	41.8	0.0	0.0	41.8	123.8	44.6	0.0	168.4	165.4	44.6	0.0	210.1
1990	74.6	0.0	0.0	74.6	162.9	8.1	0.0	171.0	237.6	8.1	0.0	245.7
1991	81.0	0.0	0.0	81.0	175.8	0.0	0.0	175.8	256.9	0.0	0.0	256.9

Table 3. --Continued.

Species/ Year	Gulf of Alaska				Bering Sea/Aleutians				All Alaska			
	Domestic	Joint venture	Foreign	Total	Domestic	Joint venture	Foreign	Total	Domestic	Joint venture	Foreign	Total
Flatfish												
1982	0.3	0.0	9.0	9.3	0.0	26.6	155.3	181.9	0.3	26.7	164.3	191.2
1983	0.4	2.7	9.5	12.7	0.0	34.3	166.3	200.6	0.4	37.0	175.8	213.3
1984	0.4	3.4	3.0	6.9	0.0	50.2	186.1	236.3	0.5	53.6	189.2	243.2
1985	0.5	2.4	0.2	3.1	0.1	172.7	147.6	320.5	0.5	175.2	147.8	323.6
1986	1.5	1.0	0.1	2.6	6.6	216.9	78.0	301.4	8.1	217.8	78.0	303.9
1987	2.7	7.2	0.0	9.9	24.2	215.6	7.5	247.3	26.9	222.8	7.5	257.2
1988	7.0	1.8	0.0	8.8	38.5	331.0	0.0	369.5	45.5	332.8	0.0	378.3
1989	5.2	0.0	0.0	5.2	37.1	193.7	0.0	230.8	42.3	193.7	0.0	236.0
1990	15.4	0.0	0.0	15.4	42.2	99.6	0.0	141.8	57.6	99.6	0.0	157.2
1991	20.1	0.0	0.0	20.1	132.0	0.0	0.0	132.0	152.1	0.0	0.0	152.1
Rockfish												
1982	0.3	0.0	10.5	10.7	0.0	0.0	4.9	4.9	0.3	0.0	15.3	15.6
1983	0.4	2.3	7.8	10.6	0.0	0.1	2.0	2.1	0.4	2.4	9.8	12.7
1984	1.1	2.0	3.2	6.3	1.3	0.6	0.9	2.9	2.4	2.7	4.1	9.1
1985	2.7	0.3	0.0	3.0	0.9	0.5	0.1	1.5	3.7	0.8	0.1	4.6
1986	7.9	0.1	0.0	8.0	1.1	0.5	0.0	1.6	8.9	0.6	0.0	9.6
1987	12.7	0.2	0.0	12.9	2.7	0.9	0.0	3.6	15.4	1.0	0.0	16.4
1988	18.4	0.0	0.0	18.4	2.6	2.1	0.0	4.7	21.0	2.1	0.0	23.1
1989	23.4	0.0	0.0	23.4	7.3	0.1	0.0	7.3	30.7	0.1	0.0	30.8
1990	21.1	0.0	0.0	21.1	25.2	0.0	0.0	25.2	46.3	0.0	0.0	46.3
1991	15.9	0.0	0.0	15.9	7.1	0.0	0.0	7.1	23.1	0.0	0.0	23.1
Atka Mackerel												
1982	0.0	0.0	6.8	6.8	0.0	12.5	7.4	19.9	0.0	12.5	14.2	26.6
1983	0.0	0.8	11.5	12.3	0.0	10.5	1.2	11.7	0.0	11.3	12.7	24.0
1984	0.0	0.6	0.5	1.2	0.0	35.9	0.1	36.1	0.0	36.5	0.6	37.2
1985	0.0	1.8	0.0	1.8	0.0	37.9	0.0	37.9	0.0	39.7	0.0	39.7
1986	0.0	0.0	0.0	0.0	0.0	32.0	0.0	32.0	0.0	32.0	0.0	32.0
1987	0.0	0.0	0.0	0.0	0.1	30.1	0.0	30.2	0.1	30.1	0.0	30.2
1988	0.1	0.0	0.0	0.1	1.9	19.6	0.0	22.6	2.0	19.6	0.0	21.6
1989	0.2	0.0	0.0	0.2	18.3	0.1	0.0	18.3	18.4	0.1	0.0	18.5
1990	0.1	0.0	0.0	0.1	22.2	0.0	0.0	22.2	22.3	0.0	0.0	22.3
1991	3.3	0.0	0.0	3.3	22.8	0.0	0.0	22.8	26.1	0.0	0.0	26.1

Notes: The joint venture and foreign data are estimates of catch; however, the domestic data are estimates of landed catch excluding discards.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way I.E., BIN C15700, Seattle, WA 98115-0070.

Table 4.--Ex-vessel value of the groundfish catch in the commercial fisheries off Alaska by fishery, 1982-91 (\$ millions and percentage of total).

Year	Fishery			Total
	Domestic	Joint venture	Foreign	
Value (\$ millions)				
1982	13.7	25.0	172.3	211.0
1983	17.9	37.2	132.9	188.0
1984	27.6	64.6	147.2	239.4
1985	43.7	98.6	117.8	260.1
1986	65.3	143.7	59.6	268.6
1987	137.8	188.0	10.9	336.7
1988	240.0	204.6	0.0	444.6
1989	338.6	86.7	0.0	425.3
1990	447.2	27.7	0.0	474.9
1991	520.9	0.0	0.0	520.9
Percentage of total				
1982	6.5	11.8	81.7	100.0
1983	9.5	19.8	70.7	100.0
1984	11.5	27.0	61.5	100.0
1985	16.8	37.9	45.3	100.0
1986	24.3	53.5	22.2	100.0
1987	40.9	55.8	3.2	100.0
1988	54.0	46.0	0.0	100.0
1989	79.6	20.4	0.0	100.0
1990	94.2	5.8	0.0	100.0
1991	100.0	0.0	0.0	100.0

Note: The value added by at-sea processing is not included in these estimates of ex-vessel value.

Source: National Marine Fisheries Service, Alaska Region; National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 5.- -Ex-vessel value of the catch in the commercial fisheries off Alaska by species group, 1982-91 (\$ millions and percentage of total).

Year	Shellfish	Salmon	Herring	Halibut	Groundfish	Total
Value (\$ millions)						
1982	216.5	310.7	19.9	25.7	211.0	783.8
1983	147.7	320.6	29.8	43.0	188.0	729.1
1984	103.4	343.0	20.4	19.6	239.4	725.8
1985	106.9	389.6	36.9	37.5	260.1	831.0
1986	183.0	404.1	38.4	70.1	268.6	964.2
1987	215.2	473.0	41.7	76.3	336.7	1,142.9
1988	235.6	744.9	56.0	66.1	444.6	1,547.1
1989	279.2	506.7	18.7	84.4	425.3	1,314.3
1990	355.1	546.7	24.0	86.9	474.9	1,487.6
1991	301.1	300.1	28.6	91.6	520.9	1,242.6
Percentage of total						
1982	27.6	39.6	2.5	3.3	26.9	100.0
1983	20.3	44.0	4.1	5.9	25.8	100.0
1984	14.2	47.3	2.8	2.7	33.0	100.0
1985	12.9	46.9	4.4	4.5	31.3	100.0
1986	19.0	41.9	4.0	7.3	27.9	100.0
1987	18.8	41.4	3.6	6.7	29.5	100.0
1988	15.2	48.2	3.6	4.3	28.7	100.0
1989	21.2	38.6	1.4	6.4	32.4	100.0
1990	23.9	36.8	1.6	5.8	31.9	100.0
1991	24.3	24.1	2.3	7.4	41.9	100.0

Note: The value added by at-sea processing is not included in these estimates of ex-vessel value. Includes joint venture and foreign groundfish catch.

Source: National Marine Fisheries Service, Alaska Region; National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 6.--Value of Pacific Northwest and Alaska exports of edible fishery products or product groups (\$ millions and percentage of total), 1982-91.

Year	Salmon	Herring	Other finfish*	Crab	Other	Total
Value (\$ millions)						
1982	531	60	25	87	36	739
1983	510	67	23	40	29	668
1984	480	60	47	36	25	648
1985	597	104	66	53	17	837
1986	707	78	126	107	16	1,034
1987	728	93	204	184	24	1,232
1988	967	115	358	231	29	1,700
1989	878	59	531	242	37	1,747
1990	822	71	795	345	38	2,071
1991	612	76	1,074	417	39	2,218
Percentage of total						
1982	71.9	8.1	3.3	11.8	4.9	100.0
1983	76.3	10.0	3.4	6.0	4.3	100.0
1984	74.1	9.3	7.2	5.5	3.9	100.0
1985	71.3	12.4	7.9	6.4	2.0	100.0
1986	68.4	7.5	12.2	10.4	1.5	100.0
1987	59.1	7.5	16.6	14.9	1.9	100.0
1988	56.9	6.8	21.0	13.6	1.7	100.0
1989	50.3	3.4	30.4	13.8	2.1	100.0
1990	39.7	3.4	38.4	16.7	1.8	100.0
1991	27.6	3.4	48.4	18.8	1.8	100.0

Notes: * Other fresh, frozen, canned, cured, roe, and processed finfish excluding salmon, herring, and other nongroundfish species. Discrepancies in totals are due to rounding.

Sources: U.S. Dep. Commer., Bur. of the Census; data base from National Marine Fisheries Service, Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fisheries Science Center, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 7. --Groundfish landings in the domestic fisheries off Alaska by area, gear, and species, 1982-91
(1,000 metric tons, round weight).

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Hook&Line	Trawl	All	Hook&Line	Trawl	All	Hook&Line	Trawl	All
All Groundfish										
	1982	3.3	4.6	8.0	0.0	23.5	25.2	3.3	28.1	33.3
	1983	4.3	4.6	9.1	0.0	45.9	46.5	4.3	50.5	55.5
	1984	9.7	4.6	14.8	0.0	48.0	48.4	9.8	52.6	63.2
	1985	11.5	20.1	33.2	1.9	78.1	81.5	13.4	98.3	114.7
	1986	20.4	38.4	61.0	3.4	95.2	106.0	23.9	134.2	167.7
	1987	33.4	76.5	111.4	9.0	285.9	295.9	42.5	362.4	407.3
	1988	32.5	109.3	143.8	8.7	650.6	659.9	41.2	759.8	803.7
	1989	31.8	135.2	167.4	18.4	1,166.6	1,185.1	50.2	1,301.8	1,352.6
	1990	32.9	179.5	219.8	53.9	1,535.3	1,591.0	86.8	1,715.2	1,811.2
	1991	32.8	183.2	228.2	75.3	1,455.0	1,536.1	108.5	1,638.5	1,764.9
Pollock										
	1982	--	2.2	2.2	--	0.2	0.2	--	2.3	2.4
	1983	--	0.1	0.1	--	1.1	1.1	--	1.2	1.2
	1984	--	1.0	1.0	--	7.2	7.3	--	8.2	8.4
	1985	--	14.6	15.4	--	30.7	30.8	--	45.3	46.1
	1986	--	21.3	21.3	--	51.8	57.9	--	73.7	79.8
	1987	--	39.8	39.9	0.3	215.0	215.5	0.3	254.8	255.3
	1988	0.1	55.6	55.7	--	522.5	522.6	0.1	578.2	578.3
	1989	0.0	66.6	66.6	0.3	993.4	993.7	0.3	1,060.1	1,060.4
	1990	0.0	77.5	77.8	1.2	1,329.3	1,330.5	1.2	1,407.3	1,408.7
	1991	0.0	82.0	82.1	0.5	1,189.1	1,189.8	0.5	1,271.3	1,272.0
Sablefish										
	1982	2.8	0.0	2.9	0.0	0.2	0.2	2.8	0.2	3.1
	1983	3.8	0.0	3.8	0.0	0.1	0.1	3.8	0.1	3.9
	1984	8.4	0.1	8.9	0.0	1.0	1.1	8.5	1.1	9.9
	1985	9.4	0.4	11.4	1.7	0.2	3.4	11.1	0.6	14.7
	1986	16.8	2.9	21.7	3.0	1.8	6.0	19.8	4.7	27.8
	1987	22.8	2.8	26.3	4.8	2.4	7.8	27.5	5.2	34.1
	1988	26.3	4.1	31.0	3.8	2.5	6.6	30.0	6.7	37.6
	1989	26.2	3.6	29.8	2.7	1.8	4.5	29.0	5.4	34.3
	1990	24.5	2.8	27.3	3.2	1.3	4.5	27.8	4.1	31.8
	1991	22.1	2.6	24.6	2.8	0.5	3.3	25.2	3.1	28.3
Pacific Cod										
	1982	0.2	2.0	2.2	0.0	23.2	24.9	0.2	25.2	27.1
	1983	0.1	4.0	4.2	0.0	41.4	42.0	0.1	45.4	46.2
	1984	0.3	2.8	3.2	0.0	38.4	38.7	0.3	41.3	41.9
	1985	0.4	2.6	3.0	0.0	45.8	45.8	0.4	48.3	48.8
	1986	2.1	5.8	8.0	0.0	34.0	34.2	2.1	39.8	42.3
	1987	8.3	20.5	29.5	1.4	43.2	44.7	9.7	63.7	74.2
	1988	3.9	25.5	30.9	2.6	84.3	87.2	6.5	109.8	118.2
	1989	3.7	37.6	41.7	14.0	109.6	123.8	17.6	147.3	165.4
	1990	6.5	61.2	74.6	47.5	113.7	162.9	54.0	174.9	237.6
	1991	7.9	60.9	81.0	69.8	100.5	175.8	77.8	161.5	256.9

Table 7. --Continued.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Hook&Line	Trawl	All	Hook&Line	Trawl	All	Hook&Line	Trawl	All
Flatfish										
	1982	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.3
	1983	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.4	0.4
	1984	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.4	0.5
	1985	0.0	0.4	0.5	0.0	0.1	0.1	0.1	0.5	0.5
	1986	0.0	1.5	1.5	0.2	6.4	6.6	0.2	7.8	8.1
	1987	0.2	2.5	2.7	2.4	21.8	24.2	2.5	24.3	26.9
	1988	0.1	6.9	7.0	2.0	36.4	38.5	2.1	43.4	45.5
	1989	0.0	5.1	5.2	1.0	36.1	37.1	1.0	41.3	42.3
	1990	0.1	15.3	15.4	0.9	41.3	42.2	1.0	56.5	57.6
	1991	0.1	20.0	20.1	0.6	131.4	132.0	0.7	151.4	152.1
Rockfish										
	1982	0.2	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.3
	1983	0.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.4
	1984	0.9	0.1	1.1	0.0	1.3	1.3	0.9	1.5	2.4
	1985	0.8	1.9	2.7	0.1	0.9	0.9	0.9	2.8	3.7
	1986	1.3	6.5	7.9	0.1	1.0	1.1	1.4	7.5	8.9
	1987	1.9	10.8	12.7	0.2	2.5	2.7	2.2	13.2	15.4
	1988	1.6	16.7	18.4	0.3	2.4	2.6	1.9	19.1	21.0
	1989	1.5	21.9	23.4	0.4	6.9	7.3	1.9	28.8	30.7
	1990	1.4	19.6	21.1	0.3	24.9	25.2	1.7	44.5	46.3
	1991	2.0	13.9	15.9	0.4	6.8	7.1	2.4	20.6	23.1
Atka Mackerel										
	1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1987	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1
	1988	0.0	0.1	0.1	0.0	1.9	1.9	0.0	2.0	2.0
	1989	0.0	0.2	0.2	0.0	18.3	18.3	0.0	18.4	18.4
	1990	0.0	0.1	0.1	0.0	22.2	22.2	0.0	22.3	22.3
	1991	0.0	3.3	3.3	0.0	22.8	22.8	0.0	26.1	26.1

Notes: All gear includes the specified gears, other gear, and unidentified gear.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 8. Groundfish landings in the domestic fisheries off Alaska by area, mode of operation, and species, 1986-91 (1,000 metric tons, round weight).

Species/Year	Gulf of Alaska		Bering Sea/Aleutians		All Alaska	
	At-sea	Shore-based	At-sea	Shore-based	At-sea	Shore-based
Pollock						
1986	12.0	9.4	43.7	14.2	56.2	23.6
1987	9.5	30.3	138.9	76.6	148.4	107.0
1988	8.0	47.7	372.2	150.3	380.3	198.0
1989	33.3	33.3	803.3	190.4	836.6	223.9
1990	13.9	63.8	1,083.1	247.3	1,097.1	311.6
1991	20.6	61.4	919.3	270.5	939.9	332.0
Sablefish						
1986	4.7	17.0	3.6	2.4	8.3	19.5
1987	5.2	21.2	6.3	1.5	11.4	22.7
1988	8.5	22.5	5.9	0.7	14.3	23.2
1989	7.8	22.0	4.3	0.2	12.1	22.3
1990	7.8	19.5	3.8	0.6	11.7	20.1
1991	4.2	20.4	2.1	1.2	6.3	22.0
Pacific Cod						
1986	3.8	4.3	24.5	9.8	28.3	14.1
1987	7.3	22.1	36.9	7.8	44.2	30.0
1988	4.5	26.4	69.3	17.8	73.8	44.2
1989	5.3	36.3	96.2	27.5	101.6	63.9
1990	15.3	59.3	126.9	33.2	142.2	92.6
1991	20.8	60.1	147.6	28.2	168.4	88.4
Flatfish						
1986	0.9	0.7	6.0	0.6	6.8	1.2
1987	1.0	1.6	20.6	3.6	21.6	5.2
1988	1.8	5.2	37.6	0.8	39.4	6.0
1989	1.3	3.9	36.2	0.9	37.5	4.8
1990	8.7	6.7	40.0	2.1	48.7	8.9
1991	11.4	8.6	124.5	7.5	135.9	16.2
Rockfish						
1986	5.0	2.9	1.0	0.0	6.0	2.9
1987	10.8	1.9	2.6	0.1	13.5	1.9
1988	16.6	1.8	2.6	0.0	19.2	1.8
1989	21.8	1.6	7.2	0.1	29.1	1.6
1990	19.4	1.6	25.0	0.2	44.4	1.9
1991	13.3	2.7	7.0	0.2	20.2	2.9
Atka Mackerel						
1988	0.1	0.0	1.9	0.0	2.0	0.0
1989	0.2	0.0	18.2	0.1	18.4	0.1
1990	0.1	0.0	21.8	0.4	21.9	0.4
1991	3.3	0.0	22.8	0.1	26.0	0.1
All Groundfish						
1986	26.6	34.4	79.0	27.0	106.2	61.5
1987	33.9	77.5	205.5	90.4	239.4	167.9
1988	39.5	104.3	490.0	169.9	529.5	274.2
1989	69.8	97.6	965.6	219.5	1,035.5	317.1
1990	67.9	151.8	1,303.1	284.9	1,371.1	437.1
1991	74.0	154.2	1,227.5	308.6	1,301.5	463.4

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 9.- Groundfish landings in the domestic fisheries off Alaska by area, residency, and species, 1986-91 (1,000 metric tons, round weight).

Species/Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
	Alaska	Other	Unknown	Alaska	Other	Unknown	Alaska	Other	Unknown
Pollock									
1986	9.5	13.7	0.1	33.7	10.0	8.0	43.8	23.7	8.1
1987	12.9	21.1	10.8	22.1	88.9	90.7	34.9	109.9	101.4
1988	17.6	33.6	5.7	63.3	261.8	192.4	81.0	295.4	198.1
1989	20.8	59.9	0.9	12.8	799.4	187.5	33.6	859.6	188.4
1990	36.8	41.0	0.0	15.1	1,315.3	0.2	51.9	1,356.3	0.2
1991	22.8	59.3	0.0	26.1	1,163.6	0.2	48.9	1,222.9	0.2
Sablefish									
1986	12.6	8.7	1.3	2.2	3.8	0.2	15.0	12.5	1.5
1987	13.7	4.3	11.2	2.7	3.5	2.7	16.4	7.8	14.0
1988	15.6	3.6	11.9	1.9	1.0	3.3	17.5	4.6	16.0
1989	13.5	11.1	3.7	0.7	3.3	0.5	14.2	14.3	4.1
1990	13.9	13.3	0.1	1.6	2.9	0.0	15.5	16.2	0.1
1991	12.5	11.9	0.1	0.8	2.5	0.0	13.3	14.4	0.1
Pacific Cod									
1986	5.6	1.7	0.3	14.3	20.9	1.8	19.9	22.6	2.1
1987	21.3	4.8	6.0	10.5	16.8	13.4	31.9	21.6	19.7
1988	23.5	3.0	3.7	7.0	31.2	43.0	30.5	34.2	47.0
1989	24.8	12.5	1.2	9.6	68.4	21.1	34.4	80.9	22.3
1990	36.6	38.0	0.0	16.4	146.4	0.1	53.0	184.4	0.1
1991	40.9	39.9	0.1	21.3	154.1	0.0	62.2	194.5	0.1
Flatfish									
1986	0.9	0.5	0.1	1.5	5.3	0.4	2.4	5.9	0.4
1987	1.2	1.0	0.8	3.5	7.1	7.9	4.8	8.0	8.7
1988	4.6	1.2	2.8	0.6	8.4	27.2	5.2	9.6	31.6
1989	3.4	4.1	2.1	0.7	26.4	15.6	4.1	30.5	17.7
1990	3.6	11.8	0.0	2.6	39.6	0.0	6.2	51.4	0.0
1991	5.0	15.1	0.0	24.7	107.2	0.1	29.7	122.3	0.1
Rockfish									
1986	1.3	3.6	2.7	0.0	1.2	0.1	1.4	4.7	2.9
1987	1.7	11.4	4.0	0.1	1.5	1.6	1.8	13.0	5.5
1988	1.7	10.4	10.0	0.2	0.9	1.9	1.8	11.3	13.0
1989	1.2	15.8	5.6	0.5	6.1	1.7	1.7	21.9	7.4
1990	5.8	15.3	0.0	2.8	18.0	0.0	8.6	33.3	0.0
1991	4.6	11.3	0.0	0.7	6.4	0.0	5.3	17.7	0.0
Atka Mackerel									
1988	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.6
1989	0.0	0.2	0.0	0.1	10.2	4.4	0.1	10.4	4.4
1990	0.0	0.1	0.0	2.3	19.9	0.0	2.3	20.0	0.0
1991	1.1	2.2	0.0	7.2	15.6	0.0	8.3	17.8	0.0
All Groundfish									
1986	30.3	28.2	4.5	51.9	41.2	10.6	83.0	69.5	15.2
1987	51.1	42.7	32.7	39.2	118.2	122.8	90.3	160.9	156.1
1988	63.2	52.1	34.2	73.0	303.3	273.9	136.2	355.5	312.0
1989	64.0	103.9	13.9	24.5	914.5	231.6	88.5	1,018.7	245.4
1990	97.0	122.5	0.1	41.1	1,545.2	0.3	138.2	1,667.8	0.4
1991	87.3	140.6	0.3	81.7	1,454.1	0.3	169.1	1,594.7	0.5

Source: National Marine Fisheries Service groundfish fish ticket, vessel registration, and weekly processor data bases; and National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 10. --Ex-vessel value of the groundfish catch in the domestic fisheries off Alaska by area, gear, and species, 1984-91 (\$ millions).

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Hook&Line	Trawl	All	Hook&Line	Trawl	All	Hook&Line	Trawl	All
All Groundfish										
	1984	7.2	1.2	8.9	0.0	18.6	18.8	7.3	19.8	27.6
	1985	15.5	3.5	21.0	2.1	19.1	22.7	17.6	22.5	43.7
	1986	25.0	9.6	37.4	3.6	18.4	27.7	28.7	28.1	65.3
	1987	41.7	23.9	66.7	9.6	60.4	71.0	51.4	84.3	137.8
	1988	60.7	36.5	98.9	11.1	129.3	141.0	71.9	165.8	240.0
	1989	53.8	43.2	97.2	12.7	228.6	243.4	66.5	271.8	338.6
	1990	42.4	48.8	94.4	34.3	317.6	352.6	76.8	366.4	447.2
	1991	55.4	70.6	133.2	52.3	331.7	386.7	108.4	402.5	520.9
Pollock										
	1984	--	0.1	0.1	--	1.3	1.3	--	1.4	1.4
	1985	--	1.4	2.7	--	3.6	3.6	--	5.0	6.3
	1986	--	2.3	2.3	--	6.0	10.0	--	8.3	12.3
	1987	--	6.9	6.9	--	35.1	35.3	0.1	42.0	42.2
	1988	--	9.2	9.2	--	87.5	87.5	--	96.7	96.7
	1989	0.0	11.3	11.3	0.1	174.1	175.1	0.1	185.4	185.4
	1990	0.0	12.6	12.7	0.8	255.2	256.0	0.8	267.9	268.7
	1991	0.0	21.4	21.4	0.3	231.8	232.2	0.3	253.3	253.7
Sablefish										
	1984	6.2	0.0	6.6	0.0	0.4	0.4	6.2	0.4	7.0
	1985	13.3	0.4	15.6	2.0	0.2	3.7	15.3	0.5	19.4
	1986	22.8	2.7	28.2	3.4	1.5	6.6	26.3	4.2	34.9
	1987	35.7	2.8	39.2	6.7	2.3	9.8	42.4	5.1	49.1
	1988	56.7	7.5	65.4	8.1	4.4	13.1	64.8	12.0	78.5
	1989	50.3	5.4	55.7	4.8	2.4	7.2	55.1	7.8	62.9
	1990	38.0	4.1	42.1	5.1	1.8	6.9	43.1	5.9	49.1
	1991	48.2	5.0	53.2	7.1	1.0	8.2	56.1	6.0	62.1
Pacific Cod										
	1984	0.1	0.8	1.0	0.0	16.6	16.7	0.1	17.4	17.6
	1985	0.1	0.7	0.8	0.0	14.8	14.8	0.1	15.5	15.6
	1986	0.7	1.6	2.4	0.0	8.4	8.5	0.8	10.0	10.9
	1987	3.8	7.9	12.0	0.5	16.4	17.0	4.4	24.3	29.0
	1988	1.9	8.3	10.8	1.6	24.0	25.7	3.4	32.5	36.5
	1989	1.7	11.0	12.8	7.1	33.2	40.3	8.8	44.2	53.2
	1990	3.0	20.2	26.1	27.2	36.7	64.7	30.1	56.9	90.7
	1991	4.9	29.5	41.7	43.5	43.7	89.8	48.4	73.2	131.5
Flatfish										
	1984	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.2
	1985	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2
	1986	0.0	0.4	0.5	0.1	2.0	2.2	0.1	2.5	2.6
	1987	0.1	0.6	0.7	2.1	5.3	7.4	2.2	5.9	8.1
	1988	0.0	1.8	1.8	1.1	11.3	12.4	1.2	13.1	14.2
	1989	0.0	1.1	1.2	0.3	10.2	10.5	0.4	11.3	11.7
	1990	0.0	3.1	3.1	0.3	11.1	11.4	0.4	14.2	14.6
	1991	0.0	6.6	6.6	0.3	43.6	43.9	0.4	50.3	50.6

Table 10. --Continued.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Hook&Line	Trawl	All	Hook&Line	Trawl	All	Hook&Line	Trawl	All
Rockfish										
	1984	0.8	0.0	0.9	0.0	0.4	0.4	0.8	0.4	1.3
	1985	0.8	0.7	1.5	0.0	0.3	0.3	0.8	1.0	1.8
	1986	1.3	2.5	3.7	0.0	0.4	0.4	1.3	2.8	4.1
	1987	1.8	5.7	7.6	0.3	0.9	1.2	2.1	6.6	8.7
	1988	1.7	9.6	11.3	0.3	1.1	1.3	1.9	10.7	12.7
	1989	1.6	14.3	15.9	0.4	2.7	2.7	1.9	16.7	18.6
	1990	1.3	8.4	9.8	0.2	6.9	7.2	1.5	15.3	16.9
	1991	1.7	7.0	8.6	0.2	3.1	3.4	1.9	10.1	12.0
Atka Mackerel										
	1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1987	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1
	1988	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.8	0.8
	1989	0.0	0.1	0.1	0.0	6.4	6.4	0.0	6.4	6.4
	1990	0.0	0.0	0.0	0.0	5.2	5.2	0.0	5.3	5.3
	1991	0.0	0.9	0.9	0.0	6.8	6.8	0.0	7.7	7.7

Note: Domestic values are based on ex-vessel prices that do not include the value added by at-sea processing; therefore, they reflect the value of catch prior to processing. Totals include specified gear, other gear, and unidentified gear. Zero indicates none or less than \$50,000.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 11.--Ex-vessel value of the groundfish catch in the domestic fisheries off Alaska by area, mode of operation, and species, 1986-91 (\$ millions).

Species/Year	Gulf of Alaska		Bering Sea/Aleutians		All Alaska	
	At-sea	Shore-based	At-sea	Shore-based	At-sea	Shore-based
Pollock						
1986	1.0	1.2	8.1	1.9	9.2	3.1
1987	1.6	5.3	22.2	13.1	23.8	18.5
1988	0.9	8.3	61.1	26.4	62.0	34.6
1989	5.5	5.8	140.2	33.9	145.7	39.7
1990	2.2	10.5	210.7	45.3	213.0	55.8
1991	9.4	12.0	179.5	52.7	188.9	64.8
Sablefish						
1986	5.3	22.9	3.9	2.7	9.2	25.7
1987	5.7	33.5	7.8	2.0	13.6	35.5
1988	17.7	47.6	11.7	1.4	29.4	49.0
1989	13.9	41.8	6.7	0.4	20.6	42.2
1990	12.0	30.0	5.9	1.0	18.0	31.0
1991	8.8	44.4	5.4	2.8	14.3	47.8
Pacific Cod						
1986	1.0	1.4	5.3	3.2	6.2	4.7
1987	2.3	9.7	13.5	3.4	15.8	13.2
1988	1.5	9.3	19.4	6.3	20.9	15.6
1989	1.9	11.0	31.9	8.4	33.8	19.4
1990	5.4	20.6	52.9	10.8	58.3	31.4
1991	10.1	31.5	77.6	12.3	87.7	43.8
Flatfish						
1986	0.2	0.3	2.1	0.1	2.3	0.4
1987	0.2	0.5	6.3	1.1	6.5	1.6
1988	0.3	1.5	12.2	0.2	12.5	1.7
1989	0.2	0.9	10.4	0.1	10.6	1.0
1990	1.7	1.4	11.1	0.3	12.8	1.7
1991	4.6	2.1	42.1	1.8	46.7	3.9
Rockfish						
1986	1.7	2.0	0.4	0.0	2.1	2.1
1987	5.8	1.8	1.1	0.1	6.9	1.9
1988	9.6	1.7	1.3	0.0	10.9	1.7
1989	14.4	1.5	2.7	0.0	17.1	1.5
1990	8.5	1.3	7.1	0.1	15.5	1.4
1991	6.7	1.9	3.3	0.1	10.0	2.0
Atka Mackerel						
1988	0.2	0.0	0.6	0.0	0.8	0.0
1989	0.1	0.0	6.3	0.0	6.4	0.0
1990	0.0	0.0	5.1	0.1	5.1	0.1
1991	0.9	0.0	6.7	0.0	7.6	0.0
All Groundfish						
1986	9.4	28.0	19.8	7.9	29.3	36.0
1987	15.6	51.1	51.1	20.0	66.7	71.1
1988	30.1	68.8	106.7	34.4	136.8	103.2
1989	36.0	61.1	198.4	43.0	234.4	104.2
1990	30.1	64.2	293.9	57.8	324.1	122.0
1991	40.8	92.4	316.7	70.0	357.6	163.3

Note: Domestic values are based on ex-vessel prices that do not include the value added by at-sea processing; therefore, they reflect the value of catch prior to processing. Zero indicates none or less than \$50,000.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 12.-- Ex-vessel value of the groundfish catch in the domestic fisheries off Alaska by area, residency, and species, 1986-91 (\$ million).

Species/Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
	Alaska	Other	Unknown	Alaska	Other	Unknown	Alaska	Other	Unknown
Pollock									
1986	1.0	1.4	0.0	5.8	1.7	1.4	6.8	3.7	1.3
1987	2.2	3.7	1.9	3.6	14.5	14.8	5.8	18.2	16.8
1988	2.9	5.6	1.0	10.6	43.8	32.2	13.6	49.5	33.2
1989	3.5	10.2	0.2	2.2	139.2	32.6	5.9	149.7	32.8
1990	6.0	6.7	0.0	2.9	252.3	0.0	8.9	259.0	0.0
1991	5.9	15.4	0.0	5.1	228.3	0.0	11.0	243.7	0.0
Sablefish									
1986	16.5	11.4	1.6	2.4	4.1	0.2	18.8	15.7	1.9
1987	20.4	6.4	16.7	3.4	4.4	3.4	23.6	11.2	20.2
1988	32.8	7.5	25.1	3.7	2.0	6.5	36.6	9.5	33.3
1989	25.1	20.6	6.8	1.2	5.2	0.7	26.0	26.2	7.5
1990	21.4	20.4	0.2	2.5	4.5	0.0	23.9	24.9	0.2
1991	27.1	25.8	0.3	2.0	6.1	0.0	29.1	31.9	0.3
Pacific Cod									
1986	1.6	0.5	0.1	3.6	5.2	0.4	5.1	5.8	0.5
1987	8.7	1.9	2.4	4.0	6.4	5.1	12.5	8.4	7.7
1988	8.2	1.0	1.3	2.1	9.2	12.7	9.4	10.6	14.5
1989	7.7	3.9	0.4	3.1	22.3	6.9	11.1	26.0	7.2
1990	12.8	13.2	0.0	6.5	58.1	0.0	19.3	71.3	0.0
1991	21.0	20.5	0.1	10.9	79.0	0.0	31.9	99.5	0.1
Flatfish									
1986	0.3	0.2	0.0	0.5	1.7	0.1	0.8	1.9	0.1
1987	0.3	0.3	0.2	1.1	2.2	2.4	1.4	2.4	2.6
1988	1.2	0.3	0.7	0.2	2.7	8.7	1.6	3.0	9.9
1989	0.8	0.9	0.5	0.2	7.4	4.4	1.1	8.4	4.9
1990	0.7	2.4	0.0	0.7	10.7	0.0	1.4	13.1	0.0
1991	1.7	5.0	0.0	8.2	35.7	0.0	9.9	40.7	0.0
Rockfish									
1986	0.7	2.1	1.6	0.0	0.7	0.1	0.8	2.8	1.7
1987	1.0	6.8	2.4	0.0	0.6	0.7	1.0	7.4	3.1
1988	1.0	6.4	6.2	0.1	0.5	1.0	1.1	6.8	7.8
1989	0.8	10.7	3.8	0.2	2.3	0.6	1.0	13.3	4.5
1990	2.7	7.1	0.0	0.8	5.1	0.0	3.5	12.2	0.0
1991	2.5	6.1	0.0	0.3	3.0	0.0	2.8	9.1	0.0
Atka Mackerel									
1988	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.6
1989	0.0	0.1	0.0	0.0	3.6	1.5	0.0	3.6	1.5
1990	0.0	0.0	0.0	0.5	4.7	0.0	0.5	4.7	0.0
1991	0.3	0.6	0.0	2.1	4.6	0.0	2.4	5.2	0.0
All Groundfish									
1986	20.2	15.6	3.4	12.3	13.5	2.3	32.3	30.0	5.5
1987	32.6	19.1	23.6	12.1	28.1	26.4	44.3	47.6	50.4
1988	46.2	20.8	34.2	16.7	58.2	61.8	62.3	79.4	99.4
1989	37.9	46.4	11.6	6.9	180.0	46.8	45.2	227.3	58.4
1990	43.7	51.2	0.2	14.0	336.1	0.1	57.7	387.3	0.3
1991	58.7	74.0	0.4	29.0	357.8	0.1	87.6	431.8	0.4

Note: Domestic values are based on ex-vessel prices that do not include the value added by at-sea processing; therefore, they reflect the value of catch prior to processing.

Source: National Marine Fisheries Service groundfish fish ticket, vessel registration, and weekly processor data bases; and National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 13.--Ex-vessel prices in the domestic groundfish fisheries off Alaska by area, gear, and species, 1984-91 (\$/lb, round weight).

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Hook&Line	Trawl	All	Hook&Line	Trawl	All	Hook&Line	Trawl	All
All Groundfish										
	1984	0.34	0.12	0.27	0.48	0.18	0.18	0.34	0.17	0.20
	1985	0.61	0.08	0.29	0.50	0.11	0.13	0.60	0.10	0.17
	1986	0.55	0.11	0.28	0.48	0.09	0.12	0.54	0.10	0.18
	1987	0.57	0.14	0.27	0.48	0.10	0.11	0.55	0.11	0.15
	1988	0.85	0.15	0.31	0.58	0.09	0.10	0.79	0.10	0.14
	1989	0.77	0.15	0.26	0.32	0.09	0.09	0.60	0.10	0.11
	1990	0.59	0.12	0.20	0.29	0.09	0.10	0.40	0.10	0.11
	1991	0.78	0.18	0.26	0.32	0.10	0.11	0.46	0.11	0.13
Pollock										
	1984	0.00	0.05	0.05	0.00	0.08	0.08	0.00	0.08	0.08
	1985	0.74	0.04	0.08	0.05	0.05	0.05	0.69	0.05	0.06
	1986	0.06	0.05	0.05	0.06	0.05	0.08	0.06	0.05	0.07
	1987	0.09	0.08	0.08	0.08	0.07	0.07	0.08	0.08	0.08
	1988	0.08	0.08	0.08	0.06	0.08	0.08	0.07	0.08	0.08
	1989	0.07	0.08	0.08	0.14	0.08	0.08	0.13	0.08	0.08
	1990	0.31	0.07	0.07	0.32	0.09	0.09	0.32	0.09	0.09
	1991	0.31	0.12	0.12	0.32	0.09	0.09	0.32	0.09	0.09
Sablefish										
	1984	0.33	0.16	0.34	0.61	0.17	0.18	0.33	0.17	0.32
	1985	0.64	0.41	0.62	0.54	0.37	0.50	0.62	0.40	0.60
	1986	0.62	0.42	0.59	0.52	0.39	0.49	0.60	0.41	0.57
	1987	0.71	0.45	0.68	0.63	0.43	0.57	0.70	0.44	0.65
	1988	0.98	0.82	0.96	0.97	0.80	0.90	0.98	0.82	0.95
	1989	0.87	0.68	0.85	0.80	0.61	0.72	0.86	0.66	0.83
	1990	0.70	0.67	0.70	0.72	0.65	0.70	0.70	0.66	0.70
	1991	0.99	0.88	0.98	1.16	0.90	1.12	1.01	0.88	1.00
Pacific Cod										
	1984	0.16	0.14	0.14	0.26	0.20	0.20	0.16	0.19	0.19
	1985	0.16	0.12	0.13	0.14	0.15	0.15	0.16	0.15	0.15
	1986	0.16	0.12	0.13	0.19	0.11	0.11	0.16	0.11	0.12
	1987	0.21	0.18	0.19	0.17	0.17	0.17	0.21	0.17	0.18
	1988	0.22	0.15	0.16	0.28	0.13	0.13	0.24	0.13	0.14
	1989	0.21	0.13	0.14	0.23	0.14	0.15	0.23	0.14	0.15
	1990	0.21	0.15	0.16	0.26	0.15	0.18	0.25	0.15	0.17
	1991	0.28	0.22	0.23	0.28	0.20	0.23	0.28	0.21	0.23
Flatfish										
	1984	0.18	0.16	0.16	0.17	0.12	0.12	0.17	0.16	0.16
	1985	0.17	0.13	0.13	0.40	0.24	0.29	0.28	0.14	0.16
	1986	0.46	0.13	0.14	0.24	0.15	0.15	0.26	0.14	0.15
	1987	0.29	0.10	0.11	0.41	0.11	0.14	0.40	0.11	0.14
	1988	0.24	0.12	0.12	0.25	0.14	0.15	0.25	0.14	0.14
	1989	0.22	0.10	0.10	0.16	0.13	0.13	0.16	0.12	0.13
	1990	0.19	0.09	0.09	0.17	0.12	0.12	0.17	0.11	0.12
	1991	0.20	0.15	0.15	0.24	0.15	0.15	0.24	0.15	0.15

Table 13. -- Continued.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Hook&Line	Trawl	All	Hook&Line	Trawl	All	Hook&Line	Trawl	All
Rockfish										
	1984	0.42	0.13	0.38	0.15	0.13	0.13	0.42	0.13	0.24
	1985	0.45	0.18	0.26	0.17	0.14	0.14	0.43	0.16	0.23
	1986	0.43	0.17	0.21	0.40	0.16	0.17	0.43	0.17	0.21
	1987	0.44	0.24	0.27	0.54	0.16	0.19	0.45	0.23	0.26
	1988	0.48	0.26	0.28	0.53	0.20	0.23	0.48	0.25	0.27
	1989	0.46	0.30	0.31	0.43	0.16	0.17	0.45	0.26	0.28
	1990	0.42	0.20	0.21	0.34	0.13	0.13	0.41	0.16	0.17
	1991	0.41	0.23	0.24	0.26	0.21	0.21	0.38	0.22	0.24
Atka Mackerel										
	1984	0.00	0.17	0.17	0.00	0.00	0.00	0.00	0.17	0.17
	1986	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.21	0.21
	1987	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.21	0.21
	1988	0.00	0.14	0.14	0.00	0.18	0.18	0.00	0.18	0.18
	1989	0.16	0.16	0.16	0.00	0.16	0.16	0.16	0.16	0.16
	1990	0.00	0.11	0.11	0.00	0.11	0.11	0.00	0.11	0.11
	1991	0.00	0.13	0.13	0.34	0.13	0.13	0.34	0.13	0.13

Notes: Domestic prices do not include the value added by at-sea processing; therefore, they reflect prices prior to processing. Prices do reflect the value added by dressing fish at sea, where the fish have not been frozen. For unfrozen landings price is calculated as landed value divided by estimated or actual round weight.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 14.--Percentage distribution of landings in the domestic groundfish fisheries off Alaska among species by area, 1982-91.

Year	Species	Gulf of Alaska	Bering Sea/Aleutians	All Alaska
1982	Pollock	27.6	0.6	7.1
	Sablefish	36.3	0.7	9.3
	Pacific Cod	28.0	98.6	81.6
	Flatfish	3.4	0.0	0.8
	Rockfish	3.2	0.0	0.8
	Other	1.4	0.0	0.3
1983	Pollock	1.3	2.3	2.2
	Sablefish	41.5	0.2	6.9
	Pacific Cod	46.4	90.3	83.1
	Flatfish	4.8	0.0	0.8
	Rockfish	4.8	0.0	0.8
	Other	1.1	7.1	6.1
1984	Pollock	7.0	15.1	13.2
	Sablefish	60.1	2.2	15.7
	Pacific Cod	21.9	79.9	66.3
	Flatfish	2.9	0.0	0.7
	Rockfish	7.2	2.7	3.8
	Atka Mackerel	0.2	0.0	0.0
	Other	0.8	0.0	0.2
1985	Pollock	46.4	37.7	40.2
	Sablefish	34.3	4.1	12.9
	Pacific Cod	8.9	56.2	42.5
	Flatfish	1.4	0.1	0.5
	Rockfish	8.2	1.2	3.2
	Other	0.9	0.6	0.7
1986	Pollock	35.0	54.6	47.6
	Sablefish	35.6	5.7	16.6
	Pacific Cod	13.2	32.3	25.2
	Flatfish	2.5	6.2	4.8
	Rockfish	12.9	1.0	5.3
	Atka Mackerel	0.0	0.0	0.0
	Other	0.8	0.2	0.4
1987	Pollock	35.8	72.8	62.7
	Sablefish	23.7	2.6	8.4
	Pacific Cod	26.4	15.1	18.2
	Flatfish	2.4	8.2	6.6
	Rockfish	11.4	0.9	3.8
	Atka Mackerel	0.0	0.0	0.0
	Other	0.3	0.3	0.3

Table 14.--Continued.

Year	Species	Gulf of Alaska	Bering Sea/Aleutians	All Alaska
1988	Pollock	38.8	79.2	71.9
	Sablefish	21.5	1.0	4.7
	Pacific Cod	21.5	13.2	14.7
	Flatfish	4.9	5.8	5.7
	Rockfish	12.8	0.4	2.6
	Atka Mackerel	0.0	0.3	0.2
	Other	0.5	0.1	0.2
1989	Pollock	39.8	83.9	78.4
	Sablefish	17.8	0.4	2.5
	Pacific Cod	24.9	10.5	12.2
	Flatfish	3.1	3.1	3.1
	Rockfish	14.0	0.6	2.3
	Atka Mackerel	0.1	1.5	1.4
	Other	0.3	0.0	0.1
1990	Pollock	35.4	83.6	77.8
	Sablefish	12.4	0.3	1.8
	Pacific Cod	34.0	10.2	13.1
	Flatfish	7.0	2.7	3.2
	Rockfish	9.6	1.6	2.5
	Atka Mackerel	0.0	1.4	1.2
	Other	1.6	0.2	0.4
1991	Pollock	36.0	77.5	72.1
	Sablefish	10.8	0.2	1.6
	Pacific Cod	35.5	11.4	14.5
	Flatfish	8.8	8.6	8.6
	Rockfish	7.0	0.5	1.3
	Atka Mackerel	1.4	1.5	1.5
	Other	0.5	0.3	0.4

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 15.--Percentage distribution of landings in the domestic groundfish fisheries off Alaska among areas by species, 1982-91.

Species	Year	Gulf of Alaska	Bering Sea/Aleutians	Unknown
All Groundfish				
	1982	24.1	75.9	0.0
	1983	16.3	83.7	0.0
	1984	23.4	76.6	0.0
	1985	28.9	71.1	0.0
	1986	36.4	63.2	0.4
	1987	27.3	72.6	0.0
	1988	17.9	82.1	0.0
	1989	12.4	87.6	0.0
	1990	12.1	87.8	0.1
	1991	12.9	87.0	0.1
Pollock				
	1982	93.5	6.5	0.0
	1983	9.9	90.1	0.0
	1984	12.4	87.6	0.0
	1985	33.3	66.7	0.0
	1986	26.7	72.6	0.7
	1987	15.6	84.4	0.0
	1988	9.6	90.4	0.0
	1989	6.3	93.7	0.0
	1990	5.5	94.5	0.0
	1991	6.5	93.5	0.0
Sablefish				
	1982	94.3	5.7	0.0
	1983	97.7	2.3	0.0
	1984	89.4	10.6	0.0
	1985	77.1	22.9	0.0
	1986	78.1	21.7	0.3
	1987	77.2	22.8	0.0
	1988	82.5	17.5	0.0
	1989	86.9	13.1	0.0
	1990	85.9	14.0	0.1
	1991	87.0	11.8	1.2
Pacific Cod				
	1982	8.3	91.7	0.0
	1983	9.1	90.9	0.0
	1984	7.7	92.3	0.0
	1985	6.1	93.9	0.0
	1986	19.0	80.9	0.1
	1987	39.7	60.3	0.0
	1988	26.2	73.8	0.0
	1989	25.2	74.8	0.0
	1990	31.4	68.6	0.0
	1991	31.5	68.5	0.0

Table 15.--Continued.

Species	Year	Gulf of Alaska	Bering Sea/Aleutians	Unknown
Flatfish				
	1982	98.3	1.7	0.0
	1983	97.7	2.3	0.0
	1984	94.9	5.1	0.0
	1985	85.0	15.0	0.0
	1986	18.8	81.2	0.0
	1987	10.0	90.0	0.0
	1988	15.4	84.6	0.0
	1989	12.3	87.7	0.0
	1990	26.8	73.2	0.0
	1991	13.2	86.7	0.1
Rockfish				
	1982	95.5	4.5	0.0
	1983	98.2	1.8	0.0
	1984	44.3	55.7	0.0
	1985	74.0	26.0	0.0
	1986	88.2	11.8	0.1
	1987	82.4	17.3	0.0
	1988	87.4	12.6	0.0
	1989	76.3	23.7	0.0
	1990	45.5	54.5	0.0
	1991	69.0	30.9	0.1
Atka Mackerel				
	1984	100.0	0.0	0.0
	1986	0.0	100.0	0.0
	1987	0.0	100.0	0.0
	1988	3.4	96.6	0.0
	1989	1.0	99.0	0.0
	1990	0.3	99.7	0.0
	1991	12.6	87.4	0.0

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 16. --Percentage distribution of landings in the domestic groundfish fisheries off Alaska among gear groups by area and species, 1982-91.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Trawl	Hook&Line	Other	Trawl	Hook&Line	Other	Trawl	Hook&Line	Other
All Groundfish										
	1982	57.3	40.7	2.0	93.1	0.0	6.9	84.5	9.8	5.7
	1983	51.2	47.0	1.8	98.7	0.0	1.3	91.0	7.7	1.4
	1984	31.0	65.8	3.2	99.3	0.0	0.7	83.3	15.4	1.3
	1985	60.7	34.7	4.7	95.9	2.3	1.8	85.7	11.7	2.6
	1986	63.0	33.5	3.5	89.8	3.2	7.1	80.0	14.2	5.7
	1987	68.7	30.0	1.3	96.6	3.0	0.3	89.0	10.4	0.6
	1988	76.0	22.6	1.4	98.6	1.3	0.1	94.6	5.1	0.3
	1989	80.8	19.0	0.2	98.4	1.6	0.0	96.3	3.7	0.0
	1990	81.6	14.9	3.5	96.5	3.4	0.1	94.7	4.8	0.5
	1991	80.3	14.4	5.3	94.7	4.9	0.4	92.8	6.2	1.0
Pollock										
	1982	98.9	--	--	100.0	--	--	99.0	--	--
	1983	100.0	--	--	99.5	--	--	99.6	--	--
	1984	99.9	--	--	98.4	--	--	98.6	--	--
	1985	95.2	--	--	99.8	--	--	98.3	--	--
	1986	99.8	--	--	89.5	--	--	92.4	--	--
	1987	99.8	0.1	--	99.8	0.1	0.1	99.8	0.1	0.1
	1988	99.8	0.2	--	100.0	--	--	100.0	0.0	--
	1989	100.0	0.0	--	100.0	0.0	--	100.0	0.0	--
	1990	99.7	0.0	0.3	99.9	0.1	0.0	99.9	0.1	0.0
	1991	100.0	0.0	0.0	99.9	0.1	0.0	99.9	0.1	0.0
Sablefish										
	1982	0.4	97.3	2.3	85.8	0.0	14.2	5.2	91.7	3.0
	1983	0.3	99.7	0.0	100.0	0.0	0.0	2.6	97.4	0.0
	1984	1.2	95.2	3.7	97.3	1.4	1.2	11.4	85.2	3.4
	1985	3.6	83.0	13.4	6.2	50.6	43.2	4.2	75.6	20.2
	1986	13.4	77.4	9.2	29.3	49.2	21.5	16.8	71.4	11.8
	1987	10.8	86.4	2.8	30.9	61.3	7.8	15.4	80.6	4.0
	1988	13.4	84.8	1.8	38.1	57.2	4.6	17.7	80.0	2.3
	1989	12.1	87.9	0.0	39.3	60.5	0.2	15.6	84.3	0.0
	1990	10.1	89.8	0.0	28.7	71.3	0.0	12.7	87.2	0.0
	1991	10.4	89.6	0.0	15.8	84.2	0.0	10.9	89.1	0.0
Pacific Cod										
	1982	91.1	7.5	1.5	93.1	0.0	6.9	92.9	0.6	6.4
	1983	95.3	1.5	3.2	98.6	0.0	1.4	98.3	0.1	1.6
	1984	87.8	8.2	3.9	99.4	0.0	0.5	98.6	0.7	0.8
	1985	86.6	12.7	0.7	99.9	0.1	0.0	99.1	0.9	0.0
	1986	72.6	25.7	1.8	99.2	0.1	0.7	94.1	5.1	0.9
	1987	69.6	28.0	2.3	96.7	3.1	0.2	85.9	13.0	1.0
	1988	82.5	12.7	4.8	96.7	2.9	0.4	93.0	5.5	1.5
	1989	90.3	8.8	0.9	88.6	11.3	0.1	89.0	10.6	0.3
	1990	82.0	8.7	9.3	69.8	29.1	1.1	73.6	22.7	3.7
	1991	75.2	9.8	15.0	57.2	39.7	3.1	62.9	30.3	6.8

Table 16. -- Continued.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Trawl	Hook&Line	Other	Trawl	Hook&Line	Other	Trawl	Hook&Line	Other
Flatfish										
	1982	99.9	0.0	0.1	100.0	0.0	0.0	99.9	0.0	0.1
	1983	99.9	0.0	0.1	100.0	0.0	0.0	99.9	0.0	0.1
	1984	98.5	0.2	1.3	94.0	3.9	2.2	98.3	0.4	1.3
	1985	93.2	6.5	0.3	66.9	33.1	0.0	89.3	10.5	0.3
	1986	98.4	1.6	0.0	96.8	3.0	0.2	97.1	2.7	0.2
	1987	94.2	5.7	0.1	90.1	9.8	0.1	90.5	9.4	0.1
	1988	98.8	1.1	0.0	94.7	5.3	0.0	95.4	4.6	0.0
	1989	98.6	0.8	0.6	97.4	2.6	0.0	97.5	2.4	0.1
	1990	99.1	0.6	0.3	97.8	2.2	0.0	98.2	1.7	0.1
	1991	99.5	0.5	0.0	99.6	0.4	0.0	99.5	0.5	0.0
Rockfish										
	1982	1.5	95.0	3.6	77.9	0.0	22.1	4.8	90.7	4.4
	1983	3.7	94.4	1.9	100.0	0.0	0.0	5.4	92.7	1.9
	1984	13.6	85.9	0.5	100.0	0.0	0.0	61.7	38.1	0.2
	1985	69.7	30.2	0.1	94.3	5.7	0.0	76.1	23.8	0.0
	1986	82.9	17.1	0.0	94.6	5.1	0.2	84.2	15.7	0.1
	1987	84.7	15.3	0.0	91.9	8.0	0.0	85.9	14.1	0.0
	1988	91.1	8.9	0.0	90.3	9.6	0.1	90.9	9.1	0.0
	1989	93.4	6.6	0.0	94.9	5.1	0.0	93.7	6.3	0.0
	1990	93.0	6.7	0.3	98.8	1.2	0.0	96.1	3.7	0.2
	1991	87.2	12.7	0.1	94.5	5.5	0.0	89.4	10.5	0.1
Atka Mackerel										
	1984	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
	1986	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1987	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1988	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1989	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1990	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1991	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 17.--Percentage distribution of the ex-vessel value of the domestic groundfish catch off Alaska among species by area, 1984-91.

Year	Species	Gulf of Alaska	Bering Sea/Aleutians	All Alaska
1984	Pollock	1.4	7.1	5.2
	Sablefish	74.6	2.2	25.4
	Pacific Cod	11.0	88.8	63.8
	Flatfish	1.8	0.0	0.6
	Rockfish	10.0	2.0	4.5
	Atka Mackerel	0.1	0.0	0.0
	Other	1.2	0.0	0.4
1985	Pollock	12.7	15.9	14.4
	Sablefish	74.6	16.4	44.3
	Pacific Cod	4.0	65.1	35.8
	Flatfish	0.7	0.2	0.4
	Rockfish	7.3	1.3	4.2
	Other	0.8	1.0	0.9
	1986	Pollock	6.1	35.9
Sablefish		75.5	23.7	53.5
Pacific Cod		6.4	30.8	16.7
Flatfish		1.2	7.8	4.0
Rockfish		9.9	1.5	6.3
Atka Mackerel		0.0	0.0	0.0
Other		0.9	0.4	0.7
1987	Pollock	10.4	49.7	30.7
	Sablefish	58.8	13.8	35.6
	Pacific Cod	18.0	23.9	21.1
	Flatfish	1.0	10.4	5.9
	Rockfish	11.4	1.6	6.3
	Atka Mackerel	0.0	0.1	0.0
	Other	0.4	0.5	0.4
1988	Pollock	9.3	62.1	40.3
	Sablefish	66.1	9.3	32.7
	Pacific Cod	10.9	18.2	15.2
	Flatfish	1.8	8.8	5.9
	Rockfish	11.4	1.0	5.3
	Atka Mackerel	0.0	0.5	0.3
	Other	0.5	0.1	0.3

Table 17 .--Continued.

Year	Species	Gulf of Alaska	Bering Sea/Aleutians	All Alaska
1989	Pollock	11.6	72.1	54.8
	Sablefish	57.3	3.0	18.6
	Pacific Cod	13.2	16.7	15.7
	Flatfish	1.2	4.4	3.4
	Rockfish	16.3	1.1	5.5
	Atka Mackerel	0.1	2.6	1.9
	Other	0.3	0.1	0.1
1990	Pollock	13.4	72.6	60.1
	Sablefish	44.5	2.0	11.0
	Pacific Cod	27.6	18.4	20.3
	Flatfish	3.3	3.2	3.2
	Rockfish	10.4	2.0	3.8
	Atka Mackerel	0.0	1.5	1.2
	Other	0.8	0.3	0.4
1991	Pollock	16.0	60.0	48.7
	Sablefish	40.0	2.1	11.9
	Pacific Cod	31.3	23.3	25.3
	Flatfish	5.0	11.4	9.7
	Rockfish	6.5	0.9	2.3
	Atka Mackerel	0.7	1.8	1.5
	Other	0.5	0.6	0.6

Notes: Domestic values are based on ex-vessel prices that do not include the value added by at-sea processing; therefore, they reflect the value of catch prior to processing.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 18.--Percentage distribution of the ex-vessel value of the domestic groundfish catch off Alaska among areas by species, 1984-91.

Species	Year	Gulf of Alaska	Bering Sea/Aleutians	Unknown
All Groundfish				
	1984	32.1	67.9	0.0
	1985	48.0	52.0	0.0
	1986	57.3	42.4	0.3
	1987	48.4	51.6	0.0
	1988	41.2	58.8	0.0
	1989	28.7	71.3	0.0
	1990	21.1	78.9	0.0
	1991	25.6	74.2	0.2
Pollock				
	1984	8.3	91.7	0.0
	1985	42.5	57.5	0.0
	1986	18.4	80.9	0.6
	1987	16.4	83.6	0.0
	1988	9.5	90.5	0.0
	1989	6.1	93.9	0.0
	1990	4.7	95.3	0.0
	1991	8.4	91.5	0.1
Sablefish				
	1984	94.2	5.8	0.0
	1985	80.7	19.3	0.0
	1986	80.9	18.8	0.3
	1987	80.0	20.0	0.0
	1988	83.3	16.7	0.0
	1989	88.6	11.4	0.0
	1990	85.7	14.1	0.2
	1991	85.6	13.2	1.2
Pacific Cod				
	1984	5.5	94.5	0.0
	1985	5.3	94.7	0.0
	1986	21.8	78.0	0.2
	1987	41.5	58.4	0.1
	1988	29.5	70.5	0.0
	1989	24.2	75.8	0.0
	1990	28.7	71.3	0.0
	1991	31.7	68.3	0.0

Table 18 .--Continued.

Species	Year	Gulf of Alaska	Bering Sea/Aleutians	Unknown
Flatfish				
	1984	96.2	3.8	0.0
	1985	72.4	27.6	0.0
	1986	17.5	82.5	0.0
	1987	8.2	90.8	0.0
	1988	12.7	87.3	0.0
	1989	9.9	90.1	0.0
	1990	21.6	78.4	0.0
	1991	13.1	86.8	0.1
Rockfish				
	1984	70.6	29.4	0.0
	1985	83.6	16.4	0.0
	1986	90.1	9.8	0.2
	1987	86.8	13.2	0.0
	1988	89.3	10.7	0.1
	1989	85.4	14.6	0.0
	1990	57.8	42.2	0.0
	1991	71.9	28.0	0.1
Atka Mackerel				
	1984	100.0	0.0	0.0
	1986	0.0	100.0	0.0
	1987	0.0	100.0	0.0
	1988	2.6	97.4	0.0
	1989	1.0	99.0	0.0
	1990	0.3	99.7	0.0
	1991	11.9	88.1	0.0

Notes: Domestic values are based on ex-vessel prices that do not include the value added by at-sea processing; therefore, they reflect the value of catch prior to processing.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 19.-- Percentage distribution of the ex-vessel value of the domestic groundfish catch off Alaska among gear groups by area and species, 1984-91.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Trawl	Hook&Line	Other	Trawl	Hook&Line	Other	Trawl	Hook&Line	Other
All Groundfish										
	1984	13.6	81.5	4.8	99.2	0.1	0.7	71.7	26.3	2.0
	1985	16.5	73.8	9.7	84.0	9.2	6.8	51.6	40.2	8.2
	1986	25.8	66.7	7.5	66.5	12.9	20.6	43.1	43.9	13.1
	1987	35.9	62.6	1.5	84.9	13.5	1.5	61.2	37.3	1.5
	1988	36.9	61.4	1.7	91.6	7.9	0.5	69.1	29.9	1.0
	1989	55.4	44.5	0.1	94.7	5.3	0.0	80.5	19.5	0.1
	1990	51.7	44.9	3.4	90.1	9.7	0.2	81.9	17.2	0.9
	1991	53.0	41.5	5.5	85.8	13.5	0.7	77.3	20.8	1.9
Pollock										
	1984	99.8	--	--	96.7	--	--	97.0	--	--
	1985	54.2	--	--	99.8	--	--	80.4	--	--
	1986	99.7	--	--	60.3	--	--	67.8	--	--
	1987	99.7	0.1	0.2	99.5	0.1	0.3	99.6	0.1	0.3
	1988	99.8	0.2	0.0	100.0	--	--	100.0	--	--
	1989	100.0	0.0	--	100.0	0.0	--	100.0	0.0	--
	1990	99.7	0.1	0.3	99.7	0.3	0.0	99.7	0.3	0.0
	1991	99.9	0.1	0.0	99.8	0.2	0.0	99.9	0.1	0.0
Sablefish										
	1984	0.6	93.9	5.5	93.8	5.0	1.2	6.0	88.8	5.3
	1985	2.3	84.7	13.0	4.6	54.0	41.5	2.8	78.8	18.5
	1986	9.5	80.8	9.7	23.1	51.5	25.3	12.0	75.4	12.6
	1987	7.1	91.1	1.8	23.1	67.9	9.0	10.3	86.4	3.3
	1988	11.5	86.8	1.7	34.0	61.7	4.3	15.3	82.6	2.1
	1989	9.7	90.3	0.0	32.8	67.0	0.2	12.3	87.7	0.0
	1990	9.7	90.3	0.0	26.4	73.6	0.0	12.0	88.0	0.0
	1991	9.4	90.6	0.0	12.7	87.3	0.0	9.7	90.3	0.0
Pacific Cod										
	1984	86.6	9.7	3.7	99.5	0.0	0.5	98.8	0.6	0.6
	1985	82.5	16.1	1.3	99.9	0.1	0.0	99.0	1.0	0.1
	1986	66.5	30.5	3.0	98.6	0.2	1.2	91.4	7.0	1.6
	1987	65.8	31.9	2.3	96.6	3.1	0.3	83.8	15.1	1.2
	1988	77.3	17.4	5.3	93.4	6.1	0.5	88.7	9.4	1.9
	1989	85.6	13.4	1.0	82.2	17.7	0.1	83.4	16.3	0.3
	1990	77.5	11.3	11.2	56.8	42.0	1.2	62.7	33.2	4.1
	1991	70.8	11.8	17.4	48.7	48.4	2.9	55.7	36.8	7.5
Flatfish										
	1984	98.5	0.2	1.3	91.4	5.4	3.2	98.2	0.4	1.4
	1985	88.5	8.4	3.1	54.3	45.7	0.0	79.1	18.7	2.2
	1986	94.7	5.3	0.0	94.8	4.7	0.4	94.8	4.8	0.4
	1987	84.8	14.9	0.3	71.3	28.5	0.2	72.4	27.4	0.2
	1988	97.7	2.3	0.0	90.9	9.1	0.0	91.7	8.3	0.0
	1989	97.4	1.8	0.8	96.8	3.2	0.0	96.8	3.1	0.1
	1990	98.3	1.3	0.4	97.0	3.0	0.0	97.3	2.6	0.1
	1991	99.3	0.7	0.0	99.3	0.7	0.0	99.3	0.7	0.0

Table 19. --Continued.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Trawl	Hook&Line	Other	Trawl	Hook&Line	Other	Trawl	Hook&Line	Other
Rockfish										
	1984	4.7	95.0	0.3	100.0	0.0	0.0	32.7	67.1	0.2
	1985	47.6	52.3	0.1	93.1	6.9	0.0	55.1	44.8	0.1
	1986	66.0	34.0	0.1	87.6	11.9	0.5	68.0	31.9	0.1
	1987	75.5	24.5	0.0	86.6	11.7	1.7	75.7	24.3	0.0
	1988	85.0	15.0	0.0	78.0	21.9	0.1	84.2	15.8	0.0
	1989	90.2	9.8	0.0	87.0	13.0	0.0	90.2	9.8	0.0
	1990	86.1	13.3	0.6	96.7	3.1	0.2	90.6	9.0	0.4
	1991	80.7	19.2	0.1	93.3	6.7	0.0	84.1	15.8	0.1
Atka Mackerel										
	1984	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
	1986	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1987	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1988	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1989	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1990	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
	1991	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0

Notes: Domestic values are based on ex-vessel prices that do not include the value added by at-sea processing; therefore, they reflect the value of catch prior to processing.

Source: National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 20.--Number of vessels that landed groundfish in the domestic fisheries off Alaska by area and gear, 1986-91.

Gear	1986	1987	1988	1989	1990	1991
Gulf of Alaska						
Hook & Line	965	1,671	1,529	1,352	1,614	1,811
Pot	21	22	46	22	71	116
Trawl	61	113	122	135	174	212
Other	7	24	15	3	93	150
All	1,036	1,784	1,669	1,494	1,833	2,096
Bering Sea/Aleutian Islands						
Hook & Line	60	121	110	78	105	194
Pot	9	11	12	5	10	38
Trawl	45	74	101	129	137	169
Other	4	1	0	1	2	3
All	111	204	220	209	250	387
All Alaska						
Hook & Line	1,356	1,704	1,549	1,363	1,640	1,873
Pot	24	31	51	26	79	150
Trawl	80	153	184	205	226	262
Other	15	25	15	4	94	153
All	1,449	1,859	1,749	1,576	1,915	2,223

Source: National Marine Fisheries Service groundfish fish ticket and weekly processor data bases, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 21.--Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, gear, and vessel length class, 1986-91.

Gear/Length in feet		1986	1987	1988	1989	1990	1991
Gulf of Alaska							
Hook & Line	< 60	835	1,476	1,370	1,196	1,413	1,598
	60-84	89	136	114	103	132	145
	85-109	15	19	14	10	16	28
	110-134	4	6	7	10	13	8
	135-159	1	2	0	0	3	1
	160-184	1	1	4	4	5	1
	> 184	0	0	0	1	5	0
	Unknown	20	31	20	28	27	30
Pot	< 60	5	10	34	17	28	60
	60-84	8	4	1	1	27	42
	85-109	5	3	6	2	10	10
	110-134	1	1	2	0	3	1
	135-159	0	0	1	0	0	1
	160-184	2	1	2	1	1	0
	> 184	0	1	0	0	1	0
	Unknown	0	2	0	1	1	2
Trawl	< 60	18	35	37	31	43	45
	60-84	14	30	31	35	42	55
	85-109	10	19	18	24	23	30
	110-134	9	14	19	18	24	28
	135-159	2	4	3	4	7	7
	160-184	3	6	6	7	11	11
	> 184	3	4	6	14	23	33
	Unknown	2	1	2	2	1	3
Other	< 60	3	21	13	3	79	140
	60-84	0	0	0	0	3	4
	85-109	1	0	0	0	3	1
	110-134	0	0	1	0	0	0
	160-184	0	0	0	0	1	0
	> 184	0	0	0	0	1	0
	Unknown	3	3	1	0	6	5
	All Gear	< 60	850	1,512	1,419	1,235	1,497
60-84		107	160	141	135	167	198
85-109		28	39	38	34	42	57
110-134		14	19	28	28	39	36
135-159		3	6	4	4	10	8
160-184		6	7	11	12	16	12
> 184		3	4	6	15	29	33
Unknown		25	37	22	31	33	39

Table 21.--Continued.

Gear/Length in feet		1986	1987	1988	1989	1990	1991
Bering Sea/Aleutian Islands							
Hook & Line	< 60	25	64	57	33	43	101
	60-84	29	44	33	28	32	46
	85-109	4	5	6	3	4	10
	110-134	1	3	8	9	12	17
	135-159	1	2	1	1	2	4
	160-184	0	1	4	3	7	11
	> 184	0	0	1	1	3	1
	Unknown	0	2	0	0	2	4
Pot	< 60	0	2	2	1	0	2
	60-84	2	0	1	1	1	6
	85-109	2	3	4	1	2	11
	110-134	3	3	2	0	1	10
	135-159	0	1	1	0	1	2
	160-184	2	2	2	2	5	5
	> 184	0	0	0	0	0	1
	Unknown	0	0	0	0	0	1
Trawl	< 60	2	6	5	9	5	2
	60-84	7	10	13	19	13	26
	85-109	11	14	18	25	15	27
	110-134	12	21	28	28	30	35
	135-159	3	4	4	5	6	9
	160-184	4	6	10	9	14	14
	> 184	3	7	22	30	45	49
	Unknown	3	6	1	4	9	7
Other	< 60	1	0	0	0	0	2
	60-84	0	0	0	0	0	0
	85-109	2	0	0	0	1	0
	110-134	1	0	0	0	0	1
	> 184	0	0	0	0	1	0
	Unknown	0	1	0	0	0	0
All Gear	< 60	38	72	63	41	47	105
	60-84	15	53	47	47	45	77
	85-109	14	22	28	28	21	45
	110-134	4	25	37	37	43	58
	135-159	6	7	6	6	9	14
	160-184	3	9	16	14	26	27
	> 184	3	7	22	31	48	51
	Unknown	28	9	1	5	11	10

Table 21.--Continued.

Gear/Length in feet		1986	1987	1988	1989	1990	1991
All Alaska							
Hook & Line	< 60	1,213	1,502	1,381	1,203	1,431	1,627
	60-84	91	139	115	103	134	148
	85-109	17	19	16	11	16	29
	110-134	4	7	9	12	14	18
	135-159	1	2	1	1	4	5
	160-184	1	2	5	4	7	11
	> 184	0	0	1	1	6	1
	Unknown	29	33	21	28	28	34
Pot	< 60	5	12	35	18	28	61
	60-84	8	4	2	2	28	46
	85-109	5	4	7	3	11	21
	110-134	4	4	3	0	3	11
	135-159	0	1	1	0	1	2
	160-184	2	3	3	2	6	5
	> 184	0	1	0	0	1	1
	Unknown	0	2	0	1	1	3
Trawl	< 60	20	39	40	36	46	47
	60-84	18	36	41	44	45	62
	85-109	15	27	29	42	28	37
	110-134	12	26	34	32	31	35
	135-159	3	4	4	5	7	9
	160-184	4	7	11	10	15	14
	> 184	3	8	22	30	45	50
	Unknown	5	6	3	6	9	8
Other	< 60	8	21	13	3	79	142
	60-109	3	0	0	0	7	5
	110-184	1	0	1	0	1	1
	> 184	0	0	0	0	1	0
	Unknown	3	4	1	1	9	5
All Gear	< 60	1,234	1,540	1,433	1,246	1,517	1,741
	60-84	113	168	150	144	172	210
	85-109	33	48	51	53	48	73
	110-134	18	33	45	44	47	59
	135-159	4	7	6	6	12	14
	160-184	7	11	18	16	27	27
	> 184	3	8	22	31	51	52
	Unknown	37	44	24	36	41	47

Source: National Marine Fisheries Service groundfish fish ticket and weekly processor data bases, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 22.--Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, species, mode of operation, and gear, 1986-91.

Species/Year	At-sea				Shore-based			
	Hook&Line	Pot	Trawl	Other	Hook&Line	Pot	Trawl	Other
Gulf of Alaska								
Pollock								
1986	0	0	8	0	27	0	28	0
1987	0	0	9	0	99	0	77	3
1988	0	0	15	0	47	2	84	4
1989	0	0	27	0	14	0	52	0
1990	4	0	44	0	40	5	78	5
1991	6	0	53	0	52	8	92	5
Sablefish								
1986	1	0	7	1	517	18	19	0
1987	5	3	7	0	756	2	5	0
1988	12	4	18	1	777	3	40	0
1989	75	0	27	0	672	1	31	0
1990	29	1	33	0	754	1	27	3
1991	17	0	35	0	1,015	1	41	2
Pacific Cod								
1986	0	0	11	0	303	8	36	3
1987	3	2	14	0	988	13	86	18
1988	12	2	17	0	678	39	95	11
1989	19	1	29	0	533	18	94	1
1990	22	4	44	1	768	65	120	32
1991	14	1	56	0	902	114	145	40
Flatfish								
1986	0	0	4	0	23	0	35	1
1987	1	0	13	0	79	3	71	2
1988	3	0	16	0	32	2	71	4
1989	6	0	29	0	20	1	58	0
1990	18	2	44	0	65	2	89	4
1991	17	0	56	0	126	2	104	2
Rockfish								
1986	0	0	6	0	607	5	26	4
1987	5	3	9	0	989	2	40	5
1988	11	2	18	1	1,046	3	52	6
1989	65	0	28	0	997	1	48	2
1990	27	1	35	0	1,042	0	62	43
1991	16	1	52	0	1,202	5	83	114
Atka Mackerel								
1988	0	0	6	0	0	0	0	0
1989	0	0	11	0	1	0	0	0
1990	0	0	2	0	0	0	1	0
1991	1	0	19	0	0	0	9	1

Table 22.--Continued.

Species/Year	At-sea				Shore-based			
	Hook&Line	Pot	Trawl	Other	Hook&Line	Pot	Trawl	Other
All Groundfish								
1986	1	0	12	1	964	21	49	6
1987	7	4	18	0	1,664	18	95	24
1988	16	5	22	1	1,514	41	100	14
1989	76	1	37	0	1,334	21	101	3
1990	31	5	46	0	1,590	66	132	92
1991	20	1	60	0	1,797	115	152	150
Bering Sea/Aleutian Islands								
Pollock								
1986	0	0	13	4	1	1	15	1
1987	0	0	23	0	2	1	33	1
1988	1	0	45	0	0	0	31	0
1989	4	0	80	0	1	0	22	0
1990	23	1	74	0	3	0	53	1
1991	31	3	80	0	10	3	90	1
Sablefish								
1986	1	0	9	0	49	7	9	0
1987	6	3	14	0	55	6	4	0
1988	18	3	27	0	77	3	2	0
1989	49	2	35	0	25	0	3	0
1990	23	0	31	0	49	0	11	0
1991	29	2	40	0	104	0	19	0
Pacific Cod								
1986	0	0	16	4	13	4	26	1
1987	2	2	26	0	64	4	40	0
1988	15	5	47	0	30	6	48	0
1989	19	4	83	0	15	1	51	0
1990	30	5	74	1	58	5	67	1
1991	39	9	81	0	143	28	97	3
Flatfish								
1986	0	0	1	0	25	4	17	0
1987	4	2	18	0	83	2	16	0
1988	14	1	42	0	58	0	20	0
1989	37	1	67	0	11	0	23	0
1990	27	3	72	0	33	1	53	1
1991	38	3	80	0	52	4	85	1
Rockfish								
1986	0	0	7	0	27	1	9	0
1987	5	2	14	0	76	2	2	0
1988	15	2	28	0	61	0	9	0
1989	46	0	45	0	18	0	13	0
1990	23	0	64	0	48	0	38	0
1991	29	2	69	0	63	1	52	1

Table 22.--Continued.

Species/Year	At-sea				Shore-based			
	Hook&Line	Pot	Trawl	Other	Hook&Line	Pot	Trawl	Other
Atka Mackerel								
1986	0	0	0	0	0	0	2	0
1987	0	0	1	0	0	0	0	0
1988	0	0	12	0	0	0	0	0
1989	0	0	45	0	0	0	8	0
1990	1	0	45	0	0	0	24	0
1991	4	2	44	0	1	1	41	0
All Groundfish								
1986	1	0	17	4	59	9	30	1
1987	6	3	31	0	115	8	47	1
1988	19	5	57	0	93	7	52	0
1989	49	4	88	0	38	1	52	0
1990	31	5	74	1	79	5	71	1
1991	42	10	83	0	163	28	100	3
All Alaska								
Pollock								
1986	0	0	13	4	28	1	36	1
1987	0	0	24	0	102	1	96	4
1988	1	0	46	0	47	2	105	4
1989	4	0	81	0	15	0	71	0
1990	23	1	75	0	40	5	105	6
1991	32	3	82	0	62	10	135	6
Sablefish								
1986	1	0	9	1	526	19	24	0
1987	6	4	15	0	763	8	9	0
1988	21	4	29	1	784	5	42	0
1989	87	2	40	0	675	1	34	0
1990	33	1	36	0	758	1	37	3
1991	31	2	54	0	1,036	1	57	2
Pacific Cod								
1986	0	0	16	4	314	11	53	5
1987	3	2	29	0	1,025	17	110	18
1988	17	5	49	0	696	43	130	11
1989	21	4	84	0	540	19	128	1
1990	34	9	76	1	810	68	149	33
1991	42	9	84	0	992	139	183	43
Flatfish								
1986	0	0	9	0	45	4	46	3
1987	4	2	20	0	148	5	81	2
1988	14	1	42	0	84	2	87	4
1989	39	1	70	0	30	1	77	0
1990	31	5	74	0	91	3	118	5
1991	39	3	83	0	165	6	139	3

Table 22.--Continued.

Species/Year	At-sea				Shore-based			
	Hook&Line	Pot	Trawl	Other	Hook&Line	Pot	Trawl	Other
Rockfish								
1986	0	0	8	0	676	5	29	6
1987	7	3	15	0	1,018	4	42	5
1988	16	2	30	1	1,057	3	60	6
1989	77	0	53	0	1,000	1	60	2
1990	32	1	67	0	1,054	0	87	43
1991	32	2	76	0	1,223	6	102	115
Atka Mackerel								
1986	0	0	0	0	0	0	2	0
1987	0	0	1	0	0	0	0	0
1988	0	0	13	0	0	0	0	0
1989	0	0	46	0	1	0	8	0
1990	1	0	45	0	0	0	24	0
1991	4	2	49	0	1	1	42	1
All Groundfish								
1986	1	0	17	5	1,355	24	65	11
1987	7	5	33	0	1,697	26	125	25
1988	22	6	58	1	1,529	45	136	14
1989	87	4	90	0	1,343	22	134	3
1990	36	10	76	1	1,614	69	161	93
1991	44	10	85	0	1,844	140	191	153

Source: National Marine Fisheries Service groundfish fish ticket and weekly processor data bases, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-070.

Table 23.--Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, gear, mode of operation, and residency, 1986-91.

Year	Residency	At-sea				Shore-based			
		Hook & Line	Pot	Trawl	Other	Hook & Line	Pot	Trawl	Other
Gulf of Alaska									
1986	Alaska	1	0	0	0	773	16	27	3
	Other	0	0	4	0	73	4	8	0
	Unknown	0	0	8	1	118	1	14	3
1987	Alaska	3	0	0	0	1,362	13	52	20
	Other	2	4	6	0	116	1	31	2
	Unknown	2	0	12	0	186	4	12	2
1988	Alaska	8	2	0	0	1,276	37	67	12
	Other	3	3	9	0	102	2	22	0
	Unknown	5	0	13	1	136	2	11	2
1989	Alaska	33	0	4	0	1,098	21	68	3
	Other	9	0	16	0	107	0	26	0
	Unknown	34	1	17	0	129	0	7	0
1990	Alaska	10	1	3	0	1,318	50	71	74
	Other	21	3	43	1	248	16	61	12
	Unknown	0	1	0	0	24	0	0	6
1991	Alaska	4	0	9	0	1,484	94	79	131
	Other	16	1	51	0	286	19	72	15
	Unknown	0	0	0	0	27	2	1	4
Bering Sea/Aleutian Islands									
1986	Alaska	1	0	0	0	36	5	12	0
	Other	0	0	4	0	5	3	12	0
	Unknown	0	0	13	4	18	1	6	1
1987	Alaska	3	0	0	0	68	3	9	0
	Other	2	3	10	0	12	5	24	0
	Unknown	1	0	21	0	35	0	14	1
1988	Alaska	8	2	4	0	55	5	10	0
	Other	4	3	20	0	7	2	29	0
	Unknown	7	0	33	0	31	0	13	0

Table 23.--Continued.

Year	Residency	At-sea				Shore-based			
		Hook & Line	Pot	Trawl	Other	Hook & Line	Pot	Trawl	Other
1989	Alaska	17	0	5	0	22	1	13	0
	Other	8	3	40	0	6	0	32	0
	Unknown	24	1	43	0	10	0	7	0
1990	Alaska	9	0	4	0	39	2	12	0
	Other	21	5	70	1	40	3	56	1
	Unknown	1	0	0	0	0	0	3	0
1991	Alaska	8	1	9	0	86	8	14	1
	Other	34	9	74	0	75	20	83	2
	Unknown	0	0	0	0	2	0	3	0
All Alaska									
1986	Alaska	1	0	0	0	1,068	18	34	6
	Other	0	0	4	0	158	4	15	1
	Unknown	0	0	13	5	129	2	16	4
1987	Alaska	3	0	0	0	1,386	16	57	20
	Other	2	5	10	0	120	6	47	2
	Unknown	2	0	23	0	191	4	21	3
1988	Alaska	10	2	4	0	1,287	39	71	12
	Other	4	4	20	0	105	4	45	0
	Unknown	8	0	34	1	137	2	20	2
1989	Alaska	37	0	6	0	1,104	22	73	3
	Other	11	3	40	0	109	0	49	0
	Unknown	39	1	44	0	130	0	12	0
1990	Alaska	11	1	4	0	1,334	51	75	74
	Other	24	8	72	1	256	18	83	13
	Unknown	1	1	0	0	24	0	3	6
1991	Alaska	9	1	9	0	1,507	100	82	132
	Other	35	9	76	0	308	38	105	17
	Unknown	0	0	0	0	29	2	4	4

Source: National Marine Fisheries Service groundfish fish ticket and weekly processor data bases, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 24.- -Number of vessels that landed groundfish in the domestic fishery off Alaska by area, gear, year, and month, 1986-91.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Gulf of Alaska												
Pots												
1986	0	2	1	10	11	9	3	2	2	3	1	4
1987	0	2	2	6	5	6	2	3	2	4	5	5
1988	0	8	16	24	21	5	1	2	0	3	9	4
1989	0	4	7	8	5	3	2	3	1	0	1	4
1990	1	12	15	12	7	6	8	13	24	30	21	25
1991	38	47	74	57	0	1	0	1	0	10	23	25
Longline												
1986	50	66	106	488	545	182	42	47	185	94	104	87
1987	91	182	243	826	806	575	78	74	359	295	157	134
1988	107	152	240	653	916	647	69	63	377	230	64	39
1989	35	82	85	582	778	702	75	41	434	100	40	49
1990	61	65	136	633	1,035	762	41	160	167	41	43	40
1991	96	133	290	282	1,385	454	45	31	634	25	24	21
Trawl												
1986	23	25	21	17	2	1	4	6	12	19	25	22
1987	16	21	23	29	18	16	18	35	41	49	52	50
1988	33	43	58	61	38	34	37	22	31	45	59	38
1989	28	48	78	71	45	37	33	34	23	18	6	1
1990	46	62	103	110	50	24	54	53	55	80	30	0
1991	72	97	151	93	25	35	83	27	33	70	1	0
All Gear												
1986	73	93	128	512	556	190	51	56	200	117	131	113
1987	107	205	269	862	830	607	101	112	400	345	215	188
1988	142	208	313	738	970	685	107	86	407	277	131	81
1989	63	134	170	660	828	741	110	78	458	118	47	54
1990	111	138	264	764	1,091	810	126	244	256	155	100	71
1991	219	291	534	450	1,428	522	160	92	681	127	84	67

Table 24.- -Continued.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Bering Sea/Aleutian Islands												
Pots												
1986	2	3	3	1	1	2	1	2	0	1	0	1
1987	2	2	1	1	1	2	2	2	4	1	1	2
1988	1	0	2	3	5	1	0	2	1	1	2	1
1989	0	0	2	2	1	1	2	0	1	0	0	1
1990	0	0	0	0	1	0	3	3	4	5	1	0
1991	0	1	4	3	0	1	12	11	9	12	9	5
Longline												
1986	3	6	11	5	3	22	32	21	3	4	4	1
1987	7	9	13	10	8	47	76	73	7	4	6	5
1988	4	10	12	8	15	20	50	58	35	12	9	6
1989	3	5	9	5	12	14	49	26	9	10	16	11
1990	13	14	13	7	34	49	64	52	32	30	28	22
1991	15	24	27	38	33	48	117	124	32	38	42	37
Trawl												
1986	5	25	27	21	16	12	12	10	8	7	7	8
1987	14	25	27	27	14	12	17	29	27	37	31	33
1988	44	36	42	35	20	23	32	37	44	57	61	64
1989	67	63	72	54	40	44	57	58	72	54	68	67
1990	82	86	90	74	74	75	64	69	86	82	64	34
1991	121	121	105	88	79	118	115	110	91	27	3	0
All Gear												
1986	10	32	41	26	21	37	45	33	12	15	12	12
1987	23	36	41	39	23	59	95	104	38	42	38	40
1988	49	46	56	46	40	44	82	96	80	70	72	71
1989	70	68	83	61	53	59	108	84	82	64	83	79
1990	95	100	103	81	109	124	131	123	122	117	93	56
1991	136	146	136	129	111	167	243	242	131	78	53	42

Table 24.--Continued.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
All Alaska												
Pots												
1986	2	4	3	11	11	10	4	3	2	4	1	5
1987	2	4	3	6	5	7	3	4	6	5	6	7
1988	1	8	18	27	23	6	1	3	1	4	10	5
1989	0	4	9	10	6	4	4	3	2	0	1	5
1990	1	12	15	12	8	6	11	16	28	35	22	25
1991	38	48	78	59	0	2	12	11	9	22	30	29
Longline												
1986	56	78	133	500	556	356	416	364	324	98	107	89
1987	98	190	256	829	814	629	150	145	365	303	163	138
1988	111	160	250	655	927	661	106	116	402	244	72	42
1989	38	85	92	582	786	707	106	62	443	108	54	59
1990	72	76	146	637	1,053	803	104	212	198	71	71	61
1991	108	156	312	319	1,410	478	140	150	665	63	66	58
Trawl												
1986	28	44	45	36	17	12	15	16	19	24	28	28
1987	28	42	50	55	31	26	31	55	61	79	80	79
1988	74	78	97	91	55	57	61	55	70	99	111	95
1989	93	105	135	114	81	77	80	81	88	70	72	68
1990	125	143	171	167	121	86	111	112	131	134	86	34
1991	187	199	205	162	91	145	147	135	117	78	4	0
All Gear												
1986	86	124	181	543	582	377	438	387	347	130	138	124
1987	128	236	310	891	851	669	187	204	430	384	250	223
1988	188	251	364	773	1,000	723	168	171	472	346	192	142
1989	131	194	236	704	873	787	190	146	533	177	126	132
1990	201	230	342	825	1,181	913	248	356	367	243	185	126
1991	346	417	614	558	1,518	657	330	326	803	186	135	108

Source: National Marine Fisheries Service groundfish fish ticket and weekly processor data bases, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 25.--Number of domestic catcher-processors and motherships in the groundfish fishery off Alaska reporting catch to National Marine Fisheries Service by area, gear, year, and month, 1986-91.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Number of Catcher-Processors												
Gulf of Alaska												
Pots												
1986	0	0	0	2	5	4	2	1	1	1	2	1
1987	0	0	1	2	2	2	2	3	1	1	0	0
1988	0	0	0	4	4	1	1	1	1	2	3	3
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	1	2	1	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	1	1
Longline												
1986	0	0	0	3	3	3	1	0	0	0	0	0
1987	0	0	0	5	5	1	0	0	0	2	1	1
1988	0	1	1	9	9	6	4	3	2	2	2	4
1989	2	6	9	14	17	15	11	3	5	1	0	0
1990	8	8	9	20	16	5	0	0	0	0	0	0
1991	5	3	6	1	12	11	6	0	1	0	0	0
Trawl												
1986	3	2	4	5	3	3	6	7	8	10	7	7
1987	3	3	5	6	8	8	9	7	10	7	6	4
1988	6	4	8	11	14	15	15	9	8	7	3	3
1989	2	0	18	23	22	18	17	10	5	1	0	0
1990	1	1	14	19	14	12	24	20	15	21	11	0
1991	2	8	31	19	12	2	11	7	13	27	0	0
All Gear												
1986	3	2	4	10	11	10	9	8	9	11	9	8
1987	3	3	6	13	15	11	11	10	11	10	7	5
1988	6	5	9	24	27	22	20	13	11	11	8	10
1989	4	6	27	37	39	33	28	13	10	2	0	0
1990	9	9	23	39	30	17	25	21	16	21	11	0
1991	7	11	37	20	24	13	17	7	14	27	1	1

Table 25.--Continued.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Number of Catcher-Processors												
Bering Sea/Aleutian Islands												
Pots												
1986	0	0	1	0	0	2	2	2	2	1	1	1
1987	3	3	1	0	0	0	1	3	2	1	1	1
1988	2	1	1	2	2	1	1	1	2	1	1	1
1989	0	1	2	1	3	2	2	0	2	0	0	0
1990	0	0	0	0	1	0	3	3	2	1	0	0
1991	0	1	2	2	0	0	5	5	4	4	1	1
Longline												
1986	1	3	3	0	0	0	2	3	2	2	2	0
1987	1	4	4	0	1	5	4	4	4	1	1	0
1988	5	5	4	0	5	5	12	11	11	12	8	6
1989	6	8	7	3	6	17	19	17	13	3	0	0
1990	11	12	11	4	14	24	23	23	24	24	23	21
1991	13	18	22	22	20	23	30	29	27	30	29	28
Trawl												
1986	3	5	9	9	7	5	6	5	5	9	7	7
1987	14	17	13	11	10	10	14	13	14	14	12	11
1988	18	21	21	18	13	11	20	20	26	31	29	31
1989	39	42	37	30	24	26	37	39	42	11	0	0
1990	48	52	52	40	39	50	37	47	55	48	39	24
1991	59	63	62	43	51	63	59	54	55	20	3	0
All Gear												
1986	4	8	13	9	7	7	10	10	9	12	10	8
1987	18	24	18	12	11	15	19	20	20	16	14	12
1988	25	27	27	20	20	17	32	32	39	42	37	38
1989	45	51	46	34	33	45	56	55	55	14	0	0
1990	59	64	63	44	54	74	63	73	81	73	62	45
1991	72	82	86	67	71	86	94	88	86	54	33	29

Table 25.--Continued.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Number of Catcher-Processors												
All Alaska												
Pots												
1986	0	0	1	2	5	4	4	3	3	2	3	2
1987	3	3	2	2	2	2	3	4	3	1	1	1
1988	2	2	1	5	5	1	1	2	2	3	4	4
1989	0	1	2	1	3	2	2	0	2	0	0	0
1990	0	0	0	0	1	0	4	5	3	1	0	0
1991	0	1	2	2	0	0	5	5	4	4	1	1
Longline												
1986	1	3	3	3	3	3	2	3	2	2	2	0
1987	1	4	4	5	5	5	4	4	4	3	2	1
1988	5	5	4	9	10	10	12	12	12	12	8	8
1989	7	12	13	15	21	21	20	17	16	4	0	0
1990	17	17	18	22	24	24	23	23	24	24	23	21
1991	15	20	23	23	25	28	30	29	28	30	29	28
Trawl												
1986	5	7	12	12	7	6	10	12	13	14	13	12
1987	15	19	17	17	17	15	19	18	19	20	17	13
1988	21	23	23	23	22	23	29	26	28	33	31	31
1989	39	42	43	44	43	42	44	41	44	11	0	0
1990	48	52	53	52	53	52	55	58	60	57	43	24
1991	60	64	65	55	52	63	62	60	62	35	3	0
All Gear												
1986	6	10	16	17	15	13	16	18	18	18	18	14
1987	19	26	22	24	24	22	26	26	26	24	20	15
1988	28	29	28	37	37	34	41	40	42	46	41	43
1989	46	55	58	60	67	65	64	57	60	15	0	0
1990	65	69	71	74	78	76	82	85	87	82	66	45
1991	75	85	90	80	77	91	97	94	94	69	33	29

Table 25.--Continued.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Number of Motherships												
Gulf of Alaska												
Pots												
1990	0	0	0	0	0	0	1	1	1	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
Longline												
1989	0	0	0	2	2	2	2	0	0	0	0	0
1990	0	0	0	8	4	4	2	2	0	0	0	0
1991	0	0	0	1	1	1	0	0	0	0	0	0
Trawl												
1986	0	0	0	0	0	0	0	0	0	0	1	0
1987	0	0	0	0	0	0	0	0	1	1	0	0
1988	0	0	0	0	0	0	1	0	0	0	0	0
1989	0	0	2	2	0	0	0	0	1	0	0	0
1990	0	0	2	2	0	1	2	3	1	2	1	0
1991	1	3	8	4	0	1	1	0	0	3	0	0
All Gear												
1986	0	0	0	0	0	0	0	0	0	0	1	0
1987	0	0	0	0	0	0	0	0	1	1	0	0
1988	0	0	0	0	0	0	1	0	0	0	0	0
1989	0	0	2	4	2	2	2	1	0	0	0	0
1990	0	0	2	10	4	5	3	4	2	2	1	0
1991	1	3	8	5	1	2	1	0	0	3	0	0
Bering Sea/Aleutian Islands												
Longline												
1989	0	0	0	0	0	0	2	1	0	0	0	0
1990	0	0	0	0	1	2	2	2	0	0	0	0
1991	0	0	0	0	0	0	0	1	1	0	0	0
Trawl												
1986	0	1	1	1	1	1	1	1	1	1	1	0
1987	1	1	1	1	1	1	1	1	1	1	1	1
1988	2	2	2	2	2	2	2	2	2	1	2	3
1989	4	5	5	3	4	3	3	3	3	0	0	0
1990	4	5	5	5	5	6	5	5	6	5	4	1
1991	10	12	10	7	7	7	7	6	6	1	0	0

Table 25.--Continued.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Number of Motherships												
Bering Sea/Aleutian Islands												
All Gear												
1986	0	1	1	1	1	1	1	1	1	1	1	0
1987	1	1	1	1	1	1	1	1	1	1	1	1
1988	2	2	2	2	2	2	2	2	2	1	2	3
1989	4	5	5	3	4	3	5	4	3	0	0	0
1990	4	5	5	5	6	8	7	7	6	5	4	1
1991	10	12	11	7	7	7	7	6	6	1	0	0
All Alaska												
Pots												
1990	0	0	0	0	0	0	1	1	1	0	0	0
1991	0	0	1	0	0	0	0	0	0	0	0	0
Longline												
1989	0	0	0	2	2	2	2	1	0	0	0	0
1990	0	0	0	8	5	4	2	2	0	0	0	0
1991	0	0	0	1	1	1	0	1	1	0	0	0
Trawl												
1986	0	1	1	1	1	1	1	1	1	1	1	0
1987	1	1	1	1	1	1	1	1	1	1	1	1
1988	2	2	2	2	2	2	2	2	2	1	2	3
1989	4	5	5	4	4	3	3	3	3	0	0	0
1990	4	5	5	5	5	6	7	7	7	5	5	1
1991	10	12	10	8	7	7	7	6	6	3	0	0
All Gear												
1986	0	1	1	1	1	1	1	1	1	1	1	0
1987	1	1	1	1	1	1	1	1	1	1	1	1
1988	2	2	2	2	2	2	2	2	2	1	2	3
1989	4	5	5	6	6	5	5	4	3	0	0	0
1990	4	5	5	13	10	10	9	10	8	5	5	1
1991	10	12	11	9	8	8	7	6	6	3	0	0

Note: Not all catcher-processors and motherships were required to report weekly to NMFS. The numbers excluded have decreased as reporting requirements have been expanded. Very few vessels are excluded in 1989.

Source: National Marine Fisheries Service groundfish fish ticket and weekly processor data bases, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 26.--Production of groundfish products in the fisheries off Alaska by species, 1990-91 (quantity in metric tons, product weight and value in million dollars).

Species/Product	1990		1991	
	Quantity	Value	Quantity	Value
Pollock				
Whole	1,356	\$ 1.1	2,001	\$ 0.7
Headed & gutted	3,315	3.0	3,053	2.6
Fillets	74,879	170.1	72,164	210.3
Minced	13,553	16.3	10,742	16.6
Surimi	177,099	276.9	139,844	438.7
Roe	12,715	96.9	21,651	247.2
Fish meal	57,180	30.4	57,306	32.3
Other	4,318	<u>0.9</u>	7,214	<u>1.0</u>
Total		595.7		949.4
Pacific cod				
Whole	22,547	21.3	22,860	23.5
Headed & gutted	65,382	116.9	63,661	127.4
Fillets	16,827	61.0	18,329	86.6
Minced	1,192	1.9	2,760	3.6
Salted	10,387	36.6	11,241	43.0
Other	4,806	<u>7.9</u>	6,225	<u>7.1</u>
Total		245.5		291.2
Sablefish				
Headed & gutted	18,495	84.8	15,567	95.1
Other	222	<u>0.6</u>	572	<u>3.0</u>
Total		85.5		98.1
Flatfish				
Whole	11,870	17.6	34,375	28.3
Headed & gutted	19,295	38.4	28,143	70.7
Fillets	1,007	3.9	1,136	6.1
Kirimi	1,676	2.8	14,904	42.9
Other	85	<u>0.0</u>	1,675	<u>2.5</u>
Total		62.7		149.7
Rockfish				
Whole	917	2.1	4,592	6.5
Headed & gutted	22,595	52.6	7,385	13.8
Other	307	<u>0.8</u>	266	<u>0.3</u>
Total		55.5		20.6
Atka mackerel				
Whole	2,039	4.2	3,798	5.1
Headed & gutted	11,041	21.7	11,264	26.0
Other	5	<u>0.0</u>	245	<u>0.1</u>
Total		<u>25.9</u>		<u>31.2</u>
Total		\$1,070.8		\$1,541.0

Note: Value based on average selling price F.O.B. plant.

Source: National Marine Fisheries Service weekly processor data base, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 27.--Production of groundfish products in the fisheries off Alaska by species, product, and area, 1990-91 (metric tons, product weight).

Species/Product	1990			1991		
	Gulf	Bering Sea & Aleutians	Total	Gulf	Bering Sea & Aleutians	Total
Pollock						
Whole	898	458	1,356	1,607	394	2,001
H & G	3,117	198	3,315	398	2,655	3,053
Fillets	10,614	64,265	74,879	6,660	65,504	72,164
Minced	1,421	12,132	13,553	1,617	9,125	10,742
Surimi	4,170	172,930	177,099	7,936	131,907	139,844
Roe	109	12,606	12,715	303	21,348	21,651
Fish meal	322	56,858	57,180	2,197	55,109	57,306
Fish oil	(d)	(d)	3,080	(d)	(d)	4,623
Other	63	1,175	1,238	153	2,439	2,591
Pacific cod						
Whole	17,009	5,538	22,547	12,849	10,011	22,860
H & G	11,533	53,849	65,382	10,487	53,174	63,661
Fillets	6,676	10,151	16,827	8,629	9,700	18,329
Minced	313	879	1,192	1,437	1,323	2,760
Salted	2,248	8,138	10,387	2,020	9,221	11,241
Fish meal	0	188	188	326	2,901	3,227
Other	1,158	3,460	4,618	1,249	1,749	2,998
Sablefish						
H & G	15,700	2,795	18,495	13,573	1,994	15,567
Other	198	24	222	533	37	572
Flatfish						
Whole	5,097	6,773	11,870	4,726	29,648	34,375
H & G	2,331	16,963	19,295	2,309	25,834	28,143
Fillets	(d)	(d)	1,007	1,050	86	1,136
Kirimi	(d)	(d)	1,676	(d)	(d)	14,904
Other	1	84	85	7	1,669	1,675
Rockfish						
Whole	799	118	917	3,246	1,346	4,592
H & G	10,873	11,722	22,595	5,182	2,203	7,385
Other	272	34	307	39	226	266
Atka mackerel						
Whole	0	2,039	2,039	5	3,792	3,798
H & G	(d)	(d)	11,041	1,617	9,647	11,264
Other	0	4	5	0	245	245

(d) - Less than three firms in one area. H & G - Headed and gutted.

Source: National Marine Fisheries Service weekly processor data base,
7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 28.--Production of groundfish products in the fisheries off Alaska by species, product, and type of operation, 1990-91 (metric tons, product weight).

Species/ Product	1990			1991		
	At sea	Shoreside	Total	At sea	Shoreside	Total
Pollock						
Whole	429	927	1,356	671	1,329	2,001
H & G	3,034	281	3,315	3,006	47	3,053
Filletts	60,929	13,950	74,879	61,137	11,027	72,164
Minced	11,905	1,648	13,553	9,422	1,320	10,742
Surimi	136,495	40,604	177,099	88,470	51,374	139,844
Roe	11,182	1,533	12,715	18,862	2,790	21,651
Fish meal	40,132	17,048	57,180	35,577	21,729	57,306
Fish oil	302	2,778	3,080	(d)	(d)	4,623
Other	2	1,236	1,238	81	2,511	2,591
Pacific cod						
Whole	3,781	18,766	22,547	5,098	17,763	22,860
H & G	53,499	11,882	65,382	54,082	9,579	63,661
Filletts	9,423	7,404	16,827	9,898	8,431	18,329
Minced	926	265	1,192	1,248	1,513	2,760
Salted	(d)	(d)	10,387	1,919	9,323	11,241
Fish meal	97	91	188	2,033	1,194	3,227
Other	3,110	1,507	4,618	1,004	1,993	2,998
Sablefish						
H & G	7,185	11,309	18,495	3,273	12,294	15,567
Other	52	170	222	194	378	572
Flatfish						
Whole	9,562	2,309	11,870	31,875	2,500	34,375
H & G	18,988	306	19,295	27,958	185	28,143
Filletts	(d)	(d)	1,007	86	1,050	1,136
Kirimi	(d)	(d)	1,676	14,797	107	14,904
Other	5	81	85	699	976	1,675
Rockfish						
Whole	345	572	917	3,317	1,275	4,592
H & G	22,208	387	22,595	7,026	359	7,385
Other	264	41	307	2	264	266
Atka mackerel						
Whole	1,891	147	2,039	(d)	(d)	3,798
H & G	11,041	0	11,041	11,264	0	11,264
Other	0	4	5	245	0	245

(d) - Less than three firms in one type of operation.

H & G - Headed and gutted.

Source: National Marine Fisheries Service weekly processor data base,
7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 29 .--Annual wholesale prices of frozen fish blocks and fillets,
F.O.B. East Coast, 1976-91, in cents/lb.

Year	Blocks				Fillets			
	Cod	Minced cod	Alaska pollock	Whiting	Cod (Canada)	Cod (Iceland)	Flounder	Ocean perch
1976	74.1	31.1	43.0	42.4	NA	111.2	106.1	84.9
1977	97.8	36.1	60.7	54.4	NA	126.7	116.7	93.1
1978	100.0	37.7	68.6	59.8	NA	130.0	126.3	98.1
1979	103.9	50.4	68.8	67.2	NA	155.0	148.1	106.7
1980	105.6	51.8	69.5	74.1	NA	160.0	144.5	101.8
1981	109.2	51.1	80.5	74.3	NA	172.3	118.2	101.0
1982	110.9	51.3	72.4	66.2	127.5	180.0	141.0	108.1
1983	116.9	39.9	65.6	61.2	126.5	180.0	144.9	104.2
1984	104.0	30.4	67.9	56.8	130.0	180.0	158.5	101.4
1985	110.6	45.9	58.0	62.7	125.6	180.0	179.6	108.2
1986	141.7	60.5	78.9	69.0	165.0	196.4	186.0	141.0
1987	186.7	55.2	104.5	96.8	212.5	245.2	199.6	154.4
1988	163.2	66.5	85.8	93.2	154.2	241.5	202.9	132.2
1989	155.0	72.8	80.7	85.8	167.7	230.0	204.5	125.6
1990	199.0	64.3	94.5	91.7	216.0	253.8	NA	NA
1991	229.6	82.0	137.0	123.7	251.0	314.2	224.0	123.5

NA - Not available.

Source: Fishery Market News Report, Natl. Mar. Fish. Serv.,
408 Atlantic Ave., Boston, MA 02210-2203.

Table 30.--Monthly wholesale prices of selected frozen fish blocks and fillets, F.O.B. East Coast, 1989-91, in cents/lb.

Year	Blocks				Fillets			
	Cod	Minced cod	Alaska pollock	Whiting	Cod (Canada)	Cod (Iceland)	Flounder	Ocean perch
1989								
Jan.	142.5	70.0	81.0	91.0	162.5	230.0	202.5	NQ
Feb.	150.0	71.0	80.0	89.0	165.0	230.0	202.5	NQ
Mar.	152.5	73.5	79.0	88.0	172.5	230.0	207.5	122.5
Apr.	152.5	73.5	79.0	87.0	165.0	230.0	207.5	NQ
May	155.0	73.5	79.0	86.0	162.5	230.0	207.5	125.0
Jun.	157.5	75.0	79.0	86.0	157.5	230.0	NQ	125.0
Jul.	157.5	75.0	79.0	86.0	160.0	230.0	NQ	125.0
Aug.	157.5	73.0	79.0	83.0	165.0	230.0	202.5	125.0
Sep.	157.5	72.5	81.0	83.0	172.5	230.0	202.5	125.0
Oct.	157.5	72.5	83.5	83.0	177.5	230.0	205.0	127.5
Nov.	157.5	72.5	83.5	83.0	177.5	230.0	205.0	130.0
Dec.	162.5	72.0	85.5	84.0	175.0	230.0	202.5	125.0
1990								
Jan.	162.5	71.0	85.5	84.0	175.0	230.0	NA	NA
Feb.	170.0	69.0	85.5	84.0	175.0	230.0	NA	NA
Mar.	172.5	68.0	85.5	84.0	185.0	230.0	NA	NA
Apr.	175.0	66.5	85.5	84.0	192.5	230.0	NA	NA
May	180.0	66.5	85.5	83.0	200.0	230.0	NA	NA
Jun.	200.0	65.0	88.0	83.0	210.0	230.0	NA	NA
Jul.	200.0	62.5	88.5	84.0	210.0	240.0	NA	NA
Aug.	210.0	57.5	93.0	88.0	225.0	260.0	NA	NA
Sep.	215.0	56.0	97.0	NQ	232.5	280.0	NA	NA
Oct.	225.0	56.0	102.5	101.0	252.5	295.0	NA	NA
Nov.	235.0	65.0	112.5	115.0	272.5	295.0	NA	NA
Dec.	242.5	69.0	112.5	119.0	262.5	295.0	NA	NA
1991								
Jan.	242.5	69.0	112.5	119.0	265.0	310.0	NA	NA
Feb.	250.0	70.0	116.5	119.0	262.5	320.0	NA	NA
Mar.	252.5	70.0	142.5	123.5	262.5	320.0	TFQ	122.5
Apr.	247.5	80.0	157.5	135.0	262.5	320.0	TFQ	122.5
May	242.5	82.5	157.5	135.0	260.0	320.0	TFQ	122.5
Jun.	232.5	82.5	152.5	140.0	247.5	320.0	TFQ	125.0
Jul.	222.5	85.0	152.5	135.0	240.0	310.0	TFQ	125.0
Aug.	195.0	85.0	147.5	122.5	235.0	310.0	227.5	TFQ
Sep.	215.0	88.0	137.5	115.0	247.5	310.0	227.5	TFQ
Oct.	222.5	90.0	132.5	115.0	247.5	310.0	222.5	TFQ
Nov.	225.0	92.5	122.5	110.0	245.0	310.0	222.5	TFQ
Dec.	207.5	90.0	112.5	110.0	237.5	310.0	220.0	TFQ

NQ - No quote. TFQ - Too few quotes. NA - Not available.

Source: Fishery Market News Report, Natl. Mar. Fish. Serv.,
408 Atlantic Ave., Boston, MA 02210-2203.

Table 31.--Monthly producer prices for domestic Alaska pollock and Pacific cod products, F.O.B. Seattle, 1987-91, in cents/lb.¹

Month	Alaska pollock					Pacific cod		
	Blocks			Fillets		Fillets, shatter ³		
	16.5 lb	55 lb	Minced	Shatter	IQF ²	Blocks	8-16 oz	16-32 oz
1987								
Jan.	115	105	--	152	160	--	260	270
Feb.	122	104	--	153	165	--	257	267
Mar.	120	104	--	146	155	--	252	262
Apr.	120	105	--	155	160	--	248	261
May	121	110	--	152	155	--	245	256
Jun.	122	105	--	152	152	--	243	256
Jul.	122	105	--	150	150	--	243	256
Aug.	121	104	--	147	147	--	243	256
Sep.	118	102	--	142	150	--	243	256
Oct.	120	102	--	138	145	--	238	251
Nov.	114	--	--	125	132	--	232	240
Dec.	112	--	--	118	130	--	228	235
1988								
Jan.	113	95	--	118	128	--	220	230
Feb.	114	--	--	110	128	--	--	--
Mar.	107	90	--	110	128	--	205	215
Apr.	103	92	--	117	125	--	205	214
May	106	85	--	119	129	--	205	212
Jun.	106	85	--	122	125	--	208	217
Jul.	104	85	--	121	129	--	198	208
Aug.	99	80	--	120	125	--	192	202
Sep.	95	80	--	120	125	--	195	205
Oct.	95	80	--	120	125	--	195	205
Nov.	88	80	--	122	125	--	195	205
Dec.	92	80	--	122	122	--	195	202
1989								
Jan.	92	80	--	110	125	--	189	194
Feb.	95	80	--	112	132	--	202	208
Mar.	96	80	--	112	132	--	200	208
Apr.	95	80	--	112	125	--	200	208
May	96	76	--	111	132	--	209	217
Jun.	94	73	--	110	132	--	205	212
Jul.	96	73	--	110	132	--	194	209
Aug.	94	73	--	108	128	--	198	208
Sep.	98	--	--	115	125	--	198	208
Oct.	100	--	--	115	129	--	202	208
Nov.	99	85	--	96	126	--	186	192
Dec.	100	85	--	105	122	--	188	192

Table 31 .--Continued.

Month	Alaska pollock					Pacific cod		
	Blocks		Fillets			Blocks	Fillets, shatter ³	
	16.5 lb	55 lb	Minced	Shatter	IQF ²		8-16 oz	16-32 oz
1990								
Jan.	98	--	54	108	120	--	190	189
Feb.	100	--	54	108	125	--	192	190
Mar.	100	--	--	108	130	--	193	191
Apr.	98	--	58	108	129	--	196	199
May	100	--	60	114	130	185	202	204
Jun.	95	--	62	120	124	205	220	224
Jul.	108	--	62	128	143	--	232	240
Aug.	107	--	58	145	158	210	246	253
Sep.	110	--	--	160	165	210	265	268
Oct.	109	--	64	170	175	208	275	280
Nov.	115	--	64	174	178	208	274	280
Dec.	120	--	62	180	180	--	280	282
1991								
Jan.	127	--	64	180	182	218	280	282
Feb.	135	--	67	180	205	238	281	285
Mar.	158	--	80	188	198	240	281	285
Apr.	168	--	84	200	192	242	280	282
May	170	--	85	198	184	235	275	278
Jun.	169	--	88	198	180	230	271	275
Jul.	161	--	86	182	172	220	269	271
Aug.	162	--	89	173	172	200	259	262
Sep.	151	--	--	175	172	220	255	258
Oct.	135	--	88	175	175	215	259	270
Nov.	132	--	88	178	178	215	256	275
Dec.	129	--	90	190	168	215	260	269

¹ Mid-point of highs and lows for the month.

² Individually quick frozen.

³ Shatter pack.

Source: Fishery Market News, Natl. Mar. Fish. Serv., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 32.--Monthly Japanese landing market price of selected groundfish by species, 1983-91, in yen/kilogram (weighted average).

Species	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Flatfish, fresh												
1983	488	541	491	334	276	305	381	405	407	441	472	468
1984	544	569	580	428	331	346	377	392	372	469	468	450
1985	543	629	462	394	366	352	385	385	370	392	396	427
1986	585	692	606	510	438	402	532	498	478	518	550	603
1987	671	721	659	488	440	439	518	492	504	518	543	547
1988	586	695	716	630	523	496	568	497	528	547	546	587
1989	634	712	645	588	505	542	590	486	515	552	613	692
1990	674	704	701	665	497	515	615	629	597	637	687	801
1991	695	840	785	640	548	598	684	699	535	737	752	688
Cod, fresh												
1983	195	177	130	103	99	99	128	104	90	158	177	246
1984	224	217	181	134	111	111	139	109	116	201	197	227
1985	226	163	129	113	100	102	74	76	76	117	122	182
1986	129	174	140	115	90	87	106	97	82	130	155	178
1987	160	144	122	108	74	63	50	110	89	146	182	155
1988	176	112	124	89	90	90	130	114	88	180	223	229
1989	170	155	168	119	105	87	132	129	121	211	204	325
1990	282	230	180	148	123	124	153	113	151	192	242	343
1991	296	279	216	148	124	137	136	128	173	261	398	366
Cod, frozen												
1983	279	280	251	251	231	243	268	274	248	261	288	284
1984	307	290	337	354	314	357	369	344	375	373	381	348
1985	319	265	262	288	294	299	288	348	306	296	288	309
1986	292	--	275	257	213	298	--	327	295	359	358	426
1987	315	305	332	319	317	--	284	340	348	380	334	304
1988	313	274	199	191	215	--	--	224	227	348	--	330
1989	280	300	308	238	236	--	132	202	201	350	384	377
1990	374	427	326	347	411	--	--	373	353	--	320	300
1991	331	290	307	325	312	342	--	332	391	410	456	440
Alaska pollock, fresh												
1983	94	115	103	60	66	73	85	46	33	43	44	37
1984	67	94	78	51	41	38	38	30	32	44	58	57
1985	121	101	81	73	71	63	41	33	38	53	79	87
1986	152	139	91	59	74	70	65	73	76	87	77	60
1987	81	81	45	60	48	43	34	41	40	48	48	39
1988	85	113	69	52	35	40	39	38	33	38	32	58
1989	96	117	67	49	47	43	36	35	31	42	48	70
1990	121	121	76	64	57	58	55	57	50	53	66	94
1991	150	172	168	108	81	87	91	111	89	115	135	146

Table 32.--Continued.

Species	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Atka mackerel, fresh												
1983	89	97	105	148	126	146	232	238	162	81	102	59
1984	84	79	127	210	170	201	263	175	179	109	82	59
1985	50	89	122	114	144	147	208	182	78	59	64	56
1986	60	93	93	103	149	99	124	73	86	62	49	55
1987	57	44	54	76	67	45	42	41	36	71	42	50
1988	40	41	80	59	86	63	87	90	44	48	37	33
1989	41	37	42	40	47	36	31	55	46	106	53	44
1990	42	54	45	50	42	48	59	61	57	64	79	85
1991	65	93	111	90	101	120	168	143	93	79	80	57
Rockfish, fresh												
1983	913	829	819	770	765	910	1022	988	791	841	830	1085
1984	965	1028	1104	1036	760	986	1032	1029	898	1011	1064	1248
1985	1122	1187	1043	869	908	1090	1256	1252	932	954	981	1176
1986	1478	1611	1446	1299	1005	1157	1333	1436	1390	1463	1454	1576
1987	1825	1591	1337	957	1118	1282	1466	1518	1393	1420	1318	1427
1988	1703	1378	1395	1375	1309	1431	1573	1366	1275	1256	1419	1628
1989	1760	1493	1670	1583	1513	1765	1935	1835	1588	1682	1830	2056
1990	2058	1975	1919	1896	1803	2049	2316	1961	1643	1948	2017	2231
1991	2328	2054	2074	1937	2035	2145	2553	2328	2003	2320	2513	2630

Source: Monthly Stat. of Agriculture, Forestry, and Fisheries, Stat. and Info. Dept., Ministry of Agriculture, Forestry, and Fishery, Government of Japan. Available from Alaska Fish. Sci. Cen., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 33.--Monthly Tokyo wholesale prices of selected products, 1983-91, in yen/kilogram (weighted average).

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Flatfish, frozen												
1983	557	559	571	556	486	498	516	569	568	569	602	565
1984	547	542	604	471	560	626	623	498	609	506	516	466
1985	559	520	516	535	597	543	587	525	513	462	592	509
1986	479	473	423	503	563	552	545	496	586	569	603	580
1987	528	502	593	594	580	557	601	496	518	624	499	531
1988	496	503	462	451	442	437	408	424	407	419	396	392
1989	409	357	349	421	343	433	410	457	462	472	480	459
1990	496	433	439	463	509	616	570	578	637	526	592	552
1991	449	512	572	570	520	541	565	573	509	543	482	485
Cod, frozen												
1983	304	329	391	443	391	382	322	355	400	397	415	443
1984	477	410	404	349	416	377	378	452	470	458	434	429
1985	433	483	344	340	374	318	444	386	413	351	416	423
1986	431	434	404	382	371	402	376	395	432	466	436	518
1987	486	384	365	404	398	352	444	433	464	552	557	418
1988	499	515	552	505	482	483	472	525	531	507	495	479
1989	472	451	341	600	529	474	511	608	174	529	506	577
1990	566	635	623	588	601	678	690	748	708	684	620	726
1991	702	681	694	704	737	694	764	771	780	800	721	742
Surimi, factory-processed												
1983	390	390	390	390	390	390	410	410	400	380	410	410
1984	410	410	410	410	410	410	410	410	425	410	425	425
1985	425	425	425	425	425	425	425	435	425	435	435	435
1986	495	495	495	495	495	500	500	500	500	500	500	500
1987	500	480	480	480	480	480	480	480	480	480	480	480
1988	480	480	480	480	480	480	480	480	480	480	480	480
1989	480	480	480	480	480	480	480	480	480	480	480	480
Surimi, land-processed, grade 2												
1983	215	210	208	210	220	285	325	240	210	215	200	180
1984	185	220	245	230	200	190	192	180	180	215	215	190
1985	240	220	235	245	260	295	260	210	215	230	256	265
1986	300	308	320	330	355	315	315	315	335	335	200	245
1987	230	230	230	240	235	230	230	220	220	210	210	200
1988	210	230	230	220	210	210	210	205	200	195	180	198
1989	195	190	195	195	200	205	205	205	200	200	200	210

Note: Beginning in 1988, prices are for six large cities wholesale market.

Source: Monthly Stat. of Agriculture, Forestry, and Fisheries, Stat. and Info. Dep., Ministry of Agriculture, Forestry, and Fisheries, Government of Japan; and Foreign Fish. Info. Release, Natl. Mar. Fish. Serv., 501 W. Ocean Blvd, Suite 4200, Long Beach, CA 90802-4213.

Table 34.--Monthly Tokyo wholesale prices of sablefish by size, and sea-processed and shore-processed surimi, 1986-91, in \$/lb, product weight.

Month	Sablefish			Surimi	
	5-7 lb	4-5 lb	3-4 lb	Sea-proc.	Shore-proc.*
1986					
Jan.	2.54	2.32	2.05	.96	.72
Feb.	2.75	2.50	2.18	1.14	.76
Mar.	2.92	2.65	2.04	1.22	.82
Apr.	2.78	2.49	1.94	1.19	.82
May	2.85	2.58	1.99	1.30	.88
Jun.	2.69	2.41	1.86	1.34	1.02
Jul.	2.53	2.24	1.73	1.37	1.11
Aug.	2.62	2.27	1.88	1.42	1.04
Sep.	2.60	2.27	2.02	1.44	1.02
Oct.	2.69	2.38	2.20	1.45	1.03
Nov.	2.59	2.31	2.14	1.38	.98
Dec.	2.59	2.31	2.14	1.38	1.00
1987					
Jan.	2.64	2.34	2.20	1.42	.92
Feb.	2.70	2.40	2.26	1.45	.85
Mar.	2.52	2.28	2.26	1.45	.80
Apr.	2.55	2.41	2.30	1.52	.84
May	2.55	2.35	2.19	1.60	.87
Jun.	2.35	2.16	2.04	1.54	.84
Jul.	2.30	2.10	1.96	1.52	.82
Aug.	2.48	2.26	2.12	1.48	.80
Sep.	2.83	2.66	2.45	1.62	.85
Oct.	3.02	2.86	2.68	1.58	.83
Nov.	3.38	3.20	3.02	1.68	.89
Dec.	3.32	3.13	2.94	1.72	.90
1988					
Jan.	3.50	--	3.10	1.82	.96
Feb.	3.22	3.02	2.80	1.74	.87
Mar.	3.16	3.00	2.80	1.72	.86
Apr.	3.16	3.03	2.85	1.76	.88
May	3.18	3.06	2.88	1.60	.90
Jun.	3.18	3.06	2.88	1.60	.90
Jul.	2.94	2.76	2.60	1.48	.82
Aug.	2.94	2.76	2.58	1.48	.82
Sep.	2.95	2.78	2.62	1.48	.85
Oct.	3.08	2.92	2.74	1.48	.85
Nov.	3.36	3.18	3.00	1.60	.91
Dec.	3.34	3.16	2.97	1.66	.94

Table 34.- -Continued.

Month	Sablefish			Surimi	
	5-7 lb	4-5 lb	3-4 lb	Sea-proc.	Shore-proc.*
1989					
Jan.	3.24	3.06	2.88	1.60	.92
Feb.	3.15	2.85	2.68	1.58	.84
Mar.	3.22	2.92	2.74	1.60	.85
Apr.	3.12	2.82	2.66	1.56	.83
May	3.02	2.74	2.54	1.53	.82
Jun.	2.80	2.58	2.36	1.43	.76
Jul.	2.76	2.56	2.30	1.46	.78
Aug.	2.70	2.45	2.18	1.43	.80
Sep.	2.72	2.46	2.20	1.43	.76
Oct.	2.78	2.53	2.27	1.44	.76
Nov.	2.74	2.49	2.24	1.42	.76
Dec.	2.74	2.49	2.24	1.42	.76
1990					
Jan.	2.74	2.48	2.30	1.41	.76
Feb.	2.95	2.67	2.51	1.41	.76
Mar.	2.91	2.64	2.52	1.38	.73
Apr.	2.80	2.62	2.50	1.30	.69
May	2.87	2.77	2.69	1.28	.73
Jun.	2.79	2.56	2.41	1.31	.83
Jul.	2.87	2.66	2.54	1.34	.85
Aug.	3.02	2.93	2.87	1.34	.85
Sep.	3.20	3.12	2.87	1.42	.90
Oct.	3.44	3.32	3.28	1.50	.96
Nov.	3.70	3.62	3.54	1.58	1.00
Dec.	3.90	3.80	3.66	1.50	.96
1991					
Jan.	4.20	3.98	--	1.40	.94
Feb.	5.30	5.20	--	NA	NA
Mar.	5.26	5.10	--	NA	NA
Apr.	4.90	4.81	--	NA	NA
May	4.08	3.99	--	NA	NA
Jun.	3.84	3.74	--	NA	NA
Jul.	3.57	3.37	--	NA	NA
Aug.	3.98	3.78	--	NA	NA
Sep.	4.25	4.08	--	NA	NA
Oct.	4.90	4.72	--	NA	NA
Nov.	4.97	4.80	--	NA	NA
Dec.	4.84	4.66	--	NA	NA

Note: Prices are average of spot prices.

* - Japanese shore-processed, grade 2 surimi.

Source: Foreign Fish. Info. Release, Natl. Mar. Fish. Serv.,
501 W. Ocean Blvd, Suite 4200, Long Beach, CA 90802-4213.

Table 35.--Annual exports of groundfish from Alaska and Washington customs districts, quantity (1,000 lbs), value (\$1,000), and average price (\$/lb), 1986-91.

Product	Quantity	Value	Average price
Whole or dressed			
Cod			
1989	40,546	39,614	0.98
1990	159,216	114,275	.72
1991	175,900	142,151	.81
Flounders and soles			
1989	31,559	43,911	1.39
1990	51,229	36,009	.70
1991	159,217	104,130	.65
Pollock			
1986	1,937	2,145	1.11
1987	4,647	3,353	.72
1988	3,578	3,350	.94
1989	8,127	4,392	.54
1990	3,313	2,448	.74
1991	465	245	.53
Sablefish			
1986	24,323	32,438	1.33
1987	39,162	66,130	1.69
1988	39,246	83,260	2.12
1989	47,149	79,930	1.70
1990	40,706	68,496	1.68
1991	38,252	91,517	2.39
Total whole or dressed			
1986	76,695	93,863	1.22
1987	108,039	151,191	1.40
1988	190,799	240,908	1.26
1989	226,893	268,912	1.19
1990	440,856	389,297	.88
1991	480,095	437,898	.91
Fillets and steaks			
Cod			
1986	7,100	9,502	1.34
1987	6,961	11,226	1.61
1988	9,813	14,735	1.50
1989	1,017	1,230	1.21
1990	2,455	2,832	1.15
1991	2,203	2,579	1.17
Halibut			
1986	1,685	2,782	1.65
1987	1,092	2,018	1.85
1988	1,511	2,592	1.72
1989	1,671	2,434	1.46
1990	1,884	4,203	2.23
1991	514	1,233	2.40

Table 35.--Continued.

Product	Quantity	Value	Average price
Other			
1986	7,812	9,606	1.23
1987	17,979	21,699	1.21
1988	27,685	29,747	1.07
1989	24,947	24,339	.98
1990	14,708	15,292	1.04
1991	25,336	27,063	1.07
Total fillets and steaks			
1986	16,596	21,891	1.32
1987	26,032	34,945	1.34
1988	39,010	47,075	1.21
1989	27,634	28,003	1.01
1990	19,047	22,327	1.17
1991	28,053	30,875	1.10
Other			
Fish roe, excluding herring and salmon			
1986	960	1,881	1.96
1987	2,053	4,457	2.17
1988	4,747	12,596	2.65
1989	22,862	72,116	3.15
1990	37,431	104,499	2.79
1991	50,184	190,264	3.79
Fish, dried, salted, smoked			
1986	1,586	1,914	1.21
1987	3,521	4,487	1.27
1988	7,814	11,093	1.42
1989	13,613	15,927	1.17
1990	11,795	14,948	1.27
1991	14,986	22,323	1.49
Fish, other			
1986	1,219	1,350	1.11
1987	6,529	5,629	.86
1988	46,447	40,621	.87
1989	156,671	141,723	.90
1990	340,348	257,139	.76
1991	285,882	379,922	1.33

Source: U.S. Dep. of Commerce, Bur. of the Census, and Natl. Mar. Fish. Serv. data base from Alaska Fish. Sci. Cen., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 36.--Exports of groundfish from Alaska and Washington customs districts to major countries, quantity (1,000 lbs), percent change from 1990 to 1991, and average price (\$/lb), 1990-91.

Product/Country	Quantity		% Change 90 to 91	Average price	
	1990	1991		1990	1991
Whole or dressed					
Cod					
Total	159,216	175,900	+10	0.72	0.81
Japan	72,059	69,748	-3	.81	.92
Norway	37,910	29,194	-23	.72	.87
Rep. of Korea	33,565	36,294	+8	.49	.57
Flounders and soles					
Total	51,229	150,337	+193	.70	.62
Japan	40,089	103,145	+157	.77	.74
Rep. of Korea	10,669	34,028	+218	.42	.33
Sablefish					
Total	40,706	38,252	-6	1.68	2.39
Japan	36,371	37,228	+2	1.82	2.42
Total	440,856	480,095	+9	.88	.91
Japan	278,640	282,796	+1	.96	1.06
Rep. of Korea	60,081	93,986	+56	.48	.51
Norway	40,457	29,327	-28	.72	.88
Fed. Rep. Germ.	41,206	18,728	-54	.87	.80
Filletts					
Total	19,047	28,053	+47	1.17	1.10
Fed. Rep. Germ.	8,649	13,178	+52	.85	.91
Canada	4,483	4,300	-4	1.58	1.81
Japan	2,043	2,861	+40	1.88	1.19
Roe					
Total	37,431	50,184	+34	2.79	3.79
Japan	30,792	41,920	+36	2.61	3.80
Rep. of Korea	6,100	7,651	+25	3.28	3.49
Salted, dried, or smoked					
Total	11,795	14,986	+27	1.27	1.49
Portugal	10,556	11,381	+8	1.35	1.52
Other					
Total	340,348	285,882	-16	.76	1.33
Japan	271,754	216,115	-20	.74	1.34
Rep. of Korea	51,119	48,345	-5	.70	1.29

Source: U.S. Dep. Commer., Bur. of the Census; and Natl. Mar. Fish. Serv. data base from Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 37.--U.S. imports of groundfish fillets, steaks, and blocks, 1976-91, quantity in million lbs, product weight and value in million dollars.

Year	<u>Fillets and steaks</u>		<u>Blocks</u>		<u>Total</u>	
	Quantity	Value	Quantity	Value	Quantity	Value
1976	337	\$273	379	\$211	716	\$ 484
1977	321	305	385	292	706	597
1978	333	341	406	325	739	666
1979	340	385	408	337	748	722
1980	297	341	336	289	633	630
1981	346	415	344	301	690	716
1982	371	458	319	274	690	732
1983	355	449	384	339	739	788
1984	373	459	316	263	689	722
1985	388	500	334	275	722	775
1986	366	542	364	380	730	922
1987	408	759	403	539	812	1,298
1988	323	568	303	382	626	950
1989	333	578	282	325	616	903
1990	262	482	264	373	526	856
1991	255	526	290	444	545	970

Source: U.S. Dep. Commer., Bur. of the Census, Washington, D.C. 20233; and Fisheries of the United States, Natl. Mar. Fish. Serv., Fish. Stat. Div., 1335 East-West Highway, Silver Spring, MD 20910, various issues.

Table 38.--U.S. per capita consumption of fish and shellfish, 1970-91,
population in millions and consumption in pounds, edible weight.

Year	Total civilian population	Per capita consumption			
		Fresh and frozen	Canned	Cured	Total
1970	201.9	6.9	4.5	.4	11.8
1971	204.9	6.7	4.3	.5	11.5
1972	207.5	7.1	4.9	.5	12.5
1973	209.6	7.4	5.0	.4	12.8
1974	211.6	6.9	4.7	.5	12.1
1975	213.8	7.5	4.3	.4	12.2
1976	215.9	8.2	4.2	.5	12.9
1977	218.1	7.7	4.6	.4	12.7
1978	220.5	8.1	5.0	.3	13.4
1979	223.0	7.8	4.8	.4	13.0
1980	225.7	7.9	4.3	.3	12.5
1981	227.9	7.8	4.6	.3	12.7
1982	230.3	7.9	4.3	.3	12.5
1983	232.6	8.4	4.7	.3	13.4
1984	234.8	9.0	4.9	.3	14.2
1985	237.0	9.8	5.0	.3	15.1
1986	239.4	9.8	5.4	.3	15.5
1987	241.7	10.7	5.2	.3	16.2
1988	244.1	10.0	4.9	.3	15.2
1989	246.6	10.2	5.1	.3	15.6
1990	249.2	9.6	5.1	.3	15.0
1991	251.3	9.7	4.9	.3	14.9

Note: Per capita consumption represents pounds of edible meat consumed from domestically caught and imported fish and shellfish adjusted for beginning and ending inventories, and exports, divided by the civilian population of the United States as of July 1 of each year.

Source: Fisheries of the United States, 1991. U.S. Dep. Commerce, Natl. Mar. Fish. Serv., Silver Spring, MD 20910, Current Fish. Stat. No. 9100, May 1992, p. 68-69.

Table 39.--U.S. consumption of all fillets and steaks, and fish sticks and portions, totals in 1,000 lbs and per capita in pounds, product weight, 1980-91.

Year	Fillets and steaks		Fish sticks and portions	
	Total	Per capita*	Total	Per capita*
1980	545,347	2.40	442,892	1.95
1981	564,844	2.46	414,149	1.80
1982	582,630	2.51	400,455	1.73
1983	649,828	2.77	413,858	1.77
1984	713,159	3.02	430,895	1.82
1985	776,093	3.25	419,547	1.76
1986	799,480	3.32	431,511	1.79
1987	861,449	3.55	419,250	1.72
1988	830,922	3.38	365,415	1.49
1989	800,906	3.23	376,384	1.52
1990	907,490	3.63	315,161	1.26
1991 p	760,617	3.01	256,049	1.01

* Total divided by total U.S. resident population.

p - preliminary.

Source: Computed from data from U.S. Dep. of Commerce, Bur. of the Census; and Fisheries of the United States, Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910, various issues.

Table 40.--Annual U.S. economic indicators: Selected producer and consumer price indexes, 1976-91.

Year	Producer price index (Index 1982=100)					Consumer price index (Index 1982-84=100)			
	All commodities	Meat	Poultry	Fish	Petroleum products	All items	Meat	Poultry	Fish
1976	61.1	69.3	93.0	64.5	36.3	56.9	66.4	76.4	60.2
1977	64.9	68.1	96.9	69.7	40.5	60.6	64.9	76.9	66.6
1978	69.9	83.6	108.5	74.1	42.2	65.2	77.0	84.9	73.0
1979	78.7	93.3	105.5	90.9	58.4	72.6	90.1	89.1	80.1
1980	89.8	94.1	108.1	87.8	88.6	82.4	92.7	93.7	87.5
1981	98.0	95.4	108.1	89.5	105.9	90.9	96.0	97.5	94.8
1982	100.0	100.0	100.0	100.0	100.0	96.5	100.7	95.8	98.2
1983	101.3	94.3	103.6	105.4	89.9	99.6	99.5	97.0	99.3
1984	103.7	94.5	115.2	112.7	87.4	103.9	99.8	107.3	102.5
1985	103.2	90.8	110.5	116.5	83.2	107.6	98.9	106.2	107.5
1986	100.2	93.9	116.2	125.6	53.2	109.6	102.0	114.2	117.4
1987	102.8	100.3	103.4	141.9	56.8	113.6	109.6	112.6	129.9
1988	106.9	99.6	111.5	157.5	53.8	119.4	113.0	121.8	139.9
1989	112.2	104.7	120.4	149.2	61.2	124.0	116.7	132.6	143.6
1990	116.2	116.9	113.6	153.7	74.8	130.6	128.4	132.5	146.7
1991	116.5	113.3	109.8	155.7	67.0	136.2	133.1	131.5	148.3

Source: Producer prices and price indexes, and Consumer price indexes, U.S. Dep. of Labor, Bur. of Labor Statistics.

Table 41.--Monthly U.S. economic indicators: Selected producer and consumer price indexes, 1989-91.

Month	Producer price index (Index 1982=100)					Consumer price index (Index 1982-84=100)			
	All commodities	Meat	Poultry	Fish	Petroleum products	All items	Meat	Poultry	Fish
1989									
Jan.	110.3	102.6	115.7	161.3	54.3	121.1	114.0	128.8	144.0
Feb.	110.8	102.4	115.0	161.8	54.9	121.6	114.3	128.4	142.9
Mar.	111.5	103.7	123.9	161.4	57.1	122.3	115.5	130.3	144.3
Apr.	112.3	103.2	125.1	158.3	64.9	123.1	115.6	133.0	143.3
May	113.1	103.5	132.2	157.5	67.7	123.8	115.6	137.0	142.3
Jun.	113.0	103.4	130.6	139.1	65.6	124.1	116.1	140.1	142.9
Jul.	112.7	105.8	125.9	137.3	63.4	124.3	116.7	138.1	142.3
Aug.	112.0	106.1	120.0	139.9	58.9	124.6	117.5	136.2	145.2
Sep.	112.3	105.2	120.2	137.7	61.4	125.0	117.7	134.0	146.9
Oct.	112.7	104.8	113.7	146.7	63.0	125.6	118.1	131.2	143.9
Nov.	112.7	107.1	112.3	146.5	61.7	125.9	119.3	126.8	142.0
Dec.	113.0	108.4	110.2	143.2	62.0	126.1	120.0	127.8	143.0
1990									
Jan.	114.9	110.6	107.9	156.2	71.7	127.4	122.3	128.6	149.0
Feb.	114.4	111.1	111.2	156.4	64.4	128.0	123.5	130.5	150.6
Mar.	114.2	111.5	117.8	160.6	63.3	128.7	124.0	134.8	148.0
Apr.	114.0	114.4	114.4	162.0	65.2	128.9	125.2	132.1	147.2
May	114.5	120.1	119.2	175.9	65.4	129.2	126.6	132.3	143.8
Jun.	114.2	120.3	116.0	142.4	63.9	129.9	129.6	134.0	143.7
Jul.	114.3	119.6	120.6	142.0	62.2	130.4	130.3	135.3	143.3
Aug.	116.5	120.0	113.9	143.6	74.4	131.6	130.5	133.6	145.2
Sep.	118.3	116.7	116.9	144.2	86.6	132.7	131.0	134.6	147.4
Oct.	120.8	119.5	110.0	143.6	96.6	132.5	131.7	133.7	147.0
Nov.	120.1	119.6	108.6	157.7	96.4	133.8	133.1	130.5	147.0
Dec.	118.6	119.6	106.6	160.2	87.0	133.8	133.6	129.7	148.5
1991									
Jan.	118.9	117.3	108.0	166.7	78.9	134.6	133.5	131.3	151.1
Feb.	117.2	117.0	106.6	166.9	71.5	134.8	132.8	132.7	148.7
Mar.	116.1	117.6	108.0	168.0	64.0	135.0	133.1	131.4	149.6
Apr.	116.0	117.4	108.7	162.6	63.6	135.2	132.7	131.1	148.2
May	116.5	118.0	111.6	165.1	66.4	135.6	133.4	132.7	147.0
Jun.	116.3	117.4	111.8	146.4	65.5	136.0	133.5	131.5	146.7
Jul.	116.0	116.1	113.3	146.6	63.3	136.2	133.1	132.5	146.1
Aug.	116.2	111.2	113.5	139.5	66.4	136.6	132.9	132.4	145.2
Sep.	116.0	108.1	112.8	142.0	67.0	137.2	131.9	131.0	147.8
Oct.	116.4	108.7	111.2	153.1	66.1	137.4	131.3	131.0	149.4
Nov.	116.4	105.9	106.8	155.3	67.9	137.8	131.5	129.3	149.3
Dec.	115.9	104.8	105.5	156.3	63.4	137.9	130.8	130.2	150.4

Source: Producer prices and price indexes, and Consumer price indexes, U.S. Dep. of Labor, Bur. of Labor Statistics.

Table 42.--Annual foreign exchange rates for selected countries, 1976-91,
in national currency units per U.S. dollar.

Year	Canada (dollar)	Denmark (kroner)	Japan (yen)	ROK (won)	New Zeal. (dollar)	Iceland (kronur)	Norway (kroner)	U.K. (pound)
1976	0.9860	6.0450	296.55	484.00	1.0036	1.822	5.4565	0.5536
1977	1.0635	6.0032	268.51	484.00	1.0301	1.989	5.3235	.5729
1978	1.1407	5.5146	210.44	484.00	.9636	2.711	5.2423	.5210
1979	1.1714	5.2610	219.14	484.00	.9776	3.526	5.0641	.4713
1980	1.1692	5.6359	226.74	607.43	1.0265	4.798	4.9392	.4299
1981	1.1989	7.1234	220.54	681.03	1.4194	7.224	5.7395	.4931
1982	1.2337	8.3324	249.08	731.08	1.3300	12.352	6.4540	.5713
1983	1.2324	9.1450	237.51	775.75	1.4952	24.843	7.2964	.6592
1984	1.2951	10.3566	237.52	805.98	1.7286	31.694	8.1615	.7483
1985	1.3655	10.5964	238.54	870.02	2.0064	41.508	8.5970	.7714
1986	1.3895	8.0910	168.52	881.45	1.9088	41.104	7.3947	.6971
1987	1.3260	6.8400	144.64	822.57	1.6886	38.677	6.7375	.6102
1988	1.2307	6.7320	128.15	731.47	1.5244	43.014	6.5170	.5614
1989	1.1840	7.3100	137.96	671.46	1.6708	57.042	6.9045	.6099
1990	1.1668	6.1890	144.79	707.76	1.6750	58.284	6.2597	.5603
1991	1.1457	6.3960	134.71	733.35	1.7265	58.996	6.4829	.5652

ROK - Republic of Korea. U.K. - United Kingdom.

Source: Intl. Financial Statistics, Intl. Mon. Fund, Washington, D.C.

Table 43.--Monthly foreign exchange rates for selected countries,
1989-91 in national currency units per U.S. dollar.

Month	Canada (dollar)	Denmark (kroner)	Japan (yen)	ROK (won)	New Zeal. (dollar)	Iceland (kronur)	Norway (kroner)	U.K. (pound)
1989								
Jan.	1.191	7.08	127.2	682.4	1.598	49.29	6.66	.563
Feb.	1.189	7.20	127.8	677.0	1.623	50.85	6.72	.570
Mar.	1.195	7.27	130.4	673.0	1.623	52.57	6.79	.583
Apr.	1.189	7.28	132.1	667.4	1.633	52.75	6.79	.588
May	1.193	7.59	138.4	666.6	1.646	55.28	7.05	.613
Jun.	1.198	7.72	143.8	666.7	1.739	58.03	7.19	.644
Jul.	1.189	7.36	140.7	667.3	1.738	57.94	6.95	.616
Aug.	1.175	7.49	141.1	668.4	1.691	59.10	7.04	.626
Sep.	1.183	7.59	145.0	670.0	1.689	61.74	7.12	.637
Oct.	1.175	7.28	141.9	671.3	1.703	61.73	6.94	.630
Nov.	1.169	7.10	143.5	672.3	1.701	61.87	6.89	.636
Dec.	1.161	6.77	143.7	675.2	1.681	61.87	6.70	.627
1990								
Jan.	1.171	6.56	145.1	683.4	1.658	60.75	6.54	.606
Feb.	1.196	6.47	145.5	689.9	1.689	60.07	6.47	.590
Mar.	1.180	6.53	153.1	697.8	1.709	61.19	6.59	.615
Apr.	1.164	6.44	158.5	706.0	1.726	60.94	6.55	.611
May	1.175	6.34	153.5	709.3	1.743	59.92	6.44	.596
Jun.	1.173	6.41	153.8	715.3	1.717	60.12	6.47	.585
Jul.	1.157	6.24	149.3	715.9	1.690	58.58	6.30	.553
Aug.	1.144	6.01	147.4	715.5	1.631	56.74	6.08	.527
Sep.	1.158	6.00	139.0	715.0	1.609	56.61	6.07	.532
Oct.	1.160	5.82	129.7	715.0	1.632	55.16	5.92	.514
Nov.	1.163	5.70	129.1	715.0	1.636	54.37	5.80	.509
Dec.	1.160	5.72	133.6	715.8	1.674	54.95	5.86	.519
1991								
Jan.	1.156	5.82	133.9	718.1	1.680	55.216	5.91	.517
Feb.	1.155	5.69	130.5	721.6	1.661	54.273	5.79	.509
Mar.	1.157	6.12	137.2	725.1	1.681	57.397	6.22	.546
Apr.	1.153	6.51	134.1	725.5	1.696	59.831	6.62	.571
May	1.150	6.56	138.0	725.1	1.704	60.266	6.96	.579
Jun.	1.144	6.88	139.8	725.4	1.733	62.253	6.98	.607
Jul.	1.149	6.92	138.0	729.0	1.762	62.387	6.82	.607
Aug.	1.145	6.75	138.9	731.1	1.742	61.310	6.78	.594
Sep.	1.137	6.56	134.6	739.7	1.724	60.040	6.64	.580
Oct.	1.128	6.53	130.7	749.2	1.771	59.777	6.62	.581
Nov.	1.130	6.31	129.7	753.1	1.775	58.266	6.38	.563
Dec.	1.146	6.10	128.1	757.3	1.806	56.941	6.18	.548

ROK - Republic of Korea. U.K. - United Kingdom.

Source: Intl. Financial Statistics, Intl. Mon. Fund, Washington, D.C.

Table 44.--Monthly U.S. cold storage holdings of selected groundfish blocks, 1989-91, in 1,000 pounds (end of month).

Month	Cod	Flounder	Alaska pollock	Whiting	Minced	Total*
1989						
Jan.	17,959	3,862	17,314	3,523	5,846	57,047
Feb.	15,642	3,141	17,760	3,857	5,041	52,805
Mar.	14,047	2,433	16,422	3,984	4,529	48,268
Apr.	14,819	2,139	14,781	2,637	5,171	46,674
May	19,127	2,016	14,778	2,883	5,305	52,257
Jun.	19,946	2,185	9,281	2,868	7,765	49,695
Jul.	24,509	3,543	9,129	2,467	9,895	57,487
Aug.	26,659	3,682	9,705	1,790	10,952	60,396
Sep.	22,907	4,141	10,095	1,776	11,510	57,138
Oct.	16,728	3,981	7,469	1,172	11,338	48,612
Nov.	14,348	4,042	6,337	2,180	11,169	46,330
Dec.	14,242	3,635	10,533	2,162	11,372	55,271
1990						
Jan.	9,167	2,031	10,605	4,284	9,965	48,900
Feb.	7,310	1,699	16,186	2,919	8,162	46,453
Mar.	4,885	1,426	11,566	2,492	6,438	37,232
Apr.	5,162	814	10,630	2,705	7,435	35,391
May	5,242	612	11,096	1,887	7,653	33,031
Jun.	7,252	731	11,261	1,560	6,784	34,042
Jul.	11,562	1,125	14,406	1,260	8,180	43,194
Aug.	11,028	1,355	12,970	1,417	8,322	42,661
Sep.	9,834	1,378	11,047	1,311	11,109	44,297
Oct.	8,625	1,179	11,839	893	8,024	38,708
Nov.	7,864	1,307	11,175	925	10,240	39,022
Dec.	9,994	1,622	11,321	2,295	10,028	43,503
1991						
Jan.	7,747	1,742	7,562	3,350	8,022	35,716
Feb.	7,517	1,395	8,169	2,728	5,470	32,605
Mar.	5,516	1,132	6,546	2,251	4,158	25,461
Apr.	5,629	800	5,342	1,574	4,771	23,046
May	9,596	682	4,819	4,128	5,214	29,891
Jun.	11,484	542	4,660	5,141	5,637	33,192
Jul.	11,631	516	7,145	5,884	7,522	39,242
Aug.	8,689	661	10,776	6,500	8,043	42,974
Sep.	9,055	786	12,803	8,958	9,791	51,234
Oct.	9,999	729	12,683	6,677	11,435	52,070
Nov.	13,119	872	12,400	6,613	16,172	61,509
Dec.	13,413	668	14,343	6,333	16,144	63,898

Note: * - Total includes other species not listed.

Source: Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910.

Table 45.--Monthly U.S. cold storage holdings of selected groundfish fillets, 1989-91, in 1,000 pounds (end of month).

Month	Cod	Flounder	Ocean perch	Pollock	Whiting	Total*
1989						
Jan.	19,950	8,637	5,487	20,276	3,679	62,560
Feb.	15,276	7,682	3,447	20,724	3,203	53,641
Mar.	17,122	7,049	3,002	19,714	2,740	52,344
Apr.	21,860	7,143	2,555	18,762	1,946	54,378
May	28,251	7,238	2,466	20,183	1,701	64,861
Jun.	36,347	8,234	3,132	21,853	2,018	78,287
Jul.	38,870	9,197	4,430	22,647	2,524	83,835
Aug.	41,380	10,850	4,949	25,256	2,600	92,531
Sep.	41,105	12,031	5,039	25,649	2,720	93,674
Oct.	34,837	12,990	5,612	28,042	2,448	91,957
Nov.	35,239	13,545	7,155	29,349	2,550	96,098
Dec.	35,244	14,838	7,617	30,772	3,270	101,055
1990						
Jan.	33,101	13,582	8,449	27,198	3,695	94,342
Feb.	28,394	12,042	7,868	22,678	2,744	79,704
Mar.	24,725	11,204	6,669	16,418	2,539	66,775
Apr.	25,345	10,333	6,042	14,488	1,865	62,490
May	22,831	10,290	6,455	12,630	2,222	58,366
Jun.	20,342	9,959	6,953	11,293	2,421	54,392
Jul.	17,617	9,256	6,265	11,831	1,759	49,668
Aug.	13,493	9,368	5,225	14,604	2,833	48,396
Sep.	10,718	10,147	4,464	18,385	3,501	50,746
Oct.	8,873	9,122	4,207	18,787	3,296	46,831
Nov.	8,673	10,701	4,807	16,205	3,607	46,476
Dec.	10,229	10,780	5,029	13,262	4,525	46,059
1991						
Jan.	8,667	9,568	4,259	10,388	3,785	38,739
Feb.	9,596	6,757	3,468	10,982	2,809	35,543
Mar.	10,245	5,347	2,664	10,845	3,092	34,132
Apr.	16,393	5,036	2,786	10,258	2,923	38,985
May	24,208	5,239	2,899	10,815	2,599	47,730
Jun.	25,536	5,176	3,265	11,045	2,695	50,096
Jul.	27,030	5,311	3,306	18,785	3,915	61,100
Aug.	28,488	5,741	2,628	17,185	2,866	60,604
Sep.	23,604	7,417	2,497	17,995	2,585	57,613
Oct.	21,919	7,123	2,812	19,128	2,778	58,033
Nov.	22,727	7,583	3,307	18,686	3,014	60,010
Dec.	22,121	7,467	3,444	16,293	3,252	57,336

Note: * - Total includes other species not listed.

Source: Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910.

Table 46.--Monthly West Coast cold storage holdings of selected groundfish products, 1989-91, in 1,000 pounds (end of month).

Month	Alaska pollock blocks	Fillets		Sablefish	Surimi	Analog products
		Cod	Pollock			
1989						
Jan.	5,902	3,280	17,065	2,146	11,013	7,931
Feb.	6,754	3,282	17,387	1,807	10,892	10,291
Mar.	7,036	4,443	16,895	795	14,916	11,682
Apr.	6,746	5,292	16,495	2,433	14,686	11,258
May	6,679	6,763	17,927	1,730	16,432	9,960
Jun.	2,616	9,109	19,333	2,577	16,266	8,214
Jul.	2,531	9,819	19,994	3,108	16,553	7,900
Aug.	1,607	10,591	22,551	2,037	16,488	9,037
Sep.	2,653	11,264	23,193	2,761	16,230	7,739
Oct.	145	7,915	25,128	1,169	17,472	7,936
Nov.	187	8,036	24,514	1,038	15,875	7,494
Dec.	203	6,813	24,537	803	16,253	7,850
1990						
Jan.	30	6,908	21,244	362	16,501	8,600
Feb.	424	6,180	17,862	312	17,464	9,352
Mar.	12	6,677	11,904	307	18,355	11,835
Apr.	13	7,382	10,609	1,380	22,691	11,955
May	28	7,664	8,672	1,841	20,216	12,580
Jun.	111	6,912	8,294	785	28,694	6,183
Jul.	924	6,172	8,654	352	27,318	6,082
Aug.	1,334	3,616	11,444	274	27,677	3,523
Sep.	1,003	2,670	13,546	586	26,183	3,917
Oct.	1,056	1,983	15,286	321	26,784	4,282
Nov.	195	1,485	12,476	251	22,967	5,207
Dec.	316	1,441	9,361	186	19,219	3,662
1991						
Jan.	62	1,117	6,185	158	16,004	4,242
Feb.	100	1,603	5,425	13	19,691	5,124
Mar.	115	2,931	4,724	134	20,630	5,703
Apr.	141	5,308	4,519	1,076	18,900	6,320
May	264	8,299	3,809	2,468	16,126	6,541
Jun.	155	8,261	3,693	2,073	16,669	5,667
Jul.	476	7,746	9,813	984	18,131	4,623
Aug.	653	7,248	9,813	729	19,382	3,912
Sep.	1,064	6,331	9,263	1,023	19,238	4,229
Oct.	1,011	4,739	10,660	416	19,184	3,849
Nov.	1,215	3,596	8,994	317	18,043	3,613
Dec.	1,051	2,854	7,241	251	15,601	2,931

Note: Includes domestic and foreign products.

Source: Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910.

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- 4 GUTTORMSEN, M., R. NARITA, and J. BERGER. 1992. Summary of U. S. observer sampling of joint venture fisheries in the northeast Pacific Ocean and Eastern Bering Sea, 1990, 78 p. NTIS No. PB93-127546.
- 3 JOHNSON, P. A., S. D. RICE, and M. M. BABCOCK (compilers). 1992. Impacts of oil pollution and Prince William Sound studies: Bibliography of 1960-91 publications and reports, Auke Bay Laboratory, 98 p. NTIS No. PB93-114064.
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