MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke
Executive Director

DATE: November 28, 1994

SUBJECT: Final BSAI Groundfish Specifications for 1995

ESTIMATED TIME
8 HOURS
(total for all D-3 items)

ACTION REQUIRED

(c) Review 1995 BSAI Final Stock Assessment and Fishery Evaluation (SAFE) document.

(d) Approve final BSAI groundfish specifications for 1995:

1. The EA for 1995 Groundfish Specifications;
2. Annual Total Allowable Catch (TAC), initial TAC (ITAC), and domestic annual processing (DAP);
3. Division of the pollock ITAC into the January 1-April 15 ('A' Season) and August 15-December 31 ('B' Season) allowances;
4. Amount of the pollock TAC that may be taken with bottom trawls;
5. Seasonal apportionment of the fixed gear Pacific cod TAC; and
6. Bycatch allowances, and seasonal apportionments of Pacific halibut, red king crab, Tanner crab, and herring to target fishery (PSC) categories.

BACKGROUND

At this meeting, the Council finalizes the annual groundfish cycle in which final recommendations of groundfish and bycatch specifications as listed above are adopted. The EA for the 1995 groundfish specifications, final SAFE report, groundfish ABCs and TACs, and bycatch apportionments need to be approved and made available for public review and comment. NMFS will prepare final rulemaking on the specifications, which will be published in the Federal Register near the end of January.

Environmental Assessment for 1995 Groundfish Specifications

Beginning in 1993, the specifications process includes Council and public review of an Environmental Assessment that assesses potential impacts to the marine environment of the Council's proposed specifications. NMFS has prepared the analysis and will distribute it at this meeting. The public will be able to comment on the analysis this week, and after the meeting. Final EAs will be prepared based on the Council's final specifications.

BSAI SAFE Document

The groundfish Plan Teams met in Seattle during the week of November 14-18, 1994 to prepare the final SAFE documents provided at this meeting. This SAFE forms the basis for final groundfish specifications for the 1995 fishing year.

The final BSAI SAFE contains the Plan Team's estimates of biomass and ABCs for all groundfish species covered under the FMP and information concerning PSC bycatch to provide guidance to the Council in establishing PSC apportionments. The attached tables from the SAFE lists the Plan Team's recommended 1995 ABCs and corresponding overfishing levels for each of the species or species complexes. Draft minutes of the BSAI plan team are also attached (Item D-3(d)(1)).

Final ABCs, TACs, and Apportionments for the 1995 BSAI Fisheries

During the week of this Council meeting the SSC and AP recommendations will be provided to the Council. Attached as Item D-3(d)(2) are Tables 6 - 8 from the SAFE summary chapter indicating 1995 ABCs and biomass levels. The Plan Team's sum of recommended ABCs for 1995 is 3.1 million mt. Overall, the status of the stocks continues to appear relatively favorable.

Adopt Seasonal Allowances for the Pollock Seasons

The FMP requires the Council to apportion pollock in the BSAI between the roe (January 1 - April 15) and non-roe (August 15 - December 31) seasons. For the 1991 and 1992 fisheries, the Council recommended a 40/60% split between the roe and non-roe seasons, and a 45/55% split for the 1993 and 1994 pollock fishery.

In recommending seasonal allowances of the BSAI pollock TAC, the Council will need to consider the following factors:

1. Estimated monthly pollock catch and effort in prior years;

2. Expected changes in harvesting and processing capacity and associated pollock catch;

3. Current estimates of and expected changes in pollock biomass and stock conditions, conditions of marine mammal stocks, and biomass and stock conditions of species taken as bycatch in directed pollock fisheries;

4. Potential impacts of expected seasonal fishing for pollock on pollock stocks, marine mammal stocks, and stocks of species taken as bycatch in directed pollock fisheries;

5. The need to obtain fishery-related data during all or part of the year;

6. Effects on operating costs and gross revenues;

7. The need to spread fishing effort over the year, minimize gear conflicts, and allow participation by various elements of the groundfish fleet and other fisheries;

8. Potential allocative effects among users and indirect effects on coastal communities; and,

9. Other biological and socioeconomic information that affects the consistency of seasonal pollock harvests with the goals and objectives of the FMP.

Information on these factors is presented in Appendix C of the SAFE document.

Adopt Amounts Of Pollock That Could Be Taken With Bottom Trawls

To control the bycatch of crab and halibut, the Council implemented Amendment 16a, which provided for the apportionment of pollock to pelagic trawl gear (i.e., set a limit on the amount of pollock that can be taken in the bottom trawl pollock fishery). In approving this amendment for Secretarial Review in 1990, the Council adopted the 88%-12% split (midwater-bottom trawl) recommended by the Region. The actual percentages from the 1990 fishery were 89%-11%. For the 1991 through 1994 fisheries, the Council noted that additional pollock harvests with non-pelagic trawl gear likely would be constrained by halibut bycatch, and did not recommend a specific apportionment between pelagic and non-pelagic gear.

If the Council chooses to limit the amount of pollock taken with bottom trawl gear, then regulations require that pollock allocations to non-pelagic trawls be based on the following types of information:

1. Bycatch allowances of PSC species;

2. Projected bycatch of prohibited species that might occur with and without constraining amounts of pollock taken with non pelagic trawls; and

3. Costs of a limit in terms of amounts of pollock TAC that may be taken with bottom trawls on the non-pelagic trawl fisheries.

Adopt Seasonal Apportionments of the Pacific Cod TAC Allocated to Fixed Gear

Amendment 24 regulations allow seasonal apportionment of the Pacific cod TAC allocated to vessels using hook-and-line or pot gear. Seasonal apportionments will be divided among trimesters and established through the annual specifications process.

In recommending seasonal apportionments, regulations will require the Council to base its decision on the following information:

1. Seasonal distribution of Pacific cod relative to PSC distribution;

2. Expected variations in PSC bycatch rates in the Pacific cod fishery throughout the fishing year; and

3. Economic effects of any seasonal apportionment of Pacific cod on the hook-and-line and pot gear fisheries.

Under Amendment 24, 2% of the TAC is reserved for jig gear, 44% for hook and line, and 54% for trawl gear. For the 1994 fisheries, the Council recommended that 90% of the fixed gear's allocation be released during the first trimester (January 1 - April 30), 10% be released for the second trimester (May 1 - August 31), and any remaining TAC be rolled over into the third trimester. The Council also recommended that if the trawl gear component does not catch all of its 54% of the TAC, then the rollover of the cod TAC into the fixed gear component should be assigned 25% to the second trimester and the rest to the third.

Adopt proposed bycatch allowances of Pacific halibut, red king crab, Tanner crab (*C. bairdi*), and herring, and seasonal allowances

Halibut PSCs

For the Trawl Fisheries: Amendment 21 established a 3,775 mt limit on halibut mortality for trawl gear. This limit can be apportioned to the following trawl fishery categories:

1. Greenland turbot, arrowtooth flounder and sablefish;
2. rock sole and "other flatfish;"
3. yellowfin sole;
4. rockfish;
5. Pacific cod; and,
6. pollock, Atka mackerel and "other species."

For Fixed Gear Fisheries: A 900 mt non-trawl gear halibut mortality can be apportioned to the following fishery categories:

1. Pacific cod;
2. Other non-trawl (includes hook-and-line sablefish, rockfish and jig gear); and
3. Groundfish pot (recommended exempt for 1994).

Item D-3(d)(3) contains 1994 PSC allocations and seasonal apportionments for the trawl and non-trawl fisheries. Item D-3(d)(4) is a current summary of PSC bycatch accounting for the 1994 BSAI fisheries.

Crab PSCs

Overall crab PSC limits for the BS trawl fisheries adopted by the Council in Amendment 16 are:

C. bairdi:	1,000,000 crabs in Zone 1 for a Zone 1 closure 3,000,000 crabs in Zone 2 for a Zone 2 closure
Red king crab	200,000 crabs in Zone 1 for a Zone 1 closure

Zone 1 is comprised of Areas 511, 512, and 516. Zone 2 is comprised of Areas 513, 517 and 521.

Herring PSCs

Amendment 16a established an overall herring PSC bycatch cap of 1% of the EBS biomass of herring. This cap is to be apportioned to the same six PSC fishery categories listed above, plus a seventh group, mid-water pollock (see Item D-3(d)(3)). The Alaska Department of Fish and Game will provide its forecast for 1995 herring biomass at the Council meeting. The PSC limit is set at 1% of the biomass in metric tons. The complete herring assessment should be available for the Council meeting.

(see Item D-3(d)(4)). The Alaska Department of Fish and Game will provide its forecast for 1995 herring biomass at the Council meeting. The PSC limit is set at 1% of the biomass in metric tons. The complete herring assessment should be available for the Council meeting.

The Council may also seasonally apportion the bycatch allowances. Regulations require that seasonal apportionments of bycatch allowances be based on the following types of information:

1. Seasonal distribution of prohibited species;

2. Seasonal distribution of target groundfish species relative to prohibited species distribution;

3. Expected prohibited species bycatch needs on a seasonal basis relevant to change in prohibited species biomass and expected catches of target groundfish species;

4. Expected variations in bycatch rates throughout the fishing year;

5. Expected changes in directed groundfish fishing seasons;

6. Expected start of fishing efforts; and

7. Economic effects of establishing seasonal prohibited species apportionments on segments of the target groundfish industry.

Information on these factors is presented in Appendices C and E in the BSAI SAFE.

Staff will present a worksheet with final SSC and AP recommendations for ABCs, TACs, PSC and seasonal apportionments when the Council addresses this Action Item.

-DRAFT MINUTES-
BERING SEA/ALEUTIAN ISLANDS
GROUNDFISH PLAN TEAM MEETING
NOVEMBER 14 - 18, 1994

BSAI Groundfish Plan Team

Loh-lee Low, chairman
David Witherell, coordinator
David Ackley
David Colpo
Lowell Fritz (substitute)
Richard Merrick
Grant Thompson
Ellen Varosi
Gregg Williams

The Bering Sea/Aleutian Islands Groundfish Plan Team met with the Gulf of Alaska Plan Team beginning at 1:00 p.m. Monday, November 14, 1994. The BSAI team met independently beginning on Tuesday to review stock assessments for 1995 fisheries. These minutes provide a brief overview of major points of discussion by the plan team; more details for all species are found in the summary chapter of the SAFE.

Pollock - Results from the winter 1994 survey continue to show a strong 1989 year-class. Early indications are that the 1992 year class may also be strong. The survey showed a large number of small pollock in the NW Bering Sea, and Vidar (Wespestad) was somewhat concerned that Russians harvesting these small fish west of 175° could impact future U.S. fisheries. The assessment author suggested using F35% (instead of F0.1) to calculate ABC in the EBS because more information is now known about the 1989 YC. Because projected biomass exceeds Bmsy, Fabc was adjusted by the ratio F35%/F30% = 0.31, which coincidentally equals F0.1. Given the uncertainty and noise in the analysis, the Team felt that the F0.1 fishing strategy was conservative and a more appropriate one.

Dissenting from the above majority opinion, the following minority report was filed by a Plan Team member: "Concern was expressed in the Plan Team meeting that an ABC of 1.25 mmt for 1995, which is similar to the ABC for EBS pollock during 1988-94, may not be adequately conservative to provide a sustainable fishery during 1995-98 and to meet conservation needs. This concern was due in part to the declining trend in pollock abundance estimated from the cohort and CAGEAN models for the period from 1988 to 1993-94. Moreover, stock size of the 1989 year-class appeared uncertain, because the cohort model and survey estimates provided different estimates of abundance. The 1989 year-class would be required to support the fishery for the near-term owing to poor recruitment from the 1985-88 year-classes. Recruitment predictions for the 1990-95 year-classes may also be too optimistic. In the assessment, the incoming (1992-95) year-classes are predicted to be above the recent (1985-91) average size, with two of these year-classes (1992 and 1994) predicted to be the third and fourth largest year-classes since 1978. Finally, the lack of an estimate of the variance of the biomass estimates, the considerable variability in prior year's biomass estimates from different runs of the VPA, and the lack of consideration of other recruitment scenarios cast some doubt on the reliability of the model. No alternative estimates of 1995 biomass or ABC (at the $F_{0.1}$ level) were provided to the Plan Team, and consequently, it was difficult to propose a more conservative estimate of the ABC. A short term alternative would, however, be to apply the lower exploitation levels used during 1983-89 (catch rates of 0.07 to 0.13 compared to 0.18 to 0.20 during 1990-93) until precise estimates of good recruitment become available. For the long term, a more risk-aversive modelling approach (e.g., the GOA pollock model) should be considered."

There was some discussion about biological impacts of a 40/60 and a 45/55 percent split between the roe and non-roe seasons. The team concluded that the ability to predict changes in Y/R, SB/R, or other measure of stock production, may be unmeasurable between the two options. Some on the team suggested that based on the stock recruitment curve, whereby recruitment is maximized at a spawning biomass of about 7 billion spawners, small increases in the harvests of spawning pollock may be appropriate at this time. A total of 12.32 billion spawners

is projected for 1995, and is projected to be about 10 billion spawners through 1998.

For the Aleutian Islands portion of the stock, the team recommended using the 1994 ABC of 56,600 mt, but has some concern about the stock status since the last survey results were from the 1991 survey. The team again recommended that the Bogoslof portion of the stock be harvested at bycatch only levels.

Pacific cod - New data from the fisheries and surveys were incorporated into the Synthesis model. Survey data show a large increase in biomass (about double). Data also indicate a strong 1992 year-class. Under the F35% strategy, ABC = 328,000 mt for 1995.

Greenland turbot - The stock continues to be at low abundance, however, there are early indications that the 1990 YC may be stronger than others in the past 10 years. The team recommended a conservative F40% approach to ABC, which would be 18,542 mt under this strategy. The team requested the assessment author to examine biological consequences of more conservative harvesting strategies.

Pacific Ocean Perch - The team discussed apportioning ABC among the Aleutian Islands areas. Such a recommendation was not made for 1995, because data from which to apportion the stock dates back to 1991. Because they had concerns about localized depletion of AI POP, the team concurred that 1994 survey data should be examined for potential apportionments in 1996. For Northern/Sharpchin and Shortraker/Rougheye, the team requested that landings data be examined to determine if there were potential biological problems with managing these species as a complex in the eastern Bering Sea. The team also discussed adjusting ABC to create a buffer between ABC and OFL for these species, but did not recommend one at this time. Hence ABC=OFL, using the F44% rate, which is a proxy rate from Gulf of Alaska POP. The team remained concerned about the possibility of catch exceeding OFL without an appropriate buffer between ABC and TAC, however.

Squid and Other species - The team agreed to keep the squid a separate target category, as it would take a plan amendment to change. The team expressed some concern about the bycatch of octopus (an important prey for Steller sea lions) in the crab and halibut fisheries, and the assessment author agreed to examine available data for the next meeting.

Sablefish - The team did not recommend apportioning the TAC for sablefish into the AI regulatory areas at this time, as sablefish are more mobile than Atka mackerel and other species such as rockfish.

Atka mackerel - The assessment author recommended continuing a 15% exploitation rate for 1995, rather than the SSC's stairstep up to 20%, because 1994 Aleutians survey data are not yet available. The team disagreed with this technique of calculating ABC, and recommended that the full F_{ABC}=M=0.30 exploitation rate be used to calculate ABC. This resulted in an ABC = 250,000 mt. However, the team recommended a TAC level of 125,000 mt to take into account that the data used to calculated the biomass depends greatly on somewhat dated (1991) survey data and because Atka mackerel is known to be an important prey species for Steller sea lions, which continue to decline.

On behalf of the North Pacific Fishery Management Council, active members of the Plan Team were presented with Certificates of Appreciation for their service on the BSAI Groundfish Plan Team.

Table 6-- Summary of stock abundance, overfishing constraints, and fishing mortality rates for the eastern Bering Sea (EBS), Aleutian Islands (AI), and Bogoslof district (518) in 1995. Biomass and catch are in metric tons.

Species	Area	Biomass[a]	OFL[b]	F_{OFL}[c]	F_{ABC}[d]
Walleye pollock	EBS	8,080,000	1,500,000	0.38	0.31
	AI	189,000	60,400	0.45	0.42
	518	442,000	133,000	0.40	0.33
Pacific cod		1,620,000	390,000	0.51	0.42
Yellowfin sole		2,770,000	319,000	0.15	0.12
Greenland turbot		150,000	27,200	0.37	0.24
Arrowtooth flounder		625,000	138,000	0.25	0.18
Rock sole		2,330,000	388,000	0.20	0.18
Flathead sole		725,000	167,000	0.23	0.19
Other flatfishes		677,000	137,000	0.20[e]	0.17[e]
Sablefish	EBS	16,500	n/a	n/a	0.13
	AI	13,900	n/a	n/a	0.13
	BSAI	n/a	4,900	0.17	n/a
POP complex					
True POP	EBS	47,100	2,910	0.093	0.058
Other red rockfish[f]	EBS	29,700	1,400	0.047[e]	0.047[e]
True POP	AI	252,000	15,900	0.093	0.058
Sharp/Northern[g]	AI	94,500	5,670	0.06	0.06
Short/Rougheye[h]	AI	45,000	1,220	0.027	0.027
Other rockfish	EBS	7,300	365	0.05	0.05
	AI	15,500	770	0.05	0.05
Atka mackerel		832,000	335,000	0.88	0.37
Squid	BSAI	n/a	3,100	n/a	n/a
Other species		682,000	136,000	0.045	0.045

a/ Projected exploitable biomass for January, 1995.
b/ Maximum 1995 catch level allowable under overfishing definition (the "overfishing level").
c/ Maximum fishing mortality rate allowable under overfishing definition.
d/ Fishing mortality rate corresponding to acceptable biological catch.
e/ Weighted average of species-specific rates.
f/ Sharpchin, northern, shortraker, and rougheye rockfish.
g/ Sharpchin and northern rockfish
h/ Shortraker and rougheye rockfish.

Table 7-- Total allowable catches (TAC) and acceptable biological catch (ABC) for 1994 (Council) and 1995 (Plan Team) ABCs for groundfish in the eastern Bering Sea (EBS), Aleutian Islands (AI), and Bogoslof district (518). Figures are in metric tons.

Species	Area	TAC (1994) Council	ABC(1994) Council	ABC(1995) Plan Team
Walleye pollock	EBS	1,330,000	1,330,000	1,250,000
	AI	56,600	56,600	56,600
	518	1,000	31,750	115,000
Pacific cod		191,000	191,000	328,000
Yellowfin sole		150,325	230,000	277,000
Greenland turbot		7,000	7,000	18,500
Arrowtooth flounder		10,000	93,400	113,000
Rock sole		75,000	313,000	347,000
Flathead sole		n/a[a]	n/a[a]	138,000
Other flatfish		56,000	225,000	117,000
Sablefish	EBS	540	540	1,600
	AI	2,800	2,800	2,200
	BSAI	n/a	n/a	n/a
POP complex				
True POP	EBS	1,910	1,910	1,850
Other red rockfish	EBS	1,400	1,400	1,400
True POP	AI	10,900	10,900	10,500
Sharp/Northern	AI	5,670	5,670	5,670
Short/Rougheye	AI	1,220	1,220	1,220
Other rockfish	EBS	365	365	365
	AI	770	770	770
Atka mackerel		68,000	122,500	250,000
Squid		3,120	3,110	3,110
Other species		26,390	27,500	27,600
Groundfish complex		2,000,000	2,656,435	3,066,385

a/ Included in other flatfish in 1994.

Table 8-- Summary of stock biomass, harvest strategy, 1995 acceptable biological catch (ABC), and stock condition for groundfish in the eastern Bering Sea (EBS), Aleutian Islands (AI), and Bogoslof district (518). Biomass and ABC are in metric tons.

Species	Area	Biomass[a]	Rate[b]	ABC	Relative abundance, trend
Walleye pollock	EBS	8,080,000	$F_{0.1}$	1,250,000	Average, stable
	AI	189,000	$F_{35\%}$	56,600	Average (?), stable (?)
	518	442,000	$F_{35\%}$	115,000	Low, stable
Pacific cod		1,620,000	$F_{35\%}$	328,000	Average, increasing
Yellowfin sole		2,770,000	$F_{35\%}$	277,000	High, increasing
Greenland turbot		150,000	$F_{40\%}$	18,500	Low, declining
Arrowtooth flounder		625,000	$F_{35\%}$	113,000	High, increasing
Rock sole		2,330,000	$F_{35\%}$	347,000	High, increasing
Flathead sole		725,000	$F_{35\%}$	138,000	High, stable
Other flatfish		677,000	$F_{35\%}$[c]	117,000	High, stable
Sablefish	EBS	16,500	$F_{35\%}$[d]	1,600	Low, increasing
	AI	13,900	$F_{35\%}$[d]	2,200	Average, declining
	BSAI	n/a	n/a	n/a	
POP complex					
True POP	EBS	47,100	$F_{44\%}$	1,850	Low, stable
Other red rockfish[e]	EBS	29,700	$F=M$[c]	1,400	Not available
True POP	AI	252,000	$F_{44\%}$	10,500	Low, stable
Sharp/Northern[f]	AI	94,500	$F=M$[c]	5,670	Not available
Short/Rougheye[g]	AI	45,000	$F=M$[c]	1,220	Not available
Other rockfish	EBS	7,300	$F=M$	365	Average, stable
	AI	15,500	$F=M$	770	Average, stable
[illegible]ka mackerel		832,000	$F=M$[h]	250,000	High, stable
[illegible]id	BSAI	n/a	$F_{1.5}$	3,110	n/a
Other species		682,000	$F_{1.5}$	27,600	High, increasing
Groundfish Complex Total		19,643,500		3,066,385	High, stable

a/ Projected exploitable biomass for January, 1995.
b/ Harvest strategy used to compute ABC.
c/ Weighted average of species-specific rates.
d/ Sablefish $F_{35\%}$ scaled by ratio of projected biomass to $B_{35\%}$.
e/ Sharpchin, northern, shortraker, and rougheye rockfish.
f/ Sharpchin and northern rockfish.
g/ Shortraker and rougheye rockfish.
h/ Ratio of catch to start-of-year biomass equals M (0.3); corresponding F is actually somewhat higher (about 0.37).

Council recommended 1994 BSAI Trawl Fisheries PSC Apportionments and Seasonal Allowances

Fishery Group	Assumed Mortality*	Halibut Mortality Cap (mt)	Herring (mt)	Red King Crab (animals) Zone1	C. bairdi Zone1	C. bairdi Zone2
Yellowfin sole	70%	592	332	40,000	175,000	1,275,000
Jan. 20 - Aug. 2		230				
Aug. 3 - Dec. 31		362				
Rocksole/other flatfish	70%	688		110,000	475,000	260,000
Jan. 20 - Mar. 29		428				
Mar. 30- June 28		180				
June 29 - Dec. 31		80				
Turbot/arrowtooth/sablefish	40%	137				5,000
Rockfish	60%	201	8			10,000
Jan. 20 - Mar. 29		40				
Mar. 30 - June 28		120				
June 29 - Dec. 31		41				
Pacific cod	60%	1,200	25	10,000	175,000	200,000
Jan. 20 - June 28						
Pollock/mackerel/"o. species"	60%	957	178	40,000	175,000	1,250,000
Jan. 20 - April 15		430				
April 16 - Dec. 31		527				
7 MW Pollock (Herring)			1,419			
TOTAL		3,775	1,962	200,000	1,000,000	3,000,000

** Council recommended discard mortality rates for 1994.

Council Recommended1994 Non-Trawl PSC Bycatch Allowances (Dec. 93)

Fishery Group	Assumed Mortality**	Halibut Mortality (mt)	Seasonal Apportion (mt)	%
Pacific Cod	12.5/15%	725		
Jan 1 - April 30			685	95
May 1 - August 31			40	5
Sept. 1 - Dec. 31			Rollover	
Other Non-Trawl*	12.5/15%	175		
Groundfish Pot	5%	Exempt		
TOTAL	900 metric tons			

* Includes Hook & Line Sablefish, Turbot, Rockfish and Jig. Lower number reflects the Careful Release Program.

** Council recommended discard mortality rates for 1994.

hook-and-line fisheries for 1994.

NMFS/AKR
11/25/94

1994 BERING SEA/ALEUTIAN ISLANDS FISHERIES
PROHIBITED SPECIES BYCATCH MORTALITY
based on amendment 21 specifications
Week Ending: 11/19/94

TRAWL HERRING, BSAI

Fishery group	Herring (mt)	Cap (mt)	%
Pacific cod	2	25	10%
Yellowfin sole	85	332	26%
Midwater pollock	1,583	1,419	112%
Other	83	178	46%
Rockfish	0	8	0%

TRAWL SALMON, BSAI

Fishery group	Chinook (#'s)	Other (#'s)
Midwater pollock	31,038	87,580
Pacific cod	7,225	1,226
Rock sole/Other flatfish	1,011	53
Yellowfin sole	53	246
Other	4,320	7,481
Rockfish	118	94

TRAWL BAIRDI TANNER CRAB

	ZONE 1			ZONE 2		
Fishery group	Crabs (#'s)	Cap (#'s)	%	Crabs (#'s)	Cap (#'s)	%
Pacific cod	79,024	175,000	45%	147,085	200,000	74%
Rock sole/Other flatfish	366,317	475,000	77%	349,378	260,000	134%
Yellowfin sole	245,786	175,000	140%	863,633	1,275,000	68%
PLCK/AMCK/OTHER	61,759	175,000	35%	309,525	1,250,000	25%
Rockfish	0	0	0%	105	10,000	1%
GTRB/ARTH/SABL	0	0	0%	59	5,000	1%

TRAWL RED KING CRAB

	ZONE 1		
Fishery group	Crabs (#'s)	Cap (#'s)	%
Pacific cod	781	10,000	8%
Rock sole/Other flatfish	193,016	110,000	175%
Yellowfin sole	11,436	40,000	29%
PLCK/AMCK/OTHER	39,401	40,000	99%

NMFS/AKR
11/25/94
18:47:11

1994 BERING SEA / ALEUTIAN ISLANDS FISHERIES
TRAWL HALIBUT BYCATCH MORTALITY (METRIC TONS)

WED	PACIFIC COD	YELLOWFIN SOLE	ROCK SOLE OTHER FLATFISH	PLCK/AMCK/ OTHER	ROCKFISH	SABLEFISH/ TURBOT	
01/01/94	0	0	0	1	0	0	
01/08/94	0	0	0	0	0	0	
01/22/94	1	0	15	22	0	0	
01/29/94	9	0	25	44	0	0	
02/05/94	15	0	19	74	0	0	
02/12/94	9	0	61	39	0	0	
02/19/94	7	0	89	43	0	0	
02/26/94	11	0	137	6	0	0	
03/05/94	28	2	109	12	4	0	
03/12/94	114	1	50	17	5	0	
03/19/94	135	3	29	11	3	0	
03/26/94	126	14	10	4	3	0	
04/02/94	110	0	15	7	2	0	
04/09/94	140	2	16	82	1	0	
04/16/94	167	21	6	10	0	1	
04/23/94	146	4	22	18	1	0	
04/30/94	147	0	34	22	0	4	
05/07/94	75	0	5	2	0	132	
05/14/94	12	6	4	3	0	237	
05/21/94	0	37	14	1	0	0	
05/28/94	0	16	16	0	0	0	
06/04/94	1	23	11	0	0	0	
06/11/94	0	29	42	0	0	0	
06/18/94	0	53	19	1	0	0	
06/25/94	0	46	7	5	0	0	
07/02/94	0	16	26	0	0	0	
07/09/94	0	1	9	2	13	0	
07/16/94	0	0	0	7	10	0	
07/23/94	0	0	0	1	0	0	
07/30/94	0	0	0	1	0	0	
08/06/94	2	4	12	1	0	0	
08/13/94	0	3	1	1	0	0	
08/20/94	0	22	0	128	0	0	
08/27/94	0	1	0	156	0	0	
09/03/94	0	0	0	56	0	0	
09/10/94	0	1	0	32	0	0	
09/17/94	5	4	0	15	0	0	
09/24/94	0	3	0	31	0	0	
10/01/94	0	4	0	6	0	0	
10/08/94	0	6	0	2	2	0	
10/15/94	1	12	0	0	0	0	
10/22/94	0	34	0	0	0	0	
10/29/94	0	46	0	0	0	0	
11/05/94	0	74	0	0	0	0	
11/12/94	0	52	2	1	0	0	
11/19/94	0	61	1	0	0	0	
TOTAL TO DATE:	1259	602	803	863	44	374	
SEASONAL CAP:	1200	592	688	957	201	137	
% OF CAP:	105%	102%	117%	90%	22%		273%

NMFS/AKR
11/25/94
18:46:44

1994 BERING SEA / ALEUTIAN ISLANDS FISHERIES
FIXED GEAR HALIBUT BYCATCH MORTALITY (METRIC TONS)

	PACIFIC COD HOOK & LINE			OTHER HOOK & LINE ALL POT AND JIG		
WEEK	OBS'D	UNOBS'D	TOTAL	OBS'D	UNOBS'D	TOTAL
01/01/94	1	2	3	0	0	0
01/08/94	23	9	35	0	0	0
01/15/94	22	6	63	0	0	0
01/22/94	19	3	86	0	0	1
01/29/94	31	5	121	0	1	1
02/05/94	15	1	137	0	1	2
02/12/94	15	7	160	0	1	2
02/19/94	23	1	184	1	0	4
02/26/94	18	2	205	0	0	4
03/05/94	10	2	217	0	1	5
03/12/94	20	2	239	1	0	6
03/19/94	33	3	274	3	0	9
03/26/94	17	1	293	0	0	10
04/02/94	24	1	318	0	0	11
04/09/94	21	2	341	1	0	12
04/16/94	28	1	371	0	1	13
04/23/94	29	5	405	3	1	17
04/30/94	33	5	443	2	1	20
05/07/94	39	3	486	16	3	39
05/14/94	40	2	528	0	28	67
05/21/94	3	0	531	0	0	67
05/28/94	0	0	531	0	0	67
06/04/94	0	0	531	0	0	68
06/11/94	0	0	532	0	0	68
06/18/94	0	0	532	1	2	71
06/25/94	0	0	532	0	2	74
07/02/94	0	0	532	0	1	75
07/09/94	0	0	532	0	4	79
07/16/94	0	0	532	0	1	80
07/23/94	0	0	532	0	1	81
07/30/94	0	0	532	0	1	82
08/06/94	0	0	532	0	1	83
08/13/94	0	0	532	0	2	86
08/20/94	0	0	532	0	0	86
08/27/94	0	0	532	0	1	87
09/03/94	11	4	547	0	1	88
09/10/94	39	10	595	0	0	88
09/17/94	37	5	638	0	0	88
09/24/94	48	6	692	0	0	88
10/01/94	76	4	772	0	0	88
10/08/94	36	17	826	0	0	89
10/15/94	47	3	875	0	0	89
10/22/94	8	0	884	0	0	89
10/29/94	0	0	884	0	0	90
11/05/94	0	0	884	0	0	90
11/12/94	0	0	884	0	0	90
11/19/94	0	0	884	0	0	90
CURRENT SEASONAL CAP:			725	CURRENT SEASONAL CAP:		175
% OF SEASONAL CAP:			122%	% OF SEASONAL CAP:		52%

AGENDA D-3(c)
DECEMBER 1994
Supplemental

FMP for Groundfish of the Bering Sea and Aleutian Islands Region

Biomass levels, overfishing levels, ABCs, and TACs as given in the November SAFE summary chapter

Species	Area	Biomass	OFL	F(OFL)	F(ABC)	Rate	ABC(94)	ABC(95)	TAC(94)
Walleye pollock	EBS	**8,080,000**	1,500,000	0.38	0.31	F0.1	1,330,000	**1,250,000**	1,330,000
	AI	**189,000**	60,400	0.45	0.42	F35%	56,600	**56,600**	56,600
	518	**442,000**	133,000	0.40	0.33	F35%	31,750	**115,000**	1,000
Pacific cod	BS/AI	**1,620,000**	390,000	0.51	0.42	F35%	191,000	**328,000**	191,000
Yellowfin sole	BS/AI	**2,770,000**	319,000	0.15	0.12	F35%	230,000	**277,000**	150,325
Greenland turbot	BS/AI	**150,000**	27,200	0.37	0.24	F40%	7,000	**18,500**	7,000
Arrowtooth flounder	BS/AI	**625,000**	138,000	0.25	0.18	F35%	93,400	**113,000**	10,000
Rock sole	BS/AI	**2,330,000**	388,000	0.20	0.18	F35%	313,000	**347,000**	75,000
Flathead sole	BS/AI	**725,000**	167,000	0.23	0.19	F35%	n/a	**138,000**	0
Other flatfishes	BS/AI	**677,000**	137,000	0.20	0.17	F35%	225,000	**117,000**	56,000
Sablefish	EBS	**16,500**	n/a	n/a	0.13	F35%	540	**1,600**	540
	AI	**13,900**	n/a	n/a	0.13	F35%	2,800	**2,200**	2,800
	BS/AI	**n/a**	4,900	0.17	n/a	n/a	n/a	**n/a**	
POP complex									
True POP	EBS	**47,100**	2,910	0.093	0.058	F44%	1910	**1,850**	1,910
Other red rockfish	EBS	**29,700**	1,400	0.047	0.047	F=M	1400	**1,400**	1,400
True POP	AI	**252,000**	15,900	0.093	0.058	F44%	10900	**10,500**	10,900
Sharp/Northern	AI	**94,500**	5,670	0.06	0.06	F=M	5670	**5,670**	5,670
Short/Rougheye	AI	**45,000**	1,220	0.027	0.027	F=M	1220	**1,220**	1,220
Other rockfish	EBS	**7,300**	365	0.05	0.05	F=M	365	**365**	365
	AI	**15,500**	770	0.05	0.05	F=M	770	**770**	770
Atka mackerel	BS/AI	**832,000**	335,000	0.88	0.37	F=M	122500	**250,000**	68,000
Squid	BS/AI	**n/a**	3,100	n/a	n/a	F(his)	3110	**3,100**	3,110
Other species	BS/AI	**682,000**	136,000	0.20	0.045	F(his)	27,500	**27,600**	26,390
TOTAL			3,766,835				2,656,435	**3,066,375**	2,000,000

AGENDA D-3(d)
DECEMBER 1994
Supplemental

WALTER J. HICKEL, GOVERNOR

DEPARTMENT OF FISH AND GAME

COMMERCIAL FISHERIES MANAGEMENT AND DEVELOPMENT DIVISION

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December 2, 1994

Dr. Clarence Pautzke
Executive Director
North Pacific Fisheries Management Council
P.O. Box 103136
Anchorage, AK 99510

Dear Dr. Pautzke:

The Alaska Department of Fish and Game estimates that the biomass of Bering Sea herring stocks returning to spawn in the spring of 1995 between Port Moller and Norton Sound will be approximately 186,075 metric tons. This is a very slight decline from last year's estimate of 196,229 metric tons.

Under Amendment 16A to the Bering Sea/Aleutians groundfish management plan, a prohibited species catch (PSC) limit would be set at 1% of this biomass, or 1,861 metric tons.

Sincerely,

RC Clarke for
Jeffery P. Koenings
Director

Enclosure

11-K1LH

Table 1. Summary of 1995 forecast spawning biomass, harvests, and harvest policies for Bering Sea herring stocks.

Fishery	Forecast Harvest (short tons - 2,000 lbs)	Spawning Biomass (short tons - 2,000 lbs)	Threshold (short tons - 2,000 lbs)	Exploitation Rate
Port Moller	1,100	5,500		
Bristol Bay (Togiak)		142,498 [a]	35,000	20%
Seine	18,832			
Gill Net	6,277			
Kuskokwim Area				
Security Cove	1,340	6,702	1,200	20%
Goodnews Bay	845	4,224	1,200	20%
Cape Avinof	397	2,644	500	15%
Nelson Island	669	4,460	3,000	15%
Nunivak Island	687	4,579	1,500	15%
Cape Romanzof	513	3,417	1,500	15%
Norton Sound	6,218	31,088	7,000	20%
Total:	**36,878**	205,112	short tons	
		186,075	metric tons	
PSC Limit (at 1% of biomass):		1,861	metric tons	

[a] Assessment work for the Togiak stock has not been finalized. However trends in age composition and abundance indices indicate that there will be little change from the 1994 value of 142,498 short tons.

DRAFT

ECONOMIC STATUS OF THE GROUNDFISH FISHERIES OFF ALASKA, 1994

by

Richard K. Kinoshita, Angie Greig, James D. Hastie
and Joseph M. Terry

Socioeconomic Task
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December 1994

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 domestic fishery accounts for all of the catch. Foreign fishing ended in 1987. Joint venture fisheries, in which domestic fishing vessels delivered their catch directly to foreign at-sea processors, peaked in 1987 at 1.39 million metric tons and ended in 1990. Catch in the domestic groundfish fishery in 1993 totaled 2.15 million metric tons, down 5.8% from 1992. Through October 29, the 1994 catch was 2.19 million metric tons.

This report presents the groundfish catch 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.

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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 with 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 was $1.06 billion. It is a major factor in terms of generating income, exports, and employment opportunities. This preliminary 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 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 1991-94 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 the two components of total catch, retained catch and discarded catch, are also presented for 1991-94. 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. The blend data for 1994 are through October 29 and the PacFIN data which were extracted November 21 are less complete. Complete data for 1994 will be incorporated when this document is revised in 1995. This will include 1994 estimates of the number of vessels and of catch by residence of vessel owners which are based on Alaska Department of Fish and Game (ADF&G) fish ticket data.

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 (Table 1). The peak catch occurred in 1991, in part, because blend estimates of catch and bycatch 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 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 through 1994, discards would have been about 16% of total catch. Finally, the blend estimates of catch net of at-sea discards, which are not reported prior to 1991 and 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. The 1993 catch totaled 2.15 million t, down 5.8% from 1992, and the partial 1994 catch was estimated at 2.19 million t through October 29.

Table 2 shows 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 emergence 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 (Table 3). The pollock catch was 1.51 million t through October 29, 1994. 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 catch was 240,500 t through October 29, 1994. 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, and catch stood at 279,000 t through October 1994. 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 monopterygius).

Table 4 gives the blend estimate of the retained, discarded, and total catch by area and species, and Tables 5 and 6 break down the catch by area and target fishery. Table 7 has 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 and was $413 million through late 1994 (Table 8). The 1993 ex-vessel value declined by 39% from 1992 value as average ex-vessel prices dropped by 31%. The value of the resulting fishery products after primary processing amounted to $1.06 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 salmon (Oncorhynchus spp.) fishery was second 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.

The exports of 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 halibut, increased from $25 million in 1982 to $1.11 billion in 1992, and declined to $833 million in 1993 (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 considerable 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 fishery. 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 herring; (2) the discard and utilization of groundfish catch; and (3) the physical and biological effects of the groundfish fisheries on marine mammals. Substantial reductions in the guideline harvest levels in the 1994-95 fishing year for the three largest crab fisheries are expected to result in more fishing vessels from the crab fisheries entering the groundfish fisheries.

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 (Table 11). In the last four years, the landings by trawls have 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 (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, with the exception in 1993 being rockfish and Atka mackerel. PacFIN data extracted November 21, 1994 show that the landings by at-sea processors totaled 1,206,800 t and on-shore processors received 580,800 t of groundfish. However, the 1994 data are more complete for at-sea processors for the following reasons: (1) the PacFIN data are from the weekly production reports for at-sea processors and from ADF&G fish tickets for on-shore processors and (2) the fish ticket data for a given period are available to PacFIN about a month later than the weekly production data.

Landings by residency of vessel owners are presented in Table 13. These data were extracted from the NMFS groundfish fish ticket 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 differ in some instances. For the domestic groundfish fishery as a whole, the majority of the landings are made by vessels with 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 vessel residence groups are much closer to being equal in the Gulf. Alaskan vessels account for more of the Pacific cod and sablefish landings 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 (Table 14). The ex-vessel value dropped by 38.7% compared to 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 to only 1.4% of the landings, while Pacific cod represented 19.4% of the value and 10.5% of the quantity landed. The ex-vessel value of the groundfish fishery in 1994 was estimated at $413 million through late 1994.

The 1993 ex-vessel value of the landings 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 have received a product mix with a larger proportion of higher priced species, including sablefish. The ex-vessel value through late 1994 for at-sea and on-shore processing are $264 million and $150 million, respectively. However, as noted above, the year to data landings data are more complete for the at-sea processors.

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, other 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 from 1990 to 1992, then declined in 1993 (Table 17). Average ex-vessel prices in 1993 were down 32% from $0.150 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 weighted average ex-vessel price through late 1994 was up about 3% from 1993.

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 fluctuated from 1,449 in 1986 to 1,859 in 1987, declined to 1,576 in 1989, increased to 2,341 in 1992, 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 to 293 in 1993. The greatest impact has been the increase of the largest vessel classes. 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 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 shown in Tables 30 to 32. The total value in 1993 declined by 25% to $1.06 billion, 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 25% in value to $257 million.

MARKETS

Annual and monthly wholesale prices for selected groundfish products are reported in Tables 33 and 34, respectively. Cod prices declined in 1993 and continue to be relatively flat in 1994. Annual average 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. Pollock block prices in the first 8 months of 1994 continued to slid, down another 5.6 to 7% from a year earlier.

Wholesale prices in Seattle exhibited trends similar to those of east coast prices (Table 35). Prices in 1993 and 1994 continue to decline and are at their lowest level since 1990. The Japanese landed and wholesale prices in Tables 36 and 37 also indicate lower prices for many products in 1993 and 1994.

A major concern of the U.S. groundfish industry in 1993 was the decline in most groundfish product prices and especially in the Japanese wholesale price of sea-processed surimi, down about 35% from the previous year. 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 and valued at $833 million. These exports were 4.1% lower by

quantity and 25% by value from the previous year. The decline in groundfish exports resulted primarily from lower surimi, pollock roe, and sablefish prices. 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 increase of other fishery products to $343 million was dominated by $298 million of surimi. 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 with the top four countries in 1993 purchasing 94% of the total. Japan imported $662 million of 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 drastically down 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 in Table 40 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 pounds and valued at $671 million. 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 pounds per capita in 1980 to 16.2 pounds in 1987. Since 1987, per capita consumption has declined, and stood at 15 pounds in 1993. Per capita consumption of fresh and frozen fish increased from 7.9 pounds in 1980 to 10.2 pounds in 1993. There was a 0.3 pound increase in the 1993 total per capita consumption of fresh and frozen fish and shellfish, and consumption of canned fish increased by 0.1 pounds (Table 41). Not all seafood products have exhibited an increase in per capita consumption. While 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). However, since 1987 per capita consumption of fillets and steaks has declined 13.7% to 3.02 pounds, while stick and portion consumption has dropped 37.6% to 1.08 pounds 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 these 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 lower than 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. The PPI and CPI through June 1994 were up 0.7% and 2.5%, respectively, from a year earlier.

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 the prices in these fisheries. In 1993, the value of the U.S. dollar was weaker compared to the Japanese yen but gained against the Republic of Korea's won and Canadian dollar from the previous year (Table 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 Korean won and 6.7% relative to the Canadian dollar from 1992. In the first 8 months of 1994, the U.S. dollar compared to the yen declined to a record low 98 yen in July 1994. The U.S. dollar was higher against the Canadian dollar in 1994, while trading within a narrow range with the Korean won.

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 July 1994 were down 7.8% from a year earlier and down 5.9% compared to the 1989-93 average 31 July holdings. Holdings of total blocks and fillets in 1993 more closely followed seasonal patterns of the 1989-93 average.

While U.S. holdings 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 five years. Holdings of pollock fillets on 31 July 1994 were up 2.9% from a year earlier, cod fillets were 61% lower, holdings of surimi were down about one-fifth, while analog products were about the same from a year earlier.

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 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 used 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. Therefore, 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 cannot 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 is the 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 are 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, 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 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 that 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 under estimated 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 1991 PacFIN, WPR, and blend estimates of the catch of Pacific cod for the Bering Sea and Aleutians Islands are 175,800 t, 172,158 t and 218,064 t, respectively. The corresponding estimates for 1992 are 175,400 t, 172,863 t and 205,326 t. The blend estimates exceed the WPR estimate by 27% in 1991 and by 19% in 1992. However the PacFIN estimates exceed the WPR estimates by 2.1% in 1991 and 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. 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.

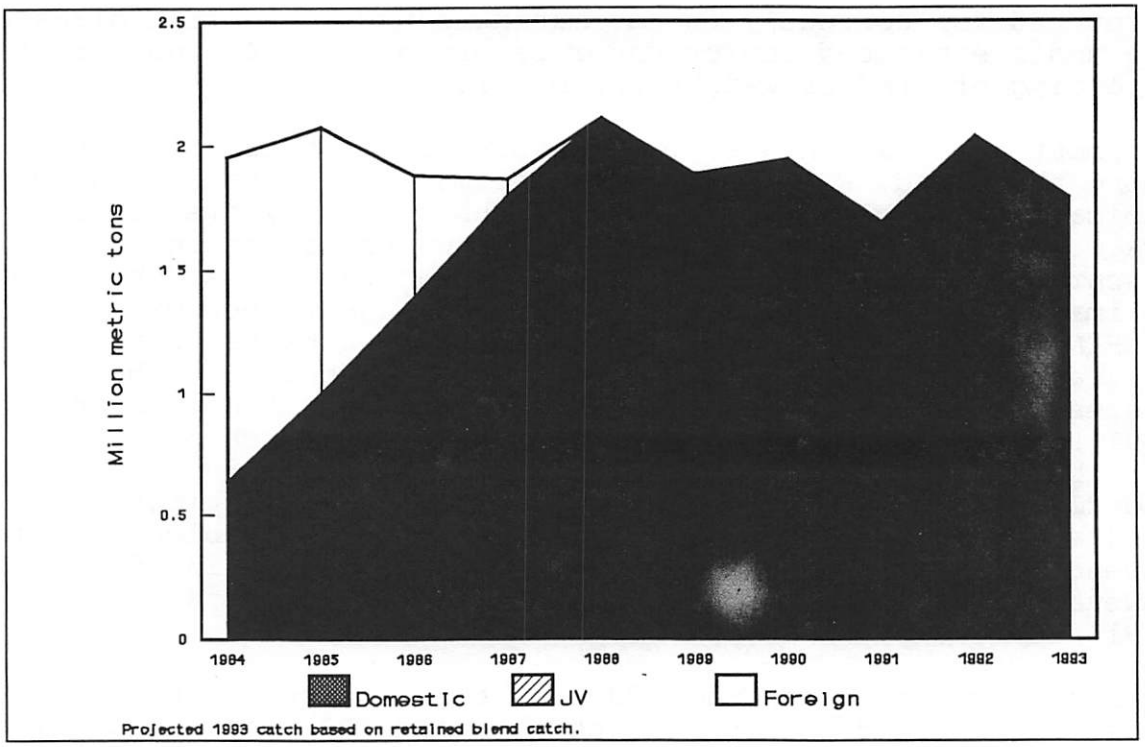


Figure 1.--Groundfish catch in the commercial fisheries off Alaska by fishery, 1984-93.

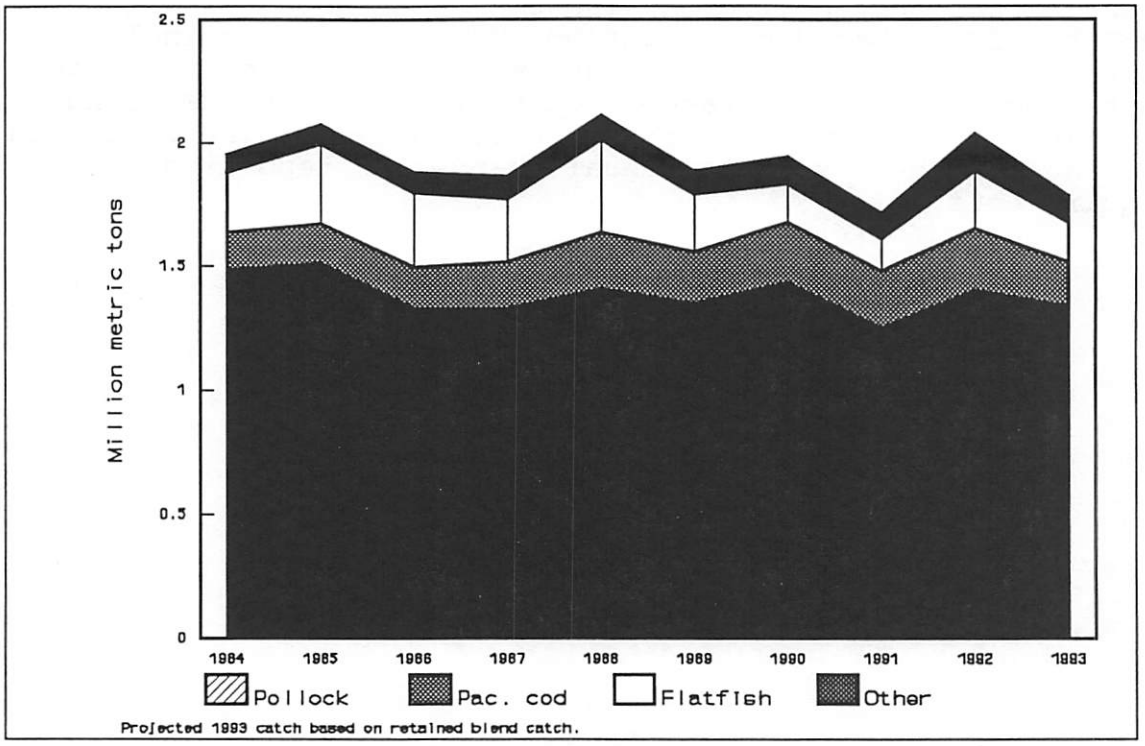


Figure 2.--Groundfish catch in the commercial fisheries off Alaska by species, 1984-93.

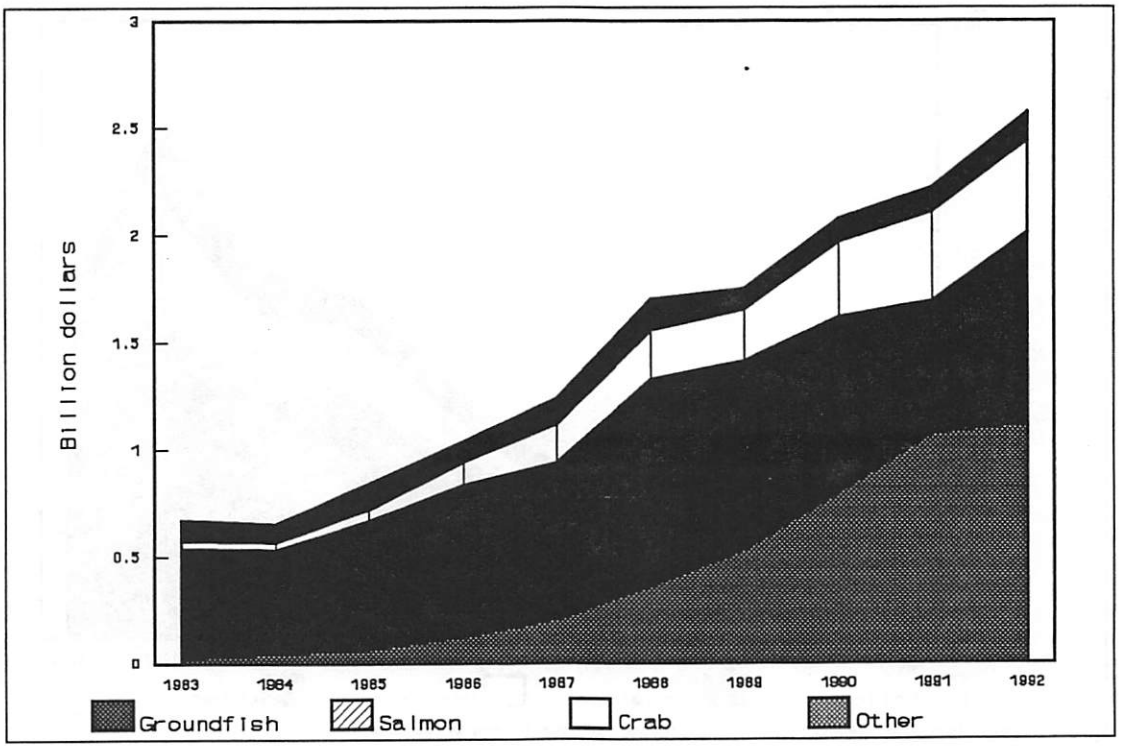


Figure 3.--Pacific Northwest and Alaska exports of edible fishery products by major product groups, 1983-92.

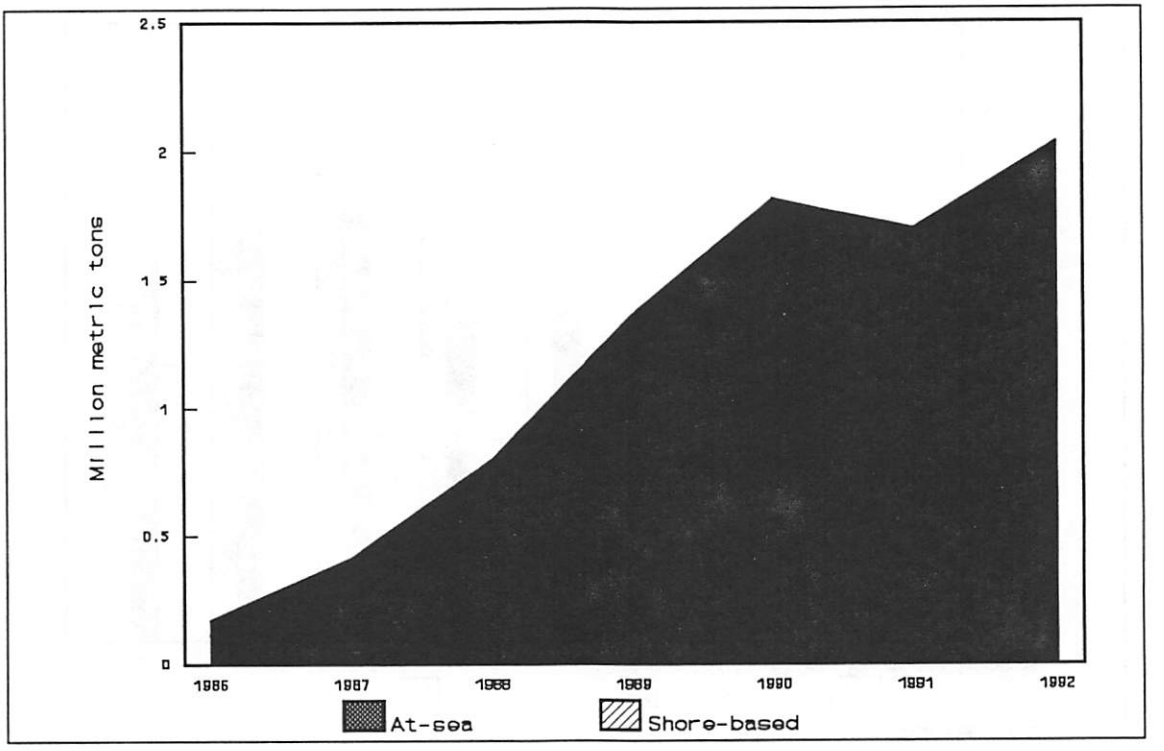


Figure 4.--Groundfish catch in the domestic fishery off Alaska by mode of operation, 1986-92.

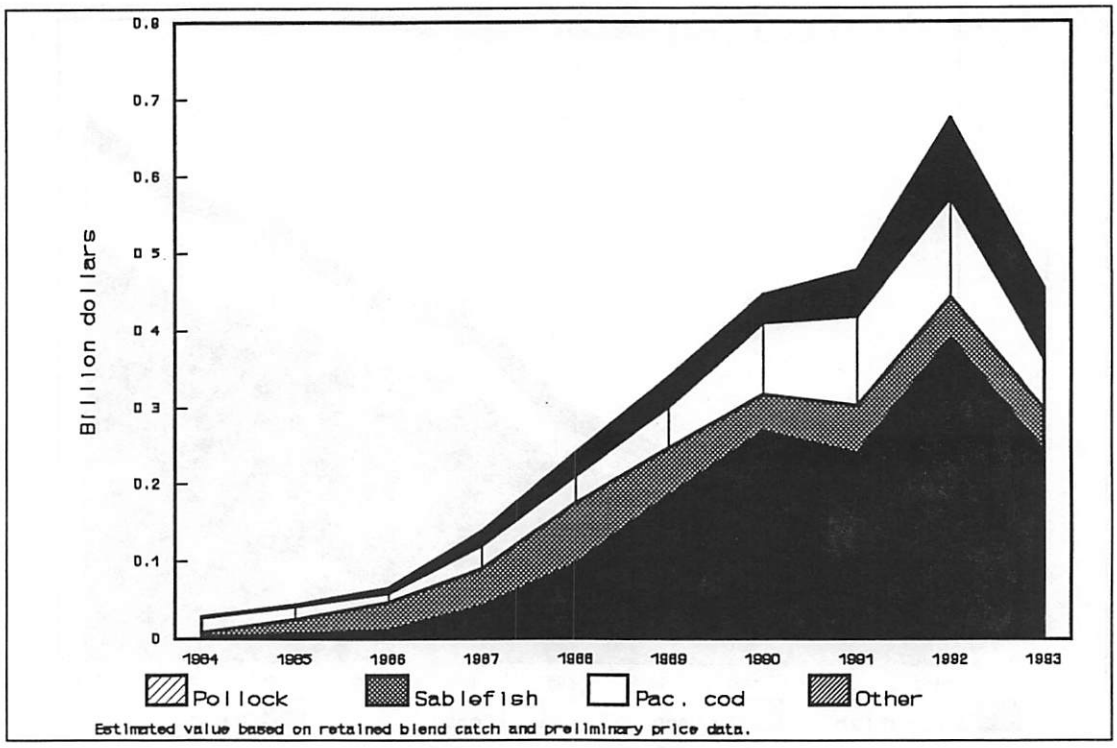


Figure 5.--Ex-vessel value of the domestic groundfish catch off Alaska by species, 1984-93.

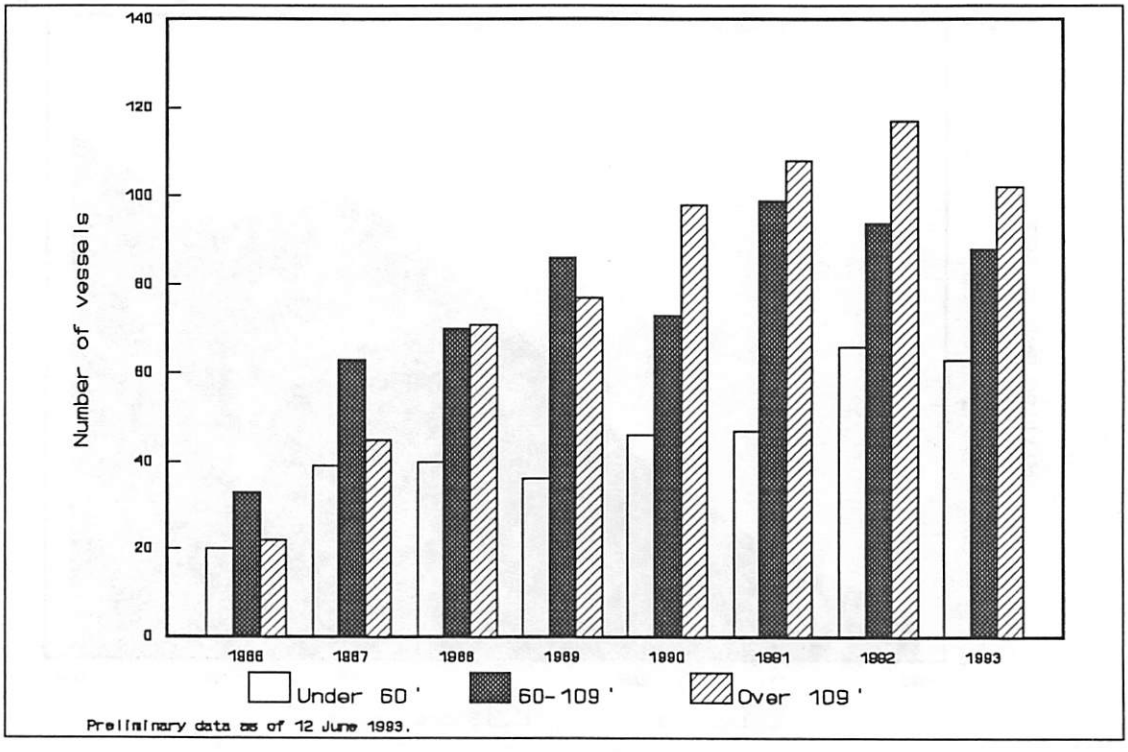


Figure 6.--Number of vessels that landed groundfish in the domestic fishery off Alaska using trawl gear by length class, 1986-93.

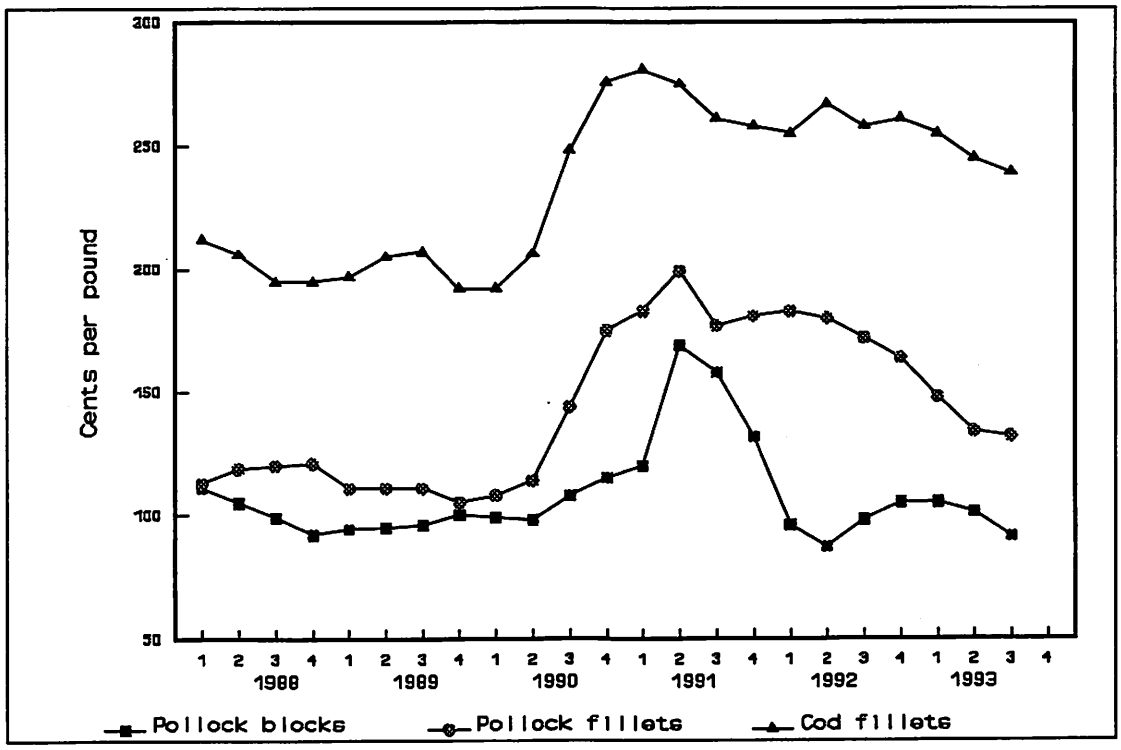


Figure 7.--Quarterly producer prices of Alaska groundfish products, F.O.B. Seattle, WA, 1988-93.

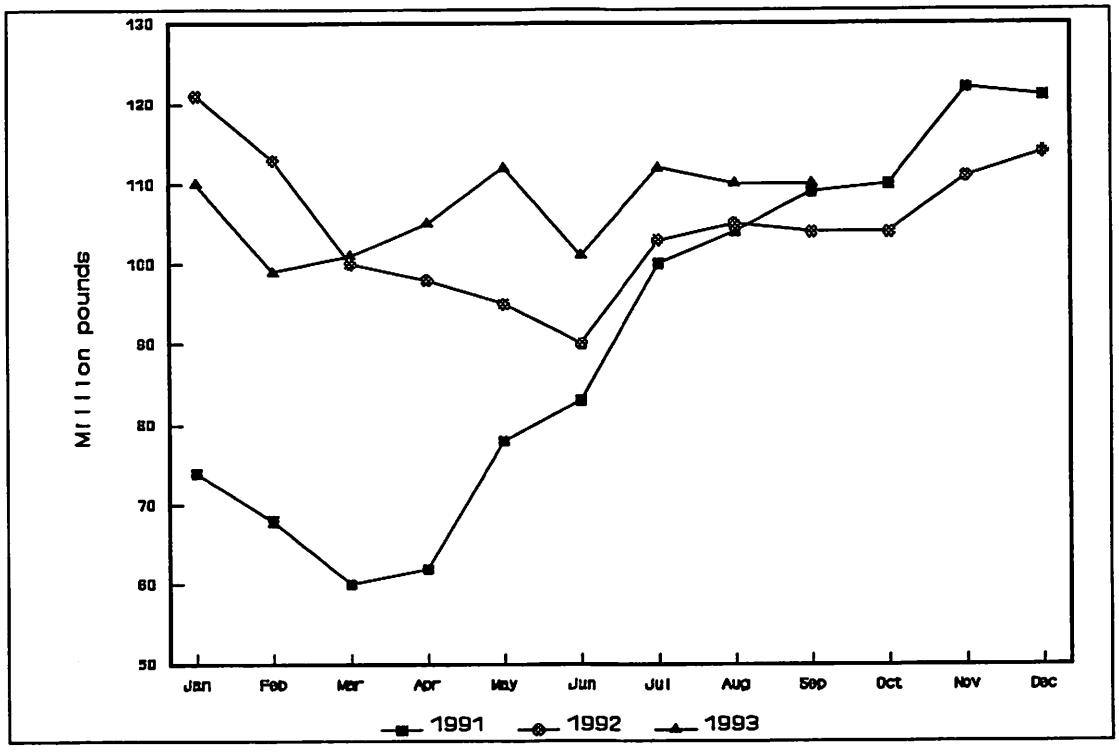


Figure 8.--Monthly U.S. cold storage holdings of groundfish blocks and fillets, 1991-93.

Table 1.--Groundfish catch in the commercial fisheries off Alaska by area and fishery, 1985-94, (1,000 metric tons, round weight).

Year	Fishery			
	Domestic	Joint venture	Foreign	Total
		Gulf of Alaska		
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
1994*	241.9	0.0	0.0	241.9
		Bering Sea/Aleutians		
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
1994*	1,944.2	0.0	0.0	1,944.2
		All Alaska		
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
1994*	2,186.1	0.0	0.0	2,186.1

Notes: Domestic catch statistics from 1985-90 reflect only the amounts that were landed, and beginning in 1991, catch includes discards.
* Preliminary data, extracted from database on 29 October 1994.

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, 1985-94.

Year	Fishery		
	Domestic	Joint venture	Foreign
	Gulf of Alaska		
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
1994	100.0	0.0	0.0
	Bering Sea/Aleutians		
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
1994	100.0	0.0	0.0
	All Alaska		
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
1994	100.0	0.0	0.0

Notes: Domestic catch statistics from 1985-90 reflect only the amounts that were landed, 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.

Table 3.--Groundfish catch in the commercial fisheries off Alaska by area, fishery, and species, 1985-94, (1,000 metric tons, round weight).

Species/ Year	Gulf of Alaska				Bering Sea/Aleutians				All Alaska			
	Domestic	Joint venture	Foreign	Total	Domestic	Joint venture	Foreign	Total	Domestic	Joint venture	Foreign	Total
Pollock												
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
1994*	110.9	0.0	0.0	110.9	1,394.8	0.0	0.0	1,394.8	1,505.6	0.0	0.0	1,505.6
Sablefish												
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
1994*	22.8	0.0	0.0	22.8	2.3	0.0	0.0	2.3	25.0	0.0	0.0	25.0
Pacific Cod												
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
1994*	47.5	0.0	0.0	47.5	193.0	0.0	0.0	193.0	240.5	0.0	0.0	240.5

Table 3.--Continued.

Species/ Year	Gulf of Alaska				Bering Sea/Aleutians				All Alaska			
	Domestic	Joint venture	Foreign	Total	Domestic	Joint venture	Foreign	Total	Domestic	Joint venture	Foreign	Total
Flatfish												
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
1994*	37.9	0.0	0.0	37.9	241.2	0.0	0.0	241.2	279.0	0.0	0.0	279.0
Rockfish												
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
1994*	15.9	0.0	0.0	15.9	19.4	0.0	0.0	19.4	35.3	0.0	0.0	35.3
Atka Mackerel												
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
1994*	3.5	0.0	0.0	3.5	69.5	0.0	0.0	69.5	73.1	0.0	0.0	73.1

Notes: The joint venture and foreign data are estimates of catch; however, the domestic data from 1985-90 are estimates of landed catch excluding discards, and beginning in 1991, catch includes discards.
* Preliminary data as of 29 October 1994.

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, 1991-94, (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
1994*									
Pollock	104.4	6.4	110.9	1,288.7	106.0	1,394.8	1,393.2	112.5	1,505.6
Sablefish	21.9	0.8	22.8	2.1	0.1	2.3	24.1	0.9	25.0
Pacific cod	44.3	3.2	47.5	161.0	32.0	193.0	205.3	35.2	240.5
Flatfish	10.5	27.3	37.9	132.9	108.3	241.2	143.4	135.6	279.0
Rockfish	11.3	4.6	15.9	12.8	6.6	19.4	24.1	11.2	35.3
Atka mackerel	3.3	0.3	3.5	59.2	10.3	69.5	62.5	10.6	73.1
Other	0.1	3.4	3.4	1.8	22.3	24.1	1.9	25.7	27.6
Total	195.9	46.1	241.9	1,658.6	285.6	1,944.2	1,854.5	331.7	2,186.1

* - Preliminary data as of 29 October 1994.

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, 1991-94, (metric tons).

Target fishery	Species									
	Pollock	Sable fish	Pacific cod	Arrow tooth	Flathd. sole	Flat deep	Flat shallow	Rock fish	Other	Total
1991										
Longline										
Sablefish	0	813	35	70	0	2	0	92	18	1,030
Pacific cod	4	0	1,166	4	0	1	0	1	19	1,196
Rockfish	0	1	.	0	.	0	.	1	0	2
Unknown	19	19,703	6,455	144	2	48	4	1,222	175	27,774
Subtotal	24	20,517	7,656	219	2	52	4	1,316	213	30,003
Pot										
Pacific cod	0	.	106	0	0	.	0	0	0	106
Unknown	86	.	10,358	0	.	.	1	1	39	10,486
Subtotal	86	.	10,464	0	0	.	1	2	40	10,593
Trawl										
Pollock										
Bottom	2,075	166	418	1,174	96	253	76	401	68	4,727
Pelagic	13,915	6	78	201	5	16	2	43	17	14,282
Sablefish	14	64	7	127	3	8	.	11	3	236
Pacific cod	1,235	1	10,265	279	67	14	722	95	534	13,212
Flat deep	460	145	335	3,078	155	1,776	460	267	181	6,858
Flat shallow	67	7	120	123	27	13	76	5	42	481
Rockfish	953	637	582	2,941	39	580	69	9,977	392	16,171
Other	130	24	433	124	5	14	55	629	2,155	3,570
Unknown	81,529	1,498	45,854	9,121	837	7,474	3,834	7,340	1,687	159,173
Subtotal	100,377	2,549	58,093	17,169	1,234	10,147	5,294	18,767	5,080	218,710
Other gears										
Unknown	1	6	115	0	.	.	0	423	0	546
Subtotal	1	6	115	0	.	.	0	423	0	546
Yearly total										
1991	100,488	23,072	76,328	17,388	1,237	10,199	5,300	20,508	5,332	259,852

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										
Pollock bottom	3	0	3	3	.	0	0	3	7	19
Sablefish	13	20,477	510	1,266	3	3,237	2	1,707	815	28,029
Pacific cod	60	138	14,891	209	3	16	11	119	619	16,064
Arrowtooth	1	8	7	2	0	0	.	0	2	21
Flat shallow	.	0	1	.	.	.	3	.	.	4
Rockfish	0	44	56	3	.	0	0	739	4	845
Other	0	0	0	0	0	.	.	0	1	1
Subtotal	76	20,667	15,467	1,482	6	3,253	16	2,567	1,448	44,984
Pot										
Pollock bottom	0	.	0	0	.	.	.	0	0	0
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										
Bottom	20,843	66	791	692	185	256	309	141	153	23,434
Pelagic	61,646	11	238	300	23	14	75	16	346	62,669
Sablefish	13	9	2	15	0	2	0	1	0	42
Pacific cod	7,921	74	49,458	2,303	470	412	3,874	401	1,283	66,196
Arrowtooth	55	52	38	96	2	14	0	14	3	274
Flat deep	1,404	619	1,113	9,378	784	6,413	485	1,000	673	21,870
Flat shallow	711	125	1,116	1,660	469	476	3,903	168	574	9,201
Rockfish	545	1,717	580	4,176	68	418	64	18,780	508	26,855
Other	229	36	971	938	182	296	57	1,500	13,492	17,700
Subtotal	93,367	2,708	54,306	19,558	2,182	8,301	8,768	22,021	17,032	228,242
Other gears										
Pollock bottom	5	1	0	.	.	.	.	.	0	7
Pacific cod	2	.	321	.	.	.	0	3	0	327
Flat deep	.	.	.	.	1	1	.	0	.	1
Rockfish	.	.	2	.	.	.	.	337	.	339
Subtotal	7	1	323	.	1	1	0	341	0	674
Yearly total										
1992	93,452	23,376	80,081	21,041	2,189	11,555	8,786	24,932	18,658	284,070

Table 5.--Continued.

Target fishery	Species									
	Pollock	Sable fish	Pacific cod	Arrow tooth	Flathd. sole	Flat deep	Flat shallow	Rock fish	Other	Total
1993										
Longline										
Pollock bottom	.	.	1	1	.	.	.	0	0	2
Sablefish	2	22,255	668	1,741	1	1,089	3	1,526	1,105	28,390
Pacific cod	28	29	8,242	147	0	0	1	55	659	9,162
Arrowtooth	0	26	11	15	0	0	.	7	1	61
Flat 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	8,962	1,906	1	1,103	7	2,259	1,779	38,400
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										
Bottom	18,533	107	2,446	574	347	347	1,509	48	549	24,460
Pelagic	86,697	16	505	286	16	5	118	21	353	88,017
Sablefish	6	97	3	71	.	16	.	10	4	207
Pacific cod	2,349	56	30,602	1,841	210	110	1,203	389	422	37,181
Arrowtooth	39	79	122	1,596	53	112	100	185	80	2,367
Flat deep	326	758	1,183	8,618	957	5,058	387	1,063	698	19,048
Flat shallow	690	179	2,069	2,689	913	660	6,316	280	827	14,623
Rockfish	164	1,097	308	1,041	7	242	16	14,199	343	17,416
Other	59	19	568	583	321	90	68	1,110	6,759	9,576
Subtotal	108,863	2,408	37,806	17,300	2,823	6,639	9,716	17,304	10,035	212,895
Other gears										
Pollock bottom	.	.	.	.	.	.	.	2	.	2
Pacific cod	.	.	8	.	.	.	.	1	.	9
Rockfish	.	.	3	.	.	.	.	129	.	132
Subtotal	.	.	11	.	.	.	.	131	.	142
Yearly total										
1993	108,908	24,759	56,487	19,209	2,824	7,742	9,727	19,695	12,012	261,365

Table 5.--Continued.

Target fishery	Species									
	Pollock	Sable fish	Pacific cod	Arrow tooth	Flathd. sole	Flat deep	Flat shallow	Rock fish	Other	Total
1994*										
Longline										
Pollock bottom	.	.	.	.	.	.	0	.	.	0
Sablefish	2	20,288	269	618	1	1,470	1	1,252	434	24,335
Pacific cod	23	17	6,548	12	0	0	1	65	133	6,801
Rockfish	.	31	56	2	.	449	.	675	700	1,912
Other	.	.	.	.	.	.	.	.	0	0
Unknown	.	.	.	.	0	0	.	0	.	0
Subtotal	26	20,336	6,874	632	1	1,920	2	1,992	1,267	33,049
Pot										
Pacific cod	5	5	8,763	4	.	.	0	0	54	8,832
Flat shallow	.	.	.	.	.	.	51	.	.	51
Other	0	.	.	.	.	.	.	.	1	1
Subtotal	5	5	8,763	4	.	.	51	0	56	8,884
Trawl										
Pollock										
Bottom	11,887	10	656	665	87	36	151	5	44	13,540
Pelagic	94,813	8	258	383	29	10	22	18	68	95,609
Sablefish	8	66	9	126	3	29	0	56	4	301
Pacific cod	2,174	43	28,602	3,095	248	215	853	285	2,052	37,568
Arrowtooth	319	29	54	453	95	100	91	13	71	1,225
Flathead sole	364	103	462	1,240	912	206	178	86	108	3,659
Flat deep	63	581	292	3,460	360	2,542	298	696	192	8,484
Flat shallow	383	113	533	912	376	378	2,080	60	425	5,261
Rockfish	92	1,007	159	897	8	238	29	11,518	342	14,291
Other	0	0	0	.	1	0	1	0	1	3
Unknown	652	449	777	10,953	395	2,962	54	693	596	17,529
Atka mackerel	13	1	64	59	7	5	22	186	1,738	2,095
Subtotal	110,768	2,409	31,865	22,243	2,521	6,722	3,780	13,616	5,642	199,566
Other gears										
Pollock bottom	51	.	23	.	.	.	.	1	.	76
Sablefish	.	1	.	.	.	.	.	0	.	1
Pacific cod	.	.	11	.	0	.	.	1	.	12
Rockfish	1	0	7	.	.	.	.	316	.	324
Subtotal	52	1	41	.	0	.	.	318	.	412
Yearly total										
1994*	110,851	22,751	47,544	22,878	2,522	8,641	3,834	15,927	6,965	241,912

* - Preliminary data as of 29 October 1994.

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, 1991-94, (metric tons).

Target fishery	Species											
	Pollock	Sable fish	Pacific cod	Arrow tooth	Rock sole	Turbot	Yellow fin	Flat other	Rock fish	Atka mackerel	Other	Total
1991												
Longline												
Sablefish	7	151	14	20	.	61	.	0	24	0	8	285
Pacific cod	2,105	131	59,126	1,725	18	256	1	253	191	0	5,936	69,742
Turbot	0	332	74	52	0	644	.	2	30	.	15	1,149
Rockfish	0	10	2	0	.	4	.	.	4	0	0	20
Other	1	6	32	7	1	12	.	0	6	.	25	91
Unknown	462	2,221	21,459	445	4	641	1	86	245	3	1,207	26,773
Subtotal	2,576	2,851	80,707	2,250	22	1,617	2	341	500	3	7,191	98,060
Pot												
Pacific cod	2	0	4,015	0	0	0	38	0	1	1	158	4,216
Arrowtooth	0	0	0	0	.	0	.	.	0	.	.	0
Turbot	.	0	.	0	.	0	.	.	.	.	.	0
Unknown	0	0	2,508	0	.	.	0	1	0	0	45	2,554
Subtotal	2	0	6,523	0	0	0	38	1	1	1	203	6,770
Trawl												
Pollock												
Bottom	208,540	15	21,327	5,278	4,914	145	379	4,596	521	55	4,487	250,256
Pelagic	680,902	2	3,019	456	207	63	39	856	68	0	878	686,490
Sablefish	0	1	0	1	.	1	.	0	0	.	0	4
Pacific cod	8,621	1	31,838	874	1,765	35	33	753	777	329	1,168	46,193
Arrowtooth	1,748	50	558	3,470	41	431	4	541	812	33	562	8,250
Rock sole	9,711	9	4,262	254	22,067	1	2,043	2,610	46	3	1,693	42,699
Turbot	114	172	81	1,033	1	2,685	0	93	60	65	130	4,434
Flatfish	6,219	0	3,425	143	8,406	0	67,663	9,097	2	0	2,747	97,705
Rockfish	689	4	1,169	325	86	24	0	84	4,250	259	230	7,120
Atka mackerel	682	52	1,886	121	98	51	.	18	400	15,330	624	19,261
Other	103	.	219	67	56	0	7	99	50	4	71	677
Unknown	690,053	242	65,023	5,239	18,393	2,809	47,094	13,752	2,642	10,542	2,565	858,352
Subtotal	1,607,382	548	132,806	17,259	56,034	6,245	117,263	32,500	9,628	26,621	15,156	2,021,441
Other gears												
Unknown	344	.	.	.	.	.	.	1	0	.	0	345
Subtotal	344	.	.	.	.	.	.	1	0	.	0	345
Yearly total												
1991	1,610,304	3,399	220,036	19,509	56,056	7,863	117,303	32,842	10,129	26,626	22,550	2,126,617

Table 6.--Continued.

Target fishery	Species											
	Pollock	Sable fish	Pacific cod	Arrow tooth	Rock sole	Turbot	Yellow fin	Plat other	Rock fish	Atka mackerel	Other	Total
1992												
Longline												
Sablefish	1	1,807	139	268	.	1,445	.	6	304	.	146	4,116
Pacific cod	3,189	179	100,940	1,655	28	576	91	275	838	57	11,165	118,993
Turbot	0	28	12	4	.	75	.	0	4	.	10	134
Rockfish	.	0	.	1	.	2	.	0	1	.	0	4
Other	2	0	139	1	0	0	0	0	0	.	17	161
Unknown	0	.	0	0	0	1	.	0	0	.	0	2
Flathead	.	.	8	.	.	0	.	.	.	.	1	9
Subtotal	3,192	2,015	101,238	1,929	28	2,100	91	281	1,147	57	11,340	123,419
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	.	.	0	.	.	.	0	.	.	.	15	15
Subtotal	7	13	13,680	4	2	9	24	1	3	12	685	14,440
Trawl												
Pollock												
Bottom	96,582	0	9,693	1,275	3,715	57	653	2,982	424	19	1,761	117,161
Pelagic	1,295,707	8	13,492	2,798	3,268	251	186	5,629	205	242	4,159	1,325,944
Sablefish	.	26	.	1	.	2	.	.	2	.	1	31
Pacific cod	16,617	10	47,913	2,865	3,501	81	276	2,485	1,176	3,071	3,002	80,998
Arrowtooth	127	1	24	108	13	10	0	44	11	11	24	374
Rock sole	10,359	0	4,867	644	25,266	3	4,941	4,769	22	10	3,145	54,027
Yellowfin	12,804	0	8,538	437	14,462	1	138,009	17,115	0	1	7,924	199,291
Flatfish	987	.	899	126	1,577	1	2,598	1,297	0	0	386	7,871
Rockfish	1,338	25	1,241	1,556	61	220	0	243	11,944	2,164	552	19,345
Atka mackerel	566	5	3,390	205	44	34	0	39	3,421	43,844	193	51,742
Other	30	.	201	14	1	0	74	21	36	0	656	1,031
Unknown	65	.	3	1	17	.	91	35	.	.	30	243
Subtotal	1,435,183	75	90,261	10,030	51,925	661	146,829	34,660	17,241	49,363	21,833	1,858,060
Other gears												
Pacific cod	0	0	117	.	.	.	.	1	0	0	.	118
Other	6	1	64	1	0	.	2	0	1	9	4	88
Subtotal	6	1	180	1	0	.	2	1	1	9	4	206
Yearly total												
1992	1,438,388	2,104	205,360	11,964	51,956	2,770	146,945	34,942	18,392	49,441	33,862	1,996,124

Table 6.--Continued.

Target fishery	Species											
	Pollock	Sable fish	Pacific cod	Arrow tooth	Rock sole	Turbot	Yellow fin	Flat other	Rock fish	Atka mackerel	Other	Total
1993												
Longline												
Sablefish	0	1,976	32	179	0	1,095	.	22	383	0	186	3,873
Pacific cod	2,158	74	65,983	762	19	205	5	209	297	21	8,215	77,946
Arrowtooth	0	1	4	7	.	3	.	0	1	.	5	20
Turbot	5	576	114	553	0	6,007	.	102	273	.	529	8,158
Rockfish	1	22	19	13	.	14	.	.	81	0	6	155
Unknown	0	.	4	.	.	.	.	0	.	.	0	5
Subtotal	2,164	2,649	66,154	1,514	19	7,324	5	333	1,034	21	8,941	90,157
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	87,226	2	12,298	666	6,625	19	523	1,586	113	5	1,474	110,535
Pelagic	1,227,495	0	8,648	557	2,089	67	579	2,659	234	35	2,346	1,244,710
Sablefish	15	19	.	13	.	20	.	0	2	.	5	74
Pacific cod	29,315	3	54,646	1,745	5,688	64	817	2,679	1,166	3,178	2,915	102,214
Arrowtooth	3	1	0	3	0	0	.	1	1	.	0	10
Rock sole	18,583	4	8,161	1,144	39,858	28	6,277	7,270	21	15	3,091	84,451
Turbot	1	1	1	7	0	12	.	5	1	.	0	28
Yellowfin	15,253	0	8,723	1,017	7,301	5	91,931	9,621	6	0	3,847	137,704
Flatfish	2,572	9	1,430	1,171	2,442	168	5,667	4,628	100	0	1,030	19,217
Rockfish	1,623	55	979	1,264	64	644	0	251	16,583	2,912	713	25,086
Atka mackerel	140	4	4,093	161	101	118	.	5	5,458	59,819	312	70,212
Other	29	.	108	17	3	.	0	28	8	.	35	228
Unknown	99	.	15	19	72	0	3	29	2	18	12	269
Subtotal	1,382,353	98	99,102	7,784	64,242	1,145	105,798	28,761	23,695	65,982	15,780	1,794,739
Other gears												
Pacific cod	.	.	35	.	.	.	.	.	.	.	.	35
Other	106	.	0	.	.	.	.	0	.	.	.	107
Subtotal	106	.	35	.	.	.	.	0	.	.	.	141
Yearly total												
1993	1,384,625	2,746	167,389	9,298	64,260	8,469	105,809	29,095	24,729	66,006	24,767	1,887,194

Table 6.--Continued.

Target fishery	Species											
	Pollock	Sable fish	Pacific cod	Arrow tooth	Rock sole	Turbot	Yellow fin	Flat other	Rock fish	Atka mackerel	Other	Total
1994*												
Longline												
Sablefish	0	1,460	20	201	1	2,135	0	1	228	0	127	4,173
Pacific cod	2,784	112	86,367	1,429	25	301	150	213	189	41	10,490	102,101
Turbot	0	153	40	88	0	1,282	.	0	44	0	69	1,677
Rockfish	0	2	0	0	.	6	.	0	4	.	1	14
Other	.	.	.	.	.	5	.	.	1	.	12	17
Unknown	.	.	.	.	.	0	.	.	.	.	0	0
Subtotal	2,784	1,727	86,427	1,718	26	3,729	150	214	467	41	10,700	107,982
Pot												
Sablefish	.	4	.	.	.	.	.	.	0	.	.	4
Pacific cod	3	0	8,181	1	0	.	15	1	1	7	196	8,404
Atka mackerel	.	.	7	.	.	.	.	.	.	0	0	7
Subtotal	3	4	8,188	1	0	.	15	1	1	7	197	8,416
Trawl												
Pollock												
Bottom	126,169	0	6,133	1,005	2,807	12	1,063	1,469	96	1	715	139,469
Pelagic	1,185,024	2	8,230	956	333	65	147	1,457	91	61	713	1,197,078
Sablefish	7	78	4	176	.	195	.	16	22	0	15	512
Pacific cod	24,342	4	53,360	2,054	7,685	61	3,546	3,258	356	241	2,596	97,503
Rock sole	16,077	16	6,271	1,744	40,418	50	4,809	5,488	125	0	3,162	78,161
Turbot	20	342	44	1,281	1	5,454	0	67	90	1	114	7,412
Yellowfin	31,881	.	14,424	1,325	7,554	5	116,346	11,665	.	.	3,293	186,492
Flatfish	6,697	17	1,452	2,898	401	207	3,476	4,389	155	4	2,003	21,700
Rockfish	449	76	470	625	18	348	96	43	11,789	1,339	151	15,403
Atka mackerel	369	1	7,369	148	63	49	0	21	6,185	67,823	433	82,460
Unknown	0	.	1	3	0	0	12	1	.	.	0	17
Subtotal	1,391,035	534	97,758	12,214	59,280	6,446	129,495	27,873	18,908	69,469	13,196	1,826,208
Other gears												
Pacific cod	.	.	619	0	.	.	.	.	0	.	.	619
Other	951	3	3	0	0	2	.	0	0	.	31	990
Subtotal	951	3	622	0	0	2	.	0	0	.	31	1,609
Yearly total												
1994*	1,394,773	2,267	192,994	13,934	59,306	10,177	129,660	28,089	19,375	69,517	24,124	1,944,215

* - Preliminary data as of 29 October 1994.

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, 1991-94, (1,000 metric tons).

	1991		1992		1993		1994*	
	Total	Discards	Total	Discards	Total	Discards	Total	Discards
Gulf of Alaska								
Pollock								
Trawl	100.4	9.2	93.4	15.5	108.9	8.2	110.8	6.4
Longline	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Other gear	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Subtotal	100.5	9.3	93.5	15.6	108.9	8.3	110.9	6.4
Sablefish								
Trawl	2.5	0.2	2.7	0.6	2.4	0.4	2.4	0.5
Longline	20.5	0.0	20.7	0.4	22.4	0.4	20.3	0.3
Other gear	0.0	0.0	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	22.8	0.8
Pacific cod								
Trawl	58.1	1.2	54.3	3.1	37.8	5.1	31.9	2.7
Longline	7.7	0.2	15.5	0.5	9.0	0.7	6.9	0.4
Other gear	10.6	0.0	10.3	0.2	9.7	0.1	8.8	0.1
Subtotal	76.3	1.4	80.1	3.8	56.5	5.9	47.5	3.2
Flatfish								
Trawl	33.8	19.1	38.8	24.1	36.5	21.3	35.3	24.8
Longline	0.3	0.3	4.8	4.7	3.0	2.9	2.6	2.5
Other gear	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Subtotal	34.1	19.4	43.6	28.9	39.5	24.2	37.9	27.3
Rockfish								
Trawl	18.8	3.3	22.0	5.2	17.3	6.7	13.6	4.0
Longline	1.3	0.1	2.6	0.7	2.3	0.7	2.0	0.7
Other gear	0.4	0.0	0.3	0.0	0.1	0.0	0.3	0.0
Subtotal	20.5	3.4	24.9	5.9	19.7	7.3	15.9	4.6
Atka mackerel								
Trawl	1.2	0.1	8.6	0.4	5.1	0.4	3.5	0.3
Longline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other gear	.	.	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	1.2	0.1	8.6	0.4	5.1	0.4	3.5	0.3
Other								
Trawl	3.9	2.0	8.4	3.7	4.9	3.1	2.1	2.1
Longline	0.2	0.2	1.4	1.4	1.8	1.8	1.3	1.3
Other gear	0.0	0.0	0.2	0.1	0.2	0.1	0.1	0.0
Subtotal	4.1	2.2	10.1	5.2	6.9	5.0	3.4	3.4
Area total								
Trawl	218.7	35.1	228.2	52.7	212.9	45.2	199.6	40.7
Longline	30.0	0.9	45.0	7.8	38.4	6.5	33.0	5.2
Other gear	11.1	0.1	10.8	0.3	10.1	0.2	9.3	0.1
All gear	259.9	36.1	284.1	60.7	261.4	51.9	241.9	46.1

Table 7.--Continued.

	1991		1992		1993		1994*	
	Total	Discards	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	1,391.0	103.5
Longline	2.6	2.4	3.2	3.1	2.2	1.9	2.8	2.5
Other gear	0.3	0.0	0.0	0.0	0.1	0.0	1.0	0.0
Subtotal	1,610.3	140.6	1,438.4	130.8	1,384.6	112.1	1,394.8	106.0
Sablefish								
Trawl	0.5	0.0	0.1	0.0	0.1	0.0	0.5	0.1
Longline	2.9	0.0	2.0	0.0	2.6	0.0	1.7	0.0
Other gear	0.0	0.0	0.0	0.0	.	.	0.0	0.0
Subtotal	3.4	0.1	2.1	0.0	2.7	0.1	2.3	0.1
Pacific cod								
Trawl	132.8	15.5	90.3	21.7	99.1	32.6	97.8	28.8
Longline	80.7	1.6	101.2	2.1	66.2	4.5	86.4	3.1
Other gear	6.5	0.2	13.9	0.2	2.1	0.0	8.8	0.2
Subtotal	220.0	17.3	205.4	24.0	167.4	37.1	193.0	32.0
Flatfish								
Trawl	229.3	97.6	244.1	111.6	207.7	97.3	235.3	104.1
Longline	4.2	3.9	4.4	4.0	9.2	2.9	5.8	4.1
Other gear	0.0	0.0	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	241.2	108.3
Rockfish								
Trawl	9.6	2.6	17.2	4.1	23.7	7.8	18.9	6.5
Longline	0.5	0.1	1.1	0.5	1.0	0.4	0.5	0.1
Other gear	0.0	0.0	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	19.4	6.6
Atka mackerel								
Trawl	26.6	3.4	49.4	9.6	66.0	15.7	69.5	10.2
Longline	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Other gear	0.0	0.0	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	69.5	10.3
Other								
Trawl	15.2	13.4	21.8	20.0	15.8	15.0	13.2	12.7
Longline	7.2	5.9	11.3	10.5	8.9	7.9	10.7	9.4
Other gear	0.2	0.2	0.7	0.6	0.0	0.0	0.2	0.2
Subtotal	22.6	19.4	33.9	31.1	24.8	22.9	24.1	22.3
Area total								
Trawl	2,021.4	270.6	1,858.1	294.7	1,794.7	278.6	1,826.2	265.9
Longline	98.1	13.9	123.4	20.3	90.2	17.6	108.0	19.2
Other gear	7.1	0.4	14.6	0.8	2.3	0.1	10.0	0.5
All gear	2,126.6	284.9	1,996.1	315.8	1,887.2	296.3	1,944.2	285.6

Table 7.--Continued.

	1991		1992		1993		1994*	
	Total	Discards	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	1,501.8	109.9
Longline	2.6	2.5	3.3	3.2	2.2	1.9	2.8	2.5
Other gear	0.4	0.1	0.0	0.0	0.1	0.0	1.0	0.0
Subtotal	1,710.8	149.9	1,531.8	146.4	1,493.5	120.4	1,505.6	112.5
Sablefish								
Trawl	3.1	0.3	2.8	0.6	2.5	0.4	2.9	0.6
Longline	23.4	0.1	22.7	0.4	25.0	0.4	22.1	0.3
Other gear	0.0	0.0	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	25.0	0.9
Pacific cod								
Trawl	190.9	16.7	144.6	24.8	136.9	37.7	129.6	31.5
Longline	88.4	1.8	116.7	2.6	75.1	5.2	93.3	3.5
Other gear	17.1	0.2	24.2	0.3	11.9	0.1	17.6	0.2
Subtotal	296.4	18.7	285.4	27.8	223.9	43.0	240.5	35.2
Flatfish								
Trawl	263.1	116.7	282.9	135.8	244.2	118.6	270.6	128.9
Longline	4.5	4.2	9.2	8.7	12.2	5.9	8.4	6.6
Other gear	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Subtotal	267.7	120.9	292.1	144.5	256.4	124.5	279.0	135.6
Rockfish								
Trawl	28.4	5.9	39.3	9.3	41.0	14.5	32.5	10.4
Longline	1.8	0.2	3.7	1.1	3.3	1.1	2.5	0.8
Other gear	0.4	0.0	0.3	0.0	0.1	0.0	0.3	0.0
Subtotal	30.6	6.1	43.3	10.4	44.4	15.5	35.3	11.2
Atka mackerel								
Trawl	27.9	3.5	57.9	10.0	71.1	16.1	73.0	10.5
Longline	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Other gear	0.0	0.0	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	73.1	10.6
Other								
Trawl	19.0	15.4	30.3	23.7	20.7	18.1	15.3	14.7
Longline	7.4	6.1	12.8	12.0	10.7	9.6	12.0	10.7
Other gear	0.2	0.2	0.9	0.7	0.2	0.2	0.3	0.3
Subtotal	26.7	21.6	43.9	36.3	31.6	27.9	27.6	25.7
Area total								
Trawl	2,240.2	305.7	2,086.3	347.4	2,007.6	323.9	2,025.8	306.6
Longline	128.1	14.8	168.4	28.1	128.6	24.1	141.0	24.5
Other gear	18.3	0.5	25.5	1.1	12.4	0.3	19.3	0.6
All gear	2,386.5	321.0	2,280.2	376.5	2,148.6	348.3	2,186.1	331.7

* - Preliminary data as of 29 October 1994.

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, 1984-94, ($ millions and percentage of total).

Year	Fishery			
	Domestic	Joint venture	Foreign	Total
	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	413.9	0.0	0.0	413.9
1994*	413.3	0.0	0.0	413.3
	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
1994	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.
* Preliminary data as of 21 November 1994.

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	413.9	1,201.2
			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	27.3	32.6	1.2	4.5	34.4	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, 1985-94, (1,000 metric tons, round weight).

		Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
Species	Year	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
	1994*	26.0	143.7	179.2	90.5	1,509.9	1,608.1	116.7	1,653.6	1,787.6
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
	1994*	0.0	95.6	95.6	1.3	1,224.7	1,226.0	1.3	1,320.3	1,321.6
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
	1994*	17.8	1.8	19.6	1.7	0.5	2.2	19.7	2.3	22.0
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
	1994*	6.5	30.0	45.6	83.8	67.2	158.7	90.4	97.2	204.3
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
	1994*	0.1	7.9	8.0	2.0	144.1	146.1	2.1	152.0	154.1

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
	1994*	1.3	5.0	6.5	0.4	12.5	12.9	1.7	17.5	19.4
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
	1994*	0.0	3.3	3.3	0.0	59.3	59.3	0.0	62.5	62.5

Notes: All gear includes the specified gears, other gear, and unidentified gear.
* Preliminary data, extracted from database on 21 November 1994.

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, 1986-94, (1,000 metric tons, round weight).

	Gulf of Alaska		Bering Sea/Aleutians		All Alaska	
Species/Year	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
1994*	19.0	160.2	1,187.7	420.4	1,206.8	580.8
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
1994*	0.5	95.1	858.8	367.2	859.3	462.3
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
1994*	4.4	15.2	1.7	0.4	6.2	15.7
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
1994*	5.0	40.6	120.5	38.2	125.5	78.8
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
1994*	1.0	7.0	132.8	13.3	133.8	20.3

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
1994*	4.8	1.7	12.7	0.1	17.5	1.9
Atka Mackerel						
1988	0.1	0.0	1.9	0.0	2.0	0.0
1989	0.2	0.0	18.2	0.1	18.4	0.1
1990	0.1	0.0	21.8	0.4	21.9	0.4
1991	3.2	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
1994*	3.3	0.0	59.2	0.0	62.5	0.1

Note: * Preliminary data, extracted from database on 21 November 1994.

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, 1986-94, (1,000 metric tons, round weight).

	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
Species/Year	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
1994*									
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
1994*									
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
1994*									
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
1994*									
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
1994*									

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
1994*									
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
1994*									

Note: * Preliminary data; extracted from the data bases on June 1994. 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, 1985-94, ($ millions).

		Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
Species	Year	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
	1994*	53.0	33.5	90.7	48.9	270.3	322.0	102.5	303.8	413.3
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
	1994*	0.0	15.6	15.6	1.0	202.1	203.2	1.0	217.7	218.7
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
	1994*	48.6	3.9	52.5	4.5	0.8	5.2	53.6	4.6	58.3
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	43.2	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
	1994*	2.8	9.3	15.9	39.8	18.6	61.1	42.5	28.0	77.1
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
	1994*	0.0	2.2	2.3	1.0	29.8	30.8	1.1	32.0	33.1

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
	1994*	1.2	1.4	2.8	0.3	2.7	3.1	1.6	4.1	5.9
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
	1994*	0.0	0.9	0.9	0.0	16.0	16.0	0.0	17.0	17.0

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. Totals include specified gear, other gear, and unidentified gear. Zero indicates none or less than $50,000.

* Preliminary data, extracted from database on 21 November 1994.

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, 1986-94, ($ millions).

	Gulf of Alaska		Bering Sea/Aleutians		All Alaska	
Species/Year	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
1994*	0.1	15.5	143.7	59.4	143.8	74.9
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
1994*	11.3	41.1	4.2	1.1	15.8	42.5
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
1994*	1.9	14.0	50.2	10.9	52.1	25.0
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
1994*	0.3	2.0	27.7	3.1	28.0	5.0
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
1994*	1.5	1.3	2.9	0.1	4.5	1.4

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
1994*	0.9	0.0	16.0	0.0	17.0	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
1994*	26.1	64.6	247.2	74.8	263.6	149.7

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. Zero indicates none or less than $50,000.
* Preliminary data, extracted from database on 21 November 1994.

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, 1986-94, ($ million).

	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
Species/Year	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
1994*									
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
1994*									
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
1994*									
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
1994*									
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
1994*									

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
1994*									
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
1994*									

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.
* Preliminary data; they were extracted from data bases on June 1994. 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, 1985-94, ($/lb, round weight).

	Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
Species/Year	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
1994*	0.923	0.106	0.229	0.245	0.081	0.091	0.398	0.083	0.105
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
1994*	0.188	0.074	0.074	0.369	0.075	0.075	0.369	0.075	0.075
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
1994*	1.239	0.962	1.213	1.174	0.761	1.088	1.235	0.922	1.202
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
1994*	0.191	0.141	0.158	0.215	0.126	0.175	0.213	0.131	0.171
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
1994*	0.266	0.127	0.129	0.231	0.094	0.096	0.233	0.095	0.097

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
1994*	0.419	0.130	0.198	0.449	0.098	0.108	0.426	0.107	0.138
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
1994*	0.000	0.130	0.130	0.120	0.123	0.123	0.120	0.123	0.123

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.
* Preliminary data, extracted from database on 21 November 1994.

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, 1985-94.

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
1994*				
	Pollock	53.3	76.2	74.0
	Sablefish	11.0	0.1	1.2
	Pacific cod	25.4	9.9	11.4
	Flatfish	4.5	9.1	8.6
	Rockfish	3.6	0.8	1.1
	Atka mackerel	1.8	3.7	3.5
	Other	0.4	0.2	0.2

Note: * Preliminary data, extracted from the database on 21 November 1994.

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, 1985-94.

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
	1994*	10.0	90.0	0.0
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
	1994*	7.2	92.7	0.0
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
	1994*	89.3	9.9	0.8
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
	1994*	22.3	77.7	0.0

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
	1994*	5.2	94.8	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
	1994*	33.4	66.3	0.3
Atka mackerel				
	1984	100.0	0.0	0.0
	1986	0.0	100.0	0.0
	1987	0.0	100.0	0.0
	1988	3.4	96.6	0.0
	1989	1.0	99.0	0.0
	1990	0.3	99.7	0.0
	1991	12.4	87.6	0.0
	1992	23.2	76.8	0.0
	1993	2.7	53.8	43.5
	1994*	5.2	94.8	0.0

Note: * Preliminary data, extracted from database on 21 November 1994.

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, 1985-94.

		Gulf of Alaska			Bering Sea/Aleutians			All Alaska		
Species	Year	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
	1994*	80.2	14.5	5.3	93.9	5.6	0.5	92.5	6.5	1.0
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
	1994*	100.0	0.0	0.0	99.9	0.1	0.0	99.9	0.1	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
	1994*	9.3	90.7	0.0	20.8	79.0	0.2	10.4	89.6	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	9.8	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
	1994*	65.7	14.4	19.9	42.3	52.9	4.8	47.6	44.2	8.2
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
	1994*	98.9	1.1	0.0	98.6	1.4	0.0	98.7	1.3	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
	1994*	76.4	20.1	3.5	97.3	2.7	0.0	90.2	8.6	1.2
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
	1994*	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0

Note: * Preliminary data, extracted from the database on 21 November 1994.

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, 1985-94.

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
1994*	Pollock	17.2	63.1	52.9
	Sablefish	57.9	1.6	14.1
	Pacific cod	17.6	19.0	18.7
	Flatfish	2.5	9.6	8.0
	Rockfish	3.1	0.9	1.4
	Atka mackerel	1.0	5.0	4.1
	Other	0.7	0.8	0.8

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.
* Preliminary data, extracted from the database on 21 November 1994.

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, 1985-94.

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
	1994*	21.9	77.9	0.2
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
	1994*	7.1	92.9	0.0
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
	1994*	90.0	9.0	1.0
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
	1994*	20.7	79.3	0.0

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
	1994*	6.9	93.1	0.0
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
	1994*	47.8	51.8	0.4
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
	1994*	5.5	94.5	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.
* Preliminary data, extracted from the database on 21 November 1994.

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, 1985-94.

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
	1994*	36.9	58.5	4.6	83.9	15.2	0.9	73.5	24.8	1.7
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
	1994*	100.0	0.0	0.0	99.5	0.5	0.0	99.5	0.5	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
	1994*	7.4	92.6	0.0	14.5	85.3	0.2	8.0	92.0	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
	1994*	58.6	17.3	24.1	30.5	65.0	4.5	36.3	55.2	8.5
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
	1994*	97.8	2.2	0.0	96.7	3.3	0.0	96.8	3.2	0.0

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
	1994*	50.3	42.7	7.0	88.7	11.3	0.0	70.2	26.5	3.3
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
	1994*	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.
* Preliminary data, extracted from the database on 21 November 1994.

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, 1986-94.

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

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, 1986-94.

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
110-13	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

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, 1986-94.

	At-sea				Shore-based			
Species/Year	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
1994*								
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
1994*								
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
1994*								
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
1994*								
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	43	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
1994*								
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
1994*								

Table 26.--Continued.

Species/Year	At-sea Hook&Line	At-sea Pot	At-sea Trawl	At-sea Other	Shore-based Hook&Line	Shore-based Pot	Shore-based Trawl	Shore-based 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
1994*								
			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
1994*								
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
1994*								
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
1994*								
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
1994*								
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
1994*								

Table 26.--Continued.

	At-sea				Shore-based			
Species/Year	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
1994*								
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
1994*								
				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
1994*								
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
1994*								
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
1994*								
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
1994*								

Table 26.--Continued.

	At-sea				Shore-based			
Species/Year	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
1994*								
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
1994*								
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
1994*								

Note: * Preliminary data as of June 1994. 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, 1986-94.

		At-sea				Shore-based			
Year	Residency	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
1994*	Alaska								
	Other								
	Unknown								
					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 Hook&Line	At-sea Pot	At-sea Trawl	At-sea Other	Shore-based Hook&Line	Shore-based Pot	Shore-based Trawl	Shore-based 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
1994*	Alaska								
	Other								
	Unknown								
					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
1994*	Alaska								
	Other								
	Unknown								

Note: * Preliminary data as of June 1994. 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, year, and month, 1986-94.

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
1994*												
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
1994*												
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
1994*												
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
1994*												

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
1994*												
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
1994*												
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
1994*												
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
1994*												

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
1994*												
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
1994*												
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
1994*												
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
1994*												

Note: * Preliminary data as of June 1994. 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, year, and month, 1986-94.

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
1994*												
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
1994*												
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
1994*												
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
1994*												

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
1994*												
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
1994*												
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
1994*												
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
1994*												

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
1994*												
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
1994*												
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
1994*												
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
1994*												

Table 29.--Continued.

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
						Number of Motherships						
						Gulf of Alaska						
Pots												
1990	0	0	0	0	0	0	1	1	1	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	1	3	3	1	0	0	0	0	0	0	0	0
1993	0	1	1	0	0	0	0	0	0	0	0	0
1994*												
Longline												
1989	0	0	0	2	2	2	2	0	0	0	0	0
1990	0	0	0	8	4	4	0	0	0	0	0	0
1991	0	0	0	1	2	1	2	0	0	0	0	0
1992	1	2	2	2	3	3	0	0	0	0	0	0
1993	0	1	1	0	1	1	0	0	0	0	0	0
1994*												
Trawl												
1986	0	0	0	0	0	0	0	0	0	0	1	0
1987	0	0	0	0	0	0	0	0	1	1	0	0
1988	0	0	0	0	0	0	1	0	0	0	0	0
1989	0	0	2	2	0	0	0	0	1	0	0	0
1990	0	0	2	2	0	1	2	3	1	2	1	0
1991	3	6	10	4	0	1	1	0	0	3	0	0
1992	2	4	10	0	0	1	1	0	0	1	0	0
1993	1	1	3	1	0	2	1	1	0	1	0	0
1994*												
All Gear												
1986	0	0	0	0	0	0	0	0	0	0	1	0
1987	0	0	0	0	0	0	0	0	1	1	0	0
1988	0	0	0	0	0	0	1	0	0	0	0	0
1989	0	0	2	4	2	2	2	1	0	0	0	0
1990	0	0	2	10	4	5	3	4	2	2	1	0
1991	3	6	10	5	2	2	3	0	0	3	0	0
1992	2	6	12	2	3	4	1	0	0	1	0	0
1993	1	1	3	1	1	3	1	1	0	1	0	0
1994*												
						Bering Sea/Aleutian Islands						
Pots												
1990	0	0	1	0	0	0	0	0	0	0	0	0
1991	0	0	1	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	1	1	1	1	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
1994*												

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
1994*												
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
1994*												
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
1994*												
						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
1994*												
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
1994*												

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
1994*												
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
1994*												

Note: * Preliminary data as of June 1994. 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, 1990-92, quantity in metric tons, product weight and value in million dollars.

Species/ Product	1990 Quantity	1990 Value	1991 Quantity	1991 Value	1992 Quantity	1992 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	0.9	7,214	1.1	8,339	1.9
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	10.5	8,985	10.8	8,705	11.7
Total		245.4		296.1		221.8
Sablefish						
H & G	18,495	85.0	15,567	94.0	14,838	91.7
Other	222	1.0	571	2.0	267	0.8
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	0.0	1,676	2.4	2,036	1.6
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	0.8	311	0.4	249	0.5
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	0.0	245	0.1	977	2.1
Total		25.9		28.6		47.4
Total		$1,072.8		$1,520.4		$1,404.8

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

(d) - Less than three firms in one area.

Source: National Marine Fisheries Service, Alaska Region.

Table 31.--Continued.

Species/ Product	1992 Gulf	1992 Bering Sea & Aleutians	1992 Total	1993 Gulf	1993 Bering Sea & Aleutians	1993 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
Fillets	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
Fillets	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
Fillets	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) - Less than three firms in one area. H & G - headed and gutted.
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	Shoreside	Total	At sea	Shoreside	Total
Pollock						
Whole	429	927	1,356	671	1,329	2,001
H & G	3,034	281	3,315	3,006	47	3,053
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 At sea	1992 Shoreside	1992 Total	1993 At sea	1993 Shoreside	1993 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
Fillets	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
Fillets	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
Fillets	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	576	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) - Less than three firms in one type of operation.
H & G - headed and gutted.
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.

	Blocks				Fillets			
Year	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, 1992-94, in cents/lb.

Month	Blocks					Fillets			
		Minced	Alaska pollock			Cod	Cod		Ocean
	Cod	cod	Imported	Domestic	Whiting	(Canada)	(Iceland)	Flounder	perch
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
1994									
Jan.	172.5	45.0	66.5	85.0	NQ	220.0	285.0	NQ	155.0
Feb.	172.5	45.0	66.5	81.0	TFQ	220.0	285.0	NQ	160.0
Mar.	172.0	45.0	66.5	81.0	TFQ	212.5	285.0	NQ	TFQ
Apr.	170.0	TFQ	67.5	80.0	TFQ	212.5	285.0	NQ	TFQ
May	170.0	44.0	67.5	80.0	NQ	212.5	285.0	NQ	NQ
Jun.	172.5	44.0	67.5	80.0	NQ	225.0	285.0	220.0	190.0
Jul.	172.5	44.0	67.5	80.0	TFQ	225.0	285.0	TFQ	190.0
Aug.	175.0	44.0	67.5	79.0	87.5	225.0	285.0	215.0	192.5
Sep.									
Oct.									
Nov.									
Dec.									

Notes: NQ - No quote. TFQ - Too few quotes.
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, 1989-94, 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			
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
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

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			
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
1994									
Jan.	90	45	--	135	--	141	170	225	235
Feb.	88	45	--	135	--	136	175	225	235
Mar.	85	45	--	135	--	138	185	218	229
Apr.	85	45	--	135	--	138	180	232	241
May	85	45	--	135	--	141	180	245	255
Jun.	80	45	--	135	--	141	180	245	255
Jul.	80	45	--	135	--	141	178	248	258
Aug.									
Sep.									
Oct.									
Nov.									
Dec.									

[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, 1985-94, in yen/kilogram (weighted average).

Species	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Flatfish, fresh												
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
1994	603	592	534	573								
Cod, fresh												
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
1994	261	272	170	132								
Cod, frozen												
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
1994	309	258	112	245								
Alaska pollock, fresh												
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
1994	76	125	118	88								

Table 36.--Continued.

Species	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Atka mackerel, fresh												
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
1994	25	28	21	20								
Rockfish, fresh												
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
1994	2687	2861	1944	2363								

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, 1985-94, in yen/kilogram (weighted average).

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Flatfish, frozen												
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
1994	423	426	403	424								
Cod, frozen												
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
1994	610	612	635	626								
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
1994	322	315	309	312								

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. Available from Alaska Fish. Sci. Cen., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 38.--Annual exports of groundfish from Alaska, Washington, and Oregon customs districts, quantity (1,000 lbs), 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	56,407	.49
1993	133,323	62,457	.47
Pollock			
1989	8,127	4,392	.54
1990	3,313	2,447	.74
1991	626	459	.73
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	95,180	2.38
1992	32,689	77,037	2.36
1993	44,106	88,490	2.01
Total whole or dressed			
1989	229,145	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
Fillets 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	2.40
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
1993	13,738	18,695	1.36
Total fillets and steaks			
1989	27,860	28,304	1.02
1990	19,338	22,837	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	72,980	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. data base 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 lbs), percent change from 1992 to 1993, and average price ($/lb), 1992-93.

Product/Country	Quantity 1992	Quantity 1993	% Change 92 to 93	Average price 1992	Average price 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	4.32	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. data base 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.

	Fillets and steaks		Blocks		Total	
Year	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. per capita consumption of fish and shellfish, 1970-93, population in millions and consumption in lbs, 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 July 1 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, 1993. 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 lbs and per capita in lbs, 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	1.04
1993 p	775,945	3.02	277,353	1.08

[1]Series 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.

[2]Total 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, 1992-94.

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
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	53.0	145.8	135.9	141.1	158.7
1994									
Jan.	119.0	106.1	112.9	171.7	52.7	146.2	136.1	140.5	163.2
Feb.	119.2	108.4	112.9	155.1	56.4	146.7	136.0	140.4	160.9
Mar.	119.7	109.9	116.3	162.1	56.1	147.2	136.4	140.1	161.8
Apr.	119.8	109.4	117.2	159.2	56.9	147.2	136.6	140.9	163.7
May	119.9	106.6	116.9	158.1	58.2	147.5	136.2	141.8	161.6
Jun.	120.4	103.5	117.1	160.1	59.2	148.0	135.4	143.6	162.7
Jul.	120.6	101.2	116.8	159.1	62.1	148.4	134.7	144.1	163.2
Aug.	121.2	104.8	115.2	160.7	66.0	149.0	135.1	141.7	163.6
Sep.	120.9	102.2	115.9	162.2	62.8	149.4	135.0	143.3	164.9
Oct.	120.9	100.5	114.9	161.3	60.0	149.5	135.0	141.5	164.8
Nov.									
Dec.									

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, 1992-94, 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)
1992								
Jan.	1.156	6.12	125.1	762.7	1.847	57.14	6.20	0.552
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
1994								
Jan.	1.317	6.77	111.5	810.5	1.777	72.97	7.48	.670
Feb.	1.342	6.77	106.2	806.6	1.741	72.96	7.49	.676
Mar.	1.364	6.32	105.1	807.7	1.748	72.05	7.35	.671
Apr.	1.382	6.67	103.5	808.5	1.756	72.10	7.36	.674
May	1.381	6.49	103.7	806.6	1.713	70.86	7.19	.665
Jun.p	1.389	6.42	102.6	806.2	1.705	NA	7.13	.658
Jul.p	1.378	6.11	98.2	807.2	1.671	NA	6.81	.642
Aug.p	1.380	6.10	100.1	804.3	1.740	NA	6.83	.648
Sep.								
Oct.								
Nov.								
Dec.								

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

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

Table 47.--Monthly U.S. cold storage holdings of selected groundfish blocks, 1992-94, in 1,000 lbs (end of month).

Month	Cod	Flounder	Alaska pollock	Pollock, other	Whiting	Minced	Total*
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
1994							
Jan.	3,529	859	11,126	3,258	594	6,681	31,765
Feb.	4,029	761	10,145	3,174	746	5,661	29,289
Mar.	3,444	562	9,663	4,051	553	6,875	29,544
Apr.	3,599	637	12,460	3,846	743	7,974	33,113
May	3,706	747	17,771	2,923	715	8,327	37,778
Jun.	5,086	645	18,899	2,442	1,377	12,801	44,640
Jul.p	5,197	310	13,616	3,602	1,012	13,907	40,437
Aug.							
Sep.							
Oct.							
Nov.							
Dec.							

Notes: * Total includes other species not listed. p - preliminary.

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

Table 48.--Monthly U.S. cold storage holdings of selected groundfish fillets, 1992-94, in 1,000 lbs (end of month).

Month	Cod	Flounder	Ocean perch	Alaska pollock	Pollock, other	Whiting	Total*
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
1994							
Jan.	28,874	4,937	1,899	20,454	3,148	4,553	66,339
Feb.	26,193	3,958	1,451	23,974	2,195	3,694	63,180
Mar.	23,901	2,929	1,159	26,968	2,258	2,918	62,396
Apr.	25,969	3,688	1,239	27,602	2,131	2,962	65,892
May	26,935	3,962	1,025	25,058	2,449	2,027	69,730
Jun.	25,392	4,576	1,768	21,991	3,072	2,488	67,686
Jul.p	25,128	3,574	2,814	20,344	4,214	2,030	63,037
Aug.							
Sep.							
Oct.							
Nov.							
Dec.							

Notes: * Total includes other species not listed. p - preliminary.

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

Table 49.--Monthly West Coast cold storage holdings of selected groundfish products, 1992-94, in 1,000 lbs (end of month).

Month	Alaska pollock blocks	Fillets			Sablefish	Surimi	Analog products
		Cod	Flounder	Pollock			
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
1994							
Jan.	853	6,799	1,913	20,222	761	16,808	3,940
Feb.	789	6,011	1,566	21,272	148	19,157	4,699
Mar.	2,729	5,053	1,194	25,890	134	24,338	5,062
Apr.	3,341	6,830	1,157	26,947	75	23,500	6,253
May	2,794	6,220	1,469	22,187	2,401	23,651	6,403
Jun.	2,744	5,214	1,292	20,048	2,340	18,151	4,997
Jul.p	2,749	4,568	1,304	17,933	839	16,560	4,086
Aug.							
Sep.							
Oct.							
Nov.							
Dec.							

Notes: Includes domestic and foreign products. p - preliminary.

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

DRAFT

Council Recommended 1995 BSAI Trawl Fisheries PSC Apportionments and Seasonal Allowances

Fishery Group	Assumed Mortality\1	Halibut Mortality Cap (mt)	Herring (mt)	Red King Crab (animals) Zone1	C. bairdi Zone1	C. bairdi Zone2
Yellowfin sole	70%	750	315	50,000	225,000	1,525,000
January 20 - August 2		280		35,000		
August 3 - December 31		470		15,000		
Rocksole/other flatfish	70%	690		110,000	475,000	510,000
January 20-March 29		428				
March 30 - June 28		180				
June 29-December 31		82				
Turbot/sablefish/ Arrowtooth	40%	120				5,000
Rockfish	60%	110	8			10,000
Jan. 1 - Mar. 29		30				
Mar. 30 - June 28		60				
June 29 - Dec. 31		20				
Pacific cod	60%	1,550	24	10,000	225,000	260,000
January 20-October 24		1,450				
Oct. 25-December 31		100				
Pollockmackerel/o.species	60%	555	169	30,000	75,000	690,000
January 20-April 15		455				
April 16- December 31		100				
# MW Pollock (Herring)	80%		1346			
TOTAL		**3,775**	**1,861**	**200,000**	**1,000,000**	**3,000,000**

\1 Mortality rates of halibut based on rates used in 1994, subject to re-evaluation and revision in June.

Council Recommended 1995 BSAI Non-Trawl Fisheries PSC Bycatch Allowances

Fishery Group	Assumed Mortality*	Halibut Mortality (mt)	Seasonal Apportion (mt)
Pacific Cod	12.5%	725	
Jan 1 - April 30			475
May 1 - August 31			40
Sept. 1 - Dec. 31			210
Other Non-Trawl**	12.5%/15%	175	
Groundfish Pot	5%	Exempt	
TOTAL		900 mt	

* Mortality rates based on rates used in 1994, subject to re-evaluation and revision in June.

** Includes hook & line fisheries for rockfish and Greenland turbot.
Sablefish hook & line fisheries will be exempted from the halibut mortality cap.
Jig gear will also be exempted from the halibut mortality cap.

DRAFT

BERING SEA AND ALUETIAN ISLANDS GROUNDFISH
Final 1995 Council Recommendations and Apportionments (mt)

Species	Area	Council OFL	Council ABC	Council TAC	Council ITAC
Pollock	EBS	1,500,000	1,250,000	1,250,000	1,062,500
	"A"			45%	
	"B"			55%	
	AI	60,400	56,600	56,600	48,110
	518	22,100	22,100	1,000	850
Pacific cod	BS/AI	390,000	328,000	250,000	212,500
Yellowfin sole	BS/AI	319,000	277,000	190,000	161,500
Greenland turbot	BS/AI	27,200	7,000	7,000	5,950
Arrowtooth	BS/AI	138,000	113,000	10,227	8,693
Rock sole	BS/AI	388,000	347,000	60,000	51,000
Flathead sole	BS/AI	167,000	138,000	30,000	25,500
Other flatfish	BS/AI	137,000	117,000	19,540	16,609
Sablefish	EBS	4,900	1,600	1,600	1,360
	AI	total	2,200	2,200	1,870
POP complex					
True POP	EBS	2,910	1,850	1,850	1,573
Other POP	EBS	1,400	1,400	1,260	1,071
True POP	AI	15,900	10,500	10,500	8,925
Sharp/Northern	AI	5,670	5,670	5,103	4,338
Short/Rougheye	AI	1,220	1,220	1,098	933
Other rockfish	EBS	365	365	329	280
	AI	770	770	693	589
Atka mackerel	BS/AI	335,000	125,000	80,000	68,000
	Western		55,600	16,500	14,025
	Central		55,900	50,000	42,500
	Eastern		13,500	13,500	11,475
Squid	BS/AI	3,110	3,110	1,000	850
					0
Other species	BS/AI	136,000	27,600	20,000	17,000
BS/AI TOTAL		3,655,945	2,836,985	2,000,000	1,700,000

"A" season for pollock: January 20 to April 15. "B" season: August 15 to December 31.
ITAC = recommended TAC less the 15% reserve.

GAUVIN

Analysis of the Impacts of a 5% Shift of Pollock TAC Form the Pollock A Season To the B Season

Principle Findings: It will be demonstrated that the proposed shift of 5% of the BS/AI pollock TAC from the A season to the B season will result in a $30,678,000 loss of gross revenue to the at-sea, shoreside, and CDQ communities. The estimated loss to CDQ communities from the 5% shift to the B season is $2,300,000.

Assumptions made for this analysis:

1. Impacts are to at-sea, shoreside, and CDQ communities.
2. Impacts are in terms of gross revenue.
3. 1994 prices and product form percentages are used to model conditions expected in 1995.
4. A 5% decrease in pollock taken in the A season does not result in a higher price for pollock roe because the U.S. industry produces only approximately 15% of overall supply of pollock roe in Japan (see attached figure). The U.S. is assumed to be a price taker given that Russia has in recent years supplied to Japan almost twice as much pollock roe as has the United States. In addition, experts believe Russian production to be at or very close to the quality level of U.S. supply.
5. Surimi and roe prices are reported as they appear in "Bill Atkinson's News Report" (BANR), September 14, 1994 and November 2, 1994 editions respectively. Pollock roe prices are averaged across grades for U.S. product in 1994. Surimi prices are for FA grade surimi.
6. The Bering Sea and Aleutian Islands TACs for pollock are assumed to be 1,250,000 mt and 56,600 mt respectively (the BSAI Plan Team recommendations)
7. Product recovery rates used for this analysis are those PRRs approved in the October 5, 1994 final rule on PRRs for the BSAI and GOA (CFR vol 59, no. 152).

Analysis

Tonnage transferred from the A season to the B season

Assuming the Plan Team recommended TACs are approved, then the overall pollock TAC would be 1,306,600 mt (1,250,000 mt (BS) + 56,600 mt (AI) = 1,306,600). The reserve 7.5 percent must be deducted (i.e. the ITAC is 15% lower but the 7.5% CDQ portion is left in the calculation because it is available at the beginning of the fishing year and is apportioned between A and B seasons in the same proportion as the open access fishery). This results in an open access and CDQ pollock fishery for 1,208,605 mt. Under the proposed shift of 5% of the TAC to the B season (a 40%,60% split, rather than the status quo split of 45%,55%), 60,430.3 metric tons of pollock would be shifted from the A season to the B season.

Under this scenario, 60,430.3 mt of pollock shifted to the B season would result in a net loss of roe and pollock roe revenue to the fishery. At the same time, a net gain in surimi and surimi revenue is expected to occur. No net gain in revenue from pollock fillets is expected occur because of this shift to the B season.

Pollock Roe

The quantity and value of the net loss of roe is calculated as follows:
The at-sea and shoreside sectors achieve different roe recovery rates for pollock roe. The at-sea loss is calculated using the official recovery rate for roe of 4%. This is close to the actual average recovery rate from the 1994 season. Given there is no official rate for the shoreside sector, the effective recovery rate based on the tons of roe produced in 1994 from the pollock allocated to that sector was used to calculate an effective roe recovery rate. That recovery rate for pollock for the shoreside sector is 1.5%. (193,764.2 mt in the A season produced 2861.5 mt of roe)

For the at-sea fleet, 65% of the 60,430.3 mt times the 4% official recovery means that there would have been 1570.5 mt of pollock roe produced from the at-sea fishery from the 5% shifted to the B season. The value of this roe would be 1571.2 times $17,000/ mt or $26,710,196.

For the shoreside sector, 35% of the 60,430.3 mt times the 1.5% recovery rate means that there will be 317.3 mt less pollock roe produced by that sector. Those 317.3 tons would be worth approximately $5,393,403 at the price of $17,000/mt.

The total loss of revenue from pollock roe is estimated to be $32,103,599 for 1995 from the at-sea, shoreside, and CDQ communities combined. The portion of this loss to CDQ communities is $2,407,769, based on a straight 7.5% of the total loss attributed to CDQ communities.

Surimi

The same amount of fish is available to make surimi under the 5% shift to the B season. Given that 60,402.5 mt is shifted to the B season, however, this means that 5% is produced at a time of year when product recovery rates for surimi are higher.

The official PRRs for the at-sea sector are 16% for A season pollock and 17% for the B season. For purposes of this analysis, this same product recovery rate difference of one percent is used for the at-sea and shoreside sectors. This amounts to a one percent gain in PRR for the portion of the 60,430.3 mt of pollock shifted to the B season that would go into surimi. Assuming that 77% of pollock goes to surimi in the B season (based on 1994 production data), this equates to a 465.1 mt increase in surimi production (0.01 x 60,402.5mt x .77 = 465.13 mt) than would have occurred if the 5% of the pollock TAC had not been shifted to the B season. At $2,552 per ton, the gain in surimi revenue from the shift is $1,187,478.

If surimi quality is higher, on average, in the B season, then the gain in surimi revenue would be understated by this calculation. To account for this, one can assume a 20% increase in surimi price per ton for the B season. This increases the gain in surimi revenue to $1,424,975. CDQ communities would share in this gain. The gain for CDQ can be estimated by assuming they share in it proportionally, i.e. 7.5% times $1,424,322 or $106,873.

Pollock Fillets

The percentage of pollock that is made into fillets was 3% higher in the B season than the A season in 1994 (23% B season versus 20% A season). Thus one can assume that 3% more fillet production would occur under the 5% shift of pollock TAC to the B season. Because the official product recovery rate for the at-sea sector is the same for both seasons, however, there is no gain in product volume from this shift.

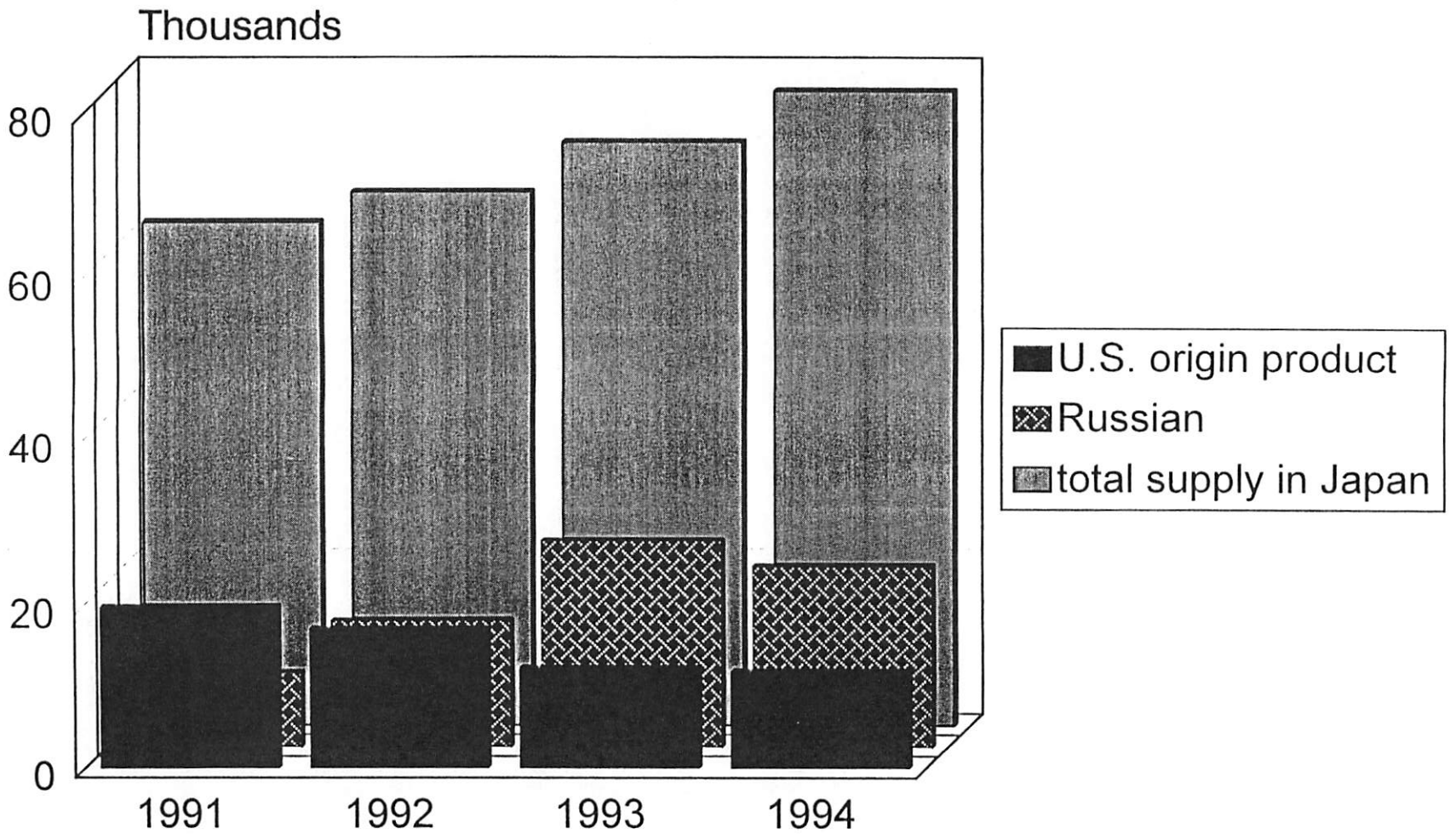
If fillet quality is higher during B season, then there would be a gain in revenue for the 23% that goes into fillets in the B season. Because a price differential for deep skin and other fillet products was not found in the 1994 BANR data from A to B seasons, this potential gain in revenue for fillets was not calculated. A gain in revenue would occur if pollock fillets do receive a higher price during the B season in 1995. Should this occur, the potential magnitude of a revenue increase from fillets would be expected to be small because of the small percentage devoted to fillets and the strong possibility that a fillet B season price differential in 1995 would be small given the supply glut in fillet markets in recent years.

Results

The shift of 5% of the pollock TAC to the B season would result in a loss of approximately $30,678,000 to the at-sea, shoreside, and CDQ communities collectively. This results from aggregating the $32,103,599 loss of pollock roe revenue and the $1,424,975 gain in surimi revenue (assuming the 20% higher surimi price for B season). The net loss to CDQ communities from the shift of 5% to the B season is approximately $2,300,000. This is based on a loss of $2,407,769 from pollock roe and a gain of $106,873 from surimi.

Percentage of Pollock Roe Supply in Japan that is U.S. Product

metric tons including inventories



source: Pollock Buyers in Japan

Analysis of the Impacts of a 5% Shift of Pollock TAC Form the Pollock A Season To the B Season

Principle Findings: It will be demonstrated that the proposed shift of 5% of the BS/AI pollock TAC from the A season to the B season will result in a $30,678,000 loss of gross revenue to the at-sea, shoreside, and CDQ communities. The estimated loss to CDQ communities is from the 5% shift to the B season is $2,300,000.

Assumptions made for this analysis:

1. Impacts are to at-sea, shoreside, and CDQ communities.
2. Impacts are in terms of gross revenue.
3. 1994 prices and product form percentages are used to model conditions expected in 1995.
4. A 5% decrease in pollock taken in the A season does not result in a higher price for pollock roe because the U.S. industry produces only approximately 15% of overall supply of pollock roe in Japan (see attached figure). The U.S. is assumed to be a price taker given that Russia has in recent years supplied to Japan almost twice as much pollock roe as has the United States. In addition, experts believe Russian production to be at or very close to the quality level of U.S. supply.
5. Surimi and roe prices are reported as they appear in "Bill Atkinson's News Report" (BANR), September 14, 1994 and November 2, 1994 editions respectively. Pollock roe prices are averaged across grades for U.S. product in 1994. Surimi prices are for FA grade surimi.
6. The Bering Sea and Aleutian Islands TACs for pollock are assumed to be 1,250,000 mt and 56,600 mt respectively (the BSAI Plan Team recommendations)
7. Product recovery rates used for this analysis are those PRRs approved in the October 5, 1994 final rule on PRRs for the BSAI and GOA (CFR vol 59, no. 152).

Analysis

Tonnage transferred from the A season to the B season

Assuming the Plan Team recommended TACs are approved, then the overall pollock TAC would be 1,306,600 mt (1,250,000 mt (BS) + 56,600 mt (AI) = 1,306,600). The reserve 7.5 percent must be deducted (i.e. the ITAC is 15% lower but the 7.5% CDQ portion is left in the calculation because it is available at the beginning of the fishing year and is apportioned between A and B seasons in the same proportion as the open access fishery). This results in an open access and CDQ pollock fishery for 1,208,605 mt. Under the proposed shift of 5% of the TAC to the B season (a 40%,60% split, rather than the status quo split of 45%,55%), 60,430.3 metric tons of pollock would be shifted from the A season to the B season.

Under this scenario, 60,430.3 mt of pollock shifted to the B season would result in a net loss of roe and pollock roe revenue to the fishery. At the same time, a net gain in surimi and surimi revenue is expected to occur. No net gain in revenue from pollock fillets is expected occur because of this shift to the B season.

Pollock Roe

The quantity and value of the net loss of roe is calculated as follows:
The at-sea and shoreside sectors achieve different roe recovery rates for pollock roe. The at-sea loss is calculated using the official recovery rate for roe of 4%. This is close to the actual average recovery rate from the 1994 season. Given there is no official rate for the shoreside sector, the effective recovery rate based on the tons of roe produced in 1994 from the pollock allocated to that sector was used to calculate an effective roe recovery rate. That recovery rate for pollock for the shoreside sector is 1.5%. (193,764.2 mt in the A season produced 2861.5 mt of roe)

For the at-sea fleet, 65% of the 60,430.3 mt times the 4% official recovery means that there would have been 1570.5 mt of pollock roe produced from the at-sea fishery from the 5% shifted to the B season. The value of this roe would be 1571.2 times $17,000/ mt or $26,710,196.

For the shoreside sector, 35% of the 60,430.3 mt times the 1.5% recovery rate means that there will be 317.3 mt less pollock roe produced by that sector. Those 317.3 tons would be worth approximately $5,393,403 at the price of $17,000/mt.

The total loss of revenue from pollock roe is estimated to be $32,103,599 for 1995 from the at-sea, shoreside, and CDQ communities combined. The portion of this loss to CDQ communities is $2,407,769, based on a straight 7.5% of the total loss attributed to CDQ communities.

Surimi

The same amount of fish is available to make surimi under the 5% shift to the B season. Given that 60,402.5 mt is shifted to the B season, however, this means that 5% is produced at a time of year when product recovery rates for surimi are higher.

The official PRRs for the at-sea sector are 16% for A season pollock and 17% for the B season. For purposes of this analysis, this same product recovery rate difference of one percent is used for the at-sea and shoreside sectors. This amounts to a one percent gain in PRR for the portion of the 60,430.3 mt of pollock shifted to the B season that would go into surimi. Assuming that 77% of pollock goes to surimi in the B season (based on 1994 production data), this equates to a 465.1 mt increase in surimi production (0.01 x 60,402.5mt x .77 = 465.13 mt) than would have occurred if the 5% of the pollock TAC had not been shifted to the B season. At $2,552 per ton, the gain in surimi revenue from the shift is $1,187,478.

If surimi quality is higher, on average, in the B season, then the gain in surimi revenue would be understated by this calculation. To account for this, one can assume a 20% increase in surimi price per ton for the B season. This increases the gain in surimi revenue to $1,424,975. CDQ communities would share in this gain. The gain for CDQ can be estimated by assuming they share in it proportionally, i.e. 7.5% times $1,424,322 or $106,873.

Pollock Fillets

The percentage of pollock that is made into fillets was 3% higher in the B season than the A season in 1994 (23% B season versus 20% A season). Thus one can assume that 3% more fillet production would occur under the 5% shift of pollock TAC to the B season. Because the official product recovery rate for the at-sea sector is the same for both seasons, however, there is no gain in product volume from this shift.

If fillet quality is higher during B season, then there would be a gain in revenue for the 23% that goes into fillets in the B season. Because a price differential for deep skin and other fillet products was not found in the 1994 BANR data from A to B seasons, this potential gain in revenue for fillets was not calculated. A gain in revenue would occur if pollock fillets do receive a higher price during the B season in 1995. Should this occur, the potential magnitude of a revenue increase from fillets would be expected to be small because of the small percentage devoted to fillets and the strong possibility that a fillet B season price differential in 1995 would be small given the supply glut in fillet markets in recent years.

Results

The shift of 5% of the pollock TAC to the B season would result in a loss of approximately $30,678,000 to the at-sea, shoreside, and CDQ communities collectively. This results from aggregating the $32,103,599 loss of pollock roe revenue and the $1,424,975 gain in surimi revenue (assuming the 20% higher surimi price for B season). The net loss to CDQ communities from the shift of 5% to the B season is approximately $2,300,000. This is based on a loss of $2,407,769 from pollock roe and a gain of $106,873 from surimi.

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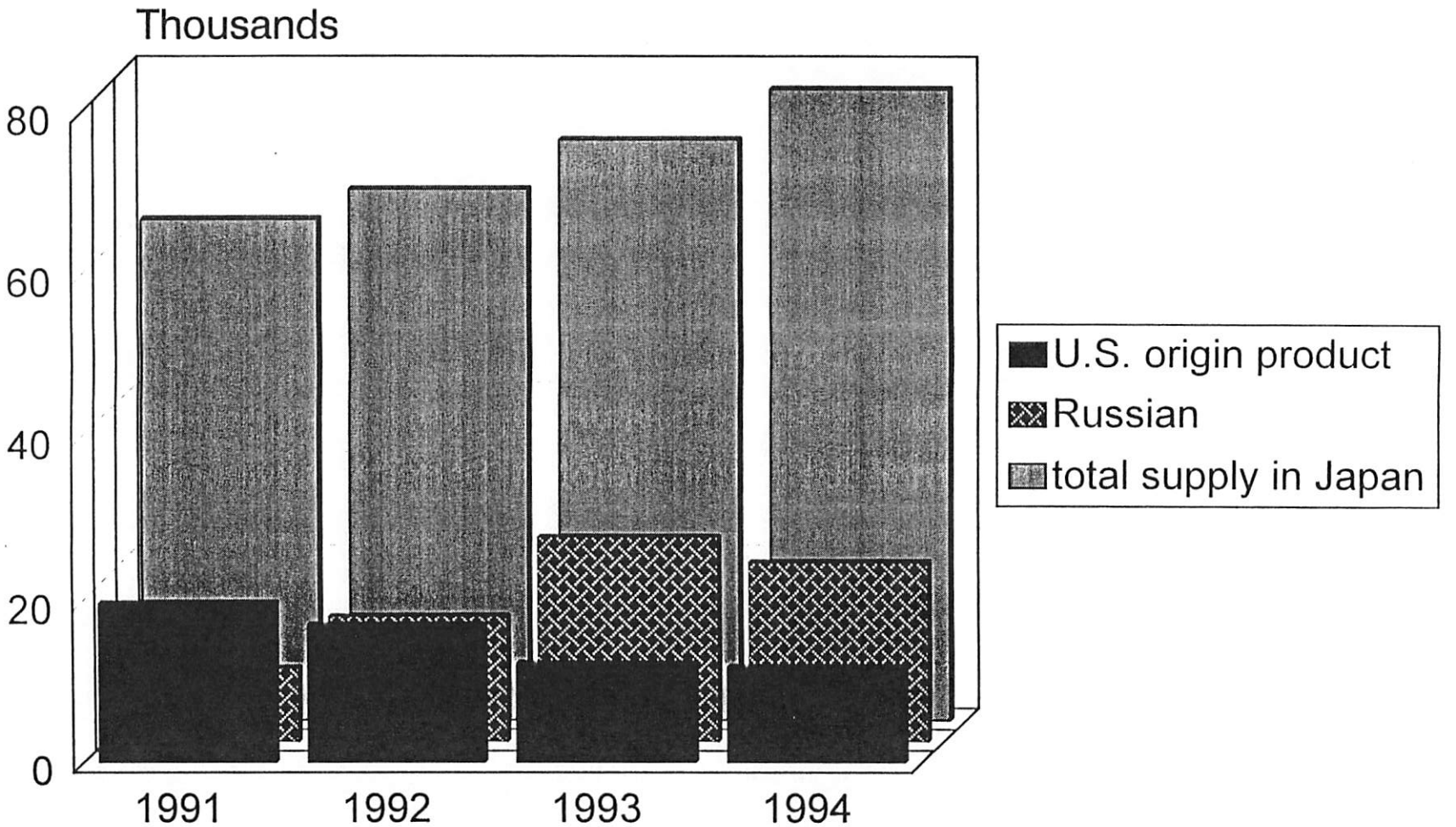

source: Pollock Buyers in Japan