



NOAA Technical Memorandum NMFS-AFSC-54

Economic Status of the Groundfish Fisheries off Alaska, 1993

by
R. K. Kinoshita, A. Grieg, and J. M. Terry

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Alaska Fisheries Science Center

August 1995

NOAA Technical Memorandum NMFS

The National Marine Fisheries Service's Alaska Fisheries Science Center uses the NOAA Technical Memorandum series to issue informal scientific and technical publications when complete formal review and editorial processing are not appropriate or feasible. Documents within this series reflect sound professional work and may be referenced in the formal scientific and technical literature.

The NMFS-AFSC Technical Memorandum series of the Alaska Fisheries Science Center continues the NMFS-F/NWC series established in 1970 by the Northwest Fisheries Center. The new NMFS-NWFSC series will be used by the Northwest Fisheries Science Center.

This document should be cited as follows:

Kinoshita, R. K., A. Grieg, and J. M. Terry. 1995. Economic status of the groundfish fisheries off Alaska, 1993. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-54, 108 p.

Reference in this document to trade names does not imply endorsement by the National Marine Fisheries Service, NOAA.



NOAA Technical Memorandum NMFS-AFSC-54

Economic Status of the Groundfish Fisheries off Alaska, 1993

by
R. K. Kinoshita, A. Grieg, and J. M. Terry

Alaska Fisheries Science Center
7600 Sand Point Way N.E., BIN C-15700
Seattle, WA 98115-0070

U.S. DEPARTMENT OF COMMERCE
Ronald H. Brown, Secretary
National Oceanic and Atmospheric Administration
D. James Baker, Under Secretary and Administrator
National Marine Fisheries Service
Rolland A. Schmitten, Assistant Administrator for Fisheries

August 1995

This document is available to the public through:

National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161

Notice to Users of this Document

In the process of scanning the original printed document into Adobe Acrobat .PDF format, slight differences in formatting can occur; page numbers in the .PDF may not match the original printed document, and some characters or symbols may not translate.

This document is being made available in .PDF format for the convenience of users; however, the accuracy and correctness of the document can only be certified as was presented in the original hard copy format.

ABSTRACT

The North Pacific groundfish fishery in the U.S. Exclusive Economic Zone (EEZ) has changed from primarily a foreign fishery up to 1984, to one where joint venture fisheries were dominant during 1986-88, and most recently, to one where the wholly domestic fishery accounts for all of the catch. Foreign fishing was terminated in 1987. Joint venture fisheries, in which the domestic fleet delivers its catch directly to foreign at-sea processors, peaked in 1987 at 1.39 million metric tons (t) and ended in 1990. It has been a wholly domestic groundfish fishery since 1991. That is, all the catch has been taken by domestic fishing vessels for delivery to domestic processors. Catch in the domestic groundfish fishery in 1993 totaled 2.15 million t, down 5.8% from 1992.

This report presents the groundfish catch off Alaska and ex-vessel value by area, species, gear, residency of vessel owners, and mode of operation. The U.S. groundfish fleet in the North Pacific is also summarized by area, gear utilized, vessel length, residency of vessel owners, and mode of operation. Lastly, the trends in North Pacific groundfish exports, U.S. groundfish imports, prices of competing products, consumption, foreign exchange rates, and holdings are reviewed. With the exception of the exports, Pacific halibut (*Hippoglossus stenolepis*) is not included in this report because for management purposes halibut is not part of the groundfish complex.

CONTENTS

	Page
Abstract.	iii
List of Figures	vii
List of Tables.	vii
Introduction.	1
Overview.	2
Domestic Fishery.	4
Markets.	7
Citations	11
Appendix.	13
The Sources and Nature of the Data	15
Figures	17
Tables	21

List of Figures

	Page
1. Groundfish catch in the commercial fisheries off Alaska by fishery, 1985-93	17
2. Groundfish catch in the commercial fisheries off Alaska by species, 1985-93	17
3. Pacific Northwest and Alaska exports of edible fishery products by major product groups, 1985-93	18
4. Groundfish catch in the domestic fishery off Alaska by mode of operation, 1986-93.	18
5. Ex-vessel value of the domestic groundfish catch off Alaska by species, 1985-93	19
6. Number of vessels that landed groundfish in the domestic fishery off Alaska using trawl gear by length class, 1986-93.	19
7. Quarterly producer prices of Alaska groundfish products, F.O.B. Seattle, WA, 1989-93.	20

List of Tables

1. Groundfish catch in the commercial fisheries off Alaska by area and fishery, 1984-93.	21
2. Percentage distribution of commercial groundfish catch off Alaska among fisheries by area, 1984-93.	22
3. Groundfish catch in the commercial fisheries off Alaska by area, fishery, and species, 1984-93	23
4. Blend estimate of the groundfish catch off Alaska by area and species, 1991-93.	25
5. Blend estimate of the Gulf of Alaska groundfish catch by species and target fishery, 1991-93.	26
6. Blend estimate of the Bering Sea and Aleutian Islands groundfish catch by species and target fishery, 1991-93.	29
7. Blend estimate of the groundfish catch and discards off Alaska by area, species, and gear, 1991-93	32
8. Ex-vessel value of the groundfish catch in the commercial fisheries off Alaska by fishery, 1984-93.	35
9. Ex-vessel value of the catch in the commercial fisheries off Alaska by species group, 1982-93.	36
10. Value of Pacific Northwest and Alaska exports of edible fishery products or product groups, 1982-93	37
11. Groundfish landings in the domestic fisheries off Alaska by area, gear, and species, 1985-93.	38
12. Groundfish landings in the domestic fisheries off Alaska by area, mode of operation, and species, 1986-93	40

13.	Groundfish landings in the domestic fisheries off Alaska by area, residency, and species, 1986-93	42
14.	Ex-vessel value of the groundfish catch in the domestic fisheries off Alaska by area, gear, and species, 1985-93.	44
15.	Ex-vessel value of the groundfish catch in the domestic fisheries off Alaska by area, mode of operation, and species, 1986-93	46
16.	Ex-vessel value of the groundfish catch in the domestic fisheries off Alaska by area, residency, and species, 1986-93	48
17.	Ex-vessel prices in the domestic groundfish fisheries off Alaska by area, gear, and species, 1985-93	50
18.	Percentage distribution of landings in the domestic groundfish fisheries off Alaska among species by area, 1985-93	52
19.	Percentage distribution of landings in the domestic groundfish fisheries off Alaska among areas by species, 1985-93.	54
20.	Percentage distribution of landings in the domestic groundfish fisheries off Alaska among gear groups by area and species, 1985-93	56
21.	Percentage distribution of the ex-vessel value of the domestic groundfish catch off Alaska among species by area, 1985-93.	58
22.	Percentage distribution of the ex-vessel value of the domestic groundfish catch off Alaska among areas by species, 1985-93	60
23.	Percentage distribution of the ex-vessel value of the domestic groundfish catch off Alaska among gear groups by area and species, 1985-93	62
24.	Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, and gear, 1986-93	64
25.	Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, gear, and vessel length class, 1986-93.	65
26.	Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, species, mode of operation, and gear, 1986-93	68
27.	Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, gear, mode of operation, and residency, 1986-93	72
28.	Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, gear, and month, 1986-93.	74
29.	Number of domestic catcher-processors and motherships in the groundfish fishery off Alaska reporting catch to National Marine Fisheries Service by area, gear, and month, 1986-93	77
30.	Production of groundfish products in the fisheries off Alaska by species, 1990-93	83
31.	Production of groundfish products in the fisheries off Alaska by species, product, and area, 1990-93.	85
32.	Production of groundfish products in the fisheries off Alaska by species, product, and type of operation, 1990-93	87

33.	Annual wholesale prices of frozen fish blocks and fillets, F.O.B. East Coast, 1976-93.	89
34.	Monthly wholesale prices of selected frozen fish blocks and fillets, F.O.B. East Coast, 1991-93	90
35.	Monthly producer prices for domestic Alaska pollock and Pacific cod products, F.O.B. Seattle, 1988-93	91
36.	Monthly Japanese landing market price of selected groundfish by species, 1984-93	93
37.	Monthly Tokyo wholesale prices of selected products, 1984-93.	95
38.	Annual exports of groundfish from Alaska, Washington, and Oregon customs districts, quantity, value, and average price, 1989-93	96
39.	Exports of groundfish from Alaska, Washington, and Oregon customs districts to major countries, quantity, percent change from 1992 to 1993, and average price, 1992-93	98
40.	U.S. imports of groundfish fillets, steaks, and blocks, 1976-93, quantity and value.	99
41.	U.S. annual per capita consumption of fish and shellfish, 1970-93.	100
42.	U.S. consumption of all fillets and steaks, and fish sticks and portions, 1980-93	101
43.	Annual U.S. economic indicators: Selected producer and consumer price indexes, 1976-93.	102
44.	Monthly U.S. economic indicators: Selected producer and consumer price indexes, 1991-93.	103
45.	Annual foreign exchange rates for selected countries, 1976-93 in national currency units per U.S. dollar.	104
46.	Monthly foreign exchange rates for selected countries, 1991-93 in national currency units per U.S. dollar.	105
47.	Monthly U.S. cold storage holdings of selected groundfish blocks, 1991-93	106
48.	Monthly U.S. cold storage holdings of selected groundfish fillets, 1991-93	107
49.	Monthly West Coast cold storage holdings of selected groundfish products, 1991-93	108

INTRODUCTION

The groundfish fishery off Alaska has become an important segment of the total U.S. fishing industry. With a total catch of 2.15 million metric tons (t), a retained catch of 1.8 million t, and an ex-vessel value of \$414 million in 1993, it accounted for 45% of the catch and 12% of the ex-vessel value of the catch off U.S. shores. The value of the resulting processed products after primary processing totaled \$1.0 billion. The fishery is a major factor in terms of generating income, exports, and employment opportunities. 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. External factors that, in part, determine the economic status of the fisheries are also included. 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. 1993) 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.

There has been a major change in the catch data presented in this report from previous years. Catch data for 1991-93 are now based on the blend estimates of total catch. The Pacific Coast Fisheries Information Network (PacFIN) was the source of the catch data presented in previous editions of this report. There are several reasons for this change. First, the PacFIN estimates exclude at-sea discards and do not use any information from the Domestic Observer Program. Second, the blend estimates are used by the National Marine Fisheries Service (NMFS) to monitor quotas. Finally, the PacFIN catch estimates for the foreign and joint venture fisheries are blend estimates of total catch including discards.

Blend estimates of total catch, retained catch and discarded catch, are presented for 1991-93. PacFIN estimates of landed catch are reported because PacFIN remains the source of ex-vessel price and value data. Differences between the PacFIN estimates of landings and blend estimates of retained catch

are explained in part by discards by processors after fish are landed. The procedure used to make the blend estimates is described in the appendix.

A brief overview of the economic status of the fisheries is followed by a more complete description of the status of the domestic fisheries in terms of the types of information listed above. 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 verbal description of the fisheries and the footnotes to the tables. The appendix is critical in helping to avoid misunderstanding the information contained in this report.

OVERVIEW

During the last 10 years, the total catch in the commercial groundfish fisheries off Alaska varied between 1.9 and 2.4 million t (Fig. 1 and Table 1). The 1993 catch totaled 2.15 million t, down 5.8% from 1992. The peak catch occurred in 1991, in part, because blend estimates of catch, including discards, were not yet used to monitor most quotas. If they had been, several fisheries would have been closed earlier in the year. There are four reasons why the catch estimates for 1988 through 1990 have a significant downward bias compared to the estimates for the other years. First, the domestic fishery accounted for a large part of the total catch in 1988 through 1990. Second, discards are not included in the reported estimates of domestic catch prior to 1991. Third, based on estimates of the discard rates for 1992 to 1993, discards would have been about 16% of the total domestic catch. Finally, the blend estimates of retained catch, which incorporate data from the Domestic Observer Program, tend to exceed the PacFIN catch estimates. Variations in the catch estimates also reflect changes in the total allowable catch (TAC), area closures, and bycatch restrictions.

Table 2 lists the percentages of the catch by the domestic, joint venture, and foreign fisheries. The end of the foreign fishery in 1987 and the joint venture fishery in 1990 resulted from the implementation of the Magnuson Fishery Conservation and Management Act of 1976 (MFCMA). The MFCMA,

fishery development programs, and foreign financial and technical assistance provided the stimulus for the successful development of the domestic harvesting and processing sectors. The domestic fishery has harvested 100% of the catch since 1991.

Walleye (Alaska) pollock (*Theragra chalcogramma*) has been the dominant species in the commercial groundfish catch. The pollock catch in 1993 totaled 1.49 million t and accounted for 69% of the total groundfish catch of 2.15 million t (Fig. 2 and Table 3). The next major species, Pacific cod (*Gadus macrocephalus*), had a catch of 223,900 t in 1993, comprising 10.4% of the 1993 catch. The 1993 catch of flatfish, which includes yellowfin sole (*Pleuronectes asper*), rock sole (*Pleuronectes bilineatus*), and arrowtooth flounder (*Atheresthes stomias*) was 256,400 t in 1993. Pollock, Pacific cod, and flatfish comprised 92.4% of the total 1993 catch. Other important species are sablefish (*Anoplopoma fimbria*), rockfish (*Sebastes* and *Sebastolobus* spp.), and Atka mackerel (*Pleurogrammus monoptyerygius*).

Table 4 lists the blend estimate of the retained, discarded, and total catch by area and species, and Tables 5 and 6 list the break down of the catch by area and target fishery. Table 7 presents total catch and discards by gear and area.

The estimated ex-vessel value of the commercial groundfish catch off Alaska, including the value of foreign and joint venture fisheries but excluding the value added by at-sea processing, increased from \$239 million in 1984 to \$675 million in 1992, but then declined to \$414 million in 1993 (Table 8). The 1993 ex-vessel value declined by 39% from the 1992 value as average ex-vessel prices dropped by 31%. The value of the resulting fishery products was in excess of \$1.0 billion in 1993. The groundfish fisheries accounted for the largest share of the ex-vessel value of all commercial fisheries off Alaska in 1993 (34.4%), while the Pacific salmon (*Oncorhynchus* spp.) fishery was second in value with \$391 million or 32.6% of the total Alaska catch (Table 9). The value of the shellfish catch amounted to \$328.5 million or 27.3% of the total Alaska catch.

Exports of edible groundfish products from the Pacific Northwest and Alaska provide another measure of the importance of the groundfish fisheries off Alaska. The value of groundfish exports, including Pacific halibut (*Hippoglossus stenolepis*), increased from \$25 million in 1982 to \$1.11 billion in 1992, and declined to \$833 million in 1993 (Fig. 3 and Table 10). Exports of groundfish in 1993 accounted for 38.7% of all edible fishery products, followed by salmon exports with 37% (\$798 million), and crab exports with 18.7% (\$403 million).

Exchange rates and world supplies of fishery products play a major role in international trade. Exchange rates change rapidly and can significantly affect the economic status of the groundfish fisheries. There is also uncertainty concerning the future conditions of stocks and the resulting quotas. The management actions taken to allocate the catch between various user groups can significantly affect the economic health of either the domestic fishery as a whole or segments of the industry. Additional management actions that will decrease groundfish catches or increase operating costs may result from continued concerns with: 1) the bycatch of crab, halibut, salmon, and Pacific herring (*Clupea pallasii*); 2) the discard and utilization of the groundfish catch; and 3) the physical and biological effects of the groundfish fisheries on marine mammals.

DOMESTIC FISHERY

Trawl, longline and other hook-and-line, pot, and other gear are used in the domestic groundfish fishery. Annual landings for virtually every gear group, area, and species increased dramatically from 1985 to 1991 as the domestic fishery replaced the foreign and joint venture fisheries (Table 11). In the last 4 years, the landings by trawls averaged 92.7% of the total landings, while the landings by longline and other hook-and-line gear accounted for 6.3%. Most species are harvested predominately by one type of gear, which typically accounts for 90% or more of the landings. The one exception is Pacific cod, where in 1993, 57.8% was taken by trawls, 36.4% by

hook-and-line gear, and 5.8% by pots. Note that PacFIN is the source of the landings data reported in this section.

Landings for at-sea processing increased from 106,200 t in 1986 to 1,433,400 t in 1992, and decreased to 1,239,000 t by 1993 (Fig. 4 and Table 12). The landings for on-shore processing increased from 61,500 t in 1986 to 604,000 t in 1992 and decreased to 599,600 t in 1993. The relative landings of these two types of operations vary by area and by species. In the Bering Sea and Aleutian Islands region, landings for at-sea processing exceeded those taken for on-shore processing for each species. The opposite is true in the Gulf of Alaska, with the exception of 1993 processing of rockfish and Atka mackerel.

Landings by residency of vessel owner is presented in Table 13. These data were extracted from the NMFS groundfish fish ticket and weekly production databases and from the State of Alaska vessel registration file which includes the stated residency of each vessel owner. The PacFIN database does not include residency information. Due to other differences in these two databases, the landings reported by each differs in some instances. For the domestic groundfish fishery as a whole, the majority of the landings are made by owners who indicated that they are not residents of Alaska.

In 1993, the landings by Alaskan vessels and other U.S. vessels were 247,600 t and 1,549,200 t, respectively. The landings of the two residence groups are much closer to being equal in the Gulf. Alaskan vessels account for more of the Pacific cod, sablefish, and rockfish catches in the Gulf than do other vessels. In the Bering Sea and Aleutian Islands region, non-Alaskan vessels dominate.

The ex-vessel value of the domestic landings, excluding the value added by at-sea processing, increased from \$478 million in 1991 to \$675 million in 1992, then declined to \$414 million in 1993 (Fig. 5 and Table 14). The ex-vessel value dropped by 38.7% compared with only a 9.8% decline in landings. Pollock was the dominant species with 52% of the total ex-vessel value, while accounting for 76% of the quantity. Sablefish accounted for 13.2% of the

value compared with only 1.4% of the landings, while Pacific cod represented 19.4% of the value and 10.5% of the quantity landed.

The 1993 ex-vessel value of the catch for at-sea processing and on-shore processing were \$263 million and \$151 million, respectively (Table 15). The dominance of landings for at-sea processing is less when it is measured in terms of ex-vessel value than when it is measured in terms of the round weight equivalent of landings. This is because the on-shore processors received a product mix with a larger proportion of higher priced species, including sablefish.

The percentage of landings taken by Alaskan vessels is also greater when measured in terms of ex-vessel value rather than in terms of weight. The estimated ex-vessel values of the 1993 landings of Alaskan vessels, non-Alaskan vessels, and vessels of unknown residence were \$93.4 million (23.0%), \$312.0 million (76.7%), and \$1.3 million (0.3%), respectively (Table 16).

The overall weighted average ex-vessel price, excluding the value added by at-sea processing, declined each year from 1984 to 1990, increased in 1990 to 1992, then declined in 1993 (Table 17). Average ex-vessel prices in 1993 were down 32% from \$0.15 per pound in 1992 to \$0.102 per pound, round weight. The average price of pollock dropped from \$0.126 per pound in 1992 to \$0.07 in 1993. Average prices of Pacific cod dropped by 18.6% from 1992, rockfish prices were down 28.1%, and sablefish prices declined by 7.8%. Average prices of flatfish and Atka mackerel in 1993 were up slightly from 1992.

The percentage distributions of landings and ex-vessel value among species, areas of catch, and gear groups are presented in Tables 18 through 23. These data summarize changes in the relative size of different components of the domestic groundfish fishery off Alaska.

The number of vessels harvesting groundfish off Alaska did not consistently increase, on an annual basis, as did landings. The total number increased from 1,449 in 1986 to 1,859 in 1987, declined to 1,576 in 1989, increased to 2,341 in 1992, and then declined to 1,977 in 1993 (Table 24). During this period, the number of trawl vessels increased annually from 80 in 1986 to 296 in 1992, but dropped slightly to 293 in 1993. The greatest impact

has been the increase of the largest vessel classes (Fig. 6). The number of trawlers greater than 185 feet in length increased from 8 in 1987 to 30 in 1989, and 50 in 1991 (Table 25). However, this group fell to 46 in 1992 and to 40 in 1993. From 1986 to 1992, the number of vessels using hook-and-line gear increased from 1,356 to 1,948, then dropped dramatically in 1993 to 1,649 vessels. Vessels using pot gear jumped from 24 in 1986 to 285 in 1992, but the number declined by over one-half to 132 in 1993.

The numbers of vessels harvesting groundfish for at-sea and on-shore processing are presented by area and species in Table 26 and by area and residency in Table 27. The seasonality of vessel deployment is depicted in Table 28 which gives the number of vessels that harvested groundfish by month, area, and gear. Table 29 gives the number of catcher-processors and motherships by month, area, and gear.

Data on production of groundfish products by species are listed in Tables 30 to 32. The value of groundfish products declined by 26.5% to \$1.03 billion in 1993, down from \$1.4 billion in 1992. There were declines in prices of most groundfish products with pollock surimi being the hardest hit. Production of pollock surimi in 1993 dropped by 7.7% to 150,288 t, and declined 53% in value to \$254 million from \$537.8 million in 1992.

MARKETS

Annual and monthly wholesale prices for selected groundfish products are reported in Tables 33 and 34, respectively. Prices of cod fillets and blocks in 1993 were down 8.4% and 15%, respectively, from 1992. For 1993, the annual average price of pollock blocks dropped by 11% from the previous year.

Wholesale prices of domestic Alaska pollock and Pacific cod products in Seattle exhibited similar trends in prices to those of East Coast prices (Table 35). Prices in 1993 continued to decline and were at their lowest level since 1990 (Fig. 7). The Japanese landed and wholesale prices were also lower for many products in 1993 (Tables 36 and 37).

A major concern of the U.S. groundfish fishing industry in 1992 and 1993 was the decline in most groundfish product prices, especially in the Japanese

wholesale price of sea-processed surimi, which was down about 35% from 1992. Lower prices have greatly impacted revenues from foreign sales of groundfish.

Exports of edible groundfish products from Oregon, Washington, and Alaska customs districts in 1993 amounted to 854 million lb (387,536 t) and valued at \$833 million (Kinoshita and Terry 1994). These exports were 4.1% lower by quantity but were down 25% by value from the previous year. The decline in U.S. groundfish exports resulted primarily from lower prices of surimi, pollock roe, and sablefish. Groundfish exports in 1993 were made up of \$55 million of cod, \$88 million of sablefish, \$195 million of other whole or dressed fish, \$25 million of fillets, \$2.3 million of dried or salted fish, \$125 million of roe, and \$343 million of "other" fishery products (Tables 38 and 39). The major product in the "other" category was surimi. Surimi exports in 1993 totaled 326 million lb (148,078 t), valued at \$298 million. Surimi was added to the U.S. schedule of exports in 1992, previously it was reported under five or six different product codes.

Japan dominated the U.S. export market and the top four countries in 1993 purchased 94% of the total. Japan imported \$662 million of Pacific Northwest and Alaska edible groundfish products or 79% of the total value of \$833 million. The Republic of Korea was a distant second with purchases of \$89.7 million or 10.7% of the total. Canada was the third largest importer with \$41.3 million, followed by Taiwan with \$8 million. Purchases of cod and pollock products in 1992 and 1993 by the Federal Republic of Germany and Norway were down drastically from 1991 as higher catches of cod by Norway and Russia increased supplies of cod to the European market (FAO/Globefish 1993). Due to the heavy dependence on foreign markets for many groundfish products, these markets 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. The import data of fillets and blocks provide information on both the potential level of import substitution that might be possible and the prices with which domestic products compete. Imports of groundfish blocks and fillets in 1993 totaled 447 million lb (202,828 t) and

were valued at \$671 million (Table 40). Imports were down 45% by quantity and 48% by value from their peak in 1987.

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 lb in 1980 to 16.2 lb in 1987 (NMFS 1994). Since 1987, per capita consumption has declined, and stood at 15 lb in 1993. Annual per capita consumption of fresh and frozen fish increased from 7.9 lb in 1980 to 10.2 lb in 1993. In 1993, there was a 0.3 lb increase in the per capita consumption of fresh and frozen fish and shellfish, and consumption of canned fish increased by 0.1 lb (Table 41). Not all U.S. seafood products have exhibited an increase in annual per capita consumption. While the annual per capita consumption of fillets and steaks increased by 28.5% between 1980 and 1993, consumption of fish sticks and portions declined by 44.6% (Table 42). Since 1987, per capita consumption of fillets and steaks has declined 13.7% to 3.02 lb, while fish stick and portion consumption has dropped 37.6% to 1.08 lb in 1993.

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 various products are presented in Tables 43 and 44. In 1993, the producer price index (PPI) increased by just 1.5% from 1992, while the consumer price index (CPI) rose 3.0%. The increase in the CPI was below the annual average increase of 4.7% in the 1980s. Consumer price index for meat and fish each increased by 3.1% in 1993, while poultry prices gained 4.1% from 1992.

Due to both 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 have significant effects on groundfish prices. In 1993, the value of the U.S. dollar was weaker compared to the Japanese yen but gained against the Canadian dollar and the Republic of Korea's won from the previous year (Tables 45 and 46). The annual value of the U.S. dollar relative to the Japanese yen fell 12%, thereby making U.S. exports less expensive in Japan. The U.S. dollar in 1993 was up

2.8% relative to the Republic of Korea's won and 6.7% relative to the Canadian dollar from 1992.

The levels of fishery product inventories provide another measure of the condition of groundfish markets. U.S. holdings of selected groundfish blocks and fillets are reported in Tables 47 and 48. U.S. cold storage holdings of groundfish blocks and fillets on 31 December 1993 were down 1.6% from a year earlier and down 5.7% from the 1989-93 average 31 December holdings. Holdings of fillets in 1993 were up 43% compared with a 42% decline in fish blocks from a year earlier.

While U.S. holdings of blocks and fillets offer 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 49). Holdings of pollock fillets, cod fillets, surimi, and analog products on the West Coast have grown with increases in production over the last 8 to 9 years. West Coast holdings of pollock fillets on 31 December 1993 were up 149% from a year earlier, cod fillets were up 146%, while holdings of surimi and analog products were off by 27% and 52%, respectively, from a year earlier.

CITATIONS

- FAO/Globefish. 1993. Globefish Highlights, (1/93): 29 p.
- Kinoshita, R. K., A. Greig, J. M. Hastie, and J. M. Terry. 1993. Economic status of the groundfish fisheries off Alaska, 1992. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-25, 102 p.
- Kinoshita, R. K., and J. M. Terry. 1994. Oregon, Washington, and Alaska exports of edible fishery products, 1993. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-44, 52 p.
- National Marine Fisheries Service. 1994. Fisheries of the United States, 1993. U.S. Dep. Commer., Current Fish. Stat. No. 9300, May 1994, 121 p. Available Sup. Doc., U.S. Gov. Print. Off., Washington, DC 20402.

APPENDIX

THE SOURCES AND NATURE OF THE DATA

The Pacific Coast Fisheries Information Network (PacFIN) is the source of the groundfish landings, ex-vessel value, and ex-vessel price data presented in this report as well as the groundfish catch data prior to 1991. Beginning in 1991, the estimates of total catch, retained catch, and discarded catch are blend estimates provided by the National Marine Fisheries Service (NMFS), Alaska Regional Office. Blend estimates of catch which are discussed below are presented in Tables 1 to 7. The Regional Office also provided estimates of the ex-vessel values of the joint venture and foreign fisheries and the estimates of the ex-vessel values of the nongroundfish fisheries. Catch and value data by the residency of vessel owners are generated from Alaska Department of Fish and Game (ADF&G) fish ticket, NMFS Alaska Regional Office's Weekly Production Reporting Program, vessel registration, and PacFIN price data.

PacFIN reports catch data for the joint venture and foreign fisheries. These data were provided to PacFIN by the Alaska Fisheries Science Center's Vessel Observer Program. For the domestic fisheries, PacFIN reports the estimated round weight equivalent of the landed catch. Discarded catch is not included for the domestic fisheries. The domestic landings data for at-sea processing and for on-shore processing, respectively, are provided to PacFIN by the NMFS Alaska Regional Office's Weekly Production Reporting Program and ADF&G Fish Ticket Program.

The ex-vessel price data reported in PacFIN are from the ADF&G fish ticket database. Typically, price data are provided for catch taken for on-shore processing, but not for catch taken for at-sea processing. The limited price data in the fish ticket database for the latter type of operations are not used by PacFIN. Therefore, PacFIN contains estimates of ex-vessel prices for landings at on-shore processing plants. These prices are applied to all landings for at-sea and on-shore processing to estimate the ex-vessel value of all catch in the domestic fisheries and do not include 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 landings and value reports that include information on the mode of operation (i.e., landings for on-shore and at-sea processing) were extracted from the PacFIN database. The landings for at-sea processing were set equal to all the landings reported for at-sea processors from the Alaska Regional Office's Weekly Production Reporting Program plus all additional landings from the ADF&G Fish Ticket Program that contained a port code that indicated that the landings were not for on-shore processing. This method is expected to provide good estimates of the landings of these two types of operations. More accurate estimates can be generated, but only with considerably more effort.

As noted above, PacFIN was not the source of any reports that include information by residency. The PacFIN database does not currently include data by vessel; therefore, it can not be used to estimate catch by residency. The groundfish ADF&G fish ticket and the Weekly Production Report databases maintained at the Alaska Regional Office were used to obtain catch by vessel for catcher boats, catcher-processors, and motherships. The catch that is delivered to motherships is considered catch of a mothership because these data are not available by catcher boat. The estimates of catch by vessel are combined with owner residence data from the vessel registration file maintained by the Alaska Commercial Fisheries Entry Commission and with PacFIN ex-vessel prices data to generate catch and value by residency. The vessel registration file indicates which vessel owners have declared themselves to be

residents of Alaska. The category of unknown residency occurs when the vessel registration file does not indicate residency.

The PacFIN database was our source of the catch data reported for the foreign and joint venture fisheries for all years and the source of the catch data for the domestic fishery prior to 1991. However, blend estimates of total, retained, and discarded catch were used for the domestic fishery beginning in 1991. The blend estimates of catch in this report use Weekly Production Report (WPR) data or observer data for each processor and week based on the following rules. If the observer estimate of total catch of all species with a Total Allowable Catch (TAC) is at least 5% greater than the WPR estimate or if the observer estimate is between 80% and 95% of the WPR estimate and between 70% and 95% for pelagic pollock, only observer data are used for that processor that week; otherwise, only WPR data are used for that processor that week. Although this blend rule has been used only since November 1993, all the blend estimates in this report were generated using this rule.

There are two reasons why blend estimates of catch are used in this report. First, beginning in 1993, blend estimates were used to monitor the attainment of TACs and Prohibited Species Catch (PSC) allowances. Second, for a fishery as a whole, the blend estimates are thought to be more accurate than either the observer or WPR estimates alone. The reasons why WPR estimates are no longer used alone to estimate catch include the following: 1) for at-sea processors, the WPR estimates are always dependent on product recovery rates and in many cases the recovery rates being used may produce large errors in the estimates of retained catch; 2) products discarded or turned into meal, after first being processed and rejected for quality reasons, are often not accounted for correctly in estimating catch; 3) often discards are underestimated and/or under-reported; and 4) inaccurate reporting of product weight can occur.

For most species and areas, there are substantial differences among the blend, WPR, and PacFIN estimates of total annual catch. Typically, the blend estimates are substantially greater than the WPR estimates. The PacFIN estimates, which do not include discards, would be expected to be substantially less than the WPR estimates, which do include discards. However, because the PacFIN estimates are based on WPR and fish tickets, respectively, for catch for at-sea processing and for catch for on-shore processing, that expectation is not always met. For example, the 1992 PacFIN, WPR, and blend estimates of the catch of Pacific cod for the Bering Sea and Aleutians Islands were 175,400 t, 172,863 t, and 205,326 t, respectively. The blend estimates exceeded the WPR estimate by 19%, however the PacFIN estimates exceeded the WPR estimates by 1.5% in 1992.

With the exception of Table 29, all the reports on the number of vessels are based on fish ticket data and WPR data, respectively, for catcher vessels and catcher-processor vessels. 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 either vessels that only processed fish or vessels that only delivered fish to motherships unless fish tickets were completed voluntarily. The information in Table 29 is based on data from the WPR 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, through 1990. The increased coverage is the result of annual changes in reporting requirements.

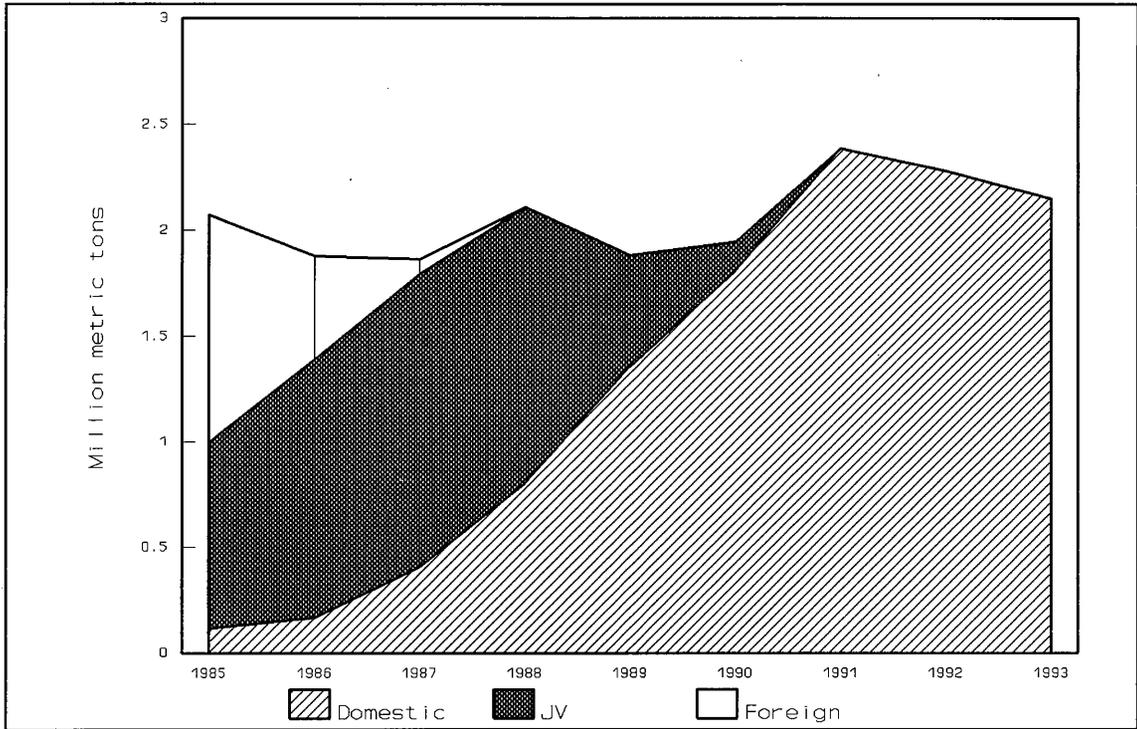


Figure 1.--Groundfish catch in the commercial fisheries off Alaska by fishery, 1985-93.

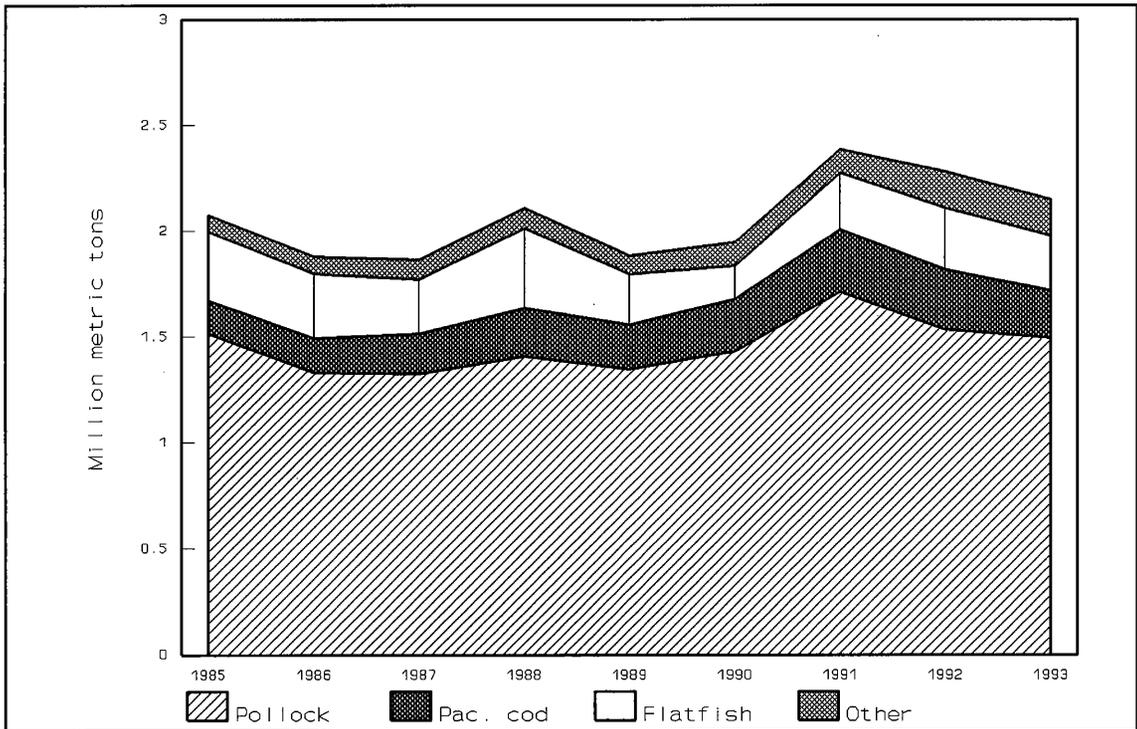


Figure 2.--Groundfish catch in the commercial fisheries off Alaska by species, 1985-93.

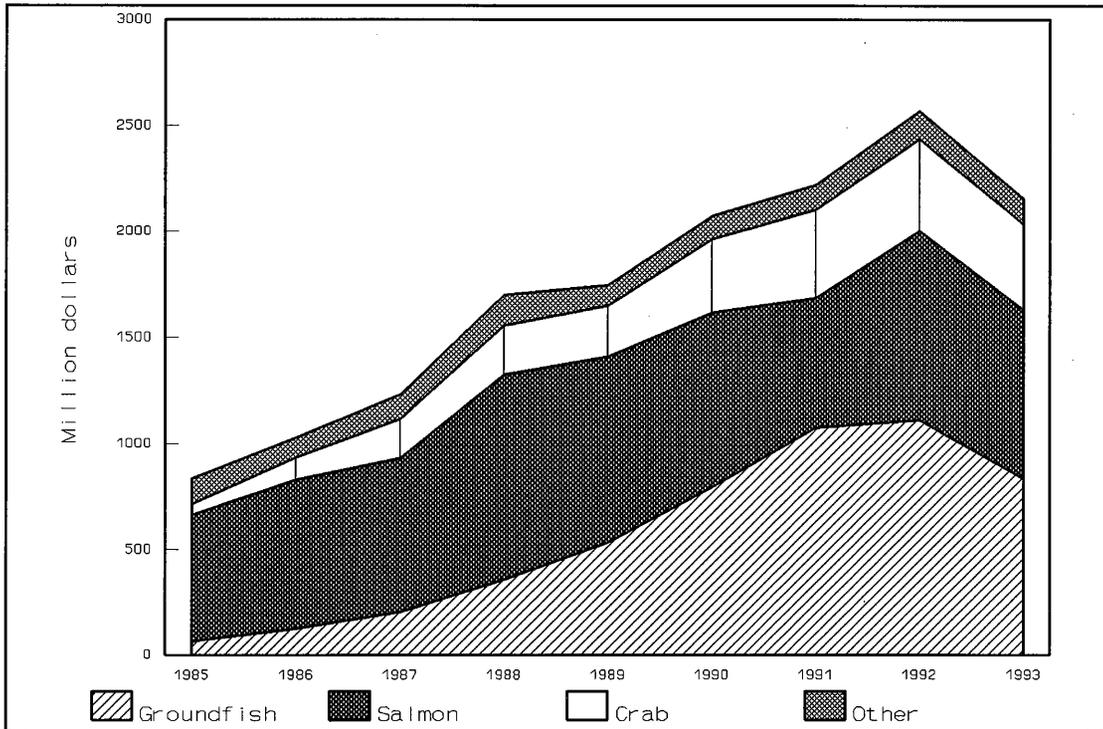


Figure 3.--Pacific Northwest and Alaska exports of edible fishery products by major product groups, 1985-93.

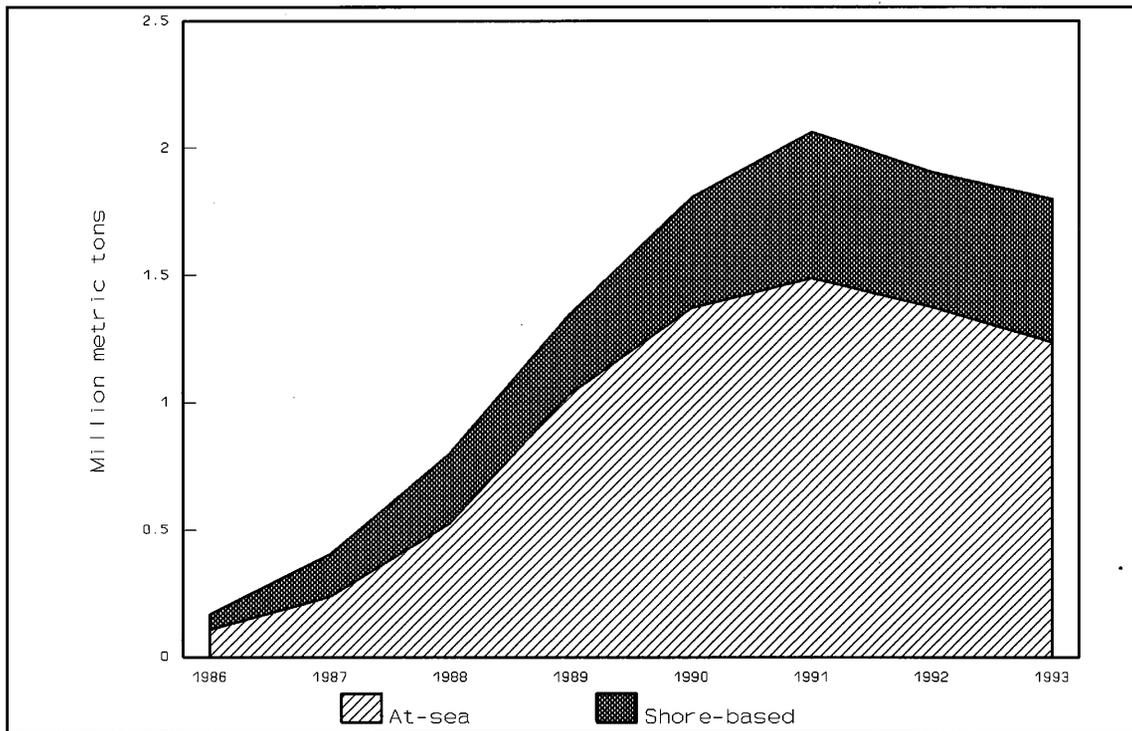


Figure 4.--Groundfish catch in the domestic fishery off Alaska by mode of operation, 1986-93.

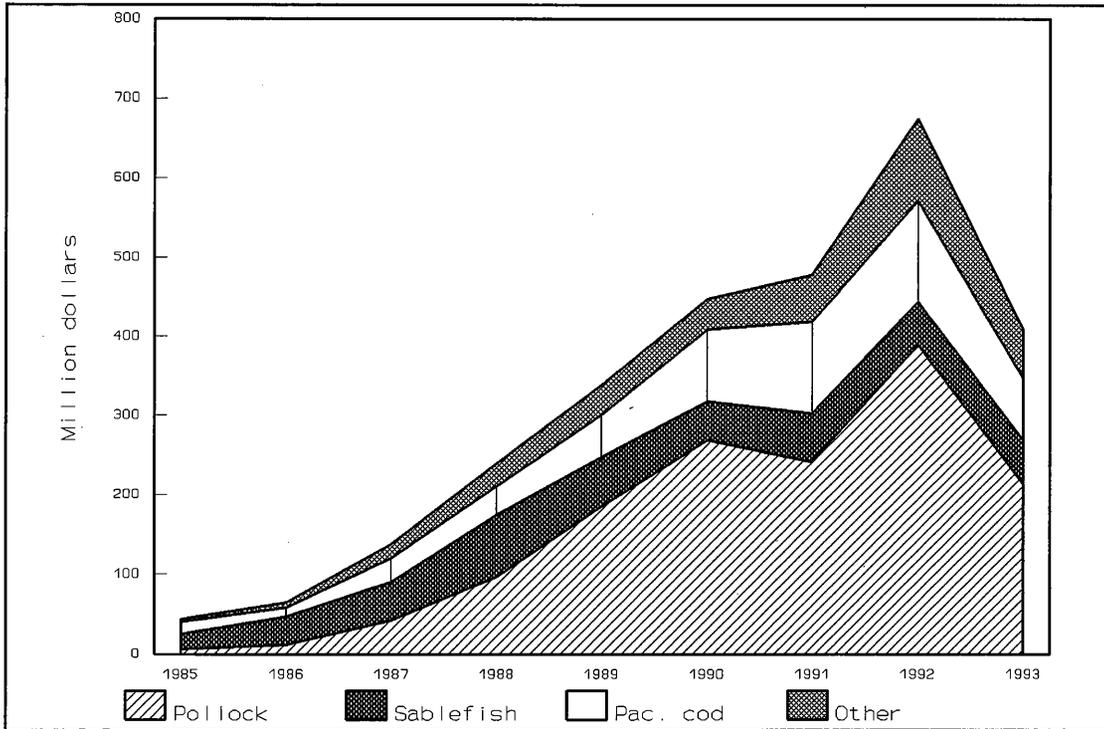


Figure 5.--Ex-vessel value of the domestic groundfish catch off Alaska by species, 1985-93.

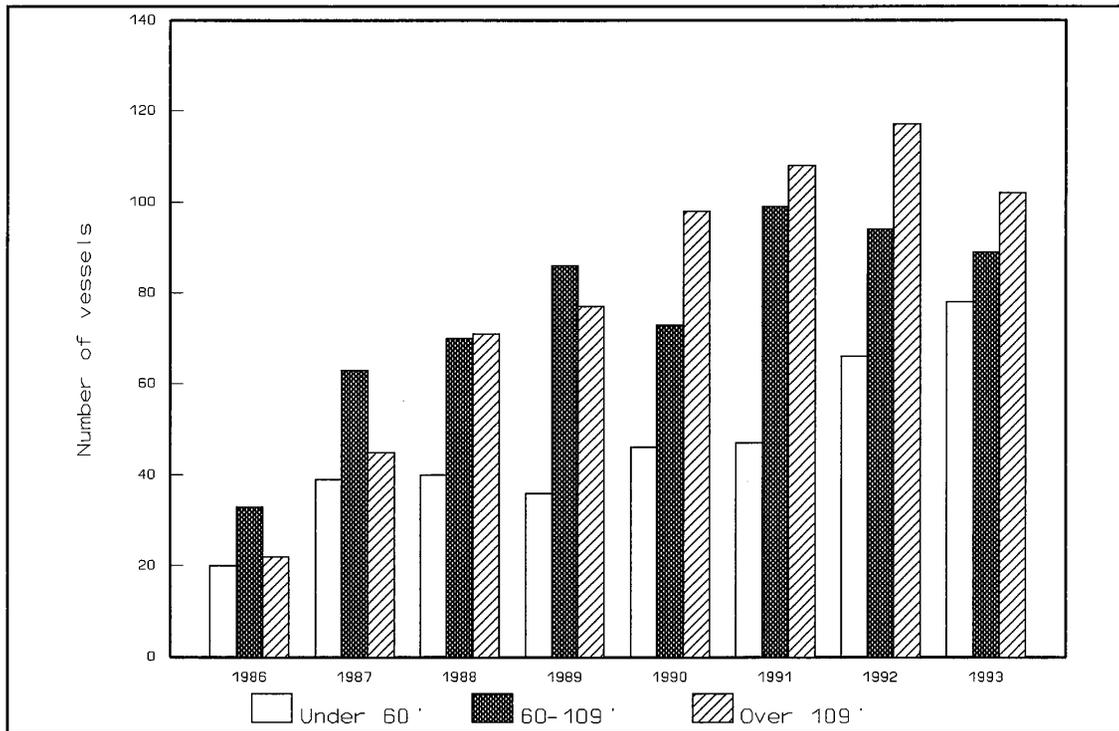


Figure 6.--Number of vessels that landed groundfish in the domestic fishery off Alaska using trawl gear by length class, 1986-93.

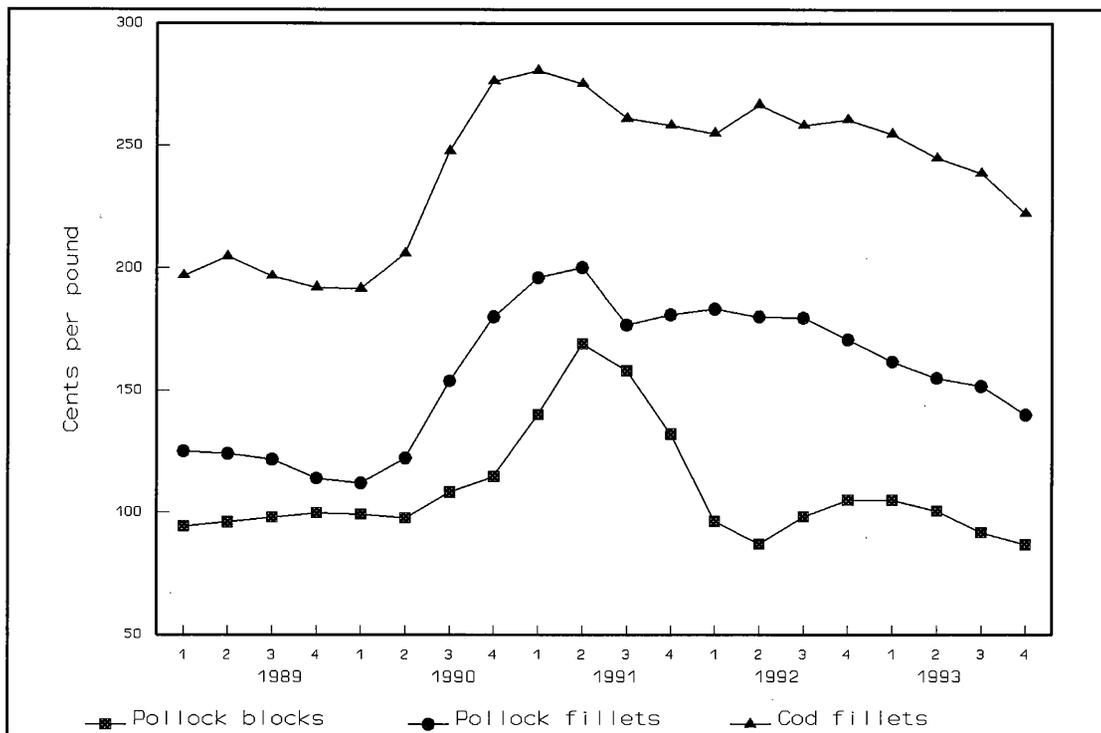


Figure 7.--Quarterly producer prices of Alaska groundfish products, F.O.B. Seattle, WA, 1989-93.

Table 1.--Groundfish catch in the commercial fisheries off Alaska by area and fishery, 1984-93 (1,000 metric tons, round weight).

Year	Fishery			Total
	Domestic	Joint venture	Foreign	
Gulf of Alaska				
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	259.9	0.0	0.0	259.9
1992	284.1	0.0	0.0	284.1
1993	261.4	0.0	0.0	261.4
Bering Sea/Aleutians				
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	2,126.6	0.0	0.0	2,126.6
1992	1,996.1	0.0	0.0	1,996.1
1993	1,887.2	0.0	0.0	1,887.2
All Alaska				
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	2,386.5	0.0	0.0	2,386.5
1992	2,280.2	0.0	0.0	2,280.2
1993	2,148.6	0.0	0.0	2,148.6

Note: Domestic catch statistics from 1984-90 reflect only the amounts that were landed, and beginning in 1991, catch also includes discards.

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; and National Marine Fisheries Service, Alaska Region, blend estimates.

Table 2.--Percentage distribution of commercial groundfish catch off Alaska among fisheries by area, 1984-93.

Year	Fishery		
	Domestic	Joint venture	Foreign
Gulf of Alaska			
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
1992	100.0	0.0	0.0
1993	100.0	0.0	0.0
Bering Sea/Aleutians			
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
1992	100.0	0.0	0.0
1993	100.0	0.0	0.0
All Alaska			
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
1992	100.0	0.0	0.0
1993	100.0	0.0	0.0

Note: Domestic catch statistics from 1984-90 reflect only the amounts that were landed, and beginning in 1991, catch also includes discards.

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, 1984-93, (1,000 metric tons, round weight).

Species/ Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska					
	Domestic	Joint		Domestic	Joint		Domestic	Joint				
		Foreign	venture		Foreign	venture		Foreign	venture	Foreign	venture	
Total	Foreign	Domestic	venture	Total	Foreign	Domestic	venture	Total	Foreign	Domestic	venture	Total
Pollock												
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	100.5	0.0	0.0	100.5	1,610.3	0.0	0.0	1,610.3	1,710.8	0.0	0.0	1,710.8
1992	93.5	0.0	0.0	93.5	1,438.4	0.0	0.0	1,438.4	1,531.8	0.0	0.0	1,531.8
1993	108.9	0.0	0.0	108.9	1,384.6	0.0	0.0	1,384.6	1,493.5	0.0	0.0	1,493.5
Sablefish												
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	23.1	0.0	0.0	23.1	3.4	0.0	0.0	3.4	26.5	0.0	0.0	26.5
1992	23.4	0.0	0.0	23.4	2.1	0.0	0.0	2.1	25.5	0.0	0.0	25.5
1993	24.8	0.0	0.0	24.8	2.7	0.0	0.0	2.7	27.5	0.0	0.0	27.5
Pacific cod												
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	76.3	0.0	0.0	76.3	220.0	0.0	0.0	220.0	296.4	0.0	0.0	296.4
1992	80.1	0.0	0.0	80.1	205.4	0.0	0.0	205.4	285.4	0.0	0.0	285.4
1993	56.5	0.0	0.0	56.5	167.4	0.0	0.0	167.4	223.9	0.0	0.0	223.9

Table 3.--Continued.

Species/ Year	Gulf of Alaska				Bering Sea/Aleutians				All Alaska			
	Domestic		Joint		Domestic		Joint		Domestic		Joint	
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Flatfish												
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	34.1	0.0	0.0	34.1	233.6	0.0	0.0	233.6	267.7	0.0	0.0	267.7
1992	43.6	0.0	0.0	43.6	248.6	0.0	0.0	248.6	292.1	0.0	0.0	292.1
1993	39.5	0.0	0.0	39.5	216.9	0.0	0.0	216.9	256.4	0.0	0.0	256.4
Rockfish												
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	20.5	0.0	0.0	20.5	10.1	0.0	0.0	10.1	30.6	0.0	0.0	30.6
1992	24.9	0.0	0.0	24.9	18.4	0.0	0.0	18.4	43.3	0.0	0.0	43.3
1993	19.7	0.0	0.0	19.7	24.7	0.0	0.0	24.7	44.4	0.0	0.0	44.4
Atka mackerel												
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	1.2	0.0	0.0	1.2	26.6	0.0	0.0	26.6	27.9	0.0	0.0	27.9
1992	8.6	0.0	0.0	8.6	49.4	0.0	0.0	49.4	58.0	0.0	0.0	58.0
1993	5.1	0.0	0.0	5.1	66.0	0.0	0.0	66.0	71.2	0.0	0.0	71.2

Note: The joint venture and foreign data are estimates of catch; however, the domestic catch from 1984-90 are estimates of total catch, and beginning in 1991, catch includes discards.

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; and National Marine Fisheries Service, Alaska Region, blend estimates.

Table 4.--Blend estimate of the groundfish catch off Alaska by area and species, 1991-93,
(1,000 metric tons).

Species	Gulf			Bering Sea/Aleutians			Total		
	Retained	Discard	Total	Retained	Discard	Total	Retained	Discard	Total
1991									
Pollock	91.2	9.3	100.5	1,469.7	140.6	1,610.3	1,560.9	149.9	1,710.8
Sablefish	22.8	0.3	23.1	3.3	0.1	3.4	26.2	0.3	26.5
Pacific cod	74.9	1.4	76.3	202.7	17.3	220.0	277.6	18.7	296.4
Flatfish	14.7	19.4	34.1	132.1	101.5	233.6	146.8	120.9	267.7
Rockfish	17.1	3.4	20.5	7.5	2.6	10.1	24.6	6.1	30.6
Atka mackerel	1.1	0.1	1.2	23.2	3.4	26.6	24.4	3.5	27.9
Other	1.9	2.2	4.1	3.1	19.4	22.6	5.0	21.6	26.7
Total	223.8	36.1	259.9	1,841.7	284.9	2,126.6	2,065.5	321.0	2,386.5
1992									
Pollock	77.8	15.6	93.5	1,307.6	130.8	1,438.4	1,385.4	146.4	1,531.8
Sablefish	22.4	1.0	23.4	2.1	0.0	2.1	24.4	1.0	25.5
Pacific cod	76.3	3.8	80.1	181.3	24.0	205.4	257.6	27.8	285.4
Flatfish	14.7	28.9	43.6	132.9	115.6	248.6	147.6	144.5	292.1
Rockfish	19.1	5.9	24.9	13.8	4.6	18.4	32.9	10.4	43.3
Atka mackerel	8.2	0.4	8.6	39.8	9.6	49.4	48.0	10.0	58.0
Other	4.8	5.2	10.1	2.8	31.1	33.9	7.6	36.3	43.9
Total	223.3	60.7	284.1	1,680.3	315.8	1,996.1	1,903.7	376.5	2,280.2
1993									
Pollock	100.6	8.3	108.9	1,272.5	112.1	1,384.6	1,373.1	120.4	1,493.5
Sablefish	23.9	0.8	24.8	2.7	0.1	2.7	26.6	0.9	27.5
Pacific cod	50.6	5.9	56.5	130.3	37.1	167.4	180.9	43.0	223.9
Flatfish	15.3	24.2	39.5	116.7	100.3	216.9	131.9	124.5	256.4
Rockfish	12.4	7.3	19.7	16.5	8.2	24.7	28.9	15.5	44.4
Atka mackerel	4.7	0.4	5.1	50.2	15.8	66.0	55.0	16.2	71.2
Other	1.8	5.0	6.9	1.9	22.9	24.8	3.8	27.9	31.6
Total	209.4	51.9	261.4	1,590.8	296.3	1,887.2	1,800.3	348.3	2,148.6

Source: Blend estimates, National Marine Fisheries Service, Alaska Region, P.O. Box 21668,
Juneau, AK 99802-1668.

Table 5.--Blend estimate of the Gulf of Alaska groundfish catch by species and target fishery, 1991-93, (metric tons).

Target fishery	Species									Total
	Pollock	Sable fish	Pacific cod	Arrow tooth	Flathd. sole	Flat deep	Flat shallow	Rock fish	Other	
1991										
Longline										
Sablefish	3	20,465	286	205	0	37	2	738	152	21,888
Pacific cod	19	24	7,317	9	2	6	2	78	61	7,517
Flatfish, deep	2	1	5	.	0	8	1	8	.	25
Rockfish	.	27	43	1	.	.	.	492	.	563
Subtotal	23	20,517	7,651	215	2	52	4	1,316	212	29,993
Pot										
Pacific cod	86	.	10,464	0	0	.	1	2	38	10,591
Other	.	.	0	.	.	.	.	.	1	2
Subtotal	86	.	10,464	0	0	.	1	2	40	10,593
Trawl										
Pollock bot.	13,350	167	927	822	83	659	270	152	33	16,463
Pollock pel.	78,480	6	197	130	13	8	31	93	18	78,976
Sablefish	0	44	5	42	0	36	.	17	2	147
Pacific cod	4,137	82	54,308	1,409	272	1,147	2,859	494	994	65,703
Arrowtooth	920	146	199	1,900	34	328	8	546	57	4,140
Flathead sole	118	43	126	221	270	85	96	42	15	1,016
Flatfish, deep	1,795	814	1,219	8,602	474	6,877	1,204	990	489	22,463
Flatfish, shallow	226	33	190	287	54	324	711	136	30	1,991
Rockfish	1,195	1,211	664	3,731	30	683	96	15,860	304	23,774
Other	31	2	251	18	2	0	17	429	3,136	3,886
Subtotal	100,252	2,549	58,084	17,163	1,234	10,147	5,292	18,760	5,079	218,559
Other gears										
Pacific cod	1	.	87	0	.	.	0	8	0	97
Rockfish	0	6	28	.	.	.	.	415	0	449
Subtotal	1	6	115	0	.	.	0	423	0	546
Yearly total										
1991	100,362	23,072	76,314	17,378	1,237	10,199	5,297	20,502	5,331	259,691

Table 5.--Continued.

Target fishery	Species									
	Pollock	Sable fish	Pacific cod	Arrow tooth	Flathd. sole	Flat deep	Flat shallow	Rock fish	Other	Total
1992										
Longline										
Sablefish	13	20,477	510	1,266	3	3,237	2	1,707	815	28,029
Pacific cod	60	138	14,892	209	3	16	11	119	619	16,065
Flathead sole	1	8	7	2	0	0	.	0	2	21
Flatfish, shallow	.	0	1	.	.	.	3	.	.	4
Rockfish	0	44	55	3	.	0	0	739	4	844
Other	.	0	0	.	.	.	.	0	1	1
Subtotal	73	20,666	15,465	1,479	6	3,253	16	2,565	1,441	44,964
Pot										
Pacific cod	2	0	9,984	1	0	0	1	2	174	10,164
Rockfish	.	.	0	.	.	.	.	1	.	1
Other	.	.	1	.	.	.	.	.	4	5
Subtotal	2	0	9,984	1	0	0	1	3	178	10,170
Trawl										
Pollock bot.	11,488	60	747	674	158	211	312	120	198	13,967
Pollock pel.	70,835	11	265	255	16	12	86	15	297	71,791
Sablefish	13	9	2	15	0	2	0	1	0	42
Pacific cod	7,831	62	49,275	2,014	386	284	3,767	381	1,223	65,225
Arrowtooth	55	52	38	97	2	15	0	20	4	283
Flathead sole	129	26	84	908	207	307	35	13	106	1,814
Flatfish, deep	1,576	631	1,257	9,485	866	6,553	576	1,032	699	22,676
Flatfish, shallow	727	125	1,151	1,680	474	491	3,904	174	574	9,301
Rockfish	545	1,716	580	4,175	68	417	64	18,774	507	26,847
Other	101	15	905	237	1	7	23	1,487	13,424	16,200
Subtotal	93,299	2,708	54,304	19,539	2,178	8,300	8,768	22,018	17,032	228,146
Other gears										
Pacific cod	2	.	321	.	.	.	0	3	0	327
Flatfish, deep	.	.	.	.	1	1	.	0	.	1
Rockfish	.	.	2	.	.	.	.	337	.	339
Unknown	5	1	.	.	.	.	.	.	0	7
Subtotal	7	1	323	.	1	1	0	341	0	674
Yearly total										
1992	93,382	23,376	80,077	21,020	2,185	11,553	8,785	24,926	18,651	283,954

Table 5.--Continued.

Target fishery	Species									
	Pollock	Sable fish	Pacific cod	Arrow tooth	Flathead sole	Flat deep	Flat shallow	Rock fish	Other	Total
1993										
Longline										
Sablefish	2	22,255	668	1,741	1	1,089	3	1,526	1,105	28,389
Pacific cod	28	30	8,242	147	0	0	1	55	659	9,162
Arrowtooth	0	26	11	15	0	0	.	7	1	61
Flatfish, deep	.	2	.	.	.	13	.	0	.	15
Rockfish	0	39	41	2	.	0	2	670	13	768
Other	.	.	0	0	.	.	0	0	1	1
Subtotal	31	22,352	8,961	1,905	1	1,103	7	2,259	1,779	38,397
Pot										
Pacific cod	14	0	9,708	3	0	0	5	0	196	9,926
Other	.	.	.	.	.	.	.	.	2	2
Subtotal	14	0	9,708	3	0	0	5	0	198	9,928
Trawl										
Pollock bot.	16,955	107	2,564	582	348	347	1,521	47	591	23,061
Pollock pel.	88,271	16	384	278	16	5	105	21	311	89,406
Sablefish	6	97	3	71	.	16	.	10	4	207
Pacific cod	2,214	53	30,508	1,589	181	78	1,151	387	399	36,559
Arrowtooth	39	79	122	1,596	53	112	100	185	80	2,367
Flathead sole	96	21	213	1,160	688	158	52	51	34	2,473
Flatfish, deep	356	760	1,142	8,482	779	5,033	385	1,030	694	18,661
Flatfish, shallow	768	175	2,073	2,462	750	643	6,349	270	825	14,315
Rockfish	135	1,094	308	1,041	7	242	16	14,199	343	17,384
Other	12	6	487	38	0	6	38	1,103	6,754	8,444
Subtotal	108,852	2,408	37,802	17,298	2,823	6,639	9,715	17,304	10,035	212,876
Other gears										
Unknown	.	.	11	.	.	.	.	131	.	142
Subtotal	.	.	11	.	.	.	.	131	.	142
Yearly total										
1993	108,897	24,759	56,482	19,207	2,824	7,742	9,727	19,694	12,012	261,344

Source: Blend estimates, National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802-1668.

Table 6.--Blend estimate of the Bering sea and Aleutian Islands groundfish catch by species and target fishery, 1991-93 (metric tons).

Target fishery	Species											Total
	Pollock	Sable fish	Pacific cod	Arrow tooth	Rock sole	Turbot	Yellow fin	Flat other	Rock fish	Atka mackerel	Other	
1991												
Longline												
Sablefish	8	2,492	268	128	0	1,101	.	14	216	0	50	4,277
Pacific cod	2,534	343	79,598	2,098	22	496	2	317	270	3	7,009	92,692
Turbot	.	6	0	1	.	12	.	1	1	.	2	23
Rockfish	.	9	2	1	.	3	.	3	13	.	0	30
Unknown	33	.	770	16	0	0	0	5	0	.	93	918
Other	0	.	25	1	.	.	.	0	.	.	35	61
Subtotal	2,575	2,850	80,663	2,244	22	1,612	2	341	500	3	7,189	98,002
Pot												
Sablefish	.	0	.	0	.	0	.	.	.	.	.	0
Pacific cod	2	0	6,523	0	0	0	38	1	1	1	203	6,770
Other	.	.	.	.	.	.	.	.	.	.	0	0
Subtotal	2	0	6,523	0	0	0	38	1	1	1	203	6,770
Trawl												
Pollock												
Bottom	453,171	26	23,300	6,935	2,565	179	852	5,036	559	563	4,066	497,251
Pelagic	1,088,525	2	3,813	284	109	100	20	927	163	7	940	1,094,890
Sablefish	36	105	13	202	1	164	.	25	27	.	20	593
Pacific cod	33,544	15	90,217	2,954	6,117	167	488	3,772	2,337	916	3,029	143,556
Arrowtooth	185	32	41	1,570	2	397	0	146	119	2	133	2,625
Rock sole	19,502	10	6,723	701	36,140	1	6,884	5,409	83	3	2,293	77,751
Turbot	179	260	127	2,053	9	5,033	.	129	114	82	203	8,188
Yellowfin	7,818	2	4,304	172	9,732	0	104,734	12,952	2	1	2,806	142,522
Flatfish, other	2,560	4	847	583	1,112	12	4,023	3,749	6	0	445	13,341
Rockfish	779	42	1,051	1,586	106	129	0	292	5,405	167	562	10,119
Atka mackerel	898	50	2,363	157	122	45	.	40	812	24,820	637	29,942
Other	1	1	2	19	0	0	.	2	0	.	11	37
Subtotal	1,607,195	548	132,801	17,215	56,015	6,228	117,002	32,478	9,627	26,561	15,146	2,020,815
Other gears												
Unknown	344	.	.	.	.	.	.	1	0	.	0	345
Subtotal	344	.	.	.	.	.	.	1	0	.	0	345
Yearly total												
1991	1,610,117	3,398	219,987	19,460	56,038	7,840	117,042	32,820	10,127	26,566	22,538	2,125,932

Table 6.--Continued.

Target fishery	Species											Total
	Pollock	Sable fish	Pacific cod	Arrow tooth	Rock sole	Turbot	Yellow fin	Flat other	Rock fish	Atka mackerel	Other	
1992												
Longline												
Sablefish	1	1,807	139	268	.	1,445	.	6	304	.	146	4,116
Pacific cod	3,189	179	100,948	1,655	28	576	91	275	838	57	11,167	119,002
Turbot	0	28	12	4	.	75	.	0	4	.	10	134
Rockfish	.	0	.	1	.	2	.	0	1	.	0	4
Subtotal	3,190	2,015	101,099	1,928	28	2,099	91	281	1,147	57	11,322	123,256
Pot												
Sablefish	0	0	0	0	.	.	.	.	0	.	0	1
Pacific cod	7	13	13,680	3	2	9	24	1	3	12	669	14,423
Other	.	.	.	.	.	.	.	.	.	.	15	15
Subtotal	7	13	13,680	4	2	9	24	1	3	12	684	14,439
Trawl												
Pollock												
Bottom	631,140	6	19,646	3,735	6,662	174	821	7,406	510	293	4,563	674,957
Pelagic	760,860	2	3,635	337	432	134	19	1,207	129	46	1,360	768,163
Sablefish	.	26	.	1	.	2	.	.	2	.	1	31
Pacific cod	16,675	10	47,868	2,849	3,502	81	277	2,485	1,176	3,073	3,005	80,999
Arrowtooth	132	1	41	124	14	10	0	46	11	11	26	417
Rock sole	10,073	.	5,292	526	26,094	0	6,636	4,845	0	8	1,974	55,448
Yellowfin	12,815	0	8,533	437	14,413	1	137,384	17,033	0	1	7,915	198,533
Flatfish, other	1,202	0	426	244	686	4	1,527	1,300	22	2	1,559	6,970
Rockfish	1,338	25	1,232	1,556	61	220	0	243	11,936	2,164	552	19,328
Atka mackerel	683	5	3,383	205	44	34	0	39	3,420	43,764	193	51,770
Other	4	.	193	7	0	0	.	1	33	.	650	888
Subtotal	1,434,922	75	90,250	10,022	51,907	661	146,664	34,605	17,239	49,363	21,797	1,857,505
Other gears												
Sablefish	.	1	.	.	.	.	.	.	.	.	.	1
Pacific cod	0	0	117	.	.	.	.	1	0	0	.	118
Rockfish	.	.	.	.	.	.	.	.	1	.	.	1
Atka mackerel	.	.	.	.	.	.	.	.	.	9	.	9
Unknown	6	.	64	1	0	.	2	0	.	.	4	78
Subtotal	6	1	180	1	0	.	2	1	1	9	4	206
Yearly total												
1992	1,438,125	2,104	205,208	11,955	51,938	2,768	146,781	34,887	18,390	49,441	33,808	1,995,406

Table 6.--Continued.

Target fishery	Species											Total
	Pollock	Sable fish	Pacific cod	Arrow tooth	Rock sole	Turbot	Yellow fin	Flat other	Rock fish	Atka mackerel	Other	
1993												
Longline												
Sablefish	0	1,970	30	178	0	1,077	.	22	379	0	180	3,836
Pacific cod	2,158	74	65,979	760	19	203	5	209	297	21	8,213	77,937
Arrowtooth	0	1	7	9	.	5	.	0	1	.	7	29
Turbot	5	582	115	555	0	6,025	.	102	277	.	535	8,196
Rockfish	1	22	19	12	.	14	.	.	81	0	6	154
Subtotal	2,164	2,649	66,150	1,514	19	7,324	5	333	1,034	21	8,940	90,153
Pot												
Pacific cod	2	.	2,098	0	0	.	7	.	0	3	46	2,156
Subtotal	2	.	2,098	0	0	.	7	.	0	3	46	2,156
Trawl												
Pollock												
Bottom	210,744	2	17,027	846	8,489	33	1,016	3,600	200	17	2,813	244,786
Pelagic	1,101,328	0	3,735	281	210	53	86	635	147	24	1,003	1,107,503
Sablefish	15	19	.	13	.	20	.	0	2	.	5	74
Pacific cod	29,345	3	54,829	1,840	5,702	64	817	2,688	1,166	3,178	2,920	102,550
Arrowtooth	3	1	0	3	0	0	.	1	1	.	0	10
Rock sole	16,478	0	7,544	601	40,275	10	5,809	4,195	6	1	2,621	77,542
Turbot	1	1	4	18	0	14	.	6	11	0	2	58
Yellowfin	15,253	0	8,723	1,017	7,318	5	91,975	9,623	6	0	3,847	137,767
Flatfish, other	4,676	13	2,047	1,713	2,007	187	6,091	7,701	115	14	1,500	26,063
Rockfish	1,623	55	976	1,252	64	642	0	250	16,572	2,911	711	25,056
Atka mackerel	146	4	4,093	161	101	118	.	5	5,458	59,819	312	70,218
Other	11	.	9	17	3	.	.	27	0	.	22	90
Subtotal	1,379,624	98	98,987	7,765	64,170	1,145	105,794	28,731	23,684	65,964	15,756	1,791,716
Other gears												
Unknown	106	.	35	.	.	.	.	0	.	.	.	141
Subtotal	106	.	35	.	.	.	.	0	.	.	.	141
Yearly total												
1993	1,381,895	2,746	167,270	9,279	64,188	8,469	105,806	29,064	24,719	65,988	24,742	1,884,167

Source: Blend estimates, National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802-1668.

Table 7.--Blend estimate of the groundfish catch and discards off Alaska by area, species, and gear, 1991-93 (1,000 metric tons).

	1991		1992		1993	
	Total	Discards	Total	Discards	Total	Discards
Gulf of Alaska						
Pollock						
Trawl	100.4	9.2	93.4	15.5	108.9	8.2
Longline	0.0	0.0	0.1	0.1	0.0	0.0
Other gear	0.1	0.1	0.0	0.0	0.0	0.0
Subtotal	100.5	9.3	93.5	15.6	108.9	8.3
Sablefish						
Trawl	2.5	0.2	2.7	0.6	2.4	0.4
Longline	20.5	0.0	20.7	0.4	22.4	0.4
Other gear	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	23.1	0.3	23.4	1.0	24.8	0.8
Pacific cod						
Trawl	58.1	1.2	54.3	3.1	37.8	5.1
Longline	7.7	0.2	15.5	0.5	9.0	0.7
Other gear	10.6	0.0	10.3	0.2	9.7	0.1
Subtotal	76.3	1.4	80.1	3.8	56.5	5.9
Flatfish						
Trawl	33.8	19.1	38.8	24.1	36.5	21.3
Longline	0.3	0.3	4.8	4.7	3.0	2.9
Other gear	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	34.1	19.4	43.6	28.9	39.5	24.2
Rockfish						
Trawl	18.8	3.3	22.0	5.2	17.3	6.7
Longline	1.3	0.1	2.6	0.7	2.3	0.7
Other gear	0.4	0.0	0.3	0.0	0.1	0.0
Subtotal	20.5	3.4	24.9	5.9	19.7	7.3
Atka mackerel						
Trawl	1.2	0.1	8.6	0.4	5.1	0.4
Longline	0.0	0.0	0.0	0.0	0.0	0.0
Other gear	.	.	0.0	0.0	0.0	0.0
Subtotal	1.2	0.1	8.6	0.4	5.1	0.4
Other						
Trawl	3.9	2.0	8.4	3.7	4.9	3.1
Longline	0.2	0.2	1.4	1.4	1.8	1.8
Other gear	0.0	0.0	0.2	0.1	0.2	0.1
Subtotal	4.1	2.2	10.1	5.2	6.9	5.0
Area total						
Trawl	218.7	35.1	228.2	52.7	212.9	45.2
Longline	30.0	0.9	45.0	7.8	38.4	6.5
Other gear	11.1	0.1	10.8	0.3	10.1	0.2
Gulf total	259.9	36.1	284.1	60.7	261.4	51.9

Table 7.--Continued.

	1991		1992		1993	
	Total	Discards	Total	Discards	Total	Discards
Bering Sea/Aleutian Islands						
Pollock						
Trawl	1,607.4	138.2	1,435.2	127.7	1,382.4	110.2
Longline	2.6	2.4	3.2	3.1	2.2	1.9
Other gear	0.3	0.0	0.0	0.0	0.1	0.0
Subtotal	1,610.3	140.6	1,438.4	130.8	1,384.6	112.1
Sablefish						
Trawl	0.5	0.0	0.1	0.0	0.1	0.0
Longline	2.9	0.0	2.0	0.0	2.6	0.0
Other gear	0.0	0.0	0.0	0.0	.	.
Subtotal	3.4	0.1	2.1	0.0	2.7	0.1
Pacific cod						
Trawl	132.8	15.5	90.3	21.7	99.1	32.6
Longline	80.7	1.6	101.2	2.1	66.2	4.5
Other gear	6.5	0.2	13.9	0.2	2.1	0.0
Subtotal	220.0	17.3	205.4	24.0	167.4	37.1
Flatfish						
Trawl	229.3	97.6	244.1	111.6	207.7	97.3
Longline	4.2	3.9	4.4	4.0	9.2	2.9
Other gear	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	233.6	101.5	248.6	115.6	216.9	100.3
Rockfish						
Trawl	9.6	2.6	17.2	4.1	23.7	7.8
Longline	0.5	0.1	1.1	0.5	1.0	0.4
Other gear	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	10.1	2.6	18.4	4.6	24.7	8.2
Atka mackerel						
Trawl	26.6	3.4	49.4	9.6	66.0	15.7
Longline	0.0	0.0	0.1	0.0	0.0	0.0
Other gear	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	26.6	3.4	49.4	9.6	66.0	15.8
Other						
Trawl	15.2	13.4	21.8	20.0	15.8	15.0
Longline	7.2	5.9	11.3	10.5	8.9	7.9
Other gear	0.2	0.2	0.7	0.6	0.0	0.0
Subtotal	22.6	19.4	33.9	31.1	24.8	22.9
Area total						
Trawl	2,021.4	270.6	1,858.1	294.7	1,794.7	278.6
Longline	98.1	13.9	123.4	20.3	90.2	17.6
Other gear	7.1	0.4	14.6	0.8	2.3	0.1
BSAI total	2,126.6	284.9	1,996.1	315.8	1,887.2	296.3

Table 7.--Continued.

	1991		1992		1993	
	Total	Discards	Total	Discards	Total	Discards
All Alaska						
Pollock						
Trawl	1,707.8	147.4	1,528.5	143.3	1,491.2	118.4
Longline	2.6	2.5	3.3	3.2	2.2	1.9
Other gear	0.4	0.1	0.0	0.0	0.1	0.0
Subtotal	1,710.8	149.9	1,531.8	146.4	1,493.5	120.4
Sablefish						
Trawl	3.1	0.3	2.8	0.6	2.5	0.4
Longline	23.4	0.1	22.7	0.4	25.0	0.4
Other gear	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	26.5	0.3	25.5	1.0	27.5	0.9
Pacific cod						
Trawl	190.9	16.7	144.6	24.8	136.9	37.7
Longline	88.4	1.8	116.7	2.6	75.1	5.2
Other gear	17.1	0.2	24.2	0.3	11.9	0.1
Subtotal	296.4	18.7	285.4	27.8	223.9	43.0
Flatfish						
Trawl	263.1	116.7	282.9	135.8	244.2	118.6
Longline	4.5	4.2	9.2	8.7	12.2	5.9
Other gear	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	267.7	120.9	292.1	144.5	256.4	124.5
Rockfish						
Trawl	28.4	5.9	39.3	9.3	41.0	14.5
Longline	1.8	0.2	3.7	1.1	3.3	1.1
Other gear	0.4	0.0	0.3	0.0	0.1	0.0
Subtotal	30.6	6.1	43.3	10.4	44.4	15.5
Atka mackerel						
Trawl	27.9	3.5	57.9	10.0	71.1	16.1
Longline	0.0	0.0	0.1	0.0	0.0	0.0
Other gear	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	27.9	3.5	58.0	10.0	71.2	16.2
Other						
Trawl	19.0	15.4	30.3	23.7	20.7	18.1
Longline	7.4	6.1	12.8	12.0	10.7	9.6
Other gear	0.2	0.2	0.9	0.7	0.2	0.2
Subtotal	26.7	21.6	43.9	36.3	31.6	27.9
Area total						
Trawl	2,240.2	305.7	2,086.3	347.4	2,007.6	323.9
Longline	128.1	14.8	168.4	28.1	128.6	24.1
Other gear	18.3	0.5	25.5	1.1	12.4	0.3
Alaska total	2,386.5	321.0	2,280.2	376.5	2,148.6	348.3

Source: Blend estimates, National Marine Fisheries Service, Alaska Region,
P.O. Box 21668, Juneau, AK 99802-1668.

Table 8.--Ex-vessel value of the groundfish catch in the commercial fisheries off Alaska by fishery, 1984-93 (\$ millions and percentage of total).

Year	Fishery			Total
	Domestic	Joint venture	Foreign	
Value (\$ millions)				
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	478.4	0.0	0.0	478.4
1992	675.1	0.0	0.0	675.1
1993	455.1	0.0	0.0	455.1
Percentage of total				
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
1992	100.0	0.0	0.0	100.0
1993	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 9.--Ex-vessel value of the catch in the commercial fisheries off Alaska by species group, 1982-93 (\$ 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	478.4	1,199.8
1992	335.1	544.5	27.0	48.0	675.1	1,629.7
1993	328.5	391.1	14.1	53.6	455.1	1,242.0
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	25.1	25.0	2.4	7.6	39.9	100.0
1992	20.6	33.4	1.7	2.9	41.4	100.0
1993	26.5	31.5	1.1	4.3	36.6	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 10.--Value of Pacific Northwest and Alaska exports of edible fishery products or product groups (\$ millions and percentage of total), 1982-93.

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
1992	891	89	1,112	433	45	2,570
1993	798	73	833	403	47	2,154
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
1992	34.7	3.5	43.3	16.8	1.7	100.0
1993	37.0	3.4	38.7	18.7	2.2	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; database 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 11.--Groundfish landings in the domestic fisheries off Alaska by area, gear, and species, 1985-93 (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										
	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	32.5	171.7	216.8	67.0	1,403.1	1,474.3	99.6	1,575.0	1,691.4
	1992	38.3	201.8	250.7	107.6	1,662.7	1,785.9	146.0	1,865.2	2,037.3
	1993	32.3	178.9	220.7	72.6	1,511.3	1,586.4	105.6	1,721.0	1,838.6
Pollock										
	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	81.1	81.1	0.4	1,167.7	1,168.3	0.4	1,248.8	1,249.4
	1992	0.1	82.9	83.2	2.6	1,315.9	1,318.7	2.7	1,399.3	1,402.3
	1993	0.0	104.5	104.6	0.3	1,283.1	1,283.4	0.3	1,390.4	1,390.7
Sablefish										
	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	22.0	2.4	24.4	2.7	0.5	3.2	24.8	2.9	27.7
	1992	19.2	2.4	21.6	1.9	0.1	2.0	21.3	2.4	23.7
	1993	21.4	2.0	23.4	2.3	0.1	2.3	24.1	2.1	26.2
Pacific Cod										
	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	7.7	55.3	75.5	62.0	88.8	154.8	69.7	144.1	230.4
	1992	15.2	49.7	75.2	90.7	69.7	175.4	105.9	119.5	250.7
	1993	8.3	38.7	55.7	61.7	71.1	135.3	70.2	111.4	192.9
Flatfish										
	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	16.0	16.1	0.4	114.9	115.4	0.5	131.0	131.5
	1992	0.4	30.7	31.1	2.7	201.3	204.0	3.1	232.1	235.3
	1993	0.3	19.3	19.7	6.6	115.7	122.3	6.9	135.0	141.9

Table 11.--Continued.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Hook&Line	Trawl	All	Hook&Line	Trawl	All	Hook&Line	Trawl	All
Rockfish										
	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	2.1	13.4	15.5	0.4	6.2	6.6	2.5	19.6	22.1
	1992	2.5	20.5	23.0	0.9	15.6	16.5	3.4	36.1	39.5
	1993	1.9	7.3	9.3	0.6	12.0	12.6	2.6	23.2	25.9
Atka Mackerel										
	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	3.2	3.2	0.0	22.5	22.5	0.0	25.7	25.7
	1992	0.0	13.8	13.8	0.0	45.8	45.8	0.0	59.7	59.7
	1993	0.0	1.4	1.4	0.0	27.6	27.6	0.0	51.3	51.3

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 12.--Groundfish landings in the domestic fisheries off Alaska by area, mode of operation, and species, 1986-93 (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
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	61.8	155.0	1,171.0	303.2	1,232.9	458.5
1992	91.1	159.6	1,342.2	443.7	1,433.4	604.0
1993	45.6	175.0	1,162.6	423.8	1,239.0	599.6
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	19.6	61.5	902.1	266.1	921.7	327.7
1992	9.2	74.9	903.9	414.8	913.1	489.2
1993	12.9	91.8	902.2	381.2	917.1	473.6
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	3.6	20.8	2.0	1.2	5.6	22.1
1992	5.2	16.4	1.2	0.8	6.6	17.2
1993	5.3	18.1	1.7	0.6	7.3	19.0
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	15.0	60.5	127.3	27.5	142.3	88.1
1992	21.6	53.6	152.4	23.0	174.0	76.7
1993	7.6	48.1	100.3	35.0	109.8	83.1
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	7.4	8.6	108.1	7.2	115.5	15.9
1992	19.1	11.9	199.6	4.4	218.7	16.5
1993	5.9	13.8	116.3	6.0	122.2	19.8

Table 12.--Continued.

Species/Year	Gulf of Alaska		Bering Sea/Aleutians		All Alaska	
	At-sea	Shore-based	At-sea	Shore-based	At-sea	Shore-based
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	12.8	2.7	6.4	0.2	19.1	2.9
1992	20.4	2.5	16.4	0.1	36.8	2.7
1993	7.4	2.0	12.5	0.1	23.8	2.1
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	3.2	0.0	22.4	0.1	25.6	0.1
1992	13.8	0.0	45.8	0.1	59.6	0.1
1993	1.4	0.0	27.6	0.0	51.3	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 13.--Groundfish landings in the domestic fisheries off Alaska by area, residency, and species, 1986-93 (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
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	84.0	139.4	0.3	77.7	1,763.6	0.4	161.8	1,903.0	0.7
1992	96.9	123.5	3.0	134.6	1,543.4	2.3	231.5	1,666.9	5.3
1993	100.9	107.6	1.0	146.7	1,441.6	2.5	247.6	1,549.2	3.5
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	24.8	66.4	0.0	21.1	1,448.3	0.2	45.9	1,514.7	0.2
1992	29.5	48.3	0.1	50.1	1,256.9	0.5	79.6	1,305.2	0.6
1993	40.9	59.2	0.6	45.4	1,224.9	2.2	86.2	1,284.1	2.8
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	11.7	10.9	0.2	0.8	2.5	0.0	12.5	13.4	0.2
1992	10.9	11.4	0.1	0.6	1.4	0.0	11.5	12.8	0.1
1993	15.0	8.7	0.3	0.6	2.1	0.0	15.6	10.7	0.3
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	35.8	39.0	0.1	22.6	180.1	0.0	58.4	219.1	0.1
1992	36.2	37.4	2.7	27.4	152.2	1.8	63.5	189.6	4.5
1993	30.4	20.1	0.1	21.8	108.3	0.2	52.2	128.4	0.3
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	5.3	9.4	0.0	24.6	107.4	0.1	29.9	116.8	0.1
1992	6.6	8.0	0.0	35.1	97.8	0.0	41.8	105.9	0.0
1993	7.3	8.0	0.0	46.1	70.5	0.0	53.4	78.5	0.1

Table 13.--Continued.

Species/Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
	Alaska	Other	Unknown	Alaska	Other	Unknown	Alaska	Other	Unknown
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	5.1	11.9	0.0	0.6	6.9	0.0	5.7	18.8	0.0
1992	6.8	12.2	0.0	6.5	7.3	0.0	13.4	19.5	0.0
1993	4.2	8.2	0.0	7.3	9.2	0.0	11.5	17.4	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	0.5	0.7	0.0	7.3	15.9	0.0	7.8	16.6	0.0
1992	5.0	3.2	0.0	14.0	25.8	0.0	19.0	29.0	0.0
1993	1.4	3.4	0.0	24.3	25.9	0.0	25.7	29.3	0.0

Note: Catch delivered to motherships is classified by the residence of the owner of the mothership and not of the catcher boat. Catch is not available by residence of the owner of the catcher boat.

Source: National Marine Fisheries Service groundfish fish ticket, vessel registration, weekly processor, blend estimates, and Pacific Marine Fisheries Commission, Pacific Fisheries Information Network databases, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 14.--Ex-vessel value of the groundfish catch in the domestic fisheries off Alaska by area, gear, and species, 1985-93 (\$ 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										
	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	55.0	64.5	127.0	44.6	304.3	351.0	99.9	369.0	478.4
	1992	54.2	87.2	147.0	63.3	456.2	527.5	117.9	543.5	675.1
	1993	51.2	43.6	99.5	43.3	260.7	305.0	95.7	312.4	413.9
Pollock										
	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	21.0	21.0	0.1	220.5	220.6	0.1	241.6	241.8
	1992	0.0	28.1	28.2	1.9	358.5	360.5	1.9	386.8	388.8
	1993	0.0	17.2	17.3	0.1	197.4	197.5	0.1	215.0	215.1
Sablefish										
	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	48.1	4.5	52.6	6.9	0.9	7.9	55.2	5.4	60.7
	1992	43.3	4.6	47.9	5.1	0.1	5.2	48.7	4.7	53.5
	1993	45.5	3.0	48.6	4.9	0.1	4.9	51.5	3.1	54.6
Pacific cod										
	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	4.7	26.8	39.0	36.4	37.8	76.2	41.2	64.6	115.3
	1992	7.9	28.9	42.2	47.2	30.6	85.3	55.1	59.5	127.5
	1993	3.4	13.2	20.8	33.8	23.6	58.5	37.3	37.6	80.1
Flatfish										
	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	4.5	4.5	0.2	34.6	34.8	0.3	39.1	39.4
	1992	0.2	7.0	7.2	1.2	47.2	48.4	1.4	54.2	55.6
	1993	0.2	6.2	6.4	3.5	26.4	29.9	3.7	32.6	36.3

Table 14.--Continued.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Hook&Line	Trawl	All	Hook&Line	Trawl	All	Hook&Line	Trawl	All
Rockfish										
	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	6.6	8.3	0.2	2.8	3.0	1.9	9.4	11.4
	1992	2.2	13.9	16.1	0.8	4.1	4.9	3.0	18.0	21.0
	1993	1.8	2.5	4.4	0.3	4.7	4.9	2.1	7.7	9.9
Atka mackerel										
	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	6.6	6.6	0.0	7.5	7.5
	1992	0.0	3.8	3.8	0.0	12.7	12.7	0.0	16.5	16.5
	1993	0.0	0.4	0.4	0.0	7.9	7.9	0.0	14.7	14.7

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 15.--Ex-vessel value of the groundfish catch in the domestic fisheries off Alaska by area, mode of operation, and species, 1986-93 (\$ 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	9.0	12.0	168.8	51.9	177.7	64.0
1992	2.7	25.5	248.4	112.1	251.1	137.7
1993	1.8	15.5	140.9	56.6	143.0	72.1
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	7.6	45.0	5.1	2.8	12.8	47.9
1992	11.2	36.7	3.1	2.1	14.6	38.9
1993	10.7	37.9	3.6	1.3	15.4	39.2
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	7.2	31.8	64.3	11.9	71.5	43.8
1992	14.1	28.2	75.2	10.1	89.3	38.2
1993	2.7	18.1	46.3	12.2	49.9	30.2
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	2.5	2.1	33.1	1.7	35.6	3.8
1992	4.0	3.3	47.6	0.8	51.6	4.1
1993	1.7	4.6	28.0	1.9	29.8	6.5
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	6.4	1.9	2.9	0.1	9.3	2.0
1992	14.0	2.1	4.8	0.1	18.8	2.2
1993	2.7	1.7	4.8	0.1	8.1	1.8

Table 15.--Continued.

Species/Year	Gulf of Alaska		Bering Sea/Aleutians		All Alaska	
	At-sea	Shore-based	At-sea	Shore-based	At-sea	Shore-based
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	6.6	0.0	7.5	0.0
1992	3.8	0.0	12.7	0.0	16.5	0.0
1993	0.4	0.0	7.9	0.0	14.7	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	33.6	93.4	282.2	68.7	316.0	162.4
1992	50.6	96.4	402.1	125.4	453.0	222.1
1993	20.9	78.5	232.7	72.3	262.9	151.0

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 16.--Ex-vessel value of the groundfish catch in the domestic fisheries off Alaska by area, residency, and species, 1986-93 (\$ 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	6.4	17.1	0.0	4.0	274.6	0.0	10.4	291.7	0.0
1992	10.0	16.4	0.0	13.7	343.6	0.1	23.7	360.0	0.2
1993	6.8	9.8	0.1	7.0	189.0	0.3	13.8	198.8	0.4
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	25.2	23.5	0.5	1.9	6.2	0.0	27.2	29.7	0.5
1992	24.2	25.2	0.3	1.6	3.8	0.0	25.8	29.0	0.3
1993	31.1	18.0	0.7	1.3	4.5	0.0	32.3	22.4	0.7
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	18.5	20.1	0.0	11.1	88.6	0.0	29.6	108.7	0.1
1992	20.3	21.0	1.5	13.3	74.2	0.9	33.7	95.2	2.4
1993	11.3	7.5	0.0	9.4	46.8	0.1	20.8	54.3	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	1.5	2.7	0.0	7.4	32.4	0.0	8.9	35.1	0.0
1992	1.5	1.9	0.0	8.4	23.3	0.0	9.9	25.2	0.0
1993	2.6	2.9	0.0	11.3	17.3	0.0	13.9	20.1	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	2.8	6.4	0.0	0.3	3.2	0.0	3.0	9.6	0.0
1992	4.8	8.6	0.0	1.9	2.2	0.0	6.7	10.8	0.0
1993	2.0	3.9	0.0	3.3	4.1	0.0	5.2	8.0	0.0

Table 16.--Continued.

Species/Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
	Alaska	Other	Unknown	Alaska	Other	Unknown	Alaska	Other	Unknown
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	0.1	0.2	0.0	2.2	4.7	0.0	2.3	4.9	0.0
1992	1.4	0.9	0.0	3.9	7.1	0.0	5.2	8.0	0.0
1993	0.4	1.0	0.0	7.0	7.4	0.0	7.4	8.4	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	54.9	70.7	0.6	27.3	410.8	0.1	82.2	481.5	0.7
1992	63.3	75.6	1.8	43.2	455.0	1.0	106.4	530.6	2.9
1993	54.2	43.0	0.8	39.2	269.0	0.5	93.4	312.0	1.3

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. Catch delivered to motherships is classified by the residence of the owner of the mothership and not of the catcher boat. Catch is not available by residence of the owner of the catcher boat.

Source: National Marine Fisheries fish ticket, weekly processor, vessel registration, blend estimates, and Pacific Marine Fisheries Commission, Pacific Fisheries Information Network databases, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 17.--Ex-vessel prices in the domestic groundfish fisheries off Alaska by area, gear, and species, 1985-93 (\$/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									
1985	0.612	0.078	0.287	0.499	0.111	0.126	0.596	0.104	0.173
1986	0.556	0.125	0.285	0.481	0.089	0.120	0.545	0.099	0.180
1987	0.567	0.142	0.272	0.484	0.096	0.109	0.549	0.106	0.153
1988	0.851	0.152	0.312	0.579	0.090	0.097	0.793	0.099	0.135
1989	0.769	0.145	0.263	0.315	0.089	0.092	0.602	0.095	0.114
1990	0.586	0.123	0.195	0.288	0.094	0.101	0.401	0.097	0.112
1991	0.767	0.171	0.266	0.302	0.098	0.108	0.455	0.106	0.128
1992	0.649	0.196	0.266	0.267	0.124	0.134	0.367	0.132	0.150
1993	0.719	0.110	0.204	0.271	0.078	0.087	0.411	0.082	0.102
Pollock									
1985	0.743	0.045	0.079	0.050	0.053	0.053	0.695	0.051	0.062
1986	0.064	0.048	0.048	0.058	0.052	0.078	0.059	0.051	0.070
1987	0.087	0.079	0.079	0.080	0.074	0.074	0.081	0.075	0.075
1988	0.083	0.075	0.075	0.057	0.076	0.076	0.073	0.076	0.076
1989	0.071	0.077	0.077	0.135	0.079	0.079	0.134	0.079	0.079
1990	0.314	0.074	0.074	0.317	0.087	0.087	0.317	0.086	0.087
1991	0.276	0.117	0.117	0.122	0.086	0.086	0.131	0.088	0.088
1992	0.213	0.154	0.154	0.331	0.124	0.124	0.328	0.125	0.126
1993	0.116	0.075	0.075	0.118	0.070	0.070	0.118	0.070	0.070
Sablefish									
1985	0.637	0.410	0.624	0.536	0.367	0.502	0.621	0.395	0.596
1986	0.617	0.420	0.591	0.518	0.391	0.495	0.602	0.409	0.570
1987	0.712	0.446	0.675	0.634	0.427	0.572	0.699	0.437	0.652
1988	0.979	0.824	0.957	0.973	0.803	0.902	0.979	0.816	0.947
1989	0.869	0.681	0.846	0.800	0.605	0.723	0.863	0.656	0.830
1990	0.702	0.667	0.698	0.724	0.648	0.702	0.705	0.661	0.699
1991	0.992	0.853	0.979	1.153	0.753	1.106	1.011	0.851	0.994
1992	1.022	0.889	1.008	1.202	0.664	1.182	1.040	0.882	1.024
1993	0.964	0.687	0.941	0.978	0.595	0.969	0.968	0.682	0.945
Pacific Cod									
1985	0.164	0.122	0.128	0.136	0.146	0.146	0.160	0.145	0.145
1986	0.160	0.123	0.134	0.193	0.112	0.113	0.162	0.114	0.117
1987	0.211	0.175	0.185	0.171	0.172	0.172	0.205	0.173	0.177
1988	0.216	0.148	0.158	0.277	0.129	0.134	0.240	0.134	0.140
1989	0.214	0.132	0.140	0.232	0.137	0.148	0.228	0.136	0.146
1990	0.207	0.149	0.158	0.259	0.147	0.180	0.253	0.148	0.173
1991	0.278	0.220	0.234	0.267	0.193	0.232	0.268	0.203	0.227
1992	0.235	0.264	0.255	0.236	0.199	0.221	0.236	0.226	0.231
1993	0.187	0.155	0.169	0.249	0.151	0.196	0.241	0.153	0.188
Flatfish									
1985	0.175	0.128	0.135	0.402	0.236	0.291	0.282	0.140	0.158
1986	0.460	0.132	0.137	0.239	0.146	0.149	0.263	0.144	0.147
1987	0.294	0.101	0.112	0.407	0.110	0.139	0.400	0.109	0.137
1988	0.237	0.116	0.118	0.254	0.140	0.146	0.253	0.137	0.142
1989	0.219	0.100	0.101	0.158	0.128	0.128	0.160	0.124	0.125
1990	0.192	0.092	0.092	0.168	0.122	0.123	0.170	0.114	0.115
1991	0.195	0.128	0.128	0.241	0.137	0.137	0.230	0.136	0.136
1992	0.208	0.104	0.105	0.204	0.106	0.108	0.205	0.106	0.107
1993	0.347	0.145	0.147	0.241	0.103	0.111	0.245	0.109	0.116

Table 17.--Continued.

Species/Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
	Hook&Line	Trawl	All	Hook&Line	Trawl	All	Hook&Line	Trawl	All
Rockfish									
1985	0.442	0.176	0.257	0.172	0.142	0.144	0.425	0.165	0.228
1986	0.428	0.235	0.268	0.402	0.274	0.280	0.427	0.240	0.269
1987	0.436	0.242	0.271	0.537	0.163	0.193	0.446	0.227	0.257
1988	0.477	0.260	0.279	0.526	0.200	0.232	0.484	0.253	0.273
1989	0.461	0.297	0.308	0.427	0.155	0.169	0.454	0.263	0.275
1990	0.418	0.195	0.211	0.345	0.126	0.129	0.406	0.157	0.166
1991	0.370	0.225	0.245	0.253	0.204	0.207	0.351	0.218	0.233
1992	0.431	0.307	0.318	0.419	0.118	0.135	0.427	0.226	0.242
1993	0.424	0.156	0.213	0.211	0.176	0.178	0.367	0.151	0.174
Atka Mackerel									
1986	0.000	0.000	0.000	0.000	0.210	0.210	0.000	0.210	0.210
1987	0.000	0.000	0.000	0.000	0.210	0.210	0.000	0.210	0.210
1988	0.000	0.137	0.137	0.000	0.176	0.176	0.000	0.175	0.175
1989	0.159	0.158	0.158	0.000	0.158	0.158	0.159	0.158	0.158
1990	0.000	0.106	0.106	0.000	0.107	0.107	0.000	0.107	0.107
1991	0.000	0.125	0.125	0.000	0.134	0.134	0.000	0.133	0.133
1992	0.202	0.125	0.125	0.202	0.125	0.125	0.202	0.125	0.125
1993	0.000	0.130	0.130	0.202	0.130	0.130	0.202	0.130	0.130

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 18.--Percentage distribution of landings in the domestic groundfish fisheries off Alaska among species by area, 1985-93.

Year	Species	Gulf of Alaska	Bering Sea/Aleutians	All Alaska
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	
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	

Table 18.--Continued.

Year	Species	Gulf of Alaska	Bering Sea/Aleutians	All Alaska
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	37.4	79.2	73.9
	Sablefish	11.2	0.2	1.6
	Pacific cod	34.8	10.5	13.6
	Flatfish	7.4	7.8	7.8
	Rockfish	7.1	0.5	1.3
	Atka mackerel	1.5	1.5	1.5
	Other	0.5	0.3	0.3
1992	Pollock	33.2	73.9	68.8
	Sablefish	8.6	0.1	1.2
	Pacific cod	30.0	9.8	12.3
	Flatfish	12.4	11.4	11.6
	Rockfish	9.2	0.9	1.9
	Atka mackerel	5.5	2.6	2.9
	Other	1.1	1.3	1.3
1993	Pollock	47.4	80.9	75.7
	Sablefish	10.6	0.1	1.4
	Pacific cod	25.2	8.5	10.5
	Flatfish	8.9	7.7	7.7
	Rockfish	4.3	0.8	1.4
	Atka mackerel	0.6	1.8	2.8
	Other	3.0	0.2	0.5

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 landings in the domestic groundfish fisheries off Alaska among areas by species, 1985-93.

Species	Year	Gulf of Alaska	Bering Sea/Aleutians	Unknown
All Groundfish				
	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	12.8	87.2	0.0
	1992	12.3	87.7	0.0
	1993	12.0	86.3	1.7
Pollock				
	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
	1992	5.9	94.1	0.0
	1993	7.5	92.3	0.2
Sablefish				
	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	88.0	11.7	0.3
	1992	91.0	8.4	0.6
	1993	89.3	8.8	1.9
Pacific cod				
	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	32.8	67.2	0.0
	1992	30.0	70.0	0.0
	1993	28.9	70.1	1.0

Table 19.--Continued.

Species	Year	Gulf of Alaska	Bering Sea/Aleutians	Unknown
Flatfish				
	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	12.2	87.7	0.1
	1992	13.2	86.7	0.1
	1993	13.9	86.1	0.0
Rockfish				
	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	70.1	29.9	0.0
	1992	58.2	41.8	0.0
	1993	36.1	48.7	15.2
Atka mackerel				
	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	12.4	87.6	0.0
	1992	23.2	76.8	0.0
	1993	2.7	53.8	43.5

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.--Percentage distribution of landings in the domestic groundfish fisheries off Alaska among gear groups by area and species, 1985-93.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Trawl	Hook&Line	Other	Trawl	Hook&Line	Other	Trawl	Hook&Line	Other
All Groundfish										
	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	79.2	15.0	5.8	95.2	4.5	0.3	93.1	5.9	1.0
	1992	80.5	15.3	4.2	93.1	6.0	0.9	91.5	7.2	1.3
	1993	81.1	14.6	4.3	95.3	4.6	0.1	93.6	5.7	0.7
Pollock										
	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	100.0	0.0	0.0	100.0	0.0	0.0
	1992	99.7	0.1	0.2	99.8	0.2	0.0	99.8	0.2	0.0
	1993	99.9	0.0	0.1	100.0	0.0	0.0	100.0	0.0	0.0
Sablefish										
	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	9.9	90.1	0.0	15.3	84.7	0.0	10.5	89.5	0.0
	1992	11.0	89.0	0.0	3.6	95.9	0.5	10.3	89.7	0.0
	1993	8.6	91.4	0.0	2.3	97.7	0.0	8.0	92.0	0.0
Pacific cod										
	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	73.2	10.2	16.6	57.3	40.1	2.6	62.5	30.3	7.2
	1992	66.1	20.2	13.7	39.8	51.7	8.5	44.6	42.3	10.1
	1993	69.5	14.9	15.6	52.5	45.6	1.9	57.8	36.4	5.8
Flatfish										
	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	99.4	0.6	0.0	99.7	0.3	0.0	99.6	0.4	0.0
	1992	98.7	1.3	0.0	98.7	1.3	0.0	98.7	1.3	0.0
	1993	98.2	1.5	0.3	94.6	5.4	0.0	95.1	4.9	0.0

Table 20.--Continued.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Trawl	Hook&Line	Other	Trawl	Hook&Line	Other	Trawl	Hook&Line	Other
Rockfish										
	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	86.6	13.3	0.1	94.1	5.9	0.0	88.8	11.1	0.1
	1992	89.3	10.7	0.0	94.5	5.5	0.0	91.4	8.6	0.0
	1993	77.9	20.2	1.9	95.1	4.9	0.0	89.4	9.9	0.7
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
	1992	100.0	0.0	0.0	99.9	0.1	0.0	99.9	0.1	0.0
	1993	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 21.--Percentage distribution of the ex-vessel value of the domestic groundfish catch off Alaska among species by area, 1985-93.

Year	Species	Gulf of Alaska	Bering Sea/Aleutians	All Alaska
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	18.8
	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	
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	

Table 21.--Continued.

Year	Species	Gulf of Alaska	Bering Sea/Aleutians	All Alaska
1991	Pollock	16.5	62.9	50.5
	Sablefish	41.4	2.2	12.7
	Pacific cod	30.7	21.7	24.1
	Flatfish	3.6	9.9	8.2
	Rockfish	6.6	0.9	2.4
	Atka mackerel	0.7	1.9	1.6
	Other	0.5	0.5	0.5
1992	Pollock	19.2	68.3	57.6
	Sablefish	32.6	1.0	7.9
	Pacific cod	28.7	16.2	18.9
	Flatfish	4.9	9.2	8.2
	Rockfish	11.0	0.9	3.1
	Atka mackerel	2.6	2.4	2.5
	Other	1.0	2.0	1.8
1993	Pollock	17.3	64.7	52.0
	Sablefish	48.9	1.6	13.2
	Pacific cod	20.9	19.2	19.4
	Flatfish	6.4	9.8	8.8
	Rockfish	4.4	1.6	2.4
	Atka mackerel	0.4	2.6	3.5
	Other	1.7	0.5	0.7

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 22.--Percentage distribution of the ex-vessel value of the domestic groundfish catch off Alaska among areas by species, 1985-93.

Species	Year	Gulf of Alaska	Bering Sea/Aleutians	Unknown
All Groundfish				
	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	26.5	73.4	0.1
	1992	21.8	78.1	0.1
	1993	24.0	73.7	2.3
Pollock				
	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	8.7	91.3	0.0
	1992	7.3	92.7	0.0
	1993	8.0	91.8	0.2
Sablefish				
	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	86.6	13.0	0.4
	1992	89.6	9.7	0.7
	1993	88.9	9.0	2.1
Pacific cod				
	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	33.8	66.2	0.0
	1992	33.1	66.9	0.0
	1993	25.9	73.0	1.1

Table 22.--Continued.

Species	Year	Gulf of Alaska	Bering Sea/Aleutians	Unknown
Flatfish				
	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	11.5	88.5	0.0
	1992	13.0	86.9	0.1
	1993	17.6	82.3	0.1
Rockfish				
	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	73.5	26.5	0.0
	1992	76.6	23.4	0.0
	1993	44.3	49.8	5.9
Atka mackerel				
	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	11.7	88.3	0.0
	1992	23.2	76.8	0.0
	1993	2.7	53.8	43.5

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 23.--Percentage distribution of the ex-vessel value of the domestic groundfish catch off Alaska among gear groups by area and species, 1985-93.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Trawl	Hook&Line	Other	Trawl	Hook&Line	Other	Trawl	Hook&Line	Other
All Groundfish										
	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	50.7	43.3	5.9	86.7	12.7	0.6	77.1	20.9	2.0
	1992	59.3	36.9	3.8	86.5	12.0	1.5	80.5	17.5	2.0
	1993	43.8	51.5	4.7	85.5	14.2	0.3	75.5	23.1	1.4
Pollock										
	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	99.9	0.1	0.0	99.9	0.1	0.0
	1992	99.7	0.1	0.2	99.5	0.5	0.0	99.5	0.5	0.0
	1993	99.9	0.0	0.1	100.0	0.0	0.0	100.0	0.0	0.0
Sablefish										
	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	8.6	91.4	0.0	11.7	88.3	0.0	9.0	91.0	0.0
	1992	9.7	90.3	0.0	2.0	97.5	0.5	8.8	91.1	0.1
	1993	6.3	93.7	0.0	1.4	98.6	0.0	5.8	94.2	0.0
Pacific cod										
	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	68.6	12.1	19.3	49.6	47.8	2.6	56.0	35.7	8.3
	1992	68.5	18.7	12.8	35.8	55.4	8.8	46.7	43.2	10.1
	1993	63.6	16.4	20.0	40.4	57.9	1.7	46.9	46.6	6.5
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	99.0	1.0	0.0	99.4	0.6	0.0	99.3	0.7	0.0
	1992	97.4	2.6	0.0	97.5	2.5	0.0	97.5	2.5	0.0
	1993	96.3	3.4	0.3	88.3	11.7	0.0	89.7	10.2	0.1

Table 23.--Continued.

Species	Year	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
		Trawl	Hook&Line	Other	Trawl	Hook&Line	Other	Trawl	Hook&Line	Other
Rockfish										
	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	79.7	20.1	0.2	92.8	7.2	0.0	83.1	16.8	0.1
	1992	86.7	13.7	0.0	82.9	17.1	0.0	85.5	14.5	0.0
	1993	56.9	40.1	3.0	94.2	5.8	0.0	77.9	20.8	1.3
Atka mackerel										
	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
	1992	100.0	0.0	0.0	99.2	0.1	0.1	99.9	0.1	0.0
	1993	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 24.--Number of vessels that landed groundfish in the domestic fisheries off Alaska by area and gear, 1986-93.

Gear	1986	1987	1988	1989	1990	1991	1992	1993
Gulf of Alaska								
Hook&Line	965	1,671	1,529	1,352	1,610	1,842	1,904	1,613
Pot	21	22	46	22	103	167	234	114
Trawl	61	113	122	135	174	214	234	206
Other	7	24	15	3	34	11	16	30
All	1,036	1,784	1,669	1,494	1,833	2,099	2,215	1,845
Bering Sea/Aleutian Islands								
Hook&Line	60	121	110	78	105	196	166	124
Pot	9	11	12	5	10	41	73	26
Trawl	45	74	101	129	135	169	191	176
Other	4	1	0	1	2	1	7	0
All	111	204	220	209	248	391	402	317
All Alaska								
Hook&Line	1,356	1,704	1,549	1,363	1,636	1,902	1,948	1,649
Pot	24	31	51	26	111	204	285	132
Trawl	80	153	184	205	225	262	296	293
Other	15	25	15	4	35	12	23	30
All	1,449	1,859	1,749	1,576	1,914	2,227	2,341	1,977

Note: Includes motherships, but does not include catcher boats delivering exclusively to motherships.

Source: Blend estimates and fish tickets, National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802-1668.

Table 25.--Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, gear, and vessel length class, 1986-93.

Gear/Length (feet)	1986	1987	1988	1989	1990	1991	1992	1993
Gulf of Alaska								
Hook&Line								
< 60	835	1,476	1,370	1,196	1,409	1,624	1,648	1,373
60-84	89	136	114	103	131	144	144	122
85-109	15	19	14	10	15	29	37	25
110-134	4	6	7	10	13	8	23	22
135-159	1	2	0	0	3	1	8	7
160-184	1	1	4	4	5	2	9	8
> 184	0	0	0	1	5	0	2	3
Unknown	20	31	20	28	29	34	33	53
Pot								
< 60	5	10	34	17	60	111	160	85
60-84	8	4	1	1	27	42	45	25
85-109	5	3	6	2	10	10	10	3
110-134	1	1	2	0	3	1	3	0
135-159	0	0	1	0	0	1	7	1
160-184	2	1	2	1	1	0	4	0
> 184	0	1	0	0	1	0	2	0
Unknown	0	2	0	1	1	2	3	0
Trawl								
< 60	18	35	37	31	43	45	62	72
60-84	14	30	31	35	42	55	57	50
85-109	10	19	18	24	23	30	29	26
110-134	9	14	19	18	24	29	31	19
135-159	2	4	3	4	7	7	9	8
160-184	3	6	6	7	11	11	13	7
> 184	3	4	6	14	23	34	23	16
Unknown	2	1	2	2	1	3	10	8
Other								
< 60	3	21	13	3	24	8	13	25
60-84	0	0	0	0	3	1	1	3
85-109	1	0	0	0	3	0	1	1
110-134	0	0	1	0	0	0	0	0
135-159	0	0	0	0	0	0	1	1
160-184	0	0	0	0	1	0	0	0
> 184	0	0	0	0	1	0	0	0
Unknown	3	3	1	0	2	2	0	0
All Gear								
< 60	850	1,512	1,419	1,235	1,497	1,712	1,769	1,481
60-84	107	160	141	135	167	198	213	169
85-109	28	39	38	34	42	57	65	48
110-134	14	19	28	28	39	37	54	39
135-159	3	6	4	4	10	8	19	13
160-184	6	7	11	12	16	13	24	15
> 184	3	4	6	15	29	34	25	19
Unknown	25	37	22	31	33	40	46	61

Table 25.--Continued.

Gear/Length (feet)	1986	1987	1988	1989	1990	1991	1992	1993
Bering Sea/Aleutian Islands								
Hook&Line								
< 60	25	64	57	33	43	102	66	38
60-84	29	44	33	28	32	46	40	27
85-109	4	5	6	3	4	10	11	11
110-134	1	3	8	9	12	17	22	21
135-159	1	2	1	1	2	4	9	7
160-184	0	1	4	3	7	12	14	12
> 184	0	0	1	1	3	1	3	4
Unknown	0	2	0	0	2	4	1	4
Pot								
< 60	0	2	2	1	0	2	4	2
60-84	2	0	1	1	1	6	9	4
85-109	2	3	4	1	2	11	23	9
110-134	3	3	2	0	1	11	11	6
135-159	0	1	1	0	1	2	11	2
160-184	2	2	2	2	5	6	12	1
> 184	0	0	0	0	0	1	2	0
Unknown	0	0	0	0	0	2	1	2
Trawl								
< 60	2	6	5	9	5	2	9	10
60-84	7	10	13	19	13	26	33	27
85-109	11	14	18	25	14	27	24	22
110-134	12	21	28	28	30	35	39	36
135-159	3	4	4	5	6	9	8	9
160-184	4	6	10	9	14	14	20	15
> 184	3	7	22	30	45	49	46	40
Unknown	3	6	1	4	8	7	12	17
Other								
< 60	1	0	0	0	0	0	2	0
60-84	0	0	0	0	0	0	0	0
85-109	2	0	0	0	1	0	0	0
110-134	1	0	0	0	0	1	2	0
135-159	0	0	0	0	0	0	2	0
> 184	0	0	0	0	1	0	1	0
Unknown	0	1	0	0	0	0	0	0
All Gear								
< 60	38	72	63	41	47	105	80	49
60-84	15	53	47	47	45	77	74	58
85-109	14	22	28	28	20	45	55	41
110-134	4	25	37	37	43	59	64	60
135-159	6	7	6	6	9	14	28	17
160-184	3	9	16	14	26	29	38	26
> 184	3	7	22	31	48	51	49	43
Unknown	28	9	1	5	10	11	14	23

Table 25.--Continued.

Gear/Length (feet)	1986	1987	1988	1989	1990	1991	1992	1993
All Alaska								
Hook&Line								
< 60	1,213	1,502	1,381	1,203	1,427	1,652	1,664	1,391
60-84	91	139	115	103	133	147	148	126
85-109	17	19	16	11	15	30	39	26
110-134	4	7	9	12	14	18	30	25
135-159	1	2	1	1	4	5	12	8
160-184	1	2	5	4	7	12	17	12
> 184	0	0	1	1	6	1	5	4
Unknown	29	33	21	28	30	37	33	57
Pot								
< 60	5	12	35	18	60	112	160	85
60-84	8	4	2	2	28	46	48	25
85-109	5	4	7	3	11	21	30	10
110-134	4	4	3	0	3	11	12	6
135-159	0	1	1	0	1	2	15	3
160-184	2	3	3	2	6	6	14	1
> 184	0	1	0	0	1	1	2	0
Unknown	0	2	0	1	1	4	4	2
Trawl								
< 60	20	39	40	36	46	47	66	78
60-84	18	36	41	44	45	62	62	57
85-109	15	27	29	42	28	37	32	32
110-134	12	26	34	32	31	35	41	36
135-159	3	4	4	5	7	9	10	11
160-184	4	7	11	10	15	14	20	15
> 184	3	8	22	30	45	50	46	40
Unknown	5	6	3	6	8	8	19	24
Other								
< 60	8	21	13	3	24	8	15	25
60-109	3	0	0	0	7	1	2	4
110-184	1	0	1	0	1	1	5	1
> 184	0	0	0	0	1	0	1	0
Unknown	3	4	1	1	2	2	0	0
All Gear								
< 60	1,234	1,540	1,433	1,246	1,517	1,740	1,786	1,503
60-84	113	168	150	144	172	210	218	179
85-109	33	48	51	53	48	73	86	61
110-134	18	33	45	44	47	60	72	64
135-159	4	7	6	6	12	14	32	18
160-184	7	11	18	16	27	29	41	26
> 184	3	8	22	31	51	52	50	43
Unknown	37	44	24	36	40	49	56	83

Note: Includes motherships, but does not include catcher boats delivering exclusively to motherships.

Source: Blend estimates and fish tickets, National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802-1668.

Table 26.--Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, species, mode of operation, and gear, 1986-93.

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	0	0	20	0	31	4	62	3
1991	0	0	34	0	26	2	88	1
1992	0	0	29	0	47	10	129	8
1993	2	0	6	0	15	3	104	1
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	32	0	753	1	24	2
1991	19	0	33	0	1,014	1	39	2
1992	34	0	28	0	1,099	3	49	2
1993	50	0	27	0	946	0	42	3
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	21	4	37	1	729	97	116	25
1991	14	1	54	0	840	163	145	7
1992	41	9	46	1	935	223	169	12
1993	32	1	33	1	628	113	150	4
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	3	0	32	0	21	2	64	2
1991	4	0	41	0	16	0	80	0
1992	12	0	41	0	29	0	95	1
1993	11	0	31	0	9	0	68	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	26	1	31	0	1,035	1	38	4
1991	18	0	42	0	1,251	6	54	6
1992	34	1	37	0	1,334	9	64	2
1993	49	0	28	0	1,170	3	46	24
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	0	0
1991	0	0	7	0	1	0	0	0
1992	0	0	13	0	0	0	3	0
1993	1	0	14	0	0	0	1	0

Table 26.--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	1	1,586	98	132	33
1991	23	1	63	0	1,825	166	152	11
1992	51	9	52	1	1,871	225	187	15
1993	56	1	37	1	1,566	113	171	29
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	1	0	60	0	1	0	39	1
1991	10	1	67	0	4	0	74	1
1992	12	0	67	2	2	1	115	1
1993	9	0	62	0	1	0	87	0
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	16	0	30	0	49	0	3	0
1991	29	1	41	0	101	0	7	0
1992	36	2	21	2	84	3	13	0
1993	53	0	13	0	59	2	1	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	61	1	58	5	65	1
1991	41	13	79	0	141	28	97	1
1992	59	21	77	2	96	63	128	2
1993	55	3	62	0	21	23	98	0
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	18	1	46	0	32	0	25	1
1991	15	0	70	0	14	0	56	1
1992	36	1	65	1	38	0	101	0
1993	51	0	56	0	42	0	63	0
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	20	0	38	0	47	0	29	0
1991	26	3	54	0	51	0	14	0
1992	38	2	52	1	70	2	50	0
1993	49	0	45	0	52	0	18	0

Table 26.--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	0	0	25	0	0	0	9	0
1991	0	1	32	0	0	0	4	0
1992	5	1	37	0	0	0	21	1
1993	6	1	31	0	1	0	6	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	69	1
1991	44	13	84	0	164	28	100	1
1992	61	21	83	4	126	63	139	3
1993	61	3	72	0	71	23	107	0
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	1	0	61	0	31	4	87	4
1991	10	1	71	0	30	2	116	2
1992	12	0	72	2	49	11	181	9
1993	9	0	63	0	16	3	152	1
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	30	1	34	0	757	1	27	2
1991	32	1	51	0	1,034	1	44	2
1992	48	2	37	2	1,111	6	60	2
1993	59	0	31	0	967	2	43	3
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	33	9	63	1	771	100	147	26
1991	43	13	82	0	935	188	183	8
1992	68	25	82	3	994	269	233	14
1993	57	4	67	1	657	128	207	4
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	20	1	46	0	51	2	80	3
1991	16	0	73	0	29	0	106	1
1992	39	1	67	1	59	0	150	1
1993	52	0	59	0	47	0	115	2

Table 26.--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	31	1	41	0	1,047	1	66	4
1991	32	3	60	0	1,267	6	67	6
1992	49	3	61	1	1,343	11	98	2
1993	58	0	53	0	1,188	3	58	24
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	0	0	25	0	0	0	9	0
1991	0	1	34	0	1	0	4	0
1992	5	1	38	0	0	0	21	1
1993	6	1	34	0	1	0	6	0
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	1,610	101	160	34
1991	47	13	86	0	1,871	191	191	12
1992	73	25	87	5	1,904	271	242	18
1993	66	4	74	1	1,601	128	223	29

Note: Includes motherships, but does not include catcher boats delivering exclusively to motherships.

Source: Blend estimates and fish tickets, National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802-1668.

Table 27.--Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, gear, mode of operation, and residency, 1986-93.

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	1,311	80	71	24
	Other	21	3	43	1	249	18	61	7
	Unknown	0	1	0	0	26	0	0	2
1991	Alaska	4	0	9	0	1,505	144	79	7
	Other	18	1	53	0	291	20	72	2
	Unknown	1	0	0	0	29	2	1	2
1992	Alaska	12	0	10	0	1,525	199	82	14
	Other	39	8	41	1	315	24	98	1
	Unknown	0	1	1	0	31	2	7	0
1993	Alaska	14	0	8	0	1,269	105	88	26
	Other	42	1	28	1	245	8	76	3
	Unknown	0	0	1	0	52	0	7	0
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
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	11	0
	Other	21	5	70	1	40	3	56	1
	Unknown	1	0	0	0	0	0	2	0
1991	Alaska	8	1	9	0	87	8	14	0
	Other	36	11	75	0	75	20	83	1
	Unknown	0	1	0	0	2	0	3	0

Table 27.--Continued.

Year	Residency	At-sea				Shore-based			
		Hook&Line	Pot	Trawl	Other	Hook&Line	Pot	Trawl	Other
1992	Alaska	12	0	14	2	58	13	21	2
	Other	49	21	68	2	67	50	113	1
	Unknown	0	0	1	0	1	0	5	0
1993	Alaska	13	0	9	0	25	8	17	0
	Other	48	3	62	0	42	13	82	0
	Unknown	0	0	1	0	4	2	8	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	1,327	81	75	24
	Other	24	8	72	1	257	20	83	8
	Unknown	1	1	0	0	26	0	2	2
1991	Alaska	9	1	9	0	1,527	150	82	7
	Other	37	11	77	0	313	39	105	3
	Unknown	1	1	0	0	31	2	4	2
1992	Alaska	18	0	14	2	1,540	202	89	16
	Other	55	24	72	3	333	67	141	2
	Unknown	0	1	1	0	31	2	12	0
1993	Alaska	16	0	9	0	1,284	106	93	26
	Other	50	4	64	1	261	20	115	3
	Unknown	0	0	1	0	56	2	15	0

Note: Includes motherships, but does not include catcher boats delivering exclusively to motherships.

Source: Blend estimates and fish tickets, National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802-1668.

Table 28.--Number of vessels that landed groundfish in the domestic fisheries off Alaska by area, gear, and month, 1986-93.

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	20	36	33	18	12	10	13	27	37	25	31
1991	46	62	111	89	3	3	0	1	0	13	26	34
1992	72	138	162	85	1	2	1	4	12	7	0	0
1993	15	81	107	6	3	1	0	0	0	0	0	0
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	64	58	131	621	1,031	765	53	172	174	39	45	40
1991	102	135	277	277	1,400	485	79	63	650	44	56	31
1992	169	245	349	225	851	1,206	183	69	558	467	47	33
1993	88	117	185	69	886	942	28	36	633	67	52	49
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	76	99	151	94	25	35	83	26	33	70	1	0
1992	89	143	178	87	43	75	74	37	29	72	11	2
1993	38	130	154	69	4	60	80	46	7	77	23	10
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	224	294	534	451	1,429	523	162	91	681	127	84	67
1992	313	522	682	396	893	1,282	258	109	595	541	58	35
1993	141	324	442	145	895	1,002	117	85	643	146	76	60

Table 28.--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	11	13	11	7
1992	12	4	3	10	33	25	27	31	15	0	0	0
1993	2	3	6	17	11	0	1	0	0	0	0	0
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	34	49	123	124	33	39	42	38
1992	31	35	49	72	64	85	91	111	43	1	0	0
1993	43	43	55	65	73	69	41	30	7	5	5	4
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	89	74	73	75	64	69	86	82	64	34
1991	121	121	106	89	81	118	115	110	91	28	3	0
1992	120	143	129	100	85	119	128	126	93	17	14	29
1993	91	138	133	120	33	31	21	121	122	89	17	15
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	102	81	108	124	131	123	122	117	93	56
1991	136	146	137	130	114	167	246	242	135	80	55	45
1992	158	180	181	177	173	228	248	263	150	18	14	29
1993	132	184	193	200	117	100	63	151	129	94	22	19

Table 28.--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	20	36	33	19	12	13	16	31	41	26	31
1991	46	63	115	91	3	4	12	11	11	26	35	40
1992	83	141	163	90	34	26	27	32	27	7	0	0
1993	16	81	112	22	13	1	1	0	0	0	0	0
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	75	69	141	625	1,049	806	116	224	205	69	73	61
1991	113	157	299	314	1,424	510	177	182	682	83	98	69
1992	192	275	384	295	888	1,271	253	163	592	471	47	34
1993	124	157	230	133	906	975	69	65	655	72	57	53
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	120	86	111	112	131	134	86	34
1991	187	199	206	163	93	145	147	135	117	78	4	0
1992	203	247	240	168	112	163	176	148	109	87	24	31
1993	128	254	253	168	37	90	96	147	126	138	40	24
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	1,180	913	248	356	367	243	185	126
1991	346	417	615	559	1,520	657	333	326	807	187	137	111
1992	454	656	780	547	1,023	1,458	456	337	722	560	71	65
1993	264	488	589	322	956	1,065	174	215	784	212	98	78

Note: Includes motherships, but does not include catcher boats delivering exclusively to motherships.

Source: Blend estimates and fish tickets, National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802-1668.

Table 29.--Number of domestic catcher-processors and motherships in the groundfish fishery off Alaska reporting catch to National Marine Fisheries Service by area, gear, and month, 1986-93.

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
1992	1	0	0	0	0	1	0	2	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
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	6	4	6	1	12	11	6	0	1	0	0	0
1992	19	14	16	3	22	21	13	13	19	14	1	0
1993	13	10	10	0	48	38	0	0	2	1	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	4	7	30	20	12	3	12	6	13	27	0	0
1992	7	12	28	22	18	0	17	14	0	16	9	0
1993	0	9	22	26	0	0	19	8	1	8	2	2
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	10	11	36	21	25	14	17	6	14	27	1	1
1992	27	26	44	25	40	22	30	29	19	30	10	0
1993	13	19	32	26	48	38	19	8	3	9	2	2

Table 29.--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	6	5	3	3
1992	0	0	0	0	10	11	13	15	12	0	0	0
1993	0	0	1	2	1	0	1	0	0	0	0	0
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	21	23	33	30	29	30	29	29
1992	28	27	40	43	47	39	48	54	40	0	0	0
1993	39	37	47	51	47	41	19	8	6	5	4	4
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	44	52	63	59	54	56	21	3	0
1992	59	65	55	49	45	58	48	57	27	17	14	19
1993	64	65	54	47	32	27	20	56	52	32	17	15
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	87	68	73	86	96	89	91	56	35	32
1992	83	91	95	87	96	108	109	123	78	17	14	19
1993	99	102	101	99	80	68	40	64	58	37	21	19

Table 29.--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	6	5	3	3
1992	1	0	0	0	10	11	13	15	12	0	0	0
1993	0	0	1	2	1	0	1	0	0	0	0	0
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	33	30	30	30	29	29
1992	38	38	43	46	51	53	53	57	50	14	1	0
1993	46	44	48	51	56	50	19	8	8	6	4	4
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	66	56	53	63	62	60	63	35	3	0
1992	61	66	65	58	47	58	60	58	27	31	22	19
1993	64	65	64	55	32	27	34	58	52	32	19	16
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	91	81	78	91	99	95	99	70	35	32
1992	95	103	108	99	102	122	126	127	88	45	23	19
1993	106	109	111	107	87	77	53	66	60	38	23	20

Table 29.--Continued.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Number of Motherships												
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	2	1	0	0	0	0
1992	0	1	1	1	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	1	0	0	0	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	8	8	7	7	6	6	1	0	0
1992	8	12	13	5	6	16	14	13	3	0	0	2
1993	16	13	9	5	2	1	0	17	19	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	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	8	8	7	8	6	6	1	0	0
1992	8	12	14	6	6	16	15	14	3	0	0	2
1993	16	13	9	5	2	2	0	17	19	3	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
1992	1	3	3	1	1	1	1	1	0	0	0	0
1993	0	1	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	2	1	2	1	0	0	0	0
1992	1	3	3	3	3	3	0	0	0	0	0	0
1993	0	1	1	0	1	1	0	0	0	0	0	0

Table 29.--Continued.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Number of Motherships												
All Alaska												
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	11	9	8	7	7	6	6	3	0	0
1992	10	13	16	5	6	16	14	13	3	1	0	2
1993	16	14	10	5	2	2	1	17	19	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	12	10	10	8	8	6	6	3	0	0
1992	10	14	19	8	9	19	15	14	3	1	0	2
1993	16	14	10	5	3	3	1	17	19	3	0	0

Note: Catcher-processors and motherships that were not required to report weekly to NMFS are not included. The numbers excluded have decreased as reporting requirements have been expanded.

Source: Blend estimates and fish tickets, National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802-1668.

Table 30.--Production of groundfish products in the fisheries off Alaska by species, 1990-93, quantity in metric tons, product weight and value in million dollars.

Species/ Product	1990		1991		1992	
	Quantity	Value	Quantity	Value	Quantity	Value
Pollock						
Whole	1,356	\$ 1.1	2,001	\$ 0.8	3,782	\$ 2.6
H & G	3,315	3.0	3,053	2.7	3,885	2.9
Fillets	74,879	171.4	72,164	214.6	42,320	111.2
Minced	13,553	15.8	10,742	16.8	14,811	15.8
Surimi	177,099	277.2	139,844	452.2	162,786	537.8
Roe	12,715	96.9	21,651	213.8	17,509	198.8
Fish meal	57,180	31.6	57,306	32.2	59,920	30.5
Other	4,318	<u>0.9</u>	7,214	<u>1.1</u>	8,339	<u>1.9</u>
Total		597.8		934.2		901.6
Pacific cod						
Whole	22,547	21.3	22,860	25.1	10,404	10.0
H & G	65,382	117.8	63,661	125.7	68,257	118.0
Fillets	16,827	60.4	18,329	91.4	14,941	66.0
Salted	10,387	35.7	11,241	43.1	4,659	16.1
Other	5,998	<u>10.5</u>	8,985	<u>10.8</u>	8,705	<u>11.7</u>
Total		245.4		296.1		221.8
Sablefish						
H & G	18,495	85.0	15,567	94.0	14,838	91.7
Other	222	<u>1.0</u>	571	<u>2.0</u>	267	<u>0.8</u>
Total		86.0		96.0		92.5
Flatfish						
Whole	11,870	17.1	34,436	27.4	30,585	21.2
H & G	19,295	38.9	28,407	64.6	33,813	55.4
Fillets	1,007	4.2	1,198	5.4	3,219	10.6
Kirimi	1,676	2.9	14,915	43.1	14,115	17.2
Other	85	<u>0.0</u>	1,676	<u>2.4</u>	2,036	<u>1.6</u>
Total		63.2		142.8		106.0
Rockfish						
Whole	917	2.0	4,647	6.4	2,439	3.1
H & G	22,595	51.8	8,364	16.1	14,591	31.8
Other	307	<u>0.8</u>	311	<u>0.4</u>	249	<u>0.5</u>
Total		54.5		22.8		35.5
Atka mackerel						
Whole	2,039	4.2	3,798	5.2	11,531	12.8
H & G	11,041	21.7	11,264	23.3	19,536	32.5
Other	5	<u>0.0</u>	245	<u>0.1</u>	977	<u>2.1</u>
Total		25.9		28.6		47.4
Total		\$1,072.8		\$1,520.4		\$1,404.8

Table 30.--Continued.

Species/ Product	1993	
	Quantity	Value
Pollock		
Whole	4,354	\$ 2.7
H & G	1,342	0.9
Filletts	67,755	150.0
Minced	16,274	14.5
Surimi	150,288	254.5
Roe	11,933	145.6
Fish meal	53,952	27.0
Other	11,537	<u>2.4</u>
Total		597.5
Pacific cod		
Whole	10,857	10.5
H & G	37,333	61.1
Filletts	12,537	47.4
Salted	6,598	16.5
Other	7,211	<u>8.5</u>
Total		144.1
Sablefish		
H & G	16,315	97.7
Other	97	<u>0.1</u>
Total		97.8
Flatfish		
Whole	28,752	22.0
H & G	36,510	43.4
Filletts	2,035	5.8
Kirimi	12,835	30.0
Other	1,312	<u>0.7</u>
Total		101.8
Rockfish		
Whole	5,324	5.0
H & G	11,581	30.7
Other	188	<u>0.6</u>
Total		36.3
Atka mackerel		
Whole	14,184	11.7
H & G	24,737	43.3
Other	31	<u>0.0</u>
Total		55.0
Total		<u>\$1,032.5</u>

H & G - Headed and gutted. Kirimi - sliced fish.

Source: National Marine Fisheries Service, Alaska and Northwest Regions.

Table 31.--Production of groundfish products in the fisheries off Alaska by species, product, and area, 1990-93, in 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
Filletts	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
Filletts	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
Filletts	(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

Table 31.--Continued.

Species/ Product	1992			1993		
	Gulf	Bering Sea & Aleutians	Total	Gulf	Bering Sea & Aleutians	Total
Pollock						
Whole	1,337	2,446	3,782	314	4,040	4,354
H & G	775	3,110	3,885	118	1,224	1,342
Filletts	6,593	35,728	42,320	11,494	56,261	67,755
Minced	982	13,828	14,811	3,182	13,092	16,274
Surimi	7,857	154,929	162,786	6,049	144,239	150,288
Roe	281	17,228	17,509	434	11,499	11,933
Fish meal	1,090	58,830	59,920	1,136	52,815	53,952
Fish oil	(d)	(d)	5,465	(d)	(d)	8,187
Other	69	2,805	2,874	(d)	(d)	3,350
Pacific cod						
Whole	8,839	1,565	10,404	8,273	2,584	10,857
H & G	10,870	57,386	68,257	4,603	32,730	37,333
Filletts	7,008	7,933	14,941	5,597	6,940	12,537
Minced	1,038	1,617	2,655	522	1,479	2,000
Salted	1,377	3,282	4,659	1,137	5,461	6,598
Roe	1,101	648	1,749	1,040	731	1,771
Fish meal	445	2,154	2,599	(d)	(d)	2,323
Other	810	892	1,702	492	624	1,117
Sablefish						
H & G	13,648	1,190	14,838	14,626	1,689	16,315
Other	254	15	267	77	19	97
Flatfish						
Whole	3,159	27,426	30,585	4,324	24,428	28,752
H & G	2,433	31,380	33,813	1,867	34,643	36,510
Filletts	1,851	1,368	3,219	1,975	61	2,035
Kirimi	260	13,855	14,115	(d)	(d)	12,835
Fish meal	140	1,527	1,667	24	1,004	1,027
Other	47	322	369	2	283	285
Rockfish						
Whole	2,039	400	2,439	5,023	301	5,324
H & G	8,015	6,577	14,591	3,347	8,235	11,581
Other	232	16	249	114	74	188
Atka mackerel						
Whole	(d)	(d)	11,531	(d)	(d)	14,184
H & G	7,184	12,352	19,536	3,874	20,863	24,737
Other	--	977	977	(d)	(d)	31

(d) - Withheld to avoid disclosure of individual companies.

H & G - Headed and gutted. Kirimi - sliced fish.

Source: National Marine Fisheries Service, Alaska Region.

Table 32.--Production of groundfish products in the fisheries off Alaska by species, product, and type of operation, 1990-93, in metric tons, product weight.

Species/ Product	1990			1991		
	At-sea	Shore-based	Total	At-sea	Shore-based	Total
Pollock						
Whole	429	927	1,356	671	1,329	2,001
H & G	3,034	281	3,315	3,006	47	3,053
Fillets	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
Fillets	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
Fillets	(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

Table 32.--Continued.

Species/ Product	1992			1993		
	At-sea	Shore-based	Total	At-sea	Shore-based	Total
Pollock						
Whole	1,773	2,009	3,782	3,969	385	4,354
H & G	3,251	634	3,885	1,226	116	1,342
Filletts	33,941	8,380	42,320	51,996	15,759	67,755
Minced	13,762	1,049	14,811	13,873	2,401	16,274
Surimi	91,472	71,314	162,786	74,949	75,340	150,288
Roe	12,943	4,567	17,509	10,126	1,807	11,933
Fish meal	32,278	27,642	59,920	26,378	27,574	53,952
Fish oil	(d)	(d)	5,465	1,403	6,785	8,187
Other	--	2,874	2,874	328	3,021	3,349
Pacific cod						
Whole	2,321	8,083	10,404	1,917	8,940	10,857
H & G	64,610	3,647	68,257	34,462	2,871	37,333
Filletts	7,496	7,444	14,941	4,033	8,504	12,537
Minced	1,459	1,196	2,655	949	1,051	2,000
Salted	(d)	(d)	4,659	.	6,598	6,598
Roe	695	1,054	1,749	635	1,136	1,771
Fish meal	1,561	1,038	2,599	595	1,728	2,323
Other	612	1,089	1,702	449	668	1,117
Sablefish						
H & G	3,662	11,176	14,838	4,164	12,151	16,315
Other	22	245	267	73	24	97
Flatfish						
Whole	30,043	543	30,585	28,367	385	28,752
H & G	33,192	622	33,813	35,809	700	36,510
Filletts	1,291	1,928	3,219	29	2,007	2,035
Kirimi	13,826	289	14,115	(d)	(d)	12,835
Fish meal	1,430	237	1,667	1,016	11	1,027
Other	34	335	369	283	2	285
Rockfish						
Whole	1,675	764	2,439	4,752	573	5,324
H & G	14,039	522	14,591	11,200	382	11,581
Other	177	72	249	114	73	188
Atka mackerel						
Whole	11,531	--	11,531	14,184	--	14,184
H & G	19,536	--	19,536	24,737	--	24,737
Other	955	22	977	(d)	(d)	31

(d) - Withheld to avoid disclosure of individual companies.

H & G - Headed and gutted. Kirimi - sliced fish.

Source: National Marine Fisheries Service, Alaska Region.

Table 33.--Annual wholesale prices of frozen fish blocks and fillets,
F.O.B. East Coast, 1976-93, 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
1992	215.6	69.6	81.0	88.3	239.0	310.0	230.4	133.9
1993	183.1	46.7	72.0	87.2	218.9	287.0	205.0	140.8

NA - Not available.

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

Table 34.--Monthly wholesale prices of selected frozen fish blocks and fillets, F.O.B. East Coast, 1991-93, in cents/lb.

Month	Blocks					Fillets			
	Cod	Minced cod	Alaska pollock Imported	Domestic	Whiting	Cod (Canada)	Cod (Iceland)	Flounder	Ocean perch
1991									
Jan.	242.5	69.0	112.5	116.5	119.0	265.0	310.0	NA	NA
Feb.	250.0	70.0	116.5	132.5	119.0	262.5	320.0	NA	NA
Mar.	252.5	70.0	142.5	150.0	123.5	262.5	320.0	TFQ	122.5
Apr.	247.5	80.0	157.5	167.5	135.0	262.5	320.0	TFQ	122.5
May	242.5	82.5	157.5	165.0	135.0	260.0	320.0	TFQ	122.5
Jun.	232.5	82.5	152.5	TFQ	140.0	247.5	320.0	TFQ	125.0
Jul.	222.5	85.0	152.5	152.5	135.0	240.0	310.0	TFQ	125.0
Aug.	195.0	85.0	147.5	152.5	122.5	235.0	310.0	227.5	TFQ
Sep.	215.0	88.0	137.5	145.0	115.0	247.5	310.0	227.5	TFQ
Oct.	222.5	90.0	132.5	140.0	115.0	247.5	310.0	222.5	TFQ
Nov.	225.0	92.5	122.5	140.0	110.0	245.0	310.0	222.5	TFQ
Dec.	207.5	90.0	112.5	117.5	110.0	237.5	310.0	220.0	TFQ
1992									
Jan.	207.5	87.5	112.5	117.5	110.0	235.0	310.0	TFQ	TFQ
Feb.	205.0	82.5	87.5	92.5	87.5	232.5	310.0	TFQ	TFQ
Mar.	205.0	82.5	82.5	92.5	87.5	235.0	310.0	TFQ	TFQ
Apr.	210.0	77.5	77.5	80.0	NQ	240.0	310.0	TFQ	135.0
May	210.0	75.0	77.5	77.5	NQ	240.0	310.0	TFQ	135.0
Jun.	210.0	NQ	72.5	TFQ	NQ	232.5	310.0	237.5	135.0
Jul.	225.0	61.0	72.5	TFQ	82.5	237.5	310.0	237.5	135.0
Aug.	225.0	61.0	75.0	88.5	82.5	245.0	310.0	240.0	135.0
Sep.	225.0	61.0	76.5	87.5	82.5	247.5	310.0	240.0	135.0
Oct.	227.5	61.0	76.5	97.5	87.5	250.0	310.0	227.5	135.0
Nov.	222.5	61.0	80.5	102.5	87.5	237.5	310.0	225.0	130.0
Dec.	217.5	56.0	80.5	102.5	87.5	235.0	310.0	205.0	130.0
1993									
Jan.	207.5	51.0	80.5	102.5	86.0	235.0	310.0	205.0	130.0
Feb.	207.5	41.5	76.5	97.5	84.0	232.5	285.0	202.5	130.0
Mar.	185.0	47.5	74.0	TFQ	84.0	230.0	285.0	202.5	130.0
Apr.	185.0	47.5	71.5	82.5	TFQ	225.0	285.0	202.5	137.5
May	180.0	47.5	71.5	85.0	TFQ	220.0	285.0	202.5	132.5
Jun.	180.0	47.5	71.5	85.0	88.5	212.5	285.0	NQ	147.5
Jul.	180.0	50.0	71.5	85.0	89.5	212.5	285.0	NQ	147.5
Aug.	177.5	47.5	71.5	85.0	88.0	212.5	285.0	NQ	150.0
Sep.	177.5	45.0	71.5	85.0	88.0	212.5	285.0	NQ	145.0
Oct.	172.5	45.0	71.5	85.0	88.0	212.5	285.0	215.0	145.0
Nov.	172.5	45.0	66.5	85.0	88.0	210.0	285.0	NQ	145.0
Dec.	172.5	45.0	66.5	85.0	88.0	212.5	285.0	NQ	150.0

Notes: 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 35.--Monthly producer prices for domestic Alaska pollock and Pacific cod products, F.O.B. Seattle, 1988-93, in cents/lb.¹

Month	Alaska pollock						Pacific cod		
	Blocks		Fillets				Fillets, shatter ³		
	16.5 lb	Minced	Shatter		IQF ²		Blocks 8-16 oz	16-32 oz	
			3-5 oz	4-6 oz	3-5 oz	4-6 oz			
1988									
Jan.	113	42	117	--	125	125	--	220	230
Feb.	114	--	108	--	129	129	--	--	--
Mar.	107	--	112	--	128	128	--	205	215
Apr.	103	--	117	--	125	125	--	205	214
May	106	--	119	--	129	129	--	205	212
Jun.	106	--	122	--	125	125	--	208	217
Jul.	104	--	121	--	129	129	--	198	208
Aug.	99	--	120	--	125	125	--	192	202
Sep.	95	--	118	--	125	125	--	195	205
Oct.	95	--	120	--	125	125	--	195	205
Nov.	88	--	128	--	126	126	--	195	205
Dec.	92	--	122	--	122	122	--	195	202
1989									
Jan.	92	--	110	--	125	125	--	189	194
Feb.	95	--	112	125	129	134	--	202	208
Mar.	96	--	116	125	125	138	--	200	208
Apr.	95	--	112	125	124	129	--	200	208
May	96	--	111	122	125	135	--	209	217
Jun.	94	--	110	125	125	135	--	205	212
Jul.	96	--	110	125	125	136	--	194	209
Aug.	94	--	108	120	125	130	--	198	208
Sep.	98	--	115	120	120	129	--	198	208
Oct.	100	--	115	122	124	131	--	202	208
Nov.	99	--	94	109	121	130	--	186	192
Dec.	100	--	105	111	118	130	--	188	192
1990									
Jan.	98	54	108	112	115	125	--	190	189
Feb.	100	54	108	112	114	125	--	192	190
Mar.	100	--	108	112	125	127	--	193	191
Apr.	98	58	109	115	122	131	--	196	199
May	100	60	114	120	124	134	185	202	204
Jun.	95	62	120	132	115	126	205	220	224
Jul.	108	62	128	140	--	142	--	232	240
Aug.	107	58	145	157	160	154	210	246	253
Sep.	110	--	160	165	--	165	210	265	268
Oct.	109	64	170	175	--	175	208	275	280
Nov.	115	64	172	180	--	178	208	274	280
Dec.	120	62	180	185	--	180	--	280	282

Table 35.--Continued.

Month	Alaska pollock						Pacific cod		
	Blocks		Fillets				Fillets, shatter ³		
	16.5 lb	Minced	Shatter		IQF ²		Blocks	8-16 oz	16-32 oz
			3-5 oz	4-6 oz	3-5 oz	4-6 oz			
1991									
Jan.	127	64	180	189	--	182	218	280	282
Feb.	135	67	180	192	--	205	238	281	285
Mar.	158	80	188	207	--	198	240	281	285
Apr.	168	84	200	205	--	192	242	280	282
May	170	85	--	198	--	184	235	275	278
Jun.	169	88	--	198	--	180	230	271	275
Jul.	161	86	170	182	--	172	220	269	271
Aug.	162	89	--	173	--	172	200	259	262
Sep.	151	--	--	175	--	172	220	255	258
Oct.	135	88	--	175	--	178	215	259	270
Nov.	132	88	--	178	--	178	215	256	275
Dec.	129	90	--	190	155	160	215	260	269
1992									
Jan.	105	90	--	190	--	155	215	255	260
Feb.	92	80	--	180	--	150	215	250	255
Mar.	92	65	--	180	--	150	215	260	265
Apr.	94	65	--	180	--	150	215	270	280
May	82	52	--	180	--	178	205	270	278
Jun.	85	50	--	180	--	175	205	260	268
Jul.	92	55	165	182	--	177	205	260	258
Aug.	95	55	160	185	--	178	215	260	258
Sep.	108	52	158	172	--	178	225	255	264
Oct.	105	52	158	172	--	178	225	262	262
Nov.	105	52	140	170	--	175	225	260	262
Dec.	105	52	138	170	--	175	225	260	262
1993									
Jan.	105	52	135	165	--	170	212	260	262
Feb.	105	52	135	160	--	165	198	252	255
Mar.	105	52	135	160	--	165	195	252	255
Apr.	102	49	122	155	--	160	195	245	252
May	100	45	110	155	--	160	195	245	252
Jun.	100	45	110	155	--	158	195	245	240
Jul.	95	45	110	155	--	155	195	245	235
Aug.	90	45	110	155	--	155	195	245	248
Sep.	90	45	--	145	--	150	182	226	232
Oct.	88	45	--	145	--	150	170	220	228
Nov.	85	45	--	140	--	148	170	222	226
Dec.	87	45	--	135	--	142	170	225	228

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 36.--Monthly Japanese landing market price of selected groundfish by species, 1984-93, in yen/kilogram (weighted average).

Species	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Flatfish, fresh												
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
1992	739	799	749	687	567	558	605	584	556	587	600	570
1993	638	746	681	611	487	515	475	651	486	576	512	490
Cod, fresh												
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
1992	332	316	180	164	128	119	135	134	175	221	366	299
1993	281	285	207	167	118	128	154	215	175	305	319	366
Cod, frozen												
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
1992	369	324	281	251	264	270	298	322	339	348	315	163
1993	278	148	171	164	206	288	259	148	329	387	260	278
Alaska pollock, fresh												
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
1992	144	201	132	68	35	33	59	64	51	57	64	74
1993	107	157	141	91	54	56	51	51	37	60	62	72

Table 36.--Continued.

Species	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Atka mackerel, fresh												
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
1992	47	36	65	85	88	91	136	95	87	94	84	48
1993	66	41	33	33	24	44	57	56	40	66	46	26
Rockfish, fresh												
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
1992	2992	2653	3281	2204	1951	2174	2383	2307	1786	2177	2808	2613
1993	2847	2987	2452	2480	2053	2004	2050	2140	1783	2010	2445	2633

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 37.--Monthly Tokyo wholesale prices of selected products, 1984-93,
in yen/kilogram (weighted average).

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Flatfish, frozen												
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
1992	499	486	517	511	530	491	423	433	499	437	460	413
1993	412	386	404	427	431	447	431	406	418	423	407	414
Cod, frozen												
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
1992	798	741	774	770	764	741	750	726	734	665	658	647
1993	643	663	670	671	666	707	614	602	604	587	639	644
Surimi												
1992	683	624	591	541	576	555	504	438	443	438	445	415
1993	360	340	347	348	364	350	367	326	332	295	295	309

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.

Table 38.--Annual exports of groundfish from Alaska, Washington, and Oregon customs districts, quantity (1,000 lb), value (\$1,000), and average price (\$/lb), 1989-93.

Product	Quantity	Value	Average price
Whole or dressed			
Cod			
1989	41,225	\$ 40,584	\$0.98
1990	160,584	115,938	.72
1991	177,223	144,389	.81
1992	124,986	94,527	.76
1993	73,117	55,013	.75
Flounders and soles			
1989	31,587	43,968	1.39
1990	51,269	36,082	.70
1991	159,230	104,172	.65
1992	114,803	56,457	.47
1993	133,323	62,457	.47
Pollock			
1989	8,127	4,392	.54
1990	3,313	2,447	.74
1991	626	459	.53
1992	2,346	1,293	.55
1993	2,145	999	.47
Sablefish			
1989	47,441	81,487	1.68
1990	42,149	70,997	1.68
1991	39,981	96,180	2.38
1992	32,689	77,037	2.36
1993	44,106	88,490	2.01
Total whole or dressed			
1989	229,134	271,903	1.19
1990	445,119	395,324	.89
1991	485,147	447,028	.92
1992	492,941	403,945	.82
1993	430,290	338,853	.79
Filletts and steaks			
Cod			
1989	1,126	1,407	1.25
1990	2,562	3,007	1.17
1991	2,215	2,607	1.18
1992	3,167	3,156	1.00
1993	1,698	3,106	1.83
Halibut			
1989	1,671	2,434	1.46
1990	2,032	4,490	2.21
1991	514	1,233	2.41
1992	1,163	2,106	1.81
1993	1,564	3,133	2.00

Table 38.--Continued.

Product	Quantity	Value	Average price
Other			
1989	25,063	\$ 24,463	\$0.98
1990	14,745	15,340	1.04
1991	25,689	27,491	1.07
1992	14,109	16,519	1.17
1992	13,738	18,695	1.36
Total fillets and steaks			
1989	27,860	28,304	1.02
1990	19,338	22,836	1.18
1991	28,223	31,331	1.11
1992	18,439	21,781	1.18
1993	17,000	24,934	1.47
Other			
Fish roe, excluding herring and salmon			
1989	23,105	72,890	3.16
1990	37,457	104,563	2.79
1991	50,566	191,793	3.79
1992	46,586	202,371	4.34
1993	32,661	124,790	3.82
Fish, dried, salted, smoked			
1989	17,518	18,880	1.08
1990	12,236	16,788	1.37
1991	14,986	22,323	1.49
1992	1,676	3,287	1.96
1993	1,494	2,314	1.55
Fish, other			
1989	152,612	140,856	.92
1990	340,374	257,200	.76
1991	287,521	381,970	1.33
1992	331,303	480,799	1.45
1993	372,940	342,588	.92

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

Table 39.--Exports of groundfish from Alaska, Washington, and Oregon customs districts to major countries, quantity (1,000 lb), percent change from 1992 to 1993, and average price (\$/lb), 1992-93.

Product/Country	Quantity		% Change 92 to 93	Average price	
	1992	1993		1992	1993
Whole or dressed					
Cod					
Total	124,986	73,117	-42	\$0.76	\$0.75
Japan	60,438	40,915	-32	.84	.83
Rep. of Korea	25,529	21,751	-15	.55	.55
Flounders and soles					
Total	114,803	133,323	16	.49	.47
Japan	51,581	48,464	-6	.62	.75
Rep. of Korea	45,846	66,419	45	.39	.28
Sablefish					
Total	32,689	44,106	35	2.36	2.01
Japan	31,466	43,663	39	2.41	2.00
Total	492,941	430,290	-13	.82	.78
Japan	299,042	255,835	-14	.97	1.00
Rep. of Korea	126,549	133,277	5	.49	.35
Canada	7,648	8,735	14	1.60	1.90
Fillets					
Total	18,439	17,000	-8	1.18	1.47
Canada	5,652	6,525	15	1.42	1.74
Japan	3,345	5,408	62	1.07	1.75
Roe					
Total	46,586	32,661	-30	4.34	3.82
Japan	41,778	31,546	-24	4.33	3.75
Rep. of Korea	4,048	767	-81	4.26	4.71
Salted, dried, or smoked					
Total	1,676	1,494	-11	1.96	1.55
Other					
Total	331,303	372,940	19	1.45	.92
Japan	280,105	292,269	4	1.50	.95
Rep. of Korea	35,448	54,982	55	1.18	.72
Canada	8,427	9,418	12	1.50	1.36

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

Table 40.--U.S. imports of groundfish fillets, steaks, and blocks, 1976-93, quantity in million lbs, product weight and value in million dollars.

Year	Fillets and steaks		Blocks		Total	
	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
1992	221	437	229	304	450	741
1993	236	452	212	219	447	671

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 41.--U.S. annual per capita consumption of fish and shellfish, 1970-93, 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	225.6	7.9	4.3	.3	12.5
1981	227.8	7.8	4.6	.3	12.7
1982	230.0	7.9	4.3	.3	12.5
1983	232.1	8.4	4.7	.3	13.4
1984	234.1	9.0	4.9	.3	14.2
1985	236.2	9.8	5.0	.3	15.1
1986	238.4	9.8	5.4	.3	15.5
1987	240.6	10.7	5.2	.3	16.2
1988	242.8	10.0	4.9	.3	15.2
1989	245.1	10.2	5.1	.3	15.6
1990	247.8	9.6	5.1	.3	15.0
1991	250.5	9.7	4.9	.3	14.9
1992	253.5	9.9	4.6	.3	14.8
1993	256.4	10.2	4.5	.3	15.0

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 1 July of each year. Population estimates for 1980-91 were revised to reflect changes from the 1990 decennial population enumeration. Changes did not significantly alter pounds per capita.

Source: Fisheries of the United States, 1992. Natl. Mar. Fish. Serv., 1335 East-West Highway, Silver Spring, MD 20910, CFS No. 9300, May 1994.

Table 42.--U.S. consumption of all fillets and steaks, and fish sticks and portions, total in 1,000 lb and per capita in pounds, product weight, 1980-93.

Year	Fillets and steaks ¹		Fish sticks and portions	
	Total	Per capita ²	Total	Per capita ²
1980	535,361	2.35	442,892	1.95
1981	555,378	2.42	414,149	1.80
1982	573,436	2.47	400,455	1.72
1983	637,900	2.72	413,858	1.77
1984	703,075	2.98	430,895	1.82
1985	768,128	3.22	419,547	1.76
1986	787,106	3.27	431,511	1.79
1987	849,724	3.50	419,250	1.73
1988	767,938	3.13	365,415	1.49
1989	757,958	3.06	376,384	1.52
1990	892,125	3.57	315,161	1.26
1991	806,288	3.19	256,049	1.01
1992	810,359	3.18	264,417	1.03
1993 p	775,945	3.02	277,353	1.08

¹Series revised in 1993 to reflect deduction of fillet production used to produce blocks, exports of foreign fillets and steaks, and changes in population estimates from 1990 decennial population enumeration.

²Total divided by total U.S. 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., 1335 East-West Highway, Silver Spring, MD 20910, various issues.

Table 43.--Annual U.S. economic indicators: Selected producer and consumer price indexes, 1976-93.

Year	Producer price index (Index 1982=100)					Consumer price index (Index 1982-84=100)			
	All items	Meat	Poultry	Fish	Petrl. 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
1992	117.1	106.5	109.2	155.6	64.6	140.3	130.6	131.5	151.8
1993	118.8	110.0	111.7	154.0	62.1	144.5	134.6	136.9	156.6

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

Table 44.--Monthly U.S. economic indicators: Selected producer and consumer price indexes, 1991-93.

Month	Producer price index (Index 1982=100)					Consumer price index (Index 1982-84=100)			
	All items	Meat	Poultry	Fish	Petrl. products	All items	Meat	Poultry	Fish
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
1992									
Jan.	115.6	103.8	105.5	160.2	58.3	138.1	130.0	132.1	154.6
Feb.	116.1	105.8	104.8	167.2	60.4	138.6	130.3	128.1	151.0
Mar.	116.1	106.5	106.9	168.5	59.2	139.3	131.1	128.2	152.6
Apr.	116.3	107.1	107.4	176.5	61.2	139.5	130.2	129.2	153.5
May	117.1	108.9	109.3	153.6	66.2	139.7	130.3	129.1	151.6
Jun.	117.8	107.2	110.3	158.9	69.7	140.2	131.0	130.7	149.1
Jul.	117.8	106.5	109.8	156.5	68.1	140.5	130.0	132.1	150.4
Aug.	117.6	106.0	112.0	148.1	66.5	140.9	130.6	133.7	151.6
Sep.	117.8	106.0	111.8	149.8	68.3	141.3	130.9	134.0	152.1
Oct.	118.1	106.1	111.8	140.4	68.5	141.8	131.1	133.3	151.4
Nov.	117.1	105.3	111.3	139.6	67.0	142.0	131.2	133.6	151.2
Dec.	117.6	108.4	109.2	147.5	61.9	141.9	131.1	133.7	152.0
1993									
Jan.	118.0	107.9	108.3	146.7	61.5	142.6	132.3	134.6	157.2
Feb.	118.2	108.5	108.5	149.8	62.4	143.1	132.1	133.1	157.5
Mar.	118.7	110.6	109.4	168.6	64.0	143.6	133.1	135.7	157.8
Apr.	119.2	113.0	110.0	160.6	65.3	144.0	133.8	135.2	159.7
May	119.7	113.9	111.4	159.0	66.7	144.2	134.7	136.6	154.7
Jun.	119.6	113.4	111.4	156.2	64.6	144.4	134.9	136.5	154.8
Jul.	119.3	111.2	110.1	147.2	61.7	144.4	135.5	136.0	153.2
Aug.	118.8	109.9	112.9	146.2	60.3	144.8	135.6	137.5	154.1
Sep.	118.7	110.2	115.3	147.9	60.9	145.1	135.5	138.0	155.4
Oct.	119.1	108.1	115.9	155.1	63.9	145.7	135.9	139.2	157.4
Nov.	118.9	107.4	113.7	154.6	60.6	145.8	136.3	139.7	158.9
Dec.	118.4	106.3	113.0	156.2	63.0	145.8	135.9	141.1	158.7

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

Table 45.--Annual foreign exchange rates for selected countries, 1976-93,
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
1992	1.2087	6.0360	126.65	780.65	1.8580	57.546	6.2145	.5664
1993	1.2901	6.4840	111.20	802.67	1.8494	67.603	7.0941	.6658

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

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

Table 46.--Monthly foreign exchange rates for selected countries, 1991-93, 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)
1991								
Jan.	1.156	5.82	133.9	718.1	1.680	55.22	5.91	.517
Feb.	1.155	5.69	130.5	721.6	1.661	54.27	5.77	.509
Mar.	1.157	6.12	137.2	725.1	1.681	57.40	6.22	.546
Apr.	1.153	6.51	134.1	725.5	1.696	59.83	6.62	.571
May	1.150	6.56	138.0	725.1	1.704	60.27	6.68	.579
Jun.	1.144	6.88	139.8	725.4	1.733	62.25	6.96	.607
Jul.	1.149	6.92	138.0	729.0	1.762	62.39	6.98	.607
Aug.	1.145	6.75	138.9	731.1	1.742	61.31	6.82	.594
Sep.	1.137	6.56	134.6	739.7	1.724	60.04	6.64	.580
Oct.	1.128	6.53	130.7	749.2	1.771	59.78	6.62	.581
Nov.	1.130	6.31	129.7	753.1	1.775	58.27	6.38	.563
Dec.	1.146	6.10	128.1	757.3	1.806	56.94	6.18	.548
1992								
Jan.	1.156	6.12	125.1	762.7	1.847	57.14	6.20	.552
Feb.	1.182	6.28	127.5	765.7	1.846	58.21	6.35	.563
Mar.	1.193	6.45	132.7	771.1	1.824	59.57	6.52	.589
Apr.	1.187	6.38	133.5	778.3	1.844	59.09	6.45	.569
May	1.199	6.26	130.6	782.8	1.867	58.15	6.32	.552
Jun.	1.196	6.06	126.8	789.1	1.844	58.89	6.16	.540
Jul.	1.192	5.74	125.6	787.2	1.830	54.68	5.86	.521
Aug.	1.191	5.60	126.3	789.2	1.849	53.75	5.72	.516
Sep.	1.222	5.61	122.7	785.6	1.848	54.24	5.79	.538
Oct.	1.245	5.71	121.0	783.6	1.996	55.92	6.04	.603
Nov.	1.268	6.11	123.9	784.0	1.919	60.45	6.47	.655
Dec.	1.273	6.12	124.0	788.6	1.936	62.86	6.68	.644
1993								
Jan.	1.278	6.24	125.0	792.0	1.949	63.79	6.88	.653
Feb.	1.260	6.30	121.0	796.6	1.939	64.87	6.98	.696
Mar.	1.247	6.33	117.1	793.2	1.887	64.99	7.00	.685
Apr.	1.262	6.13	112.4	795.8	1.853	63.14	6.76	.645
May	1.270	6.18	110.4	800.0	1.842	63.22	6.79	.646
Jun.	1.279	6.23	107.4	802.7	1.849	65.13	6.98	.612
Jul.	1.282	6.64	107.7	806.2	1.822	71.71	7.31	.668
Aug.	1.309	6.92	103.7	810.2	1.809	71.51	7.36	.670
Sep.	1.321	6.64	105.3	808.6	1.813	69.36	7.08	.656
Oct.	1.326	6.63	106.9	810.2	1.810	69.94	7.16	.665
Nov.	1.318	6.77	107.8	807.1	1.826	71.64	7.39	.675
Dec.	1.331	6.71	109.7	809.4	1.800	71.95	7.42	.671

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

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

Table 47.--Monthly U.S. cold storage holdings of selected groundfish blocks, 1991-93, in 1,000 lb (end of month).

Month	Cod	Flounder	Alaska pollock	Pollock, other	Whiting	Minced	Total*
1991							
Jan.	7,747	1,742	7,562	1,329	3,350	8,022	35,716
Feb.	7,517	1,395	8,169	1,465	2,728	5,470	32,605
Mar.	5,516	1,132	6,546	1,659	2,251	4,158	25,461
Apr.	5,629	800	5,342	1,689	1,574	4,771	23,046
May	9,596	682	4,819	2,077	4,128	5,214	29,891
Jun.	11,484	542	4,660	1,736	5,141	5,637	33,192
Jul.	11,631	516	7,145	2,625	5,884	7,522	39,242
Aug.	8,689	661	10,776	3,894	6,500	8,043	42,974
Sep.	9,055	786	12,803	5,544	8,958	9,791	51,234
Oct.	9,999	729	12,683	6,551	6,677	11,435	52,070
Nov.	13,119	872	12,400	7,912	6,613	16,172	61,509
Dec.	13,413	668	14,343	9,792	6,333	16,144	63,898
1992							
Jan.	12,584	667	12,706	8,318	5,251	17,335	59,786
Feb.	10,094	459	10,406	7,727	5,343	19,187	56,447
Mar.	6,911	335	9,465	8,684	5,059	13,822	47,137
Apr.	5,959	515	7,476	10,600	3,496	12,557	43,443
May	6,931	138	5,994	10,310	4,975	10,592	41,757
Jun.	6,941	467	5,787	8,681	4,604	10,622	41,134
Jul.	9,017	582	8,915	9,506	3,582	10,358	48,926
Aug.	8,738	548	8,778	8,032	3,933	11,167	48,624
Sep.	9,584	670	12,698	7,355	3,502	9,514	49,036
Oct.	11,193	797	14,710	6,763	3,398	10,086	53,007
Nov.	12,660	895	13,629	7,525	6,396	9,554	56,390
Dec.	14,145	1,209	13,998	8,811	4,057	10,842	59,468
1993							
Jan.	11,862	1,253	13,024	6,367	3,655	12,385	54,990
Feb.	9,709	1,169	11,738	6,957	3,396	9,590	47,220
Mar.	6,722	944	10,670	9,089	1,934	10,071	43,469
Apr.	4,810	823	16,186	2,821	1,875	10,374	39,718
May	5,367	769	22,052	4,627	1,584	10,753	47,669
Jun.	5,860	881	17,536	5,826	1,352	11,120	45,224
Jul.	7,749	926	18,141	4,498	1,476	12,344	48,713
Aug.	7,870	790	13,517	5,537	1,528	11,053	44,371
Sep.	7,370	602	12,225	6,567	1,206	10,858	43,867
Oct.	7,944	908	14,373	5,199	2,001	9,322	45,245
Nov.	6,418	838	12,263	4,335	1,115	8,175	38,874
Dec.	4,639	938	10,454	5,539	1,335	4,728	34,579

Notes: * Total includes other species not listed.

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

Table 48.--Monthly U.S. cold storage holdings of selected groundfish fillets, 1991-93, in 1,000 lb (end of month).

Month	Cod	Flounder	Ocean perch	Alaska pollock	Pollock, other	Whiting	Total*
1991							
Jan.	8,667	9,568	4,259	6,710	3,678	3,785	38,739
Feb.	9,596	6,757	3,468	5,791	5,191	2,809	35,543
Mar.	10,245	5,347	2,664	5,351	5,507	3,092	34,132
Apr.	16,393	5,036	2,786	4,919	5,339	2,923	38,985
May	24,208	5,239	2,899	4,150	6,664	2,599	47,730
Jun.	25,536	5,176	3,265	4,312	6,733	2,695	50,096
Jul.	27,030	5,311	3,306	10,660	8,125	3,915	61,100
Aug.	28,488	5,741	2,628	10,026	7,159	2,866	60,604
Sep.	23,604	7,417	2,497	11,267	8,127	2,585	57,613
Oct.	21,919	7,123	2,812	11,071	8,057	2,778	58,033
Nov.	22,727	7,583	3,307	9,559	9,127	3,014	60,010
Dec.	22,121	7,467	3,444	7,601	8,697	3,252	57,336
1992							
Jan.	23,561	7,084	3,362	12,398	8,107	2,814	61,396
Feb.	20,504	6,017	3,115	13,119	7,132	2,464	56,272
Mar.	21,432	5,312	2,867	12,449	5,855	2,213	52,977
Apr.	23,518	4,475	3,499	10,909	6,714	1,899	54,218
May	23,434	3,785	3,656	10,092	6,666	2,237	53,315
Jun.	20,662	4,388	3,466	9,923	3,894	2,648	48,617
Jul.	20,882	6,202	3,602	11,439	4,873	2,951	54,137
Aug.	19,808	8,200	3,441	13,687	4,589	3,553	56,757
Sep.	17,764	9,633	3,580	12,685	4,035	3,339	54,666
Oct.	16,876	9,762	3,240	9,886	4,244	2,574	50,541
Nov.	17,904	10,133	2,706	12,891	4,417	2,796	54,370
Dec.	17,045	10,159	2,574	12,124	4,944	3,061	54,063
1993							
Jan.	16,409	9,170	2,184	16,023	5,184	3,183	55,102
Feb.	15,273	8,258	2,867	15,989	3,821	2,954	51,747
Mar.	20,447	8,001	1,567	19,733	3,959	2,467	57,634
Apr.	27,237	7,049	1,228	22,462	3,582	2,077	65,126
May	27,730	6,988	1,335	20,996	3,361	1,863	64,139
Jun.	24,526	5,780	683	19,165	2,519	1,490	55,939
Jul.	29,956	5,930	1,358	18,814	2,604	2,460	63,538
Aug.	29,657	6,645	1,705	19,000	3,356	2,805	65,443
Sep.	26,798	5,495	1,292	24,457	2,938	3,222	65,695
Oct.	27,085	6,543	1,586	32,082	3,204	6,154	78,890
Nov.	28,613	8,346	1,659	35,523	3,359	5,187	81,270
Dec.	31,306	7,815	1,988	25,285	3,522	5,570	77,127

Notes: * Total includes other species not listed.

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

Table 49.--Monthly West Coast cold storage holdings of selected groundfish products, 1991-93, in 1,000 lb (end of month).

Month	Alaska pollock	Fillets			Sablefish	Surimi	Analog products
	blocks	Cod	Flounder	Pollock			
1991							
Jan.	62	1,117	737	6,185	158	16,004	4,242
Feb.	100	1,603	635	5,425	13	19,691	5,124
Mar.	115	2,931	575	4,724	134	20,630	5,703
Apr.	141	5,308	737	4,519	1,076	18,900	6,320
May	264	8,299	810	3,809	2,468	16,126	6,541
Jun.	155	8,261	981	3,693	2,073	16,669	5,667
Jul.	476	7,746	1,360	9,813	984	18,131	4,623
Aug.	653	7,248	1,697	9,813	729	19,382	3,912
Sep.	1,064	6,331	2,251	9,263	1,023	19,238	4,229
Oct.	1,011	4,739	2,205	10,660	416	19,184	3,849
Nov.	1,215	3,596	1,936	8,994	317	18,043	3,613
Dec.	1,051	2,854	1,631	7,241	251	15,601	2,931
1992							
Jan.	2,325	4,376	1,830	12,113	161	12,287	3,133
Feb.	1,079	3,009	1,044	12,518	124	13,936	3,460
Mar.	1,102	5,124	1,114	12,014	695	17,085	3,847
Apr.	1,004	8,295	1,125	10,474	901	17,657	3,843
May	645	7,729	1,517	8,396	3,527	22,185	3,473
Jun.	484	6,332	2,151	6,575	3,013	21,903	6,698
Jul.	431	5,394	3,762	7,556	2,578	22,417	3,888
Aug.	910	5,009	5,088	10,520	2,454	27,940	6,830
Sep.	909	4,150	6,248	9,560	2,948	31,843	6,967
Oct.	2,328	4,583	6,054	6,602	2,384	35,735	6,475
Nov.	1,422	5,101	6,191	9,745	2,106	30,661	4,889
Dec.	1,144	3,943	5,890	9,406	1,548	27,203	6,832
1993							
Jan.	1,094	3,292	5,024	13,549	1,304	24,173	6,694
Feb.	1,438	3,396	4,439	14,165	862	24,220	3,128
Mar.	2,502	8,978	4,583	19,103	466	31,186	3,313
Apr.	3,723	13,581	3,786	21,119	370	27,160	4,767
May	3,641	13,642	4,279	19,295	1,733	30,484	4,851
Jun.	3,585	12,250	4,091	17,450	1,267	25,262	3,241
Jul.	2,332	11,798	3,485	17,433	1,081	20,602	3,389
Aug.	729	10,078	3,542	17,484	1,885	20,060	4,009
Sep.	470	8,396	3,294	22,447	1,951	20,396	4,264
Oct.	3,074	7,312	2,982	30,417	1,655	24,348	4,356
Nov.	2,148	8,992	4,817	31,364	1,027	22,915	4,506
Dec.	1,206	9,717	4,645	23,445	753	19,825	3,304

Notes: Includes domestic and foreign products.

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

RECENT TECHNICAL MEMORANDUMS

Copies of this and other NOAA Technical Memorandums are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22167. Paper copies vary in price. Microfiche copies cost \$3.50.

AFSC-

- 53 WING, B. L., and D. J. KAMIKAWA. 1995. Distribution of neustonic sablefish larvae and associated ichthyoplankton in the eastern Gulf of Alaska, May 1990, 48 p. NTIS number pending.
- 52 HONKALEHTO, T., and N. WILLIAMSON. 1995. Echo integration-trawl survey of walleye pollock (Theragra chalcogramma) in the southeast Aleutian Basin during February and March, 1994, 39 p. NTIS No. PB95-219424.
- 51 CLARY, J. C. (editor). 1995. Poster abstracts and manuscripts from the Third International Conference on Marine Debris, May 8-13, 1994, Miami, Florida, 108 p. NTIS No. PB95-210837.
- 50 MUNRO, P. T., and R. Z. HOFF. 1995. Two demersal trawl surveys in the Gulf of Alaska: Implications of survey design and methods, 139 p. NTIS No. PB95-195061.
- 49 STARK, J. W., and D. M. CLAUSEN. 1995. Data Report: 1990 Gulf of Alaska bottom trawl survey, 221 p. NTIS No. PB95-194825.
- 48 NARITA, R., M. GUTTORMSEN, J. GHARRETT, G. TROMBLE, and J. BERGER. 1994. Summary of observer sampling of domestic groundfish fisheries in the northeast Pacific Ocean and eastern Bering Sea, 1991, 540 p. NTIS No. PB95-190963
- 47 DORN, M. W., E. P. NUNNALLEE, C. D. WILSON, and M. E. WILKINS. 1994. Status of the coastal Pacific whiting resource in 1993, 101 p. NTIS No. PB95-176467.
- 46 SINCLAIR, E. H. (editor). 1994. Fur seal investigations, 1993, 93 p. NTIS No. PB95-178943.
- 45 SINCLAIR, E. H. (editor). 1994. Fur seal investigations, 1992, 190 p. NTIS No. PB95-173472.
- 44 KINOSHITA, R. K., and J. M. TERRY. 1994. Oregon, Washington, and Alaska exports of edible fishery products, 1993, 52 p. NTIS No. PB95-165924.
- 43 FERRERO, R. C., and L. W. FRITZ. 1994. Comparisons of walleye pollock, Theragra chalcogramma, harvest to Steller sea lion, Eumetopias jubatus, abundance in the Bering Sea and Gulf of Alaska, 25 p. NTIS No. PB95-155602.
- 42 ZIMMERMANN, M., M. E. WILKINS, R. R. LAUTH, and K. L. WEINBERG. 1994. The 1992 Pacific west coast bottom trawl survey of groundfish resources: Estimates of distribution, abundance, and length composition, 110 p. plus Appendices. NTIS No. PB95-154159.
- 41 ZIMMERMANN, M., P. GODDARD, T. M. SAMPLE. 1994. Results of the 1991 U.S.-U.S.S.R. cooperative bottom trawl survey of the eastern and western Bering Sea continental shelf, 178 p. NTIS No. PB95-111589.
- 40 SIGLER, M. F., and H. H. ZENGER, Jr. 1994. Relative abundance of Gulf of Alaska sablefish and other groundfish based on the domestic longline survey, 1989, 79 p. NTIS No. PB94-204963.
- 39 ZENGER, H. H., Jr., M. F. SIGLER, and E. R. VAROSI. 1994. Assessment of Gulf of Alaska sablefish and other groundfish species based on the 1988 National Marine Fisheries Service longline survey, 79 p. NTIS No. PB94-204872.
- 38 LOWRY, L. F., K. J. FROST, R. DAVIS, R. S. SUYDAM, and D. P. DEMASTER. Movements and behavior of satellite-tagged spotted seals (Phoca largha) in the Bering and Chukchi Seas, 71 p. NTIS No. PB94-180684.