

Special Publication No. 92-5

Alaska Sport Fishing in the Aftermath of the Exxon Valdez Oil Spill

by

Michael J. Mills

December 1992

Alaska Department of Fish and Game

Division of Sport Fish



ACE 10917282

SPECIAL PUBLICATION NO. 92-5
ALASKA SPORT FISHING IN THE AFTERMATH
OF THE EXXON VALDEZ OIL SPILL

by
Michael J. Mills

Alaska Department of Fish and Game
Division of Sport Fish
Anchorage, Alaska

December 1992

ACE 10917283

The Special Publications series was established in 1991 for the publication of techniques and procedures manuals, informational pamphlets, special subject reports to decision-making bodies, symposia and workshop proceedings, application software documentation, in-house lectures, and other documents that do not fit in another publication series of the Division of Sport Fish. Special Publications are intended for fishery and other technical professionals. Distribution is to state and local publication distribution centers, libraries and individuals and, on request, to other libraries, agencies, and individuals.

The Alaska Department of Fish and Game receives federal funding. All of its public programs and activities are operated free from discrimination on the basis of race, religion, sex, color, national origin, age, or handicap. Any person who believes he or she has been discriminated against by this agency should write to:

OEO
U.S. Department of the Interior
Washington, D.C. 20240

ACE 10917284

PREFACE

Following the Exxon Valdez oil spill in 1989, those planning economic studies to assess damages from lost recreational uses identified sport fishing as the recreational activity with the most potential for rigorous evaluation of the spill's impact. The Alaska Department of Fish and Game had for a good many years collected data that if appropriately synthesized would produce information fundamental to such an evaluation. The Alaska Department of Law determined that it required this information for legal representation of the state in the oil spill litigation and contracted the Department of Fish and Game to produce it.

In January, 1991, the Department of Fish and Game delivered to the Department of Law a document entitled *Alaska Sport Fishing in the Aftermath of the Exxon Valdez Oil Spill*. That document was prepared for the Department of Law for litigation purposes, thus the Department of Fish and Game distributed no other copies.

The State of Alaska has since reached a settlement agreement with the Exxon Corporation and the Exxon Shipping Company and, most recently, with Alyeska Pipeline Service Company. According, it has authorized release of the document. Preparatory to this release, a section summarizing results was added and a few inconsequential, typographical revisions were made. Nothing was updated. The result is this Special Publication.

December 1992

Michael J. Mills

TABLE OF CONTENTS

	<u>Page</u>
PREFACE.....	i
TABLE OF CONTENTS.....	ii
LIST OF TABLES.....	iii
LIST OF FIGURES.....	vi
LIST OF APPENDICES.....	vii
INTRODUCTION.....	1
METHODS.....	1
RESULTS.....	1
The entire oil spill area.....	1
Saltwater versus freshwater.....	2
Subareas.....	2
Residency.....	3
Sport fishing by clean-up workers.....	3
Other results.....	3
ACKNOWLEDGEMENTS.....	114
LITERATURE CITED.....	114
APPENDIX A.....	116
APPENDIX B.....	163

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Sport fishing participation and harvest for the Exxon Valdez oil spill area, 1989.....	20
2. Sport fishing participation and harvest by household type for the Exxon Valdez oil spill area, 1989.....	21
3. Sport fishing participation and harvest by water type for the Exxon Valdez oil spill area, 1989.....	22
4. Sport fishing participation and harvest by subarea for the Exxon Valdez oil spill area, 1989.....	23
5. Sport fishing participation and harvest by residency for the Exxon Valdez oil spill area, 1989.....	24
6. Sport fishing participation and percentage change for the Exxon Valdez oil spill area by water type, subarea, and residence, 1984-1989.....	25
7. Sport fishing participation and harvest for the Exxon Valdez oil spill area, 1984-1989.....	27
8. Freshwater sport fishing participation and harvest for the Exxon Valdez oil spill area, 1984-1989.....	28
9. Saltwater sport fishing participation and harvest for the Exxon Valdez oil spill area, 1984-1989.....	29
10. Sport fishing participation and harvest in the Prince William Sound subarea of the Exxon Valdez oil spill area, 1984-1989.....	30
11. Sport fishing participation and harvest in the Kenai Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.....	31
12. Sport fishing participation and harvest in the West Cook Inlet subarea of the Exxon Valdez oil spill area, 1984-1989.....	32
13. Sport fishing participation and harvest in the Kodiak subarea of the Exxon Valdez oil spill area, 1984-1989.....	33
14. Sport fishing participation and harvest in the Alaska Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.....	34
15. Sport fishing participation and harvest by residents of the Exxon Valdez oil spill area, 1984-1989.....	35
16. Sport fishing participation and harvest in the Exxon Valdez oil spill area by Alaskan's residing outside the oil spill area, 1984-1989.....	36

LIST OF TABLES (Continued)

<u>Table</u>	<u>Page</u>
17. Sport fishing participation and harvest in the Exxon Valdez oil spill area by nonresidents of Alaska, 1984-1989.....	37
18. Percentage of Southcentral sport fishing participation and harvest by households that did and did not participate in the oil spill cleanup, 1989.....	38
19. Percentage of Southcentral Alaska sport fishing participation and harvest in the Exxon Valdez oil spill area, 1984-1989.....	39
20. Percentage of Southcentral Alaska freshwater sport fishing participation and harvest in the Exxon Valdez oil spill area, 1984-1989.....	40
21. Percentage of Southcentral Alaska saltwater sport fishing participation and harvest in the Exxon Valdez oil spill area, 1984-1989.....	41
22. Percentage of Southcentral Alaska sport fishing participation and harvest in the Prince William Sound subarea of the Exxon Valdez oil spill area, 1984-1989.....	42
23. Percentage of Southcentral Alaska sport fishing participation and harvest in the Kenai Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.....	43
24. Percentage of Southcentral Alaska sport fishing participation and harvest in the West Cook Inlet subarea of the Exxon Valdez oil spill area, 1984-1989.....	44
25. Percentage of Southcentral Alaska sport fishing participation and harvest in the Kodiak subarea of the Exxon Valdez oil spill area, 1984-1989.....	45
26. Percentage of Southcentral Alaska sport fishing participation and harvest in the Alaska Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.....	46
27. Percentage of Southcentral Alaska sport fishing participation and harvest by residents of the Exxon Valdez oil spill area, 1984-1989.....	47
28. Percentage of Southcentral Alaska sport fishing participation and harvest in the Exxon Valdez oil spill area by Alaskan's residing outside the oil spill area, 1984-1989.....	48
29. Percentage of Southcentral Alaska sport fishing participation and harvest in the Exxon Valdez oil spill area by nonresidents of Alaska, 1984-1989.....	49

LIST OF TABLES (Continued)

<u>Table</u>	<u>Page</u>
30. Number of anglers by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.....	50
31. Number of sport fishing trips by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.....	54
32. Number of angler-days fished by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.....	58
33. Chinook salmon sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	62
34. Coho salmon sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	66
35. Sockeye salmon sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	70
36. Pink salmon sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	74
37. Chum salmon sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	78
38. Steelhead sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	82
39. Rainbow trout sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	86
40. Cutthroat trout sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	90
41. Dolly Varden/Arctic char sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	94
42. Halibut sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	98
43. Rockfish sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	102
44. Razor clam sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	106
45. Other fish sport harvest by subarea and fishery for the Exxon Valdez oil spill area, 1984-1989.....	110

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Map of Alaska and Southcentral Alaska.....	4
2. Map of the Exxon Valdez oil spill area.....	5
3. Number of anglers by region and Exxon Valdez oil spill area, 1984-1989.....	6
4. Number of sport fishing trips by region and Exxon Valdez oil spill area, 1984-1989.....	7
5. Number of angler-days by region and Exxon Valdez oil spill area, 1984-1989.....	8
6. Sport fishing participation for the Exxon Valdez oil spill area, 1984-1989.....	9
7. Freshwater sport fishing participation for the Exxon Valdez oil spill area, 1984-1989.....	10
8. Saltwater sport fishing participation for the Exxon Valdez oil spill area, 1984-1989.....	11
9. Sport fishing participation in the Prince William Sound subarea of the Exxon Valdez oil spill area, 1984-1989.....	12
10. Sport fishing participation in the Kenai Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.....	13
11. Sport fishing participation in the West Cook Inlet subarea of the Exxon Valdez oil spill area, 1984-1989.....	14
12. Sport fishing participation in the Kodiak subarea of the Exxon Valdez oil spill area, 1984-1989.....	15
13. Sport fishing participation in the Alaska Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.....	16
14. Sport fishing participation by residents of the Exxon Valdez oil spill area, 1984-1989.....	17
15. Sport fishing participation in the Exxon Valdez oil spill area by Alaskan's residing outside the oil spill area, 1984-1989.....	18
16. Sport fishing participation in the Exxon Valdez oil spill area by nonresidents of Alaska, 1984-1989.....	19

LIST OF APPENDICES

<u>Appendix</u>	<u>Page</u>
A1. Sport fish survey questionnaire, 1989.....	117
A2. First reminder, 1989.....	161
A3. Second reminder, 1989.....	162
B1. Comments by anglers on the Exxon Valdez oil spill.....	164

INTRODUCTION

At 12:04 a.m., March 24, 1989, the tanker Exxon Valdez ran aground on Bligh Reef 25 miles south of Valdez in Alaska's Prince William Sound. The tanker ruptured spilling 11 million gallons of crude oil, which eventually spread southwest for more than four hundred miles. Inquiries immediately arose concerning the effects of the spill on recreation in the area. One recreational activity for which there was sufficient information to examine trends for the spill area was sport fishing.

Since 1977, the Sport Fish Division of the Alaska Department of Fish and Game has conducted an annual survey of anglers who sport fished in Alaska. These surveys collected data on number of fish harvested and the number of days fished, and have since 1983 been site-specific for all areas of the state. Since 1984, data have also been collected on the number of anglers fishing each site and the number of household fishing trips to each site. The Southcentral Alaska (Figure 1) portions of the 1984-1989 databases resulting from these surveys were reorganized to provide historical information for the area of the Exxon Valdez oil spill (Figure 2). This publication contains that information.

METHODS

The surveys of sport fishing in Alaska involved mailing questionnaires to random samples selected from computerized files of names and addresses of individuals who had purchased licenses to sport fish. Reminder letters and questionnaires were mailed to those individuals who did not respond to the first mailing. A second reminder and a questionnaire were mailed to those who did not respond to the first reminder. Further details and results for these surveys may be found in Mills (1979, 1980, 1981a, 1981b, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990). Appendix A contains copies of the questionnaire and letters used in 1989.

Reorganization of historical databases involved first identifying those fishing sites, excluding lakes, that were in the oil spill area. Codes associated with these sites were then used to extract estimates for these sites from the 1984-1989 databases to form a new database. This new database was manipulated to produce the results in this report. Standard errors were estimated by bootstrapping (Efron, 1982) with 1,000 replications.

RESULTS

The entire oil spill area

During the five-year period, 1984-1988, the estimated number of anglers who fished the area where oil was spilled in 1989 increased continuously from 73,037 in 1984 to 120,160 in 1988, a mean increase of 10% per year; the number of household trips increased from 164,985 to 270,956, an increase of 10% per year; the number of days fished increased from 209,075 to 312,521, an increase of 8% per year; and the number of fish harvested increased from 187,157 to 352,630, an increase of 14% per year (Figure 6, Table 7). Similar trends

occurred elsewhere in Alaska—in Southeast Alaska, in the Arctic-Yukon-Kuskokwim region, and in areas of Southcentral Alaska outside the oil spill area (Figures 3-5).

In 1989, the year of the spill, these increasing trends continued except in the oil spill area where participation, effort, and harvest all decreased (Figures 3-6). In the oil spill area, the estimated number of anglers decreased 13% from 120,160 in 1988 to 104,739 in 1989, the number of household trips decreased 15% from 270,956 to 230,520, the number of days fished decreased 6% from 312,521 to 294,598, and the number of fish harvested decreased 10% from 352,630 to 318,981 (Table 1).

Saltwater versus freshwater

Decreases in the spill area from 1988 to 1989 were greatest in saltwater (Tables 3, 6, 9, 20, and 21): number of anglers decreased 13% from 111,046 to 96,653, household trips decreased 21% from 208,762 to 165,189, days fished decreased 10% from 249,134 to 224,502, and fish harvested decreased 12% from 304,979 to 267,259. In freshwater (streams) of the spill area, number of anglers decreased 16% from 22,489 to 18,971; but trips increased 5% from 62,194 to 65,331, days fished increased 11% from 63,387 to 70,096, and fish harvested increased 9% from 47,651 to 51,722 (Tables 6 and 8 and Figures 7 and 8).

Subareas

With the exception of harvest in Prince William Sound, household trips and days fished around Kodiak, and days fished and fish harvested along the Alaska Peninsula, participation, and harvest decreased from 1988 to 1989 in all subareas of the oil spill area (Tables 4, 6, 10-14, 22-26, and 30-45; and Figures 9-13).

In the Prince William Sound subarea the estimated number of anglers decreased 19% from 29,550 to 23,866, the number of household trips decreased 16% from 58,977 to 49,789, the number of days fished decreased 3% from 79,203 to 77,156, but the number of fish harvested increased 17% from 94,867 to 111,155. In the Kenai Peninsula subarea the number of anglers decreased 14% from 85,602 to 73,960, household trips decreased 26% from 145,143 to 107,791, days fished decreased 20% from 165,308 to 132,421, and fish harvested decreased 19% from 159,595 to 128,499.

In the subarea comprising the Westside of Cook Inlet, the number of anglers decreased 35% from 529 to 344, trips decreased 42% from 434 to 253, days fished decreased 46% from 835 to 447, and fish harvested decreased 52% from 871 to 415. In the Kodiak subarea anglers decreased 2% from 12,255 to 11,964, trips increased 10% from 65,040 to 71,692, days fished increased 26% from 66,289 to 83,456, and fish harvested decreased 20% from 96,374 to 77,349. For the Alaska Peninsula subarea anglers decreased by 12% from 249 to 219, trips decreased 27% from 1,362 to 995, but days fished increased by 26% from 886 to 1,118 and fish harvested increased by 69% from 923 to 1,563.

Residency

Participation and harvest decreased from 1988 to 1989 in the oil spill area for local residents of the oil spill area and for Alaskan's residing outside the oil spill area, but increased for nonresidents of Alaska (Tables 5, 15-18, and 27-29, and Figures 14-16).

For local residents of the spill area, the estimated number of anglers decreased 19% from 17,015 to 13,825, the number of household trips decreased 18% from 108,481 to 89,075, the number of days fished increased 1% from 108,544 to 109,877, and the number of fish harvested decreased by 11% from 118,622 to 105,518. For Alaska residents residing outside of the spill area, the number of anglers decreased 18% from 68,214 to 55,771, the number of household trips decreased 21% from 112,133 to 88,956, the number of days fished decreased 19% from 147,697 to 119,870, and the number of fish harvested decreased 15% from 161,076 to 136,867.

For nonresidents of Alaska, the number of anglers fishing the oil spill area increased 1% from 34,931 to 35,142, the number of household trips increased 4% from 50,343 to 52,489, the number of days fished increased 15% from 56,279 to 64,851, and the number of fish harvested increased 5% from 72,929 to 76,596.

Sport fishing by clean-up workers

Many members of households that worked in the clean-up of the oil spill also sport fished in the oil spill area (Table 2). Of 104,739 anglers fishing the oil spill area 10,635 (10%) were oil spill workers. These workers accounted for 20% of all household fishing trips in the area (46,969 of 230,520 trips), 21% of the all days fished (62,250 of 294,598 days), and 24% of all fish harvested (75,827 of 318,981 fish).

Other results

Tabulations of harvest and participation for the oil spill area for 1984 through 1989 are detailed by household type (clean-up or nonclean-up), water type (saltwater or streams), subareas, residency, percentage of Southcentral region totals, and specific fisheries in tables that follow. Angler's comments regarding the oil spill are in Appendix B.

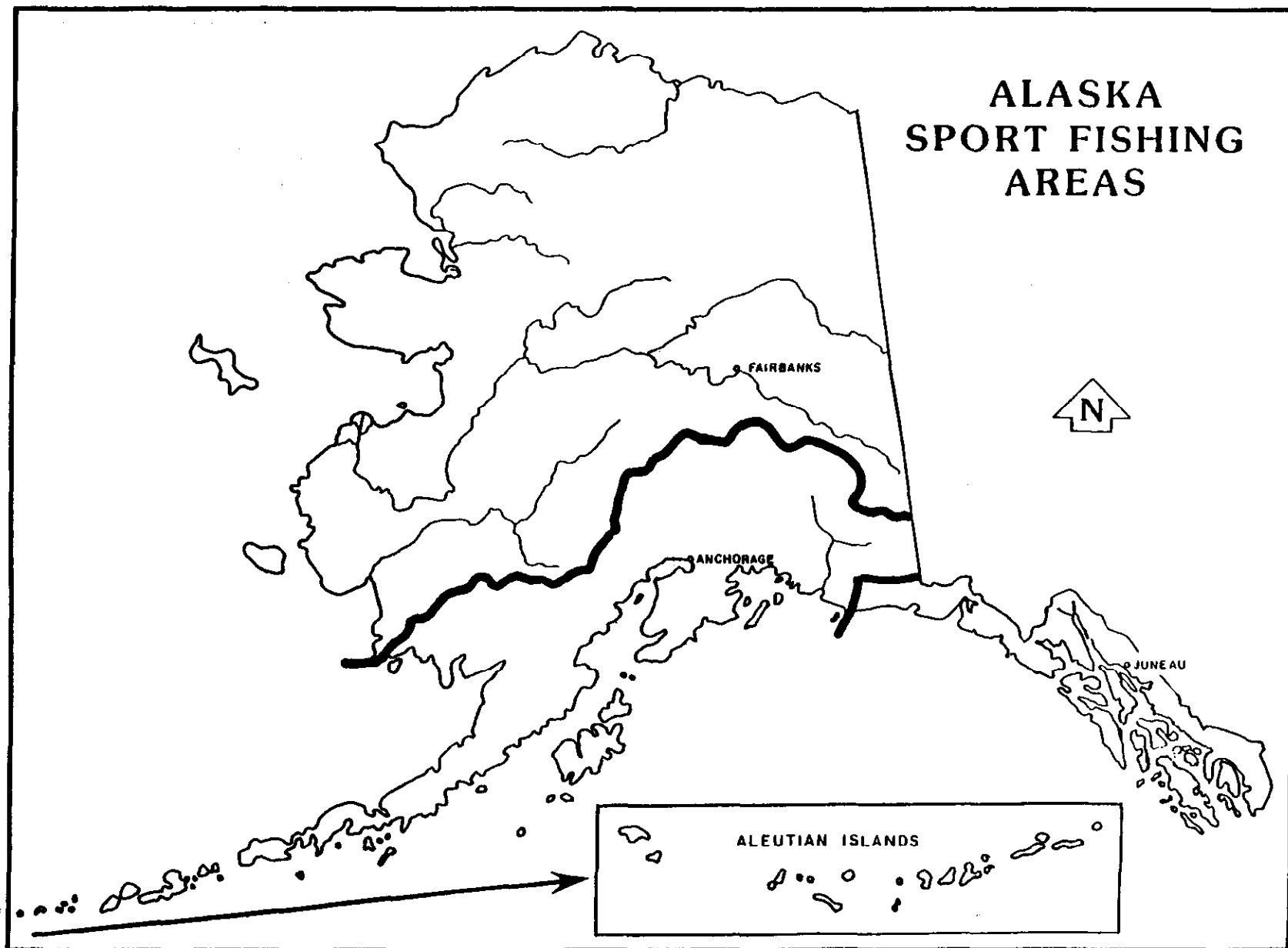


Figure 1. Map of Alaska and Southcentral Alaska.

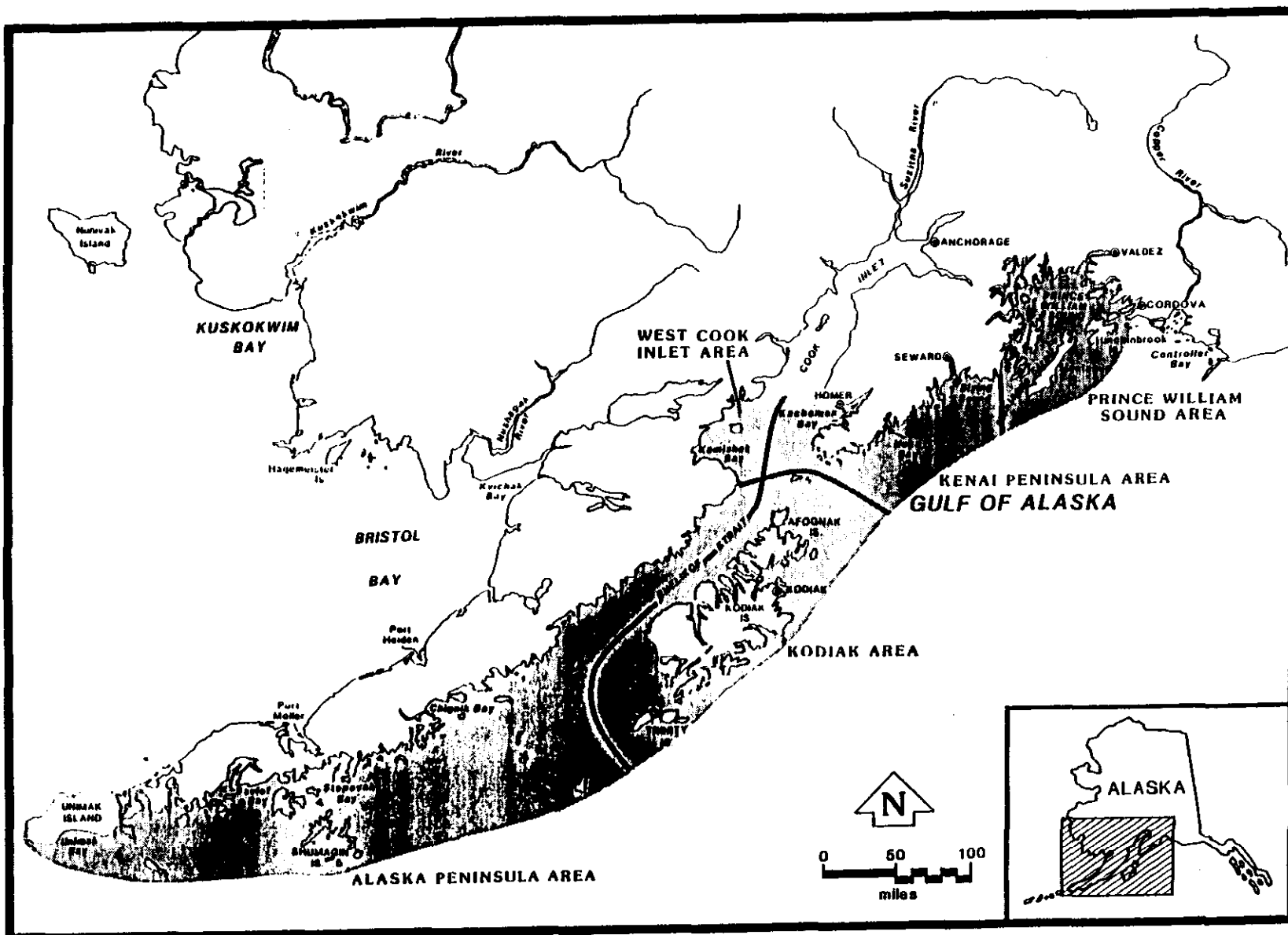


Figure 2. Map of the Exxon Valdez oil spill area.

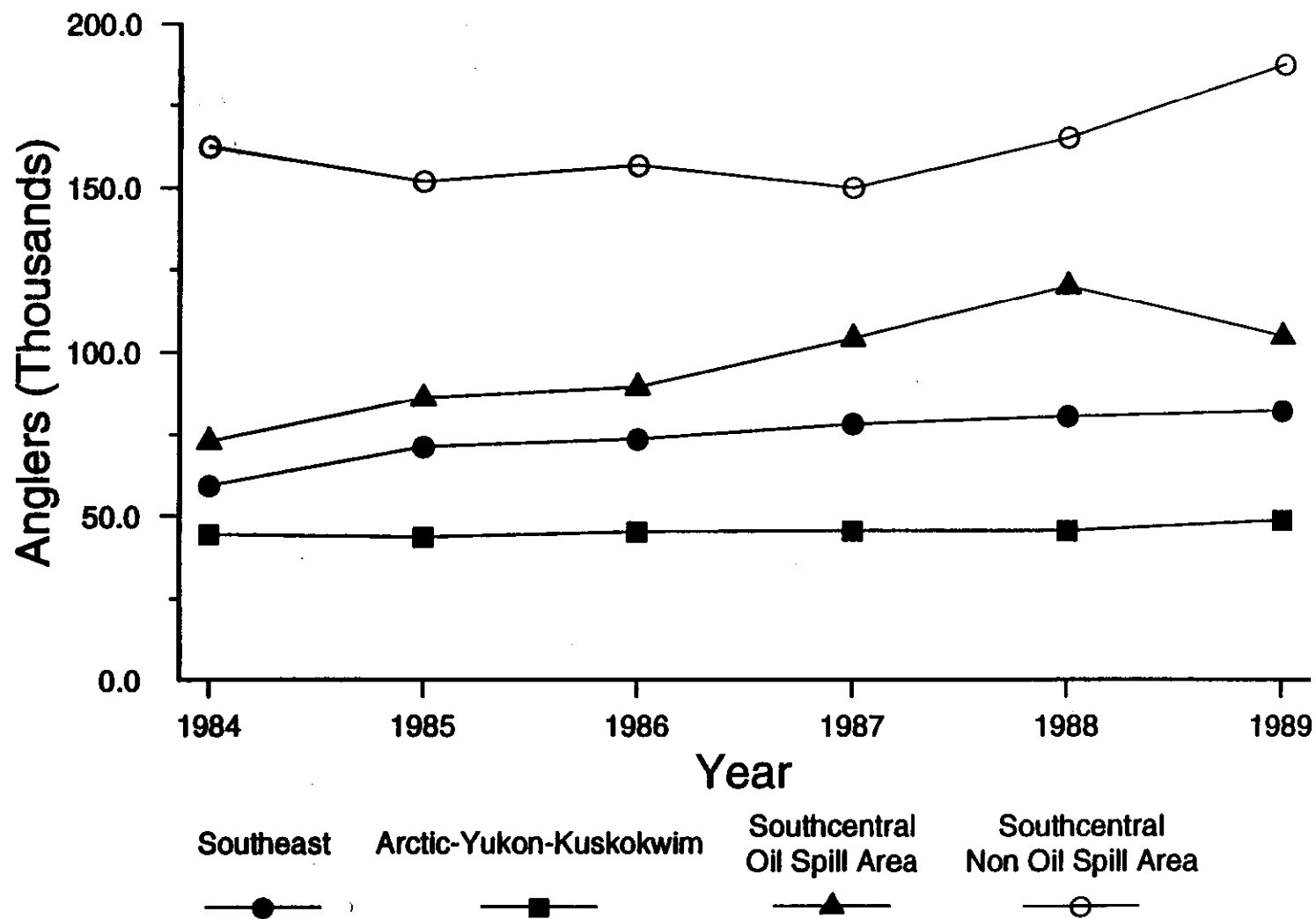


Figure 3. Number of anglers by region and Exxon Valdez oil spill area, 1984-1989.

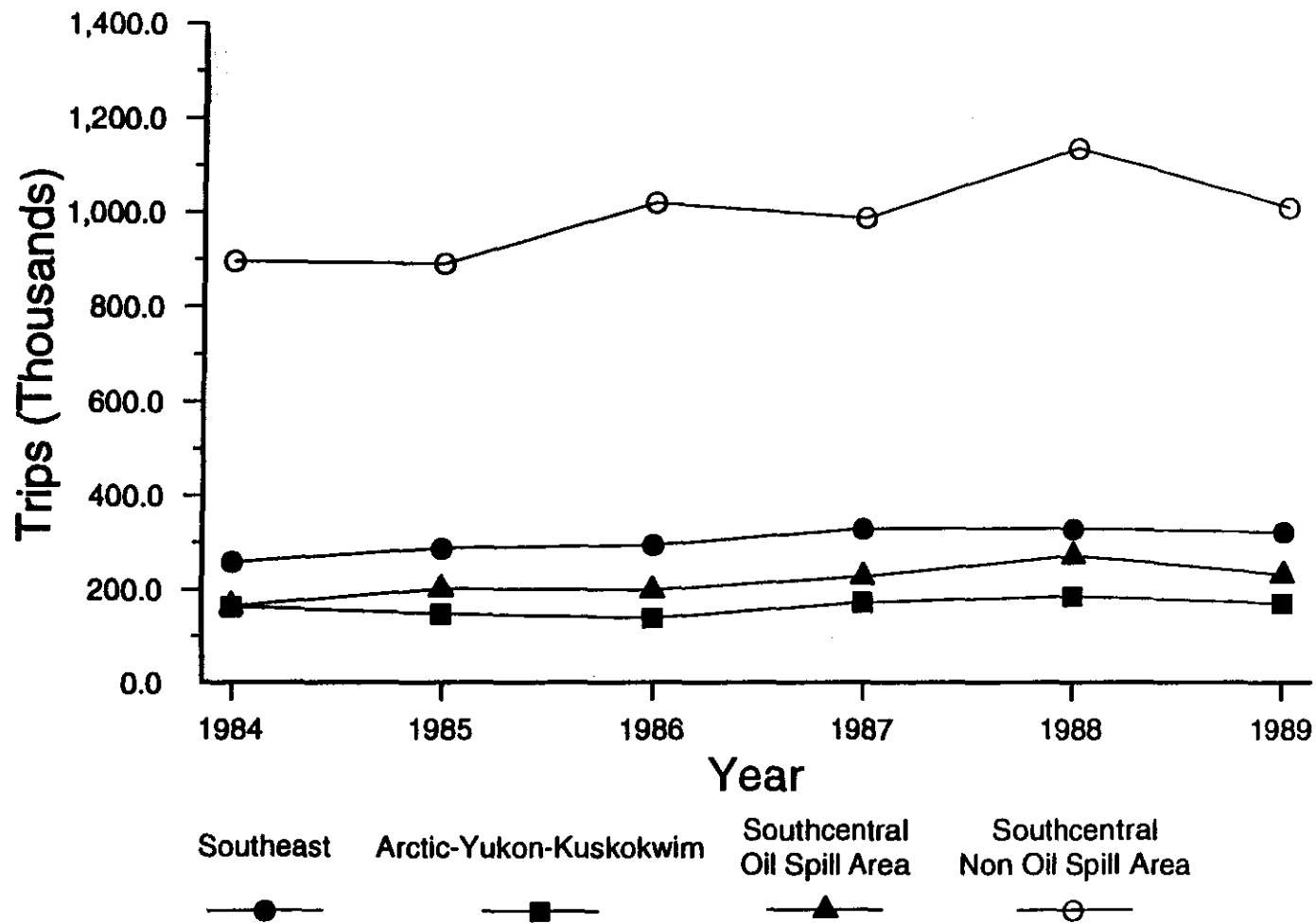


Figure 4. Number of sport fishing trips by region and Exxon Valdez oil spill area, 1984-1989.

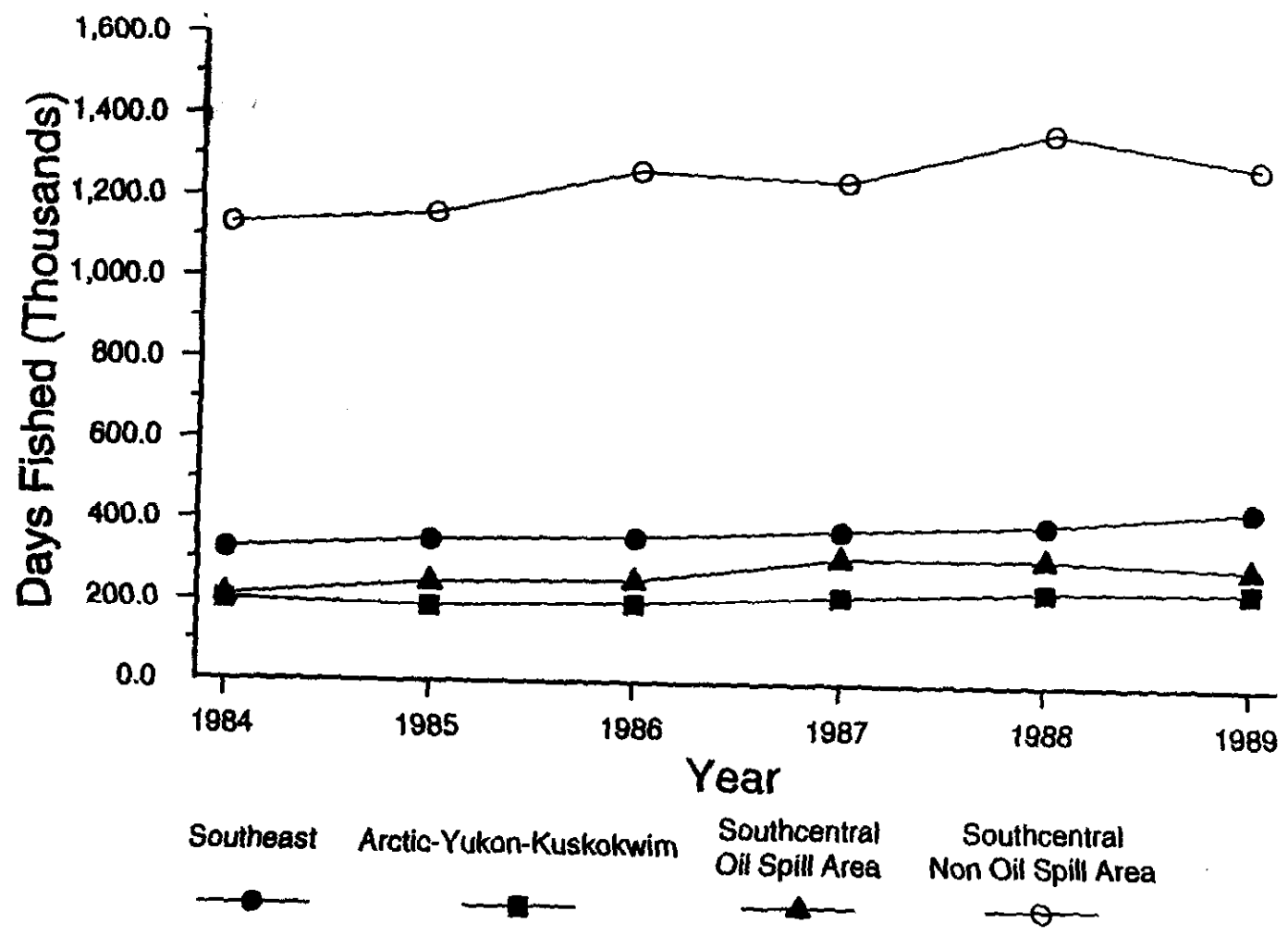


Figure 5. Number of angler-days by region and Exxon Valdez oil spill area, 1984-1989.

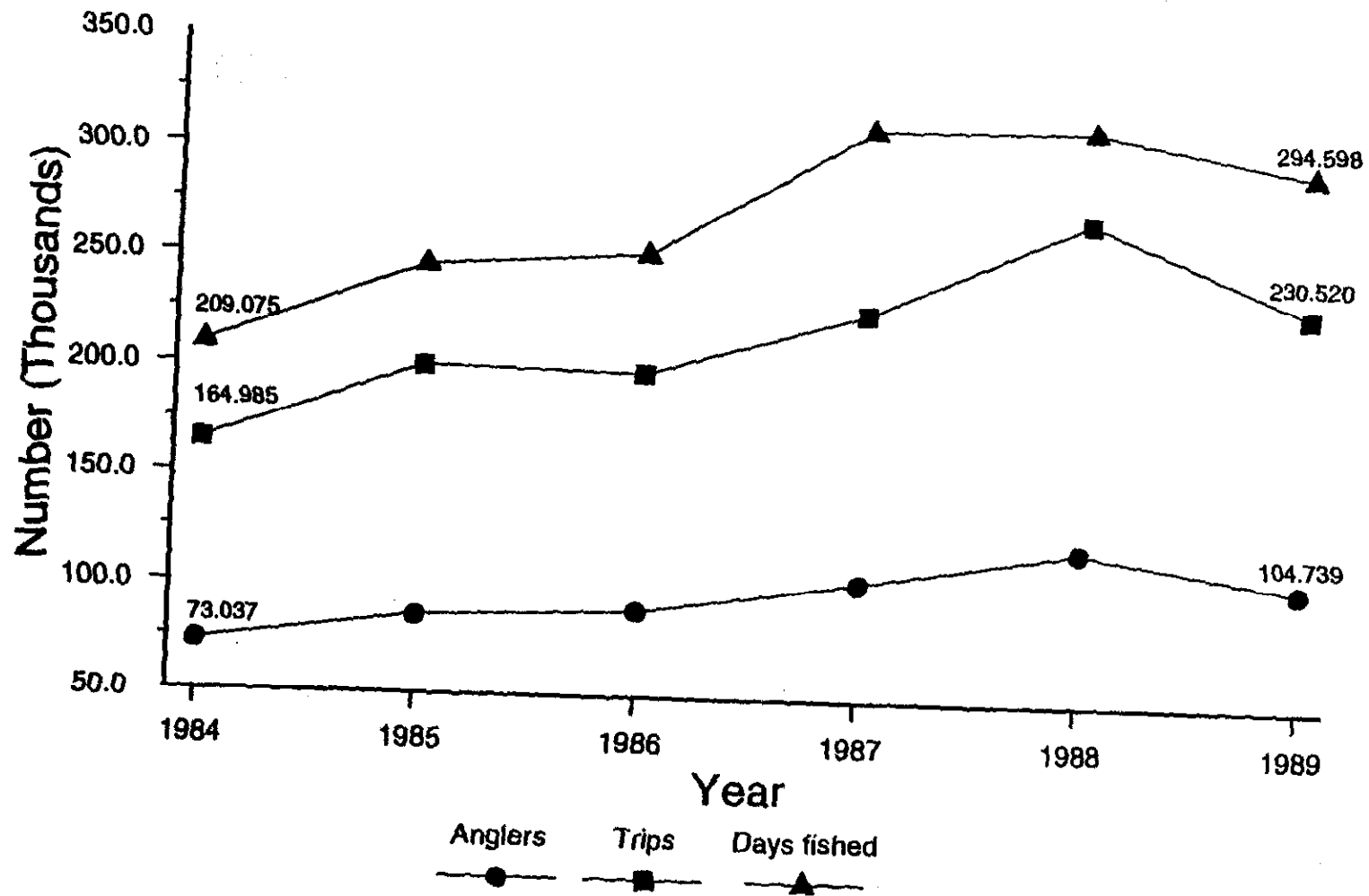


Figure 6. Sport fishing participation for the Exxon Valdez oil spill area, 1984-1989.

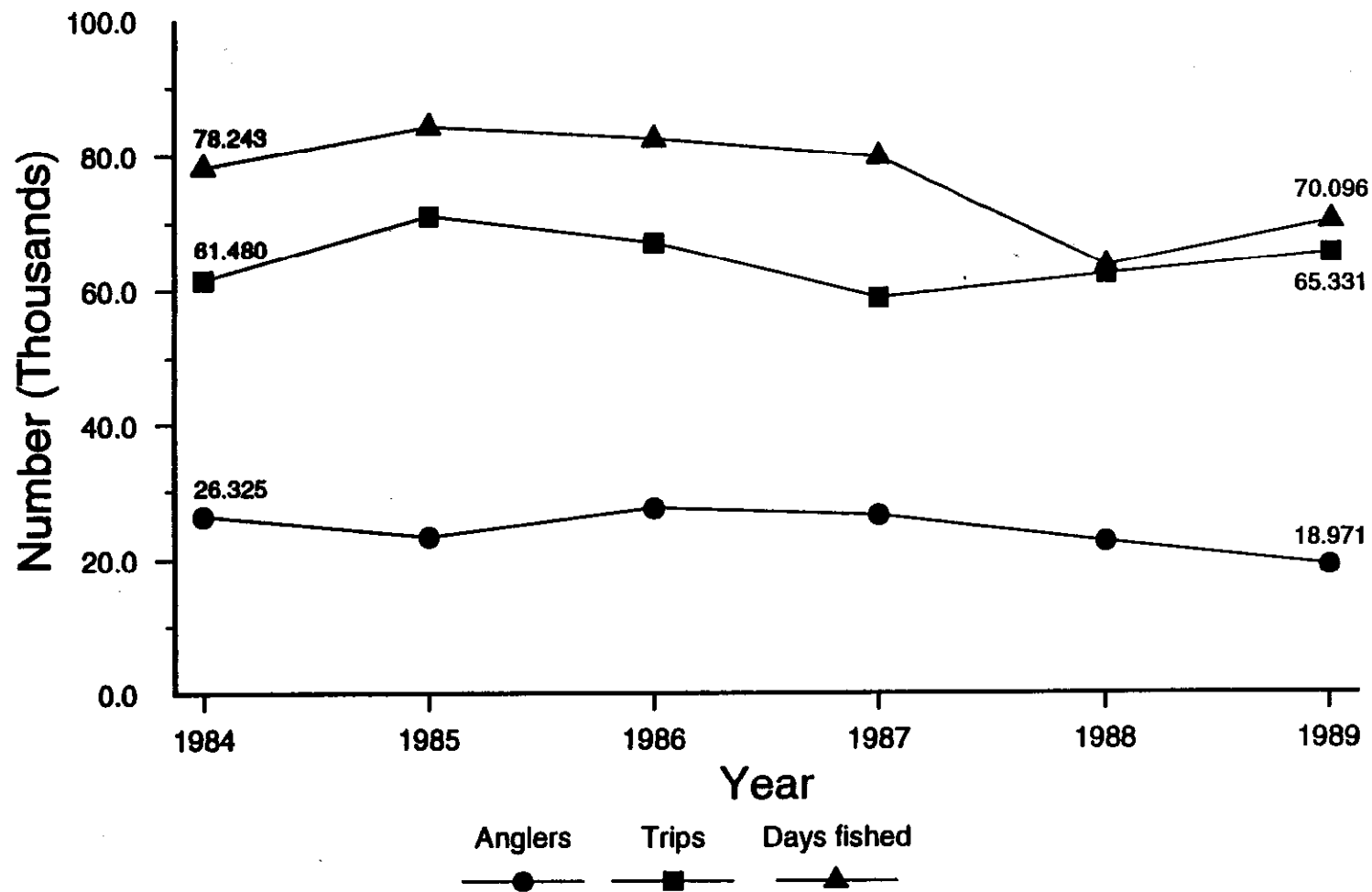


Figure 7. Freshwater sport fishing participation for the Exxon Valdez oil spill area, 1984-1989.

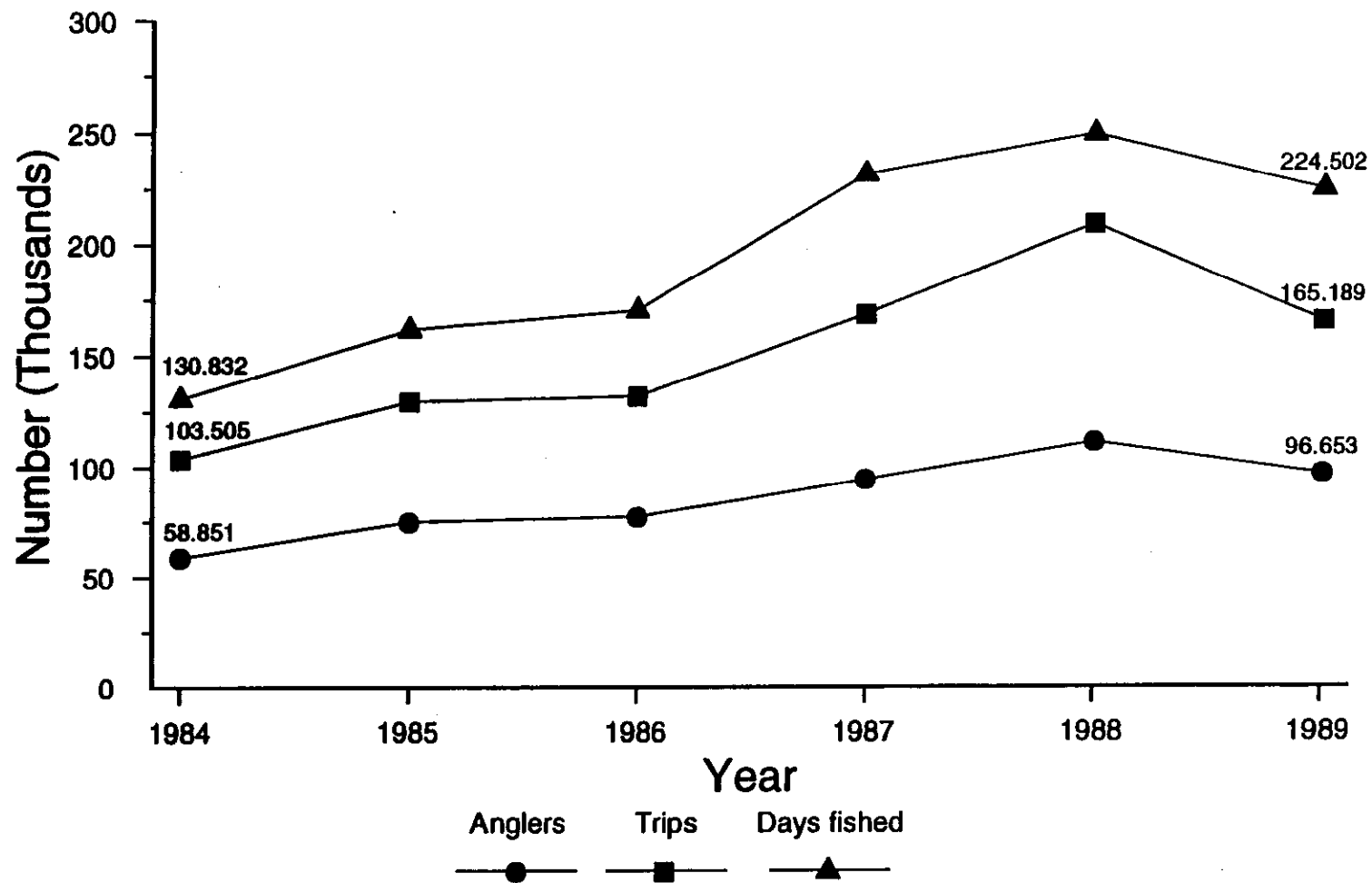


Figure 8. Saltwater sport fishing participation for the Exxon Valdez oil spill area, 1984-1989.

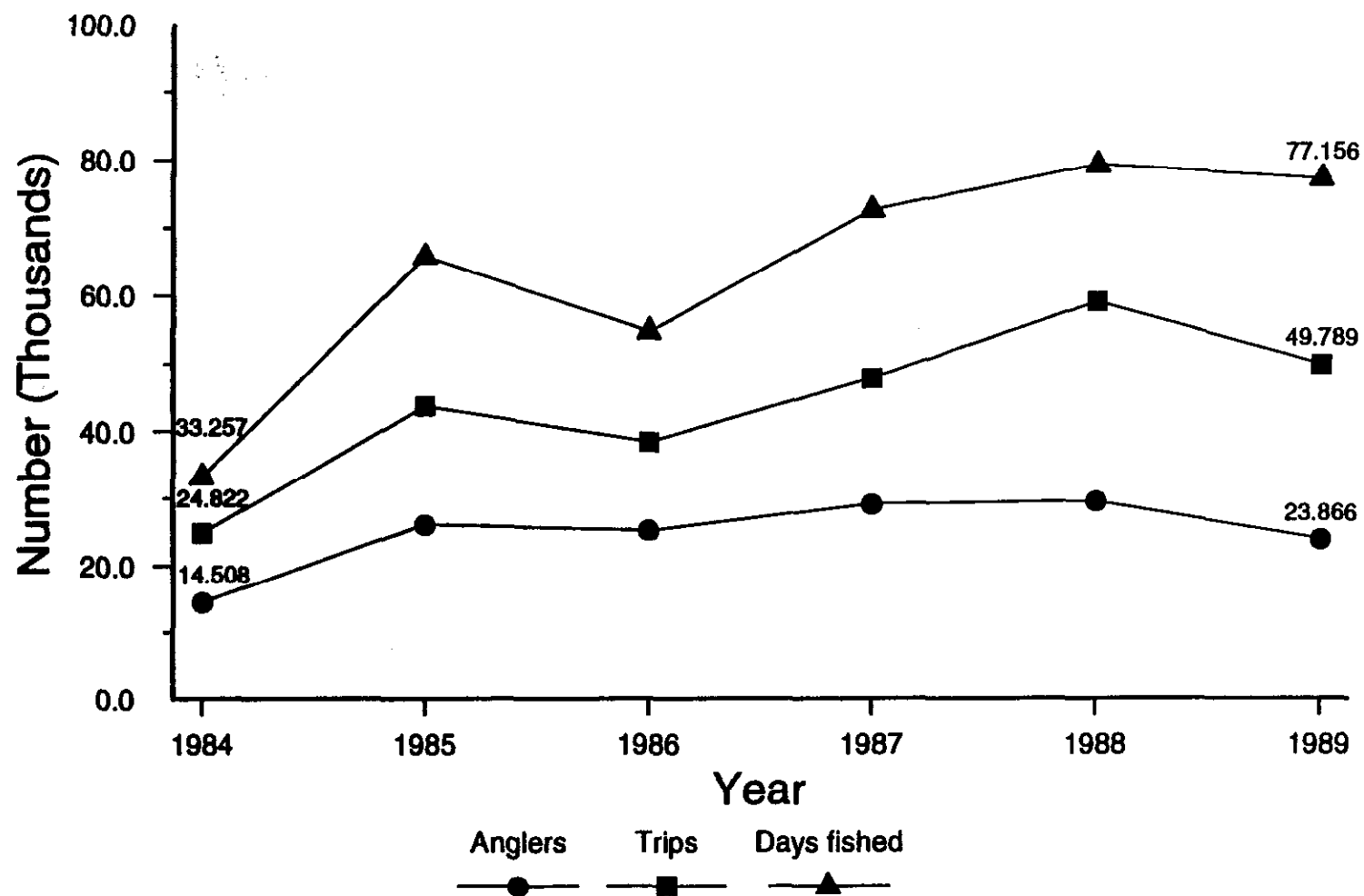


Figure 9. Sport fishing participation in the Prince William Sound subarea of the Exxon Valdez oil spill area, 1984-1989.

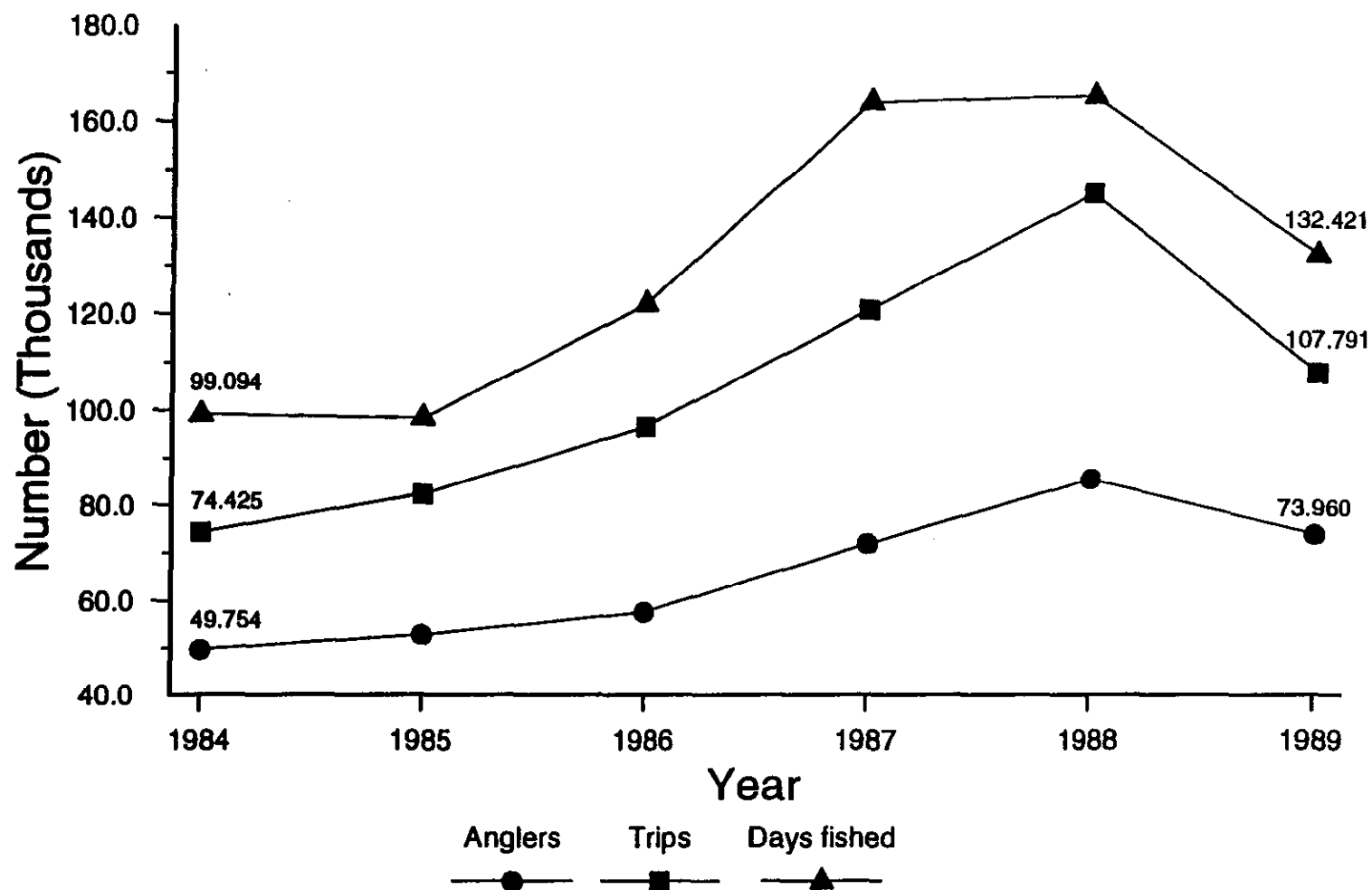


Figure 10. Sport fishing participation in the Kenai Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.

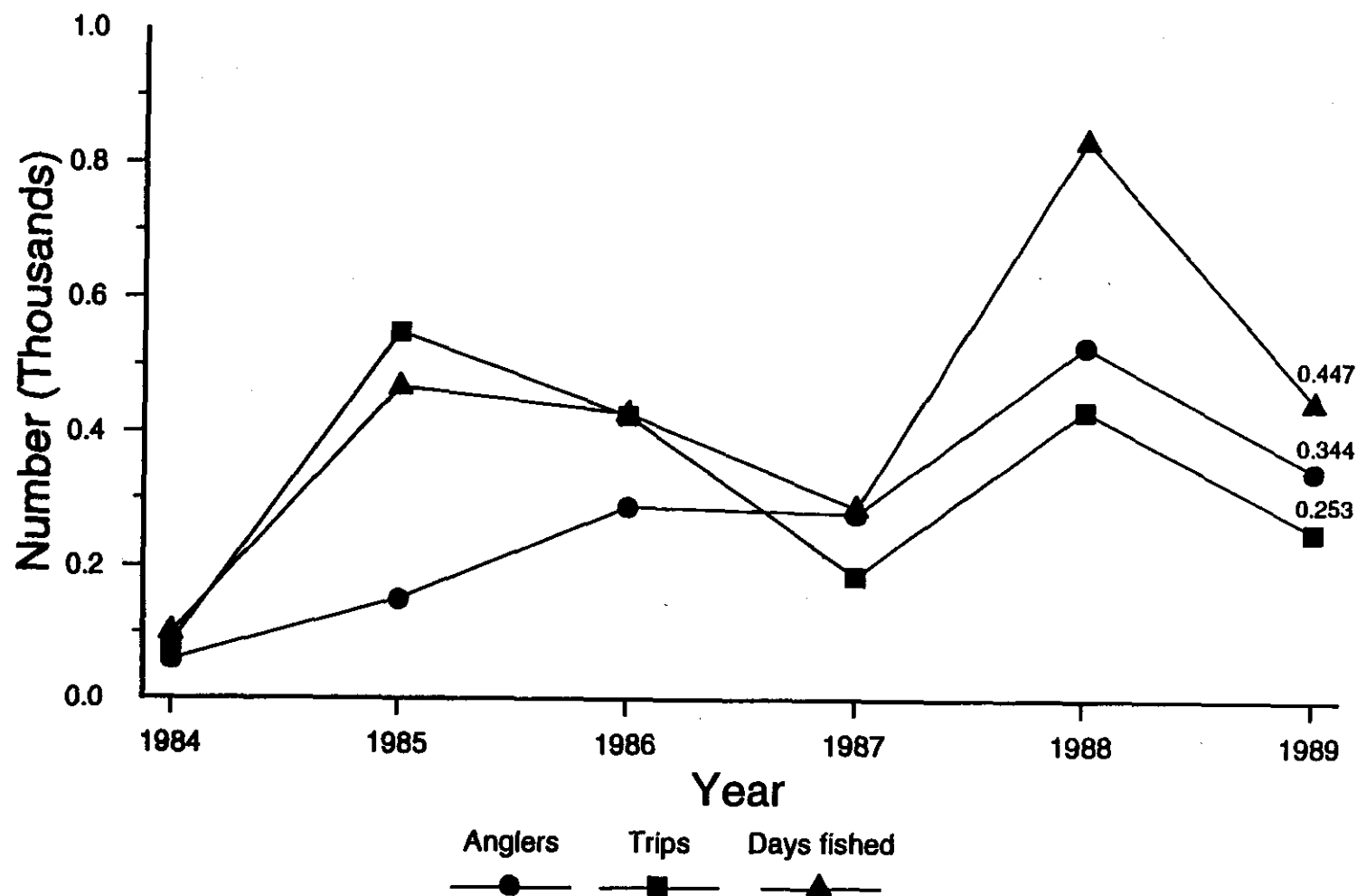


Figure 11. Sport fishing participation in the West Cook Inlet subarea of the Exxon Valdez oil spill area, 1984-1989.

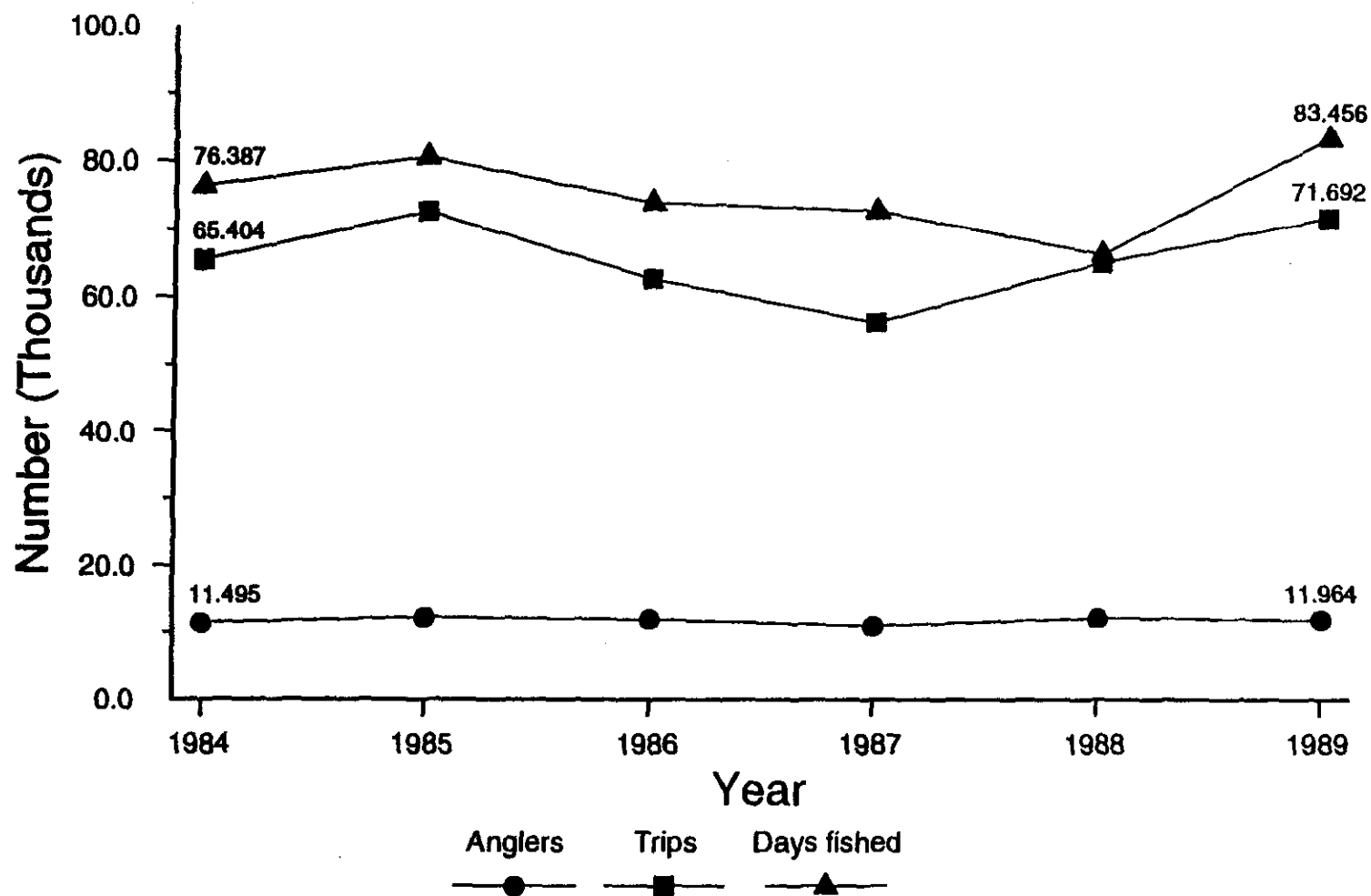


Figure 12. Sport fishing participation in the Kodiak subarea of the Exxon Valdez oil spill area, 1984-1989.

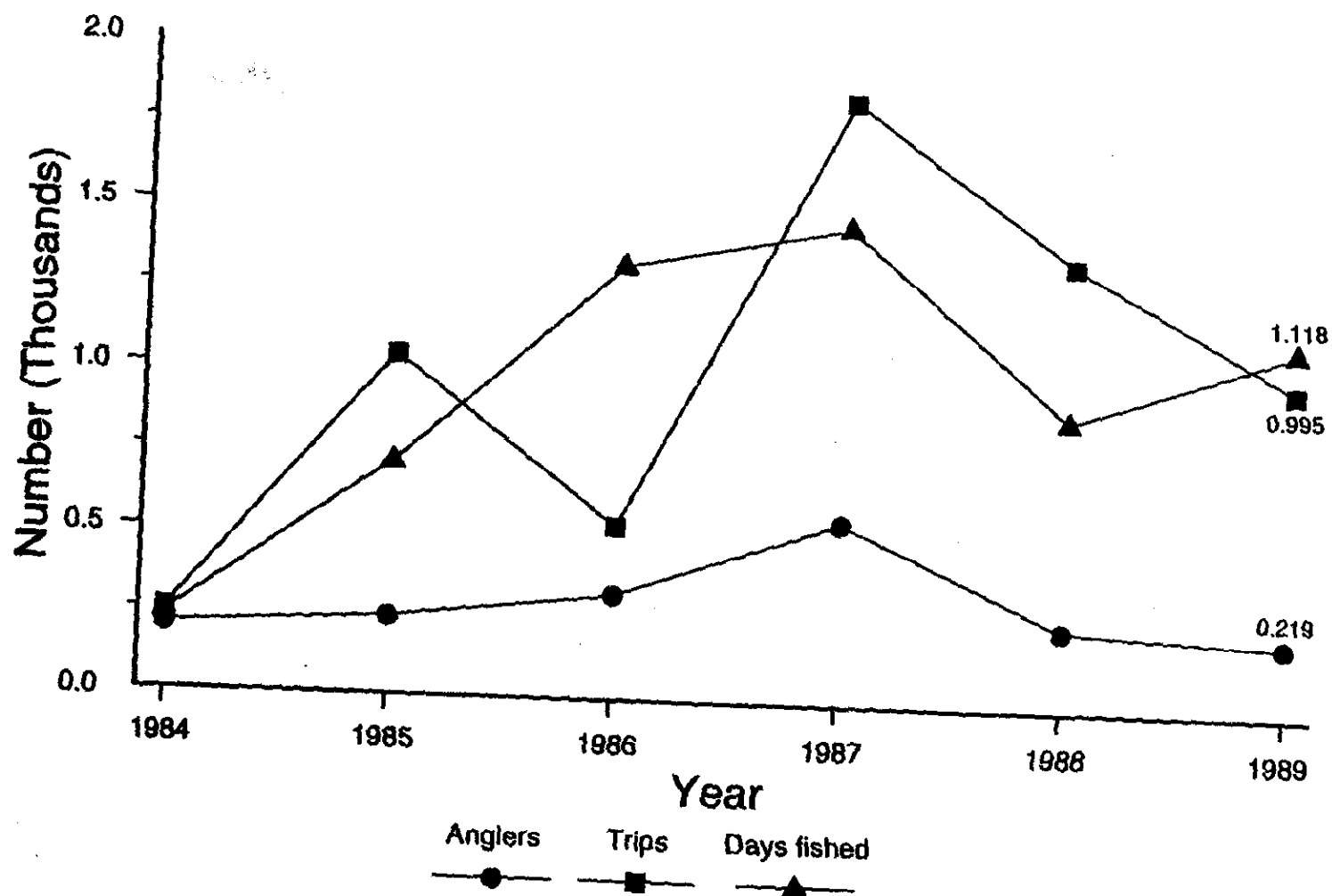


Figure 13. Sport fishing participation in the Alaska Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.

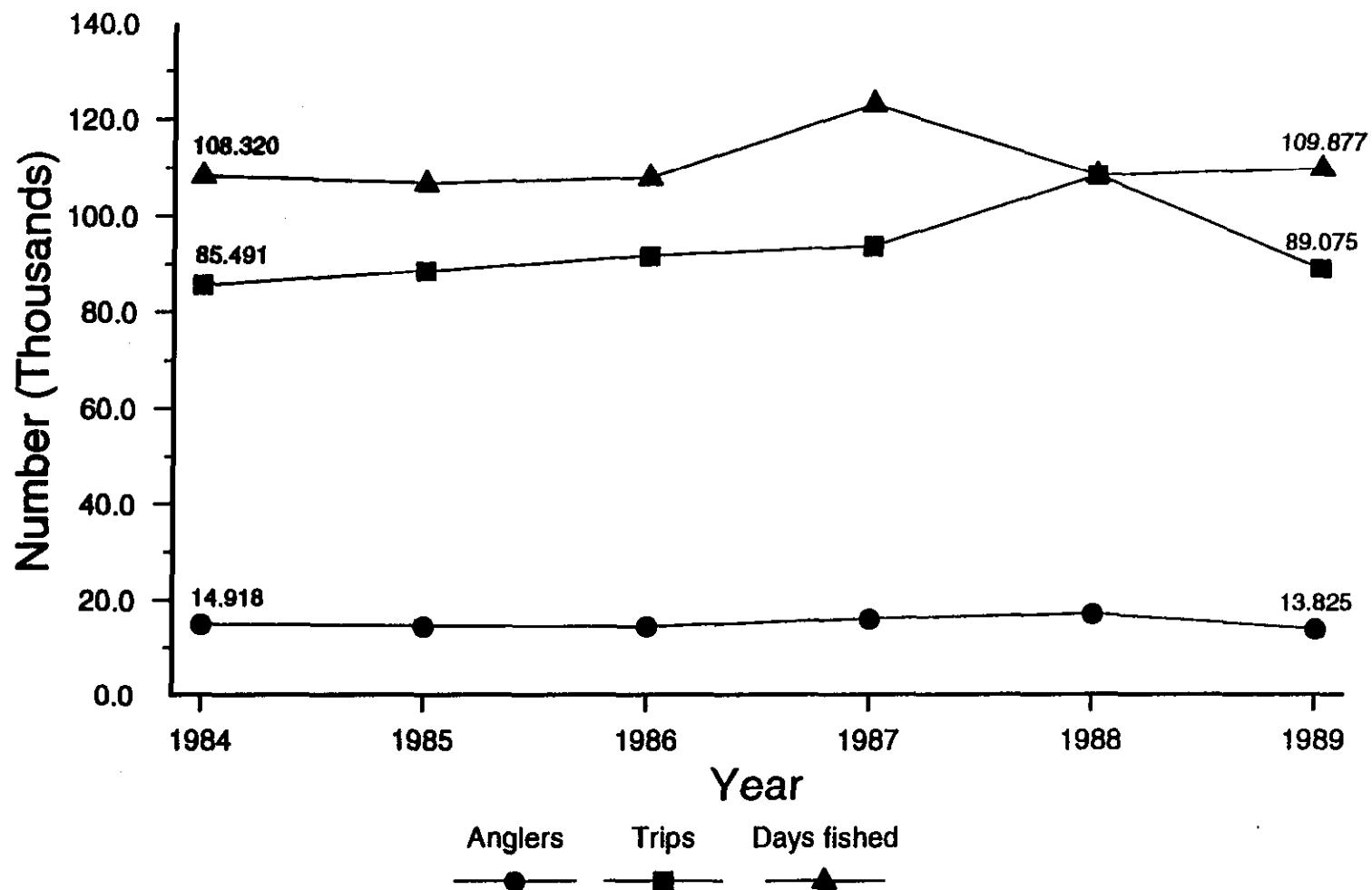


Figure 14. Sport fishing participation by residents of the Exxon Valdez oil spill area, 1984-1989.

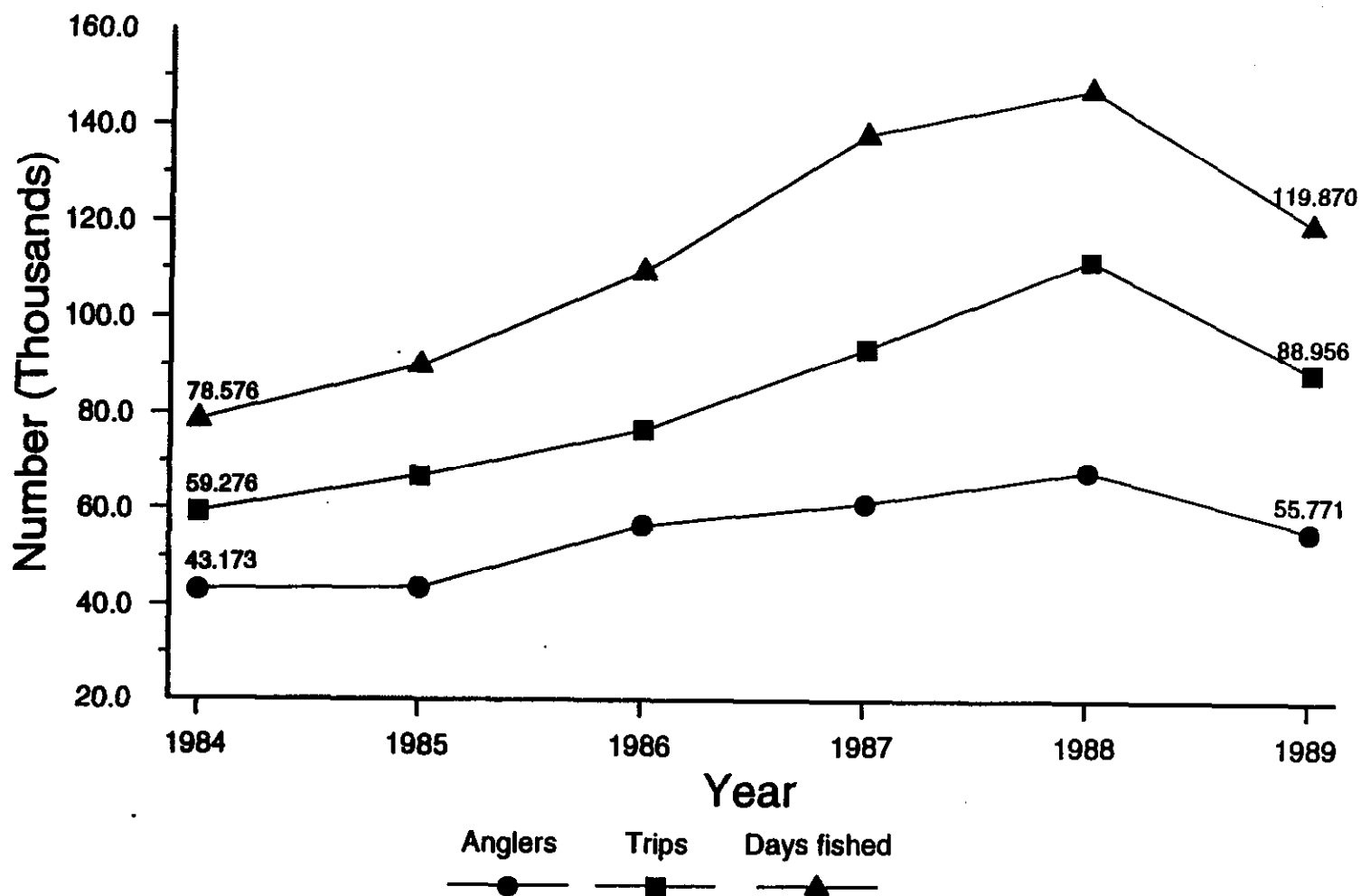


Figure 15. Sport fishing participation in the Exxon Valdez oil spill area by Alaskans residing outside the oil spill area, 1984-1989.

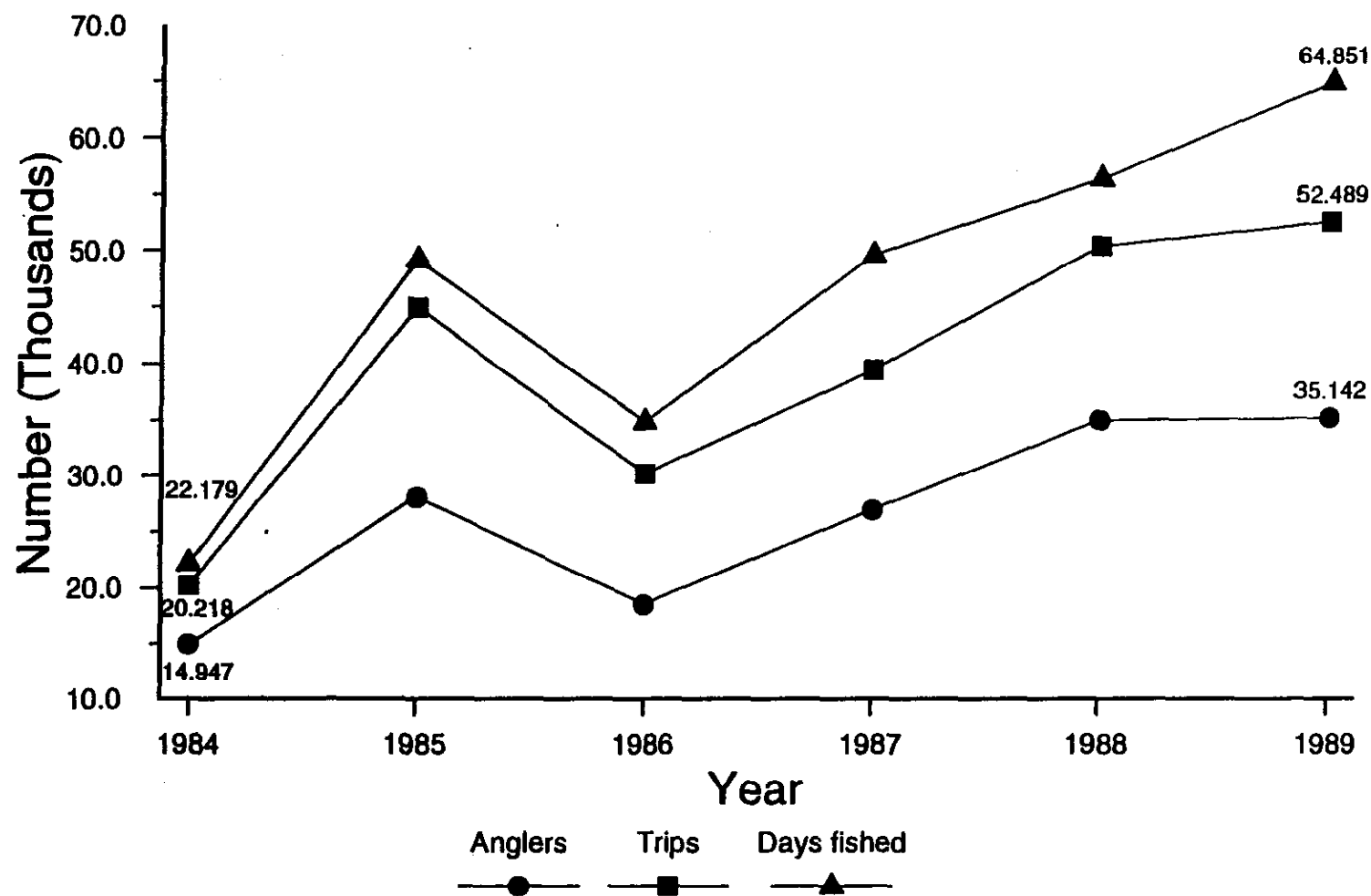


Figure 16. Sport fishing participation in the Exxon Valdez oil spill area by nonresidents of Alaska, 1984-1989.

Table 1. Sport fishing participation and harvest for the Exxon Valdez oil spill area, 1989.

	Total	
	Number	SE ^a
Anglers	104,739	1,798
Trips	230,520	10,725
Days fished	294,598	14,293
Chinook salmon	7,796	765
Coho salmon	47,477	3,423
Sockeye salmon	11,809	1,284
Pink salmon	63,065	4,650
Chum salmon	4,549	716
Steelhead	676	274
Rainbow trout	473	226
Cutthroat trout	494	453
Dolly Varden/Arctic Char	19,862	2,206
Halibut	105,793	5,586
Rockfish	21,431	2,617
Razor clams	1,541	938
Other fish	34,015	15,236

^a SE - standard error of participation or harvest numbers.

Table 2. Sport fishing participation and harvest by household type for the Exxon Valdez oil spill area, 1989.

	Nonclean-up Households			Clean-up Households			Total Households
	Number	Percent	SE*	Number	Percent	SE*	Number
Anglers	94,104	89.9	1,744	10,635	10.1	689	104,739
Trips	183,551	79.6	5,602	46,969	20.4	4,469	230,520
Days fished	232,348	78.9	7,287	62,250	21.1	5,907	294,598
Chinook salmon	6,309	80.9	592	1,487	19.1	296	7,796
Coho salmon	34,324	72.3	2,188	13,153	27.7	1,584	47,477
Sockeye salmon	8,909	75.4	1,001	2,900	24.6	618	11,809
Pink salmon	49,173	78.0	2,937	13,892	22.0	1,851	63,065
Chum salmon	2,748	60.4	368	1,801	39.6	523	4,549
Steelhead	637	94.2	257	39	5.8	28	676
Rainbow trout	412	87.1	218	61	12.9	45	473
Cutthroat trout	475	96.1	486	19	3.9	20	494
Dolly Varden/Arctic Char	13,944	70.2	1,447	5,918	29.8	1,453	19,862
Halibut	94,728	89.5	4,023	11,065	10.5	1,374	105,793
Rockfish	15,939	74.4	2,096	5,492	25.6	971	21,431
Razor clams	228	14.8	179	1,313	85.2	948	1,541
Other fish	15,328	45.1	2,360	18,687	54.9	16,304	34,015

* SE - standard error of participation or harvest numbers.

Table 3. Sport fishing participation and harvest by water type for the Exxon Valdez oil spill area, 1989.

	Freshwater		Saltwater	
	Number	SE*	Number	SE*
Anglers	18,971	811	96,653	1,794
Trips	65,331	6,873	165,189	8,298
Days fished	70,096	7,788	224,502	11,989
Chinook salmon	1,571	485	6,225	604
Coho salmon	17,456	2,021	30,021	2,861
Sockeye salmon	6,176	984	5,633	837
Pink salmon	11,131	1,582	51,934	4,313
Chum salmon	494	133	4,055	703
Steelhead	379	213	297	168
Rainbow trout	473	226	0	0
Cutthroat trout	494	453	0	0
Dolly Varden/Arctic Char	12,965	1,977	6,897	1,032
Halibut	0	0	105,793	5,586
Rockfish	0	0	21,431	2,617
Razor clams	0	0	1,541	938
Other fish	583	301	33,432	15,225

* SE = standard error of participation or harvest numbers.

Table 4. Sport fishing participation and harvest by subarea for the Exxon Valdez oil spill area, 1989.

	Prince William Sound		Kenai Peninsula		West Cook Inlet		Kodiak		Alaska Peninsula	
	Number	SE*	Number	SE*	Number	SE*	Number	SE*	Number	SE*
Anglers	23,866	1,065	73,960	1,469	344	114	11,964	789	219	110
Trips	49,789	5,481	107,791	6,142	253	165	71,692	6,849	995	392
Days fished	77,156	8,206	132,421	8,031	447	320	83,456	8,722	1,118	524
Chinook salmon	1,052	279	5,553	550	0	0	1,087	474	104	85
Coho salmon	21,670	2,648	6,440	920	56	58	18,973	2,053	338	229
Sockeye salmon	3,488	658	1,753	399	43	43	6,499	1,005	26	26
Pink salmon	37,128	3,791	7,731	1,148	0	0	17,582	2,479	624	414
Chum salmon	3,607	684	233	87	0	0	631	165	78	59
Steelhead	39	36	9	9	0	0	628	273	0	0
Rainbow trout	19	18	95	53	0	0	359	223	0	0
Cutthroat trout	494	453	0	0	0	0	0	0	0	0
Dolly Varden/Arctic Char	2,488	680	4,419	919	0	0	12,851	1,881	104	57
Halibut	8,439	1,341	86,503	5,130	316	278	10,435	1,338	100	60
Rockfish	11,975	1,984	4,342	750	0	0	5,070	1,437	44	28
Razor clams	64	64	0	0	0	0	1,477	938	0	0
Other fish	20,692	14,962	11,421	2,201	0	0	1,757	529	145	144

* SE - standard error of participation or harvest numbers.

Table 5. Sport fishing participation and harvest by residency for the Exxon Valdez oil spill area, 1989.

	Resident of Oil Spill Area		Other Alaska		Nonresident of Alaska	
	Number	SE ^a	Number	SE ^a	Number	SE ^a
Anglers	13,825	757	55,771	1,392	35,142	1,064
Trips	89,075	6,387	88,956	3,700	52,489	3,053
Days fished	109,877	8,531	119,870	5,219	64,851	3,236
Chinook salmon	1,582	324	3,389	328	2,825	449
Coho salmon	24,487	2,243	16,552	1,564	6,438	941
Sockeye salmon	4,886	783	3,827	524	3,096	778
Pink salmon	20,569	2,219	26,431	2,222	16,065	1,657
Chum salmon	1,259	384	2,220	491	1,070	216
Steelhead	299	179	78	36	299	218
Rainbow trout	171	92	31	23	271	214
Cutthroat trout	0	0	484	451	10	10
Dolly Varden/Arctic Char	13,023	1,749	3,982	796	2,857	753
Halibut	13,378	1,727	59,111	2,854	33,304	2,360
Rockfish	6,675	1,423	8,876	1,094	5,880	1,559
Razor clams	1,313	903	164	165	64	62
Other fish	17,876	16,165	11,722	2,099	4,417	901

^a SE = standard error of participation or harvest numbers.

Table 6. Sport fishing participation and percentage change from prior year for the Exxon Valdez oil spill area by water type, subarea, and residence, 1984-1989.

	1984	1985	Percent change	1986	Percent change	1987	Percent change	1988	Percent change	1989	Percent change
Entire area											
Anglers	73,037	86,067	17.84	89,494	3.98	104,152	16.38	120,160	15.37	104,739	-12.83
Trips	164,985	200,251	21.38	198,465	-0.89	226,767	14.26	270,956	19.49	230,520	-14.92
Days fished	209,075	245,754	17.54	252,239	2.64	310,812	23.22	312,521	0.55	294,598	-5.73
Freshwater											
Anglers	26,325	23,269	-11.61	27,364	17.60	26,339	-3.75	22,489	-14.62	18,971	-15.64
Trips	61,480	70,944	15.39	66,929	-5.66	58,690	-12.31	62,194	5.97	65,331	5.04
Days fished	78,243	84,211	7.63	82,309	-2.26	79,595	-3.30	63,387	-20.36	70,096	10.58
Saltwater											
Anglers	58,851	74,657	26.86	76,742	2.79	93,919	22.38	111,046	18.24	96,653	-12.96
Trips	103,505	129,307	24.93	131,536	1.72	168,077	27.78	208,762	24.21	165,189	-20.87
Days fished	130,832	161,543	23.47	169,930	5.19	231,217	36.07	249,134	7.75	224,502	-9.89
Prince William Sound											
Anglers	14,508	26,054	79.58	25,153	-3.46	29,060	15.53	29,550	1.69	23,866	-19.24
Trips	24,822	43,653	75.86	38,387	-12.06	47,742	24.37	58,977	23.53	49,789	-15.58
Days fished	33,257	65,648	97.40	54,610	-16.81	72,508	32.77	79,203	9.23	77,156	-2.58
Kenai Peninsula											
Anglers	49,754	52,856	6.24	57,548	8.88	71,970	25.06	85,602	18.94	73,960	-13.60
Trips	74,425	82,396	10.71	96,533	17.16	120,786	25.12	145,143	20.17	107,791	-25.73
Days fished	99,094	98,351	-0.75	122,017	24.06	163,883	34.31	165,308	0.87	132,421	-19.89
Westside Cook Inlet											
Anglers	59	150	154.37	288	92.00	278	-3.47	529	90.29	344	-34.97
Trips	84	548	552.38	425	-22.45	186	-56.24	434	133.33	253	-41.71
Days fished	100	467	367.00	428	-8.35	287	-32.94	835	190.94	447	-46.47

-continued-

Table 6. (Page 2 of 2).

	1984	1985	Percent change	1986	Percent change	1987	Percent change	1988	Percent change	1989	Percent change
Kodiak											
Anglers	11,495	12,368	7.60	12,048	-2.59	11,067	-8.14	12,255	10.73	11,964	-2.37
Trips	65,404	72,615	11.03	62,591	-13.80	56,207	-10.20	65,040	15.72	71,692	10.23
Days fished	76,387	80,577	5.49	73,860	-8.34	72,676	-1.60	66,289	-8.79	83,456	25.90
Alaska Peninsula											
Anglers	205	240	17.07	320	33.33	556	73.75	249	-55.22	219	-12.05
Trips	250	1,039	315.60	529	-49.09	1,846	248.96	1,362	-26.22	995	-26.95
Days fished	237	711	200.00	1,324	86.22	1,458	10.12	886	-39.23	1,118	26.19
Local Alaska											
Anglers	14,918	14,434	-3.24	14,387	-0.33	15,952	10.88	17,015	6.66	13,825	-18.75
Trips	85,491	88,491	3.51	91,645	3.56	93,678	2.22	108,481	15.80	89,075	-17.89
Days fished	108,320	106,637	-1.55	107,950	1.23	123,107	14.04	108,544	-11.83	109,877	1.23
Other Alaska											
Anglers	43,173	43,572	0.92	56,619	29.94	61,273	8.22	68,214	11.33	55,771	-18.24
Trips	59,276	66,827	12.74	76,677	14.74	93,671	22.16	112,133	19.71	88,956	-20.67
Days fished	78,576	90,009	14.55	109,483	21.64	138,158	26.19	147,697	6.90	119,870	-18.84
Nonresident											
Anglers	14,947	28,060	87.73	18,488	-34.11	26,927	45.65	34,931	29.72	35,142	0.60
Trips	20,218	44,932	122.24	30,143	-32.91	39,418	30.77	50,343	27.72	52,489	4.26
Days fished	22,179	49,109	121.42	34,806	-29.13	49,547	42.35	56,279	13.59	64,851	15.23

Table 7. Sport fishing participation and harvest for the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	73,037	86,067	89,494	104,152	120,160	104,739
Trips	164,985	200,251	198,465	226,767	270,956	230,520
Days fished	209,075	245,754	252,239	310,812	312,521	294,598
Chinook salmon	4,406	2,913	3,491	4,899	13,333	7,796
Coho salmon	22,455	27,138	35,525	36,031	37,833	47,477
Sockeye salmon	10,089	11,642	9,921	10,047	10,038	11,809
Pink salmon	27,968	47,840	40,849	45,135	56,703	63,065
Chum salmon	2,755	2,730	3,241	2,601	9,050	4,549
Steelhead	1,408	1,232	719	733	1,235	676
Rainbow trout	934	279	291	292	292	473
Cutthroat trout	573	277	137	290	73	494
Dolly Varden/Arctic Char	37,171	31,177	31,953	16,027	24,847	19,862
Halibut	49,455	56,076	72,852	68,202	123,616	105,793
Rockfish	15,999	16,001	20,394	15,885	32,472	21,431
Razor clams	7,360	6,650	8,532	11,543	4,641	1,541
Other fish	6,584	22,823	46,064	38,724	38,497	34,015

Table 8. Freshwater sport fishing participation and harvest for the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989	SE*
Anglers	26,325	23,269	27,364	26,339	22,489	18,971	811
Trips	61,480	70,944	66,929	58,690	62,194	65,331	6,873
Days fished	78,243	84,211	82,309	79,595	63,387	70,096	7,788
Chinook salmon	1,751	1,421	1,343	1,193	2,488	1,571	485
Coho salmon	8,289	9,543	13,064	11,618	14,093	17,456	2,021
Sockeye salmon	5,106	6,480	5,320	5,143	5,690	6,176	984
Pink salmon	9,999	8,366	9,675	7,208	10,137	11,131	1,582
Chum salmon	547	891	199	604	1,358	494	133
Steelhead	1,284	757	474	534	345	379	213
Rainbow trout	934	279	291	292	292	473	226
Cutthroat trout	573	277	0	163	73	494	453
Dolly Varden/Arctic Char	29,912	25,175	22,185	10,053	13,113	12,965	1,977
Halibut	0	0	0	0	0	0	0
Rockfish	0	0	0	0	0	0	0
Razor clams	0	0	0	0	0	0	0
Other fish	50	35	6,336	616	62	583	301

* SE - standard error of participation or harvest numbers.

Table 9. Saltwater sport fishing participation and harvest for the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989	SE*
Anglers	58,851	74,657	76,742	93,919	111,046	96,653	1,794
Trips	103,505	129,307	131,536	168,077	208,762	165,189	8,298
Days fished	130,832	161,543	169,930	231,217	249,134	224,502	11,989
Chinook salmon	2,655	1,492	2,148	3,706	10,845	6,225	604
Coho salmon	14,166	17,595	22,461	24,413	23,740	30,021	2,861
Sockeye salmon	4,983	5,162	4,601	4,904	4,348	5,633	837
Pink salmon	17,969	39,474	31,174	37,927	46,566	51,934	4,313
Chum salmon	2,208	1,839	3,042	1,997	7,692	4,055	703
Steelhead	124	475	245	199	890	297	168
Rainbow trout	0	0	0	0	0	0	0
Cutthroat trout	0	0	137	127	0	0	0
Dolly Varden/Arctic Char	7,259	6,002	9,768	5,974	11,734	6,897	1,032
Halibut	49,455	56,076	72,852	68,202	123,616	105,793	5,586
Rockfish	15,999	16,001	20,394	15,885	32,472	21,431	2,617
Razor clams	7,360	6,650	8,532	11,543	4,641	1,541	938
Other fish	6,534	22,788	39,728	38,108	38,435	33,432	15,225

* SE - standard error of participation or harvest numbers.

Table 10. Sport fishing participation and harvest in the Prince William Sound subarea of the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year						SE ^a
	1984	1985	1986	1987	1988	1989	1989
Anglers	14,508	26,054	25,153	29,060	29,550	23,866	1,065
Trips	24,822	43,653	38,387	47,742	58,977	49,789	5,481
Days fished	33,257	65,648	54,610	72,508	79,203	77,156	8,206
Chinook salmon	337	348	435	846	443	1,052	279
Coho salmon	6,122	10,190	12,079	13,156	15,260	21,670	2,648
Sockeye salmon	2,482	2,441	4,297	4,220	3,201	3,488	658
Pink salmon	12,182	30,869	24,998	30,769	31,087	37,128	3,791
Chum salmon	1,434	1,628	2,858	1,894	7,237	3,607	684
Steelhead	0	0	0	0	18	39	36
Rainbow trout	0	0	0	0	0	19	18
Cutthroat trout	573	277	137	290	73	494	453
Dolly Varden/Arctic Char	8,578	4,889	5,735	3,421	1,165	2,488	680
Halibut	1,946	4,375	8,026	4,359	9,749	8,439	1,341
Rockfish	5,287	8,810	9,706	6,534	12,591	11,975	1,984
Razor clams	0	1,680	1,468	9,388	27	64	64
Other fish	3,081	18,085	21,301	19,237	14,016	20,692	14,962

^a SE - standard error of participation or harvest numbers.

Table 11. Sport fishing participation and harvest in the Kenai Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year						SE ^a
	1984	1985	1986	1987	1988	1989	1989
Anglers	49,754	52,856	57,548	71,970	85,602	73,960	1,469
Trips	74,425	82,396	96,533	120,786	145,143	107,791	6,142
Days fished	99,094	98,351	122,017	163,883	165,308	132,421	8,031
Chinook salmon	3,118	1,654	2,565	3,567	11,233	5,553	550
Coho salmon	2,755	3,619	2,957	5,005	4,493	6,440	920
Sockeye salmon	2,844	2,235	689	1,642	1,020	1,753	399
Pink salmon	3,106	3,842	1,923	2,480	6,258	7,731	1,148
Chum salmon	12	62	62	54	418	233	87
Steelhead	761	472	459	480	418	9	9
Rainbow trout	224	52	138	253	36	95	53
Cutthroat trout	0	0	0	0	0	0	0
Dolly Varden/Arctic Char	7,470	9,919	6,407	4,473	5,929	4,419	919
Halibut	39,255	44,336	53,379	53,440	105,429	86,503	5,130
Rockfish	2,481	2,500	6,178	2,607	8,512	4,342	750
Razor clams	0	0	0	0	0	0	0
Other fish	1,322	2,792	13,812	9,021	15,849	11,421	2,201

^a SE = standard error of participation or harvest numbers.

Table 12. Sport fishing participation and harvest in the West Cook Inlet subarea of the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year						SE ^a
	1984	1985	1986	1987	1988	1989	1989
Anglers	59	150	288	278	529	344	114
Trips	84	548	425	186	434	253	165
Days fished	100	467	428	287	835	447	320
Chinook salmon	0	0	78	0	0	0	0
Coho salmon	112	100	0	0	73	56	58
Sockeye salmon	0	0	89	0	0	43	43
Pink salmon	0	0	0	0	182	0	0
Chum salmon	0	125	0	18	182	0	0
Steelhead	0	0	0	0	0	0	0
Rainbow trout	0	0	0	0	0	0	0
Cutthroat trout	0	0	0	0	0	0	0
Dolly Varden/Arctic Char	0	52	11	0	0	0	0
Halibut	0	0	212	325	434	316	278
Rockfish	0	0	0	0	0	0	0
Razor clams	0	0	0	0	0	0	0
Other fish	0	0	29	0	0	0	0

^a SE - standard error of participation or harvest numbers.

Table 13. Sport fishing participation and harvest in the Kodiak subarea of the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year						SE ^a
	1984	1985	1986	1987	1988	1989	1989
Anglers	11,495	12,368	12,048	11,067	12,255	11,964	789
Trips	65,404	72,615	62,591	56,207	65,040	71,692	6,849
Days fished	76,387	80,577	73,860	72,676	66,289	83,456	8,722
Chinook salmon	909	737	413	379	1,564	1,087	474
Coho salmon	13,466	12,806	20,245	16,625	17,790	18,973	2,053
Sockeye salmon	4,763	6,929	4,846	3,966	5,786	6,499	1,005
Pink salmon	12,655	13,104	13,928	11,644	18,898	17,582	2,479
Chum salmon	1,309	865	321	542	1,182	631	165
Steelhead	647	760	260	253	799	628	273
Rainbow trout	710	227	153	18	256	359	223
Cutthroat trout	0	0	0	0	0	0	0
Dolly Varden/Arctic Char	20,973	16,317	19,341	8,112	17,735	12,851	1,881
Halibut	8,179	7,303	10,960	9,869	7,749	10,435	1,338
Rockfish	8,231	4,691	4,479	6,501	11,369	5,070	1,437
Razor clams	7,360	4,970	7,064	2,155	4,614	1,477	938
Other fish	2,181	1,946	10,922	9,542	8,632	1,757	529

^a SE - standard error of participation or harvest numbers.

Table 14. Sport fishing participation and harvest in the Alaska Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year						SE ^a
	1984	1985	1986	1987	1988	1989	1989
Anglers	205	240	320	556	249	219	110
Trips	250	1,039	529	1,846	1,362	995	392
Days fished	237	711	1,324	1,458	886	1,118	524
Chinook salmon	42	174	0	107	93	104	85
Coho salmon	0	423	244	1,245	217	338	229
Sockeye salmon	0	37	0	219	31	26	26
Pink salmon	25	25	0	242	278	624	414
Chum salmon	0	50	0	93	31	78	59
Steelhead	0	0	0	0	0	0	0
Rainbow trout	0	0	0	21	0	0	0
Cutthroat trout	0	0	0	0	0	0	0
Dolly Varden/Arctic Char	150	0	459	21	18	104	57
Halibut	75	62	275	209	255	100	60
Rockfish	0	0	31	243	0	44	28
Razor clams	0	0	0	0	0	0	0
Other fish	0	0	0	924	0	145	144

^a SE - standard error of participation or harvest numbers.

Table 15. Sport fishing participation and harvest by residents of the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	14,918	14,434	14,387	15,952	17,015	13,825
Trips	85,491	88,491	91,645	93,678	108,481	89,075
Days fished	108,320	106,637	107,950	123,107	108,544	109,877
Chinook salmon	1,760	1,077	1,155	1,708	4,466	1,582
Coho salmon	14,016	13,481	21,240	18,327	20,775	24,487
Sockeye salmon	5,706	5,567	3,708	2,837	5,513	4,886
Pink salmon	16,094	16,746	16,629	18,255	20,027	20,569
Chum salmon	1,870	926	1,498	325	3,255	1,259
Steelhead	448	233	337	210	603	299
Rainbow trout	386	106	61	52	256	171
Cutthroat trout	524	0	76	127	0	0
Dolly Varden/Arctic Char	26,008	20,247	22,078	8,524	16,835	13,023
Halibut	14,091	9,658	16,908	14,191	23,013	13,378
Rockfish	10,500	4,752	4,437	4,610	12,763	6,675
Razor clams	7,360	5,705	7,431	9,850	4,125	1,313
Other fish	2,537	13,897	8,205	12,893	6,991	17,876

-35-

Table 16. Sport fishing participation and harvest in the Exxon Valdez oil spill area by Alaskan's residing outside the oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	43,173	43,572	56,619	61,273	68,214	55,771
Trips	59,276	66,827	76,677	93,671	112,133	88,956
Days fished	78,576	90,009	109,483	138,158	147,697	119,870
Chinook salmon	1,729	1,031	1,162	1,691	4,576	3,389
Coho salmon	5,992	8,869	9,650	12,408	12,672	16,552
Sockeye salmon	3,411	2,742	4,165	4,617	3,294	3,827
Pink salmon	8,369	14,642	19,071	20,057	22,992	26,431
Chum salmon	710	1,234	1,253	1,885	4,492	2,220
Steelhead	761	420	291	327	533	78
Rainbow trout	524	15	107	142	24	31
Cutthroat trout	37	156	0	163	55	484
Dolly Varden/Arctic Char	8,546	5,793	3,993	4,750	5,231	3,982
Halibut	27,764	30,566	42,874	38,210	71,268	59,111
Rockfish	4,177	6,675	10,871	9,473	16,099	8,876
Razor clams	0	0	612	154	516	164
Other fish	3,405	7,584	32,282	23,329	19,324	11,722

Table 17. Sport fishing participation and harvest in the Exxon Valdez oil spill area by nonresidents of Alaska, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	14,947	28,060	18,488	26,927	34,931	35,142
Trips	20,218	44,932	30,143	39,418	50,343	52,489
Days fished	22,179	49,109	34,806	49,547	56,279	64,851
Chinook salmon	917	806	1,175	1,500	4,291	2,825
Coho salmon	2,447	4,788	4,635	5,296	4,385	6,438
Sockeye salmon	971	3,333	2,049	2,593	1,231	3,096
Pink salmon	3,505	16,451	5,149	6,823	13,684	16,065
Chum salmon	175	570	490	391	1,303	1,070
Steelhead	200	580	92	196	98	299
Rainbow trout	24	158	122	99	12	271
Cutthroat trout	12	121	61	0	18	10
Dolly Varden/Arctic Char	2,617	5,136	5,883	2,753	2,781	2,857
Halibut	7,600	15,852	13,070	15,801	29,335	33,304
Rockfish	1,321	4,574	5,086	1,802	3,610	5,880
Razor clams	0	945	489	1,539	0	64
Other fish	642	1,342	5,578	2,502	12,181	4,417

Table 18. Percentage of Southcentral sport fishing participation and harvest by households that did and did not participate in the oil spill cleanup, 1989.

	Nonclean-up Households	Clean-up Households
Anglers	32.2	3.6
Trips	14.8	3.8
Days fished	14.7	3.9
Chinook salmon	7.1	1.7
Coho salmon	14.5	5.5
Sockeye salmon	2.1	0.7
Pink salmon	54.5	15.4
Chum salmon	13.9	9.1
Steelhead	65.1	4.0
Rainbow trout	0.3	0.0
Cutthroat trout	31.4	1.3
Dolly Varden/Arctic Char	19.9	8.4
Halibut	61.2	7.2
Rockfish	33.7	11.6
Razor clams	0.0	0.1
Other fish	4.4	5.4

Table 19. Percentage of Southcentral Alaska sport fishing participation and harvest in the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	31.0	36.2	36.3	41.0	42.1	35.8
Trips	15.6	18.3	16.3	18.7	19.3	18.6
Days fished	15.6	17.5	16.6	20.0	18.6	18.6
Chinook salmon	7.2	4.6	4.4	5.5	12.8	8.8
Coho salmon	13.5	19.7	18.8	20.4	16.8	20.0
Sockeye salmon	8.5	6.8	5.5	2.1	3.6	2.8
Pink salmon	27.7	70.5	37.5	74.4	52.6	69.9
Chum salmon	17.4	34.6	18.7	20.3	29.7	22.9
Steelhead	59.2	75.4	63.7	59.3	62.4	69.1
Rainbow trout	0.7	0.2	0.3	0.3	0.2	0.4
Cutthroat trout	22.5	30.3	8.5	21.4	11.8	32.7
Dolly Varden/Arctic Char	33.6	34.1	34.1	22.8	31.5	28.3
Halibut	63.4	68.8	62.9	67.2	73.4	68.4
Rockfish	36.5	47.7	34.2	50.8	45.6	45.3
Razor clams	0.6	0.6	0.7	1.0	0.4	0.2
Other fish	1.3	4.8	12.9	11.2	10.9	9.9

Table 20. Percentage of Southcentral Alaska freshwater sport fishing participation and harvest in the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	11.2	9.8	11.1	10.4	7.9	6.5
Trips	5.8	6.5	5.5	4.8	4.4	5.3
Days fished	5.8	6.0	5.4	5.1	3.8	4.4
Chinook salmon	2.9	2.2	1.7	1.3	2.4	1.8
Coho salmon	5.0	6.9	6.9	6.6	6.2	7.4
Sockeye salmon	4.3	3.8	3.0	1.1	2.0	1.5
Pink salmon	9.9	12.3	8.9	11.9	9.4	12.3
Chum salmon	3.5	11.3	1.1	4.7	4.5	2.5
Steelhead	54.0	46.3	42.0	43.2	17.4	38.8
Rainbow trout	0.7	0.2	0.3	0.3	0.2	0.4
Cutthroat trout	22.5	30.3	0.0	12.0	11.8	32.7
Dolly Varden/Arctic Char	27.1	27.6	23.7	14.3	16.6	18.5
Halibut	0.0	0.0	0.0	0.0	0.0	0.0
Rockfish	0.0	0.0	0.0	0.0	0.0	0.0
Razor clams	0.0	0.0	0.0	0.0	0.0	0.0
Other fish	0.0	0.0	1.8	0.2	0.0	0.2

Table 21. Percentage of Southcentral Alaska saltwater sport fishing participation and harvest in the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	25.0	31.4	31.2	36.9	38.9	33.0
Trips	9.8	11.8	10.8	13.9	14.8	13.3
Days fished	9.8	11.5	11.2	14.9	14.8	14.2
Chinook salmon	4.3	2.4	2.7	4.1	10.4	7.1
Coho salmon	8.5	12.8	11.9	13.8	10.5	12.7
Sockeye salmon	4.2	3.0	2.6	1.0	1.5	1.3
Pink salmon	17.8	58.2	28.6	62.5	43.2	57.6
Chum salmon	14.0	23.3	17.5	15.6	25.3	20.4
Steelhead	5.2	29.1	21.7	16.1	45.0	30.4
Rainbow trout	0.0	0.0	0.0	0.0	0.0	0.0
Cutthroat trout	0.0	0.0	8.5	9.4	0.0	0.0
Dolly Varden/Arctic Char	6.6	6.6	10.4	8.5	14.9	9.8
Halibut	63.4	68.8	62.9	67.2	73.4	68.4
Rockfish	36.5	47.7	34.2	50.8	45.6	45.3
Razor clams	0.6	0.6	0.7	1.0	0.4	0.2
Other fish	1.3	4.8	11.1	11.0	10.8	9.7

Table 22. Percentage of Southcentral Alaska sport fishing participation and harvest in the Prince William Sound subarea of the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	6.2	10.9	10.2	11.4	10.4	8.2
Trips	2.3	4.0	3.2	3.9	4.2	4.0
Days fished	2.5	4.7	3.6	4.7	4.7	4.9
Chinook salmon	0.6	0.5	0.5	0.9	0.4	1.2
Coho salmon	3.7	7.4	6.4	7.4	6.8	9.1
Sockeye salmon	2.1	1.4	2.4	0.9	1.1	0.8
Pink salmon	12.1	45.5	22.9	50.7	28.8	41.2
Chum salmon	9.1	20.6	16.5	14.8	23.8	18.2
Steelhead	0.0	0.0	0.0	0.0	0.9	4.0
Rainbow trout	0.0	0.0	0.0	0.0	0.0	0.0
Cutthroat trout	22.5	30.3	8.5	21.4	11.8	32.7
Dolly Varden/Arctic Char	7.8	5.4	6.1	4.9	1.5	3.5
Halibut	2.5	5.4	6.9	4.3	5.8	5.5
Rockfish	12.1	26.2	16.3	20.9	17.7	25.3
Razor clams	0.0	0.1	0.1	0.8	0.0	0.0
Other fish	0.6	3.8	6.0	5.6	4.0	6.0

-42-

ACE 10917333

Table 23. Percentage of Southcentral Alaska sport fishing participation and harvest in the Kenai Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	21.1	22.2	23.4	28.3	30.0	25.3
Trips	7.0	7.5	7.9	10.0	10.3	8.7
Days fished	7.4	7.0	8.0	10.5	9.8	8.4
Chinook salmon	5.1	2.6	3.2	4.0	10.8	6.3
Coho salmon	1.7	2.6	1.6	2.8	2.0	2.7
Sockeye salmon	2.4	1.3	0.4	0.4	0.4	0.4
Pink salmon	3.1	5.7	1.8	4.1	5.8	8.6
Chum salmon	0.1	0.8	0.4	0.4	1.4	1.2
Steelhead	32.0	28.9	40.7	38.8	21.1	0.9
Rainbow trout	0.2	0.0	0.1	0.3	0.0	0.1
Cutthroat trout	0.0	0.0	0.0	0.0	0.0	0.0
Dolly Varden/Arctic Char	6.8	10.9	6.8	6.4	7.5	6.3
Halibut	50.3	54.4	46.1	52.7	62.6	55.9
Rockfish	5.7	7.4	10.4	8.3	11.9	9.2
Razor clams	0.0	0.0	0.0	0.0	0.0	0.0
Other fish	0.3	0.6	3.9	2.6	4.5	3.3

Table 24. Percentage of Southcentral Alaska sport fishing participation and harvest in the West Cook Inlet subarea of the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	0.0	0.1	0.1	0.1	0.2	0.1
Trips	0.0	0.1	0.0	0.0	0.0	0.0
Days fished	0.0	0.0	0.0	0.0	0.1	0.0
Chinook salmon	0.0	0.0	0.1	0.0	0.0	0.0
Coho salmon	0.1	0.1	0.0	0.0	0.0	0.0
Sockeye salmon	0.0	0.0	0.1	0.0	0.0	0.0
Pink salmon	0.0	0.0	0.0	0.0	0.2	0.0
Chum salmon	0.0	1.6	0.0	0.1	0.6	0.0
Steelhead	0.0	0.0	0.0	0.0	0.0	0.0
Rainbow trout	0.0	0.0	0.0	0.0	0.0	0.0
Cutthroat trout	0.0	0.0	0.0	0.0	0.0	0.0
Dolly Varden/Arctic Char	0.0	0.1	0.0	0.0	0.0	0.0
Halibut	0.0	0.0	0.2	0.3	0.3	0.2
Rockfish	0.0	0.0	0.0	0.0	0.0	0.0
Razor clams	0.0	0.0	0.0	0.0	0.0	0.0
Other fish	0.0	0.0	0.0	0.0	0.0	0.0

Table 25. Percentage of Southcentral Alaska sport fishing participation and harvest in the Kodiak subarea of the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	4.9	5.2	4.9	4.4	4.3	4.1
Trips	6.2	6.6	5.1	4.6	4.6	5.8
Days fished	5.7	5.7	4.9	4.7	3.9	5.3
Chinook salmon	1.5	1.2	0.5	0.4	1.5	1.2
Coho salmon	8.1	9.3	10.7	9.4	7.9	8.0
Sockeye salmon	4.0	4.1	2.7	0.8	2.1	1.5
Pink salmon	12.5	19.3	12.8	19.2	17.5	19.5
Chum salmon	8.3	11.0	1.8	4.2	3.9	3.2
Steelhead	27.2	46.5	23.1	20.5	40.4	64.2
Rainbow trout	0.6	0.2	0.1	0.0	0.2	0.3
Cutthroat trout	0.0	0.0	0.0	0.0	0.0	0.0
Dolly Varden/Arctic Char	19.0	17.9	20.7	11.5	22.5	18.3
Halibut	10.5	9.0	9.5	9.7	4.6	6.7
Rockfish	18.8	14.0	7.5	20.8	15.9	10.7
Razor clams	0.6	0.4	0.5	0.2	0.4	0.2
Other fish	0.4	0.4	3.1	2.8	2.4	0.5

Table 26. Percentage of Southcentral Alaska sport fishing participation and harvest in the Alaska Peninsula subarea of the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	0.1	0.1	0.1	0.2	0.1	0.1
Trips	0.0	0.1	0.0	0.2	0.1	0.1
Days fished	0.0	0.1	0.1	0.1	0.1	0.1
Chinook salmon	0.1	0.3	0.0	0.1	0.1	0.1
Coho salmon	0.0	0.3	0.1	0.7	0.1	0.1
Sockeye salmon	0.0	0.0	0.0	0.0	0.0	0.0
Pink salmon	0.0	0.0	0.0	0.4	0.3	0.7
Chum salmon	0.0	0.6	0.0	0.7	0.1	0.4
Steelhead	0.0	0.0	0.0	0.0	0.0	0.0
Rainbow trout	0.0	0.0	0.0	0.0	0.0	0.0
Cutthroat trout	0.0	0.0	0.0	0.0	0.0	0.0
Dolly Varden/Arctic Char	0.1	0.0	0.5	0.0	0.0	0.1
Halibut	0.1	0.1	0.2	0.2	0.2	0.1
Rockfish	0.0	0.0	0.1	0.8	0.0	0.1
Razor clams	0.0	0.0	0.0	0.0	0.0	0.0
Other fish	0.0	0.0	0.0	0.3	0.0	0.0

Table 27. Percentage of Southcentral Alaska sport fishing participation and harvest by residents of the Exxon Valdez oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	6.3	6.1	5.8	6.3	6.0	4.7
Trips	8.1	8.1	7.5	7.7	7.7	7.2
Days fished	8.1	7.6	7.1	7.9	6.5	6.9
Chinook salmon	2.9	1.7	1.4	1.9	4.3	1.8
Coho salmon	8.4	9.8	11.2	10.4	9.2	10.3
Sockeye salmon	4.8	3.3	2.1	0.6	2.0	1.2
Pink salmon	15.9	24.7	15.2	30.1	18.6	22.8
Chum salmon	11.8	11.7	8.6	2.5	10.7	6.3
Steelhead	18.8	14.2	29.8	17.0	30.5	30.6
Rainbow trout	0.3	0.1	0.1	0.1	0.2	0.1
Cutthroat trout	20.6	0.0	4.7	9.4	0.0	0.0
Dolly Varden/Arctic Char	23.5	22.2	23.6	12.1	21.3	18.5
Halibut	18.1	11.9	14.6	14.0	13.7	8.6
Rockfish	24.0	14.2	7.4	14.7	17.9	14.1
Razor clams	0.6	0.5	0.6	0.9	0.3	0.1
Other fish	0.5	2.9	2.3	3.7	2.0	5.2

Table 28. Percentage of Southcentral Alaska sport fishing participation and harvest in the Exxon Valdez oil spill area by Alaskans residing outside the oil spill area, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	18.3	18.3	23.0	24.1	23.9	19.1
Trips	5.6	6.1	6.3	7.7	8.0	7.2
Days fished	5.9	6.4	7.2	8.9	8.8	7.6
Chinook salmon	2.8	1.6	1.5	1.9	4.4	3.8
Coho salmon	3.6	6.4	5.1	7.0	5.6	7.0
Sockeye salmon	2.9	1.6	2.3	1.0	1.2	0.9
Pink salmon	8.3	21.6	17.5	33.1	21.3	29.3
Chum salmon	4.5	15.6	7.2	14.7	14.8	11.2
Steelhead	32.0	25.7	25.8	26.4	26.9	8.0
Rainbow trout	0.4	0.0	0.1	0.1	0.0	0.0
Cutthroat trout	1.5	17.0	0.0	12.0	8.8	32.0
Dolly Varden/Arctic Char	7.7	6.3	4.3	6.7	6.6	5.7
Halibut	35.6	37.5	37.0	37.7	42.3	38.2
Rockfish	9.5	19.9	18.2	30.3	22.6	18.8
Razor clams	0.0	0.0	0.0	0.0	0.0	0.0
Other fish	0.7	1.6	9.1	6.7	5.5	3.4

Table 29. Percentage of Southcentral Alaska sport fishing participation and harvest in the Exxon Valdez oil spill area by nonresidents of Alaska, 1984-1989.

	1984	1985	1986	1987	1988	1989
Anglers	6.3	11.8	7.5	10.6	12.2	12.0
Trips	1.9	4.1	2.5	3.2	3.6	4.2
Days fished	1.7	3.5	2.3	3.2	3.4	4.1
Chinook salmon	1.5	1.3	1.5	1.7	4.1	3.2
Coho salmon	1.5	3.5	2.5	3.0	1.9	2.7
Sockeye salmon	0.8	1.9	1.1	0.6	0.4	0.7
Pink salmon	3.5	24.3	4.7	11.2	12.7	17.8
Chum salmon	1.1	7.2	2.8	3.1	4.3	5.4
Steelhead	8.4	35.5	8.1	15.9	5.0	30.6
Rainbow trout	0.0	0.1	0.1	0.1	0.0	0.2
Cutthroat trout	0.5	13.2	3.8	0.0	2.9	0.7
Dolly Varden/Arctic Char	2.4	5.6	6.3	3.9	3.5	4.1
Halibut	9.7	19.5	11.3	15.6	17.4	21.5
Rockfish	3.0	13.6	8.5	5.8	5.1	12.4
Razor clams	0.0	0.1	0.0	0.1	0.0	0.0
Other fish	0.1	0.3	1.6	0.7	3.4	1.3

Table 30. Number of anglers by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	8,657	11,980	7,563	8,988	10,829	10,336	807
Passage Canal (Whittier)	3,062	2,764	4,438	4,094	4,301	2,408	675
Orca Inlet	176	224	555	246	1,083	510	221
Boat - Other	620	1,948	2,158	3,266	3,718	2,940	406
Saltwater shoreline							
Valdez Arm and Road System	--	7,457	7,183	13,851	14,250 ^c	12,848 ^c	589
Passage Canal (Whittier)	--	362	759	646	309	271	196
Orca Inlet	--	195	526	431	278	447	154
Shoreline - Other	90	585	1,134	1,232	991	624	158
Saltwater Total	12,402 ^c	24,736 ^c	23,583 ^c	27,452 ^c	28,804 ^c	22,928 ^c	994
Freshwater							
Kahamy Creek and Lagoon	824	586	1,022	739	402	191	158
Coghill River	758	755	847	985	371	415	166
Roba River	824	224	818	215	217	112	66
Other Streams	1,910	639	874	1,354	527	751	174
Freshwater Total	3,686 ^c	2,156 ^c	3,493 ^c	3,030 ^c	1,431 ^c	1,408 ^c	208
Subarea Total	14,508 ^c	26,054 ^c	25,153 ^c	29,060 ^c	29,550 ^c	23,866 ^c	1,065
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	4,380	6,895	9,065	6,401	1,033
Halibut Cove - Charter Boat	--	--	13,695	18,530	23,886	23,159	2,307
Halibut Cove - Private Boat	--	--	6,190	8,187	9,808	8,155	1,178
Tutka Bay - Charter Boat	--	--	--	3,170	3,527	2,955	814
Tutka Bay - Private Boat	--	--	--	2,739	2,723	1,874	534
Other Kachemak Bay - Charter Boat	--	--	7,680	11,327	12,933	9,189	1,032
Other Kachemak Bay - Private Boat	--	--	7,650	10,250	11,169	6,805	1,240
Kachemak Bay Subtotal	39,162	45,218	39,595 ^c	53,691 ^c	62,562 ^c	54,365 ^c	1,523

-continued-

Table 30. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	409	431	248	449	228
Anchor River Area - Private Boat	--	--	6,278	8,372	8,292	5,771	882
Anchor River Subtotal	1,295	2,040	6,687 ^c	8,748 ^c	8,540 ^c	6,220 ^c	466
Cook Inlet							
Cook Inlet - Charter Boat	--	--	642	893	1,331	1,299	426
Cook Inlet - Private Boat	--	--	380	523	990	300	226
Cook Inlet Subtotal	176	324	1,022 ^c	1,414 ^c	1,462 ^c	1,599 ^c	239
Boat - Other							
Boat - Other Charter	--	--	175	647	248	772	232
Boat - Other Private	--	--	845	1,077	155	690	178
Boat - Other Subtotal	558	941	1,020 ^c	1,724 ^c	403 ^c	1,462 ^c	274
Saltwater shoreline							
Tutka Bay	--	--	--	646	897	720	217
Homer Spit	--	--	4,467	7,172	15,037	11,842	1,551
Seldovia Bay	--	33	234	92	495	285	110
Shoreline - Other	324	1,849	145	309	372	585	177
Saltwater Total	40,248 ^c	45,549 ^c	48,224 ^c	64,952 ^c	80,501 ^c	69,346 ^c	1,488
Freshwater							
Anchor River	14,870	12,923	14,074	15,821	12,747	9,797	1,411
Other Streams	676	426	292	555	651	236	113
Freshwater Total	15,210 ^c	12,158 ^c	14,366 ^c	16,376 ^c	13,251 ^c	9,916 ^c	598
Subarea Total	49,754 ^c	52,856 ^c	57,548 ^c	71,970 ^c	85,602 ^c	73,960 ^c	1,469

-continued-

Table 30. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	33	175	184	434	267	271
Saltwater shoreline	0	0	29	31	31	0	0
Saltwater Total	0 ^c	30 ^c	204 ^c	215 ^c	465 ^c	266 ^c	116
Freshwater streams	58	164	58	62	62	79	42
Freshwater Total	58 ^c	120 ^c	58 ^c	62 ^c	62 ^c	78 ^c	59
Subarea Total	58 ^c	150 ^c	262 ^c	277 ^c	527 ^c	344 ^c	114
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	454	3,884	3,417	3,435	3,250	468
Afognak Island Area	--	--	2,891	2,370	2,382	2,411	352
Barren Islands	--	--	--	369	681	1,149	295
Boat - Other	7,008	5,099	1,663	956	1,054	1,245	252
Saltwater shoreline							
Chiniak Bay Area	--	141	2,073	2,001	1,547	2,199	362
Afognak Island Area	--	--	672	677	774	574	251
Women's Bay	--	738	146	554	155	509	237
Shoreline - Other	3,594	3,403	1,225	1,603	1,147	1,049	252
Saltwater Total	8,219 ^c	7,756 ^c	9,068 ^c	8,069 ^c	7,994 ^c	8,477 ^c	670
Freshwater							
Buskin River	4,800	6,378	5,460	4,217	5,445	5,744	996
Pasagahak River	2,591	3,119	2,691	2,493	2,321	3,282	687
Karluk River and Lagoon	590	1,077	292	523	774	870	328
American River	1,001	681	1,810	1,693	2,197	2,199	474
Olds River	1,148	425	2,044	1,077	1,795	2,511	556
Salty Creek	206	284	263	92	248	410	188
Other Streams	2,948	2,428	1,721	1,479	1,456	1,408	317
Freshwater Total	7,722 ^c	9,373 ^c	8,523 ^c	6,956 ^c	7,994 ^c	7,820 ^c	571
Subarea Total	11,495 ^c	12,368 ^c	12,048 ^c	11,067 ^c	12,255 ^c	11,964 ^c	789

-continued-

Table 30. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	44	130	116	148	155	136	52
Saltwater shoreline	0	33	146	128	31	102	62
Saltwater Total	44 ^c	150 ^c	224 ^c	276 ^c	156 ^c	172 ^c	61
Freshwater streams	153	196	87	149	124	51	30
Freshwater Total	146 ^c	150 ^c	87 ^c	149 ^c	124 ^c	47 ^c	19
Subarea Total	190 ^c	240 ^c	311 ^c	425 ^c	249 ^c	219 ^c	110
Grand Total	73,037 ^c	86,067 ^c	89,494 ^c	104,152 ^c	120,160 ^c	104,739 ^c	1,798

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

^c Angler totals may not equal sum of sites due to some anglers fishing at more than one site.

Table 31. Number of sport fishing trips by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	13,912	19,561	11,532	13,328	17,017	17,417	2,860
Passage Canal (Whittier)	3,232	5,456	6,510	5,602	8,044	3,318	880
Oroa Inlet	786	503	1,355	492	2,537	1,579	824
Boat - Other	565	4,226	5,657	4,834	9,471	7,151	1,216
Saltwater shoreline							
Valdez Arm and Road System	--	9,655	6,563	16,652	16,553	15,264	3,224
Passage Canal (Whittier)	--	583	850	1,570	526	702	582
Oroa Inlet	--	253	877	1,170	743	1,340	882
Shoreline - Other	87	561	1,617	1,540	2,445	958	418
Saltwater Total	18,582	40,718	34,961	45,188	57,336	47,729	5,470
Freshwater							
Eahemy Creek and Lagoon	759	419	558	616	340	128	92
Coghill River	618	588	479	523	248	415	166
Robe River	2,614	1,035	1,674	215	557	494	286
Other Streams	2,249	893	715	1,200	496	1,023	364
Freshwater Total	6,240	2,935	3,426	2,554	1,641	2,060	510
Subarea Total	24,822	43,653	38,387	47,742	58,977	49,789	5,481
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	4,278	7,910	10,458	6,985	1,433
Halibut Cove - Charter Boat	--	--	10,416	12,989	19,956	17,930	1,862
Halibut Cove - Private Boat	--	--	7,547	8,588	10,551	10,283	1,601
Tutka Bay - Charter Boat	--	--	--	2,555	3,156	2,027	587
Tutka Bay - Private Boat	--	--	--	3,263	3,001	2,054	575
Other Kachemak Bay - Charter Boat	--	--	8,397	8,434	12,067	8,246	1,720
Other Kachemak Bay - Private Boat	--	--	17,538	18,653	21,967	11,587	2,147
Kachemak Bay Subtotal	49,102	48,327	48,176	62,392	81,156	59,112	4,051

-continued-

Table 31. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	266	616	186	325	178
Anchor River Area - Private Boat	--	--	9,300	14,467	14,727	8,964	1,600
Anchor River Subtotal	2,305	4,024	9,566	15,083	14,913	9,289	1,604
Cook Inlet - Charter Boat	--	--	319	1,016	4,177	1,501	694
Cook Inlet - Private Boat	--	--	3,082	554	1,300	345	233
Cook Inlet Subtotal	197	585	3,401	1,570	5,477	1,846	724
Boat - Other Charter	--	--	185	585	217	509	239
Boat - Other Private	--	--	1,938	1,141	279	1,905	858
Boat - Other Subtotal	1,461	1,453	2,123	1,726	496	2,414	887
Saltwater shoreline							
Tutka Bay	--	--	--	585	959	735	278
Homer Spit	--	--	5,288	9,080	16,584	14,345	2,044
Seldovia Bay	--	97	691	62	928	914	425
Shoreline - Other	619	2,300	397	431	774	1,440	661
Saltwater Total	53,684	56,786	69,642	90,929	121,287	90,095	5,101
Freshwater							
Anchor River	20,096	25,187	26,386	28,718	23,205	17,192	3,452
Other Streams	645	423	505	1,139	651	504	277
Freshwater Total	20,741	25,610	26,891	29,857	23,856	17,696	3,458
Subarea Total	74,425	82,396	96,533	120,786	145,143	107,791	6,142

-continued-

Table 31. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	97	319	124	372	189	161
Saltwater shoreline	0	0	80	31	31	0	0
Saltwater Total	0	97	399	155	403	189	161
Freshwater streams	84	451	26	31	31	64	32
Freshwater Total	84	451	26	31	31	64	32
Subarea Total	84	548	425	186	434	253	165
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	1,789	8,450	11,820	7,735	7,269	1,622
Afognak Island Area	--	--	3,241	5,448	4,826	4,546	1,045
Barren Islands	--	--	--	215	557	903	237
Boat - Other	19,140	12,302	3,635	1,909	2,941	2,821	773
Saltwater shoreline							
Chiniak Bay Area	--	313	6,696	5,941	7,673	5,727	1,673
Afognak Island Area	--	--	717	1,170	1,392	706	302
Women's Bay	--	3,040	159	1,508	278	2,150	985
Shoreline - Other	12,057	13,776	3,213	2,463	3,560	2,213	872
Saltwater Total	31,197	31,220	26,111	30,474	28,962	26,335	3,055
Freshwater							
Bukin River	20,293	29,040	22,613	13,451	20,359	24,976	5,300
Pasagshak River	4,160	5,456	4,863	4,432	4,827	5,399	1,278
Karluk River and Lagoon	534	1,223	399	431	990	1,313	527
American River	1,715	768	3,082	2,893	2,939	3,955	903
Olds River	1,967	1,137	2,843	2,062	4,393	5,333	1,156
Salty Creek	534	256	558	185	557	1,067	479
Other Streams	5,004	3,515	2,122	2,279	2,013	3,314	950
Freshwater Total	34,207	41,395	36,480	25,733	36,078	45,357	5,848
Subarea Total	65,404	72,615	62,591	56,207	65,040	71,692	6,849

-continued-

Table 31. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	42	259	238	558	712	395	228
Saltwater shoreline	0	227	185	773	62	446	305
Saltwater Total	42	486	423	1,331	774	841	378
Freshwater streams	208	553	106	515	588	154	124
Freshwater Total	208	553	106	515	588	154	124
Subarea Total	250	1,039	529	1,846	1,362	995	392
Grand Total	164,985	200,251	198,465	226,767	270,956	230,520	10,725

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

Table 32. Number of angler-days fished by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	18,620	33,174	19,403	20,645	29,923	28,985	4,899
Passage Canal (Whittier)	4,166	7,281	9,556	8,439	9,568	6,592	2,123
Orca Inlet	970	344	1,697	362	2,310	2,468	1,365
Boat - Other	1,405	7,043	5,551	6,112	10,640	12,785	1,519
Saltwater shoreline							
Valdez Arm and Road System	--	12,498	9,419	25,100	21,173	19,486	3,225
Passage Canal (Whittier)	--	508	1,238	1,286	546	561	457
Orca Inlet	--	209	1,024	2,626	946	1,929	1,472
Shoreline - Other	67	853	2,072	3,246	2,297	1,970	833
Saltwater Total	25,228	61,910	49,960	67,816	77,403	74,776	8,182
Freshwater							
Eshamy Creek and Lagoon	1,740	688	1,022	739	473	203	172
Coghill River	786	897	847	985	371	415	170
Robe River	2,995	1,136	1,712	215	327	494	299
Other Streams	2,508	1,017	1,069	2,753	629	1,268	436
Freshwater Total	8,029	3,738	4,650	4,692	1,800	2,380	586
Subarea Total	33,257	65,648	54,610	72,508	79,203	77,156	8,206
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	6,009	14,633	14,443	8,790	1,626
Halibut Cove - Charter Boat	--	--	13,695	18,530	23,886	23,159	2,578
Halibut Cove - Private Boat	--	--	8,975	9,997	11,423	13,199	2,083
Tutka Bay - Charter Boat	--	--	--	3,170	3,527	2,955	846
Tutka Bay - Private Boat	--	--	--	4,328	3,383	2,273	637
Other Kachemak Bay - Charter Boat	--	--	7,737	11,327	12,942	9,189	1,483
Other Kachemak Bay - Private Boat	--	--	24,540	26,078	28,576	16,180	3,172
Kachemak Bay Subtotal	64,411	56,823	60,956	88,063	98,180	75,745	5,200

-continued-

Table 32. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	409	431	248	449	232
Anchor River Area - Private Boat	--	--	10,734	18,816	13,388	12,644	2,687
Anchor River Subtotal	2,844	4,335	11,143	19,247	13,636	13,093	2,696
Cook Inlet							
Cook Inlet - Charter Boat	--	--	642	893	2,738	1,388	506
Cook Inlet - Private Boat	--	--	3,058	739	1,802	491	399
Cook Inlet Subtotal	134	798	3,700	1,632	4,540	1,879	635
Boat - Other							
Boat - Other Charter	--	--	364	647	280	922	420
Boat - Other Private	--	--	2,923	1,630	340	2,849	1,567
Boat - Other Subtotal	2,861	1,750	3,287	2,277	620	3,771	1,624
Saltwater shoreline							
Tutka Bay	--	--	--	646	982	727	290
Homer Spit	--	--	6,620	10,721	20,282	15,753	2,369
Seldovia Bay	--	52	657	92	982	727	317
Shoreline - Other	1,104	2,496	273	677	721	1,181	470
Saltwater Total	71,354	66,254	86,636	123,355	139,943	112,876	6,568
Freshwater							
Anchor River	26,919	31,715	34,938	39,045	24,356	19,145	4,505
Other Streams	821	382	443	1,483	1,009	400	207
Freshwater Total	27,740	32,097	35,381	40,528	25,365	19,545	4,506
Subarea Total	99,094	98,351	122,017	163,883	165,308	132,421	8,031

-continued-

Table 32. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	52	291	184	695	368	316
Saltwater shoreline	0	0	61	31	31	0	0
Saltwater Total	0	52	352	215	726	368	316
Freshwater streams	100	415	76	72	109	79	42
Freshwater Total	100	415	76	72	109	79	42
Subarea Total	100	467	428	287	835	447	320
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	1,002	8,654	14,614	8,694	8,392	1,935
Afognak Island Area	--	--	6,988	6,610	6,420	6,963	1,595
Barren Islands	--	--	--	369	681	1,149	345
Boat - Other	22,268	13,980	4,584	3,049	2,602	3,304	940
Saltwater shoreline							
Chiniak Bay Area	--	592	6,284	6,701	6,276	6,902	2,216
Afognak Island Area	--	--	1,972	1,413	2,656	966	424
Women's Bay	--	2,672	146	2,318	382	1,912	902
Shoreline - Other	11,945	14,786	3,134	3,597	2,811	5,897	3,573
Saltwater Total	34,213	33,032	31,762	38,671	30,522	35,485	5,306
Freshwater							
Buskin River	24,024	32,485	24,219	16,390	18,426	26,145	5,637
Pasagashak River	4,751	6,011	5,504	5,143	5,111	5,578	1,246
Karluk River and Lagoon	820	2,520	657	3,459	2,128	2,420	1,108
American River	1,974	729	4,419	3,622	3,038	3,506	821
Olds River	3,145	987	3,578	1,938	4,147	5,378	1,253
Salty Creek	937	380	566	145	528	1,175	530
Other Streams	6,523	4,433	3,155	3,308	2,389	3,769	1,184
Freshwater Total	42,174	47,545	42,098	34,005	35,767	47,971	6,278
Subarea Total	76,387	80,577	73,860	72,676	66,289	83,456	8,722

-continued-

Table 32. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	37	174	166	527	504	394	222
Saltwater shoreline	0	121	1,054	633	36	603	474
Saltwater Total	37	295	1,220	1,160	540	997	522
Freshwater streams	200	416	104	298	346	121	83
Freshwater Total	200	416	104	298	346	121	83
Subarea Total	237	711	1,324	1,458	886	1,118	524
Grand Total	209,075	245,754	252,239	310,812	312,521	294,598	14,293

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

Table 33. Chinook salmon sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	125	271	123	146	170	374	163
Passage Canal (Whittier)	212	22	11	78	123	70	38
Orca Inlet	0	0	11	0	9	0	0
Boat - Other	0	44	234	165	56	339	142
Saltwater shoreline							
Valdez Arm and Road System	--	11	45	214	57	152	85
Passage Canal (Whittier)	--	0	11	243	28	117	109
Orca Inlet	--	0	0	0	0	0	0
Shoreline - Other	0	0	0	0	0	0	0
Saltwater Total	337	348	435	846	443	1,052	279
Freshwater							
Kahamy Creek and Lagoon	0	0	0	0	0	0	0
Coghill River	0	0	0	0	0	0	0
Robe River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	337	348	435	846	443	1,052	279
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	213	199	564	466	159
Halibut Cove - Charter Boat	--	--	110	579	1,292	283	78
Halibut Cove - Private Boat	--	--	258	326	1,619	1,097	315
Tutka Bay - Charter Boat	--	--	--	0	145	34	24
Tutka Bay - Private Boat	--	--	--	0	36	8	8
Other Kachemak Bay - Charter Boat	--	--	52	91	200	79	49
Other Kachemak Bay - Private Boat	--	--	84	36	201	126	61
Kachemak Bay Subtotal	1,859	821	717	1,231	4,057	2,093	370

-continued-

Table 33. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	65	127	54	0	0
Anchor River Area - Private Boat	--	--	304	489	654	624	201
Anchor River Subtotal	87	149	369	616	708	624	201
Cook Inlet - Charter Boat	--	--	65	18	36	34	21
Cook Inlet - Private Boat	--	--	19	18	0	16	17
Cook Inlet Subtotal	0	0	84	36	36	50	26
Boat - Other Charter	--	--	0	0	0	0	0
Boat - Other Private	--	--	0	0	0	0	0
Boat - Other Subtotal	125	0	0	0	0	0	0
Saltwater shoreline							
Tutka Bay	--	--	--	54	145	94	49
Homer Spit	--	--	297	833	5,275	1,956	308
Seldovia Bay	--	0	0	0	36	150	80
Shoreline - Other	37	12	0	36	0	8	8
Saltwater Total	2,108	982	1,467	2,806	10,257	4,975	537
Freshwater							
Anchor River	998	672	1,098	761	976	578	115
Other Streams	12	0	0	0	0	0	0
Freshwater Total	1,010	672	1,098	761	976	578	115
Subarea Total	3,118	1,654	2,565	3,567	11,233	5,553	550

-continued-

Table 33. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	78	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	78	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	78	0	0	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	0	0	73	60	35
Afognak Island Area	--	--	153	0	18	12	9
Barren Islands	--	--	--	0	0	12	12
Boat - Other	98	86	15	0	0	6	6
Saltwater shoreline							
Chiniak Bay Area	--	0	0	18	0	24	19
Afognak Island Area	--	--	0	0	18	0	0
Women's Bay	--	0	0	0	0	0	0
Shoreline - Other	112	76	0	36	36	6	6
Saltwater Total	210	162	168	54	145	120	44
Freshwater							
Bukin River	0	0	0	0	0	0	0
Pasagahak River	87	40	123	0	0	18	14
Kariuk River and Lagoon	175	447	122	199	819	559	287
American River	0	0	0	0	0	0	0
Olds River	0	0	0	0	0	0	0
Saltery Creek	0	0	0	0	0	0	0
Other Streams	437	88	0	126	600	390	361
Freshwater Total	699	575	245	325	1,419	967	472
Subarea Total	909	737	413	379	1,564	1,087	474

-continued-

Table 33. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	0	0	0	0	78	82
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	78	82
Freshwater streams	42	174	0	107	93	26	25
Freshwater Total	42	174	0	107	93	26	25
Subarea Total	42	174	0	107	93	104	85
Grand Total	4,406	2,913	3,491	4,899	13,333	7,796	765

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE - standard error.

Table 34. Coho salmon sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	5,138	5,848	5,749	5,010	6,457	13,868	2,391
Passage Canal (Whittier)	549	1,280	1,437	1,554	728	587	230
Orca Inlet	50	108	413	184	691	180	95
Boat - Other	0	686	642	534	1,455	821	307
Saltwater shoreline							
Valdez Arm and Road System	--	1,530	1,040	3,729	3,784	4,266	946
Passage Canal (Whittier)	--	109	1,177	583	218	132	129
Orca Inlet	--	0	61	447	327	596	391
Shoreline - Other	0	282	933	582	1,182	359	227
Saltwater Total	5,737	9,843	11,452	12,623	14,842	20,809	2,630
Freshwater							
Eshamy Creek and Lagoon	37	43	76	0	0	95	77
Coghill River	12	0	0	10	0	9	9
Robe River	0	0	0	0	0	9	9
Other Streams	336	304	551	523	418	748	301
Freshwater Total	385	347	627	533	418	861	313
Subarea Total	6,122	10,190	12,079	13,156	15,260	21,670	2,647
Kenai Peninsula subarea							
Saltwater boat							
Bomer Spit - Private Boat	--	--	306	77	146	515	208
Halibut Cove - Charter Boat	--	--	46	18	218	202	78
Halibut Cove - Private Boat	--	--	76	115	291	213	79
Tutka Bay - Charter Boat	--	--	--	0	36	55	38
Tutka Bay - Private Boat	--	--	--	0	18	9	9
Other Kachemak Bay - Charter Boat	--	--	61	0	55	0	0
Other Kachemak Bay - Private Boat	--	--	612	536	255	266	142
Kachemak Bay Subtotal	1,097	485	1,101	746	1,019	1,260	288

-continued-

Table 34. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	76	0	0	0	0
Anchor River Area - Private Boat	--	--	245	651	509	311	192
Anchor River Subtotal	37	162	321	651	509	311	192
Cook Inlet - Charter Boat	--	--	31	0	0	0	0
Cook Inlet - Private Boat	--	--	0	0	0	0	0
Cook Inlet Subtotal	0	249	31	0	0	0	0
Boat - Other Charter	--	--	0	0	0	0	0
Boat - Other Private	--	--	0	536	0	89	89
Boat - Other Subtotal	225	25	0	536	0	89	89
Saltwater shoreline							
Iutka Bay	--	--	--	0	55	0	0
Bomer Spit	--	--	245	459	200	1,439	352
Seldovia Bay	--	0	46	0	200	240	177
Shoreline - Other	125	286	30	459	18	275	178
Saltwater Total	1,484	1,207	1,774	2,851	2,001	3,614	569
Freshwater							
Anchor River	1,135	2,239	1,021	2,010	2,219	2,635	709
Other Streams	136	173	162	144	273	191	134
Freshwater Total	1,271	2,412	1,183	2,154	2,492	2,826	714
Subarea Total	2,755	3,619	2,957	5,005	4,493	6,440	920

-continued-

Table 34. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	18	0	0
Saltwater Total	0	0	0	0	18	0	0
Freshwater streams	112	100	0	0	55	56	58
Freshwater Total	112	100	0	0	55	56	58
Subarea Total	112	100	0	0	73	56	58
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	46	902	1,195	1,364	934	323
Afognak Island Area	--	--	3,517	3,459	2,310	1,783	496
Barren Islands	--	--	--	0	0	0	0
Boat - Other	4,838	3,081	840	308	109	371	300
Saltwater shoreline							
Chiniak Bay Area	--	0	2,049	1,847	1,019	663	266
Afognak Island Area	--	--	1,208	706	1,110	779	417
Women's Bay	--	380	31	127	0	244	140
Shoreline - Other	2,107	2,702	673	417	874	564	222
Saltwater Total	6,945	6,209	9,220	8,059	6,786	5,338	868
Freshwater							
Bunkin River	1,871	2,178	4,098	3,133	3,474	4,782	1,278
Pasagshak River	1,646	2,292	2,951	3,459	2,601	2,065	585
Karluk River and Lagoon	37	106	306	18	309	906	535
American River	486	349	826	435	1,710	1,500	417
Olds River	561	304	1,651	235	1,273	2,571	731
Salty Creek	137	304	336	163	528	1,013	532
Other Streams	1,783	1,064	857	1,123	1,109	798	262
Freshwater Total	6,521	6,597	11,025	8,566	11,004	13,635	1,817
Subarea Total	13,466	12,806	20,245	16,625	17,790	18,973	2,053

-continued-

Table 34. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	149	15	64	31	208	210
Saltwater shoreline	0	187	0	816	62	52	52
Saltwater Total	0	336	15	880	93	260	215
Freshwater streams	0	87	229	365	124	78	79
Freshwater Total	0	87	229	365	124	78	79
Subarea Total	0	423	244	1,245	217	338	229
Grand Total	22,455	27,138	35,525	36,031	37,833	47,477	3,423

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

Table 35. Sockeye salmon sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	786	846	260	525	891	326	147
Passage Canal (Whittier)	62	119	1,193	1,159	291	352	146
Orca Inlet	0	0	153	0	0	53	53
Boat - Other	437	173	626	54	654	1,215	342
Saltwater shoreline							
Valdez Arm and Road System	--	228	153	1,231	691	502	204
Passage Canal (Whittier)	--	0	0	0	0	0	0
Orca Inlet	--	0	0	254	0	0	0
Shoreline - Other	0	109	15	0	0	53	52
Saltwater Total	1,285	1,475	2,400	3,223	2,527	2,501	566
Freshwater							
Eshamy Creek and Lagoon	736	467	612	453	528	79	58
Coghill River	249	456	321	417	146	344	172
Robe River	25	0	0	0	0	53	31
Other Streams	187	43	964	127	0	511	278
Freshwater Total	1,197	966	1,897	997	674	987	329
Subarea Total	2,482	2,441	4,297	4,220	3,201	3,488	658
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	15	54	55	132	76
Halibut Cove - Charter Boat	--	--	61	18	146	51	29
Halibut Cove - Private Boat	--	--	0	54	73	248	132
Tutka Bay - Charter Boat	--	--	--	127	0	9	9
Tutka Bay - Private Boat	--	--	--	0	18	41	42
Other Kachemak Bay - Charter Boat	--	--	15	0	18	17	12
Other Kachemak Bay - Private Boat	--	--	505	0	91	397	257
Kachemak Bay Subtotal	2,426	1,596	596	253	401	895	310

-continued-

Table 35. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	0	0	0	0	0
Anchor River Area - Private Boat	--	--	15	0	0	17	12
Anchor River Subtotal	0	52	15	0	0	17	12
Cook Inlet - Charter Boat	--	--	0	0	0	0	0
Cook Inlet - Private Boat	--	--	0	0	0	0	0
Cook Inlet Subtotal	0	262	0	0	0	0	0
Boat - Other Charter	--	--	0	0	0	0	0
Boat - Other Private	--	--	0	36	0	99	101
Boat - Other Subtotal	0	0	0	36	0	99	101
Saltwater shoreline							
Tutka Bay	--	--	--	0	18	0	0
Homer Spit	--	--	0	54	146	265	88
Seldovia Bay	--	0	0	0	91	0	0
Shoreline - Other	0	26	0	36	146	224	109
Saltwater Total	2,426	1,936	611	379	802	1,500	365
Freshwater							
Anchor River	167	224	39	1,263	109	136	96
Other Streams	251	75	39	0	109	117	117
Freshwater Total	418	299	78	1,263	218	253	149
Subarea Total	2,844	2,235	689	1,642	1,020	1,753	399

-continued-

Table 35. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	89	0	0	43	43
Freshwater Total	0	0	89	0	0	43	43
Subarea Total	0	0	89	0	0	43	43
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	0	435	236	218	107
Afognak Island Area	--	--	214	381	164	590	248
Barren Islands	--	--	--	0	0	54	53
Boat - Other	611	106	122	0	0	336	333
Saltwater shoreline							
Chiniak Bay Area	--	0	321	54	273	100	50
Afognak Island Area	--	--	214	145	346	281	192
Women's Bay	--	30	0	91	0	0	0
Shoreline - Other	661	1,578	719	0	0	27	21
Saltwater Total	1,272	1,714	1,590	1,106	1,019	1,606	475
Freshwater							
Buskin River	1,197	3,484	2,339	1,503	2,274	1,816	511
Pasagehak River	374	182	428	417	819	1,244	409
Karluk River and Lagoon	62	1,078	214	235	891	799	330
American River	0	0	0	0	0	0	0
Olds River	125	0	0	0	0	0	0
Saltery Creek	0	61	107	0	437	390	196
Other Streams	1,733	410	168	705	346	644	469
Freshwater Total	3,491	5,215	3,256	2,860	4,767	4,893	897
Subarea Total	4,763	6,929	4,846	3,966	5,786	6,499	1,005

-continued-

Table 35. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	25	0	0	0	26	26
Saltwater shoreline	0	12	0	196	0	0	0
Saltwater Total	0	37	0	196	0	26	26
Freshwater streams	0	0	0	23	31	0	0
Freshwater Total	0	0	0	23	31	0	0
Subarea Total	0	37	0	219	31	26	26
Grand Total	10,009	11,642	9,921	10,047	10,038	11,809	1,284

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

Table 36. Pink salmon sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	9,639	15,223	12,782	8,652	10,659	14,740	2,351
Passage Canal (Whittier)	935	1,573	1,437	2,039	1,019	918	424
Orca Inlet	0	0	76	0	164	172	119
Boat - Other	212	901	168	581	1,364	1,614	502
Saltwater shoreline							
Valdez Arm and Road System	--	11,805	9,312	17,303	16,117	18,139	2,834
Passage Canal (Whittier)	--	195	153	0	273	0	0
Orca Inlet	--	22	214	437	182	240	193
Shoreline - Other	12	596	489	1,126	1,127	403	337
Saltwater Total	10,798	30,315	24,631	30,138	30,905	36,226	3,755
Freshwater							
Kashamy Creek and Lagoon	449	54	260	194	18	17	16
Coghill River	112	109	0	252	0	86	71
Robe River	0	0	0	0	0	43	42
Other Streams	823	391	107	185	164	756	524
Freshwater Total	1,384	554	367	631	182	902	532
Subarea Total	12,182	30,869	24,998	30,769	31,087	37,128	3,791
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	122	18	127	652	305
Halibut Cove - Charter Boat	--	--	31	0	18	183	79
Halibut Cove - Private Boat	--	--	46	18	437	467	173
Tutka Bay - Charter Boat	--	--	--	616	364	798	716
Tutka Bay - Private Boat	--	--	--	779	1,528	757	381
Other Kachemak Bay - Charter Boat	--	--	31	0	291	116	98
Other Kachemak Bay - Private Boat	--	--	642	761	346	56	35
Kachemak Bay Subtotal	2,395	2,836	872	2,192	3,111	3,029	882

-continued-

Table 36. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	0	0	0	0	0
Anchor River Area - Private Boat	--	--	15	36	18	56	34
Anchor River Subtotal	0	0	15	36	18	56	34
 Cook Inlet - Charter Boat	--	--	0	0	0	0	0
Cook Inlet - Private Boat	--	--	0	0	273	0	0
Cook Inlet Subtotal	0	0	0	0	273	0	0
 Boat - Other Charter	--	--	0	0	0	0	0
Boat - Other Private	--	--	382	18	0	241	193
Boat - Other Subtotal	462	435	382	18	0	241	193
 Saltwater shoreline							
Tutka Bay	--	--	--	0	36	153	91
Homer Spit	--	--	337	0	1,819	3,856	679
Seldovia Bay	--	0	76	0	364	169	127
Shoreline - Other	0	124	92	72	0	40	29
 Saltwater Total	2,857	3,395	1,774	2,318	5,621	7,544	1,141
 Freshwater							
Anchor River	249	124	136	54	109	115	46
Other Streams	0	323	13	108	528	72	55
 Freshwater Total	249	447	149	162	637	187	73
 Subarea Total	3,106	3,842	1,923	2,480	6,258	7,731	1,148

-continued-

Table 36. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	0	182	0	0
Freshwater Total	0	0	0	0	182	0	0
Subarea Total	0	0	0	0	182	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	474	743	1,418	168	106
Afognak Island Area	--	--	321	217	1,638	1,317	584
Barren Islands	--	--	--	0	0	0	0
Boat - Other	1,658	821	519	217	18	318	201
Saltwater shoreline							
Chiniak Bay Area	--	30	2,538	2,934	6,075	3,554	1,495
Afognak Island Area	--	--	245	0	127	88	51
Women's Bay	--	2,292	76	290	36	1,414	975
Shoreline - Other	2,656	2,596	596	851	728	707	350
Saltwater Total	4,314	5,739	4,769	5,252	10,040	7,566	1,915
Freshwater							
Buskin River	4,701	3,812	5,810	2,354	5,202	4,402	1,082
Pasagshak River	499	501	321	706	327	804	276
Karluk River and Lagoon	0	774	0	54	36	35	28
American River	835	380	948	1,739	1,310	1,397	446
Olds River	611	440	1,086	1,105	982	2,325	762
Saltery Creek	0	15	153	18	0	97	87
Other Streams	1,695	1,443	841	416	1,001	956	411
Freshwater Total	8,341	7,365	9,159	6,392	8,858	10,016	1,505
Subarea Total	12,655	13,104	13,928	11,644	18,898	17,582	2,479

-continued-

Table 36. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	25	0	0	0	52	38
Saltwater shoreline	0	0	0	219	0	546	413
Saltwater Total	0	25	0	219	0	598	414
Freshwater streams	25	0	0	23	278	26	26
Freshwater Total	25	0	0	23	278	26	26
Subarea Total	25	25	0	242	278	624	414
Grand Total	27,968	47,840	40,849	45,135	56,703	63,065	4,650

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE - standard error.

Table 37. Chum salmon sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	1,397	868	1,116	1,078	3,674	1,497	370
Passage Canal (Whittier)	0	217	596	194	1,637	147	101
Orca Inlet	0	0	15	0	236	0	0
Boat - Other	0	120	367	39	1,091	596	360
Saltwater shoreline							
Valdez Arm and Road System	--	380	749	447	527	1,221	398
Passage Canal (Whittier)	--	0	0	0	18	9	9
Orca Inlet	--	0	0	0	0	64	47
Shoreline - Other	0	0	15	0	54	0	0
Saltwater Total	1,397	1,585	2,858	1,758	7,237	3,534	680
Freshwater							
Eshamy Creek and Lagoon	0	0	0	0	0	9	9
Coghill River	12	0	0	0	0	0	0
Robe River	0	0	0	0	0	18	18
Other Streams	25	43	0	136	0	46	47
Freshwater Total	37	43	0	136	0	73	51
Subarea Total	1,434	1,628	2,858	1,894	7,237	3,607	684
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	0	0	0	0	0
Halibut Cove - Charter Boat	--	--	0	0	0	53	53
Halibut Cove - Private Boat	--	--	0	0	0	52	39
Tutka Bay - Charter Boat	--	--	--	0	0	0	0
Tutka Bay - Private Boat	--	--	--	18	0	0	0
Other Kachemak Bay - Charter Boat	--	--	0	0	0	0	0
Other Kachemak Bay - Private Boat	--	--	0	0	73	0	0
Kachemak Bay Subtotal	12	0	0	18	73	105	66

-continued-

Table 37. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	0	0	0	0	0
Anchor River Area - Private Boat	--	--	0	0	18	9	9
Anchor River Subtotal	0	0	0	0	18	9	9
Cook Inlet - Charter Boat	--	--	0	0	0	0	0
Cook Inlet - Private Boat	--	--	0	0	18	0	0
Cook Inlet Subtotal	0	0	0	0	18	0	0
Boat - Other Charter	--	--	0	0	0	0	0
Boat - Other Private	--	--	31	0	0	9	9
Boat - Other Subtotal	0	37	31	0	0	9	9
Saltwater shoreline							
Tutke Bay	--	--	--	0	0	34	34
Homer Spit	--	--	0	0	18	52	37
Seldovia Bay	--	0	0	0	200	0	0
Shoreline - Other	0	0	31	0	55	9	9
Saltwater Total	12	37	62	18	382	218	86
Freshwater							
Anchor River	0	25	0	36	0	15	15
Other Streams	0	0	0	0	36	0	0
Freshwater Total	0	25	0	36	36	15	15
Subarea Total	12	62	62	54	418	233	87

-continued-

Table 37. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	50	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	50	0	0	0	0	0
Freshwater streams	0	75	0	18	182	0	0
Freshwater Total	0	75	0	18	182	0	0
Subarea Total	0	125	0	18	182	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	0	54	0	0	0
Afognak Island Area	--	--	0	72	0	28	27
Barren Islands	--	--	--	0	0	0	0
Boat - Other	549	0	0	0	0	18	13
Saltwater shoreline							
Chiniak Bay Area	--	0	122	18	0	57	34
Afognak Island Area	--	--	0	0	0	0	0
Women's Bay	--	30	0	18	0	0	0
Shoreline - Other	250	137	0	36	73	122	94
Saltwater Total	799	167	122	198	73	225	105
Freshwater							
Bukin River	162	152	107	217	218	66	59
Pasagashak River	0	15	0	0	0	0	0
Karluk River and Lagoon	0	0	0	0	0	9	9
American River	100	0	0	36	400	95	48
Olds River	62	76	92	0	455	142	74
Saltery Creek	0	0	0	0	0	0	0
Other Streams	186	455	0	91	36	94	65
Freshwater Total	510	698	199	344	1,109	406	124
Subarea Total	1,309	865	321	542	1,182	631	165

-continued-

Table 37. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	0	0	0	0	26	26
Saltwater shoreline	0	0	0	23	0	52	54
Saltwater Total	0	0	0	23	0	78	59
Freshwater streams	0	50	0	70	31	0	0
Freshwater Total	0	50	0	70	31	0	0
Subarea Total	0	50	0	93	31	78	59
Grand Total	2,755	2,730	3,241	2,601	9,050	4,549	716

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

Table 38. Steelhead sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	0	0	0	0	0	0	0
Passage Canal (Whittier)	0	0	0	0	0	0	0
Orca Inlet	0	0	0	0	0	0	0
Boat - Other	0	0	0	0	0	39	36
Saltwater shoreline							
Valdez Arm and Road System	--	0	0	0	0	0	0
Passage Canal (Whittier)	--	0	0	0	0	0	0
Orca Inlet	--	0	0	0	0	0	0
Shoreline - Other	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	39	36
Freshwater							
Eshamy Creek and Lagoon	0	0	0	0	0	0	0
Coghill River	0	0	0	0	0	0	0
Robe River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	18	0	0
Freshwater Total	0	0	0	0	18	0	0
Subarea Total	0	0	0	0	18	39	36
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	0	0	0	0	0
Halibut Cove - Charter Boat	--	--	0	0	0	0	0
Halibut Cove - Private Boat	--	--	0	0	0	0	0
Tutka Bay - Charter Boat	--	--	--	0	0	0	0
Tutka Bay - Private Boat	--	--	--	0	0	0	0
Other Kachemak Bay - Charter Boat	--	--	0	0	0	0	0
Other Kachemak Bay - Private Boat	--	--	46	0	0	0	0
Kachemak Bay Subtotal	0	12	46	0	0	0	0

-continued-

Table 38. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	0	0	0	0	0
Anchor River Area - Private Boat	--	--	31	18	236	0	0
Anchor River Subtotal	0	37	31	18	236	0	0
Cook Inlet - Charter Boat							
Cook Inlet - Private Boat	--	--	0	0	0	0	0
Cook Inlet Subtotal	0	0	0	0	0	0	0
Boat - Other Charter							
Boat - Other Private	--	--	0	0	0	0	0
Boat - Other Subtotal	0	0	0	0	0	0	0
Saltwater shoreline							
Tutka Bay	--	--	--	0	0	0	0
Homer Spit	--	--	0	0	18	0	0
Seldovia Bay	--	0	0	0	0	0	0
Shoreline - Other	0	0	0	0	0	9	9
Saltwater Total	0	49	77	18	254	9	9
Freshwater							
Anchor River	761	423	382	462	164	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	761	423	382	462	164	0	0
Subarea Total	761	472	459	480	418	9	9

-continued-

Table 38. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	0	0	0	0	0
Afognak Island Area	--	--	15	36	218	0	0
Barren Islands	--	--	--	0	0	0	0
Boat - Other	112	46	153	0	0	0	0
Saltwater shoreline							
Chiniak Bay Area	--	0	0	0	0	0	0
Afognak Island Area	--	--	0	36	236	20	20
Women's Bay	--	0	0	0	0	100	98
Shoreline - Other	12	380	0	109	182	129	129
Saltwater Total	124	426	168	181	636	249	163
Freshwater							
Bukin River	0	0	92	0	0	0	0
Pasagahak River	0	0	0	0	0	0	0
Karluk River and Lagoon	150	167	0	72	18	20	20
American River	0	0	0	0	0	0	0
Olds River	0	0	0	0	0	0	0
Saltery Creek	137	46	0	0	0	30	23
Other Streams	236	121	0	0	145	329	210
Freshwater Total	523	334	92	72	163	379	213
Subarea Total	647	760	260	253	799	628	272

-continued-

Table 38. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0
Grand Total	1,408	1,232	719	733	1,235	676	274

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

Table 39. Rainbow trout sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	0	0	0	0	0	0	0
Passage Canal (Whittier)	0	0	0	0	0	0	0
Orca Inlet	0	0	0	0	0	0	0
Boat - Other	0	0	0	0	0	0	0
Saltwater shoreline							
Valdez Arm and Road System	--	0	0	0	0	0	0
Passage Canal (Whittier)	--	0	0	0	0	0	0
Orca Inlet	--	0	0	0	0	0	0
Shoreline - Other	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater							
Eshamy Creek and Lagoon	0	0	0	0	0	0	0
Coghill River	0	0	0	0	0	0	0
Robe River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	19	18
Freshwater Total	0	0	0	0	0	19	18
Subarea Total	0	0	0	0	0	19	18
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	0	0	0	0	0
Halibut Cove - Charter Boat	--	--	0	0	0	0	0
Halibut Cove - Private Boat	--	--	0	0	0	0	0
Tutka Bay - Charter Boat	--	--	--	0	0	0	0
Tutka Bay - Private Boat	--	--	--	0	0	0	0
Other Kachemak Bay - Charter Boat	--	--	0	0	0	0	0
Other Kachemak Bay - Private Boat	--	--	0	0	0	0	0
Kachemak Bay Subtotal	0	0	0	0	0	0	0

-continued-

Table 39. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	0	0	0	0	0
Anchor River Area - Private Boat	--	--	0	0	0	0	0
Anchor River Subtotal	0	0	0	0	0	0	0
Cook Inlet - Charter Boat	--	--	0	0	0	0	0
Cook Inlet - Private Boat	--	--	0	0	0	0	0
Cook Inlet Subtotal	0	0	0	0	0	0	0
Boat - Other Charter	--	--	0	0	0	0	0
Boat - Other Private	--	--	0	0	0	0	0
Boat - Other Subtotal	0	0	0	0	0	0	0
Saltwater shoreline							
Tutka Bay	--	--	--	0	0	0	0
Bomer Spit	--	--	0	0	0	0	0
Seldovia Bay	--	0	0	0	0	0	0
Shoreline - Other	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater							
Anchor River	224	52	138	181	36	95	53
Other Streams	0	0	0	72	0	0	0
Freshwater Total	224	52	138	253	36	95	53
Subarea Total	224	52	138	253	36	95	53

-continued-

Table 39. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	0	0	0	0	0
Afognak Island Area	--	--	0	0	0	0	0
Barren Islands	--	--	--	0	0	0	0
Boat - Other	0	0	0	0	0	0	0
Saltwater shoreline							
Chiniak Bay Area	--	0	0	0	0	0	0
Afognak Island Area	--	--	0	0	0	0	0
Women's Bay	--	0	0	0	0	0	0
Shoreline - Other	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater							
Buskin River	0	0	61	0	0	0	0
Pasagshak River	0	0	0	0	0	0	0
Karluk River and Lagoon	150	137	0	0	91	10	10
American River	0	0	0	0	0	0	0
Olds River	0	0	0	0	0	0	0
Saltery Creek	25	0	0	0	55	20	14
Other Streams	535	90	92	18	110	329	222
Freshwater Total	710	227	153	18	256	359	223
Subarea Total	710	227	153	18	256	359	223

-continued-

Table 39. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	21	0	0	0
Freshwater Total	0	0	0	21	0	0	0
Subarea Total	0	0	0	21	0	0	0
Grand Total	934	279	291	292	292	473	226

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE - standard error.

Table 40. Cutthroat trout sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	0	0	61	0	0	0	0
Passage Canal (Whittier)	0	0	0	0	0	0	0
Orca Inlet	0	0	15	0	0	0	0
Boat - Other	0	0	0	0	0	0	0
Saltwater shoreline							
Valdez Arm and Road System	--	0	0	0	0	0	0
Passage Canal (Whittier)	--	0	0	0	0	0	0
Orca Inlet	--	0	0	127	0	0	0
Shoreline - Other	0	0	61	0	0	0	0
Saltwater Total	0	0	137	127	0	0	0
Freshwater							
Eshamy Creek and Lagoon	12	277	0	163	73	0	0
Coghill River	0	0	0	0	0	0	0
Robe River	25	0	0	0	0	0	0
Other Streams	536	0	0	0	0	494	453
Freshwater Total	573	277	0	163	73	494	453
Subarea Total	573	277	137	290	73	494	453
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	0	0	0	0	0
Halibut Cove - Charter Boat	--	--	0	0	0	0	0
Halibut Cove - Private Boat	--	--	0	0	0	0	0
Tutka Bay - Charter Boat	--	--	--	0	0	0	0
Tutka Bay - Private Boat	--	--	--	0	0	0	0
Other Kachemak Bay - Charter Boat	--	--	0	0	0	0	0
Other Kachemak Bay - Private Boat	--	--	0	0	0	0	0
Kachemak Bay Subtotal	0	0	0	0	0	0	0

-continued-

Table 40. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	0	0	0	0	0
Anchor River Area - Private Boat	--	--	0	0	0	0	0
Anchor River Subtotal	0	0	0	0	0	0	0
Cook Inlet - Charter Boat	--	--	0	0	0	0	0
Cook Inlet - Private Boat	--	--	0	0	0	0	0
Cook Inlet Subtotal	0	0	0	0	0	0	0
Boat - Other Charter	--	--	0	0	0	0	0
Boat - Other Private	--	--	0	0	0	0	0
Boat - Other Subtotal	0	0	0	0	0	0	0
Saltwater shoreline							
Tutka Bay	--	--	--	0	0	0	0
Homer Spit	--	--	0	0	0	0	0
Seldovia Bay	--	0	0	0	0	0	0
Shoreline - Other	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater							
Anchor River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0

-continued-

Table 40. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	0	0	0	0	0
Afognak Island Area	--	--	0	0	0	0	0
Barren Islands	--	--	0	0	0	0	0
Boat - Other	0	0	0	0	0	0	0
Saltwater shoreline							
Chiniak Bay Area	--	0	0	0	0	0	0
Afognak Island Area	--	--	0	0	0	0	0
Women's Bay	--	0	0	0	0	0	0
Shoreline - Other	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater							
Buskin River	0	0	0	0	0	0	0
Pasagahak River	0	0	0	0	0	0	0
Karluk River and Lagoon	0	0	0	0	0	0	0
American River	0	0	0	0	0	0	0
Olds River	0	0	0	0	0	0	0
Saltery Creek	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0

-continued-

Table 40. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0
Grand Total	573	277	137	290	73	494	453

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE - standard error.

Table 41. Dolly Varden/Arctic char sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	811	1,266	31	235	55	416	143
Passage Canal (Whittier)	0	0	291	978	55	87	51
Orca Inlet	75	0	46	0	0	145	107
Boat - Other	0	173	245	0	0	185	124
Saltwater shoreline							
Valdez Arm and Road System	--	17	0	199	291	319	125
Passage Canal (Whittier)	--	0	0	18	0	0	0
Orca Inlet	--	35	92	525	0	223	222
Shoreline - Other	0	17	31	181	364	0	0
Saltwater Total	886	1,508	736	2,136	765	1,375	397
Freshwater							
Eshamy Creek and Lagoon	25	17	61	0	18	0	0
Coghill River	137	69	61	235	18	29	21
Robe River	5,499	3,104	4,449	525	364	290	211
Other Streams	2,031	191	428	525	0	794	540
Freshwater Total	7,692	3,381	4,999	1,285	400	1,113	572
Subarea Total	8,578	4,889	5,735	3,421	1,165	2,488	680
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	291	72	455	236	188
Halibut Cove - Charter Boat	--	--	229	0	127	206	187
Halibut Cove - Private Boat	--	--	0	18	400	100	62
Tutka Bay - Charter Boat	--	--	--	91	55	9	9
Tutka Bay - Private Boat	--	--	--	163	0	27	20
Other Kachemak Bay - Charter Boat	--	--	0	0	0	141	136
Other Kachemak Bay - Private Boat	--	--	199	344	182	73	45
Kachemak Bay Subtotal	1,559	1,283	719	688	1,219	792	305

-continued-

Table 41. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	15	18	0	0	0
Anchor River Area - Private Boat	--	--	0	54	182	100	61
Anchor River Subtotal	0	0	15	72	182	100	61
Cook Inlet							
Cook Inlet - Charter Boat	--	--	0	0	0	0	0
Cook Inlet - Private Boat	--	--	0	0	109	0	0
Cook Inlet Subtotal	0	0	0	0	109	0	0
Boat - Other							
Boat - Other Charter	--	--	0	0	0	28	27
Boat - Other Private	--	--	0	0	0	0	0
Boat - Other Subtotal	0	35	0	0	0	28	27
Saltwater shoreline							
Tutka Bay	--	--	--	0	0	127	77
Homer Spit	--	--	1,208	580	746	682	210
Seldovia Bay	--	0	245	36	291	155	111
Shoreline - Other	0	885	0	163	418	773	559
Saltwater Total	1,559	2,203	2,187	1,539	2,965	2,657	689
Freshwater							
Anchor River	5,599	7,716	3,914	2,735	2,746	1,476	555
Other Streams	312	0	306	199	218	286	239
Freshwater Total	5,911	7,716	4,220	2,934	2,964	1,762	604
Subarea Total	7,470	9,919	6,407	4,473	5,929	4,419	919

-continued-

Table 41. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	11	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	11	0	0	0	0
Freshwater streams	0	52	0	0	0	0	0
Freshwater Total	0	52	0	0	0	0	0
Subarea Total	0	52	11	0	0	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	719	434	1,055	269	146
Afognak Island Area	--	--	15	145	2,092	439	186
Barren Islands	--	--	--	0	0	0	0
Boat - Other	1,534	334	993	217	0	189	154
Saltwater shoreline							
Chiniak Bay Area	--	91	2,171	960	2,237	1,006	450
Afognak Island Area	--	--	963	0	1,019	0	0
Women's Bay	--	228	0	145	0	319	219
Shoreline - Other	3,280	1,638	1,514	398	1,601	549	338
Saltwater Total	4,814	2,291	6,375	2,299	8,004	2,771	663
Freshwater							
Bushman River	9,265	10,109	10,214	3,948	5,293	7,092	1,651
Passagehak River	1,072	152	933	688	1,055	588	239
Karluk River and Lagoon	274	850	153	72	491	418	183
American River	848	46	107	417	800	448	225
Olds River	249	91	321	290	200	259	92
Saltery Creek	998	91	688	36	746	129	101
Other Streams	3,453	2,687	550	362	1,146	1,146	609
Freshwater Total	16,159	14,026	12,966	5,813	9,731	10,080	1,791
Subarea Total	20,973	16,317	19,341	8,112	17,735	12,851	1,881

-continued-

Table 41. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	0	115	0	0	31	32
Saltwater shoreline	0	0	344	0	0	63	47
Saltwater Total	0	0	459	0	0	94	56
Freshwater streams	150	0	0	21	18	10	10
Freshwater Total	150	0	0	21	18	10	10
Subarea Total	150	0	459	21	18	104	57
Grand Total	37,171	31,177	31,953	16,027	24,847	19,862	2,206

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

Table 42. Halibut sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	1,322	2,832	3,241	1,961	4,467	4,086	813
Passage Canal (Whittier)	387	575	1,040	456	1,023	684	233
Orca Inlet	162	33	520	233	879	747	342
Boat - Other	75	620	2,828	1,553	3,092	2,590	513
Saltwater shoreline							
Valdez Arm and Road System	--	315	153	107	132	145	84
Passage Canal (Whittier)	--	0	0	39	12	0	0
Orca Inlet	--	0	76	10	12	21	21
Shoreline - Other	0	0	168	0	132	166	84
Saltwater Total	1,946	4,375	8,026	4,359	9,749	8,439	1,341
Freshwater							
Eshamy Creek and Lagoon	0	0	0	0	0	0	0
Coghill River	0	0	0	0	0	0	0
Robe River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	1,946	4,375	8,026	4,359	9,749	8,439	1,341
Kenai Peninsula subarea							
Saltwater boat							
Bomer Spit - Private Boat	--	--	3,196	5,288	8,076	5,429	1,076
Halibut Cove - Charter Boat	--	--	13,180	11,934	26,412	25,873	2,608
Halibut Cove - Private Boat	--	--	3,960	4,165	6,748	8,319	1,577
Tutka Bay - Charter Boat	--	--	--	1,811	3,365	3,323	914
Tutka Bay - Private Boat	--	--	--	1,322	1,983	1,051	343
Other Kachemak Bay - Charter Boat	--	--	8,012	6,574	16,407	13,484	2,435
Other Kachemak Bay - Private Boat	--	--	12,110	10,594	25,630	12,814	2,404
Kachemak Bay Subtotal	36,113	40,716	40,458	41,688	88,621	70,293	4,726

-continued-

Table 42. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	398	308	218	542	277
Anchor River Area - Private Boat	--	--	8,394	8,294	11,860	10,109	1,788
Anchor River Subtotal	1,995	2,575	8,792	8,602	12,078	10,651	1,800
Cook Inlet							
Cook Inlet - Charter Boat	--	--	505	996	1,801	1,837	590
Cook Inlet - Private Boat	--	--	1,712	163	1,309	574	434
Cook Inlet Subtotal	175	162	2,217	1,159	3,110	2,411	721
Boat - Other							
Boat - Other Charter	--	--	198	580	383	813	353
Boat - Other Private	--	--	1,194	777	201	1,479	546
Boat - Other Subtotal	274	708	1,392	1,357	584	2,292	647
Saltwater shoreline							
Tutka Bay	--	--	--	181	291	10	10
Homer Spit	--	--	398	435	618	642	160
Seldovia Bay	--	0	76	0	73	0	0
Shoreline - Other	698	175	46	18	54	204	107
Saltwater Total	39,255	44,336	53,379	53,440	105,429	86,503	5,130
Freshwater							
Anchor River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	39,255	44,336	53,379	53,440	105,429	86,503	5,130

-continued-

-99-

ACE 10917390

Table 42. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	123	289	434	316	278
Saltwater shoreline	0	0	89	36	0	0	0
Saltwater Total	0	0	212	325	434	316	278
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	212	325	434	316	278
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	865	5,352	4,654	3,346	4,130	903
Afognak Island Area	--	--	3,211	3,170	2,365	2,464	746
Barren Islands	--	--	--	362	928	1,846	561
Boat - Other	8,117	5,891	1,848	815	655	1,376	433
Saltwater shoreline							
Chiniak Bay Area	--	243	183	18	0	160	99
Afognak Island Area	--	--	229	543	146	203	92
Women's Bay	--	0	0	0	0	0	0
Shoreline - Other	62	304	137	307	309	256	111
Saltwater Total	8,179	7,303	10,960	9,869	7,749	10,435	1,338
Freshwater							
Buskin River	0	0	0	0	0	0	0
Pasagahak River	0	0	0	0	0	0	0
Karluk River and Lagoon	0	0	0	0	0	0	0
American River	0	0	0	0	0	0	0
Olds River	0	0	0	0	0	0	0
Salty Creek	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	8,179	7,303	10,960	9,869	7,749	10,435	1,338

-continued-

Table 42. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	75	62	107	116	255	100	60
Saltwater shoreline	0	0	168	93	0	0	0
Saltwater Total	75	62	275	209	255	100	60
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	75	62	275	209	255	100	60
Grand Total	49,455	56,076	72,852	68,202	123,616	105,793	5,586

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

Table 43. Rockfish sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	4,340	5,740	5,864	2,670	6,718	6,668	1,616
Passage Canal (Whittier)	711	1,703	1,620	1,437	1,866	1,898	661
Orca Inlet	25	380	134	0	169	239	135
Boat - Other	199	846	1,832	1,893	3,453	2,580	500
Saltwater shoreline							
Valdez Arm and Road System	--	141	67	262	265	404	254
Passage Canal (Whittier)	--	0	22	29	0	0	0
Orca Inlet	--	0	11	0	0	31	23
Shoreline - Other	12	0	156	243	120	155	110
Saltwater Total	5,287	8,810	9,706	6,534	12,591	11,975	1,984
Freshwater							
Eshamy Creek and Lagoon	0	0	0	0	0	0	0
Coghill River	0	0	0	0	0	0	0
Roba River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	5,287	8,810	9,706	6,534	12,591	11,975	1,984
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	260	91	1,619	136	103
Halibut Cove - Charter Boat	--	--	1,224	362	1,091	733	171
Halibut Cove - Private Boat	--	--	521	326	1,255	350	125
Tutka Bay - Charter Boat	--	--	--	145	400	141	95
Tutka Bay - Private Boat	--	--	--	36	127	175	111
Other Kachemak Bay - Charter Boat	--	--	244	91	418	291	108
Other Kachemak Bay - Private Boat	--	--	2,324	797	1,401	1,061	536
Kachemak Bay Subtotal	2,407	2,463	4,573	1,848	6,311	2,887	618

-continued-

Table 43. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kensai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	0	0	18	0	0
Anchor River Area - Private Boat	--	--	137	54	236	156	114
Anchor River Subtotal	62	0	137	54	254	156	114
Cook Inlet - Charter Boat	--	--	0	54	491	20	20
Cook Inlet - Private Boat	--	--	0	0	582	68	70
Cook Inlet Subtotal	0	25	0	54	1,073	88	73
Boat - Other Charter	--	--	154	199	91	161	162
Boat - Other Private	--	--	994	181	164	554	250
Boat - Other Subtotal	12	12	1,148	380	255	715	296
Saltwater shoreline							
Tutka Bay	--	--	--	0	73	0	0
Homer Spit	--	--	275	271	55	311	152
Seldovia Bay	--	0	31	0	146	0	0
Shoreline - Other	0	0	14	0	345	185	101
Saltwater Total	2,481	2,500	6,178	2,607	8,512	4,342	750
Freshwater							
Anchor River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	2,481	2,500	6,178	2,607	8,512	4,342	750

-continued-

Table 43. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	2,309	1,956	5,530	1,932	746
Afognak Island Area	--	--	550	2,916	4,220	1,398	645
Barren Islands	--	--	--	0	0	0	0
Boat - Other	5,537	1,760	626	91	1,128	331	166
Saltwater shoreline							
Chiniak Bay Area	--	213	642	887	0	555	401
Afognak Island Area	--	--	352	362	0	107	108
Women's Bay	--	0	0	72	0	0	0
Shoreline - Other	2,694	2,718	0	217	491	747	750
Saltwater Total	8,231	4,691	4,479	6,501	11,369	5,070	1,436
Freshwater							
Buskin River	0	0	0	0	0	0	0
Pasagashak River	0	0	0	0	0	0	0
Karluk River and Lagoon	0	0	0	0	0	0	0
American River	0	0	0	0	0	0	0
Olds River	0	0	0	0	0	0	0
Salty Creek	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	8,231	4,691	4,479	6,501	11,369	5,070	1,436

-continued-

Table 43. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	0	0	81	0	44	28
Saltwater shoreline	0	0	31	162	0	0	0
Saltwater Total	0	0	31	243	0	44	28
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	31	243	0	44	28
Grand Total	15,999	16,001	20,394	15,865	32,472	21,431	2,617

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

Table 44. Razor clam sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	0	0	0	0	0	0	0
Passage Canal (Whittier)	0	0	0	0	0	0	0
Orca Inlet	0	0	0	0	0	0	0
Boat - Other	0	0	0	0	0	0	0
Saltwater shoreline							
Valdez Arm and Road System	--	0	306	154	27	64	64
Passage Canal (Whittier)	--	0	0	0	0	0	0
Orca Inlet	--	1,680	489	0	0	0	0
Shoreline - Other	0	0	673	9,234	0	0	0
Saltwater Total	0	1,680	1,468	9,388	27	64	64
Freshwater							
Eshamy Creek and Lagoon	0	0	0	0	0	0	0
Coghill River	0	0	0	0	0	0	0
Robe River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	1,680	1,468	9,388	27	64	64
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	0	0	0	0	0
Halibut Cove - Charter Boat	--	--	0	0	0	0	0
Halibut Cove - Private Boat	--	--	0	0	0	0	0
Tutka Bay - Charter Boat	--	--	--	0	0	0	0
Tutka Bay - Private Boat	--	--	--	0	0	0	0
Other Kachemak Bay - Charter Boat	--	--	0	0	0	0	0
Other Kachemak Bay - Private Boat	--	--	0	0	0	0	0
Kachemak Bay Subtotal	0	0	0	0	0	0	0

-continued-

Table 44. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	0	0	0	0	0
Anchor River Area - Private Boat	--	--	0	0	0	0	0
Anchor River Subtotal	0	0	0	0	0	0	0
Cook Inlet - Charter Boat	--	--	0	0	0	0	0
Cook Inlet - Private Boat	--	--	0	0	0	0	0
Cook Inlet Subtotal	0	0	0	0	0	0	0
Boat - Other Charter	--	--	0	0	0	0	0
Boat - Other Private	--	--	0	0	0	0	0
Boat - Other Subtotal	0	0	0	0	0	0	0
Saltwater shoreline							
Tutka Bay	--	--	--	0	0	0	0
Homer Spit	--	--	0	0	0	0	0
Seldovia Bay	--	0	0	0	0	0	0
Shoreline - Other	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater							
Anchor River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0

-continued-

Table 44. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	0	0	0	0	0
Afognak Island Area	--	--	0	0	0	0	0
Barren Islands	--	--	--	0	0	0	0
Boat - Other	0	0	0	0	0	0	0
Saltwater shoreline							
Chiniak Bay Area	--	1,190	917	616	1,981	821	847
Afognak Island Area	--	--	0	0	0	0	0
Women's Bay	--	0	612	0	0	164	166
Shoreline - Other	7,360	3,780	5,535	1,539	2,633	492	368
Saltwater Total	7,360	4,970	7,064	2,155	4,614	1,477	938
Freshwater							
Buskin River	0	0	0	0	0	0	0
Pasagshak River	0	0	0	0	0	0	0
Karluk River and Lagoon	0	0	0	0	0	0	0
American River	0	0	0	0	0	0	0
Olds River	0	0	0	0	0	0	0
Saltery Creek	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	7,360	4,970	7,064	2,155	4,614	1,477	938

-continued-

Table 44. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	0	0	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	0	0	0	0	0
Grand Total	7,360	6,650	8,532	11,543	4,641	1,541	938

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE - standard error.

-109-

ACE 10917400

Table 45. Other fish sport harvest by subarea and fishery in the Exxon Valdez oil spill area, 1984-1989.

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Prince William Sound subarea							
Saltwater boat							
Valdez Bay	2,033	3,867	934	3,170	4,517	2,313	1,134
Passage Canal (Whittier)	549	1,474	2,278	154	0	80	67
Orca Inlet	62	0	0	0	186	351	311
Boat - Other	412	8,687	321	123	1,114	16,110	14,905
Saltwater shoreline							
Valdez Arm and Road System	--	2,202	16,221	13,882	8,199	894	541
Passage Canal (Whittier)	--	0	58	1,908	0	0	0
Orca Inlet	--	0	876	0	0	0	0
Shoreline - Other	0	1,855	613	0	0	686	666
Saltwater Total	3,056	18,085	21,301	19,237	14,016	20,434	14,957
Freshwater							
Eshamy Creek and Lagoon	25	0	0	0	0	0	0
Coghill River	0	0	0	0	0	0	0
Robe River	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	258	211
Freshwater Total	25	0	0	0	0	258	211
Subarea Total	3,081	18,085	21,301	19,237	14,016	20,692	14,962
Kenai Peninsula subarea							
Saltwater boat							
Homer Spit - Private Boat	--	--	4,497	31	1,145	360	159
Halibut Cove - Charter Boat	--	--	1,986	369	2,031	2,078	407
Halibut Cove - Private Boat	--	--	934	739	433	2,716	1,610
Tutka Bay - Charter Boat	--	--	--	123	185	316	163
Tutka Bay - Private Boat	--	--	--	6,956	186	566	322
Other Kachemak Bay - Charter Boat	--	--	964	154	2,155	1,312	619
Other Kachemak Bay - Private Boat	--	--	3,562	92	5,043	748	411
Kachemak Bay Subtotal	1,297	2,688	11,943	8,464	11,178	8,096	1,869

-continued-

Table 45. (Page 2 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Kenai Peninsula subarea (continued)							
Saltwater boat (continued)							
Anchor River Area - Charter Boat	--	--	0	154	0	50	35
Anchor River Area - Private Boat	--	--	321	62	3,032	821	336
Anchor River Subtotal	0	17	321	216	3,032	871	337
Cook Inlet - Charter Boat	--	--	292	62	308	151	150
Cook Inlet - Private Boat	--	--	117	31	619	918	950
Cook Inlet Subtotal	0	0	409	93	927	1,069	962
Boat - Other Charter	--	--	29	0	0	123	96
Boat - Other Private	--	--	321	93	31	166	79
Boat - Other Subtotal	0	0	350	93	31	289	124
Saltwater shoreline							
Tutka Bay	--	--	--	31	0	181	126
Homer Spit	--	--	672	62	681	648	258
Seldovia Bay	--	0	0	0	0	0	0
Shoreline - Other	0	87	117	0	0	251	149
Saltwater Total	1,297	2,792	13,812	8,959	15,849	11,405	2,202
Freshwater							
Anchor River	25	0	0	31	0	16	15
Other Streams	0	0	0	31	0	0	0
Freshwater Total	25	0	0	62	0	16	15
Subarea Total	1,322	2,792	13,812	9,021	15,849	11,421	2,201

-continued-

Table 45. (Page 3 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
West Cook Inlet subarea							
Saltwater boat	0	0	29	0	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	29	0	0	0	0
Freshwater streams	0	0	0	0	0	0	0
Freshwater Total	0	0	0	0	0	0	0
Subarea Total	0	0	29	0	0	0	0
Kodiak subarea							
Saltwater boat							
Chiniak Bay Area	--	0	876	1,539	1,485	706	358
Afognak Island Area	--	--	380	308	31	443	321
Barren Islands	--	--	--	0	0	66	46
Boat - Other	1,271	941	1,665	154	93	213	171
Saltwater shoreline							
Chiniak Bay Area	--	0	0	0	309	66	64
Afognak Island Area	--	--	1,577	6,156	0	0	0
Women's Bay	--	30	0	0	0	0	0
Shoreline - Other	910	940	88	831	6,652	99	73
Saltwater Total	2,181	1,911	4,586	8,988	8,570	1,593	511
Freshwater							
Buskin River	0	0	204	92	0	164	159
Pasagshak River	0	35	3,212	462	62	0	0
Karluk River and Lagoon	0	0	0	0	0	0	0
American River	0	0	2,920	0	0	0	0
Olds River	0	0	0	0	0	0	0
Saltery Creek	0	0	0	0	0	0	0
Other Streams	0	0	0	0	0	0	0
Freshwater Total	0	35	6,336	554	62	164	159
Subarea Total	2,181	1,946	10,922	9,542	8,632	1,757	529

-continued-

Table 45. (Page 4 of 4).

	Estimate by Year ^a						SE ^b
	1984	1985	1986	1987	1988	1989	1989
Alaska Peninsula subarea							
Saltwater boat	0	0	0	924	0	0	0
Saltwater shoreline	0	0	0	0	0	0	0
Saltwater Total	0	0	0	924	0	0	0
Freshwater streams	0	0	0	0	0	145	144
Freshwater Total	0	0	0	0	0	145	144
Subarea Total	0	0	0	924	0	145	144
Grand Total	6,584	22,823	46,064	38,724	38,497	34,015	15,236

^a -- Indicates that data were not disaggregated for a specific fishery for a given year. Harvest and participation information were collected and estimates are reported in a more aggregated fishery or in one of several "Other" categories.

^b SE = standard error.

ACKNOWLEDGEMENTS

Several computer programmers contributed to the development of the information in this publication. Gary Fidler produced the summary tables, Gail Heineman produced the standard errors, and Cynthia Olnes produced the detailed tables. The Alaska Department of Law funded this investigation as part of the Exxon Valdez oil spill budget.

LITERATURE CITED

- Efron, B. 1982. The jackknife, the bootstrap, and other resampling plans. Society for Industrial and Applied Mathematics, Monograph 38, CBMS-NSF Regional Conference Series in Applied Mathematics, Philadelphia, Pennsylvania.
- Mills, M. J. 1979. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1978-1979, Project F-9-11, 20 (SW-I-A), Juneau.
- _____. 1980. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1979-1980, Project F-9-12, 21 (SW-I-A), Juneau.
- _____. 1981a. Alaska statewide sport fish harvest studies (1979). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1980-1981, Project F-9-13, 22 (SW-I-A), Juneau.
- _____. 1981b. Alaska statewide sport fish harvest studies (1980). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1980-1981, Project F-9-13, 22 (SW-I-A), Juneau.
- _____. 1982. Alaska statewide sport fish harvest studies (1981). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1981-1982, Project F-9-14, 23 (SW-I-A), Juneau.
- _____. 1983. Alaska statewide sport fish harvest studies (1982). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1982-1983, Project F-9-15, 24 (SW-I-A), Juneau.
- _____. 1984. Alaska statewide sport fish harvest studies (1983). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25 (SW-I-A), Juneau.
- _____. 1985. Alaska statewide sport fish harvest studies (1984). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1984-1985, Project F-9-17, 26 (SW-I-A), Juneau.
- _____. 1986. Alaska statewide sport fish harvest studies (1985). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1985-1986, Project F-10-1, 27 (RT-2), Juneau.
- _____. 1987. Alaska statewide sport fisheries harvest report (1986). Alaska Department of Fish and Game, Fishery Data Series No. 2, Juneau.

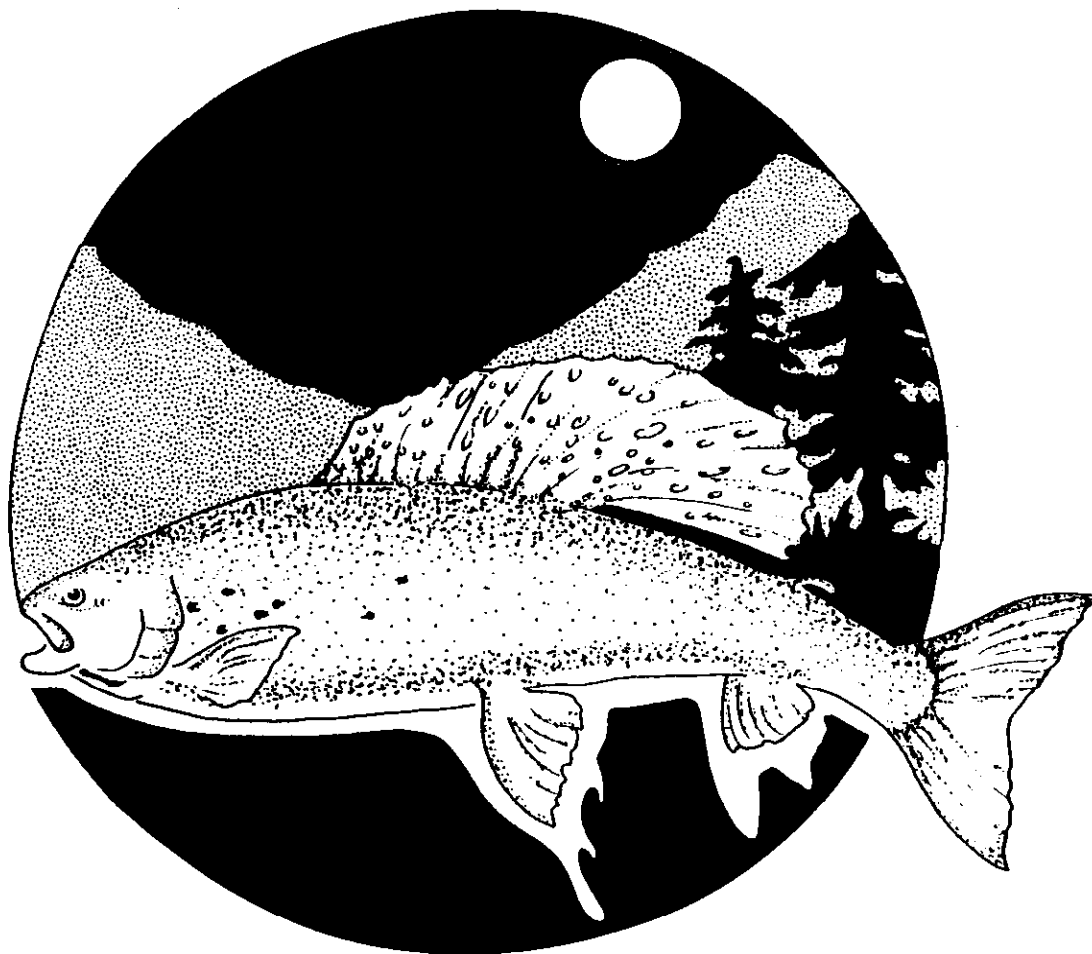
LITERATURE CITED (Continued)

- _____. 1988. Alaska statewide sport fisheries harvest report (1987). Alaska Department of Fish and Game, Fishery Data Series No. 52, Juneau.
- _____. 1989. Alaska statewide sport fisheries harvest report (1988). Alaska Department of Fish and Game, Fishery Data Series No. 122, Anchorage.
- _____. 1990. Harvest and participation in Alaska sport fisheries during 1989. Alaska Department of Fish and Game, Fishery Data Series No. 90-44, Anchorage.

APPENDIX A
QUESTIONNAIRE AND REMINDERS

ALASKA DEPARTMENT OF FISH AND GAME

1989 SPORT FISH SURVEY



Dear Alaska Sport Angler:

Alaska's sport fishery resources are attracting an ever-growing number of anglers. To help the Division of Sport Fisheries obtain the best possible information necessary to maintain and improve the quality of sport fishing in Alaska, the department conducts an annual survey of a representative sample of anglers who purchased a sport fishing license.

I would appreciate your taking a few minutes to answer the questions attached to this letter. Even if you did not fish in Alaska during 1989, your responses to the General Questions on page 3 are important. Please complete the enclosed questionnaire and return it in the postage-paid envelope that is provided for your use. Although there are quite a number of pages, the questions are straightforward and you need only respond to those pertaining to the areas of Alaska where you sport fished during the 1989 season. Be assured that your responses will be considered confidential.

This survey is a means by which you can participate in decisions concerning this state's fishery resources.

Sincerely,

Don W. Collinsworth
Commissioner

-117-

ACE 10917408

INSTRUCTIONS:

1. Questions apply to the January 1 to December 31, 1989 period. (Note: include ice fishing trips for 1989 completed to date.)
2. Questions apply only to yourself and those people living in your home. Do NOT include visiting relatives or friends.
3. If more than one member of your household received a survey, complete only one, but to avoid being sent additional forms, please return all copies.
4. If members of your household did not sport fish during 1989, answer the questions on the following page and return the survey in the postage-paid envelope so we may avoid mailing you additional surveys this year.
5. If members of your household did sport fish during 1989, answer the questions on the following page and then complete the pages which cover the areas sport fished. If you cannot remember the exact number of fish caught, please estimate as closely as you can.
6. Do not include commercially-caught or subsistence-caught fish. Do include personal-use dipnet-caught fish.
7. Please return your completed survey in the postage-paid envelope. Thanks for helping us help you.

Use the map below to locate the booklet pages that apply to your household's 1989 sport fishing.

**ARCTIC-YUKON
KUSKOKWIM**
page 34

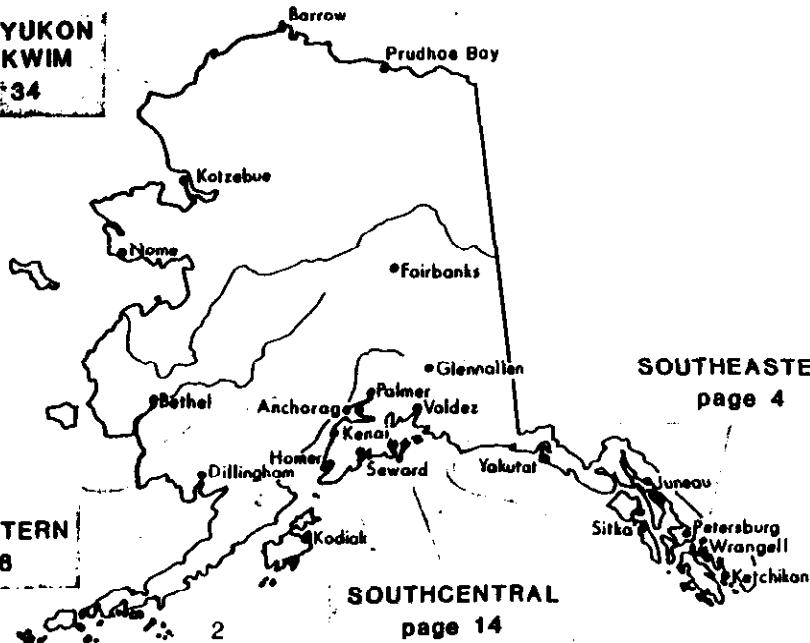
SPORT ANGLERS LIVING OUTSIDE OF THE UNITED STATES:

The postage permit that we have for return mail is good only in the United States. However, it is very important that anglers who do not live in the United States return their surveys to us. Therefore, we must ask that you supply your own postage in order to return the survey questionnaire. We hope you will consider this postage as an additional contribution towards sound management of Alaska's sport fisheries. Thank you for your cooperation and support.

SOUTHWESTERN
page 28

SOUTHCENTRAL
page 14

SOUTHEASTERN
page 4



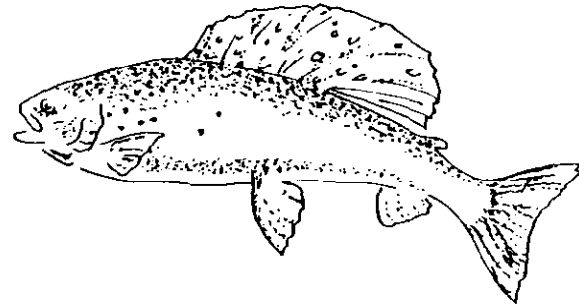
The questions below apply to members of your household and the 1989 sport fishing season.

1A. Number of persons under 16 years of age who sport fished

LICENSE REQUIRED

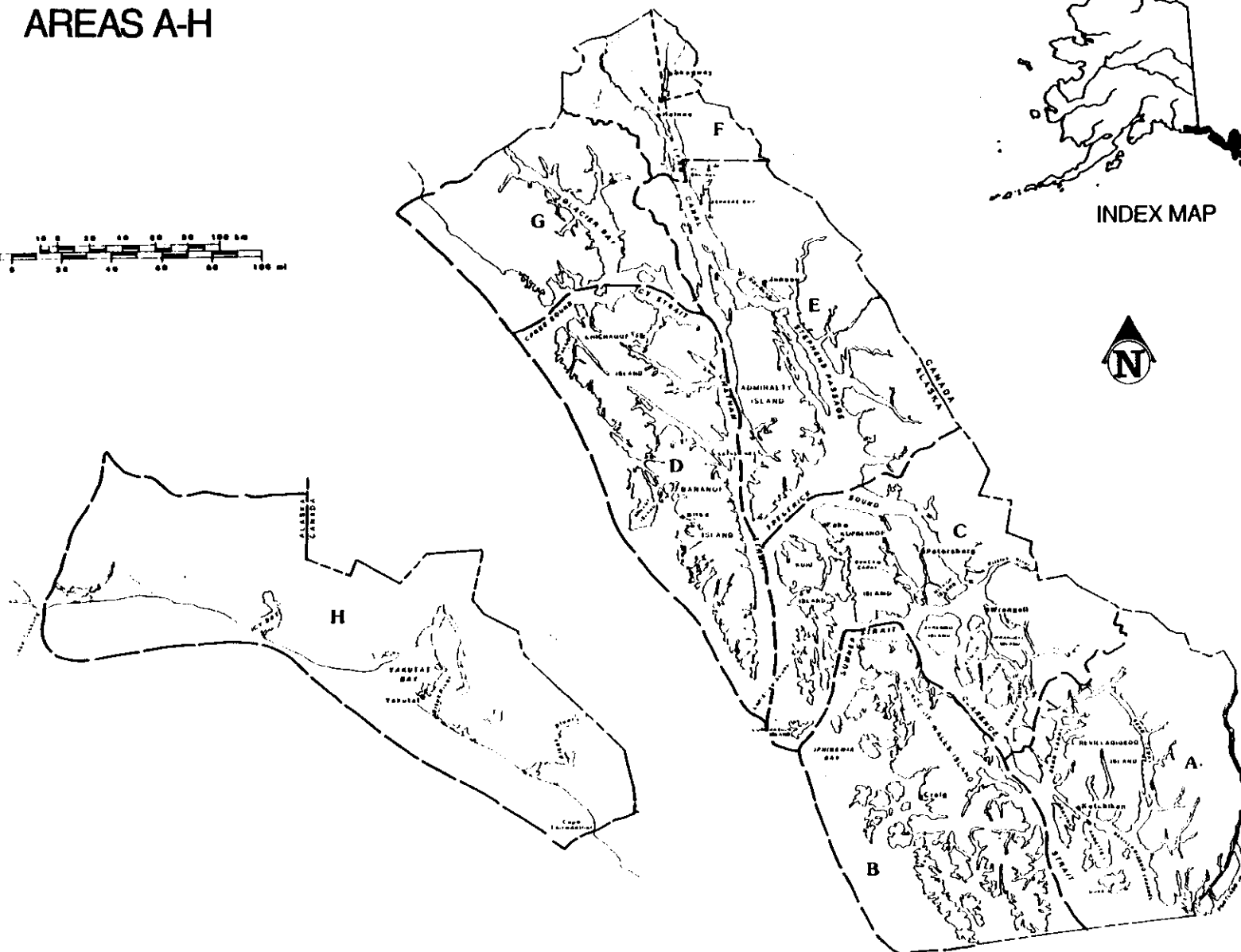
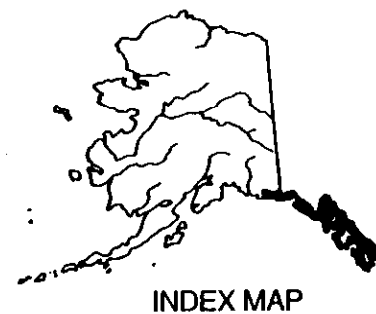
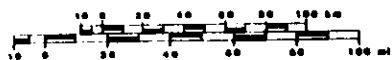
2B. Number of persons recorded in 2A who DID sport fish

3B. If YES, how many household members worked on the clean-up of the Exxon Valdez oil spill?

[illegible]

A full page of blank graph paper with a uniform grid of small squares. The grid consists of 20 columns and 20 rows, creating a total of 400 square units. The lines are thin and black, set against a white background. There are no margins or additional markings on the page.

AREAS A-H



SOUTHEASTERN ALASKA SPORT FISH SURVEY AREAS		
	DESCRIPTION	PAGE
A. KETCHIKAN AREA	All Alaska waters and drainages of the Unuk River and East Behm Canal south to the Proposed International Boundary line and east of a line bisecting Clarence Strait to the Canadian border. This area includes Duke, Annette, Revillagigedo, Gravina islands, and others. FISHING SITES: East and West Behm Canals, Clarence Strait, Revillagigedo Channel, Tongass Narrows, Yes Bay, Bell Island, Naha River, Ward Cove Creek, and others.	6
B. PRINCE OF WALES AREA	All Alaska marine and fresh waters west of a line bisecting Clarence Strait and north of the Proposed International Boundary to a line bisecting Sumner Strait (including Forester Island in the south and Warren Island in the north). FISHING SITES: Karta and Klawock rivers, Nossuk and Shaheen creeks, Sweetwater-Thorne system, and others.	7
C. KAKE, PETERSBURG, WRANGELL, STIKINE AREA	All Alaska waters, including freshwater drainages, bounded by a line from Ernest Sound east through Bradfield Canal to the Canadian border and north along a line bisecting Clarence Strait to Sumner Strait, bisecting Sumner Strait and turning south to, and including, Coronation Island. This area is bounded on the north by a line from the Canadian border west through Cape Fanshaw and bisecting Frederick Sound before ending at the Sitka Borough boundary in Chatham Strait. The Sitka Borough boundary extended south to Coronation Island forms the western boundary; the Canadian border forms the eastern boundary. Islands in this area include, but are not limited to, Etolin, Deer, Onslow, Sumner, Wrangell, Zarembo, Kupreanof, Mitkof, Farm, Kuiu, and Coronation. FISHING SITES: Blind Slough/Wrangell Narrows; Duncan Saltchuck/Duncan Canal; Grays Pass; Castle River; Anan, Petersburg, and Kadake creeks; and others.	8
D. SITKA AREA	All Alaska marine and fresh waters within the Sitka Borough boundary and north to a line following the Glacier Bay National Monument boundary in Cross Sound and bisecting Icy Strait. Islands in this area include, but are not limited to, Baranof, Kruzof, Catherine, Chichagof, Inian, Lemesurier, and Yakobi. FISHING SITES: Starrigavan Bay, Goulding River and Lakes, Mud Bay Creek, Plotnikof/Rezanof system, Pavlov Harbor system, Lake Eva, and others.	9
E. JUNEAU AREA	All Alaska marine and fresh waters bounded on the south by a line from the Canadian border west through Cape Fanshaw to the Sitka Borough boundary in Chatham Strait; on the east by the Canadian border; on the north by the Haines Borough/Juneau City and Borough boundary from Mount Nesselrode (Boundary Peak 98) on the Canadian border, west to Eldred Rock Lighthouse, south through Lynn Canal to latitude of Point Sherman, west through Lynn Canal and ending at the western boundary of Glacier Bay National Monument north of the Endicott River watershed; and on the west by all east-side drainages of the Lynn Canal and a line bisecting Chatham Strait south from Pt. Couverden to Frederick Sound. This area includes all of Admiralty Island. FISHING SITES: Doty Cove to Berners Bay (including all Berners Bay rivers) and west to Point Retreat; Dupont to Echo Cove and Douglas Island; Mitchell Bay Salt Lagoon; Salmon Creek Reservoir; Hasselborg, Florence, Turner, and Peterson lakes; and others.	10
F. HAINES-SKAGWAY AREA	All Alaska marine and fresh waters north of the Haines Borough/Juneau City and Borough boundary from Mount Nesselrode (Boundary Peak 98) on the Canadian border, west to Eldred Rock Lighthouse, south through Lynn Canal to latitude of Point Sherman, west through Lynn Canal and ending at the western boundary of Glacier Bay National Monument north of the Endicott River watershed; and north and east of this National Monument boundary to the Canadian border. The area does not include Pt. Sherman. FISHING SITES: Chilkoot River, Chilkoot Lake and others. SKAGWAY SUB-AREA: That portion of the Haines-Skagway Area north of a line from Taiya Point east to the Canadian border and north and east of the Ferebee River drainage (excludes Ferebee River). HAINES SUB-AREA: Remainder of Haines-Skagway Area.	11
G. GLACIER BAY AREA	All marine and fresh waters within the Glacier Bay National Monument boundaries, all east-side drainages of Excursion Inlet and Icy Strait to Pt. Couverden, and that area south of the monument and north of a line bisecting Icy Strait. This includes, but is not limited to, Rocky, Ansley, Entrance, Porpoise, and Pleasant islands, The Sisters, and the town of Gustavus.	12
H. YAKUTAT AREA	All Gulf of Alaska drainages from Cape Fairweather north to, but not including, Cape Suckling. This area includes associated salt water and is bounded inland by the Canadian border and the Bagley Icefield. FISHING SITES: Situk River and others.	13

A

A. KETCHIKAN AREA (see map page 4 for area definition). Please include only information for members of your household.

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 25"	King 25" and Over	Silver Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Dolly Varden	Steelhead Trout	Rainbow Trout	Cut-throat Trout	Brook Trout	Arctic Grayling	Smelt	Halibut	Rock-fish	Other (Specify)
EXAMPLE	2	2	5		1	2														
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat-East, West, Behm Canals																				
2. Boat-Clarence Strait																				
3. Boat-Revillagigedo ("Revilla") Channel																				
4. Boat-Tongass Narrows																				
5. Boat-Ves Bay																				
6. Boat-Bell Island																				
7. Other Boat Sites (Specify):																				
8. Other Shoreline Sites (Specify):																				
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
10. Ward Cove Creek																				
9. Naha River																				
214. Ketchikan Creek																				
111. Other Streams (Specify):																				
112. Lakes (Specify):																				

B. PRINCE OF WALES AREA (see map page 4 for area definition). Please include only information for members of your household

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. EXAMPLE: A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. EXAMPLE: If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

B

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 28"	King 28" and Over	Silver Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Dolly Varden	Steelhead Trout	Rainbow Trout	Cut-throat Trout	Arctic Grayling	Smelt	Holbrock	Rockfish	Other (Specify)
EXAMPLE	2	2	5			2													
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																			
2. Shoreline Sites (Specify):																			
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Karta River																			
4. Sweetwater-Thorne System (Stream, Lake)																			
5. Klawock River																			
7. Shaboon Creek																			
120. Eagle Creek																			
124. Harris River																			
150. Stoney Creek																			
100. Other Streams (Specify):																			
109. Other Lakes (Specify):																			

C

C. KAKE, PETERSBURG, WRANGELL, STIKINE AREA (see map page 4 for area definition). Please include only information for members of your household.

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. EXAMPLE: A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. EXAMPLE: If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Days	Number of Trips	King Under 28"	King 28" and Over	Silver Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Belly Varden	Steelhead Trout	Rainbow Trout	Cut-throat Trout	Brook Trout	Arctic Grayling	Whitefish	Smelt	Hallbut	Rockfish	Other (Specify)
EXAMPLE	2	2	5			2															
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat-Blind Slough (in Wrangell Narrows)																					
720. Boat-Remainder of Wrangell Narrows																					
2. Boat-Duncan Saltchuck, Duncan Canal																					
3. Boat-Grays Pass																					
720. Boat-Frederick Sound*																					
5. Shoreline-Blind Slough (in Wrangell Narrows)																					
721. Shoreline-Remainder of Wrangell Narrows																					
6. Shoreline-Duncan Saltchuck, Duncan Canal																					
811. Shoreline-Zimovia Strait																					
4. Other Boat Sites (Specify):																					
7. Other Shoreline Sites (Specify):																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8. Castle River																					
9. Anan Creek																					
10. Petersburg Creek																					
175. Stikine River																					
112. Other Streams (Specify):																					
113. Lakes (Specify):																					

*Cape Strait to Pt. Frederick.

D. SITKA AREA (see map page 4 for area definition). Please include only information for members of your household

- For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).
- For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 28"	King 28" and Over	Silver Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Dolly Varden	Steel-head Trout	Rainbow Trout	Cut-throat Trout	Brook Trout	Arctic Grayling	Smelt	Halibut	Rock-Fish	Razor Clams	Other (Specify)
EXAMPLE	2	2	5		1	2															
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
786. Boat-Crescent Bay (Sheldon Jackson Hatchery Area)																					
11. Boat-Starrigavan Bay																					
13. Boat-Silver Bay																					
724. Boat-Other Sitka Sound including Viskari Is.																					
766. Boat-Salisbury Sound																					
787. Shoreline-Crescent Bay (Sheldon Jackson Hatchery Area)																					
12. Shoreline-Starrigavan Bay																					
731. Shoreline-Silver Bay																					
725. Shoreline-Other Sitka Sound																					
1. Other Boat Sites (Specify):																					
2. Other Shoreline Sites (Specify):																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Pielikof and Rezanof System (Lake, Stream)																					
8. Eva Lake (Lake, Stream)																					
14. Sitkoh System (Lake, Stream)																					
148. Salmon Lake																					
161. Salmon Creek																					
186. Baranof System (Lake, Stream)																					
107. Other Streams (Specify):																					
110. Other Lakes (Specify):																					

D

E

E. JUNEAU AREA (see map page 4 for area definition). Please include only information for members of your household.

1. For each site sport fished in 1989 write the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. EXAMPLE: A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. EXAMPLE: If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 28"	King 28" and Over	Silver Salmon	Land-locked King, Silvers	Red Salmon	Mahama Salmon	Pink Salmon	Chum Salmon	Dolly Varden	Steel-head Trout	Rainbow Trout	Cut-throat Trout	Brook Trout	Arctic Grayling	Smelt	Hallibut	Rock-fish	Other (Specify)
EXAMPLE	2	2	5			2															
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat-Dolly Cove to Barrow Bay and west to Point Retreat																					
744. Boat-Sheep Creek Area																					
4. Boat-Mitchell Bay Salt Lagoon (Admiralty Island)																					
3. Shoreline-Juneau Road System (includes Dupont)																					
745. Shoreline-Sheep Creek Area																					
2. Other Boat Sites (Specify):																					
5. Other Shoreline Sites (Specify):																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
6. Juneau Road System (includes Dupont)																					
8. Salmon Creek Reservoir (Lake only)																					
9. Hasselberg Lake																					
10. Lake Florence																					
11. Turner Lake																					
12. Peterson Lake																					
211. Twin Lakes																					
107. Other Streams (Specify):																					
113. Other Lakes (Specify):																					

F. HAINES-SKAGWAY AREA (see map page 4 for area definition) Please include only information for members of your household

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. EXAMPLE: A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. EXAMPLE: If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

SKAGWAY SUB-AREA: That portion of the Haines-Skagway Area north of a line from Taiya Point east to the Canadian border and north and east of the Ferebee River drainage (excludes Ferebee River).

SKAGWAY SUB-AREA F,	Number of Anglers	Number of Trips	Number of Days Fished	King Under 26"	King 26" and Over	Silver Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Dolly Varden	Steel-head Trout	Rainbow Trout	Cut-throat Trout	Brook Trout	Arctic Grayling	White-fish	Smelt	Halibut	Rock-fish	Other (Specify)
EXAMPLE	2	2	5			2															
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																					
2. Shoreline Sites (Specify):																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
100. Streams (Specify):																					
100. Lakes (Specify):																					

HAINES SUB-AREA: Remainder of Haines-Skagway Area.

HAINES SUB-AREA F,	Number of Anglers	Number of Trips	Number of Days Fished	King Under 26"	King 26" and Over	Silver Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Dolly Varden	Steel-head Trout	Rainbow Trout	Cut-throat Trout	Brook Trout	Arctic Grayling	White-fish	Smelt	Halibut	Rock-fish	Other (Specify)
EXAMPLE	2	2	5			2															
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																					
2. Shoreline Sites (Specify):																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
5. Chilkoot Lake																					
3. Chilkoot River																					
130. Chilkat Lake																					
107. Chilkat River																					
100. Other Streams (Specify):																					
109. Other Lakes (Specify):																					

F

-127-

ACE 10917418

G

G. GLACIER BAY AREA (see map page 4 for area definition). Please include **only** information for members of your household.

1. For each site **apart** fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Days Fished	King Under 25"	King 25" and Over	Silver Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Belly Varden	Steel-head Trout	Rainbow Trout	Cut-throat Trout	White-Fish	Saelt	Holbro	Rock Fish	Other (Specify)
EXAMPLE	2	2	5			2													
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																			
2. Shoreline Sites (Specify):																			
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
103. Streams (Specify):																			
104. Lakes (Specify):																			

H. YAKUTAT AREA (see map page 4 for area definition) Please include only information for members of your household

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

H

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 16"	King 16" and Over	King 20" and Over	Silver Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Dolly Varden	Steelhead Trout	Rainbow Trout	Cut-throat Trout	Arctic Grayling	Northern Pike	Smelt	Halibut	Rockfish	Other (Specify)
EXAMPLE	2	2	5				2														
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
724. Boat- Yakutat Bay																					
1. Other Boat Sites (Specify):																					
2. Shoreline Sites (Specify):																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Situk River																					
136. Ankau System (River, Lagoons, Outlet)																					
104. Other Streams (Specify):																					
105. Lakes (Specify):																					

[illegible]

-130-

ACE 10917421

SOUTHCENTRAL ALASKA SPORT FISH SURVEY AREAS

	DESCRIPTION	PAGE
I. GLENNALLEN AREA	All waters and tributaries of the Copper River upstream from a line between the south bank of Haley Creek and the south bank of Canyon Creek in Wood Canyon; also includes the upper Susitna River drainage from its confluence with the Oshetna River. Does not include the Oshetna River. FISHING SITES: Crosswind, Tyone, Van, Paxson, Summit, Strelina, Sculpin, Hudson, and Susitna lakes; Lake Louise; Gulkana River; and others. (Does not include Tangle Lakes, see page 35, FAIRBANKS AREA.)	16
J. PRINCE WILLIAM SOUND AREA	All saltwater and freshwater drainages from Cape Suckling on the east through Prince William Sound to Cape Puget (including Cape Suckling, as well as waters emptying into Port Bainbridge). Also included is that portion of the Copper River drainage downstream of a line between the south bank of Haley Creek and the south bank of Canyon Creek in Wood Canyon. FISHING SITES: Valdez Bay, Passage Canal (Whittier), Eshamy and Shrode creeks; Eyak, Coghill, and Pignot rivers; Eshamy and Shrode lakes; and others.	17
K. KNIK ARM DRAINAGE AREA	All watersheds of the Matanuska River, Knik River, and Little Susitna River, as well as east-side drainages of the Susitna River from Cook Inlet north to, but not including, the Willow Creek drainage. Also Knik Arm west of the Anchorage municipal boundary and its drainages, including the Nancy Lake Recreation Area. Includes fish caught from the east bank of this portion of the Susitna River. FISHING SITES: Little Susitna River; Fish Creek area; Wasilla, Cottonwood, and Jim creeks; Wasilla, Finger, Lucille, Nancy and Big lakes; Kepler Lake complex; Eklutna power plant raceway; and others.	18-19
L. ANCHORAGE AREA	All marine and fresh waters bounded by the Eklutna River drainage on the north, Knik Arm on the west, Turnagain Arm to and including the Portage Creek drainage on the south, and the Chugach Mountains on the east. Included in this area are boundary streams, that part of Knik Arm east of the Anchorage municipal boundary, and that part of Turnagain Arm north of the Anchorage municipal boundary. FISHING SITES: Ship, Bird, and Campbell creeks; Twentymile and Eagle rivers; Jewel, Campbell Point, Sand, Lower Fire, Mirror, Otter, Clunie, Gwen, Sixmile, Green, Hillberg, Triangle, C Street, Beach, Fish, and Cheny lakes; and others.	20-21
M. EAST-SIDE SUSITNA DRAINAGE AREA	All drainages of the Susitna River from its confluence with the Oshetna River downstream to its confluence with the Chulitna River near Talkeetna and including the Oshetna River drainage; all east-side drainages of the Susitna River from Talkeetna to, and including, Willow and Deception creeks on the south; and all east-side drainages of the Middle Fork of the Chulitna River, from near Summit to near Talkeetna. This includes all fish caught while fishing from the east bank of the Susitna and Chulitna rivers from Willow Creek north to near Summit. FISHING SITES: Summit Lake, Broad Pass Lakes, and other small lakes in the Summit area; and Willow, Deception, Caswell, Montana, Sunshine, Clear (Chunilna), Sheep, and Little Willow creeks. (Does not include Little Susitna River, see pages 18-19, KNIK ARM DRAINAGE AREA.)	22
N. WEST-SIDE COOK INLET—WEST-SIDE SUSITNA DRAINAGE AREA	All west-side drainages of the Susitna River, from its confluence with the Chulitna River near Talkeetna to Cook Inlet; all west-side drainages of the Chulitna River from Summit to its confluence with the Susitna, near Talkeetna; and all drainages emptying into Cook Inlet from the Susitna River to Cape Douglas and including Kamishak Bay and other associated salt water. This includes all fish caught while fishing from the west bank of the above river reaches. FISHING SITES: Deshka, Talachulitna, Chulitna, Theodore, and Lewis rivers; Alexander, Polly, and Lake creeks; Shell and Judd lakes; and others.	23
P. KENAI PENINSULA AREA	All fresh water and associated salt water of the Kenai Peninsula bounded on the north by Turnagain Arm and including the Placer River drainage, on the west by Cook Inlet and including Kalgin Island; and on the east by the Placer River drainage, Kenai Lake watershed, and waters flowing into the Gulf of Alaska west of Port Bainbridge (includes Resurrection Bay). FISHING SITES: Kenai, Anchor, Ninilchik, Russian, and Kaslof rivers; Deep and Stariski creeks; Hidden Lake, Swanson River and Swan Lake Canoe systems; and others.	24-27

I

1. GLENNALLEN AREA (see map page 14 for area definition) Please include only information for members of your household.

1 For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. EXAMPLE: A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2 For each type of fish and site fished, write the total number kept by your household. EXAMPLE: If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 20"	King 20" and Over	Sea-run Silver Salmon	Land-locked King, Silver	Red Salmon	Kokane Salmon	Lake Trout	Belly V. Arctic Char	Steel-head Trout	Rainbow Trout	Arctic Grayling	Whitefish	Burbot	Other (Specify)
EXAMPLE	2	2				2											
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Gulkana River Float (Paxson to Sourdough)																	
15. Gulkana River Float (Sourdough to Hwy.)																	
2. Gulkana River Other Fishing																	
192. Klutina River Boat Fishing																	
370. Klutina River Bank Fishing																	
9. Hudson Lake																	
390. Tolsona Lake																	
397. Moose Lake																	
10. Lake Louise*																	
11. Susitna Lake																	
12. Tyone Lake																	
4. Van (Silver) Lake																	
13. Paxson Lake																	
14. Summit Lake (near Paxson)																	
8. Crosswind Lake																	
110. Other Streams (Specify):																	
111. Other Lakes (Specify):																	
PERSONAL USE FISHERIES	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
910. Copper River Dipnet (near Chitina)																	
911. Copper River Fish-wheel (near Chitina)																	

* Mile 160 Glenn Highway at end of Lake Louise Road.

J

J. PRINCE WILLIAM SOUND AREA (see map page 14 for area definition). Please include **only** information for members of your household

1. For each site **part** fished in 1989 write: the number of **household anglers** who fished, the number of **fishing trips**, and the number of **days fished** on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together)

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 16"	King 16" and Over	Silver Salmon	Red Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Steel-head Trout	Rainbow Trout	Cut-throat Trout	Arctic Grayling	White-fish	Smelt	Halibut	Rock-Bass	Razor Clams	Other (Specify)
EXAMPLE	2	2	5			2															
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat-Valdez Arm/Bay (including Port Valdez)																					
2. Boat-Passage Canal (Whittier)																					
727. Shoreline-Valdez Road System																					
747. Shoreline-Remainder of Valdez Arm																					
3. Other Boat Sites (Specify):																					
4. Other Shoreline Sites (Specify):																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
5. Eyak River																					
6. Eshamy Creek and Lagoon																					
7. Coghill River																					
8. Shrode Creek																					
9. Pigot River Drainage																					
11. Eshamy Lake																					
12. Shrode Lake																					
110. Other Streams (Specify):																					
113. Other Lakes (Specify):																					

K

K. KNIK ARM DRAINAGE AREA — PAGE 1 OF 2 (see map page 14 for area definition) Please include only information for members of your household.

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** if 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	Sea-run King Under 16"	Sea-run King 16" and Over	Sea-run Silver Salmon	Land-locked King Salmon	Red Salmon	Nokanee Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Northern Pike	Burbot	Smelt	Other (Specify)
EXAMPLE	2	2	5			2														
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat-Fish Creek Area																				
2. Other Boat Sites (Specify):																				
3. Shoreline Sites (Specify):																				
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
NANCY LAKE REC. AREA																				
13. Nancy Lake																				
241. South Rolly Lake																				
242. Little Noluck Lake																				
243. Big Noluck Lake																				
244. Other Fishing Sites (within Rec. Area)																				
REMAINDER OF AREA K	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
4. Little Susitna River																				
5. Knik River and Tributaries, including Jim Creek																				
6. Washie Creek (Rabbit Slough)																				
7. Cottonwood Creek																				
14. Ektulna Power Plant Raceway																				
159. Meadow Creek (Big Lake Drainage)																				
234. Fish Creek (Big Lake Drainage)																				

Please note: "K" is continued on the next page.

K. KNIK ARM DRAINAGE AREA — PAGE 2 OF 2 (see map page 14 for area definition) Please include **only** information for members of your household.

1. For each site **apart** fished in 1989 write: the number of **household anglers** who fished, the number of **fishing trips**, and the number of **days fished** on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).
2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

K

	Number of Anglers	Number of Trips	Number of Days Fished	Sea-run King Under 16"	Sea-run King 16" and Over	Sea-run Silver Salmon	Land-locked King, Stewies	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Northern Pike	Burbot	Smelt	Other (Specify)
EXAMPLE	2	2	5			2														
FRESHWATER (cont.)	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
10. Kepler Lake Complex*																				
8. Wasilla Lake																				
9. Finger Lake																				
11. Lucille Lake																				
12. Big Lake																				
114. Other Streams (Specify):																				
115. Other Lakes (Specify):																				
PERSONAL USE FISHERIES	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
900. Fish Creek (Big Lake Drainage)																				

*Kepler Complex = Bradley, Canoe, Echo, Harriet, Irene, Kepler, Klaire, Long, Matanuska, Silver, and Victor Lakes.

L

L. ANCHORAGE AREA — PAGE 1 OF 2 (see map page 14 for area definition) Please include **only** information for members of your household

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	Sea-run King Under 16"	Sea-run King 16" and Over	Sea-run Silver Salmon	Land-locked King, Silvers	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	White-Fish	Smelt	Other (Specify)
EXAMPLE	2	2	5			2											
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																	
2. Shoreline Sites (Specify):																	
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
ANCHORAGE AREA LAKES	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Jewel Lake																	
4. Campbell Point Lake																	
5. Sand Lake																	
20. C Street Lake (Lake-Campbell Lake)																	
23. Cherry Lake																	
138. DeLong Lake																	
ELMENDORF BASE LAKES	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
22. Fish Lake																	
11. Sixmile Lake																	
12. Green Lake																	
13. Hillberg Lake																	
19. Triangle Lake																	

Please note: "L" is continued on the next page.

L. ANCHORAGE AREA — PAGE 2 OF 2 (see map page 14 for area definition). Please include **only** information for members of your household.

- For each site sport fished in 1989 write: the number of **household anglers** who fished, the number of **fishing trips** and the number of **days fished** on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).
- For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

L

	Number of Anglers	Number of Trips	Number of Days Fished	Sea-run King Under 16"	Sea-run King 16" and Over	Sea-run Silver Salmon	Land-locked King, Silvers	Red Salmon	Kokanee Salmon	Pink Salmon	Chum Salmon	Dolly V Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Smelt	Other (Specify)
EXAMPLE	2	2	5			2											
FRESHWATER (cont.)	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
FORT RICHARDSON LAKES	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8. Otter Lake																	
9. Clunie Lake																	
10. Gwan Lake																	
OTHER AREA 1 LAKES	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
6. Lower Fire Lake																	
7. Mirror Lake																	
21. Beach Lake																	
124. Other Lakes (Specify):																	
AREA 1 CREEKS/RIVERS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14. Ship Creek																	
15. Bird Creek																	
16. Campbell Creek																	
17. Twentymile River																	
18. Eagle River																	
125. Other Streams (Specify):																	

M

M. EAST SIDE SUSITNA DRAINAGE AREA (see map page 14 for area definition) Please include only information for members of your household

- For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).
- For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 16"	King 16" and Over	Sea-run Silver Salmon	Land-locked Kings, Silvers	Red Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Burbot	Other (Specify)
EXAMPLE	2	2	5			2											
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
143. Kashwitna River																	
4. Willow Creek																	
5. Caswell Creek																	
6. Montana Creek																	
7. Sunshine Creek																	
169. Talkeetna River & Tribes, including Clear Creek																	
9. Sheep Creek																	
10. Little Willow Creek																	
138. Goose Creek																	
117. Birch Creek																	
112. Other Streams (Specify):																	
111. Other Lakes (Specify):																	

N. WEST SIDE COOK INLET — WEST SIDE SUSITNA DRAINAGE AREA (see map page 14 for area definition) Please include **only** information for members of your household

N

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together)

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 16"	King 16" to Under 28"	King 28" and Over	Silver Salmon	Red Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Northern Pike	Burbot	Smelt	Hallibut	Razor Clams	Other (Specify)
EXAMPLE	2	2	5		1		2														
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																					
2. Shoreline Sites (Specify):																					
16. Razor Clams: Polly Creek Beach/Crescent River Bar																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Dezhka River (Kroto Creek)																					
4. Lake Creek																					
171. Fish Lake Creek & Fish Lakes (Yentaa Drainage)																					
5. Alexander Creek																					
6. Polly Creek																					
7. Talachallina River																					
8. Chulita River																					
9. Theodore River																					
10. Lewis River																					
186. Kustalan River																					
12. Shell Lake																					
15. Judd Lake																					
237. Silver Salmon Creek																					
111. Other Streams (Specify):																					
116. Other Lakes (Specify):																					

P

FRESHWATER

P. KENAI PENINSULA AREA — PAGE 1 OF 4 (see map page 14 for area definition) Please include only information for members of your household.

NOTE: Please write your responses to instructions 1 and 2 below in the appropriate section, depending on whether your trip was non-guided or guided. Include only those trips under "guided" for which your household paid money to persons specifically in the business of guiding fishermen on the Kenai River.

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. EXAMPLE: A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number caught and the number kept by your household. EXAMPLE: If 4 silver salmon were caught, but only 2 were kept, the numbers 4/2 would be written.

KENAI RIVER NON-GUIDED P.

	Number of Anglers	Number of Trips	Number of Days Fished	Sea-run King Under 16"	Sea-run King 16" and Over	Sea-run Silver Salmon	Red Salmon	Pink Salmon	Chum Salmon	Lake Trout	Belly V. Arctic Char	Rainbow Trout	Arctic Grayling	White- fish	Northern Pike	Smelt	Other (Specify)
EXAMPLE	2	2	5			1/2											
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Kenai River- Cook Inlet to Soldotna Bridge																	
2. Kenai River- Soldotna Bridge to Moose River																	
3. Kenai River- Moose River to Skilak Outlet																	
4. Kenai River- Skilak Inlet to Kenai Lake																	

KENAI RIVER GUIDED P.

	Number of Anglers	Number of Trips	Number of Days Fished	Sea-run King Under 16"	Sea-run King 16" and Over	Sea-run Silver Salmon	Red Salmon	Pink Salmon	Chum Salmon	Lake Trout	Belly V. Arctic Char	Rainbow Trout	Arctic Grayling	White- fish	Northern Pike	Smelt	Other (Specify)
EXAMPLE	2	2	5			1/2											
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Kenai River- Cook Inlet to Soldotna Bridge																	
2. Kenai River- Soldotna Bridge to Moose River																	
3. Kenai River- Moose River to Skilak Outlet																	
4. Kenai River- Skilak Inlet to Kenai Lake																	

Please note: "P" is continued on the next page.

P. KENAI PENINSULA AREA — PAGE 2 OF 4 (see map page 14 for area definition) Please include **only** information for members of your household.

1. For each site sport fished in 1989 write: the number of **household anglers** who fished, the number of **fishing trips**, and the number of **days fished** on **all** trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number caught and the number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the numbers 4/2 would be written.

P
FRESHWATER

**OTHER FRESHWATER
GUIDED AND
NON-GUIDED P.**

	Number of Anglers	Number of Trips	Number of Days Fished	Sea-run King Under 16"	Sea-run King 16" and Over	Sea-run Silver Salmon	Land- locked King Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Steel- head Trout	Rainbow Trout	Arctic Grayling	White- fish	Northern Pike	Burbot	Smelt	Other (Specify)
EXAMPLE	2	2	5			4/2															
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
5. Anchor River																					
8. Stariski Creek																					
7. Deep Creek																					
6. Ninilchik River																					
10. Kaslof River																					
244. Rustumena Lake																					
334. Swanson River																					
14. Swanson River Canoe Route Lakes																					
15. Swan Lake Canoe System																					
228. Skilak Lake																					
12. Hidden Lake																					
9. Russian River																					
218. Quartz Creek																					
147. Crescent Lake																					
261. Resurrection Creek																					
226. Sixmile Creek Drainage*																					
175. Ingram Creek																					
111. Other Streams (Specify)																					
114. Other Lakes (Specify)																					

*Including Sixmile, Granite, East Fork and Canyon Creeks
Please note "P" is continued on the next page

P

P. KENAI PENINSULA AREA — PAGE 3 OF 4 (see map page 14 for area definition) Please include only information for members of your household.

NOTE: Include under "CHARTER BOAT" only those trips for which you hired the boat and crew to take you fishing, not merely to ferry you to a destination. Trips for which you used your own boat or a boat was rented and operated by a member of the fishing party should be included under "PRIVATE BOAT."

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

SALTWATER FINFISH

EXAMPLE

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 16"	King 16" and Over	Silver Salmon	Red Salmon	Pink Salmon	Chum Salmon	Dolly V. Arctic Char	Steel-head Trout	Smelt	Halibut	Lingcod	Rock-Fish	Other Fish (Specify)
EXAMPLE	2	2	5			2										
SALTWATER CHARTER BOAT P.	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
734. Halibut Cove (Kachemak Bay, Homer Area)																
738. Tutka Bay (Kachemak Bay, Homer Area)																
803. Remainder of Kachemak Bay																
802. Resurrection Bay (Seward)																
804. Other CHARTER Fishing Sites (Specify):																
SALTWATER PRIVATE BOAT P.	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
734. Halibut Cove (Kachemak Bay, Homer Area)																
738. Tutka Bay (Kachemak Bay, Homer Area)																
822. Homer Spit (Kachemak Bay)																
803. Remainder of Kachemak Bay																
732. Anchor River Area																
736. Whiskey Gulch Area																
801. Deep Creek Area																
802. Resurrection Bay (Seward)																
804. Other PRIVATE BOAT Fishing Sites (Specify):																
SALTWATER SHORELINE P.	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
738. Tutka Bay (Kachemak Bay, Homer Area)																
823. Homer Spit (Kachemak Bay)																
793. Resurrection Bay (Seward)																
805. Other SHORELINE Fishing Sites (Specify):																

Please note: "P" is continued on the next page.

P. KENAI PENINSULA AREA — PAGE 4 OF 4 (see map page 14 for area definition) Please include **only** information for members of your household.

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each variety of fish and site visited, write the total number taken by your household.

PERSONAL USE

FRESHWATER

FINFISH P₁

EXAMPLE

	Number of Anglers	Number of Trips	Number of Days Fished	Sea-run Silver Salmon	Red Salmon	Pink Salmon	Chum Salmon	Other (Specify)
EXAMPLE	2	2	5	2				
PERSONAL USE DIPNET	*****	*****	*****	*****	*****	*****	*****	*****
1. China Pool								
2. Kenai River								
3. Kaslof River								

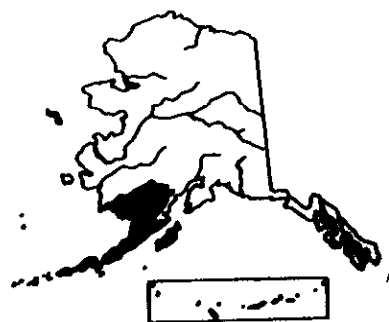
2. For each variety of shellfish and site visited, write the total number (unless gallons is indicated) taken by your household.

SALTWATER SHELLFISH P₂

EXAMPLE

	Number of Anglers	Number of Trips	Number of Days Fished	King Crab	Dungeness Crab	Tanner Crab	Shrimp (gallons)	Hd. Shell Clams (gallons)	Razor Clams	Other Shellfish (Specify)
EXAMPLE	2	2	5		7					
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Resurrection Bay (Seward)										
2. Kachemak Bay (Homer)										
5. Clams: Kaslof to Anchor Point, including Clam Gulch										
4. Other Sites (Specify):										

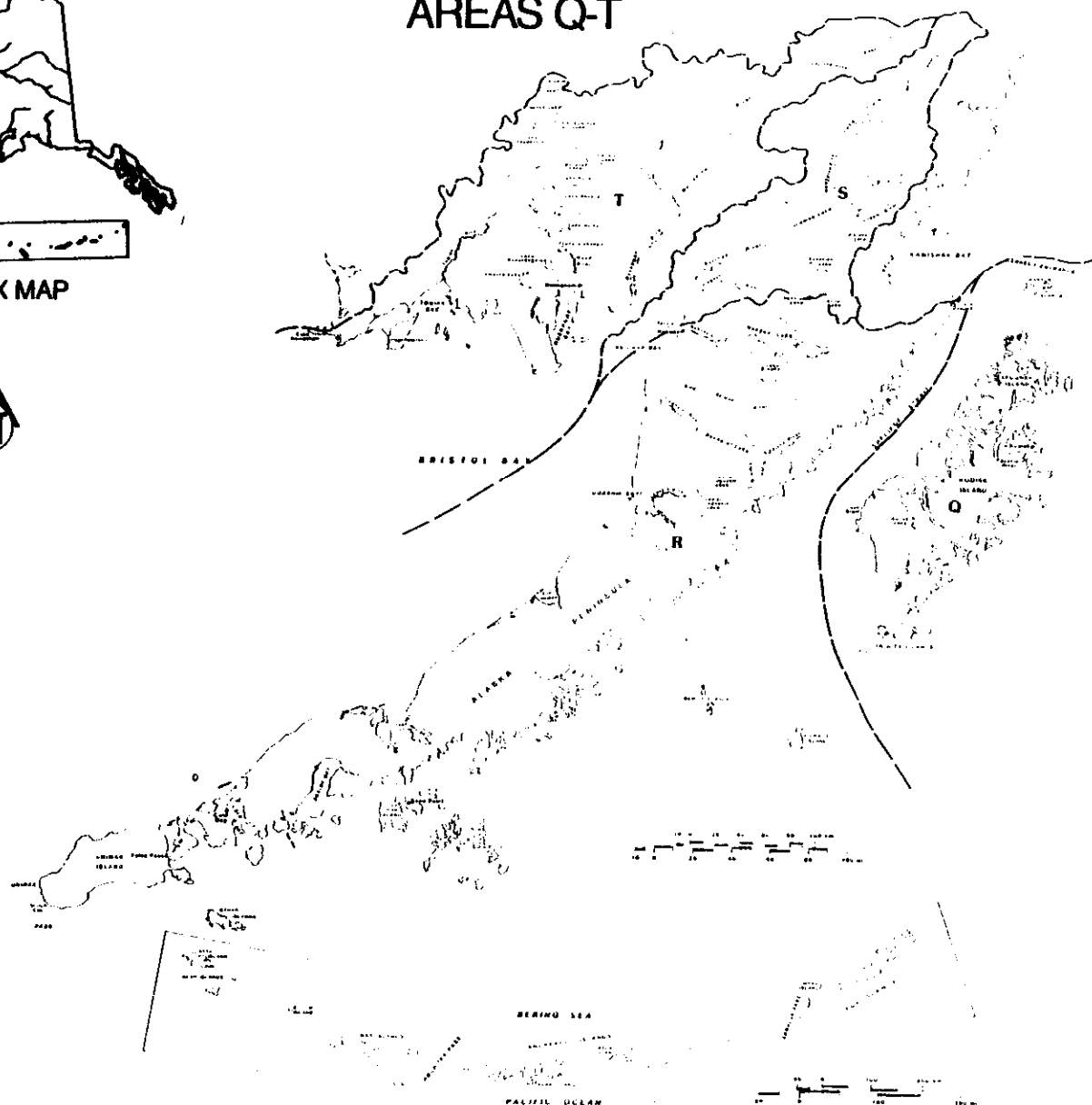
P



INDEX MAP



AREAS Q-T



SOUTHWESTERN ALASKA SPORT FISH SURVEY AREAS

	DESCRIPTION	PAGE
Q. KODIAK AREA	All marine and fresh waters within the Kodiak Island Borough boundary. This includes Afognak Island and the Barren Islands in the north and the Trinity Islands in the south. FISHING SITES: Buskin and Pasagshak rivers; Karluk River, Lake, and Lagoon; and others.	30
R. NAKNEK DRAINAGES— ALASKA PENINSULA AREA	All freshwater drainages of the Alaska Peninsula and the Aleutian Chain south of Cape Douglas and the Naknek River watershed. Boundary waters are included as well as adjacent salt water and islands. FISHING SITES: Russel Creek (Cold Bay Area), Adak Island Area, Naknek River and Lake, Brooks River and Lake, Ugashik system, Becharof system, and others.	31
S. KVICHAK RIVER DRAINAGE AREA	All waters and tributaries of the Kvichak River watershed, including Nonvianuk Lake, Kukaktek Lake, Kulik Lake, Lake Iliamna, and Lake Clark. Also includes Kvichak Bay north of Naknek. FISHING SITES: Lower Talarik Creek; Copper, Newhalen, and Alagnak rivers; Gibraltar system, and others.	32
T. NUSHAGAK AREA	All waters and tributaries of the Nushagak River watershed, including the Mulchatna River drainage, the Wood River and Tikchik Lakes systems and waters westward to Cape Newenham. Includes adjacent salt water. FISHING SITES: Togiak River system, Chilikadrotna River, and others.	33

Q

Q. KODIAK AREA (see map page 28 for area definition) Please include **only** information for members of your household

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 20"	King 20" and Over	Silver Salmon	Land-locked Kings, Silvers	Red Salmon	Pink Salmon	Chum Salmon	Dolly V. Arctic Char	Steel-head Trout	Rainbow Trout	Arctic Grayling	Capelin (Smelt)	Halibut	Rock Fish	Razor Clams	Other (Specify)
EXAMPLE	2	2	5			2													
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
736. Boat-Chiniak Bay Area*																			
814. Boat-Alognak Island Area																			
800. Boat-Shuyak Area																			
737. Shoreline-Chiniak Bay Area*																			
815. Shoreline-Alognak Island Area																			
801. Shoreline-Shuyak Area																			
1. Other Boat Sites (Specify):																			
2. Other Shoreline Sites (Specify):																			
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Bushia River																			
4. Pasagshak River																			
5. Karluk River and Lagoon																			
114. American River																			
163. Olds River (or Creek)																			
7. Karluk Lake																			
106. Other Streams (Specify):																			
108. Roadside Lakes (Specify):																			
109. Other Lakes (Specify):																			

*Cape Chiniak to Monashka Bay

R. NAKNEK DRAINAGE — ALASKA PENINSULA AREA (see map page 28 for area definition) Please include only information for members of your household

- For each site sport fished in 1989 write the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man); number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).
- For each type of fish and site fished, write the total number caught and the number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the numbers 4/2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King 28" and Under	King Over 28"	Silver Salmon	Red Salmon	Kokane Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Northern Pike	Burbot	Smelt	Hallbut	Rockfish	Other (Specify)
EXAMPLE	2	2	5		4 1/2																
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat-Cold Bay Area																					
2. Boat-Adak Island Area																					
3. Other Boat Sites (Specify):																					
4. Other Shoreline Sites (Specify):																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
5. Cold Bay Area, including Russel Creek																					
6. Adak Island Area																					
102. American Creek																					
7. Naknek River & Tributaries																					
8. Naknek Lake-Bay of Islands																					
9. Naknek Lake-Other																					
10. Brooks River																					
13. Brooks Lake																					
11. Ugashik System*																					
12. Becharof System**																					
113. Other Streams (Specify):																					
114. Other Lakes (Specify):																					

*Including Upper and Lower Ugashik Lakes.

**Including Becharof Lake, Kejulik and Egegik Rivers and Shosky Creek.

R

S

S. KVICHAK RIVER DRAINAGE AREA (see map page 28 for area definition) Please include **only** information for members of your household

- For each site **sport** fished in 1989 write: the number of **household anglers** who fished, the number of **fishing trips**, and the number of **days fished** on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).
- For each type of fish and site fished, write the total number caught and the number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the numbers 4/2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King 20" and Under	King 21" Over 20"	Silver Salmon	Red Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Northern Pike	Burbot	Smelt	Other (Specify)
EXAMPLE	2	2	5			4/2												
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																		
2. Shoreline Sites (Specify):																		
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Kvichak River																		
4. Lower Talarik Creek																		
5. Copper River (Trih. of Iliamna Lake)																		
6. Ghratler Lake																		
7. Newhalen River																		
8. Alagnak (Branch) River																		
9. Lake Clark																		
125. Iliamna Lake																		
111. Other Streams (Specify):																		
110. Other Lakes (Specify):																		

T. NUSHAGAK AREA (see map page 28 for area definition). Please include only information for members of your household

1. For each site **and** fished in 1989 write the number of **household anglers** who fished, the number of **fishing trips**, and the number of **days fished on all trips**. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the **total number caught** and the **number kept** by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the numbers 4/2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King 28" and Under	King Over 28"	Silver Salmon	Red Salmon	Kokanee Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Northern Pike	Burbot	Smelt	Other (Specify)
EXAMPLE	2	2	5			4/2													
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																			
2. Shoreline Sites (Specify):																			
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Nushagak River System*																			
4. Wood River Lakes System**																			
5. Tikchik-Nuyakuk Lake System***																			
6. Togiak River System****																			
7. Mulchatna River																			
8. Chilikadrotna River																			
109. Other Streams (Specify):																			
110. Other Lakes (Specify):																			

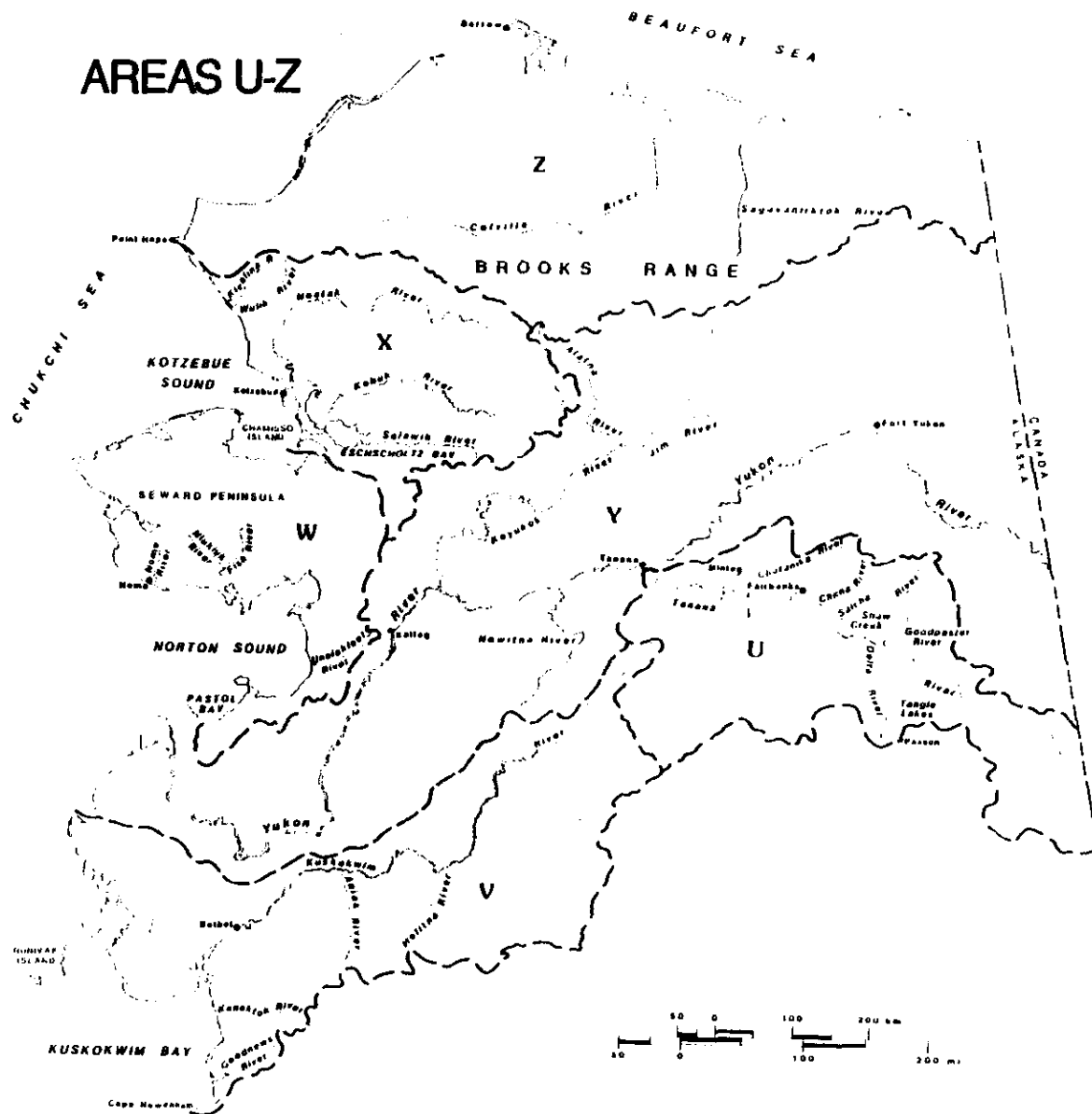
*Excluding Mulchatna, Nuyakuk and Chilikadrotna Rivers.

**Including Lakes Aleknagik, Nerka, Beverley and Kulik.

***Including Nuyakuk, Tikchik, Chickaminuk, Nishlik and Upnuk Lakes and Lake Chauvekukuli.

****Including Togiak River-Lake drainage area.

AREAS U-Z



-150-

ACE 10917441

ARCTIC-YUKON-KUSKOKWIM SPORT FISH SURVEY AREAS

	DESCRIPTION	PAGE
U. FAIRBANKS AREA	The Tanana River watershed. This area also includes the Alaskan portion (Wrangell Mts.) of the White River drainage. This area excludes all portions of the Yukon and Kuskokwim River watersheds. FISHING SITES: Chena, Chatanika, Salcha, Delta Clearwater, Richardson Clearwater, Goodpastor, and Delta rivers; Shaw Creek; Badger Slough; Birch, Quartz, George, Volkmar, Fielding, Tangle, and Chena lakes; Minto Flats; and others.	36-37
V. KUSKOKWIM RIVER DRAINAGE AREA	The Kuskokwim River watershed. All waters flowing into Kuskokwim Bay; adjacent salt water from Cape Newenham north to the Naskonal Peninsula (north of Nelson Island), and Nunivak Island. This area does not include the Pastolik River, nor any portion of the Tanana River watershed or Yukon River watershed. FISHING SITES: Anektok, Goodnews, Aniak, and Holitna rivers, and others.	38
W. SEWARD PENINSULA-NORTON SOUND AREA	All waters north of the Yukon River drainage, south of the Selawik River-Kotzebue Sound area, and west of the Yukon-Koyukuk river drainages. This area includes Pastol Bay and all salt water north and west of it in Norton Sound as well as salt water adjacent to the Seward Peninsula, including Spatarief Bay in Kotzebue Sound and the southern half of Eschscholtz Bay. FISHING SITES: Unalakleet, Pilgrim, and Nome rivers; Fish-Niukluk river system; and others.	39
X. NORTHWEST ALASKA AREA	All waters and drainages of the Kotzebue area including drainages of the Selawik, Kobuk, Noatak, Wulik, and Kivalina rivers. All salt water in the northern half of Eschscholtz Bay, including Chamisso Island area, and the northern half of Kotzebue Sound to and including Point Hope.	40
Y. YUKON RIVER DRAINAGE AREA	The Yukon River watershed. All drainages of the Yukon River from the south side of the Brooks Range to the Bering Sea, from Naskonal Peninsula north to Pastol Bay; from the Canadian border, including the Alaskan portion of the Fortymile and Sixtymile river drainages, west to Kaltag. This area excludes all portions of the Tanana and Kuskokwim river watersheds. FISHING SITES: Haul Road/Dalton Highway takes and streams.	41
Z. NORTH SLOPE BROOKS RANGE AREA	All drainages north of the Brooks Range flowing into the Beaufort and Chukchi Seas, east of Point Hope and west of the Canadian border, including adjacent saltwater areas.	42

U

U. FAIRBANKS AREA — PAGE 1 OF 2 (see map page 34 for area definition). Please include only information for members of your household.

- For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).
- For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 16"	King 16" and Over	Sea-run Silver Salmon	Land-locked King, Silver	Chum Salmon	Lake Trout	Dolly V Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Sheefish	Northern Pike	Burbot	Other (Specify)
EXAMPLE	2	2	5			2											
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Upper Chena River*																	
2. Lower Chena River**																	
319. Piledriver Slough																	
513. Nenana River Drainage																	
3. Badger Slough***																	
4. Chatanika River																	
5. Salcha River																	
6. Delta Clearwater River																	
7. Richardson Clearwater River																	
8. Goodpastor River																	
16. Shaw Creek																	
17. Delta River (below Tangle Lakes)																	
137. Brushkana Creek																	
514. Lower Tanana River† (mainstem only)																	
515. Middle Tanana River†† (mainstem only)																	
516. Upper Tanana River††† (mainstem only)																	
118. Other Streams (Specify):																	

*The Chena River and tributaries accessed from the Chena Hot Springs Road beyond 25 mile on the road.
 **The Chena River and tributaries from the mouth upstream to 25 mile Chena Hot Springs Road.
 ***All parts of Badger Slough (sometimes called Chena Slough).
 Please note "U" is continued on the next page.

†The mainstem Tanana River downstream from Nenana.
 ††The mainstem Tanana River between Delta Junction and Nenana.
 †††The mainstem Tanana River upstream from Delta Junction.

U. FAIRBANKS AREA — PAGE 2 OF 2 (see map page 34 for area definition). Please include only information for members of your household

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).
2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

U

	Number of Anglers	Number of Trips	Number of Days Fished	King Under 16"	King 16" and Over	Sea-run Silver Salmon	Land-locked Kings, Silvers	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Sheefish	Northern Pike	Burbot	Other (Specify)
EXAMPLE	2	2	5			2											
FRESHWATER (cont.)	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9. Birch Lake																	
10. Quartz Lake																	
11. George Lake																	
201. Koole Lake																	
12. Volkmar Lake																	
13. Fielding Lake																	
202. Lake Minchumina																	
163. East Twin Lake																	
296. Wien Lake																	
14. Minto Flats																	
15. Tangle Lakes																	
18. Chena Lake (Lake only)																	
408. Dune Lake																	
189. Harding Lake																	
117. Other Lakes (Specify):																	

-153-

ACE 10917444

V

V. KUSKOKWIM RIVER DRAINAGE AREA (see map page 34 for area definition). Please include only information for members of your household

1. For each site sport fished in 1989 write: the number of household anglers who fished, the number of fishing trips, and the number of days fished on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together)

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King 26" and Under	King Over 26"	Sea-run Silver Salmon	Land-locked King, Silvers	Red Salmon	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Sheefish	Northern Pike	Burbot	Smelt	Halibut	Other (Specify)
EXAMPLE	2	2	5			2															
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																					
2. Shoreline Sites (Specify):																					
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
5. Aniak River																					
6. Holitna River																					
3. Kanaklak River																					
4. Goodnews River																					
7. Other Streams (Specify):																					
8. Other Lakes (Specify):																					

W. SEWARD PENINSULA-NORTON SOUND AREA (see map page 34 for area definition) Please include **only** information for members of your household

1. For each site sport fished in 1989 write: the number of **household anglers** who fished, the number of **fishing trips**, and the number of **days fished** on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together)

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King 20" and Under	King Over 20"	Sea-run Silver Salmon	Red Salmon	Pink Salmon	Chum Salmon	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Sheefish	Northern Pike	Burbot	Smelt	Other (Specify)
EXAMPLE	2	2	5			2												
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																		
2. Shoreline Sites (Specify):																		
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
6. Pilgrim River																		
4. Nome River																		
5. Fish-Niukluk River System*																		
3. Unalakleet River																		
7. Other Streams (Specify):																		
8. Other Lakes (Specify):																		

*Including Pargon, Rathlatuk, Casadepaga, Niukluk and Fish Rivers and Boston Creek

W

X

X. NORTHWEST ALASKA AREA (see map page 34 for area definition). Please include **only** information for members of your household.

1. For each site sport fished in 1989 write: the number of **household anglers** who fished, the number of **fishing trips**, and the number of **days fished** on **all** trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	King 26" and Under	King Over 26"	Sas-run Silver Salmon	Red Salmon	Pink Salmon	Chum Salmon	Lake Trout	Belly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Shoefish	Northern Pike	Burbot	Smelt	Other (Specify)
EXAMPLE	2	2	5			2													
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):																			
2. Shoreline Sites (Specify):																			
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Noatak River																			
4. Kobuk River																			
5. Wulik River																			
6. Other Streams (Specify):																			
8. Other Lakes (Specify):																			

Y. YUKON RIVER DRAINAGE AREA (see map page 34 for area definition). Please include **only** information for members of your household.

Y

- For each site sport fished in 1989 write: the number of **household anglers** who fished, the number of **fishing trips**, and the number of **days fished** on all trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4, on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).
- For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 silver salmon were caught, but only 2 were kept, the number 2 would be written.

	Number of Anglers	Number of Trips	Number of Days Fished	King 24" and Under	King Over 24"	Sea-run Silver Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Shadfish	Northern Pike	Burbot	Other (Specify)
EXAMPLE	2	2	5			2										
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Lakes accessed via Haul Road/Dalton Highway (Specify):																
2. Streams accessed via Haul Road/Dalton Highway (Specify):																
3. Other Lake Sites (Specify):																
4. Other Stream Sites (Specify):																

Z

Z. NORTH SLOPE BROOKS RANGE AREA (see map page 34 for area definition) Please include **only** information for members of your household.

1. For each site sport fished in 1989 write: the number of **household anglers** who fished, the number of **fishing trips**, and the number of **days fished** on **all** trips. Consider any part day fished as one whole day. **EXAMPLE:** A woman took 2 trips to a site. On her first trip she fished June 1 (her husband stayed home). On the second trip she fished July 3 and 4; on the same trip her husband fished July 4 and 5. Number of days fished is 5 (3 for the woman, 2 for the man), number of anglers is 2, and number of trips is 2 (1 by the woman alone, 1 by the man and woman together).

2. For each type of fish and site fished, write the total number kept by your household. **EXAMPLE:** If 4 pink salmon were caught, but only 2 were kept, the number 2 would be written.

NOTE: "Boat" or "Boat Site" refers to fishing from a boat; "Shoreline" or "Shoreline Site" refers to fishing from shore.

	Number of Anglers	Number of Trips	Number of Days Fished	Pink Salmon	Chum Salmon	Lake Trout	Dolly V. Arctic Char	Rainbow Trout	Arctic Grayling	Whitefish	Shadfish	Northern Pike	Burbot	Smelt	Other (Specify)
EXAMPLE	2	2	5	2											
SALTWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1. Boat Sites (Specify):															
2. Shoreline Sites (Specify):															
FRESHWATER	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3. Lakes accessed via Haul Road/Dalton Highway (Specify):															
4. Streams accessed via Haul Road/Dalton Highway (Specify):															
5. Other Lake Sites (Specify):															
6. Other Stream Sites (Specify):															

PLEASE CUT ALONG LINE TO KEEP THIS PAGE FOR YOUR USE

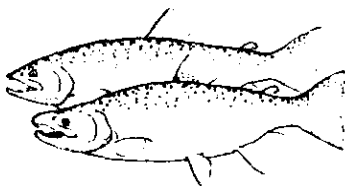
Distinguishing Characteristics of Several Varieties of Fish



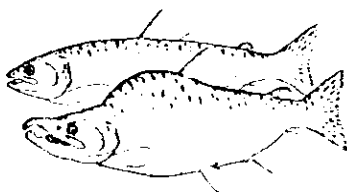
General Characteristics Fish: Cut away of operculum (gill cover) showing one gill arch, filaments, and gill rakers



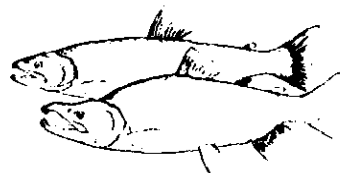
King (Chinook) Salmon: small black spots on back and on both lobes of caudal fin, gum line of lower jaw black, scales large, gill rakers less than 25, anal fin rays 15-17.



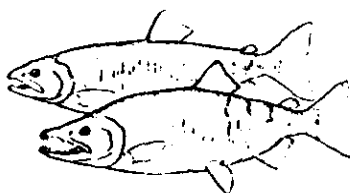
Silver (Coho) Salmon: small black spots usually occur only on upper lobe of caudal fin and on back; gum line on lower jaw not black, scales large, gill rakers less than 25, anal fin rays 13-15



Pink (Humpback) Salmon: large oval black spots on back and on both lobes of caudal fin, scales very small, usually over 12 anal fin rays, males develop a pronounced hump during spawning.



Sockeye (Red) Salmon and Kokanee (landlocked form): no distinct black spots on back or tail, 30-40 long, fine, and serrated, closely spaced gill rakers, usually over 12 anal fin rays. **NOTE:** Kokanee should be recorded separately in the booklet



Chum (Dog) Salmon: no distinct black spots on back or tail; 18-26 smooth, short, stout, and widely spaced gill rakers; usually over 12 anal fin rays.



Dolly Varden/Arctic Char: round, red, pink or yellow spots on sides, caudal fin slightly forked; 8-12 anal fin rays; no dark green wavy marks on back or dorsal fin.



Lake Trout: body dark green to grayish with oval or irregular white to yellowish spots on sides and back, caudal fin deeply forked, 8-12 anal fin rays, no dark green wavy marks on back or dorsal fin.



Brook Trout: spots on body pale or red with blue halos, but never brown or black, dark green wavy marks on back and dorsal fin; 8-12 anal fin rays



Cutthroat Trout: spots on body dark brown or black; anal fin rays 8-12; no red band on sides, red to orange slash on underside of lower jaw, upper jaw extends well behind eye in adults.



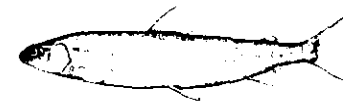
Rainbow Trout: spots on body dark brown or black; anal fin rays 8-12; reddish band on sides, no red slash under jaw, upper jaw usually does not extend behind eye in adults. **NOTE:** Steelhead are sea-run rainbows, and should be recorded separately in the booklet.



Northern Pike: dorsal and anal fins positioned rearward, no adipose fin as in the trout, salmon, grayling and whitefish, long flattened jaws with large mouth and many large, sharp teeth, sides are yellowish gray



Arctic Grayling: dorsal fin typically with dark purple edge and much longer (18 or more rays) than in whitefish and tan like, rows of reddish to orange and/or purple to green spots on dorsal fin, sides of fish are black spotted, scales larger than in trout



"Whitefish": distinguished from the trout and salmon by the small, weak, or absent teeth and the presence of large scales, distinguished from the arctic grayling by the much smaller dorsal fin (15 or fewer rays). A round whitefish is shown. **NOTE:** Sheefish are a species of whitefish, but should be recorded separately in the booklet



Burbot: two dorsal fins and one anal fin present, no adipose fin as in the trout, salmon, grayling and whitefish; pelvic fins very far forward and just under head; body long and tapering, barbel on chin

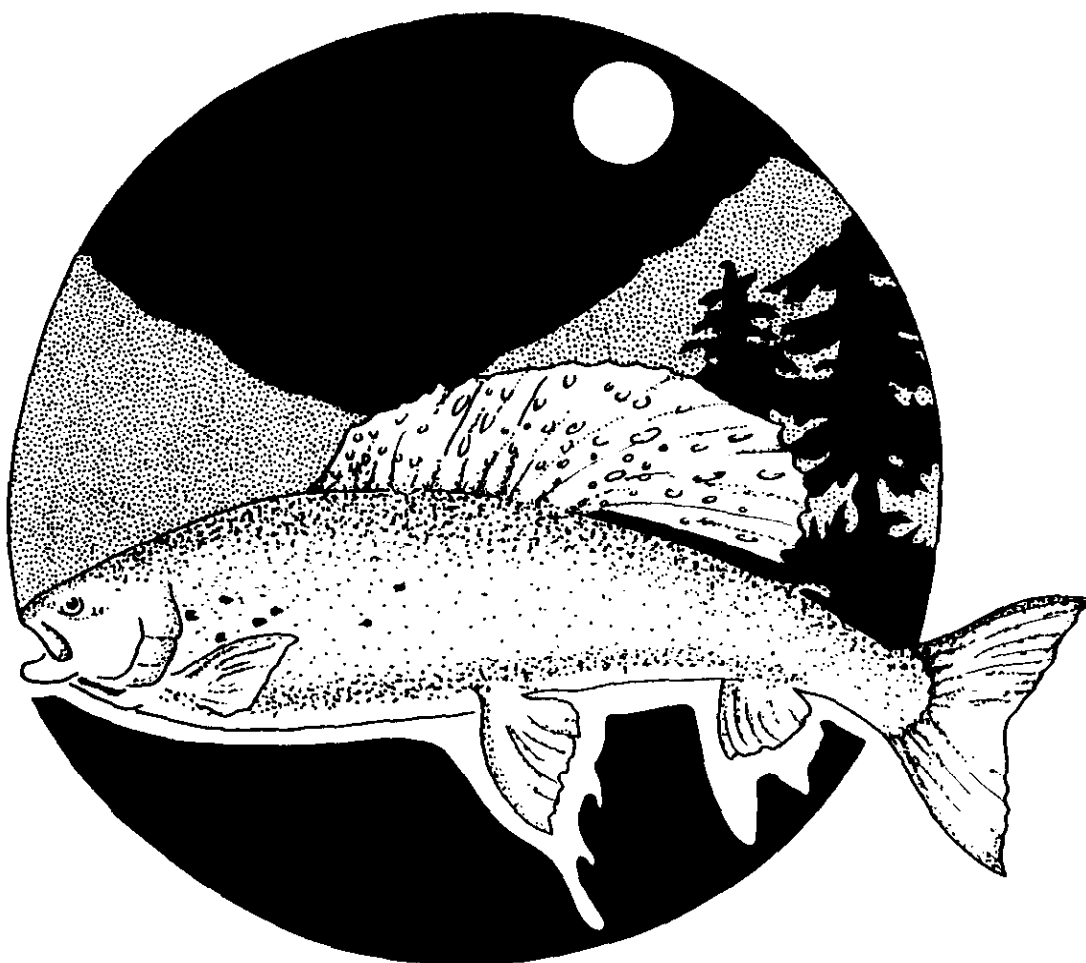


"Rockfish": several species of marine fish also referred to as black bass, sea bass, and red snapper. Rockfish may be distinguished from sculpins (Irish Lords) by the dorsal fin, which has spines on the front half and soft rays on the rear half in the rockfish. **NOTE:** Handle with care because of spines



ALASKA DEPARTMENT OF FISH AND GAME

1989 SPORT FISH SURVEY



Dear Alaska Sport Angler:

We have not yet received your completed 1989 Alaska Sport Fishing questionnaire. Even if you did not fish in Alaska during 1989, your responses to the General Questions on page 3 are important. Please complete the enclosed questionnaire and return it in the postage-paid envelope that is provided for your use. Your response will be considered confidential.

Please do not underestimate the importance of your fishing activities. As part of a representative sample of Alaska sport anglers chosen to participate in this study, the information you provide is vital to the success of this study, and may have significant impact on the future management of Alaska's sport fish resources.

If you have already returned your questionnaire, please disregard this letter and accept our sincere thanks.

Sincerely,

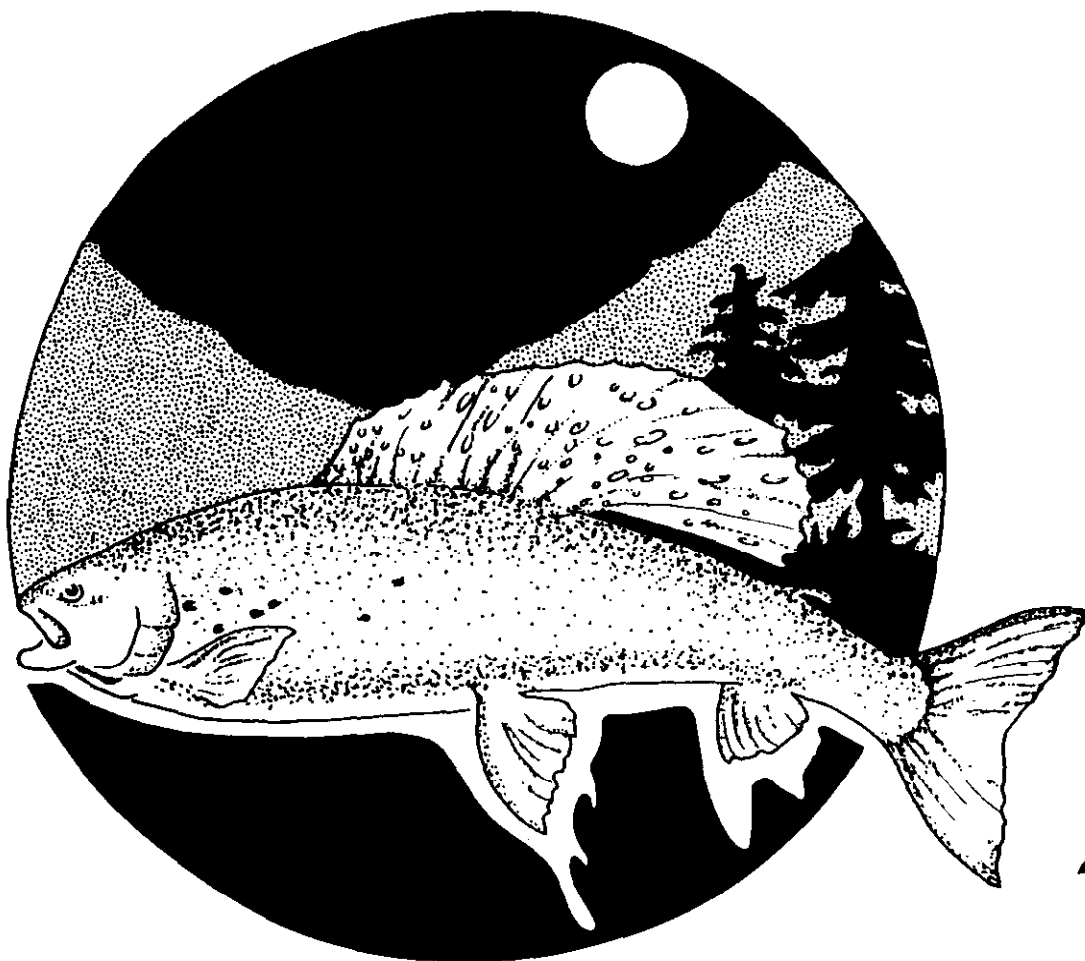
Norval Netsch, Director
Division of Sport Fisheries

-161-

ACE 10917452

ALASKA DEPARTMENT OF FISH AND GAME

1989 SPORT FISH SURVEY



Dear Alaska Sport Angler:

Some time has passed since we first requested information about your fishing activities in Alaska in 1989. We still have not received your reply.

Even if you did not fish in Alaska during 1989, your responses to the General Questions on page 3 are important. Please answer the questions that pertain to your 1989 Alaska sport fishing and return the survey questionnaire in the enclosed postage-paid envelope.

You were selected as part of a representative sample of Alaska anglers and, as such, we urgently need your reply at the earliest possible date. Won't you give a few minutes of time now to help insure future fishing enjoyment in Alaska for yourself and others? Your response will be considered confidential.

If you have already returned your questionnaire, please disregard this letter and accept our sincere thanks.

Sincerely,

Norval Netsch, Director
Division of Sport Fisheries

-162-

ACE 10917453

APPENDIX B
COMMENTS BY ANGLERS ON THE EXXON VALDEZ OIL SPILL

Appendix B1. Comments by anglers on the Exxon Valdez oil spill.

One hundred thirty two households provided 160 oil spill related comments in response to survey question 4 ("Please provide comments on sport fishing in Alaska during 1989 and your suggestions on how to improve it in the future"). All oil spill related comments are presented below.

Only minor changes have been made to the comments to improve grammar and to make them understandable. Editorial comments are included in parentheses.

General comments on the oil spill (14.4%)

Make sure that another Valdez (oil spill) doesn't happen again.

I'm sure this year will show some effects of the spill as well as the years to come.

Too much crude oil from the Exxon Valdez spill in Nuka Bay where I live.

Let's hope it (Exxon Valdez spill) doesn't happen again for everyone and everthings sake.

Keep oil spills from becoming a problem.

Don't spill oil.

Prevent any more oil spills.

Do everything to stop further oil spills.

Keep the oil out.

Keep the oil out of the ocean.

I am a retired employee of ARCO and I hope that was the last oil spill in Alaska.

Kodiak Island problem with oil, rooms, and boats due to oil.

We were most upset on what happened in Valdez.

Nobody could have helped in this situation, except no more oil spill.

The oil did a lot of damage.

Have fewer oil spills.

Don't spill Alaskan waterways or land with human waste such as an Exxon oil spill.

Prevent oil spills.

No more oil spills.

Appendix B1. (Page 2 of 9).

Keep the stream free from oil.

Keep the oil spills out of the water.

Do best to prevent further contamination of coastline and rivers.

Hopefully the Exxon disaster will save the great Northwest Territory from future oil expenditures.

Effect of the oil spill on sport fishing participation and success (30.6%)

Because of thievery by clean-up employees I had to watch my camp, did not sport fish.

Did not have time to fish this year due to oil spill work.

Unable to fish (early runs) due to the oil spill (worried about eating the fish). Waited for the silvers to run.

I did not sport fish due to the presence of oil on the Kodiak area beaches.

Didn't go fishing because of closures and effects of oil spill.

Due to the Valdez oil spill fishing in the Kenai River was terrible for us.

I had the worst fishing experience of the 5 years I've been vacationing in Alaska. I think it had everything to do with the oil spill in the sound where I do most of my fishing.

Sport fishing damaged by oil spill.

We went to Homer to try and get a halibut boat to fish and had to wait three days for an opening. We read in the paper fishing boats were idle due to the oil spill.

I was really disappointed in the number of fish. I'm positive the oil spill greatly degraded your quality fishing.

We feel the next few years of salmon will be affected. We also feel that the shellfish industry was hurt (presumably by the oil spill?).

I think the oil spill still had an effect on halibut fishing.

I ran into Exxon oil in Resurrection Bay, Seward, and caught no fish when it happened. The oil fouled the fiberglass on my new boat.

The fishing was bad. The oil and commercial fishermen did it in (illegible) runs are closed through the week so it is not worth it any more.

Appendix B1. (Page 3 of 9).

Halibut and bottom fish out of Seward was not good. Obvious oil spill remains in area we fish had a detrimental effect on fishing - also greatly reduced evidence of sea birds and seas mammals from past 4 years experience.

We didn't fish after oil hit our usual beaches.

Lots of good fishing, however I think the oil spill hindered many anglers and limited good spots.

What happened to our good fishing? Since the oil spill in PWS our fishing has been totally unproductive. We wasted our time and money for an entire summer.

Fishing for me was quite poor. Many people blamed the lack of fish on the oil spill.

The oil spill ruined the salmon fishing planned for years - found rivers closed.

The oil spill greatly affected the halibut fishing near Valdez. Sue Exxon.

We normally keep our boat in Whittier and fish in Prince William Sound. We did not take the boat over to Whittier this year because of the spill and related activity.

Because of the Exxon Valdez oil spill there wasn't that many people fishing this year.

Please keep an eye of the fish for the next few years because of the oil. I rather not fish in order to preserve the salmon species.

My 1989 sport fishing was disrupted by the Exxon oil spill since we did not get to stay in PWS long enough to get a "home pack".

Because of the spill I didn't fish much.

I was not able to fish as much this year because of the oil spill.

I was planning to spend two weeks in Valdez fishing until the oil spill.

The king salmon run was a week late; oil spill?

Fishing was great, keep the oil tankers away from it.

Sport fishing in 1989 was very successful for our household, but I'm sorry to say it was because of the oil spill that our success was so good.

No sign of oil residue (Barren Island area) fishing good.

I guess it was because of the oil spill, I'll feel a little guilty but this is the best year I've had in my 11 years in Alaska.

Appendix B1. (Page 4 of 9).

Because of the oil spill I personally caught more fish than I've ever caught in the past.

Fishing was excellent because of Exxon.

Generally fishing results were not as good for us as compared to 1988 season. May be due to the spill and that record rainfall near the end of August and early September.

If not for the oil spill it would have been great.

I feel the fishing was excellent, considering the damage of the oil spill.

Oil spill had no apparent adverse effect on sport fishing evidenced by record runs of salmon.

The fishing was great, but it won't stay that way if Exxon gets away with their negligence.

The oil spill had little or no detrimental effect on the fishing.

Took the ferry from Seward to Valdez late April and saw little evidence of the oil spill.

Excellent despite oil spill.

The Valdez oil spill seemed to have no effect on the fishing.

We visited Valdez, found it busy but little sign of oil from Homer to Valdez in July.

The children stepped in oil globs at Pillar Creek. The fishing seemed to me as normal.

The oil spill did not affect my fishing.

Was very pleased that the oil did not damage the sport fishing on the Kenai Peninsula.

The fishing wasn't as bad as I thought it would be because of the oil spill.

Effect of commercial fishery openings & closures on sport fishing (10.0%)

We were told that the commercial fishermen at Valdez were allowed to fish longer than usual because of the oil spill so there were less fish swimming upstream for us to catch.

I fished much less than in past years, but did much better. This was probably due to the lack of commercial fishing pressure (due to oil spill).

Spill more oil, this shutting down fishing really puts fish in the rivers.

Appendix B1. (Page 5 of 9).

The fishing was great and I think it was because the oil spill stopped the fishermen from getting so many fish at sea.

The reduced commercial fishing due to the Exxon Valdez oil spill provided evidence beyond a doubt, especially sport fishing on Kodiak Island, that commercial fishing as regulated by the state is overfishing the resources of Alaska.

The sport fishing was great this year. I believe the only reason it was is due to the oil spill and reduction in commercial fishing.

I believe there was a greater number of fish in the streams due to commercial fishing closures (as a result of the oil spill).

Best year we ever had since 1975. The shutdown of the Cook Inlet setnet and drift fishery produced a bonanza. Thank you Exxon.

The fishing was good, but that could be because of the oil spill.

The big (commercial) nets couldn't fish Cook Inlet - the sport fishermen benefited from the spill.

The limitations on Cook Inlet drift fishermen caused by the oil spill made a very noticeable difference in the number of fish in the spawning streams of Turnagain arm. The more the commercial fishermen quotas are limited the better the sport fishing.

The fishing on the Kenai River was excellent due to the large escapement because the set net fishermen were restricted or limited because of the oil spill.

Well the 88 (?) sport season was far above excellent because seiners did not fish (due to oil spill).

Sport fishing in Prince William Sound was excellent in 1989 in spite of the oil spill and all the activity.

Seemed like a higher return. I guess because the oil spill less boats.

Caught silvers for the first time in Bird Creek after 14 years of fishing - think that happened because of the oil spill and the cut back on commercial fishing.

Comments on the edible quality of fish caught (1.3%)

(Have fewer oil spills) the sport caught fish given to me made me sick.

Leery of eating the early fish run (due to spill).

Comments on environmental injury and restoration (5.6%)

Exxon should be held liable for costs associated with any reduction, both present and future, of fisheries assets in the spill region.

Restock salmon and release fry in areas not affected by the oil spill until chemical bioremediation has been completed and water tested along with the bottom samples from sound area.

Halibut and crab may be in serious danger.

Increase stocking of trout and grayling to offset salmon loss.

Stock halibut in areas not affected by spill.

You should double, triple your hatchery output. Between Exxon and drift nets you gotta run like hell to stay in the same place.

Suggest Exxon pay ADFG through state legislature to finally fund your dreams to provide present and future stocks.

Make Exxon seed fish where the largest impact on the fishery has taken place.

Exxon Valdez should pay for the fishing and wildlife programs in Valdez.

Comments on the oil spill cleanup (9.4%)

Quit feeding them (fish?) oil. Clean up Valdez terminal or get rid of it.

If there was any delay in the clean up it was the fault of the State of Alaska and not Exxon.

Force Exxon to do complete the cleanup use pressure to bankrupt Exxon if possible.

Clean up Prince William Sound.

Make the state and Exxon clean up the oil.

Finish the oil clean up.

Get an oil spill state owned clean up ship in Valdez and quit arguing about the finances between the state and county and district.

Please clean up the Valdez oil spill the best way possible.

Clean up the oil spill.

Expand rapid response spill containment deployment capabilities.

Begin a fund by charging all tankers a fee to move oil. In the event of future disasters use fund to help pay for the clean up.

Appendix B1. (Page 7 of 9).

Charge the oil companies for the clean up and for the loss of wildlife.

Do not allow Exxon to come back. Throwing money, even theirs, at rocks is stupid.

Make Exxon clean in '90 and '91.

Spend \$ used to mail this survey to me 3 times for clean up of the oil spill.

Comments on oil companies and their employees (12.5%)

Elect Hazelwood Governor at least we were employed.

Oil has been good for Alaska, witness buildings in Anchorage and Nome and tax refunds for residents. A little more common sense and fairness would be in order.

Get Exxon back in Alaska so I can fish more.

You guys/gals (Alaska Department of Fish and Game) can figure out fish better than Houston and President Bush.

To protect your pristine environment don't listen to greedy suit and tie SOBs, listen to Mother Earth. Don't worry about quarterly profits for oil companies. Instead plan 50-100 years down the line. Power to the peons.

Hang Exxon we missed fishing for pink salmon at Valdez.

Don't let Exxon or any other oil company get away with murder again.

Sue Exxon for all damages to fisheries and all other pollution damage.

I know people need jobs, but please don't let the oil companies ruin America's last frontier.

Take the president of Exxon and Alyeska and their board of directors up to Valdez and shoot them for their smugness and what they did.

Shoot Exxon, don't change anything else.

The captain of the Exxon Valdez should be put in prison and the Exxon oil company should be fined 100 million minimum.

That captain on the Valdez should have a long prison term. All the animals and fish that died didn't have a chance.

Teach Captain Hazelwood how to steer.

Kick Exxon out of P.W.S. The Exxon Valdez spilled oil but did not pollute the sound as bad as 2000 puker boats and 5000 people. Do an environmental impact statement on that one.

Appendix B1. (Page 8 of 9).

Kick out Exxon.

Ban Exxon from shipping oil out of Valdez.

Kick Exxon out of Alaska for the carelessness and negligence and it will send a clear message to other oil companies when they try to cut corners when it comes to safety and the environment.

Outlaw Exxon.

Keep Exxon out of your beautiful state forever.

Comments of regulation of oil transport and exploration (6.3%)

The above mentioned (Exxon Valdez) oil spill should NOT cause new restrictions on oil tankers or oil shipment.

Stop oil shipment by sea-going tankers, instead ship crude oil, liquified gas...by lighter than air helium filled solar powered air ships.

A disaster like the Valdez can harm the age old ocean habitat almost indefinitely. I would say there must be a better way of transporting that type of product (oil).

The state should not have let the oil companies operate without checking to see that they did in fact have the clean up equipment and techniques they said they would have.

Outlaw tankers.

Keep oil tankers out of Prince William Sound.

Stricter laws for tankers.

Control/ban oil transport.

Eliminate off-shore oil drilling.

Closer checks of barges and crews that are moving oil, stiffer penalties.

Comments on media coverage (2.5%)

I'm not an Exxon shareholder, but I observed the media hype, noted salmon run flooding Resurrection Bay at Seward with setnetters idled by state law and lining up for Exxon extortion.

Reports indicated that fishing this year was just as good if not better than before the Exxon incident. which seemed tp be "blown" out of proportion.

(We are) just afraid of the long term effects of the Exxon oil spill. Please keep us informed.

Appendix B1. (Page 9 of 9).

I feel Exxon should be made to advertise in every newspaper in the country telling people about the oil spill. So people think from what the media said that the whole state was covered by the spill.

Comments on measures to prevent or clean up oil spills (7.5%)

Lets start the clean up immediately and not let the oil companies dictate on how and when it will be cleaned up.

Insist all other companies (coded elsewhere, this person said kick Exxon out of Valdez) have double hulled ships or do not allow them to operate in sensitive areas that have the potential to be devastated like Valdez.

I think measures should be made to prevent spills - continue testing of crews in Valdez with escorts out of closed waters. Better radar coverage in sound.

Be more prepared for the next oil spill, let's hope not. Oil co., Pipe line Co., State, Govt, Greenies - EPA - , Coast Guard, Every John & Sue Doe.

Be prepared for oil spills, have necessary equipment ready. Teach captains to prevent these tragic accidents.

Demand absolute safety features on oil vessels.

To regulate and check all oil tankers to make sure that they are double hulled. Also Alyeska should be updated to help aid possible future accidents.

Require double hulled tankers and oil barges.

Double hull tankers.

Double hulls (for tankers).

Limit liquor sales in Valdez, inspect tankers and other large ships for alcohol.

Get rid of booze and drugs not oil.