2.1.6 Pot Catcher Vessels (PCV)

This catcher vessel class includes all vessels that are not trawl catcher vessels for which the value of pot catch is greater than15 percent of total catch value, vessel length is greater than or equal to 60 ft., and the total value of groundfish catch is greater than $5000.

The vast majority of vessels in this class focus on crab fisheries and participate in groundfish fisheries only as a secondary activity. This class is distinct from other fixed gear vessels because all vessels in the class have crab endorsements under the NPFMC BSAI Crab LLP, primarily use pots rather than longline or jig gear, and are longer than 60 feet. These differences in vessel size, gear type, and relevant regulations result in operational and financial differences between PCVs and other fixed gear catcher vessels. However, many PCVs have substantial landings with longline gear. The fact that these vessels do not have large trawl landings distinguishes them from the trawl vessel classes.

2.1.6.1 Class Characteristics

The PCV fleet consists of vessels built primarily with steel hulls in schooner or house-forward configuration, open-decked or portside shelter-decked, and equipped with one or two large deck cranes for moving and stacking crab pots. The vessels have a steel-framed crab pot launcher, as well as a line coiler and below-deck seawater circulating tanks for holding and carrying live crab to shoreside plants or floating processors.

In 2000, vessels in the PCV class had an average length of 105 feet and ranged from 60 to 166 feet (Table 2.1.6-1). Most were less than 110 feet. The vessels have an average horsepower rating of about 825, with a maximum of about 1,860 and a minimum of 240. Average gross tonnage is approximately 185 tons and average hold capacity is 7,475 cubic feet (CFEC, 2001).

Table 2.1.6-1. Number of Pot Catcher Vessels, by Vessel Length, 1992-2000

	Vessel Length								
Year	60-79'	80'-94'	95'-109'	110'-124	125-139'	140'-154'	155'-169'	170'+	Total
1992	32	12	14	5	3	1	5	0	72
1993	23	5	4	2	3	0	0	0	37
1994	17	5	9	5	3	0	1	0	40
1995	19	29	23	17	11	2	0	0	101
1996	17	28	27	15	9	3	1	0	100
1997	14	18	23	11	7	2	0	1	76
1998	15	16	16	9	7	1	0	1	65
1999	20	21	30	13	15	2	2	0	103
2000	23	25	49	28	22	7	4	0	158

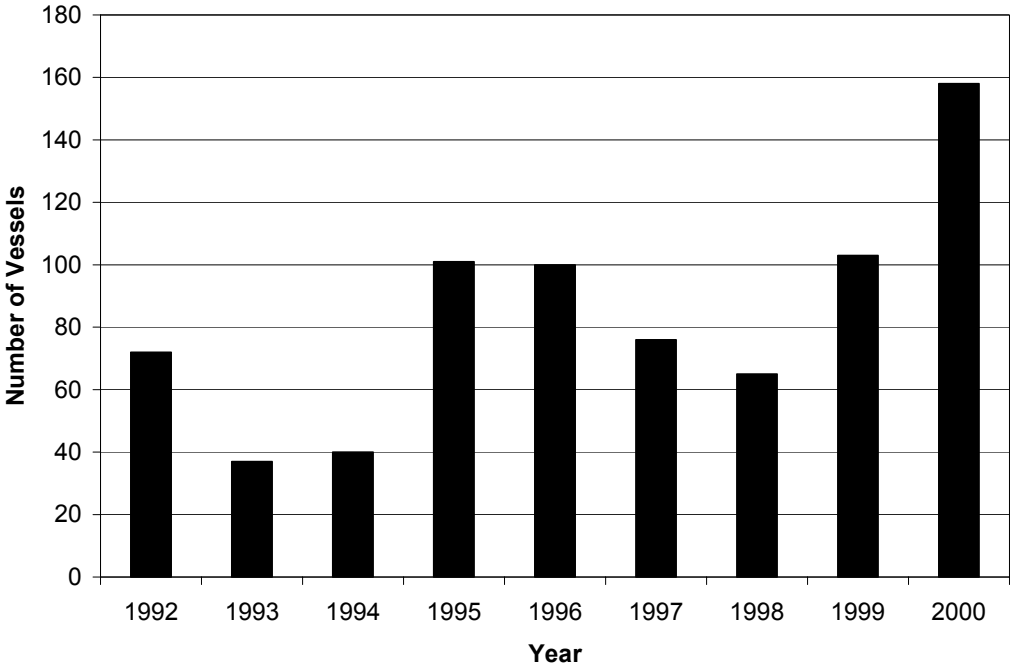
Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.6.2 Class Participation

The number of PCVs that have made more than incidental landings of groundfish landings has varied widely between 1992 and 2000, as shown in Figure 2.1.6-1. The number of PCVs with substantial landings of groundfish increased from 38 in 1988 to 70 in 1992, and dropped back to 35 in 1993. During this period, many vessels experimenting with pot fishing for Pacific cod could not make enough money to justify continued participation. In 1995, harvests in the *opilio* tanner crab fishery, which had become the mainstay of the crab fleet, reached the lowest levels in a decade, and crab

fishers sought other fisheries to generate needed revenues. The number of PCVs with substantial groundfish landings jumped to 99. Between 1995 and 2000, participation first declined but then sharply increased to 157.

Figure 2.1.6-1. Number of Active Pot Catcher Vessels,1992-2000



Source: CFEC/ADFG Fish Ticket Data, June 2001.

Of the vessels in the PCV class that were active in the groundfish fishery in 2000, the average number of years since 1992 in which a vessel was active was 3.76, with a minimum of one year and a maximum of nine years. Of those vessels that were not active in 2000, the average number of years of participation was 1.90, with a minimum of one and a maximum of seven.

2.1.6.3 Description of Fishing Operations

Fishing with pots entails deploying baited cages that trap entering shellfish or finfish at set locations on the ocean floor. Historically, the pot fishery in Alaska waters produced crab. As few as seven years ago, a discussion of pot harvesting vessels would have centered entirely on crab fisheries, but recently Pacific cod has evolved as an important new harvested species.

Several events led to the emergence of pot fishing for groundfish. The collapse of king crab stocks, first in the 1960s and then again in the 1980s, affected not only the pot sector, but also other sectors as pot vessels moved into other fisheries. With diminished king crab stocks, the pot vessels turned to *opilio* tanner crab as their mainstay species. Beginning in the early 1990s, crabbers began to harvest Pacific cod with pots to supplement their earnings in the crab fishery. The feasibility of fishing Pacific cod with pots was greatly enhanced with the implementation of Amendment 24 to the BSAI FMP, which allocated the target fishery between trawl and fixed gears.

Existing crab pots can be easily converted to fish for Pacific cod by refitting the tunnel openings with "triggers" or plastic fingers that allow codfish to swim through but inhibit the entry of larger halibut or crab. The cost of the conversion is proportional to the number of pots switched over. According to

informants, however, entering the groundfish fishery is not prohibitively expensive and is substantially cheaper than rigging a vessel with trawl gear.

The most highly touted advantage of using pots over trawls to harvest Pacific cod is that pot fishing is "clean"—that is, it does not produce the high rate of bycatch that is sometimes associated with trawl fishing. There is bycatch with pot fishing, but the nature of the gear limits the size of halibut that can enter the trap, and the mortality rate with fixed gear is reportedly lower.

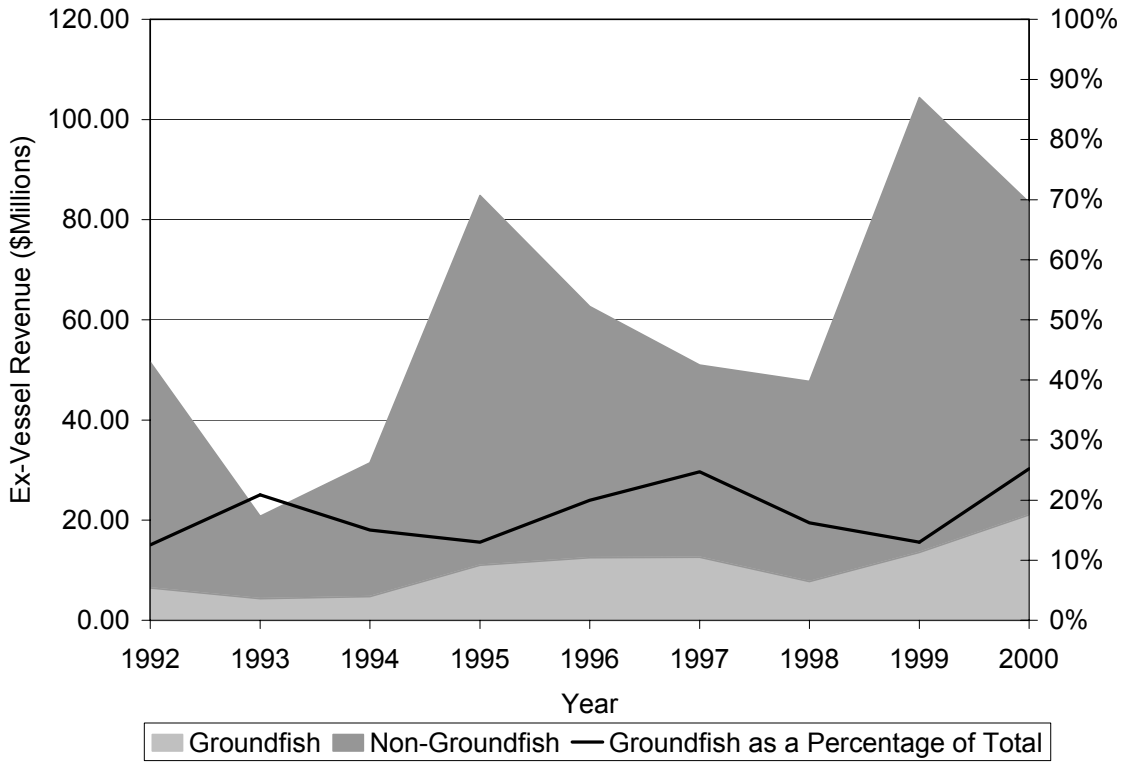
Another benefit of pot fishing for cod is product quality. Fishers and processors have stated that cod harvested in pots is less bruised, able to be bled more quickly because of the smaller quantities handled, and of a more consistent size than cod harvested by trawl gear (IAI, 1994).

The development of the Pacific cod pot fishery is an example of the innovation and entrepreneurial effort that can arise from fisheries characterized by declining productivity and profits. Using pot gear to fish for cod has become a "bread-and-butter" fishery for some—a way of extending time fishing, as opposed to time tied up at the dock, and helping pay expenses.. As one fisher succinctly put it, "It hurts to tie the vessel up" (IAI, 1994).

2.1.6.4 Dependence on Groundfish and Annual Cycle of Operations

In the PCV class groundfish accounted for between 13 and 25 percent of total ex-vessel value during the 1992-2000 period (Table 2.1.6-1 and Table 2.1.6-2). In 1999, the most recent year for which landings data for all non-groundfish species are available, the ex-vessel value per vessel from groundfish accounted for about 13 percent of the ex-vessel value per vessel for all species (Table 2.1.6-3). In 2000, groundfish accounted for over 25 percent of the total ex-vessel value from all species for the class, however halibut is not included and therefore the importance of groundfish is somewhat over-estimated. If is assumed that value from the halibut is equal to 1999 levels, groundfish would still account for more than 20 percent of total value.

Figure 2.1.6-2. Ex-Vessel Value of Harvest in Major Alaska Fisheries for Pot Catcher Vessels,1992-2000



Source: CFEC/ADFG Fish Ticket Data, June 2001.

Table 2.1.6-2. Number of Vessels and Total Ex-Vessel Value by Species Group for Pot Catcher Vessels,1992-2000

Year	Number of Vessels	$Millions		
		Groundfish	Non-Groundfish	All Species
1992	72	6.47	45.04	51.52
1993	37	4.35	16.45	20.79
1994	40	4.72	26.73	31.46
1995	101	11.03	73.81	84.84
1996	100	12.53	50.16	62.69
1997	76	12.60	38.38	50.98
1998	65	7.76	39.98	47.73
1999	103	13.57	90.84	104.42
2000	158	21.05	62.36	83.41

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Value of halibut landings is not included for 2000

Table 2.1.6-3. Number of Vessels and Ex-Vessel Value Per Vessel by Species Group for Pot Catcher Vessels, 1992-2000

Year	Number of Vessels	Ex-Vessel Value Per Vessel ($)		
		Groundfish	Non-Groundfish	All Species
1992	72	89,887	625,620	715,507
1993	37	117,537	444,486	562,024
1994	40	118,042	668,369	786,411
1995	101	109,206	730,761	839,967
1996	100	125,290	501,577	626,868
1997	76	165,738	505,043	670,781
1998	65	119,327	615,052	734,379
1999	103	131,793	881,958	1,013,751
2000	158	133,219	394,712	527,930

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Value of halibut landings is not included for 2000

Table 2.1.6-4 and Table 2.1.6-5 provide additional detail about the relative importance of groundfish to vessels in the PCV class. In 1999, 86 vessels in this class made landings of crab and 24 vessels made landings of halibut. These species accounted for virtually all of the ex-vessel value of non-groundfish landings in that year.

The crab fishery is the mainstay of the PCV class. As *opilio* harvests increased in 1997 and 1998, the number of PCVs landing groundfish diminished—increasing again as *opilio* harvests declined in 1999 and 2000. The Pacific cod fishery is a way to keep crewmembers employed for longer periods and possibly make additional marginal contributions to the financial bottom line. Few, if any, of these vessels would likely survive if they relied solely on the Pacific cod fishery (Painter, June 2000).

Table 2.1.6-4. Number of Pot Catcher Vessels Participating in Non-Groundfish Fisheries, by Species, 1992-2000

Year	Number of Vessels				
	Salmon	Crab	Halibut	Other	Total
1992	1	62	41	10	69
1993	1	34	26	4	37
1994	0	33	23	2	40
1995	0	90	27	5	97
1996	2	82	35	3	94
1997	2	61	23	5	72
1998	2	54	23	4	64
1999	4	86	24	4	96
2000	2	139	a	3	140

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001
Note: Values for salmon may represent data entry errors, as ADFG salmon regulations generally prohibit seine vessels over 60 feet in length from landing salmon.
[a] Value for halibut is not available.

Table 2.1.6-5. Ex-Vessel Value of Non-Groundfish Species Harvested by Pot Catcher Vessels, by Species, 1992-2000

Year	Ex Vessel Value ($Millions)				
	Salmon	Crab	Halibut	Other	Total
1992	a	42.76	2.14	0.14	45.04
1993	a	14.46	1.89	0.09	16.45
1994	0.00	24.72	2.01	a	26.73
1995	0.00	70.12	3.68	0.00	73.81
1996	a	45.16	5.00	a	50.16
1997	a	33.08	5.20	0.11	38.38
1998	a	36.47	3.34	0.16	39.98
1999	0.01	84.78	6.01	0.04	90.84
2000	a	62.36	c	b	62.36

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001
Note: Values for salmon may represent data entry errors, as ADFG salmon regulations generally prohibit seine vessels over 60 feet in length from landing salmon.
[a] Combined with value for halibut due to confidentiality restrictions.
[b] Combined with value for crab due to confidentiality restrictions.
[c] Value for halibut is not available.

PCVs harvest primarily two species of tanner crab from the Bering Sea (*opilio* and *Bairdi*) and three species of king crab from the BSAI (red, blue, and brown). A low-volume fishery for Korean hair crab also occurs near the Pribilof Islands. Smaller vessels fish for king, tanner, and Dungeness crab in waters around Kodiak, north to Cook Inlet, and to the southern tip of Southeast Alaska.

Table 2.1.6-6 shows ex-vessel value by month in 1999 and 2000 from groundfish and from all other species. The importance and duration of the *opilio* season is clearly illustrated. Crab vessels fishing the Bering Sea begin operations in mid-January with the *opilio* tanner crab fishery in the central to northern Bering Sea. The season typically ends in late February to late March, although quota reductions for the 2000 season resulted in a season lasting only 7 days in April. The next crab fishery is a typically short season around St. Matthew Island and the Pribilof Islands during the first week of September. This fishery is followed by the November 1 opening for red king crab in the Southeast Bering Sea, which lasts one week or less. The *Bairdi* tanner crab fishery follows in mid-November.

During the period when no crab fisheries are available—typically March through at least mid-August—many vessels in this category fish for Pacific cod with pot gear and tender herring and salmon if they can obtain contracts.

The number of vessels participating in and ex-vessel value from groundfish and non-groundfish fisheries by trimester are shown in Table 2.1.6-7 and Table 2.1.6-8, respectively. The number of vessels participating groundfish and non-groundfish fisheries by month is shown in Table 2.1.6-9.

Table 2.1.6-6. Ex-Vessel Value of Groundfish, Salmon, Crab, Halibut, and Other Species Harvested by Pot Catcher Vessels, by Month, 1999-2000

Year		$Millions												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1999	Salmon	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01
	Crab	9.98	25.60	19.75	2.83	2.00	0.06	0.01	0.00	0.44	22.96	1.15	0.01	84.78
	Halibut	0.00	0.00	0.00	0.36	0.99	1.09	0.64	0.20	0.92	0.36	1.43	0.00	6.01
	Other	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	Groundfish	1.36	1.17	1.12	3.57	3.21	0.57	0.03	0.00	1.39	0.59	0.23	0.33	13.57
2000	Salmon	a	a	a	a	a	a	a	a	a	a	a	a	a
	Crab	0.00	0.03	0.03	34.57	1.92	0.24	0.03	0.67	1.31	21.22	1.50	0.08	61.60
	Halibut	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other	b	b	b	b	b	b	b	b	b	b	b	b	b
	Groundfish	4.45	10.60	3.01	0.49	1.10	0.15	0.17	0.14	0.46	0.26	0.17	0.05	21.05

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Combined with value for halibut due to confidentiality restrictions.

[b] Combined with value for crab due to confidentiality restrictions.

Table 2.1.6-7. Number of Pot Catcher Vessels with Groundfish Landings by Trimester, 1992-2000

Year	Number of Vessels			
	Jan-Apr	May-Aug	Sep-Oct	Total
1992	45	47	17	72
1993	37	24	0	37
1994	30	21	31	40
1995	85	38	45	101
1996	88	65	35	100
1997	62	55	49	76
1998	50	36	37	65
1999	59	58	65	103
2000	157	22	24	158

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-8. Ex-Vessel Value of Harvest of Groundfish by Pot Catcher Vessels by Trimester, 1992-2000

Year	$Millions			
	Jan-Apr	May-Aug	Sep-Dec	Total
1992	2.94	3.30	0.23	6.47
1993	2.71	1.64	0.00	4.35
1994	2.48	1.16	1.09	4.72
1995	6.73	2.53	1.76	11.03
1996	6.96	4.18	1.40	12.53
1997	6.34	4.28	1.97	12.60
1998	4.91	1.76	1.09	7.76
1999	7.22	3.81	2.55	13.57
2000	18.54	1.57	0.94	21.05

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-9. Number of Pot Catcher Vessels with Groundfish Landings, by Month, 1992-2000

Year	Number of Vessels												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1992	10	38	39	33	31	25	16	17	15	12	0	0	72
1993	11	23	26	17	24	13	0	0	0	0	0	0	37
1994	8	16	29	15	20	2	0	0	18	20	2	2	40
1995	18	25	81	40	32	18	2	9	21	27	16	16	101
1996	25	24	72	61	54	29	10	14	16	25	7	8	100
1997	20	19	29	52	47	23	5	11	17	24	28	17	76
1998	18	22	21	42	29	13	4	2	9	28	17	13	65
1999	23	21	27	55	55	27	1	0	49	42	23	18	103
2000	135	152	139	16	19	8	2	4	16	10	12	6	158

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.6.5 Catch and Value in Groundfish Fisheries

Table 2.1.6-10 shows the number of PCVs in this class with landings for each of the four major species groups (pollock, Pacific cod, flatfish, and the ARSO species complex, [Atka mackerel, all rockfish species, sablefish, and other groundfish]) on an annual basis.

Table 2.1.6-10. Number of Pot Catcher Vessels by Species, 1992-2000

Year	Number of Vessels				
	ARSO	FLAT	PCOD	PLCK	Total
1992	17	0	72	5	72
1993	18	1	37	1	37
1994	17	5	39	7	40
1995	27	11	101	12	101
1996	30	10	100	15	100
1997	23	11	76	17	76
1998	19	5	65	18	65
1999	34	16	103	22	103
2000	55	42	157	53	158

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-11 and Table 2.1.6-13 provide information on retained landings and ex-vessel value by species group. From 1992 to 2000, total harvest volume for the class varied between 7,000 and 27,000 tons. In the same period, ex-vessel revenue ranged from a high of $21 million in 2000 to a low of $4 million in 1993.

Table 2.1.6-11. Retained Tons of Groundfish by Pot Catcher Vessels by Species, 1992-2000

	Thousands of Tons				
Year	ARSO	FLAT	PCOD	PLCK	Total
1992	0.5	a	10.1	0.0	10.6
1993	0.6	a	6.8	a	7.4
1994	0.3	0.0	10.5	0.0	10.8
1995	0.5	0.0	20.7	0.0	21.2
1996	0.4	0.0	26.5	0.0	26.9
1997	0.2	0.2	24.5	0.0	25.0
1998	0.3	0.1	16.0	0.1	16.3
1999	0.1	0.0	20.1	0.0	20.3
2000	0.5	0.0	25.9	0.1	26.5

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Combined with tons of ARSO to protect the confidentiality of the small number of PCVs that reported catching these species during the year.

Table 2.1.6-12. Ex -Vessel Prices by Species for Pot Catcher Vessels Greater than 60 Feet in Length, 1992-2000

	ARSO		FLAT		PCOD		PLCK	
YEAR	$ / Pound	$ / Ton	$ / Pound	$ / Ton	$ / Pound	$ / Ton	$ / Pound	$ / Ton
1992	$1.15	$2,529.70	$0.00	$0.00	$0.23	$517.61	$0.24	$538.54
1993	$0.98	$2,170.40	$0.24	$537.18	$0.20	$448.84	$0.09	$202.72
1994	$1.39	$3,058.15	$0.10	$215.38	$0.17	$371.27	$0.00	$7.04
1995	$1.76	$3,875.40	$0.05	$108.91	$0.20	$445.60	$0.10	$227.50
1996	$1.99	$4,385.79	$0.24	$528.23	$0.19	$410.48	$0.08	$182.02
1997	$2.26	$4,985.37	$0.64	$1,420.00	$0.21	$454.56	$0.17	$369.59
1998	$1.52	$3,349.95	$0.26	$571.75	$0.19	$426.49	$0.06	$126.58
1999	$1.97	$4,347.13	$0.02	$43.14	$0.29	$641.68	$0.04	$96.10
2000	$1.99	$4,393.96	$0.14	$298.01	$0.33	$723.91	$0.28	$624.73

Source: CFEC/ADFG Fish Ticket Data, June 2001

Table 2.1.6-13. Ex-Vessel Value of Harvest by Pot Catcher Vessels, 1992-2000

Year	$Millions				
	ARSO	FLAT	PCOD	PLCK	Total
1992	1.21	a	5.26	0.01	6.47
1993	1.28	a	3.07	a	4.35
1994	0.79	0.00	3.93	0.00	4.72
1995	1.76	0.00	9.27	0.00	11.03
1996	1.62	0.01	10.89	0.00	12.53
1997	1.19	0.23	11.16	0.01	12.60
1998	0.91	0.03	6.81	0.01	7.76
1999	0.65	0.00	12.93	0.00	13.57
2000	2.23	0.01	18.75	0.06	21.05

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
[a] Combined with value of ARSO to protect the confidentiality of the small number of PCVs that reported catching these species during the year.

Additional details on the number of vessels and ex-vessel value in target fisheries and the harvest volume and value by target species are presented in Table 2.1.6-14 through Table 2.1.6-17. Pacific cod has been the most important groundfish species for this class in terms of harvest volume and total ex-vessel value, and pollock has been the least important groundfish species. The ARSO aggregation also accounts for a relatively large share of ex-vessel value, reflecting the fact that between 10 and 17 vessels in this class have participated in the high-value sablefish fisheries over the years.

Table 2.1.6-14. Number of Pot Catcher Vessels in Each Target Fishery, 1992-2000

Year	Number of Vessels						
	PCOD	SABL	FLAT	PLCK	OT-AM	ROCK	Total
1992	72	16	0	0	1	1	72
1993	37	17	1	0	1	1	37
1994	39	14	0	1	0	0	40
1995	101	15	0	0	1	0	101
1996	100	19	2	0	0	2	100
1997	76	10	3	2	1	1	76
1998	65	14	1	1	1	1	65
1999	102	11	0	1	0	2	103
2000	157	17	2	4	4	4	158

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-15. Ex-vessel Value of Total Catch in Top Three Target Fisheries by Pot Catcher Vessels, 1992-2000

YEAR	$Millions			
	PCOD	SABL	FLAT	Total
1992	5.26	1.21	a	6.47
1993	3.06	1.25	a	4.35
1994	3.93	0.79	0.00	4.72
1995	9.27	1.73	0.00	11.03
1996	10.89	1.62	0.01	12.53
1997	11.16	1.16	0.27	12.60
1998	6.81	0.90	0.03	7.76
1999	12.93	0.65	0.00	13.57
2000	18.76	2.21	0.01	21.05

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Includes catches of all species in the target fishery listed. Total includes catches of all species in both target and non-target fisheries.

[a] Data omitted due to confidentiality restrictions.

Table 2.1.6-16. Total Catch of Target Species by Pot Catcher Vessels by Trimester, 1992-2000

Target	Year	Thousands of Tons			
		Jan-Apr	May-Aug	Sep-Dec	Total
PCOD	1992	5.4	4.3	0.4	10.1
	1993	5.9	0.9	0.0	6.8
	1994	6.3	1.5	2.8	10.5
	1995	13.0	4.5	3.2	20.7
	1996	15.8	8.2	2.5	26.5
	1997	14.0	7.0	3.5	24.5
	1998	11.2	3.1	1.7	16.0
	1999	10.9	5.5	3.7	20.1
	2000	25.4	0.1	0.4	25.9
SABL	1992	0.0	0.4	0.0	0.4
	1993	0.0	0.5	0.0	0.5
	1994	0.0	0.2	0.0	0.3
	1995	0.2	0.2	0.1	0.4
	1996	0.1	0.2	0.1	0.4
	1997	0.0	0.1	0.1	0.2
	1998	0.0	0.1	0.1	0.3
	1999	0.0	0.1	0.0	0.1
	2000	0.0	0.3	0.1	0.5

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-17. Ex-Vessel Value Total Catch of Target Species by Pot Catcher Vessels by Trimester, 1992-2000

Target	Year	$Millions			
		Jan-Apr	May-Aug	Sep-Dec	Total
PCOD	1992	2.93	2.08	0.23	5.25
	1993	2.70	0.37	0.00	3.06
	1994	2.48	0.52	0.94	3.93
	1995	6.00	1.87	1.40	9.27
	1996	6.63	3.20	1.06	10.89
	1997	6.20	3.27	1.69	11.16
	1998	4.82	1.22	0.77	6.81
	1999	7.18	3.33	2.42	12.93
	2000	18.33	0.07	0.35	18.75
SABL	1992	0.00	1.19	0.00	1.19
	1993	0.00	1.24	0.00	1.24
	1994	0.00	0.64	0.15	0.79
	1995	0.70	0.66	0.36	1.72
	1996	0.32	0.95	0.33	1.61
	1997	0.14	0.74	0.27	1.14
	1998	0.08	0.50	0.31	0.90
	1999	0.04	0.47	0.13	0.64
	2000	0.14	1.48	0.58	2.19

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-18 and Table 2.1.6-19 show the number of vessels and ex-vessel value of the PCV class fleet by FMP subarea, respectively. The BS FMP subarea is the most important fishing area for the PCV class, followed by the CG.

Table 2.1.6-18. Number of Pot Catcher Vessels by FMP Subarea, 1992-2000

Year	Number of Vessels					
	AI	BS	WG	CG	EG	Total
1992	2	36	7	46	4	72
1993	2	15	6	25	5	37
1994	1	25	3	18	4	40
1995	3	69	26	46	7	101
1996	5	79	24	43	7	100
1997	3	53	25	28	5	76
1998	2	43	25	26	3	65
1999	20	62	18	48	3	103
2000	28	90	43	60	7	158

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-19. Ex-Vessel Value of Harvest of Pot Catcher Vessels by FMP Subarea, 1992-2000

Year	$Millions					
	AI	BS	WG	CG	EG	Total
1992	a	2.28	0.22	3.56	0.40	6.47
1993	a	0.84	0.25	2.75	0.50	4.35
1994	a	2.45	a	1.96	0.31	4.72
1995	a	5.80	0.45	4.27	0.51	11.03
1996	0.05	7.87	0.81	3.50	0.29	12.53
1997	a	8.54	0.84	3.05	0.16	12.60
1998	a	3.64	0.48	3.64	b	7.76
1999	1.12	5.87	0.57	6.01	b	13.57
2000	2.10	8.06	2.13	8.32	0.45	21.05

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Combined with value from BS to protect the confidentiality of the small number of PCVs that reported catches in this subarea during the year.

[b] Combined with value from CG to protect the confidentiality of the small number of PCVs that reported catches in this subarea during the year.

Table 2.1.6-20. Number of Pot Catcher Vessels with Pacific Cod and Pollock Landings by FMP Subarea, 1992-2000

Year	Number of Vessels												
	PCOD						PLCK						Total
	AI	BS	WG	CG	EG	Total	AI	BS	WG	CG	EG	Total	
1992	2	36	5	46	1	72	0	1	1	3	0	5	72
1993	2	15	5	24	4	37	0	0	0	1	0	1	37
1994	0	25	3	18	3	39	0	5	0	2	0	7	39
1995	1	68	24	45	2	101	0	11	0	1	0	12	101
1996	4	77	19	35	1	100	0	13	0	2	0	15	100
1997	2	52	22	28	2	76	0	13	0	4	0	17	76
1998	0	42	23	25	0	65	0	15	4	3	0	18	65
1999	20	62	18	48	0	103	0	18	4	3	0	22	103
2000	26	88	42	58	2	157	1	43	12	7	0	53	157

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-21. Ex-Vessel Value of Pacific Cod and Pollock Landings of Pot Catcher Vessels, by FMP Subarea, 1992-2000

Year	$Millions												
	PCOD						PLCK						Total
	AI	BS	WG	CG	EG	Total	AI	BS	WG	CG	EG	Total	
1992	a	2.26	0.22	2.78	b	5.26	Ex-Vessel Value of Pollock in all years and areas was approximately zero.						5.26
1993	a	0.81	0.21	1.84	0.21	3.07							3.07
1994	0.00	2.29	b	1.64	b	3.93							3.93
1995	a	5.75	0.39	3.12	b	9.27							9.27
1996	0.04	7.80	0.62	2.44	b	10.89							10.89
1997	a	8.19	0.67	2.30	b	11.16							11.16
1998	0.00	3.51	0.45	2.84	0.00	6.81							6.81
1999	1.12	5.82	0.57	5.41	0.00	12.93							12.93
2000	1.43	7.84	2.09	7.39	b	18.75							18.75

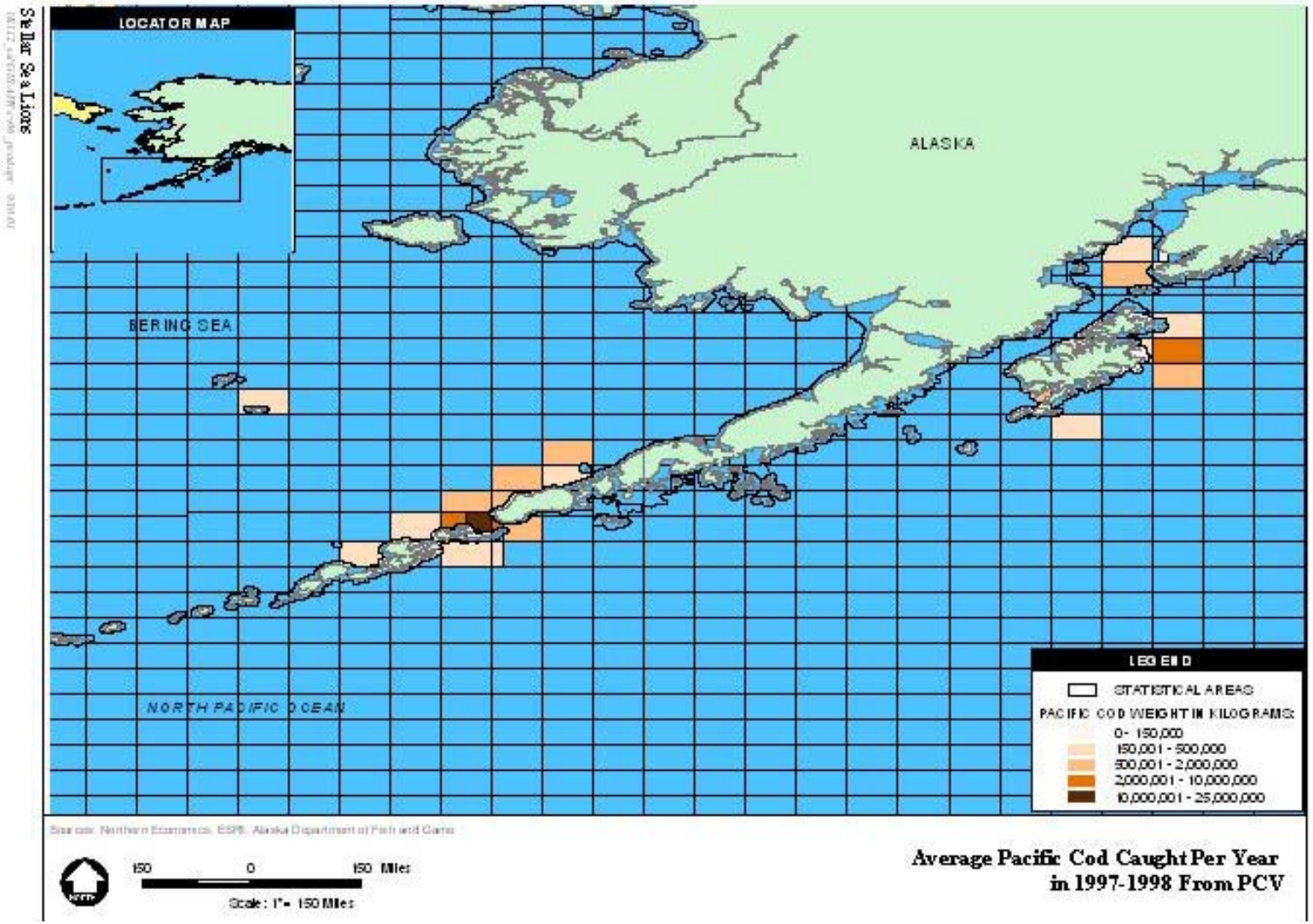
Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Added to BS to protect confidentiality.

[b] Added to CG to protect confidentiality.

Detailed information on the geographical distribution of the Pacific cod catch by vessels in the PCV class is presented in Figure 2.1.6-3 for the years 1997 and 1998 combined. In the figures, only catches in areas in which four or more vessels reported landings are shown.

Figure 2.1.6-3. Average Annual Pacific Cod Catch of Pot Catcher Vessels, by Statistical Area, 1997-1998



The importance of pot gear and hook-and-line gear to vessels in this class is shown in Table 2.1.6-22.

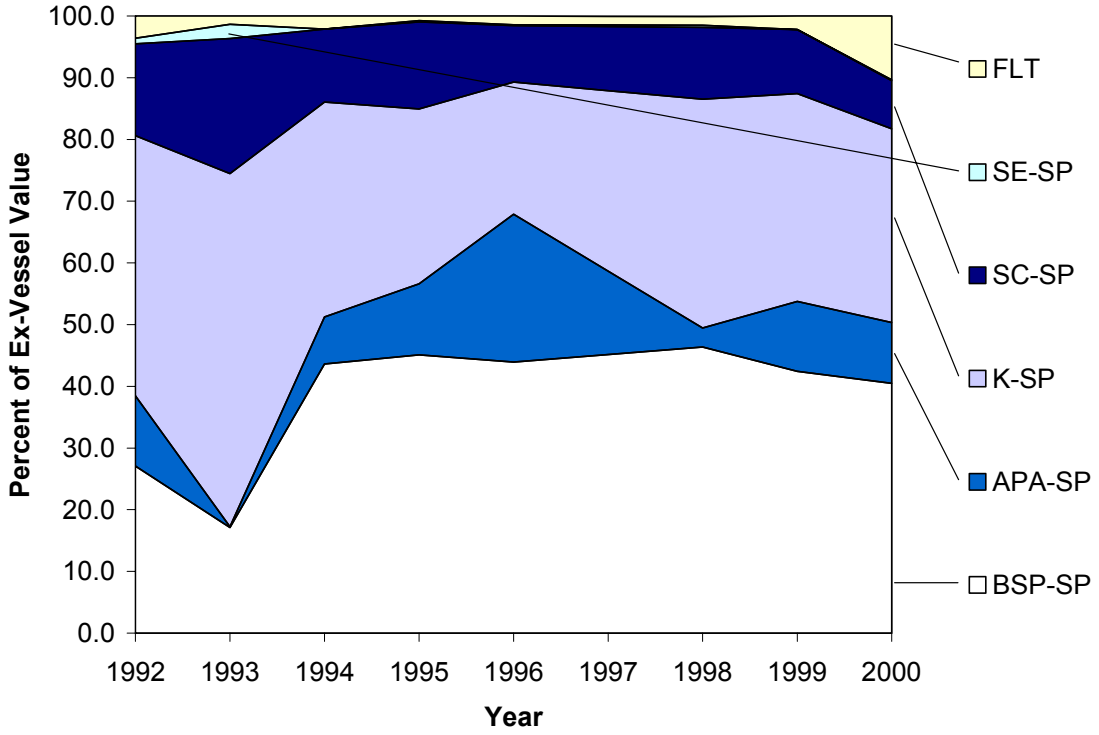
Table 2.1.6-22. Percent of Total Value by Gear in Top Three Target Fisheries by Pot Catcher Vessels, 1996-2000

Year	Percent of Total Value				
	HAL	JIG-OTH	POT	TWL	Total
PCOD					
1996	0.0	0.0	100.0	0.0	100.0
1997	3.7	0.0	96.3	0.0	100.0
1998	0.0	0.0	100.0	0.0	100.0
1999	0.4	0.0	99.6	0.0	100.0
2000	0.3	0.0	99.6	0.0	100.0
SABL					
1996	99.9	0.0	0.1	0.0	100.0
1997	100.0	0.0	0.0	0.0	100.0
1998	100.0	0.0	0.0	0.0	100.0
1999	92.4	0.1	7.5	0.0	100.0
2000	66.7	0.0	32.1	1.3	100.0
FLAT					
1996	96.5	0.0	0.2	3.3	100.0
1997	100.0	0.0	0.0	0.0	100.0
1998	99.9	0.0	0.1	0.0	100.0
1999	0.0	0.0	100.0	0.0	100.0
2000	26.4	0.0	73.6	0.0	100.0

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Figure 2.1.6-4 shows the reliance of the PCV fleet on various processors from 1992 through 2000. BSP-SP are the largest buyers of groundfish harvests of PCVs, accounting for approximately 40 percent of total revenues. Processors in Kodiak (K-SP) account for about 30 percent of PCV ex-vessel value.

Figure 2.1.6-4. Ex-Vessel Value Paid by Various Processor Classes for Pot Catcher Vessels Less Than 60 Feet in Length, 1992-2000



Note: Data for 1997 is a simple average of the values for 1996 and 1998.
Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001.

2.1.6.6 Crew Employment and Income

Pot vessels harvesting groundfish have an average of four to five crewmembers including the skipper. The crewmembers on pot vessels are usually experienced fishers. One fisher explained that these vessels might be able to "get away with" having one or two crewmembers with little experience Pacific cod fishing, "but it is too dangerous otherwise." Having at least a few employees who are experienced and can run the hydraulic crane operations is important in minimizing injury on a pot vessel. These are rarely fewer than three crewmembers on a vessel at any time. In addition to handling hydraulics, tasks on a pot vessel include sorting and bleeding fish, baiting the pots, cooking, cleaning the deck, and maintaining gear and equipment. Skippers prefer to hire crewmembers that are capable of performing all jobs equally well, but they are not usually that fortunate (IAI, 1994). One crewmember stated that with some experience and a good reputation it is "not too hard to find work" (IAI, 1994).

This analysis assumed an average crew size of five, including the skipper, for this type of vessel. Another 0.5 position was added to the average to account for vessel support staff. Table 2.1.6-23shows the estimated total number of crew (including skipper and administrative staff)

in this class for each year between 1992 and 2000. Each year's estimate was derived by multiplying the average crew size by the number of unique vessels with landings in that year. The number of crewmember months was used to estimate FTE employment based on the assumption that crewmembers work an average of 16 hours per day for an average 15 days for every month their vessel is active. The total number of estimated crewmember hours is then divided by the 2080 hours per year. Since 1992, total estimated FTE employment in the PCV class has varied between 72 in 1993 to 329 in 2000.

Table 2.1.6-23. Number of Crewmembers and Crewmember Months by Species Group for Pot Catcher Vessels, 1992-2000

Year	Number of Crew Members	Crewmember Months			Groundfish FTE
		Groundfish	Non-Groundfish	All Species	
1992	396.0	1,298	2,371	3,240	150
1993	203.5	627	1,771	1,419	72
1994	220.0	726	2,272	1,518	84
1995	555.5	1,678	2,360	3,663	194
1996	550.0	1,898	2,107	3,438	219
1997	418.0	1,606	2,063	2,772	185
1998	357.5	1,199	1,997	2,569	138
1999	566.5	1,876	2,195	3,718	216
2000	869.0	2,855	330	4,565	329

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Crewmembers are typically paid on a share basis. The shares paid to skippers and crewmembers vary according to vessel ownership, productivity, fishery, crew experience and longevity, expenses, and other factors. Some owners offer small crew shares during the season and a bonus at the end of the season as an incentive to stay with the vessel. Crew shares commonly range between four and seven percent of catch revenues. Skippers receive higher percentages, commonly ranging from 12 to 17 percent. This analysis assumes that 40 percent of ex-vessel revenue goes to payments for labor.[18]

[18] The analysis makes no assumptions about owner profits, as no data were available to estimate operating costs.

Estimated payments to labor over time in groundfish and non-groundfish fisheries are shown in Table 2.1.6-24. Labor payments per vessel in groundfish and non-groundfish fisheries are shown in Table 2.1.6-25. Labor payments per crewmember are shown in Table 2.1.6-26. Labor payments per FTE in groundfish have been relatively stable between $22,000 and $27,000 from 1993 to 2000.

Table 2.1.6-24. Payments to Labor by Species Group for Pot Catcher Vessels, 1992-2000

	$Millions		
Year	Groundfish	Non-Groundfish	All Species
1992	2.59	18.02	20.61
1993	1.74	6.58	8.32
1994	1.89	10.69	12.58
1995	4.41	29.52	33.93
1996	5.01	20.06	25.07
1997	5.04	15.35	20.39
1998	3.10	15.99	19.09
1999	5.43	36.34	41.77
2000	8.42	24.95	33.37

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-25. Payments to Labor Per Vessel by Species Group for Pot Catcher Vessels, 1992-2000

	Payments to Labor Per Vessel ($)		
Year	Groundfish	Non-Groundfish	All Species
1992	35,955	250,248	286,203
1993	47,015	177,795	224,809
1994	47,217	267,347	314,564
1995	43,682	292,304	335,987
1996	50,116	200,631	250,747
1997	66,295	202,017	268,312
1998	47,731	246,021	293,752
1999	52,717	352,783	405,500
2000	53,288	157,885	211,172

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.6-26. Number of Crewmembers and Labor Payments Per Crewmember by Species Group for Pot Catcher Vessels, 1992-2000

Year	Number of Crew Members	Labor Payments per Crewmember ($)			Groundfish Labor Payments per FTE ($)
		Groundfish	Non-Groundfish	All Species	
1992	396.0	6,537	45,500	52,037	17,285
1993	203.5	8,548	32,326	40,874	24,045
1994	220.0	8,585	48,609	57,193	22,546
1995	555.5	7,942	53,146	61,088	22,794
1996	550.0	9,112	36,478	45,590	22,890
1997	418.0	12,054	36,730	48,784	27,190
1998	357.5	8,678	44,731	53,409	22,426
1999	566.5	9,585	64,142	73,727	25,091
2000	869.0	9,689	28,706	38,395	25,563

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.6.7 Regional Residence of Vessel Owners

Table 2.1.6-27 presents information on the residence of owners of vessels in this class. More than half of the vessels in this category are owned by Alaska residents, and the remainder are owned predominantly by Washington residents. Among the regions in Alaska, Kodiak has generally had the most vessel owners in this class.

The owner's residence is an important factor because most of the regional economic impact of catcher vessel operations occurs in the owner's region of residence. Table 2.1.6-28 shows the ex-vessel revenue accruing to each region. Table 2.1.6-29 and Table 2.1.6-30 show the crewmember months and payments to labor accruing to each region. It was assumed that all crewmembers of a particular vessel and home office staff reside in the vessel owner's region of residence.

Table 2.1.6-27. Number of Pot Catcher Vessels Landing Groundfish, by Region of Owner, 1992-2000

Year	Number of Vessels							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	1	18	21	0	23	8	1	72
1993	0	15	8	0	11	2	1	37
1994	0	15	4	0	15	5	1	40
1995	3	24	18	0	45	6	5	101
1996	5	32	16	0	37	5	5	100
1997	1	25	8	3	29	5	5	76
1998	2	22	10	0	21	4	6	65
1999	3	25	17	2	47	6	3	103
2000	4	36	23	4	74	10	7	158

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001

Table 2.1.6-28. Ex-Vessel Revenue by Vessel Owner's Region for Pot Catcher Vessels, 1992-2000

Year	$Millions							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0.07	1.67	1.45	0.00	2.22	0.57	0.09	6.47
1993	0.00	2.04	0.72	0.00	1.33	0.23	0.11	4.35
1994	0.00	1.96	0.30	0.00	1.87	0.49	0.11	4.72
1995	0.20	2.67	1.07	0.00	5.40	0.57	0.67	11.03
1996	0.51	4.35	1.01	0.00	5.05	0.60	0.58	12.53
1997	0.14	4.63	0.73	0.45	5.21	0.71	0.69	12.60
1998	0.19	2.74	0.77	0.00	2.63	0.48	0.71	7.76
1999	0.36	4.15	1.60	0.23	6.15	0.82	0.43	13.57
2000	0.41	5.15	2.20	0.53	10.33	1.18	0.98	21.05

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the regionally weighted average revenue per vessel.

Table 2.1.6-29. Crewmember Months by Vessel Owner's Region for Pot Catcher Vessels, 1992-2000

Year	Crewmember Months							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	18	325	379	0	415	144	18	1,298
1993	0	254	136	0	186	34	17	627
1994	0	272	73	0	272	91	18	726
1995	50	399	299	0	747	100	83	1,678
1996	95	607	304	0	702	95	95	1,898
1997	21	528	169	63	613	106	106	1,606
1998	37	406	184	0	387	74	111	1,199
1999	55	455	310	36	856	109	55	1,876
2000	72	650	416	72	1,337	181	126	2,855

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the number of crewmember months.

Table 2.1.6-30. Payments to Labor by Vessel Owner's Region for Pot Catcher Vessels, 1992-2000

Year	$Millions							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0.03	0.67	0.58	0.00	0.89	0.23	0.04	2.59
1993	0.00	0.81	0.29	0.00	0.53	0.09	0.04	1.74
1994	0.00	0.78	0.12	0.00	0.75	0.20	0.04	1.89
1995	0.08	1.07	0.43	0.00	2.16	0.23	0.27	4.41
1996	0.21	1.74	0.40	0.00	2.02	0.24	0.23	5.01
1997	0.06	1.85	0.29	0.18	2.08	0.28	0.27	5.04
1998	0.08	1.10	0.31	0.00	1.05	0.19	0.29	3.10
1999	0.14	1.66	0.64	0.09	2.46	0.33	0.17	5.43
2000	0.16	2.06	0.88	0.21	4.13	0.47	0.39	8.42

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the regionally weighted payments to labor.

2.1.7 Longline Catcher Vessels Greater than or Equal to 60 feet in Length (LCV)

This catcher vessel class includes all vessels that are not trawl catcher vessels or pot catcher vessels for which vessel length is greater than or equal to 60 ft. and the total value of groundfish catch is greater than $2000, excluding halibut and state water sablefish.

A large majority of the vessels in this class operate solely with longline fixed gear, focusing on halibut and relatively high-value groundfish such as sablefish and rockfish. Their operating parameters are influenced primarily by regulations for fixed gear fisheries targeting these species. The reliance of LCVs on groundfish fisheries sets them apart from smaller fixed gear catcher vessels, which are much more likely to operate in Alaska salmon fisheries with multiple gear types. The use of 60 feet as the minimum length for vessels in this class reflects the fact that regulations for State of Alaska salmon fisheries limit participating vessels to 58 feet. Thus, by definition vessels in the LCV class are generally precluded from operating in Alaska salmon fisheries. The LCVs' reliance on longline gear sets them apart from the other large fixed gear vessels that use pots and have crab endorsements under the Crab LLP.

2.1.7.1 Class Characteristics

IAI (1994) reported that during the late 1800s and early 1900s, longline fishers employed steamships carrying dories to catch halibut from the Pacific Northwest to Alaska. Steamship-dory fishing waned as schooner-style vessels were built with the house aft, as opposed to a seine style with the house in the bow. The schooner houses are set off to one side so that fish can be pulled up over the side. The post-World War I schooner longliners were fished primarily by Norwegians.

Several vessels built between 1918 and1938 are still participating in Alaska longline fisheries. They are homeported in the Seattle area, and have been re-powered and updated. Some of these schooners have third- or fourth-generation owner-operators aboard. The schooners vary in age and length, but most vessels are longer than 60 feet. These vessels are sturdy and productive. Many belong to the Fishing Vessel Owners' Association and contract crew from the Deep Sea Fishers' Union in Seattle.

The longline fishery off Alaska has changed since the turn of the century. For example, dories have been superseded as the primary type of catcher vessel, circle hooks have replaced "J" hooks, and effort has increased. Despite these changes, the style of fishing is much the same, and halibut remains the dominant target species. Sablefish is a secondary species for LCVs. Both halibut and sablefish fisheries generate high value per ton, and LCVs often enter other high value fisheries such as high-seas albacore fisheries.

Some of the main differences between fishing for halibut and sablefish with longline gear are the season length, size of hook, and fishing depth. Halibut are fished with a large hook at a depth of around 100 fathoms, although depth may vary by season and area. Sablefish are fished with smaller hooks at about 350 fathoms.

In general, LCVs do not target Pacific cod. The high quality of the fresh-frozen-at-sea product produced by longline catcher processors (L-CP vessels) commands a price three to four times higher than the price of iced product delivered by LCVs. Longline catcher processors can stay out longer and hold more fish.

Overall, the LCV fleet is quite diverse in size and style. Vessels consist of both house-forward and schooner-style configurations and are constructed of wood, steel, or fiberglass. Vessels are characterized by a longline hauling "roller station" on the side of the fishing deck and an aft shelter deck for dressing fish and setting the longline. Belowdeck are ice holds divided into bins that collectively hold 50,000 to 75,000 pounds of dressed and iced fish. Crew sizes are typically 5 to 6

people. Their operations take place in Southeast Alaska, the GOA, the Aleutian Islands, and the Bering Sea. A typical 60- to 70-foot LCV is family-owned and has a fair market value of $200,000 to $600,000 (IAI, 1994).

In 2000, vessels in the LCV class had an average length of 72 feet and ranged from 60 to 176 feet. Most were less than 70 feet (Table 2.1.7-1). The vessels have an average horsepower rating of about 395, with a maximum of about 1,150 and a minimum of 135. Average gross tonnage is approximately 90 tons and average hold capacity is 4,688 cubic feet (CFEC, 2001).

The larger vessels in this class can operate in the BSAI during most weather conditions. Smaller vessels can have trouble operating during adverse weather and typically seek shelter during storms. The vessels normally start their season in Southeast Alaska and move north and west as the weather improves, fishing the BSAI during the summer and early fall months.

Table 2.1.7-1. Number of Longline Catcher Vessels, by Vessel Length, 1992-2000

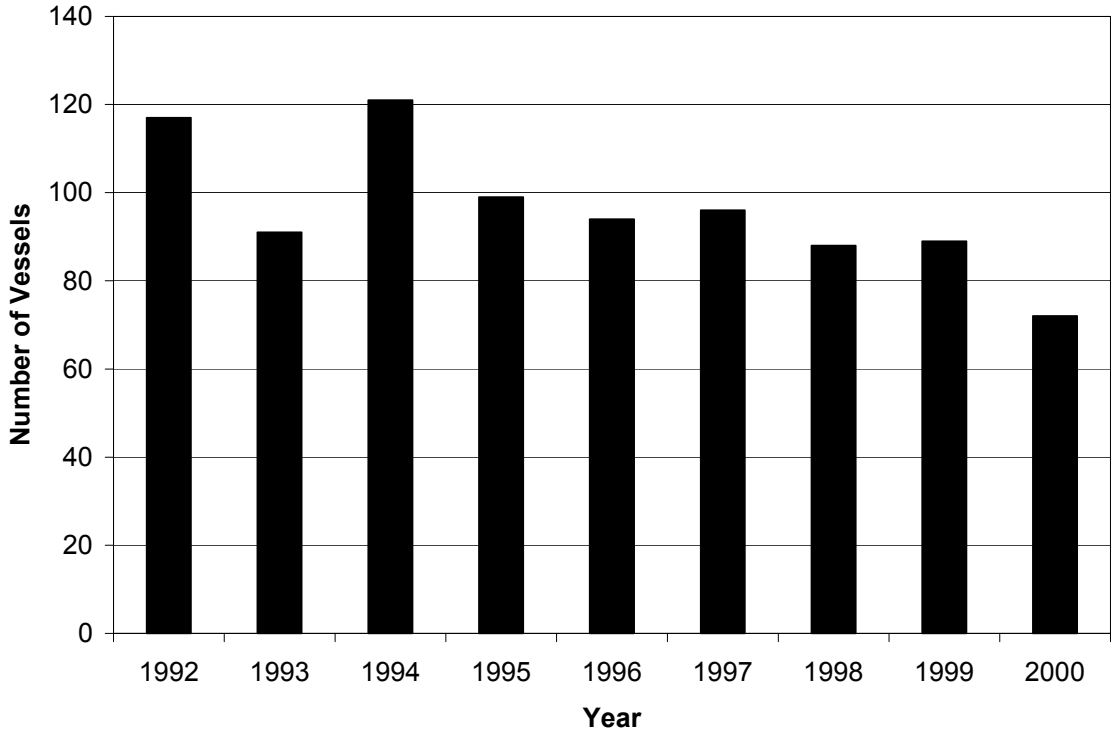
Year	Vessel Length							
	60-79'	80'-94'	95'-109'	110'-124	125-139'	155'-169'	170'+	Total
1992	90	18	5	3	1	0	0	117
1993	72	12	4	3	0	0	0	91
1994	94	18	6	3	0	0	0	121
1995	84	9	2	3	1	0	0	99
1996	76	12	2	3	0	1	0	94
1997	68	13	1	6	5	2	1	96
1998	73	12	0	1	1	0	1	88
1999	69	13	0	3	2	2	0	89
2000	61	9	0	0	1	0	1	72

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.7.2 Class Participation

The number of longline catcher vessels increased from 89 in 1988 to 117 in 1992. Since 1994, the number of vessels in this class has shown a general declining trend (Figure 2.1.7-1). The decline is an expected outcome of the IFQ program, which encourages consolidation of harvest on fewer vessels.

Figure 2.1.7-1. Number of Active Longline Catcher Vessels,1992-2000



Source: CFEC/ADFG Fish Ticket Data, June 2001.

Of the vessels in the LCV class that were active in the groundfish fishery in 2000, the average number of years since 1992 in which a vessel was active was 6.82, with a minimum of one year and a maximum of nine years. Of those vessels that were not active in 2000, the average number of years of participation was 2.41, with a minimum of one and a maximum of eight.

2.1.7.3 Description of Fishing Operations

In longlining, a long groundline with many gangions or short leaders attached to baited hooks is anchored at sea. An individual section of groundline is called a skate, and several skates may be linked together so that the fishing line is several miles long. A single vessel may set several lines, letting each "soak" for periods varying from hours to days (depending on fishing conditions and weather) before harvesting the fish by hauling the lines aboard the vessel. As the line is taken aboard each fish is shaken off the hook, bled, dressed (gutted, or headed and gutted, depending on the species), and stored in ice in the fish hold.

2.1.7.4 Dependence on Groundfish and Annual Cycle of Operations

Groundfish accounted for between 31 and 92 percent of total ex-vessel value during the 1992-2000 period (Figure 2.1.7-2 and Table 2.1.7-2). In 1999, the most recent year for which landings data for all non-groundfish species are available, the ex-vessel value per vessel from groundfish accounted for about one-third of the ex-vessel value per vessel for all species (Table 2.1.7-3).

Figure 2.1.7-2. Ex-Vessel Value of Harvest in Major Alaska Fisheries for Longline Catcher Vessels, 1992-2000

Source: CFEC/ADFG Fish Ticket Data, June 2001

Table 2.1.7-2. Number of Vessels and Total Ex-Vessel Value by Species Group for Longline Catcher Vessels,1992-2000

		$Millions		
Year	Number of Vessels	Groundfish	Non-Groundfish	All Species
1992	117	13.09	18.78	31.86
1993	91	8.26	18.77	27.03
1994	121	11.22	22.72	33.94
1995	99	28.24	24.98	53.21
1996	94	25.75	22.73	48.48
1997	96	39.46	33.80	73.26
1998	88	16.63	18.72	35.36
1999	89	17.42	33.75	51.11
2000	72	21.00	1.83	22.83

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Value of halibut landings is not included for 2000

Table 2.1.7-3. Number of Vessels and Ex-Vessel Value Per Vessel by Species Group for Longline Catcher Vessels, 1992-2000

Year	Number of Vessels	Ex-Vessel Value Per Vessel ($)		
		Groundfish	Non-Groundfish	All Species
1992	117	111,858	160,492	272,350
1993	91	90,725	206,300	297,024
1994	121	92,720	187,759	280,479
1995	99	285,221	252,285	537,506
1996	94	273,929	241,856	515,784
1997	96	411,059	352,108	763,166
1998	88	189,021	212,780	401,801
1999	89	195,693	379,250	574,943
2000	72	291,704	25,378	317,081

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Value of halibut landings is not included for 2000

Table 2.1.7-4 and Table 2.1.7-5 provide additional detail about the relative importance of groundfish to vessels in the LCV class. In 1999, 15 vessels in this class made landings of crab and 74 vessels made landings of halibut. These species accounted for 96 percent of the ex-vessel value of non-groundfish landings in that year.

Table 2.1.7-4. Number of Longline Catcher Vessels Participating in Non-Groundfish Fisheries, by Species, 1992-2000

Year	Number of Vessels				
	Salmon	Crab	Halibut	Other	Total
1992	2	38	113	22	115
1993	6	33	91	22	91
1994	5	41	121	24	121
1995	6	24	97	23	98
1996	6	18	90	22	91
1997	2	22	87	21	89
1998	6	11	78	19	84
1999	5	15	74	18	81
2000	7	9	a	17	24

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001
Note: Values for salmon may represent data entry errors, as ADFG salmon regulations generally prohibit seine vessels over 60 feet in length from landing salmon.
[a] Value for halibut is not available.

Table 2.1.7-5. Ex-Vessel Value of Non-Groundfish Species Harvested by Longline Catcher Vessels, by Species, 1992-2000

Year	Ex Vessel Value ($Millions)				
	Salmon	Crab	Halibut	Other	Total
1992	a	10.34	7.52	0.92	18.78
1993	0.04	9.29	8.23	1.22	18.77
1994	0.05	9.52	11.58	1.58	22.72
1995	0.07	8.33	15.02	1.56	24.98
1996	0.06	3.58	17.39	1.70	22.73
1997	a	5.91	25.73	2.16	33.80
1998	0.07	2.63	14.59	1.43	18.72
1999	0.08	6.56	25.95	1.10	33.69
2000	0.06	0.59	b	1.18	1.83

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001
Note: Values for salmon may represent data entry errors, as ADFG salmon regulations generally prohibit seine vessels over 60 feet in length from landing salmon.
[a] Combined with the value for halibut due to confidentiality restrictions.
[b] Value for halibut is not available.

Table 2.1.7-6 shows ex-vessel value by month in 1999 and 2000 from groundfish and from all other species. Longline catcher vessels with halibut or sablefish IFQs may fish their share at any time during the open season from March 15 through November 15. The LCV fleet has a relatively long operating season, with the largest part of overall ex-vessel value earned in April and May. This pattern is a function of the IFQ system, which lets individual vessel owners determine the optimal time to fish. Few vessels operate continually over the entire season.

The number of vessels participating in and ex-vessel value from groundfish and non-groundfish fisheries by trimester are shown Table 2.1.7-7 and Table 2.1.7-8, respectively. The number of vessels participating groundfish and non-groundfish fisheries by month is shown in Table 2.1.7-9.

Table 2.1.7-6. Ex-Vessel Value of Groundfish, Salmon, Crab, Halibut, and Other Species Harvested by Longline Catcher Vessels, by Month, 1999-2000

Year		$Millions												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1999	Salmon	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.01	0.00	0.00	0.00	0.08
	Crab	1.03	2.16	1.74	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.18	0.00	6.56
	Halibut	0.00	0.00	1.72	2.22	3.91	3.08	2.49	2.14	2.28	0.80	7.31	0.00	25.95
	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.56	0.32	0.17	0.00	1.10
	Groundfish	0.11	0.13	1.33	3.92	4.42	2.27	1.18	0.82	1.95	1.06	0.22	0.01	17.42
2000	Salmon	0.00	0.00	0.00	0.01	0.00	0.01	0.03	0.02	0.00	0.00	0.00	0.00	0.06
	Crab	0.00	0.25	0.12	0.15	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.59
	Halibut	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.63	0.33	0.17	0.00	1.18
	Groundfish	0.33	0.44	0.85	4.84	6.73	2.65	1.66	0.82	1.77	0.62	0.28	0.01	21.00

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-7. Number of Longline Catcher Vessels with Groundfish Landings by Trimester, 1992-2000

Year	Number of Vessels			
	Jan-Apr	May-Aug	Sep-Oct	Total
1992	37	114	11	117
1993	14	90	3	91
1994	16	107	68	121
1995	55	83	62	99
1996	56	83	41	94
1997	52	82	46	96
1998	45	73	46	88
1999	50	70	53	89
2000	46	62	37	72

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-8. Ex-Vessel Value of Harvest of Groundfish by Longline Catcher Vessels, 1992-2000

Year	$Millions			
	Jan-Apr	May-Aug	Sep-Dec	Total
1992	1.34	11.68	0.07	13.09
1993	0.65	7.60	a	8.26
1994	0.78	8.50	1.94	11.22
1995	8.52	14.34	5.37	28.24
1996	8.10	15.12	2.53	25.75
1997	15.10	17.17	7.20	39.46
1998	4.48	9.34	2.81	16.63
1999	5.49	8.69	3.24	17.42
2000	6.46	11.86	2.68	21.00

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Combined with value for May-Aug to protect the confidentiality of the small number of LCVs that reported during this trimester.

Table 2.1.7-9. Number of Longline Catcher Vessels with Groundfish Landings, by Month, 1992-2000

Year	Number of Vessels												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1992	4	12	26	25	98	91	32	29	6	7	0	0	117
1993	3	6	9	6	85	53	12	4	2	0	1	0	91
1994	5	10	12	7	102	20	7	9	64	3	3	3	121
1995	3	5	25	43	66	52	28	27	37	33	20	0	99
1996	7	7	18	49	60	48	27	34	28	19	9	1	94
1997	7	6	21	45	61	46	32	22	29	21	17	7	96
1998	4	6	10	38	58	39	32	23	32	28	7	4	88
1999	6	6	24	40	54	40	28	18	41	27	10	2	89
2000	10	14	17	37	50	39	24	15	27	20	12	2	72

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.7.5 Catch and Value in Groundfish Fisheries

Table 2.1.7-10 shows the number of LCVs in this category with landings for each of the four major species groups (pollock, Pacific cod, flatfish, and the ARSO species complex [Atka mackerel, all rockfish species, sablefish, and other groundfish]), on an annual basis. ARSO are the most often landed species during the entire period, whereas pollock are the least.

Table 2.1.7-11 and Table 2.1.7-13 provide information on retained landings and ex-vessel value by species group. From 1992 to 2000, total harvest volume for the class varied between 4,200 and 18,400 tons. In the same period, ex-vessel revenue ranged from a high of $39 million in 1997 to a low of $8 million in 1993. Low prices in 1998 and 1999, due to primarily to the Asian economic crisis, had a major negative impact ex-vessel revenues.

Table 2.1.7-10. Number of Longline Catcher Vessels by Species, 1992-2000

	Number of Vessels				
Year	ARSO	FLAT	PCOD	PLCK	Total
1992	117	19	54	5	117
1993	91	16	13	1	91
1994	119	17	17	0	121
1995	99	26	35	3	99
1996	93	26	25	2	94
1997	93	17	31	1	96
1998	85	13	33	2	88
1999	84	14	36	1	89
2000	70	12	35	5	72

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-11. Retained Tons of Groundfish by Longline Catcher Vessels by Species, 1992-2000

	Thousands of Tons				
Year	ARSO	FLAT	PCOD	PLCK	Total
1992	4.7	0.1	1.6	0.0	6.3
1993	3.4	0.4	0.4	0.0	4.2
1994	3.4	0.5	0.8	0.0	4.7
1995	6.8	0.4	1.0	a	8.2
1996	5.8	0.2	0.7	0.0	6.6
1997	5.4	0.7	12.4	0.0	18.4
1998	4.7	0.1	0.5	0.0	5.4
1999	4.2	0.2	1.4	0.0	5.8
2000	4.1	0.1	1.4	0.0	5.5

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Combined with tons of FLAT to protect the confidentiality of the small number of LCVs that reported catching these species during the year.

Table 2.1.7-12. Ex -Vessel Prices by Species for Longline Catcher Vessels Greater then 60 Feet in Length, 1992-2000

YEAR	ARSO		FLAT		PCOD		PLCK	
	$ / Pound	$ / Ton	$ / Pound	$ / Ton	$ / Pound	$ / Ton	$ / Pound	$ / Ton
1992	$1.17	$2,581.99	$0.26	$571.35	$0.27	$594.99	$0.35	$767.21
1993	$1.04	$2,290.17	$0.25	$549.44	$0.29	$635.69	$0.50	$1,102.30
1994	$1.41	$3,108.59	$0.22	$482.12	$0.28	$618.47	$0.00	$0.00
1995	$1.85	$4,070.36	$0.18	$407.30	$0.24	$534.72	$0.08	$184.26
1996	$1.98	$4,374.16	$0.27	$592.50	$0.26	$581.46	$0.09	$195.87
1997	$2.29	$5,048.52	$0.88	$1,947.78	$0.40	$891.12	$0.07	$152.04
1998	$1.58	$3,476.63	$0.26	$570.08	$0.20	$436.75	$0.08	$171.91
1999	$1.80	$3,971.70	$0.29	$636.75	$0.23	$511.75	$0.10	$215.70
2000	$2.24	$4,933.56	$0.30	$650.52	$0.32	$698.55	$0.12	$255.70

Source: CFEC/ADFG Fish Ticket Data, June 2001

Table 2.1.7-13. Ex-Vessel Value of Harvest by Longline Catcher Vessels, 1992-2000

Year	$Millions				
	ARSO	FLAT	PCOD	PLCK	Total
1992	12.13	0.03	0.92	0.00	13.09
1993	7.77	0.22	0.27	0.00	8.26
1994	10.49	0.23	0.50	0.00	11.22
1995	27.55	0.14	0.55	a	28.24
1996	25.26	0.09	0.40	0.00	25.75
1997	27.17	1.28	11.01	0.00	39.46
1998	16.35	0.06	0.23	0.00	16.63
1999	16.57	0.12	0.72	0.00	17.42
2000	19.98	0.03	0.98	0.00	21.00

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Combined with value of FLAT to protect the confidentiality of the small number of LCVs that reported catching these species during the year.

Additional details on the number of vessels and ex-vessel value in target fisheries and the harvest volume and value by target species are presented in Table 2.1.7-12 through Table 2.1.7-17.

The activities of the LCV fleet have focused on sablefish (a groundfish species) and halibut (a species not covered by the groundfish FMPs). Management of the sablefish and halibut fisheries changed dramatically during the 1990s. In 1991, NPFMC approved an IFQ management system for these fisheries. Fishing under the IFQ program began in 1995. Prior to implementation of IFQs, the two fisheries were open access fisheries characterized by a "race for fish" as the number of vessels grew and the fishing seasons were increasingly shortened . Under the IFQ system each vessel owner is allocated a percentage of the longline allocation of the TAC.

One major impact of the transition from open access to IFQs was a significant increase in the value of the fish harvested by LCVs. Fishers received higher prices because they were better able to cater to fresh-fish markets, particularly those for halibut, and because the IFQ system provided harvesters with the ability to sell their catch to the highest bidder. Before the IFQ system the intense race for fish and supply glut reduced the ability of harvesters to negotiate prices. Table 2.1.7-13 shows the increase in total ex-vessel value received by the LCV fleet beginning in 1995. TACs for sablefish during this period declined, but those for halibut increased.

Table 2.1.7-14. Number of Longline Catcher Vessels in Each Target Fishery, 1992-2000

Year	Number of Vessels						
	SABL	PCOD	FLAT	ROCK	PLCK	OT-AM	Total
1992	114	40	2	29	2	4	117
1993	90	11	12	18	1	1	91
1994	119	15	13	19	0	0	121
1995	99	16	12	14	2	2	99
1996	92	13	9	19	0	4	94
1997	91	18	8	30	0	0	96
1998	79	13	8	19	0	1	88
1999	79	21	5	28	0	1	89
2000	65	19	7	27	0	1	72

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-15. Ex-vessel Value of Total Catch in Top Three Target Fisheries by Longline Catcher Vessels Greater than 60 Feet in Length, 1992-2000

YEAR	$Millions			
	SABL	PCOD	FLAT	Total
1992	12.01	0.09	a	13.09
1993	7.66	0.27	0.26	8.26
1994	10.41	0.52	0.25	11.22
1995	27.52	0.56	0.10	28.24
1996	25.14	0.40	0.15	25.75
1997	26.96	10.90	1.54	39.46
1998	16.27	0.23	0.05	16.63
1999	16.43	0.74	0.16	17.42
2000	19.86	1.00	0.03	21.00

Note: Includes catches of all species in the target fishery listed. Total includes catches of all species in both target and non-target fisheries.

[a] Data omitted due to confidentiality restrictions.

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-16. Total Catch of Target Species by Longline Catcher Vessels Greater than 60 Feet in Length by Trimester, 1992-2000

Target	Year	Thousands of Tons			
		Jan-Apr	May-Aug	Sep-Dec	Total
FLAT	1992	0.0	0.0	0.0	0.0
	1993	0.0	0.4	0.0	0.4
	1994	0.0	0.5	0.0	0.5
	1995	0.0	0.2	0.1	0.2
	1996	0.0	0.1	0.0	0.1
	1997	0.0	0.6	0.0	0.6
	1998	0.0	0.1	0.0	0.1
	1999	0.0	0.1	0.1	0.1
	2000	0.0	0.0	0.0	0.0
PCOD	1992	1.2	0.2	0.1	1.5
	1993	0.4	0.0	0.0	0.4
	1994	0.8	0.0	0.0	0.8
	1995	1.0	0.0	0.0	1.0
	1996	0.7	0.0	0.0	0.7
	1997	8.2	0.2	3.9	12.2
	1998	0.5	0.0	0.0	0.5
	1999	1.3	0.0	0.1	1.4
	2000	1.4	0.0	0.0	1.4
SABL	1992	0.2	4.2	0.0	4.4
	1993	0.2	3.1	0.0	3.2
	1994	0.1	2.6	0.6	3.2
	1995	2.0	3.3	1.2	6.5
	1996	1.7	3.3	0.5	5.5
	1997	1.5	2.9	0.7	5.1
	1998	1.1	2.6	0.8	4.5
	1999	1.2	2.1	0.7	3.9
	2000	1.0	2.3	0.5	3.8

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-17. Ex-Vessel Value Total Catch of Target Species by Longline Catcher Vessels Greater than 60 Feet in Length by Trimester, 1992-2001

Target	Year	$Millions			
		Jan-Apr	May-Aug	Sep-Dec	Total
FLAT	1992	0.00	0.00	0.00	0.00
	1993	0.00	0.20	0.00	0.20
	1994	0.00	0.22	0.00	0.22
	1995	0.00	0.05	0.03	0.08
	1996	0.00	0.06	0.00	0.06
	1997	0.00	1.23	0.00	1.23
	1998	0.00	0.04	0.01	0.05
	1999	0.00	0.04	0.06	0.10
	2000	0.00	0.02	0.00	0.02
PCOD	1992	0.68	0.17	0.06	0.91
	1993	0.25	0.02	0.00	0.27
	1994	0.48	0.00	0.02	0.50
	1995	0.54	0.00	0.00	0.54
	1996	0.39	0.00	0.01	0.40
	1997	7.30	0.14	3.45	10.89
	1998	0.21	0.00	0.01	0.22
	1999	0.66	0.02	0.05	0.72
	2000	0.95	0.00	0.02	0.98
SABL	1992	0.56	11.20	0.00	11.76
	1993	0.36	7.17	0.00	7.52
	1994	0.27	8.14	1.91	10.32
	1995	7.91	14.00	5.25	27.15
	1996	7.61	14.71	2.49	24.81
	1997	7.74	15.23	3.68	26.65
	1998	4.20	9.13	2.70	16.03
	1999	4.76	8.50	2.96	16.22
	2000	5.40	11.65	2.58	19.63

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-18 and Table 2.1.7-19 show the number of vessels and ex-vessel value of the LCV fleet by FMP subarea, respectively. The EG and CG FMP subareas are the most important fishing areas for the LCV class. In recent years (1998-2000), these two areas accounted for 79 to 84 percent of the total value of groundfish retained by the LCV class. The number of vessels with pollock and Pacific cod landings by FMP subarea are presented in Table 2.1.7-20, while Table 2.1.7-21 shows the ex-vessel value of the landings of these species by FMP subarea. These tables are presented because of proposed time and area closures designed to protect Steller sea lions that would significantly restrict Pacific cod and pollock fisheries.

Table 2.1.7-18. Number of Longline Catcher Vessels by FMP Subarea, 1992-2000

	Number of Vessels					
Year	AI	BS	WG	CG	EG	Total
1992	20	30	33	90	60	117
1993	16	12	10	67	41	91
1994	12	19	9	70	68	121
1995	32	32	43	86	78	99
1996	27	30	46	78	74	94
1997	26	35	38	76	68	96
1998	21	24	36	66	72	88
1999	25	20	37	59	67	89
2000	18	16	29	54	59	72

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-19. Ex-Vessel Value of Harvest of Longline Catcher Vessels by FMP Subarea, 1992-2000

	$Millions					
Year	AI	BS	WG	CG	EG	Total
1992	0.92	0.86	2.34	5.64	3.33	13.09
1993	0.59	0.62	0.36	4.22	2.45	8.26
1994	0.64	0.76	0.41	3.77	5.64	11.22
1995	1.68	1.00	3.33	10.39	11.84	28.24
1996	1.02	0.64	3.54	9.79	10.75	25.75
1997	2.48	11.04	4.40	10.84	10.70	39.46
1998	0.63	0.42	1.92	7.43	6.23	16.63
1999	1.09	0.58	2.04	7.16	6.55	17.42
2000	1.13	0.28	1.94	8.87	8.79	21.00

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-20. Number of Longline Catcher Vessels with Pacific Cod and Pollock Landings by FMP Subarea, 1992-2000

	Number of Vessels												
	PCOD						PLCK						
Year	AI	BS	WG	CG	EG	Total	AI	BS	WG	CG	EG	Total	Total
1992	6	16	5	32	8	54	0	1	0	4	0	5	54
1993	0	2	1	8	5	13	0	1	0	0	0	1	13
1994	1	3	2	10	6	17	0	0	0	0	0	0	17
1995	3	4	5	22	10	35	0	2	0	1	0	3	35
1996	0	3	5	13	9	25	0	0	0	2	0	2	25
1997	3	12	6	13	7	31	0	0	0	1	0	1	31
1998	2	1	2	18	15	33	0	0	0	2	0	2	33
1999	11	7	2	15	14	36	0	0	0	1	0	1	36
2000	9	4	2	15	10	35	1	0	0	4	0	5	35

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-21. Ex-Vessel Value of Pacific Cod and Pollock Landings of Longline Catcher Vessels by FMP Subarea, 1992-2000

Year	$Millions												
	PCOD						PLCK						
	AI	BS	WG	CG	EG	Total	AI	BS	WG	CG	EG	Total	Total
1992	0.01	0.34	0.09	0.48	0.01	0.92	Ex-Vessel Value of Pollock in all years and areas was approximately zero.						0.92
1993	0.00	a	a	0.26	0.01	0.27							0.27
1994	a	a	a	0.49	0.01	0.50							0.50
1995	b	0.11	0.00	0.43	0.01	0.55							0.55
1996	0.00	a	0.14	0.25	0.01	0.40							0.40
1997	b	9.92	0.97	0.12	0.00	11.01							11.01
1998	a	a	a	0.22	0.00	0.23							0.23
1999	0.27	0.11	a	0.33	0.01	0.72							0.72
2000	0.25	0.03	a	0.69	0.02	0.98							0.98

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Added to the value for CG to protect confidentiality.

[b] Added to the value for BS to protect confidentiality.

Detailed information on the geographical distribution of the Pacific cod and sablefish catch by vessels in the LCVclass is presented in Figure 2.1.7-3 and Figure 2.1.7-4 for the years 1997 and 1998 combined. In the figures, only catches in areas in which four or more vessels reported landings are shown.

Figure 2.1.7-3. Average Annual Pacific Cod Catch of Longline Catcher Vessels, by Statistical Area, 1997-1998

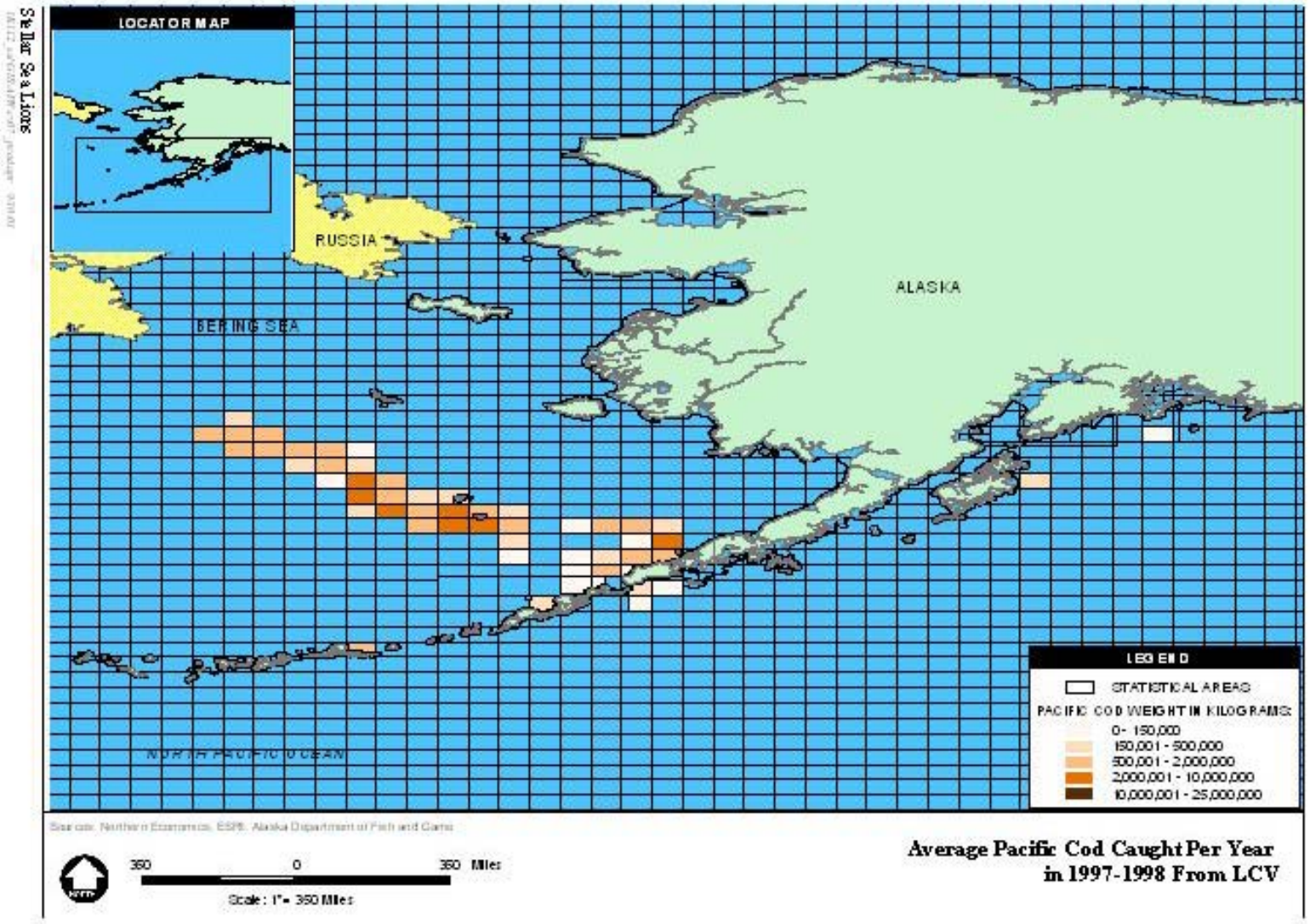
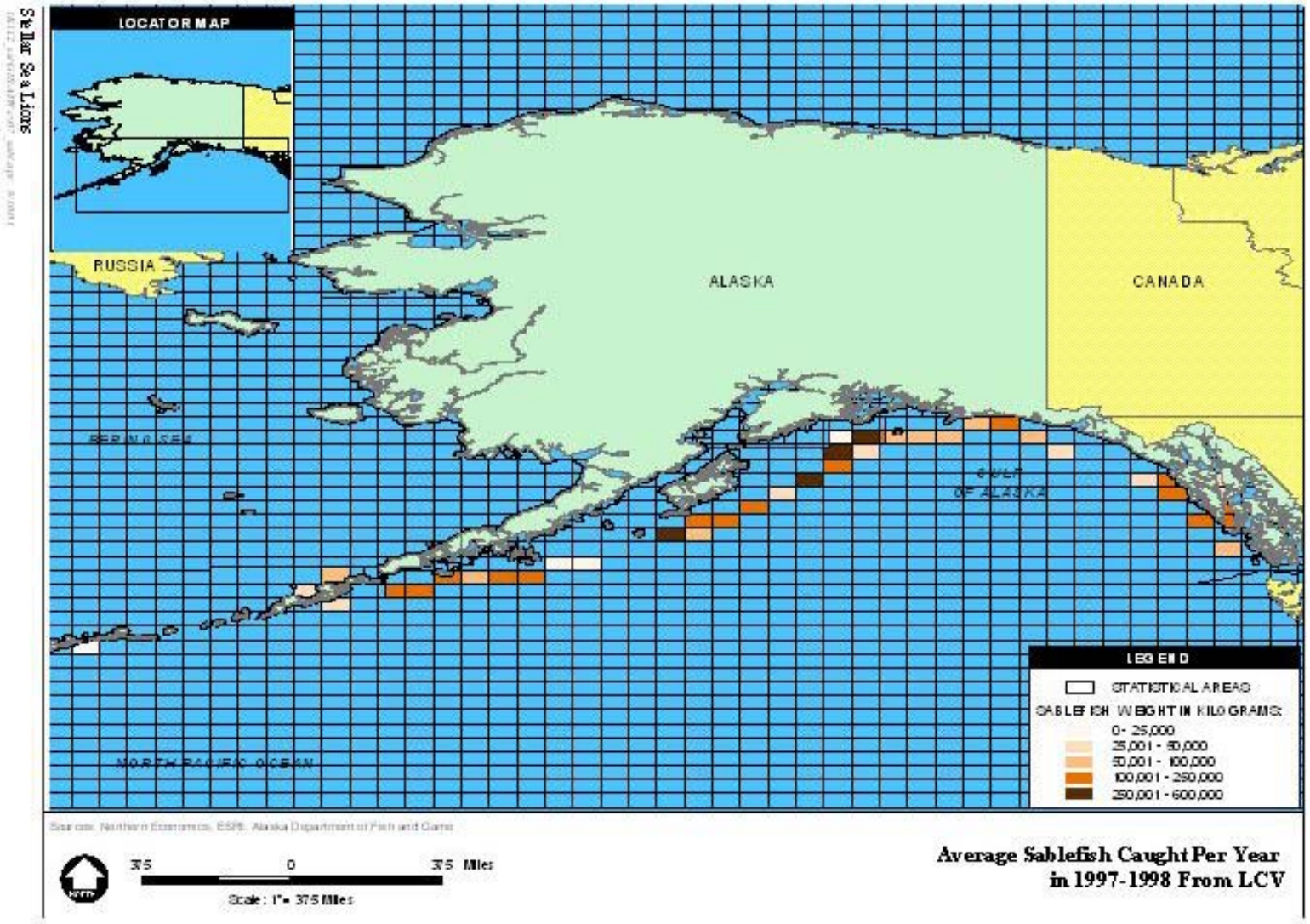


Figure 2.1.7-4. Average Annual Sablefish Catch of Longline Catcher Vessels, by Statistical Area, 1997-1998



The nearly exclusive reliance of the vessels in this class on hook-and-line gear is shown in Table 2.1.7-22.

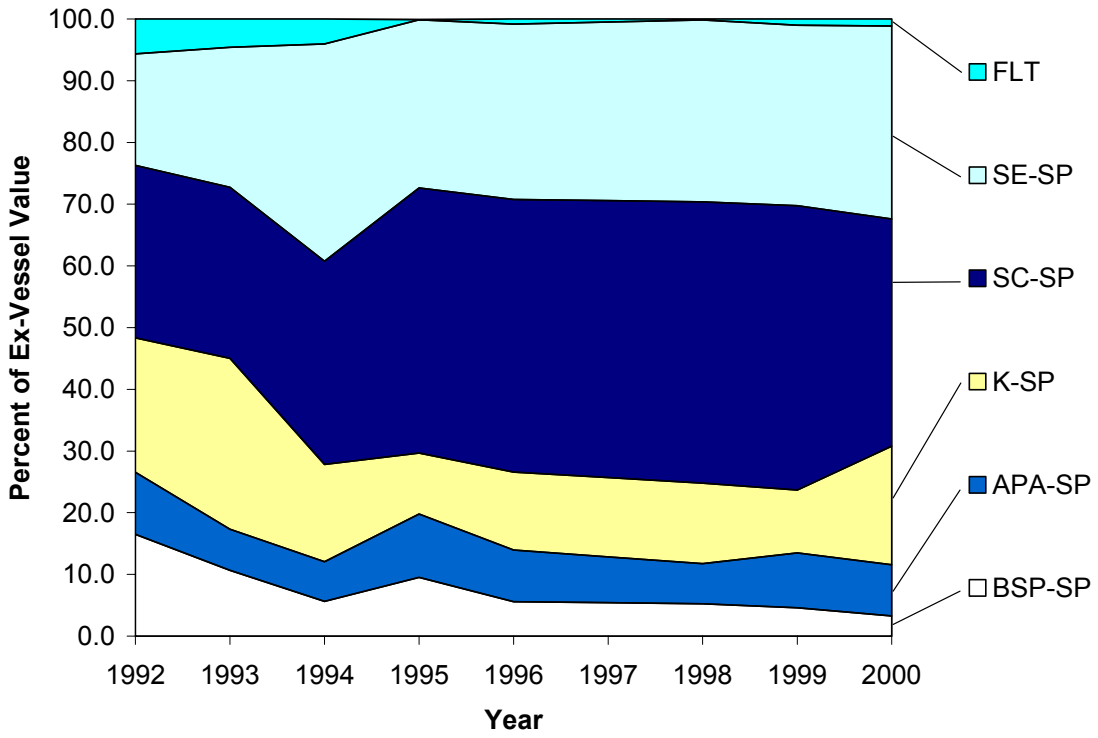
Table 2.1.7-22. Percent of Total Value by Gear in Top Three Target Fisheries by Longline Catcher Vessels, 1996-2000

Year	Percent of Total Value				
	HAL	JIG-OTH	POT	TWL	Total
SABL					
1996	100.0	0.0	0.0	0.0	100.0
1997	100.0	0.0	0.0	0.0	100.0
1998	100.0	0.0	0.0	0.0	100.0
1999	100.0	0.0	0.0	0.0	100.0
2000	99.9	0.0	0.0	0.1	100.0
PCOD					
1996	93.6	0.0	6.4	0.0	100.0
1997	99.9	0.0	0.0	0.0	100.0
1998	98.3	1.6	0.2	0.0	100.0
1999	95.8	2.6	1.6	0.0	100.0
2000	98.5	0.1	1.4	0.0	100.0
FLAT					
1996	100.0	0.0	0.0	0.0	100.0
1997	100.0	0.0	0.0	0.0	100.0
1998	100.0	0.0	0.0	0.0	100.0
1999	99.9	0.0	0.1	0.0	100.0
2000	100.0	0.0	0.0	0.0	100.0

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Figure 2.1.7-5 shows the reliance of the LCV fleet on various processors from 1992 through 2000. In 2000, LCVs received 37 percent of their ex-vessel revenue from processors in Southcentral Alaska (SC-SP) and 31 percent from processors in Southeast Alaska. The relative importance of processors in Kodiak (K-SP) increased from 10 percent of ex-vessel value in 1999 to 19 percent in 2000.

Figure 2.1.7-5. Ex-Vessel Value Paid by Various Processor Classes to Longline Catcher Vessels Less Than 60 Feet in Length, 1992-2000



Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Data for 1997 is a simple average of the data for 1996 and 1998.

2.1.7.6 Crew Employment and Income

The LCV class is one of the most labor-intensive of the groundfish catcher vessel classes due to the need to handle each fish and piece of fishing gear individually. LCVs typically carry between three and six deckhands and a skipper who also works the deck, although the number of crewmembers has decreased since 1995 with implementation of the IFQ system (Alverson, 2000). The actual number of deckhands on LCVs generally depends on the fishery and the experience and productivity of the captain and crew.

On average, at least five people are needed to do all the jobs on an LCV. Experienced crewmembers move among all of the needed positions. The person who retrieves the gear is sometimes called the "roller" because he manages the hydraulic reel that hauls the gear. This job is generally considered the most dangerous, and is often undertaken by the skipper. The "roller" also navigates the vessel, although automatic pilots typically are used to aid in this task. "Coilers" or "winders" coil down the groundline and gangions into tubs. More than 1,800 feet of line may be set in some fisheries. "Baiters" bait the hooks, and hook-related injuries such as pierces and cuts are often associated with this job. The person that bleeds and guts the fish is called the "checker" or "dresser man." One or two

crewmembers scrape the bloodline and ice the fish cavities. Ice is also shoveled between layers of fish. When the crew is short in members there may be no one in the checker, bleeder, or icer positions, and the crew must compensate by working multiple jobs. One or more of the crewmembers acts as a cook, and the skipper and other crewmembers might perform engineering and maintenance tasks. Crewmembers are expected to participate in at-dock work before fishing begins (IAI, 1994)

This analysis assumed an average crew size of five, including the skipper, for this type of vessel.. Another 0.5 position has been added to the average to account for vessel support staff. The actual number of crew depends on factors such as the presence of automatic baiting machines, the size of the vessel, and the amount of sablefish IFQ shares owned by the skipper and crew. Table 2.1.7-23 shows the estimated total number of crew (including skipper) in this class for each year between 1992 and 2000. Each year's estimate was derived by multiplying the average crew size by the number of unique vessels with landings in that year. The number of crewmember months was used to estimate FTE employment based on the assumption that crewmembers work an average of 16 hours per day for an average 15 days for every month their vessel is active. The total number of estimated crewmember hours is then divided by the 2080 hours per year. Since 1992, total estimated FTE employment in groundfish fisheries in the LCV class declined from its high in 1995 (215 FTE) to 169 FTE in 2000.

Table 2.1.7-23. Number of Crewmembers and Crewmember Months by Species Group for Longline Catcher Vessels, 1992-2000

Year	Number of Crew Members	Crewmember Months			Groundfish FTE
		Groundfish	Non-Groundfish	All Species	
1992	643.5	1,815	2,371	3,493	209
1993	500.5	996	1,771	2,404	115
1994	665.5	1,348	2,272	3,091	155
1995	544.5	1,865	2,360	2,662	215
1996	517.0	1,689	2,107	2,404	195
1997	528.0	1,727	2,063	2,497	199
1998	484.0	1,546	1,997	2,277	178
1999	489.5	1,628	2,195	2,547	188
2000	396.0	1,469	330	1,656	169

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

As in other catcher vessel classes, longline crew are paid on a share basis. The percentage crewmembers receive from the sale of the catch varies by operation. According to 1994 sector profiles (IAI, 1994) the overall crew share ranges between 35 and 69 percent of the total proceeds from the catch, after expenses for food, fuel, and bait have been deducted. This range is slightly larger than for other catcher vessel classes because some crewmembers are union members and/or own IFQ shares. These higher crew share payments include a return on the crewmembers' investment in IFQ shares in addition to payments for their labor. Notwithstanding the higher share payments, this analysis assumes that 40 percent of ex-vessel revenue goes to payments for labor.

Estimated payments to labor over time in groundfish and non-groundfish fisheries are shown in Table 2.1.7-24. Labor payments per vessel in groundfish and non-groundfish fisheries are shown in Table 2.1.7-25. Labor payments per FTE in groundfish (Table 2.1.7-26) have varied considerably over the period shown. Prior to implementation of IFQs in 1995 FTE labor payments were relatively

low, but increased from 1995 to a peak at $79,213 in 1997. In 1998 and 1999, payments declined due primarily to low prices resulting from Asian economic crisis.

Table 2.1.7-24. Payments to Labor by Species Group for Longline Catcher Vessels, 1992-2000

Year	$Millions		
	Groundfish	Non-Groundfish	All Species
1992	5.23	7.51	12.75
1993	3.30	7.51	10.81
1994	4.49	9.09	13.58
1995	11.29	9.99	21.29
1996	10.30	9.09	19.39
1997	15.78	13.52	29.31
1998	6.65	7.49	14.14
1999	6.97	13.50	20.47
2000	8.40	0.73	9.13

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-25. Payments to Labor Per Vessel by Species Group for Longline Catcher Vessels, 1992-2000

Year	Payments to Labor Per Vessel ($)		
	Groundfish	Non-Groundfish	All Species
1992	44,743	64,197	108,940
1993	36,290	82,520	118,810
1994	37,088	75,103	112,192
1995	114,088	100,914	215,002
1996	109,571	96,742	206,314
1997	164,423	140,843	305,266
1998	75,608	85,112	160,720
1999	78,277	151,700	229,977
2000	116,682	10,151	126,833

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.7-26. Number of Crewmembers and Labor Payments Per Crewmember by Species Group for Longline Catcher Vessels, 1992-2000

Year	Number of Crew Members	Labor Payments per Crewmember ($)			Groundfish Labor Payments per FTE ($)
		Groundfish	Non-Groundfish	All Species	
1992	643.5	8,135	11,672	19,807	24,997
1993	500.5	6,598	15,004	21,602	28,750
1994	665.5	6,743	13,655	20,398	28,863
1995	544.5	20,743	18,348	39,091	52,501
1996	517.0	19,922	17,589	37,512	52,866
1997	528.0	29,895	25,608	55,503	79,213
1998	484.0	13,747	15,475	29,222	37,311
1999	489.5	14,232	27,582	41,814	37,087
2000	396.0	21,215	1,846	23,060	49,581

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.7.7 Regional Residence of Vessel Owners

Table 2.1.7-27 presents information on the residence of owners of vessels in this class. In 2000, about half of the vessels in this category were owned by Alaska residents, and the remainder were owned predominantly by Washington residents. AKSE and AKSC have had the largest number of vessel owners among the Alaska regions since the late 1980s. The number of owners in AKSE has been relatively stable over the years, compared to the annual changes that have occurred in the number of owners from other Alaska regions. The number of owners in AKSC has declined significantly from 33 in 1994 (the year before IFQs) to 11 in 2000—post IFQ changes in other regions do not appear significant.

The owner's residence is an important factor because most of the regional economic impact of catcher vessel operations occurs in the owner's region of residence. Table 2.1.7-28 shows the ex-vessel revenue accruing to each region. Table 2.1.7-29 and Table 2.1.7-30 show the crewmember months and payments to labor accruing to each region. It was assumed that all crewmembers of a particular vessel and home office staff reside in the vessel owner's region of residence.

Table 2.1.7-27. Number of Longline Catcher Vessels Landing Groundfish, by Region of Owner, 1992-2000

Year	Number of Vessels							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0	14	26	22	45	2	8	117
1993	0	11	25	16	33	2	4	91
1994	2	11	33	19	44	5	7	121
1995	1	8	22	22	37	4	5	99
1996	1	7	19	21	36	3	7	94
1997	1	8	12	19	44	3	9	96
1998	2	6	11	20	39	2	8	88
1999	1	7	8	19	42	2	10	89
2000	0	3	11	18	31	2	7	72

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001

Table 2.1.7-28. Ex-Vessel Revenue by Vessel Owner's Region for Longline Catcher Vessels, 1992-2000

Year	$Millions							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0.00	1.61	2.24	2.52	5.40	0.18	0.94	13.09
1993	0.00	1.15	1.74	1.58	3.09	0.18	0.34	8.26
1994	0.11	1.13	1.92	2.18	4.31	0.38	0.61	11.22
1995	0.17	2.32	3.40	6.20	11.59	1.00	1.75	28.24
1996	0.22	2.08	2.63	5.73	10.74	0.79	1.79	25.75
1997	0.36	3.67	2.70	7.00	19.59	1.05	3.06	39.46
1998	0.31	1.18	1.35	3.80	7.74	0.38	1.50	16.63
1999	0.18	1.72	1.12	3.28	8.16	0.41	2.12	17.42
2000	0.00	0.94	2.30	5.24	9.47	0.52	2.14	21.00

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Estimated by multiplying the number of vessels associated with the region by the regionally weighted average revenue per vessel.

Table 2.1.7-29. Crewmember Months by Vessel Owner's Region for Longline Catcher Vessels, 1992-2000

Year	Crewmember Months							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0	217	403	341	698	31	124	1,815
1993	0	120	273	175	361	22	44	996
1994	22	123	368	212	490	56	78	1,348
1995	19	151	414	414	697	75	94	1,865
1996	18	126	341	377	647	54	126	1,689
1997	18	144	216	342	792	54	162	1,727
1998	35	105	193	351	685	35	141	1,546
1999	18	128	146	348	768	37	183	1,628
2000	0	61	224	367	632	41	143	1,469

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Estimated by multiplying the number of vessels associated with the region by the number of crewmember months.

Table 2.1.7-30. Payments to Labor by Vessel Owner's Region for Longline Catcher Vessels, 1992-2000

Year	$Millions							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0.00	0.65	0.90	1.01	2.16	0.07	0.37	5.23
1993	0.00	0.46	0.69	0.63	1.23	0.07	0.14	3.30
1994	0.05	0.45	0.77	0.87	1.73	0.15	0.25	4.49
1995	0.07	0.93	1.36	2.48	4.63	0.40	0.70	11.29
1996	0.09	0.83	1.05	2.29	4.30	0.32	0.72	10.30
1997	0.14	1.47	1.08	2.80	7.84	0.42	1.22	15.78
1998	0.12	0.47	0.54	1.52	3.09	0.15	0.60	6.65
1999	0.07	0.69	0.45	1.31	3.26	0.16	0.85	6.97
2000	0.00	0.38	0.92	2.10	3.79	0.21	0.86	8.40

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the regionally weighted payments to labor.

2.1.8 Fixed Gear catcher Vessels Greater than 32 and Less than 60 feet in Length (FGCV 33-59)

This catcher vessel class includes all vessels that are not trawl catcher vessels for which vessel length is 33 to 59 ft., and the total value of groundfish catch is greater than $2000.

The larger size of these vessels in comparison to vessels in the smaller fixed gear class results in greater capacity and fishing efficiency. Consequently, this class accounts for a large portion of the total harvest of fixed gear vessels. The vessels in this class employ a mix of gear types, with smaller vessels typically using longline and jig gear, and larger vessels typically employing longline and pot gear. This class was established because these vessels were typically designed for, and participate in, a greater number of fisheries than smaller fixed gear vessels do, and vessels in this class use more gear types than larger fixed gear vessels use. The length of these vessels (< 60′) also means they can participate almost all Alaskan salmon fisheries with the notable exception of fisheries in Bristol Bay.

2.1.8.1 Class Characteristics

In 2000, vessels in the FGCV 33-59 class had an average length of 47 feet and ranged from 33 to 59 feet (Table 2.1.8-1). Most were less than 50 feet. The vessels have an average horsepower rating of about 313, with a maximum of about 1,280 and a minimum of 40. Average gross tonnage is approximately 36 tons and average hold capacity is 2,395 cubic feet (CFEC, 2001).

Table 2.1.8-1. Number of Fixed Gear Catcher Vessels 33 to 59 Feet in Length, by Vessel Length, 1992-2000

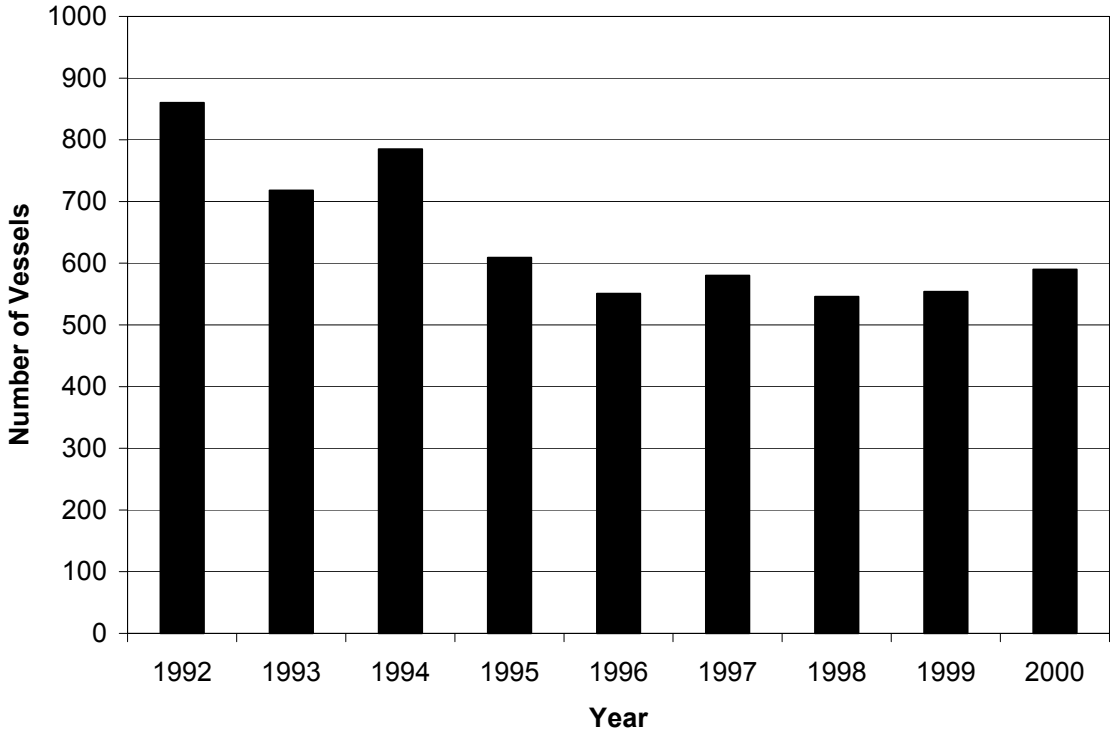
Year	Vessel Length					
	33-39'	40'-44'	45'-49'	50'-54'	55'-59	Total
1992	221	224	253	82	80	860
1993	183	186	208	67	74	718
1994	195	220	213	72	85	785
1995	132	159	167	65	86	609
1996	105	135	131	60	120	551
1997	123	142	115	67	133	580
1998	99	145	108	66	128	546
1999	100	129	107	74	144	554
2000	105	155	104	73	153	590

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.8.2 Class Participation

From 1994 through 2000 the number of vessels in the FGCV 33-59 class remained between 546 and 680 (Figure 2.1.8-1). The significant decline in vessel numbers beginning in 19995 is a assumed to be a result of the implementation of IFQs in sablefish and halibut fisheries.

Figure 2.1.8-1. Number of Active Fixed Gear Catcher Vessels 33 to 59 Feet in Length,1992-2000



Source: CFEC/ADFG Fish Ticket Data, June 2001.

Of the vessels in the FGCV 33-59 class that were active in the groundfish fishery in 2000, the average number of years since 1992 in which a vessel was active was 5.93, with a minimum of one year and a maximum of nine years. Of those vessels that were not active in 2000, the average number of years of participation was 2.67, with a minimum of one and a maximum of eight.

2.1.8.3 Description of Fishing Operations

Vessels in the FGCV 33-59 class employ a number of gear types. This subsection provides a brief description of the three primary gear types used by these vessels. Additional details on the use of longline and pot gears are discussed in the relevant subsections for LCVs and PCVs.

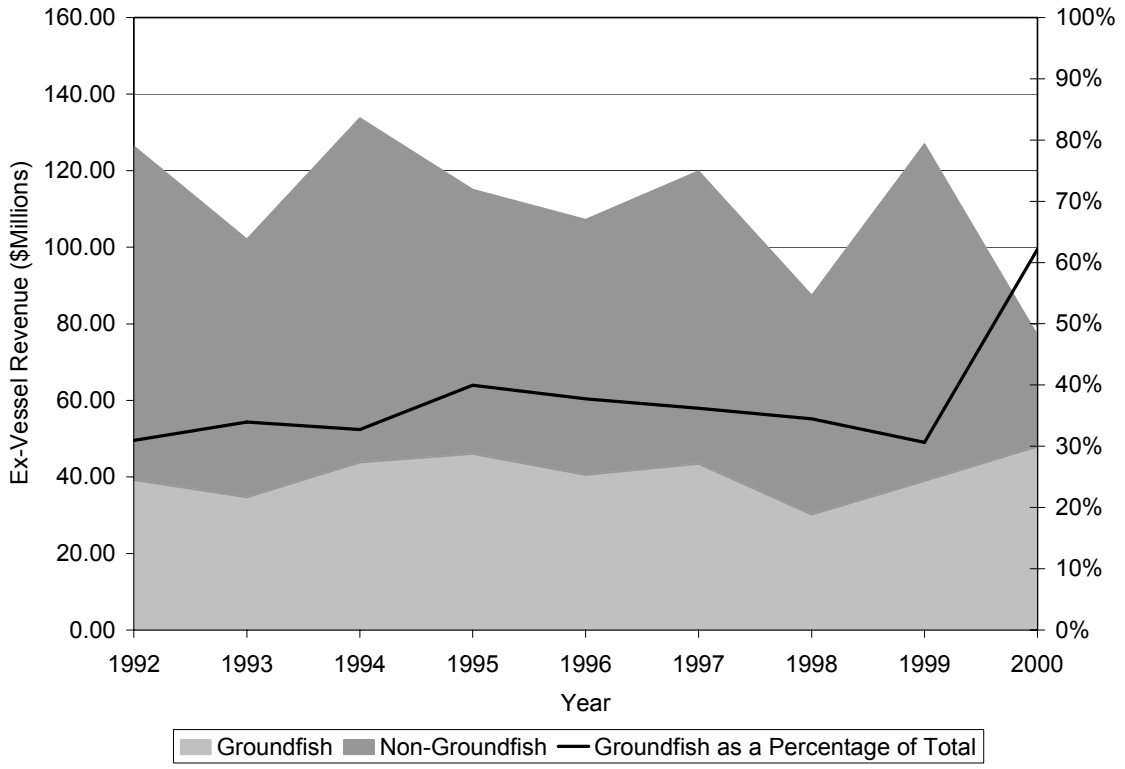
In longlining, a long groundline with many gangions, or short leaders, attached to baited hooks is anchored at sea. An individual section of groundline is termed a skate, and several skates may be tied together so that the fishing line is several miles long. A vessel may set several such lines, leaving each on the ocean floor for periods varying from hours to days (depending on fishing conditions and weather) before harvesting the fish by picking up the lines. As the line is taken aboard, each fish is taken off the hook, bled, dressed (gutted), and iced. A vessel using longline gear can use its gillnet reel to set and haul a longline if the gangions are attached to the groundline with stainless steel snaps. Otherwise, vessels in this category have a roller on the side of the vessel and a hydraulic line hauler on the deck. The crew manually coils lengths of longline and gangions that are fixed into the groundline as they are brought aboard. Vessels in the FGCV 33-59 class may use automatic baiting machines. Automatic jigging machines mounted on the gunwales are employed infrequently on these vessels. Hydraulic or electric jigging machines can be set to fish at various depths and automatically raise and lower the hooked lines. Bait, or jigs made of feathers, plastic, or metal, are used to attract fish.

Vessel in the FGCV 33-59 class can also use small pyramid-shaped or inverted-cone-shaped pots made of stainless steel or corded mesh and steel bars, or they can use standard-size king crab pots. However, the number of standard king crab pots that can be handled on a vessel of this size is limited. Small plastic containers are filled with bait and hung in the pots. The pots are then dropped to the ocean floor, with a line running to a buoy at the surface. Use of pot gear requires a davit, boom, or hydraulic crane to haul the pots, and the lines can be brought in by a hydraulic line hauler or the gillnet reel. After the pot is brought onboard the vessel, the groundfish are taken out of the pot, and the pot is rebaited and dropped back to the ocean floor. Harvested fish are bled, dressed, and iced. On those vessels equipped with RSW systems, whole, undressed fish may be placed in the fish hold and delivered to the processor.

2.1.8.4 Dependence on Groundfish and Annual Cycle of Operations

Groundfish accounted for between 31 and 62 percent of total ex-vessel value (groundfish and non-groundfish) for vessels in the FGCV 33-59 class during the 1992-2000 period (Figure 2.1.8-2 and Table 2.1.8-2). In 1999, the most recent year for which landings data for all non-groundfish species are available, the ex-vessel value per vessel from groundfish accounted for about 31 percent of the ex-vessel value per vessel for all species (Table 2.1.8-3).

Figure 2.1.8-2. Ex-Vessel Value of Harvest in Major Alaska Fisheries for Fixed Gear Catcher Vessels 33 to 59 Feet in Length,1992-2000



Source: CFEC/ADFG Fish Ticket Data, June 2001.

Table 2.1.8-2. Number of Vessels and Total Ex-Vessel Value by Species Group for Fixed Gear Catcher Vessels 33 to 59 Feet in Length,1992-2000

Year	Number of Vessels	$Millions		
		Groundfish	Non-Groundfish	All Species
1992	860	39.14	87.25	126.39
1993	718	34.67	67.41	102.08
1994	785	43.75	89.99	133.74
1995	609	46.00	69.04	115.04
1996	551	40.50	66.72	107.21
1997	580	43.40	76.46	119.86
1998	546	30.14	57.24	87.38
1999	554	38.89	88.09	126.98
2000	590	47.90	29.13	77.03

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Value of halibut landings is not included for 2000

Table 2.1.8-3. Number of Vessels and Ex-Vessel Value Per Vessel by Species Group for Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

Year	Number of Vessels	Ex-Vessel Value Per Vessel ($)		
		Groundfish	Non-Groundfish	All Species
1992	860	45,513	101,454	146,967
1993	718	48,280	93,892	142,172
1994	785	55,738	114,632	170,370
1995	609	75,534	113,373	188,908
1996	551	73,494	121,088	194,582
1997	580	74,819	131,836	206,655
1998	546	55,200	104,834	160,034
1999	554	70,199	159,012	229,212
2000	590	81,191	49,369	130,560

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Value of halibut landings is not included for 2000

Table 2.1.8-4 and Table 2.1.8-5 provide additional detail about the relative importance of groundfish to vessels in the FGCV 33-59 class. The activities of this vessel class have focused on salmon, halibut, and groundfish. Groundfish harvests decline significantly when these vessels switch to harvesting salmon and halibut. In 1999, 384 vessels in this class made landings of salmon and 415 vessels made landings of halibut. These species accounted for 88 percent of the ex-vessel value of non-groundfish landings in that year.

Table 2.1.8-4. Number of Fixed Gear Catcher Vessels 33 to 59 Feet in Length Participating in Non-Groundfish Fisheries, by Species, 1992-2000

Year	Number of Vessels				
	Salmon	Crab	Halibut	Other	Total
1992	595	180	827	337	858
1993	522	176	700	263	712
1994	558	158	763	252	783
1995	437	76	492	239	589
1996	362	72	454	230	530
1997	381	72	462	246	552
1998	371	60	396	213	514
1999	384	55	415	189	523
2000	396	56	a	176	458

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001
[a] Value for halibut is not available.

Table 2.1.8-5. Ex-Vessel Value of Non-Groundfish Species Harvested by Fixed Gear Catcher Vessels 33 to 59 Feet in Length, by Species, 1992-2000

Year	Ex Vessel Value ($Millions)				
	Salmon	Crab	Halibut	Other	Total
1992	53.98	5.54	20.53	8.07	88.13
1993	33.26	4.23	22.92	7.13	67.54
1994	42.31	5.71	34.33	8.44	90.78
1995	30.07	5.23	24.91	9.72	69.93
1996	20.00	3.52	30.24	13.54	67.30
1997	22.39	3.24	40.30	12.66	78.59
1998	25.79	2.77	25.25	7.84	61.65
1999	39.62	3.60	42.88	8.00	94.10
2000	22.25	2.75	a	8.31	33.30

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001
[a] Value for halibut is not available.

Table 2.1.8-6 shows ex-vessel value by month in 1999 and 2000 from groundfish and from all other species for vessels in the FGCV 33-59 class. The number of vessels participating in and ex-vessel value from groundfish and non-groundfish fisheries by trimester are shown in Table 2.1.8-7 and Table 2.1.8-8, respectively. The number of vessels participating groundfish and non-groundfish fisheries by month is shown in Table 2.1.8-9.

Table 2.1.8-6. Ex-Vessel Value of Groundfish, Salmon, Crab, Halibut, and Other Species Harvested by Fixed Gear Catcher Vessels 33 to 59 Feet in Length, by Month, 1999-2000

Year		$Millions												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1999	Salmon	0.01	0.01	0.03	0.02	0.13	6.02	14.92	16.16	2.16	0.07	0.09	0.01	39.62
	Crab	0.00	2.16	0.36	0.02	0.03	0.14	0.08	0.03	0.01	0.01	0.77	0.00	3.60
	Halibut	0.00	0.00	5.33	5.02	6.20	4.95	2.95	3.50	3.89	3.68	7.37	0.00	42.88
	Other	0.04	0.01	1.13	0.13	0.80	0.01	0.19	0.05	2.82	1.89	0.66	0.26	8.00
	Groundfish	3.35	3.52	4.03	5.40	7.17	5.39	2.12	1.27	3.35	2.11	0.92	0.28	38.89
2000	Salmon	0.00	0.01	0.03	0.07	0.11	4.91	9.30	6.98	0.77	0.03	0.03	0.00	22.25
	Crab	0.01	1.91	0.49	0.05	0.03	0.06	0.07	0.03	0.04	0.06	0.01	0.00	2.75
	Halibut	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.01	0.02	0.81	0.11	0.86	0.01	0.06	0.00	3.60	2.07	0.49	0.26	8.31
	Groundfish	3.30	5.08	3.01	8.95	9.75	5.37	2.38	2.75	4.70	1.75	0.55	0.32	47.90

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-7. Number of Fixed Gear Catcher Vessels 33 to 59 Feet in Length with Groundfish Landings by Trimester, 1992-2000

Year	Number of Vessels			
	Jan-Apr	May-Aug	Sep-Oct	Total
1992	384	740	137	860
1993	235	648	87	718
1994	215	704	336	785
1995	337	444	250	609
1996	336	368	234	551
1997	343	412	261	580
1998	326	366	232	546
1999	366	375	221	554
2000	416	398	204	590

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-8. Ex-Vessel Value of Harvest of Groundfish by Fixed Gear Catcher Vessels 33 to 59 Feet in Length by Trimester, 1992-2000

	$Millions			
Year	Jan-Apr	May-Aug	Sep-Dec	Total
1992	5.57	33.19	0.38	39.14
1993	3.85	30.49	0.33	34.67
1994	3.53	33.49	6.73	43.75
1995	14.73	25.13	6.13	46.00
1996	16.11	18.62	5.76	40.50
1997	15.48	20.13	7.79	43.40
1998	10.10	13.49	6.55	30.14
1999	16.29	15.94	6.65	38.89
2000	20.35	20.24	7.31	47.90

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-9. Number of Fixed Gear Catcher Vessels 33 to 59 Feet in Length with Groundfish Landings, by Month, 1992-2000

Year	Number of Vessels												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1992	129	235	319	225	691	454	121	61	61	76	28	24	860
1993	70	150	183	50	632	274	24	29	34	47	41	35	718
1994	109	148	155	53	690	82	44	34	282	61	33	29	785
1995	178	179	218	174	315	223	87	108	156	115	88	26	609
1996	162	168	228	158	244	186	89	106	141	115	77	45	551
1997	159	180	211	221	280	228	112	114	154	124	78	40	580
1998	163	180	202	195	234	191	76	89	149	111	88	35	546
1999	164	171	222	230	260	201	86	62	122	119	92	41	554
2000	183	217	230	276	288	173	84	106	135	89	62	39	590

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.8.5 Catch and Value in Groundfish Fisheries

Table 2.1.8-10 shows the number of vessels in the FGCV 33-59 class with landings for each of the four major species groups (pollock, Pacific cod, flatfish, and the ARSO species complex [Atka mackerel, all rockfish species, sablefish, and other groundfish]) on an annual basis. Landing volumes were significantly greater for ARSO than for the other species during the entire period, and pollock and flatfish had the lowest landings.

Table 2.1.8-10. Number of Fixed Gear Catcher Vessels 33 to 59 Feet in Length by Species, 1992-2000

	Number of Vessels				
Year	ARSO	FLAT	PCOD	PLCK	Total
1992	778	23	470	44	860
1993	664	21	306	18	718
1994	732	11	234	8	785
1995	530	27	308	16	609
1996	496	36	271	27	551
1997	506	29	337	66	580
1998	466	27	325	49	546
1999	449	21	364	64	554
2000	449	19	391	71	590

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-11 and Table 2.1.8-13 provide information on retained landings and ex-vessel value by species group for vessels in the FGCV 33-59 class. From 1992 to 2000, total harvest volume for the class varied between 20,000 and 27,000 tons. In the same period, ex-vessel revenue ranged from a high of $14 million in 1997 to a low of $7 million in 1993.

Table 2.1.8-11. Retained Tons of Groundfish by Fixed Gear Catcher Vessels 33 to 59 Feet in Length by Species, 1992-2000

	Thousands of Tons				
Year	ARSO	FLAT	PCOD	PLCK	Total
1992	13.6	0.0	10.1	0.0	23.7
1993	13.7	0.5	7.1	0.0	21.4
1994	13.1	0.2	7.9	0.0	21.2
1995	10.0	0.0	12.8	0.0	22.8
1996	8.2	1.7	10.2	0.0	20.1
1997	7.3	0.3	16.9	0.1	24.6
1998	7.0	0.3	16.0	0.1	23.3
1999	6.5	0.1	20.0	0.1	26.7
2000	7.4	0.1	16.2	0.1	23.7

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-12. Ex -Vessel Prices by Species for Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

YEAR	ARSO		FLAT		PCOD		PLCK	
	$ / Pound	$ / Ton	$ / Pound	$ / Ton	$ / Pound	$ / Ton	$ / Pound	$ / Ton
1992	$1.12	$2,476.93	$0.24	$537.50	$0.24	$529.41	$0.11	$233.50
1993	$1.02	$2,241.82	$0.25	$540.53	$0.22	$495.51	$0.07	$164.12
1994	$1.40	$3,087.52	$0.19	$411.88	$0.18	$403.80	$0.08	$176.12
1995	$1.80	$3,979.02	$0.19	$423.53	$0.22	$495.15	$0.10	$224.67
1996	$1.91	$4,210.31	$0.26	$566.08	$0.23	$510.45	$0.10	$213.06
1997	$2.15	$4,730.74	$0.42	$915.31	$0.23	$505.59	$0.10	$229.14
1998	$1.48	$3,252.21	$0.25	$556.89	$0.21	$453.63	$0.08	$165.48
1999	$1.77	$3,894.79	$0.24	$518.37	$0.31	$682.20	$0.10	$216.01
2000	$2.13	$4,698.24	$0.26	$564.10	$0.37	$820.14	$0.13	$283.33
Total	$1.55	$3,425.36	$0.26	$577.32	$0.26	$564.05	$0.10	$226.69

Source: CFEC/ADFG Fish Ticket Data, June 2001

Table 2.1.8-13. Ex-Vessel Value of Harvest by Fixed Gearl Catcher Vessels 33 to 59 Feet in Length by Species, 1992-2000

Year	$Millions				
	ARSO	FLAT	PCOD	PLCK	Total
1992	33.64	0.02	5.47	0.01	39.14
1993	30.79	0.29	3.58	0.00	34.67
1994	40.45	0.07	3.23	0.00	43.75
1995	39.63	0.02	6.35	0.00	46.00
1996	34.20	0.97	5.33	0.00	40.50
1997	34.51	0.25	8.62	0.02	43.40
1998	22.71	0.16	7.25	0.01	30.14
1999	25.10	0.07	13.71	0.01	38.89
2000	34.52	0.04	13.31	0.03	47.90

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Additional details on the number of vessels and ex-vessel value in target fisheries and the harvest volume and value by target species are presented in Table 2.1.8-12 and Table 2.1.8-14 through Table 2.1.8-17. The ARSO species complex (consisting of Atka mackerel, rockfish, sablefish, and other groundfish) is the most important for this vessel class in terms of total ex-vessel value. High-valued sablefish has been the most important species. Pacific cod has been the second most important species in terms of volume, but is a much smaller component in terms of ex-vessel value.

Table 2.1.8-14. Number of Fixed Gear Catcher Vessels 33 to 59 Feet in Length in Each Target Fishery, 1992-2000

Year	Number of Vessels						
	SABL	PCOD	ROCK	FLAT	OTAM	PLCK	Total
1992	720	398	224	2	62	1	860
1993	636	230	179	13	48	0	718
1994	714	201	152	6	50	1	785
1995	470	251	172	4	55	3	609
1996	392	229	195	11	67	3	551
1997	380	287	193	13	31	6	580
1998	338	277	160	19	31	3	546
1999	323	312	142	10	7	1	554
2000	316	341	167	8	11	5	590

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-15. Ex-vessel Value of Total Catch in Top Three Target Fisheries by Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

YEAR	$Millions			
	SABL	PCOD	ROCK	Total
1992	32.76	5.51	0.85	39.14
1993	30.02	3.59	0.67	34.67
1994	39.51	3.27	0.85	43.75
1995	38.57	6.43	0.95	46.00
1996	32.79	5.37	1.17	40.50
1997	33.35	8.69	1.05	43.40
1998	21.76	7.34	0.84	30.14
1999	24.17	13.79	0.80	38.89
2000	33.46	13.38	0.99	47.90

Note: Includes catches of all species in the target fishery listed. Total includes catches of all species in both target and non-target fisheries.
Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-16. Total Catch of Target Species by Fixed Gear Catcher Vessels 33 to 59 Feet in Length by Trimester, 1992-2000

Target	Year	Thousands of Tons			
		Jan-Apr	May-Aug	Sep-Dec	Total
PCOD	1992	9.4	0.3	0.3	10.0
	1993	6.8	0.1	0.1	7.1
	1994	7.4	0.2	0.4	7.9
	1995	12.0	0.4	0.3	12.8
	1996	9.9	0.2	0.2	10.2
	1997	13.4	2.5	1.0	16.9
	1998	14.2	0.9	0.8	15.9
	1999	17.0	2.4	0.7	20.0
	2000	14.3	1.3	0.5	16.2
ROCK	1992	0.4	0.5	0.1	0.9
	1993	0.3	0.2	0.2	0.6
	1994	0.4	0.2	0.1	0.7
	1995	0.3	0.3	0.1	0.7
	1996	0.4	0.2	0.2	0.8
	1997	0.3	0.1	0.2	0.6
	1998	0.3	0.1	0.2	0.5
	1999	0.2	0.0	0.2	0.4
	2000	0.2	0.2	0.2	0.6
SABL	1992	0.0	12.1	0.0	12.2
	1993	0.0	12.6	0.0	12.7
	1994	0.0	10.0	2.0	12.0
	1995	1.9	5.6	1.3	8.8
	1996	2.0	3.9	1.1	7.0
	1997	1.5	3.5	1.3	6.3
	1998	0.9	3.6	1.6	6.1
	1999	1.0	3.4	1.4	5.7
	2000	1.5	3.7	1.3	6.4

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-17. Ex-Vessel Value Total Catch of Target Species by Fixed Gear Catcher Vessels 33 to 59 Feet in Length by Trimester, 1992-2001

Target	Year	$Millions			
		Jan-Apr	May-Aug	Sep-Dec	Total
PCOD	1992	4.99	0.20	0.24	5.43
	1993	3.36	0.06	0.14	3.56
	1994	2.97	0.07	0.18	3.22
	1995	5.93	0.22	0.18	6.33
	1996	5.04	0.12	0.16	5.31
	1997	6.89	1.16	0.54	8.59
	1998	6.39	0.44	0.39	7.22
	1999	11.54	1.69	0.45	13.67
	2000	11.82	1.05	0.41	13.28
ROCK	1992	0.42	0.33	0.07	0.81
	1993	0.35	0.14	0.18	0.67
	1994	0.48	0.19	0.14	0.82
	1995	0.43	0.37	0.14	0.94
	1996	0.64	0.23	0.29	1.16
	1997	0.60	0.13	0.30	1.04
	1998	0.49	0.04	0.30	0.83
	1999	0.45	0.03	0.30	0.78
	2000	0.51	0.15	0.30	0.96
SABL	1992	0.08	32.22	0.06	32.36
	1993	0.09	29.64	0.00	29.74
	1994	0.01	32.89	6.39	39.29
	1995	8.20	24.22	5.76	38.18
	1996	9.26	18.01	5.27	32.54
	1997	7.84	18.42	6.85	33.12
	1998	3.07	12.64	5.73	21.45
	1999	4.18	13.98	5.74	23.90
	2000	7.84	18.73	6.53	33.10

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-18 and Table 2.1.8-19 show the number of vessels and ex-vessel value of the FGCV 33-59 fleet by FMP subarea, respectively. The EG and CG FMP subareas are the most important fishing grounds for this catcher vessel class. From 1992 to 2000, these two areas accounted for almost all of the total value of groundfish retained by this class. The number of vessels with pollock and Pacific cod landings by FMP subarea are presented in Table 2.1.8-20, while Table 2.1.8-21 shows the ex-vessel value of the landings of these species by FMP subarea.

Table 2.1.8-18. Number of Fixed Gear Catcher Vessels 33 to 59 Feet in Length by FMP Subarea, 1992-2000

	Number of Vessels					
Year	AI	BS	WG	CG	EG	Total
1992	15	48	70	458	492	860
1993	12	26	11	359	434	718
1994	15	26	26	333	497	785
1995	19	51	56	320	393	609
1996	11	35	58	269	372	551
1997	15	30	63	297	345	580
1998	11	25	68	286	310	546
1999	16	16	67	303	297	554
2000	21	24	79	334	291	590

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-19. Ex-Vessel Value of Harvest of Fixed Gear Catcher Vessels 33 to 59 Feet in Length by FMP Subarea, 1992-2000

	$Millions					
Year	AI	BS	WG	CG	EG	Total
1992	0.44	0.42	2.13	17.14	19.01	39.14
1993	0.17	0.69	0.12	14.04	19.65	34.67
1994	0.25	0.52	0.31	11.64	31.03	43.75
1995	0.46	1.44	1.84	17.18	25.08	46.00
1996	0.22	1.27	1.65	14.71	22.65	40.50
1997	0.33	0.66	2.47	17.82	22.12	43.40
1998	0.35	0.54	2.28	13.20	13.78	30.14
1999	0.68	0.39	3.05	19.90	14.87	38.89
2000	1.17	0.75	3.94	21.99	20.05	47.90

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-20. Number of Fixed Gear Catcher Vessels 33 to 59 Feet in Length with Pacific Cod and Pollock Landings by FMP Subarea, 1992-2000

Year	Number of Vessels												
	PCOD						PLCK						Total
	AI	BS	WG	CG	EG	Total	AI	BS	WG	CG	EG	Total	
1992	7	35	29	313	143	470	0	0	1	41	3	44	470
1993	1	10	6	181	126	306	0	0	0	13	5	18	306
1994	0	16	23	135	86	234	0	0	0	7	1	8	234
1995	0	29	25	189	96	308	0	0	0	12	4	16	308
1996	0	17	28	146	104	271	0	0	0	21	7	27	271
1997	1	13	31	204	107	337	0	1	0	52	13	66	337
1998	1	9	38	202	88	325	0	0	1	37	11	49	325
1999	8	7	43	225	105	364	0	1	0	54	9	64	364
2000	12	19	53	267	81	391	0	1	2	66	3	71	391

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-21. Ex-Vessel Value of Pacific Cod and Pollock Landings of Fixed Gear Catcher Vessels 33 to 59 Feet in Length, by FMP Subarea, 1992-2000

Year	Number of Vessels												
	PCOD						PLCK						Total
	AI	BS	WG	CG	EG	Total	AI	BS	WG	CG	EG	Total	
1992	0.03	0.15	0.36	4.59	0.35	5.47	Ex-Vessel Value of Pollock in all years and areas was approximately zero.						5.47
1993	a	0.09	0.09	2.97	0.42	3.58							3.58
1994	0.00	0.35	0.21	2.53	0.14	3.23							3.23
1995	0.00	0.69	0.25	5.33	0.08	6.35							6.35
1996	0.00	0.18	0.35	4.53	0.27	5.33							5.33
1997	a	0.10	1.12	7.12	0.29	8.62							8.62
1998	a	0.10	1.12	5.85	0.19	7.25							7.25
1999	0.13	0.08	1.40	11.90	0.19	13.71							13.71
2000	0.03	0.16	1.60	11.33	0.18	13.31							13.31

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Added to the value f BS to protect confidentiality.

Detailed information on the geographical distribution of the Pacific cod, rockfish and sablefishcatch by vessels in the FGCV 33-59 class is presented in Figure 2.1.8-3 through Figure 2.1.8-5 for the years 1997 and 1998 combined. In the figures, only catches in areas in which four or more vessels reported landings are shown. For comparison purposes the scale of catches by area in thiese figures is the same used for all longline catches of each of the species shown, and that none of the catches of vessels in the FGCV 33-59 class reach the higer ends of the scale.

Figure 2.1.8-3. Average Annual Pacific Cod Catch of Fixed Gear Catcher Vessels 33 to 59 Feet in Length, by Statistical Area, 1997-1998

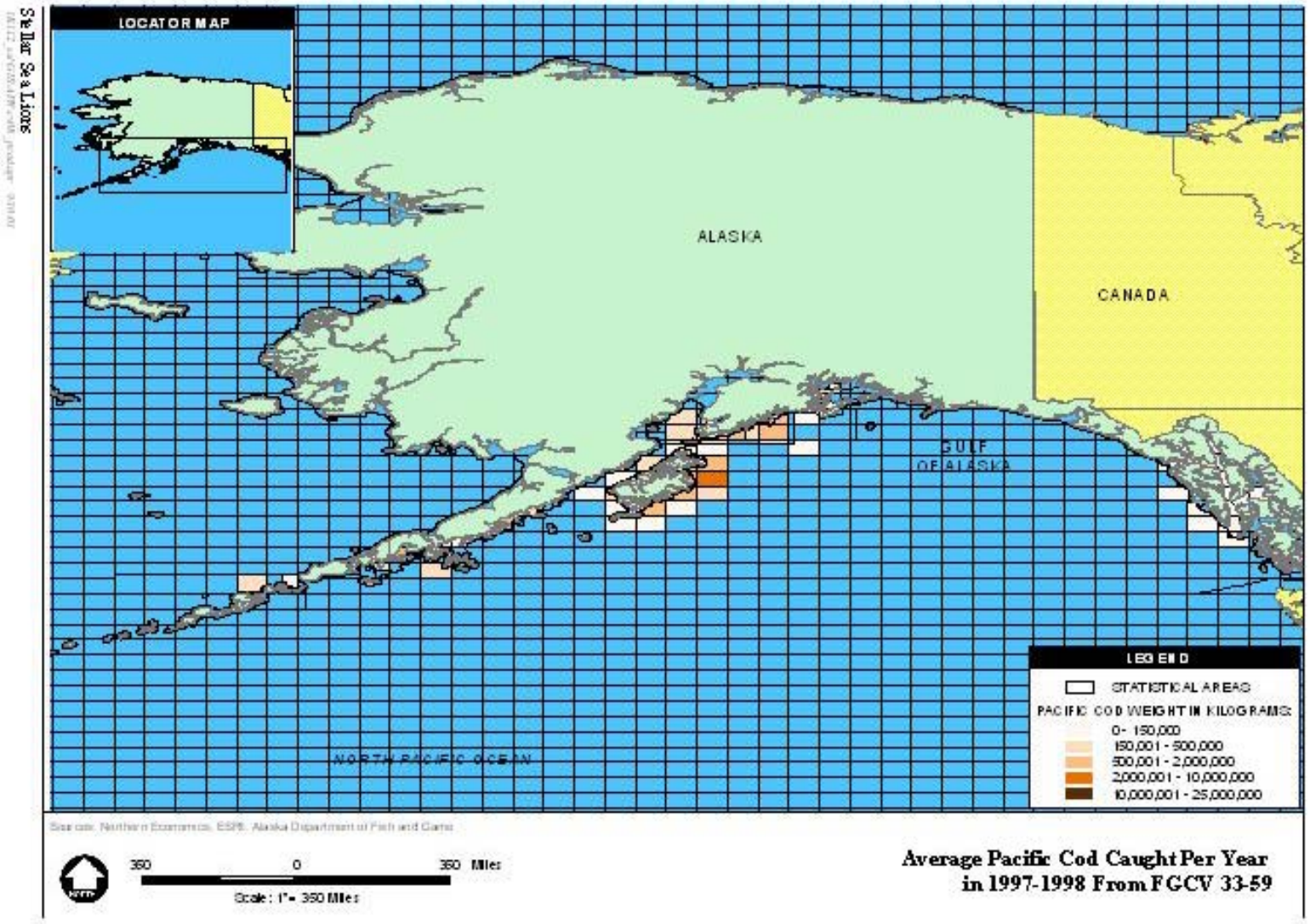


Figure 2.1.8-4. Average Annual Rockfish Catch of Fixed Gear Catcher Vessels 33 to 59 Feet in Length, by Statistical Area, 1997-1998

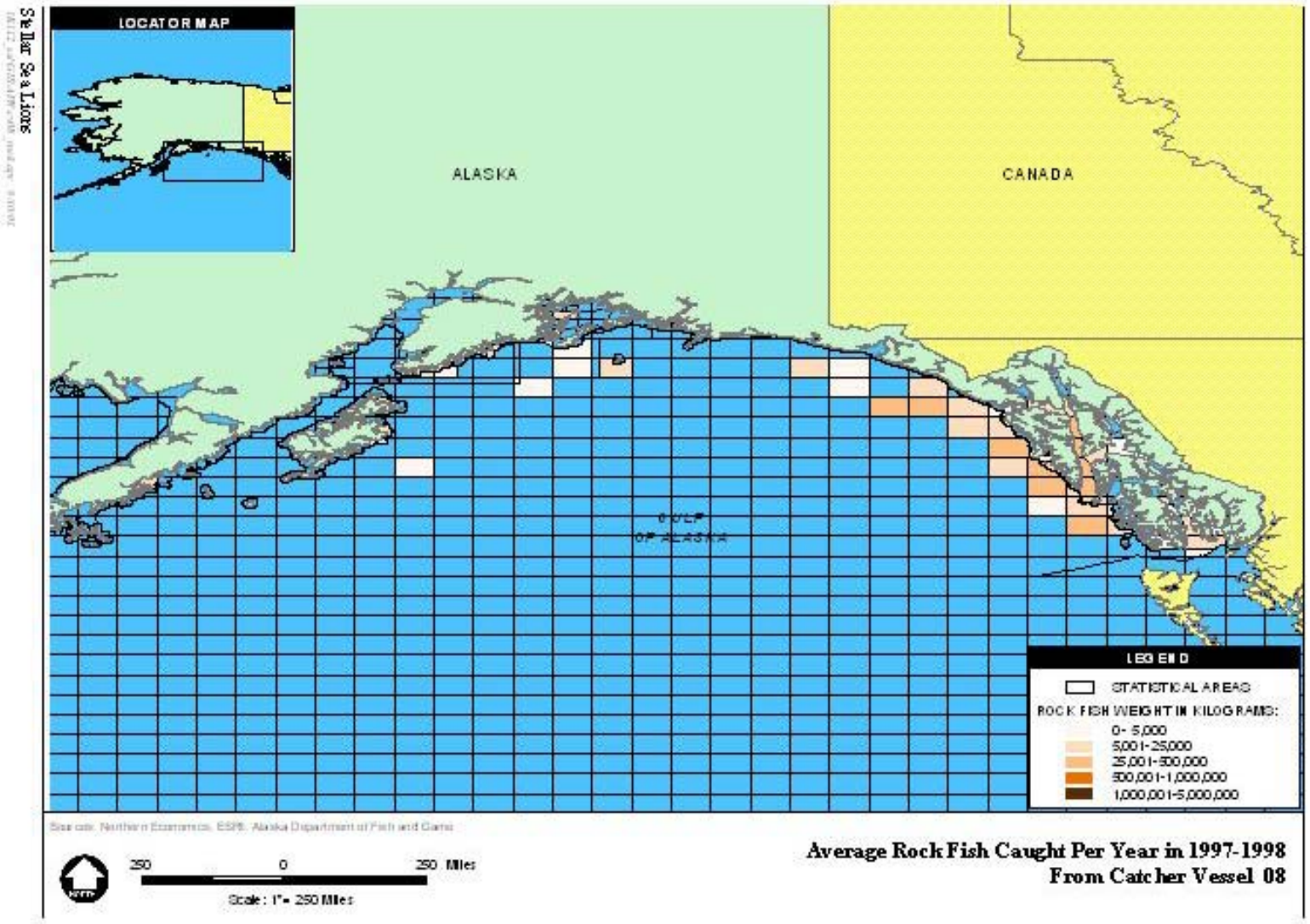
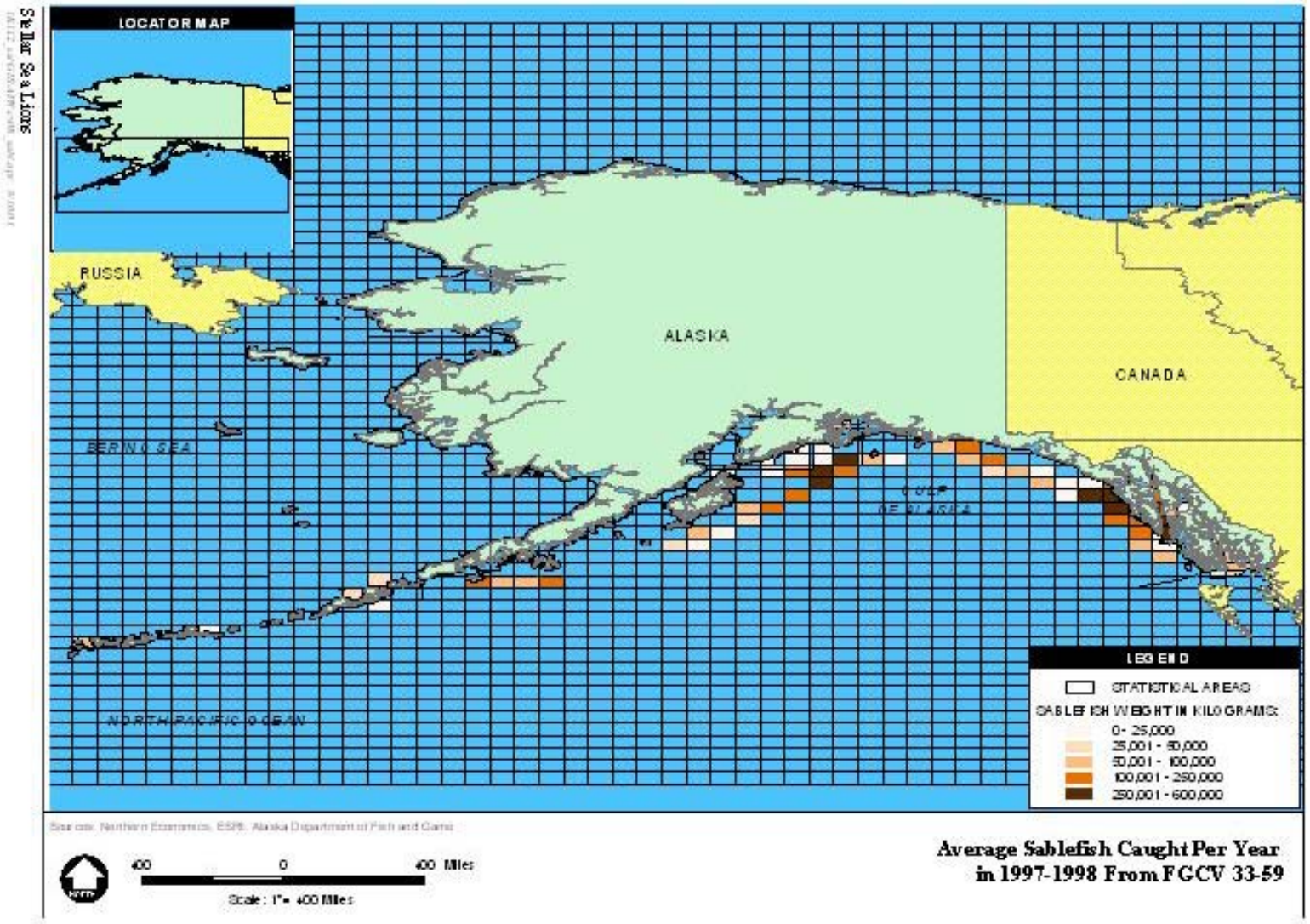


Figure 2.1.8-5. Average Annual Sablefish Catch of Fixed Gear Catcher Vessels 33 to 59 Feet in Length, by Statistical Area, 1997-1998



The importance to vessels in this class of hook-and-line gear, jig gear and pot gear is shown in Table 2.1.9-22.

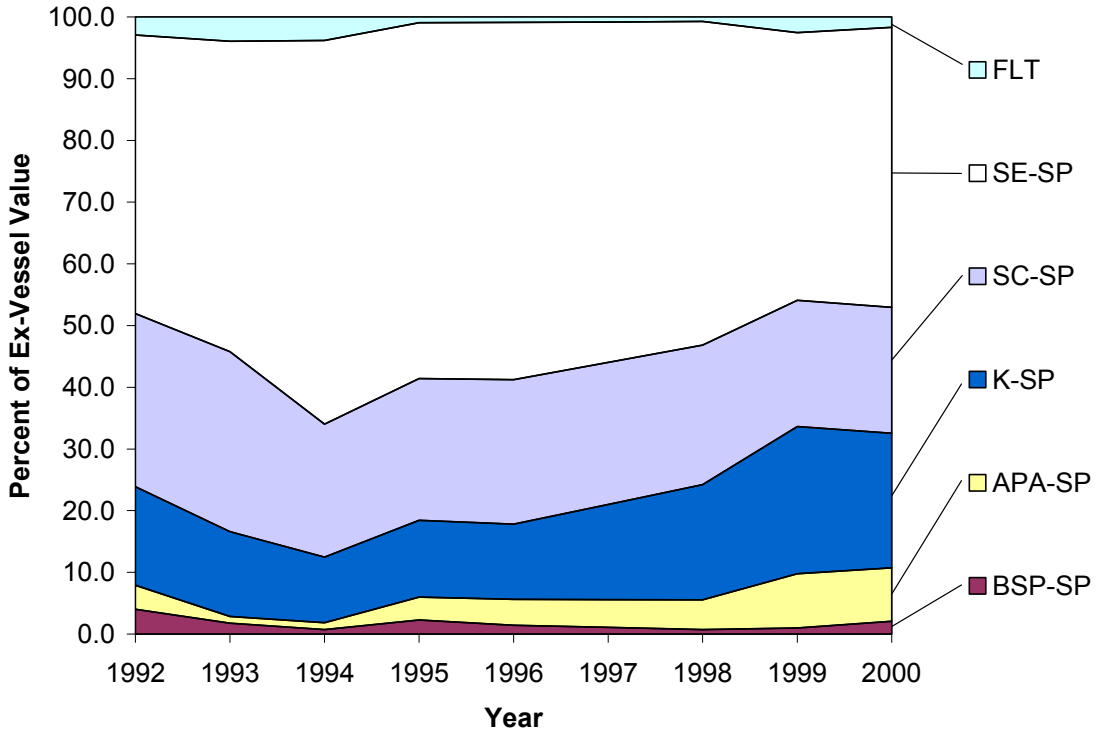
Table 2.1.8-22. Percent of Total Value by Gear in Top Three Target Fisheries by Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1996-2000

Year	Percent of Total Value				
	HAL	JIG-OTH	POT	TWL	Total
SABL					
1996	99.9	0.0	0.1	0.0	100.0
1997	99.0	0.0	1.0	0.0	100.0
1998	99.4	0.0	0.5	0.0	100.0
1999	99.1	0.1	0.8	0.0	100.0
2000	99.4	0.0	0.6	0.0	100.0
PCOD					
1996	43.6	3.5	52.9	0.0	100.0
1997	37.7	7.7	54.6	0.0	100.0
1998	33.9	8.1	58.0	0.1	100.0
1999	30.3	8.0	61.7	0.0	100.0
2000	37.6	8.0	54.4	0.0	100.0
ROCK					
1996	74.9	19.5	5.6	0.0	100.0
1997	87.5	12.4	0.1	0.0	100.0
1998	94.0	6.0	0.0	0.0	100.0
1999	95.0	5.0	0.0	0.0	100.0
2000	86.2	13.8	0.0	0.0	100.0

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Figure 2.1.8-6 shows the reliance of the FGCV 33-59 fleet on various processors from 1992 through 2000. Processors in Southeast Alaska (SE-CP) accounted for 45 percent of ex-vessel value generated by the FGCV 33-59 class. Processors in Kodiak and Southcentral Alaska both contributed about 20 percent of the total ex-vessel value of the class. The relative importance of K-SP to the class has increased following implementation of IFQs in 1995.

Figure 2.1.8-6. Ex-Vessel Value Paid by Various Processor Classes to Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000



Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Data for 1997 is a simple average of the values for 1996 and 1998.

2.1.8.6 Crew Employment and Income

This analysis assumed an average crew size of 3.5, including the skipper, for this type of vessel. Another 0.5 position has been added to the average to account for vessel support staff. The actual number of crew depends on a number of factors such as the type of gear, the presence of automatic baiting machines, the size of the vessel, and the amount of sablefish IFQ shares owned by the skipper and crew. Table 2.1.8-23 shows the estimated total number of crew (including skipper and administrative staff) in this class for each year between 1992 and 2000. Each year's estimate was derived by multiplying the average crew size by the number of unique vessels with landings in that year. The number of crewmember months was used to estimate FTE employment based on the assumption that crewmembers work an average of 16 hours per day for an average 15 days for every month their vessel is active. The total number of estimated crewmember hours is then divided by the 2080 hours per year. Since 1992, total estimated FTE employment in groundfish fisheries in the FGCV 33-59 class has varied between 791 and 869.

Table 2.1.8-23. Number of Crewmembers and Crewmember Months by Species Group for Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

Year	Number of Crew Members	Crewmember Months			Groundfish FTE
		Groundfish	Non-Groundfish	All Species	
1992	3,440.0	9,696	16,748	23,240	1,119
1993	2,872.0	6,276	13,072	17,524	724
1994	3,140.0	6,880	13,864	18,816	794
1995	2,436.0	7,468	11,164	14,684	862
1996	2,204.0	6,876	10,168	13,320	793
1997	2,320.0	7,604	10,748	14,252	877
1998	2,184.0	6,852	10,036	13,496	791
1999	2,216.0	7,080	10,932	14,364	817
2000	2,360.0	7,528	6,120	12,656	869

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Crewmembers are typically paid on a share basis. A share may be calculated as a portion of gross revenue such as gross revenue less food and fuel expenditures or gross revenue less food, fuel, and landing tax expenditures. Individual crew shares are about six to ten percent of the gross revenue after expenditures have been subtracted. This analysis assumes that 40 percent of ex-vessel revenue goes to payments for labor.[19]

Estimated payments to labor over time in groundfish and non-groundfish fisheries are shown in Table 2.1.8-24. Labor payments per vessel in groundfish and non-groundfish fisheries are shown in Table 2.1.8-25. Labor payments per crewmember are shown in Table 2.1.8-26. Estimated payments per FTE have varied within a relatively narrow band since 1993—between $19,000 and $22,000—with the exception in 1998 explained by the Asian economic crisis.

Table 2.1.8-24. Payments to Labor by Species Group for Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

	$Millions		
Year	Groundfish	Non-Groundfish	All Species
1992	15.66	34.90	50.56
1993	13.87	26.97	40.83
1994	17.50	35.99	53.50
1995	18.40	27.62	46.02
1996	16.20	26.69	42.89
1997	17.36	30.59	47.94
1998	12.06	22.90	34.95
1999	15.56	35.24	50.79
2000	19.16	11.65	30.81

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[19] The analysis makes no assumptions about owner profits, as no data were available to estimate operating costs.

Table 2.1.8-25. Payments to Labor Per Vessel by Species Group for Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

	Payments to Labor Per Vessel ($)		
Year	Groundfish	Non-Groundfish	All Species
1992	18,205	40,582	58,787
1993	19,312	37,557	56,869
1994	22,295	45,853	68,148
1995	30,214	45,349	75,563
1996	29,398	48,435	77,833
1997	29,928	52,734	82,662
1998	22,080	41,934	64,014
1999	28,080	63,605	91,685
2000	32,476	19,748	52,224

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.8-26. Number of Crewmembers and Labor Payments Per Crewmember by Species Group for Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

Year	Number of Crew Members	Labor Payments per Crewmember ($)			Groundfish Labor Payments per FTE ($)
		Groundfish	Non-Groundfish	All Species	
1992	3,440.0	4,551	10,145	14,697	13,994
1993	2,872.0	4,828	9,389	14,217	19,148
1994	3,140.0	5,574	11,463	17,037	22,047
1995	2,436.0	7,553	11,337	18,891	21,354
1996	2,204.0	7,349	12,109	19,458	20,417
1997	2,320.0	7,482	13,184	20,666	19,784
1998	2,184.0	5,520	10,483	16,003	15,249
1999	2,216.0	7,020	15,901	22,921	19,042
2000	2,360.0	8,119	4,937	13,056	22,059

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.8.7 Regional Residence of Vessel Owners

Table 2.1.8-27 presents information on the residence of owners of vessels in this class. In 2000, about 81 percent of these vessels were owned by Alaska residents, and most of the remainder were owned by Washington residents. Southeast Alaska has the largest number of vessel owners among the Alaska regions since the late 1980s. The data reveal that there has been a marked decline in participation of vessels owned by residents of Southcentral and Southeast Alaska, while other participation by other regions has remained relatively stable or increased (AKAPAI, AKKO). The regional differences can be explained by opportunistic nature of participation in small boat fisheries for groundfish. Residents of Southcentral and Southeast Alaska have relatively more non-fishing opportunities than residents of Kodiak and the Alaska Peninsula. If the likelihood of big pay-offs in fishing decline, then those that can are more likely to choose non-fishing opportunities—particularly if fishing is not a full-time occupation. Similar declines are not apparent in the WAIW and ORCO

regions because it is more likely these vessel owners are full-time fishers compared to participants in Southcentral and Southeast Alaska.

The owner's residence is an important factor because most of the regional economic impact of catcher vessel operations occurs in the owner's region of residence. Table 2.1.8-28 shows the ex-vessel revenue accruing to each region. Table 2.1.8-29 and Table 2.1.8-30 show the crewmember months and payments to labor accruing to each region. It was assumed that all crewmembers of a particular vessel and home office staff reside in the vessel owner's region of residence.

Table 2.1.8-27. Number of Fixed Gear Catcher Vessels 33 to 59 Feet in Length Landing Groundfish, by Region of Owner, 1992-2000

Year	Number of Vessels							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	23	90	232	357	102	8	48	860
1993	8	62	203	318	79	7	41	718
1994	18	71	205	341	98	8	44	785
1995	27	72	158	266	65	4	17	609
1996	23	62	125	256	64	5	16	551
1997	27	74	143	245	70	4	17	580
1998	30	80	125	216	71	5	19	546
1999	23	85	119	214	70	6	37	554
2000	31	111	132	205	71	6	34	590

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001

Table 2.1.8-28. Ex-Vessel Revenue by Vessel Owner's Region for Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

Year	$Millions							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0.86	4.22	8.12	16.64	4.98	0.29	2.28	39.14
1993	0.24	3.46	7.51	16.71	3.93	0.33	1.84	34.67
1994	0.62	4.38	7.18	23.55	5.77	0.37	2.32	43.75
1995	1.22	5.54	6.47	19.85	5.39	0.26	1.58	46.00
1996	1.39	4.94	4.64	18.73	5.12	0.35	1.10	40.50
1997	1.76	6.18	5.87	16.43	5.67	0.26	1.05	43.40
1998	1.34	4.61	4.47	11.98	4.11	0.28	1.04	30.14
1999	1.47	7.51	5.97	13.27	4.88	0.44	2.82	38.89
2000	1.93	9.68	7.68	16.63	6.04	0.43	2.89	47.90

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the regionally weighted average revenue per vessel.

Table 2.1.8-29. Crewmember Months by Vessel Owner's Region for Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

Year	Crewmember Months							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	259	1,015	2,616	4,025	1,150	90	541	9,696
1993	70	542	1,774	2,780	691	61	358	6,276
1994	158	622	1,797	2,989	859	70	386	6,880
1995	331	883	1,938	3,262	797	49	208	7,468
1996	287	774	1,560	3,195	799	62	200	6,876
1997	354	970	1,875	3,212	918	52	223	7,604
1998	376	1,004	1,569	2,711	891	63	238	6,852
1999	294	1,086	1,521	2,735	895	77	473	7,080
2000	396	1,416	1,684	2,616	906	77	434	7,528

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the number of crewmember months.

Table 2.1.8-30. Payments to Labor by Vessel Owner's Region for Fixed Gear Catcher Vessels 33 to 59 Feet in Length, 1992-2000

Year	$Millions							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0.35	1.69	3.25	6.66	1.99	0.11	0.91	15.66
1993	0.10	1.38	3.00	6.68	1.57	0.13	0.74	13.87
1994	0.25	1.75	2.87	9.42	2.31	0.15	0.93	17.50
1995	0.49	2.22	2.59	7.94	2.16	0.11	0.63	18.40
1996	0.56	1.98	1.85	7.49	2.05	0.14	0.44	16.20
1997	0.71	2.47	2.35	6.57	2.27	0.10	0.42	17.36
1998	0.54	1.85	1.79	4.79	1.65	0.11	0.42	12.06
1999	0.59	3.00	2.39	5.31	1.95	0.18	1.13	15.56
2000	0.77	3.87	3.07	6.65	2.42	0.17	1.16	19.16

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the regionally weighted payments to labor.

2.1.9 Fixed Gear Catcher Vessels Less than or Equal to 32 feet in Length (FGCV ≤ 32)

This catcher vessel class includes all vessels that are not trawl catcher vessels for which vessel length is less than or equal to 32 ft., and the total value of groundfish catch is greater than $1000.

These vessels consitute a distinct class because of specific differences when compared to larger fixed gear catcher vessels. A length of 32 feet is the maximum for the Bristol Bay salmon drift gillnet fishery, and vessels in this fishery typically are built to this size limit. A large number of vessels of this size have been built for the Bristol Bay fishery and other salmon fisheries in Alaska. Similar size restrictions do not apply to other salmon management areas in the state. Vessels in this class typically were designed for salmon fisheries. The vessels may use a mix of longline, jig, and sometimes pot gear to harvest halibut and groundfish before or after the salmon season.

2.1.9.1 Class Characteristics

Vessels in the FGCV ≤ 32 class typically were constructed for use as salmon drift gillnet vessels, although small skiffs used in set gillnetting are also included in this class. Most of the vessels have the cabin set forward, a relatively large working deck with a hydraulic gillnet reel aft, and fish holds amidships. Typical vessels in this size category are of aluminum or fiberglass construction, but some are made of wood.

Because vessels of this size are too small to operate in unprotected waters during adverse weather conditions, they typically fish within several miles of shore. However, in good weather during summer months these vessels may venture 50 miles or more from shore.

The primary target species of vessels in the FGCV ≤ 32 class that use longline gear are halibut (a non-groundfish species), Pacific cod, and to a lesser extent, sablefish and rockfish. FGCV ≤ 32 vessels without sablefish IFQs generally have switched to Pacific cod as a target species. Vessel equipped for longline fishing pursue halibut and sablefish under the current IFQ system and harvest other groundfish as incidental catch. A significant percentage of the fleet may pursue rockfish and other relatively high-value groundfish as target species after reaching their IFQ quota cap. Vessels using jig gear typically target Pacific cod and rockfish but also catch halibut and sablefish. Pots are also used to target Pacific cod, particularly in the emerging state water fishery.

Vessels in the FGCV ≤ 32 class can begin to fish in January when the season opens for Pacific cod and other groundfish species, but few vessels do so. Most wait until the halibut season opens on March 15 before starting the annual fishery cycle; and some vessels wait until late April or May when the weather has improved. IFQ owners fish until their quotas are reached, or until they need to begin preparations for the salmon season. If the IFQ quotas are reached before preparations for the salmon season begin, vessels may focus on other groundfish species if resource availability and price are adequate to make a profit. Following the salmon season, vessel owners may then change gear to harvest the remaining portion of their IFQs.

In 2000, vessels in the FGCV ≤ 32 class had an average length of 30 feet and ranged from 18 to 32 feet (Table 2.1.9-1). The vessels have an average horsepower rating of about 330, with a maximum of about 900 and a minimum of 40. Average gross tonnage is approximately 14 tons and average hold capacity is 1,193 cubic feet (CFEC, 2001).

Table 2.1.9-1. Number of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, by Vessel Length, 1992-2000

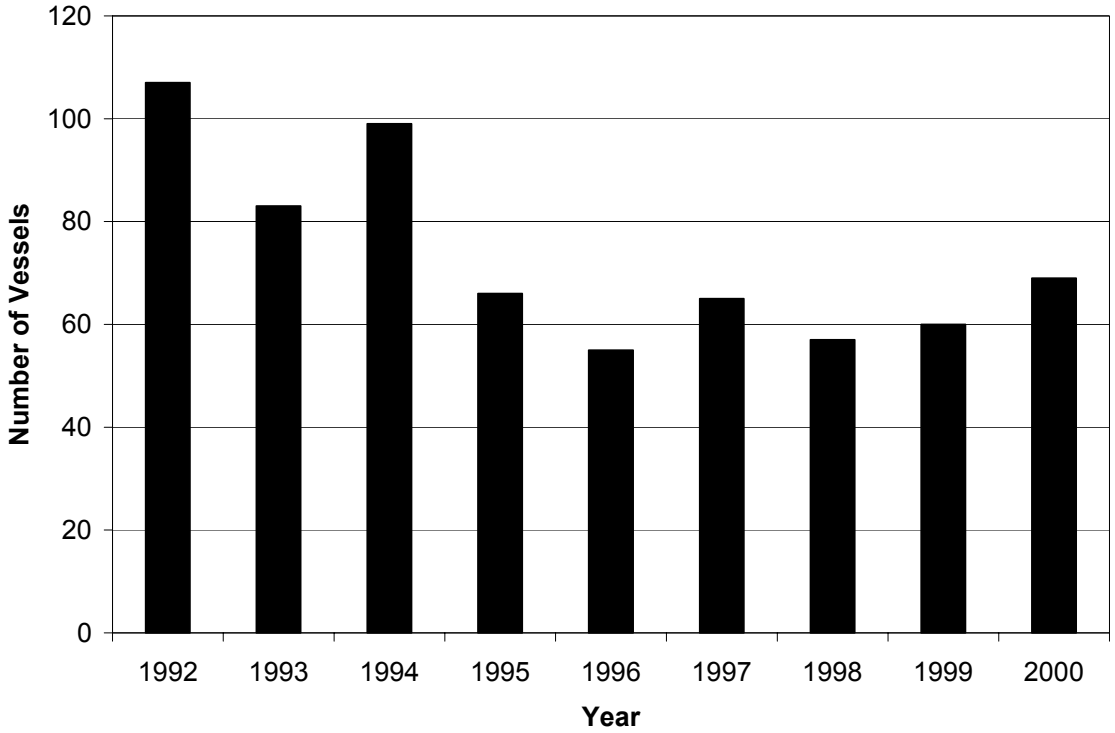
Year	Vessel Length				
	≤20'	21'-24'	25'-28'	29'-32	Total
1992	5	5	8	89	107
1993	3	3	10	67	83
1994	5	2	9	83	99
1995	6	3	2	55	66
1996	7	2	2	44	55
1997	7	0	11	47	65
1998	3	2	9	43	57
1999	2	3	11	44	60
2000	1	2	14	52	69

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.9.2 Class Participation

The number of vessels in the FGCV ≤ 32 class decreased significantly between 1992 and 1998 (Figure 2.1.9-1). The decline in the number of vessels is at least partly attributable to implementation of the halibut and sablefish IFQ system in 1995.

Figure 2.1.9-1. Number of Active Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000



Source: CFEC/ADFG Fish Ticket Data, June 2001.

Of the vessels in the FGCV ≤ 32 class that were active in the groundfish fishery in 2000, the average number of years since 1992 in which a vessel was active was 3.61, with a minimum of one year and a maximum of nine years. Of those vessels that were not active in 2000, the average number of years of participation was 1.75, with a minimum of one and a maximum of eight.

2.1.9.3 Description of Fishing Operations

Vessels in the FGCV ≤ 32 class employ a number of gear types. This subsection provides a brief description of the three primary gear types used by these vessels. Additional details on the use of longline and pot gears are discussed in the relevant subsections for LCVs and PCVs.

In longlining, a long groundline with many gangions, or short leaders, attached to baited hooks is anchored at sea. An individual section of groundline is termed a skate, and several skates may be tied together so that the fishing line is several miles long. A single vessel may set several such lines, leaving each on the ocean floor for periods varying from hours to days (depending on fishing conditions and weather) before harvesting the fish by picking up the lines. As the line is taken aboard, each fish is taken off the hook, bled, dressed (gutted), and iced.

A vessel using longline gear can use its gillnet reel to set and haul a longline if the gangions are attached to the groundline with stainless steel snaps. Otherwise, vessels in this category have a roller on the side of the vessel and a hydraulic line hauler on the deck. The crew manually coils lengths of longline and gangions that are fixed into the groundline as they are brought aboard. Some FGCV ≤ 32 vessels use automatic baiting machines.

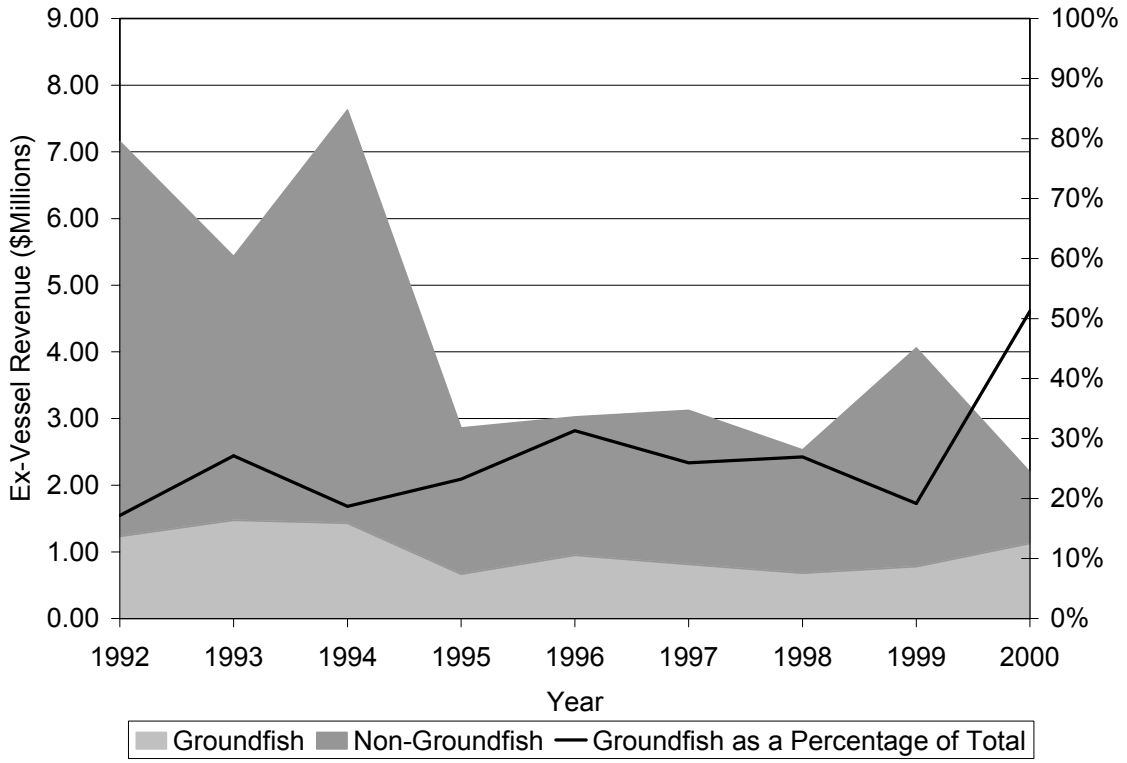
Automatic jigging machines are increasing in popularity for vessels in this class. Hydraulic or electric jigging machines can be set to fish at various depths and automatically raise and lower the hooked lines. Bait, or jigs made of feathers, plastic, or metal are used to attract fish. The jigging machines mount on the gunwales and can be operated easily by a single person. As the fish are brought to the surface they are taken off the hook, bled, dressed, and iced.

Vessels in this class can also use small pyramid-shaped or inverted-cone-shaped pots made of stainless steel or corded mesh and steel bars. However, the number of pots that can be handled on the deck of a vessel this small is very limited. Small plastic containers are filled with bait and hung in the pots. The pots are dropped to the ocean floor, with a line running to a buoy at the surface. Use of pot gear requires a davit or boom to haul the pots, and the lines can be retrieved by a hydraulic line hauler or the gillnet reel. After the pot is brought onboard, the groundfish are taken out, and the pot is rebaited and dropped back down to the ocean floor. The fish are then bled, dressed, and iced. Although some Bristol Bay salmon drift gillnet vessels have RSW systems, most vessels of this size do not. The majority of vessels carry ice to chill their catch.

2.1.9.4 Dependence on Groundfish and Annual Cycle of Operations

Groundfish catches are important to the financial health of vessels in the FGCV ≤ 32 class, but non-groundfish species generally account for the majority of the total earnings for the fleet. During the 1992-199 period groundfish accounted for between 17 and 31 percent of total ex-vessel value (Figure 2.1.9-2 and Table 2.1.9-2). In 1999, the most recent year for which landings data for all non-groundfish species are available, the ex-vessel value per vessel from groundfish accounted for about 19 percent of the ex-vessel value per vessel for all species (Table 2.1.9-3).

Figure 2.1.9-2. Ex-Vessel Value of Harvest in Major Alaska Fisheries for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length,1992-2000



Source: CFEC/ADFG Fish Ticket Data, June 2001.

Table 2.1.9-2. Number of Vessels and Total Ex-Vessel Value by Species Group for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length,1992-2000

Year	Number of Vessels	$Millions		
		Groundfish	Non-Groundfish	All Species
1992	107	1.23	5.93	7.16
1993	83	1.47	3.96	5.43
1994	99	1.43	6.20	7.63
1995	66	0.66	2.19	2.86
1996	55	0.95	2.08	3.03
1997	65	0.81	2.31	3.12
1998	57	0.68	1.85	2.53
1999	60	0.78	3.28	4.06
2000	69	1.13	1.07	2.20

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Value of halibut landings is not included for 2000

Table 2.1.9-3. Number of Vessels and Ex-Vessel Value Per Vessel by Species Group for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

Year	Number of Vessels	Ex-Vessel Value Per Vessel ($)		
		Groundfish	Non-Groundfish	All Species
1992	107	11,490	55,385	66,876
1993	83	17,761	47,658	65,419
1994	99	14,413	62,635	77,048
1995	66	10,060	33,241	43,301
1996	55	17,235	37,776	55,011
1997	65	12,472	35,571	48,043
1998	57	11,945	32,424	44,369
1999	60	12,969	54,670	67,639
2000	69	16,311	15,536	31,847

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
Note: Value of halibut landings is not included for 2000

Table 2.1.9-4 and Table 2.1.9-5 provide additional detail about the relative importance of groundfish to vessels in the FGCV ≤ 32 class. In 1999, 25 vessels in this class made landings of salmon and 23 vessels made landings of halibut. These species accounted for nearly all of the ex-vessel value of non-groundfish landings in that year.

Table 2.1.9-4. Number of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length Participating in Non-Groundfish Fisheries, by Species, 1992-2000

Year	Number of Vessels				
	Salmon	Crab	Halibut	Other	Total
1992	56	8	97	17	101
1993	52	13	69	8	76
1994	55	13	84	10	89
1995	25	7	27	7	42
1996	32	1	29	14	41
1997	28	5	28	7	42
1998	22	1	27	7	34
1999	25	1	23	4	36
2000	35	1	a	3	36

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001
[a] Value for halibut is not available.

Table 2.1.9-5. Ex-Vessel Value of Non-Groundfish Species Harvested by Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, by Species, 1992-2000

Year	Ex Vessel Value ($Millions)				
	Salmon	Crab	Halibut	Other	Total
1992	4.84	0.15	0.91	0.03	5.93
1993	2.67	0.29	0.96	0.04	3.96
1994	4.11	0.41	1.62	0.06	6.20
1995	1.40	0.12	0.61	0.06	2.19
1996	1.06	a	0.92	0.10	2.08
1997	0.77	0.18	1.33	0.03	2.31
1998	0.56	a	1.25	0.04	1.85
1999	1.34	a	1.93	0.01	3.28
2000	1.07	a	b	a	1.07

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001
[a] Combined with value for salmon due to confidentiality restrictions.
[b] Value for halibut is not available.

Table 2.1.9-6 shows ex-vessel value by month in 1999 and 2000 from groundfish and from all other species. Groundfish are more important to this vessel class early in the year.

The number of vessels participating in and ex-vessel value from groundfish and non-groundfish fisheries by trimester are shown in Table 2.1.9-7 and Table 2.1.9-8, respectively. The number of vessels participating groundfish and non-groundfish fisheries by month is shown in Table 2.1.9-9.

Table 2.1.9-6. Ex-Vessel Value of Groundfish, Salmon, Crab, Halibut, and Other Species Harvested by Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, by Month, 1999-2000

Year		$Millions												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1999	Salmon	0.00	0.00	0.00	0.00	0.00	0.12	1.02	0.13	0.05	0.00	0.00	0.00	1.32
	Crab	a	a	a	a	a	a	a	a	a	a	a	a	a
	Halibut	0.00	0.00	0.09	0.08	0.15	0.18	0.15	0.44	0.22	0.28	0.34	0.00	1.93
	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
	Groundfish	0.08	0.12	0.13	0.07	0.13	0.08	0.03	0.07	0.03	0.01	0.03	0.00	0.78
2000	Salmon	0.00	0.00	0.00	0.00	0.01	0.53	0.35	0.05	0.05	0.00	0.00	0.00	1.00
	Crab	a	a	a	a	a	a	a	a	a	a	a	a	a
	Halibut	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other	a	a	a	a	a	a	a	a	a	a	a	a	a
	Groundfish	0.08	0.30	0.11	0.13	0.17	0.12	0.05	0.03	0.07	0.04	0.01	0.01	1.13

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001
[a] Combined with value for salmon due to confidentiality restrictions.

Table 2.1.9-7. Number of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length with Groundfish Landings by Trimester, 1992-2000

Year	Number of Vessels			
	Jan-Apr	May-Aug	Sep-Oct	Total
1992	58	85	23	107
1993	36	72	9	83
1994	24	87	48	99
1995	31	50	21	66
1996	32	29	25	55
1997	40	48	27	65
1998	31	44	20	57
1999	32	42	14	60
2000	49	45	15	69

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-8. Ex-Vessel Value of Harvest of Groundfish by Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length by Trimester, 1992-2000

Year	$Millions			
	Jan-Apr	May-Aug	Sep-Dec	Total
1992	0.30	0.90	0.04	1.23
1993	0.21	1.24	0.02	1.47
1994	0.11	1.05	0.27	1.43
1995	0.19	0.41	0.07	0.66
1996	0.43	0.40	0.12	0.95
1997	0.42	0.32	0.07	0.81
1998	0.37	0.24	0.06	0.68
1999	0.40	0.32	0.06	0.78
2000	0.63	0.36	0.14	1.13

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-9. Number of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length with Groundfish Landings, by Month, 1992-2000

Year	Number of Vessels												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1992	19	40	46	32	78	37	14	18	9	11	6	6	107
1993	10	19	31	12	65	41	9	7	6	5	4	3	83
1994	8	10	16	14	73	27	14	12	44	10	9	6	99
1995	12	15	21	15	37	22	15	18	14	9	6	4	66
1996	13	19	23	10	15	17	13	11	13	10	12	11	55
1997	22	23	24	20	28	37	25	17	17	9	11	5	65
1998	19	24	25	17	27	26	25	13	12	9	7	1	57
1999	10	18	18	18	28	26	16	14	9	5	6	2	60
2000	16	30	33	30	30	28	12	13	8	6	5	3	69

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.9.5 Catch and Value in Groundfish Fisheries

Table 2.1.9-10 shows the number of vessels in the FGCV ≤ 32 class with landings for each of the four major species groups (pollock, Pacific cod, flatfish, and the ARSO species complex [Atka mackerel, all rockfish species, sablefish, and other groundfish]) on an annual basis. Landing volumes were significantly greater for ARSO (primarily sablefish) and Pacific cod than for other species during the entire period, and pollock and flatfish had the lowest landings.

Table 2.1.9-10. Number of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length by Species, 1992-2000

	Number of Vessels				
Year	ARSO	FLAT	PCOD	PLCK	Total
1992	95	6	77	9	107
1993	79	3	39	3	83
1994	83	0	32	0	99
1995	47	2	42	3	66
1996	42	4	39	2	55
1997	48	2	55	11	65
1998	44	7	44	6	57
1999	45	0	50	6	60
2000	52	1	57	3	69

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-11 and Table 2.1.9-13 provide information on retained landings and ex-vessel value by species group for vessels in the FGCV ≤ 32 class. Between 1992 and 2000, total harvest volume for the class varied between 700 and 1,200 tons. In the same period, ex-vessel revenue ranged from a high of $1.5 million in 1993 to a low of $0.7 million in 1995.

Table 2.1.9-11. Retained Tons of Groundfish by Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length by Species, 1992-2000

	Thousands of Tons				
Year	ARSO	FLAT	PCOD	PLCK	Total
1992	0.4	0.0	0.5	0.0	1.0
1993	0.6	a	0.3	a	1.0
1994	0.5	0.0	0.5	0.0	1.0
1995	0.2	a	0.5	a	0.7
1996	0.3	0.0	0.4	a	0.7
1997	0.3	a	1.0	0.0	1.2
1998	0.2	0.1	0.9	0.0	1.2
1999	0.1	0.0	0.8	0.0	0.9
2000	0.1	a	1.0	a	1.1

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Combined with tons of PCOD to protect the confidentiality of the small number of FGCV ≤ 32s that reported catching these species during the year.

Table 2.1.9-12. Ex -Vessel Prices by Species for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

YEAR	ARSO		FLAT		PCOD		PLCK	
	$ / Pound	$ / Ton	$ / Pound	$ / Ton	$ / Pound	$ / Ton	$ / Pound	$ / Ton
1992	$0.95	$2,096.33	$0.20	$437.16	$0.26	$567.78	$0.42	$916.64
1993	$0.97	$2,131.36	$0.24	$528.22	$0.26	$580.46	$0.20	$432.74
1994	$1.11	$2,442.57	$0.00	$0.00	$0.20	$444.87	$0.00	$0.00
1995	$0.94	$2,065.72	$0.21	$464.35	$0.22	$483.98	$0.11	$237.56
1996	$1.15	$2,529.65	$0.25	$559.38	$0.25	$561.24	$0.09	$209.39
1997	$0.48	$1,059.43	$0.05	$117.37	$0.25	$551.69	$0.18	$388.21
1998	$0.47	$1,045.11	$0.26	$566.19	$0.22	$493.23	$0.13	$283.75
1999	$0.74	$1,639.63	$0.00	$0.00	$0.35	$765.12	$0.13	$277.52
2000	$1.11	$2,443.94	$0.20	$440.92	$0.39	$850.11	$0.25	$562.08
Total	$0.92	$2,037.28	$0.25	$551.02	$0.28	$607.17	$0.21	$452.95

Source: CFEC/ADFG Fish Ticket Data, June 2001

Table 2.1.9-13. Ex-Vessel Value of Harvest by Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length by Species, 1992-2000

	$Millions				
Year	ARSO	FLAT	PCOD	PLCK	Total
1992	0.92	0.00	0.31	0.00	1.23
1993	1.26	a	0.01	a	1.47
1994	1.20	0.00	0.23	0.00	1.43
1995	0.43	a	0.23	a	0.66
1996	0.69	0.00	0.25	a	0.95
1997	0.28	a	0.53	0.00	0.81
1998	0.18	0.03	0.46	0.00	0.68
1999	0.18	0.00	0.60	0.00	0.78
2000	0.32	a	0.81	a	1.13

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Combined with value of PCOD to protect the confidentiality of the small number of FGCV ≤ 32s that reported catching these species during the year.

Additional details on the number of vessels and ex-vessel value in target fisheries and the harvest volume and value by target species are presented Table 2.1.9-14 through Table 2.1.9-17. The ARSO species complex is the most important target for this vessel class in terms of harvest volume, although the volume of the ARSO harvest has declined in recent years. The volume of retained harvest of Pacific cod has increased. The implementation of a Pacific cod fishery in state waters and increasing prices for Pacific cod have increased the level of harvest activity by this small vessel fleet.

Table 2.1.9-14. Number of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length in Each Target Fishery, 1992-2000

YEAR	Number of Vessels			
	SABL	PCOD	ROCK	FLAT
1992	67	66	38	2
1993	61	36	24	3
1994	67	28	26	0
1995	29	35	25	0
1996	14	35	20	2
1997	10	55	28	1
1998	17	43	24	6
1999	11	49	19	0
2000	14	53	27	0

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-15. Ex-vessel Value of Total Catch in Top Three Target Fisheries by Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

YEAR	$Millions			
	SABL	PCOD	ROCK	Total
1992	0.82	0.31	0.09	1.23
1993	1.19	0.21	0.06	1.47
1994	1.08	0.23	0.12	1.43
1995	0.30	0.23	0.13	0.66
1996	0.56	0.26	0.12	0.95
1997	0.08	0.54	0.19	0.81
1998	0.06	0.48	0.10	0.68
1999	0.10	0.61	0.06	0.78
2000	0.23	0.82	0.07	1.13

Note: Includes catches of all species in the target fishery listed. Total includes catches of all species in both target and non-target fisheries.
Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-16. Total Catch of Target Species by Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length by Trimester, 1992-2000

		Thousands of Tons			
Target	Year	Jan-Apr	May-Aug	Sep-Dec	Total
PCOD	1992	0.4	0.0	0.0	0.5
	1993	0.3	0.0	0.0	0.3
	1994	0.2	0.3	0.1	0.5
	1995	0.3	0.2	0.1	0.5
	1996	0.4	0.1	0.0	0.4
	1997	0.7	0.2	0.0	0.9
	1998	0.7	0.3	0.0	0.9
	1999	0.5	0.2	0.0	0.8
	2000	0.6	0.3	0.0	0.9
ROCK	1992	0.0	0.1	0.0	0.1
	1993	0.0	0.0	0.0	0.1
	1994	0.0	0.1	0.0	0.1
	1995	0.0	0.1	0.0	0.1
	1996	0.0	0.0	0.1	0.1
	1997	0.0	0.2	0.0	0.2
	1998	0.0	0.1	0.0	0.1
	1999	0.0	0.0	0.0	0.1
	2000	0.0	0.0	0.0	0.1
SABL	1992	0.0	0.3	0.0	0.3
	1993	0.0	0.5	0.0	0.5
	1994	0.0	0.3	0.1	0.4
	1995	0.0	0.1	0.0	0.1
	1996	0.0	0.1	0.0	0.1
	1997	0.0	0.0	0.0	0.0
	1998	0.0	0.0	0.0	0.0
	1999	0.0	0.0	0.0	0.0
	2000	0.0	0.0	0.0	0.0

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-17. Ex-Vessel Value Total Catch of Target Species by Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length by Trimester, 1992-2001

Target	$Millions				
	Year	Jan-Apr	May-Aug	Sep-Dec	Total
PCOD	1992	0.25	0.03	0.02	0.30
	1993	0.18	0.01	0.01	0.20
	1994	0.06	0.12	0.05	0.23
	1995	0.12	0.08	0.03	0.23
	1996	0.19	0.04	0.02	0.25
	1997	0.37	0.13	0.03	0.52
	1998	0.32	0.13	0.01	0.46
	1999	0.36	0.20	0.03	0.59
	2000	0.55	0.22	0.03	0.80
ROCK	1992	0.03	0.04	0.01	0.08
	1993	0.02	0.03	0.01	0.06
	1994	0.05	0.06	0.01	0.11
	1995	0.02	0.08	0.03	0.13
	1996	0.02	0.04	0.06	0.12
	1997	0.03	0.12	0.03	0.18
	1998	0.02	0.07	0.00	0.09
	1999	0.01	0.04	0.00	0.06
	2000	0.03	0.04	0.00	0.06
SABL	1992	0.01	0.80	0.00	0.81
	1993	0.00	1.17	0.00	1.18
	1994	0.00	0.86	0.21	1.07
	1995	0.04	0.24	0.01	0.29
	1996	0.21	0.32	0.03	0.56
	1997	0.01	0.06	0.01	0.08
	1998	0.01	0.01	0.03	0.06
	1999	0.01	0.06	0.03	0.10
	2000	0.04	0.09	0.11	0.23

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-18 and Table 2.1.9-19 show the number of vessels and ex-vessel value in the FGCV ≤ 32 fleet by FMP subarea, respectively. The CG FMP subarea is the most important fishing area for this class. In recent years, this area has accounted for at least half of the total value of groundfish retained by this fixed gear catcher vessel class. The number of vessels with pollock and Pacific cod landings by FMP subarea are presented in Table 2.1.9-20, while Table 2.1.9-21 shows the ex-vessel value of the landings of these species by FMP subarea.

Table 2.1.9-18. Number of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length by FMP Subarea, 1992-2000

	Number of Vessels					
Year	AI	BS	WG	CG	EG	Total
1992	0	12	11	69	30	107
1993	0	3	3	55	28	83
1994	0	14	8	68	22	99
1995	1	18	3	39	18	66
1996	0	9	3	34	17	55
1997	0	12	12	41	12	65
1998	0	15	11	36	11	57
1999	1	6	10	40	8	60
2000	0	6	5	51	11	69

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-19. Ex-Vessel Value of Harvest of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length by FMP Subarea, 1992-2000

	$Millions					
Year	AI	BS	WG	CG	EG	Total
1992	0.00	0.07	0.12	0.75	0.29	1.23
1993	0.00	b	b	0.93	0.55	1.47
1994	0.00	0.15	0.01	0.88	0.38	1.43
1995	a	0.15	a	0.30	0.21	0.66
1996	0.00	0.13	a	0.45	0.37	0.95
1997	0.00	0.06	0.07	0.60	0.08	0.81
1998	0.00	0.10	0.04	0.47	0.08	0.68
1999	a	0.04	0.09	0.59	0.05	0.78
2000	0.00	0.04	0.08	0.86	0.15	1.13

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Combined with value from BS to protect the confidentiality of the small number of FGCV ≤ 32s that reported catches in this subarea during the year.

[b] Combined with value from CG to protect the confidentiality of the small number of FGCV ≤ 32s that reported catches in this subarea during the year.

Table 2.1.9-20. Number of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length with Pacific Cod and Pollock Landings by FMP Subarea, 1992-2000

Year	Number of Vessels												
	PCOD						PLCK						Total
	AI	BS	WG	CG	EG	Total	AI	BS	WG	CG	EG	Total	
1992	0	12	5	55	14	77	0	1	0	6	2	9	77
1993	0	1	2	27	10	39	0	0	0	2	1	3	39
1994	0	14	7	14	4	32	0	0	0	0	0	0	32
1995	1	18	2	20	5	42	0	0	0	2	1	3	42
1996	0	9	2	23	7	39	0	0	0	2	0	2	39
1997	0	10	11	36	7	55	0	3	0	5	3	11	55
1998	0	7	8	31	4	44	0	0	0	4	2	6	44
1999	1	5	10	36	1	50	0	0	0	6	0	6	50
2000	0	6	5	46	3	57	0	0	0	3	0	3	57

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-21. Ex-Vessel Value of Pacific Cod and Pollock Landings by Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, by FMP Subarea, 1992-2000

Year	Number of Vessels												
	PCOD						PLCK						Total
	AI	BS	WG	CG	EG	Total	AI	BS	WG	CG	EG	Total	
1992	0.00	0.06	0.02	0.22	0.02	0.31	Ex-Vessel Value of Pollock in all years and areas was approximately zero.						0.31
1993	0.00	a	a	0.16	0.04	0.20							0.20
1994	0.00	0.15	0.01	0.05	0.02	0.23							0.23
1995	b	0.12	a	0.10	0.01	0.23							0.23
1996	0.00	0.05	a	0.19	0.02	0.25							0.25
1997	0.00	0.04	0.01	0.45	0.02	0.53							0.53
1998	0.00	0.04	0.01	0.39	0.02	0.46							0.46
1999	b	0.04	0.04	0.52	a	0.60							0.60
2000	0.00	0.04	0.07	0.71	a	0.81							0.81

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

[a] Added to the value for CG to protect confidentiality.

[b] Added to the value for BS to protect confidentiality.

Detailed information on the geographical distribution of the Pacific cod, rockfish and sablefishcatch by vessels in the FGCV ≤ 32 class is presented in Figure 2.1.9-3 through Figure 2.1.9-5 for the years 1997 and 1998 combined. In the figures, only catches in areas in which four or more vessels reported landings are shown. For comparison purposes the scale of catches by area in thiese figures is the same used for all longline catches of each of the species shown, and that none of the catches of vessels in the FGCV ≤ 32 class reach the higer ends of the scale.

Figure 2.1.9-3. Average Annual Pacific Cod Catch of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, by Statistical Area, 1997-1998

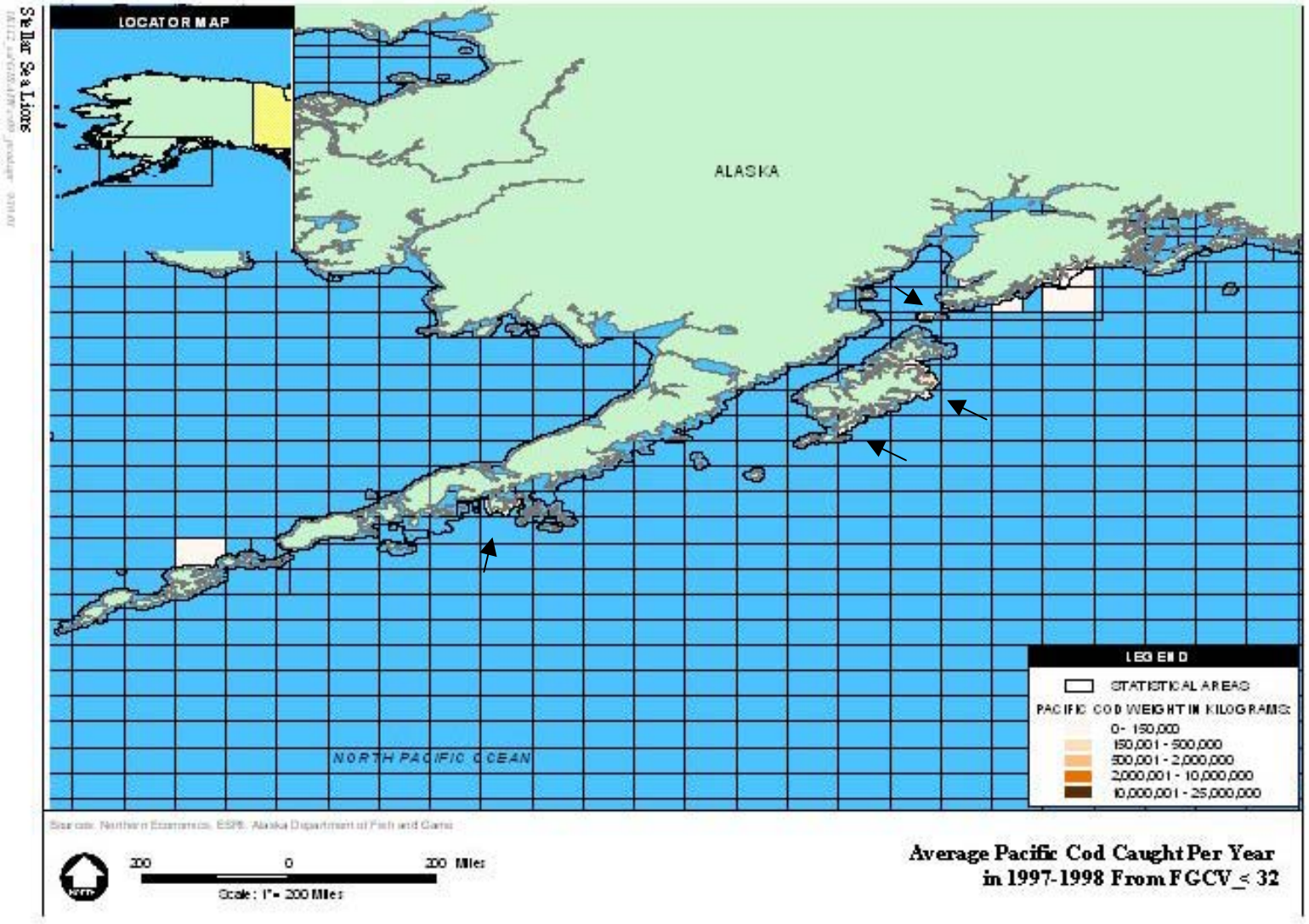


Figure 2.1.9-4. Average Annual Rockfish Catch of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, by Statistical Area, 1997-1998

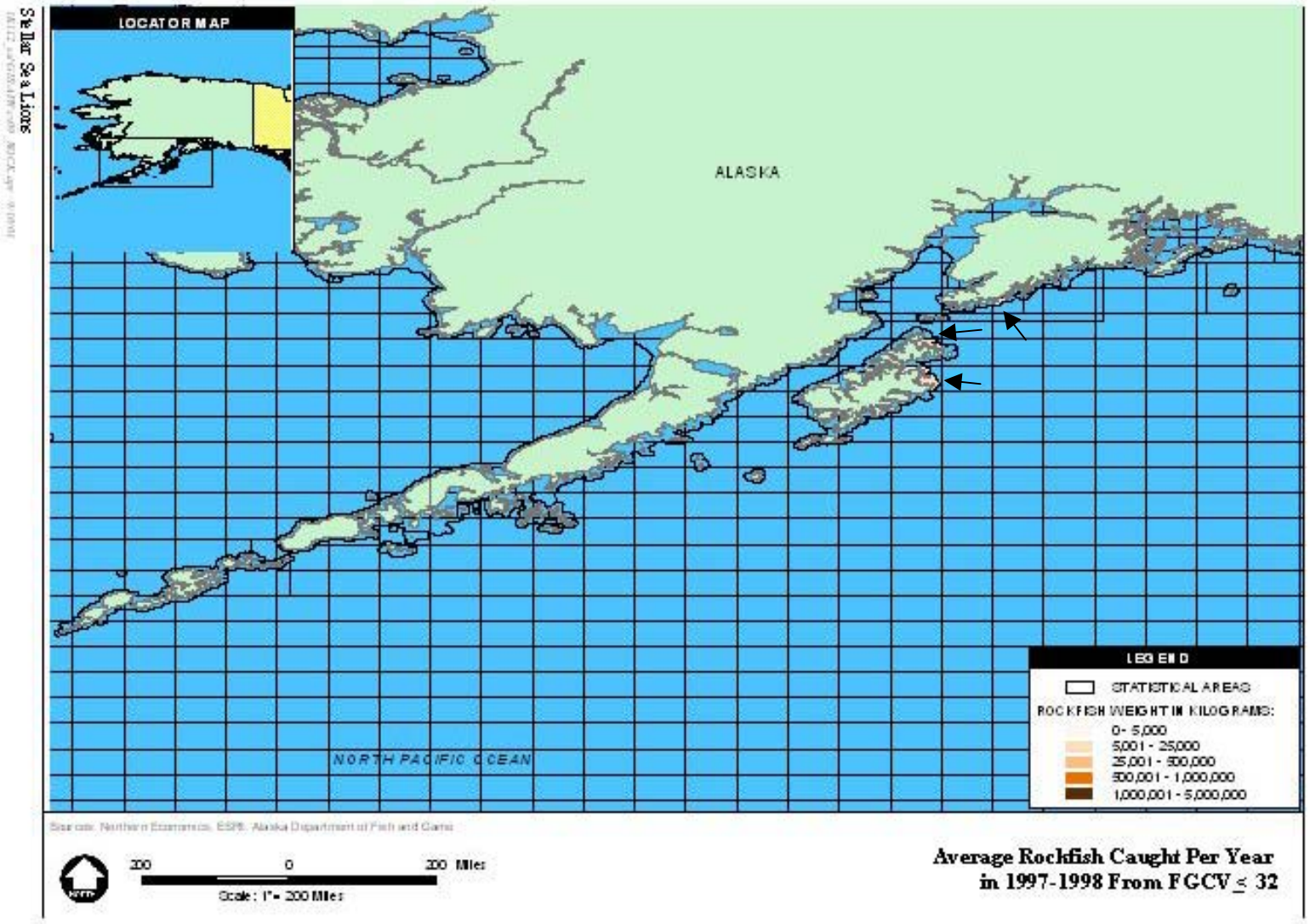
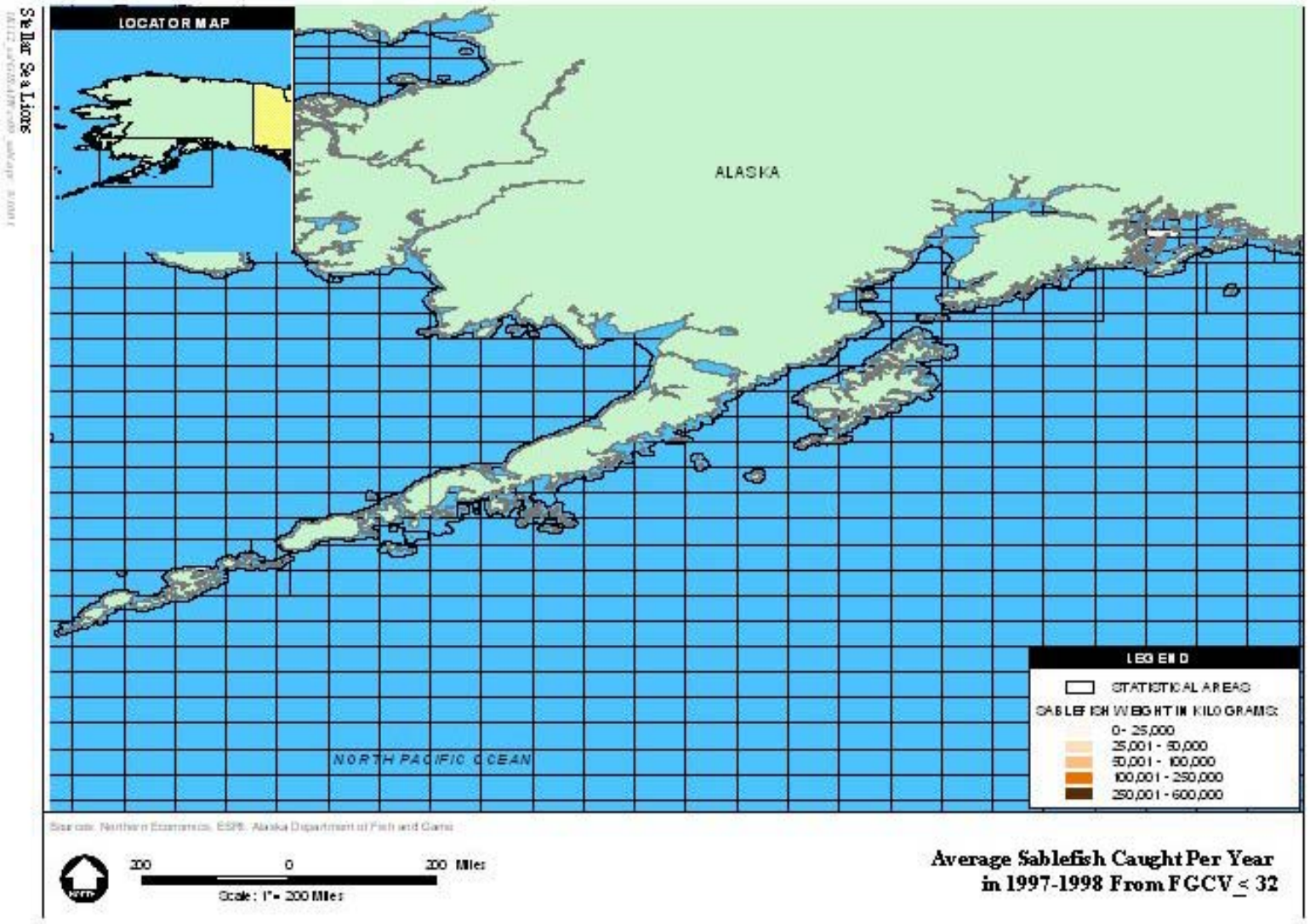


Figure 2.1.9-5. Average Annual Sablefish Catch of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, by Statistical Area, 1997-1998



The importance of various gear types—particularly jig gear in the Pacific cod and rockfish fisheries—to vessels in this class is shown in Table 2.1.9-22.

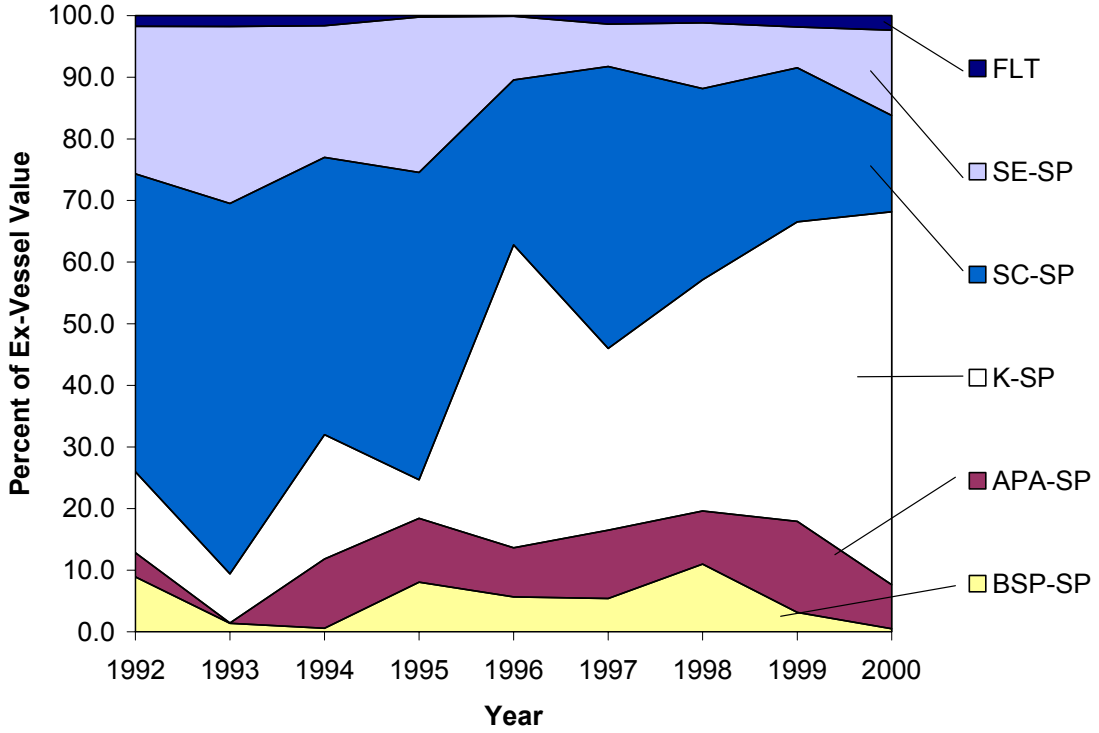
Table 2.1.9-22. Percent of Total Value by Gear for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, by Species, 1992-2000

Year	Percent of Total Value				
	HAL	JIG-OTH	POT	TWL	Total
SABL					
1996	100.0	0.0	0.0	0.0	100.0
1997	100.0	0.0	0.0	0.0	100.0
1998	100.0	0.0	0.0	0.0	100.0
1999	100.0	0.0	0.0	0.0	100.0
2000	100.0	0.0	0.0	0.0	100.0
PCOD					
1996	82.4	17.1	0.5	0.0	100.0
1997	71.4	28.4	0.2	0.0	100.0
1998	63.5	36.3	0.2	0.0	100.0
1999	52.3	45.7	2.0	0.0	100.0
2000	53.6	45.6	0.8	0.0	100.0
ROCK					
1996	27.7	72.3	0.0	0.0	100.0
1997	18.7	81.3	0.0	0.0	100.0
1998	16.7	83.2	0.1	0.0	100.0
1999	15.7	84.3	0.0	0.0	100.0
2000	17.8	82.2	0.0	0.0	100.0

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Figure 2.1.9-6 shows the reliance of the FGCV ≤ 32 fleet on various processors from 1992 through 2000. The Figure shows the increasing importance of processors in Kodiak to the class as well as the declining importance of processors in Southcentral Alaska. In 1994, K-SP accounted for just 6 percent of the ex-vessel value for the class while SC-SP accounted for 50 percent. By 2000, ex-vessel revenues from K-SP were 61 percent of the class total while SC-SP accounted for 16 percent. This change has come about because of the increasing importance of the Pacific cod fishery to vessels in the FGCV ≤ 32 class.

Figure 2.1.9-6. Ex-Vessel Value Paid by Various Processor Classes to Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000



Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.9.6 Crew Employment and Income

This analysis assumed an average crew size of three, including the skipper, for this type of vessel. Another 0.5 position was added to the average to account for vessel support staff. The actual number of crew depends primarily on the size of the vessel. Table 2.1.9-23 shows the estimated total number of crew (including skipper and administrative staff) in this class for each year between 1992 and 2000. Each year's estimate was derived by multiplying the average crew size by the number of unique vessels with landings in that year. It was assumed that all crewmembers of a particular vessel and home office staff reside in the vessel owner's region of residence. The number of crewmember months was used to estimate FTE employment based on the assumption that crewmembers work an average of 16 hours per day for an average 15 days for every month their vessel is active. The total number of estimated crewmember hours is then divided by the 2080 hours per year. Since 1992, total estimated FTE employment in the FGCV ≤ 32 class has varied between 146 and 77.

Table 2.1.9-23. Number of Crewmembers and Crewmember Months by Species Group for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

Year	Number of Crew Members	Crewmember Months			Groundfish FTE
		Groundfish	Non-Groundfish	All Species	
1992	428.0	1,264	1,484	2,464	146
1993	332.0	848	1,088	1,728	98
1994	396.0	972	1,200	1,928	112
1995	264.0	752	628	1,268	87
1996	220.0	668	620	1,148	77
1997	260.0	952	676	1,444	110
1998	228.0	820	556	1,184	95
1999	240.0	680	532	1,080	78
2000	276.0	856	360	1,168	99

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Crewmembers are typically paid on a share basis. A share may be calculated as a portion of gross revenue such as gross revenue less food and fuel expenditures or gross revenue less food, fuel, and landing tax expenditures. Individual crew shares are about six to ten percent of the gross revenue after expenditures have been subtracted. This analysis assumes that 40 percent of ex-vessel revenue goes to payments for labor.[20]

Estimated payments to labor over time in groundfish and non-groundfish fisheries are shown in Table 2.1.9-24. Labor payments per vessel in groundfish and non-groundfish fisheries are shown in Table 2.1.9-25. Labor payments per estimated FTE are shown in Table 2.1.9-26—the estimates are very low relative to similar estimates for other classes. The low estimates are believed to be a function of the algorithm used to calculate FTEs, which will be overstated if participating vessels make only one or two trips during a given month.

Table 2.1.9-24. Payments to Labor by Species Group for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

	$Millions		
Year	Groundfish	Non-Groundfish	All Species
1992	0.49	2.37	2.86
1993	0.59	1.58	2.17
1994	0.57	2.48	3.05
1995	0.27	0.88	1.14
1996	0.38	0.83	1.21
1997	0.32	0.92	1.25
1998	0.27	0.74	1.01
1999	0.31	1.31	1.62
2000	0.45	0.43	0.88

[20] The analysis makes no assumptions about owner profits, as no data were available to estimate operating costs.

Source: CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-25. Payments to Labor Per Vessel by Species Group for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

	Payments to Labor Per Vessel ($)		
Year	Groundfish	Non-Groundfish	All Species
1992	4,596	22,154	26,750
1993	7,104	19,063	26,168
1994	5,765	25,054	30,819
1995	4,024	13,296	17,320
1996	6,894	15,110	22,004
1997	4,989	14,228	19,217
1998	4,778	12,970	17,748
1999	5,188	21,868	27,056
2000	6,524	6,214	12,739

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Table 2.1.9-26. Number of Crewmembers and Labor Payments Per Crewmember by Species Group for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

Year	Number of Crew Members	Labor Payments per Crewmember ($)			Groundfish Labor Payments per FTE ($)
		Groundfish	Non-Groundfish	All Species	
1992	428.0	1,149	5,539	6,688	3,372
1993	332.0	1,776	4,766	6,542	6,026
1994	396.0	1,441	6,264	7,705	5,089
1995	264.0	1,006	3,324	4,330	3,061
1996	220.0	1,724	3,778	5,501	4,920
1997	260.0	1,247	3,557	4,804	2,952
1998	228.0	1,194	3,242	4,437	2,878
1999	240.0	1,297	5,467	6,764	3,967
2000	276.0	1,631	1,554	3,185	4,558

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

2.1.9.7 Regional Residence of Vessel Owners

Table 2.1.9-27 presents information on the residence of owners of vessels in this class. In 2000, about 87 percent of the vessels in this category were owned by Alaska residents, and the remainder were owned by Washington residents and residents of Other Regions. In recent years, residents from AKKO have increased while participants from AKSC and AKSE have decreased. These participation trends are believed to be linked to the availability of non-fishing opportunities in AKSC and AKSE.

The owner's residence is an important factor because most of the regional economic impact of catcher vessel operations occurs in the owner's region of residence. Table 2.1.9-28 shows the ex-vessel revenue accruing to each region. Table 2.1.9-29 and Table 2.1.9-30 show the crewmember months and payments to labor accruing to each region. It was assumed that all crewmembers of a particular vessel and home office staff reside in the vessel owner's region of residence.

Table 2.1.9-27. Number of Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length Landing Groundfish, by Region of Owner, 1992-2000

Year	Number of Vessels							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	4	11	51	28	1	1	11	107
1993	1	6	44	21	3	0	8	83
1994	7	9	55	18	1	0	9	99
1995	5	7	35	12	4	0	3	66
1996	7	9	25	10	2	0	2	55
1997	12	14	28	7	1	0	3	65
1998	9	12	21	7	5	0	3	57
1999	8	15	21	7	3	0	6	60
2000	3	20	28	9	3	0	6	69

Source: CFEC/ADFG Fish Ticket Data provided by NPFMC, June 2001

Table 2.1.9-28. Ex-Vessel Revenue by Vessel Owner's Region for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

Year	$Millions							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0.04	0.13	0.45	0.33	0.01	0.01	0.13	1.23
1993	0.01	0.12	0.60	0.41	0.05	0.00	0.13	1.47
1994	0.06	0.14	0.50	0.32	0.02	0.00	0.12	1.43
1995	0.03	0.07	0.19	0.12	0.04	0.00	0.04	0.66
1996	0.10	0.17	0.22	0.17	0.04	0.00	0.03	0.95
1997	0.13	0.20	0.19	0.08	0.01	0.00	0.03	0.81
1998	0.09	0.15	0.16	0.08	0.06	0.00	0.04	0.68
1999	0.09	0.24	0.19	0.08	0.04	0.00	0.08	0.78
2000	0.04	0.35	0.33	0.15	0.05	0.00	0.10	1.13

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the regionally weighted average revenue per vessel.

Table 2.1.9-29. Crewmember Months by Vessel Owner's Region for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

Year	Crewmember Months							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	47	130	602	331	12	12	130	1,264
1993	10	61	450	215	31	0	82	848
1994	69	88	540	177	10	0	88	972
1995	57	80	399	137	46	0	34	752
1996	85	109	304	121	24	0	24	668
1997	176	205	410	103	15	0	44	952
1998	129	173	302	101	72	0	43	820
1999	91	170	238	79	34	0	68	680
2000	37	248	347	112	37	0	74	856

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the number of crewmember months.

Table 2.1.9-30. Payments to Labor by Vessel Owner's Region for Fixed Gear Catcher Vessels Less than or Equal to 32 Feet in Length, 1992-2000

Year	$Millions							
	AKAPAI	AKKO	AKSC	AKSE	WAIW	ORCO	OTHER	Total
1992	0.02	0.05	0.18	0.13	0.00	0.00	0.05	0.49
1993	0.00	0.05	0.24	0.16	0.02	0.00	0.05	0.59
1994	0.02	0.06	0.20	0.13	0.01	0.00	0.05	0.57
1995	0.01	0.03	0.08	0.05	0.02	0.00	0.01	0.27
1996	0.04	0.07	0.09	0.07	0.02	0.00	0.01	0.38
1997	0.05	0.08	0.08	0.03	0.01	0.00	0.01	0.32
1998	0.03	0.06	0.07	0.03	0.03	0.00	0.01	0.27
1999	0.04	0.10	0.08	0.03	0.02	0.00	0.03	0.31
2000	0.02	0.14	0.13	0.06	0.02	0.00	0.04	0.45

Source: Estimated by Northern Economics based on CFEC/ADFG Fish Ticket Data and NMFS Observer Data, June 2001

Note: Estimated by multiplying the number of vessels associated with the region by the regionally weighted payments to labor.

2.2 Catcher Processors

American-owned catcher processors began operating in Alaska waters in about 1983. A catcher processor uses various gear to catch fish and process them into products onboard the vessel. Five catcher processor classes were defined for this analysis based on the predominant product type or gear type associated with these vessels (Table 2.2-1). These classes are mutually exclusive.

Table 2.2-1. Catcher Processor Classes

Acronym	Description
ST-CP	**Surimi Trawl Catcher Processor.** These factory trawlers have the necessary processing equipment to produce surimi from pollock and other groundfish. They are generally the largest of all catcher processors.
FT-CP	**Fillet Trawl Catcher Processor.** These trawl vessels have the processing equipment to produce fillets from pollock, Pacific cod, and other groundfish. They are generally smaller than ST-CP vessels.
HT-CP	**Head And Gut Trawl Catcher Processor.** These factory trawlers do not process more than incidental amount of fillets. Generally, they are limited to headed and gutted products or kirimi. In general, they do not focus their efforts on pollock, opting instead for flatfish, Pacific cod, and Atka mackerel. HT-CP vessels are the smallest of the trawl catcher processors.
P-CP	**Pot Catcher Processor.** These vessels have been used primarily in the crab fisheries of the North Pacific, but increasingly are participating in the Pacific cod fisheries. They generally use pot gear, but may also use longline gear. They produce whole or headed and gutted groundfish products, some of which may be frozen in brine rather than blast frozen.
L-CP	**Longline Catcher Processor**. These vessels, also known as freezer longliners, do not trawl or use pot gear but use longline gear with a focus on Pacific cod. Most L-CP vessels are limited to headed and gutted products, and in general are smaller than HT-CP vessels.

Table 2.2-2 summarizes domestic catcher processor activity in North Pacific groundfish fisheries during the 1992-2000 period. The number of active vessels peaked at 134 in 1992 and declined to 79 by 2000. One likely reason for this decline was the inshore-offshore allocations of pollock and Pacific cod. In addition, the decline after 1998 was directly related to the AFA, which removed nine trawl catcher processors from the fishery.

From 1992-2000 catcher processors harvested an average of 1,143,957 tons of groundfish with which they generated an average of 314,594 tons of product, worth an estimated wholesale value of $620 million. The average ton of product has generated $558. Pollock accounted for about 53 percent of all groundfish harvested by catcher processors with about 88 percent of all catcher processor harvests coming from the BSAI. Over the nine-year period, catcher processors improved their average utilization rate (proportion of product weight to round weight) from 24.7 percent in 1992 to 35.4 percent in 2000.

Catcher processors are estimated to have generated annual employment averaging 4,510 FTEs between 1992 and 2000, and annual payments to labor averaging $239 million. The vast majority of catcher processors are owned or operated Washington based individuals or corporations, and approximately 94 percent of employment and income is assigned to the WAIW Region. Data on crew complements are reported weekly to NMFS by at-sea processors (catcher processors and motherships) and therefore employment estimates of at-sea processors are more reliable than estimates generated for inshore processors, which are based on production to labor ratios derived from survey data collected in the early 1990s.

Table 2.2-2. Summary of Catcher Processor Activities in North Pacific Groundfish Fisheries, 1991–1999

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vessels Landing Groundfish and Reported Groundfish tons									
No. of Vessels	136	120	116	118	112	106	98	88	90
Thousands of Tons	1,432	1,330	1,368	1,338	1,269	1,268	1,110	874	976
Reported tons of Species Groups as a Percent of Total Groundfish									
ARSO	13.2	15.3	13.5	14.0	16.2	14.5	12.9	17.6	16.1
FLAT	13.8	12.6	14.4	12.9	15.5	18.5	15.7	14.7	16.1
PCOD	13.0	10.1	10.9	14.2	13.8	15.5	14.6	16.5	14.6
PLCK	60.0	62.0	61.2	58.9	54.6	51.5	56.8	51.2	53.2
Reported tons from FMP Subareas as a Percent of Total Groundfish									
BSAI	88	88	89	90	90	89	86	86	88
GOA	12	12	11	10	10	11	14	14	12
Total Production, Product Utilization Rate, Product Value, and Value per MT of Round Weight									
Product (Thousands of Tons)	339	322	331	346	355	355	316	280	307
Utilization Rate (%)	23.7	24.2	24.2	25.8	28.0	28.0	28.5	32.0	31.4
Product Value ($Millions)	812	585	623	748	681	639	569	625	699
Value per Ton ($)	567.1	439.7	455.3	558.7	536.4	503.9	512.9	715.8	716.1
Total Employment by Region (FTE) [a]									
Alaska	145	115	119	101	134	136	153	155	187
WAIW	4,528	4,655	4,257	4,880	5,391	4,439	4,593	3,546	3,465
Total [b]	4,851	4,930	4,526	5,115	5,635	4,716	4,852	3,859	3,818
Total Payments to Labor by Region ($Millions) [a]									
Alaska	8.0	5.8	6.7	4.9	6.9	6.1	7.5	9.8	11.7
WAIW	285.9	209.4	225.4	274.8	249.8	234.0	209.8	223.1	246.1
Total [b]	304.4	224.7	240.8	287.9	262.8	246.7	221.6	240.0	266.8

Sources: NMFS Blend Data and NMFS Weekly Production Report Data, provided by NMFS in June 2001.

[a] Includes skippers, fishing crew processing crew and home-office staff.

[b] Total includes estimates for resident of other regions.

Table 2.2-3 is a summary of catcher processor activities by class for 2000. Of the 90 catcher processors, 39 were trawl catcher processors and 51 used longlines or pots. The 11 surimi trawl catcher processors (ST-CP vessels) had the highest total catch of all catcher processors and generated more than 46 percent of the total wholesale value, 49 percent of the payments to labor, and 36 percent of the total FTE employment.

Table 2.2-3. Summary of Catcher Processor Activities by Class, 2000

Vessel Class	No. of Vessels	Reported Harvest—Retained and Discarded (Thousands of MT)				Wholesale Value ($Millions)	Payments to Labor ($Millions)	Total Employment (FTE)
		PLCK	PCOD	ARSO	FLAT			
ST-CP	11	394.74	1.14	5.91	10.76	321.43	112.50	1,375
FT-CP	4	88.03	4.38	1.93	0.48	80.56	32.22	362
HT-CP	24	31.92	31.15	129.12	138.28	151.50	60.60	1,144
L-CP	10	0.01	3.73	0.07	0.06	4.87	1.46	42
P-CP	41	4.84	102.07	20.33	7.53	140.89	56.35	864
Total	**90**	**519.54**	**142.47**	**157.36**	**157.11**	**699.25**	**263.14**	**3,787**

Sources: NMFS Blend Data and NMFS Weekly Production Report Data, provided by NMFS in June 2001.

Each profile examines the activities of a single class of catcher processors from 1992 through 2000. The profiles include the following elements:

- A description of the vessels in the class and number of participants
- A description of fishing and processing operations
- A description of employment and income associated with the groundfish fishery for each catcher processor class. Income and employment are linked to regions in Alaska and the Pacific Northwest.