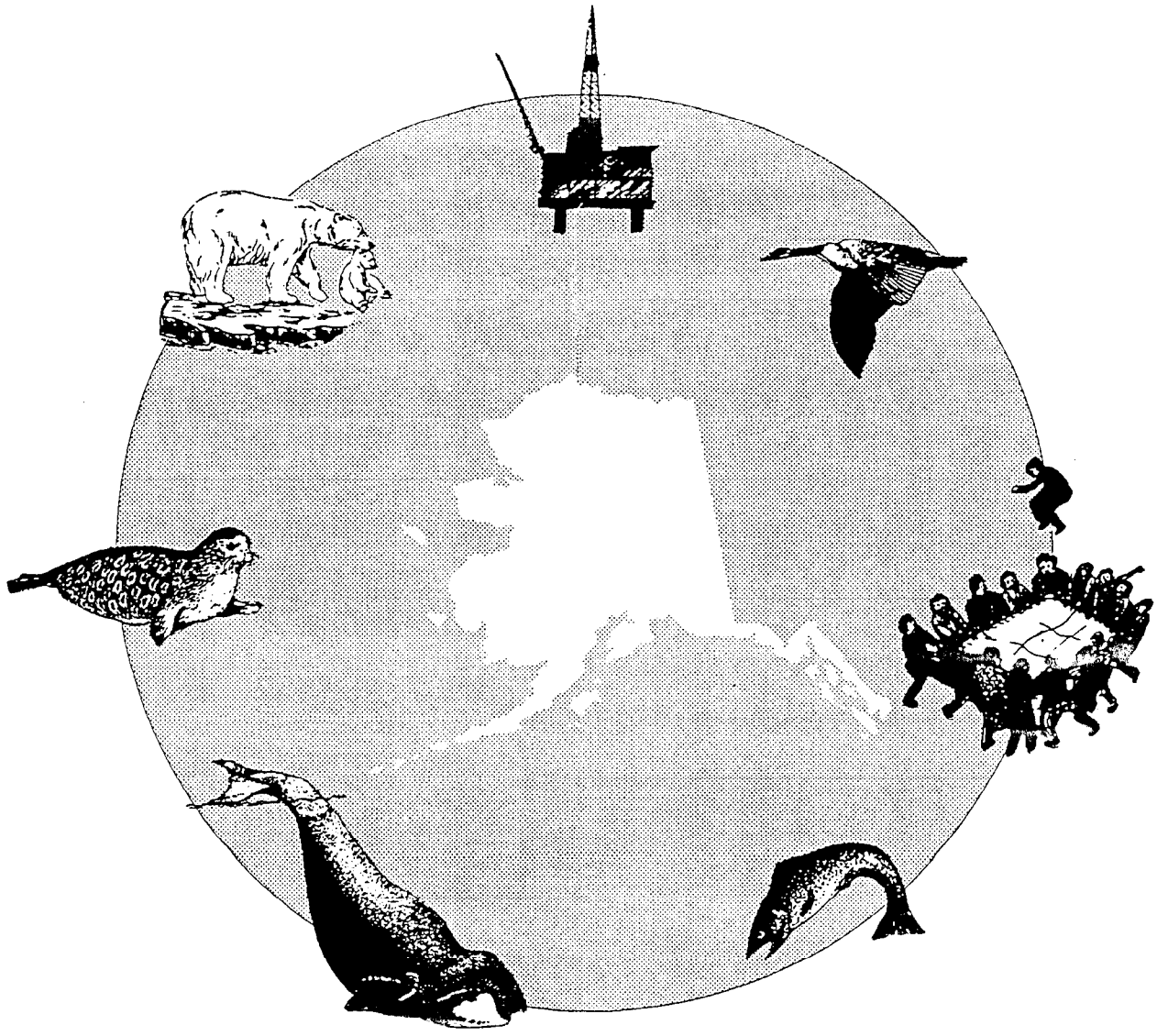
OCS Study
MMS 95-010

An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska

I. Introduction



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Alaska Outer Continental Shelf Region

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An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska

I. Introduction

James A. Fall and Charles J. Utermohle, editors

Contributors:

Jeffrey Barnhart, Louis Brown, Jimmie Evak, James A. Fall, Susan Georgette, Lisa Hutchinson-Scarbrough, Gretchen Jennings, James Magdanz, Rachel Mason, Rita Miraglia, Craig Mishler, Sverre Pedersen, Jody Seitz, Sandra Skaggs, Ronald T. Stanek, Lisa Tomrdle, Charles J. Utermohle, and Vicki Vanek

Submitted to:

United States Department of the Interior
Minerals Management Service
Alaska OCS Region
Social and Economic Studies Unit
949 E. 36th Ave.
Anchorage, Alaska 99508-4302

Submitted by:

Division of Subsistence
Alaska Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 99518

March 1995

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Alaska OCS Environmental Studies Program

An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska

I. Introduction

Division of Subsistence
Alaska Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 99518

March 1995

EXECUTIVE SUMMARY

This report provides selected findings from a three-year study entitled "An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska." The findings are primarily organized by study community, and the report consists of 24 chapters in six volumes. The project was conducted by the Division of Subsistence of the Alaska Department of Fish and Game (the division) under a cooperative agreement (No. 14-35-0001-30622) with the U.S. Department of the Interior, Minerals Management Service (MMS). The primary purpose of the research was to investigate the long-term social and cultural consequences of the development of the resources of Alaska's Outer Continental Shelf (OCS), especially as these affect the subsistence uses of fish and wildlife. Investigation of the consequences of the *Exxon Valdez* oil spill of March 1989 was a major focus of the research.

Most data were collected through voluntary face-to-face interviews using two instruments. The first, the "harvest survey questionnaire," modeled after the division's standard survey instrument, collected data on household demography, involvement in the cash economy, resource harvests and uses, and assessments of changes in subsistence harvest and use patterns. The second instrument, the "Social Effects Questionnaire" was based in part on questionnaires and interview protocols used in prior Social Indicators research funded by MMS. It addressed changes in social and community organization which could be affected by OCS development.

Three rounds of fieldwork took place, in 1992, 1993, and 1994. Study communities in the area affected by the *Exxon Valdez* oil spill included Chenega Bay, Cordova, Tatitlek, and Valdez in the Prince William Sound area; Kenai, Nanwalek, Port Graham, and Seldovia in the Cook Inlet area; Akhiok, Karluk, Kodiak, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions in the Kodiak Island Borough; and Chignik Bay and Chignik Lake in the Lake and Peninsula Borough (Alaska Peninsula). Additionally, the study added control or reference communities in the Arctic region which will strengthen the application of the findings to broad questions of sociocultural change which are related to development of the resources of the Outer Continental Shelf. These were Kotzebue, Kaktovik, Kivalina, and Nuiqsut.

Earlier research by the division found that the *Exxon Valdez* oil spill caused major impacts on subsistence uses and the sociocultural systems which they support. There was a definite geographic pattern to these spill effects which reflects the relative degree of oiling and the persistence of oil in the environment. Impacts were greatest on communities closest to the spill -- particularly Tatitlek and Chenega Bay -- and lessened with distance from Prince William Sound.

Over the three years of this study, further evidence of this geographic pattern developed, with communities closer to the spill in Prince William Sound and lower Cook Inlet, as well as Ouzinkie, reporting higher levels of spill impacts than more distant communities. A relatively high percentage of respondents in Chenega Bay, Nanwalek, and Tatitlek in all three study years said there was less sharing of wild foods

since the spill. Similarly, of all study communities, the largest percentages in Ouzinkie, Port Graham, Chenega Bay, Nanwalek, and Tatitlek said that the spill had a negative effect on children's participation in subsistence activities. Households in Prince William Sound communities, and especially Cordova and Chenega Bay, were most likely to say that they liked living in their community less during the study years than before the spill.

Subsistence harvest levels in all the communities of the oil spill area appear to be rebounding from the low levels of the first and second post-spill years. Pre-spill levels of harvests have been approached or matched in most affected communities, such as Nanwalek, Port Graham, Port Lions, Larsen Bay, Old Harbor, and Akhiok. However, in the severely impacted communities of Tatitlek, Chenega Bay, and Ouzinkie, harvest levels remain below pre-spill averages. In Tatitlek and Chenega Bay, harvests appear to have declined in the third year of this project from estimated levels for the first and second years. There also continues to be an important shift in the composition of subsistence harvests in Chenega Bay and Tatitlek, with much lower takes of marine mammals than before the spill and a larger portion of the harvests composed of fish.

In many study communities, a significant proportion of households reported that subsistence uses have not recovered to earlier levels. This position is expressed strongly in the Prince William Sound villages, in Nanwalek, and in Ouzinkie. In all four villages, a larger percentage of households reported lowered levels of resource harvests compared to before the spill in 1993 than did so in 1991. Thus the perception appears to be not only one of lowered subsistence uses, but that uses continue to decline.

There has been an important shift in the explanations people offer concerning why the spill's impacts reduced their resource uses. In 1989, a majority of households with spill-caused reductions in resource uses cited fear of oil contamination as the reason for the decline. By 1993, the vast majority of households who still said that the spill's effects were impacting their subsistence uses cited reduced resource populations as the cause of the decline. This viewpoint was especially strong in Prince William Sound. A large majority of respondents in Chenega Bay in all three years said that populations of deer, harbor seals, sea lions, sea ducks, and clams were down since the spill. In the second and third years an increasing majority said that salmon stocks were down as well. At Tatitlek, a majority of respondents said there were less deer, seals, sea lions, sea ducks, salmon, halibut, clams, bidarkies, and octopus.

Contamination concerns about specific resources, while substantially reduced from the levels expressed in the first few years after the spill, persist among many households, especially in Chenega Bay, Tatitlek, Port Graham, and Nanwalek. Substantial percentages of households reported that they had not received adequate information about the safety of subsistence foods. This illustrates an important finding that many households in the spill area returned to using subsistence foods despite lingering contamination fears. The economic and cultural necessities of using subsistence foods have compelled Alaska Natives of the spill area to resume subsistence harvests even at increased costs of time, money, and health concerns.

In Tatitlek and Chenega Bay, subsistence harvesters' observations of reduced wildlife populations and diseased animals (such as a viral infection in Prince William Sound herring), created substantial doubts about the overall health of the natural environment. In 1989, the spill's immediate effects caused subsistence users to distrust the safety of subsistence foods. Direct observations of dead and injured wildlife, interpreted through traditional systems of knowledge, strongly suggested to subsistence users that resources might be unsafe for humans. The spill also created conditions very unfamiliar to subsistence users which experience and training were ill-equipped to explain. Under these circumstances, many households acted with caution. By 1993, traditional knowledge about food safety and edibility continued to inform people's decisions about subsistence uses. In addition, public health advisories had been disseminated in villages through the work of the Oil Spill Health Task Force. But doubts persisted that traditional and scientific knowledge were not enough to answer questions about what the spill had done. In the view of many of the people interviewed as part of this project, and especially in Prince William Sound and among Alaska Native people, the spill had caused fundamental changes to natural resource populations and the natural environment overall that have yet to be adequately explained. This uncertainty has had profound effects on the outlook for the future that people expressed in several communities, such as Tatitlek, Chenega Bay, and Cordova. This remains an important long-term impact of the spill.

Finally, one additional social effect of the *Exxon Valdez* oil spill has been the prolonged litigation over damage claims. Rulings in federal court which ruled ineligible claims by the Alaska Native Class concerning injuries to their way of life were especially disheartening to the people whose subsistence uses had suffered following the spill. In some cases, these rulings discouraged people from participating in this research. They concluded that additional studies were pointless. The settlement with Exxon regarding the replacement value of lost subsistence harvests was viewed by subsistence users as, at best, only a partial compensation of the Native Class claims. A view persisted that the cultural importance of subsistence to the Alaska Native communities of the spill area and the injury that this culture suffered had not yet been acknowledged by the judicial process. Appeals of these rulings were in preparation as this report was being completed. This continuing litigation remains another long-term impact of the spill, and should be considered in impact assessments for future Outer Continental Shelf development.

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ACKNOWLEDGMENTS

First and foremost, we would like to thank the hundreds of people who took the time to participate in this research project. We are also grateful to the governments of the study communities for granting us permission to conduct the interviews.

We also thank the individuals who assisted ADF&G personnel with designing the survey instruments. These included Don Callaway, Karen Gibson, Tracy Andrews, Joe Jorgensen, Steve Braund, Bill Simeone, Lisa Moorehead, and Jack Kruse. Finally, thanks to Bob Wolfe, Division of Subsistence research director, for his thoughtful review of sections of this report.

CHAPTER I: INTRODUCTION

by

James A. Fall, Ronald T. Stanek, and Charles J. Utermohle

PROJECT BACKGROUND

This report provides selected findings from a three-year study entitled "An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska." The findings are primarily organized by study community, and the report consists of 24 chapters in six volumes. The project was conducted by the Division of Subsistence of the Alaska Department of Fish and Game (ADF&G) (hereafter "the division") under a cooperative agreement (No. 14-35-0001-30622) with the U.S. Department of the Interior, Minerals Management Service (MMS). The interpretations and conclusions in this report are those of the division.

As the state's lead agency for investigating patterns of subsistence use of wild renewable resources in Alaska, the division has conducted research in approximately 175 communities (Fall 1990a). The result of these studies appear in over 200 technical papers. Additionally, quantified harvest, demographic, and other economic data on over 175 Alaska communities are summarized in the Community Profile Database (CPDB) (Scott et al. 1993), the division's central depository of information about contemporary subsistence uses in Alaska.

The *Exxon Valdez* oil spill of March 1989 fouled resources, waters, and lands used for subsistence harvesting by 18 rural communities of Southcentral and Southwest Alaska. Fifteen of these communities have relatively small populations, which are mostly Alaska Native: Chenega Bay, Tatitlek, Port Graham, Nanwalek (formerly English Bay), Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, Port Lions, Chignik Bay, Chignik Lagoon, Chignik Lake, Ivanof Bay, and Perryville. The remaining three (Cordova, Seldovia, and Kodiak) are mid-sized communities with culturally-mixed populations. In 1990 about 17,000 people lived in the area affected by the spill, and about 20 percent of this population was Alaska Native.

Prior to 1989, the division had conducted baseline research in all of the 18 rural communities impacted by the spill (Morris 1987; Reed 1985; Stanek 1985, forthcoming a; Stratton and Chisum 1986; Stratton 1989, 1990; Schroeder et al. 1987; Fall and Walker 1993; Fall 1990a). A major component of prior research was systematic household surveys, which collected detailed demographic, resource harvest and use, and other economic data. These data were incorporated into the CPDB. In addition, these studies resulted in maps of subsistence harvest areas, information on community backgrounds and histories, and household case studies which illustrate, among other things, subsistence harvest methods and resource uses.

In 1989, the division accelerated its research program in order to document subsistence harvest patterns in the first year after the spill in the 15 Alaska Native villages listed above. Some preliminary

findings of the first year of research were reported in several conference papers (Fall 1990a, 1990b; Fall and Mishler 1991). The final results will be discussed in four technical papers now being prepared (Fall et al. forthcoming; Stratton et al. forthcoming; Mishler and Cohen forthcoming; Stanek forthcoming b).

For the second post-spill year, the division collected data for seven of the Alaska Native villages in the oil spill area. Partial funding for this project was provided by the U.S. Fish and Wildlife Service through a cooperative agreement with the ADF&G. The study communities were Tatitlek, Chenega Bay, Nanwalek, Port Graham, Ouzinkie, Larsen Bay, and Karluk. Preliminary findings were presented in a report to the U.S. Fish and Wildlife Service and in several conference papers (Fall 1992a; Fall 1992b, Fall 1993). A revised version of the preliminary report appears in the division's technical paper series (Fall, forthcoming).

In 1988, the division entered into a contract with the MMS (No. 14-12-0001-30418) to conduct a project called "Subsistence in the Bering Sea." A major component of this project was to prepare a household level database for communities of the Bristol Bay region. The database household survey data collected by the division with information from other sources, including the Commercial Fisheries Entry Commission and the ADF&G subsistence salmon permit database. As part of this effort, a template for organizing these data was prepared and reviewed by the MMS.

Beginning in July 1990, the division and the MMS entered into a cooperative agreement (No. 14-35-0001-30539) to continue household-level database development in additional communities in the Gulf of Alaska area. This database included communities in the area affected by the *Exxon Valdez* oil spill for the study years before the spill. It also included the first and second post-spill years' data sets. The database was completed in September 1994. It was delayed by the necessity to protect the confidentiality of survey respondents by converting potentially identifying information into summarized variables.

The research conducted under the present cooperative agreement builds upon these earlier projects. The goals of the present research were to investigate the long-term consequences of the oil spill and to integrate division study findings with those of other research in the spill area, especially the MMS Social Indicators project (University of Alaska, Institute of Social and Economic Research (ISER) 1979; Louis Berger and Associates 1983; Stephen R. Braund & Associates 1985; Jorgensen 1990). Additionally, the study added control or reference communities in the Arctic region which will strengthen the application of the findings to broad questions of sociocultural change which are related to development of the resources of the outer continental shelf (OCS).

STUDY COMMUNITIES AND STUDY YEARS

Table I-1 lists the study communities for the present research effort and their historic populations as reported by the federal decennial census. Three rounds of fieldwork took place, in 1992, 1993, and 1994. Data collected in 1992 pertain to the "1991 study year" ("the first study year"), which, depending

upon the community, was defined as either the calendar year 1991 or a 12-month period spanning 1991 and 1992. Correspondingly, the 1993 interviews pertain to the "1992 study year" ("the second study year") and those done in 1994 concern the "1993 study year" ("the third study year"). As in the first year, these latter two study years are either a calendar year or a 12-month period spanning two calendar years, depending upon the study community.

In the first year of the research, the study communities included Chenega Bay, Cordova, Tatitlek, and Valdez in the Prince William Sound area; Kenai, Nanwalek, Port Graham, and Seldovia in the Cook Inlet area; Karluk, Kodiak, Larsen Bay, Old Harbor, and Ouzinkie in the Kodiak Island Borough; Chignik (also known as Chignik Bay) and Chignik Lake in the Lake and Peninsula Borough (Alaska Peninsula); and Kotzebue in the Northwest Arctic Borough (Fig. I-1). In 1993, the study communities were the first year communities of Cordova, Valdez, Chenega Bay, Kenai, Seldovia, Port Graham, Nanwalek, Kodiak, Ouzinkie, and Larsen Bay, plus Kivalina in the Northwest Arctic Borough and Kaktovik in the North Slope Borough. Also, the harvest survey only (see below) was administered in Akhiok (Kodiak Island Borough) in order to obtain a second post-*Exxon Valdez* oil spill estimate of subsistence harvests in that community. In 1994, a third round of research was conducted in Cordova, Valdez, Chenega Bay, Kenai, Seldovia, Port Graham, Nanwalek, Kodiak, Ouzinkie, and Larsen Bay. Tatitlek, which had not been surveyed in the second year, was added back for the third. Interviews also took place in 1994 in Nuiqsut, a North Slope Borough community. Finally, the harvest survey only was administered in Port Lions, the last Kodiak Island Borough community for which no post-1989 (the oil spill year) harvest data were available.

PURPOSE, OBJECTIVES, AND DATA COLLECTION METHODS

The primary purpose of the research was to investigate the long-term social and cultural consequences of the development of the resources of Alaska's outer continental shelf, especially as these affect the subsistence uses of fish and wildlife. Investigation of the consequences of the *Exxon Valdez* oil spill of March 1989 was a major focus of the research. Most data were collected through voluntary face-to-face interviews using two instruments. The first, the "harvest survey questionnaire" was based on the division's standard survey instrument which has been administered in approximately 175 communities throughout the state. The second, the "Social Effects Questionnaire" was developed especially for this project, but was based in part on questionnaires and interview protocols used in prior Social Indicators research funded by MMS. Each of these instruments will be discussed in turn.

The Harvest Survey Instrument

The purpose of the harvest survey instrument was to collect data on household demography, involvement in the cash economy, and resource harvests and uses that are comparable to those

collected in previous division studies and that can be incorporated into the division's statewide CPDB. For additional background on the harvest survey instrument, the reader should Fall (1990a). With the exception of Valdez, a version of this harvest survey had been administered at least once before in all the other study communities.

The harvest survey instrument as developed for this study contained several sections pertaining specifically to change and potential oil spill effects. One such series of questions pertained to households' perceptions of changes in harvest and use patterns by resource category. After collection of harvest and use data for a particular resource category, such as salmon or marine invertebrates, the respondent was asked to compare this pattern with that of other recent years. If a difference had occurred, the respondent was asked for a cause of the difference. Similar questions had been asked on the two previous post-oil spill surveys. Another set of questions asked for respondents' observations of "abnormal" resources. This was a follow-up to questions in earlier surveys pertaining to discarding of resources because of suspected oil contamination. Also, detailed data were collected on equipment used in subsistence harvesting and processing, plus replacement costs for this equipment. Finally, a section on medicinal uses of plants was added.

Objectives of the harvest survey instrument included the following for each study community:

1. Quantified data on levels of participation in subsistence activities and estimates of household harvests in numbers of animals or fish and in pounds usable weight for a 12-month study year;
2. Data on commercial fisheries involvement during the study year, including quantities of resources removed from commercial catches for home use;
3. Household demographic information, including age, birthplace, ethnicity, level of formal education, and length of residency in the study community for each household member;
4. Information on cash employment by adults in the sample (16 years of age or older), including occupation, industry, months employed, hours worked per day and per week, and amount earned, plus other sources of household income;
5. Descriptions of resources which were discarded because of perceived abnormalities, plus explanations of these abnormalities (1991 only);
6. Each household's evaluation of its resource uses of each resource category and overall resource harvest for the study year in comparison with other years, including reasons for any changes they perceived (1991 and 1993 study years only);
7. An inventory of equipment used for subsistence activities, and the replacement costs of that equipment (1991 study year only; this question was not administered in Tatitlek, Port Graham, Ouzinkie, Larsen Bay, and Karluk.);

8. Communities to which resources were given and from which resources were received (1991 only);
9. Uses of wild plants for medicinal purposes (1991 only);
10. Estimate of the percentage of meat and fish used from wild foods (1991 and 1993 only);
11. Assessment of household's financial situation compared to before the spill (1991 only); and
12. Estimates of monthly costs of groceries (1991 and 1993).

For the most part, the harvest survey instruments administered in each study community as part of this project were similar in structure. The major differences had to do with the lists of resources for which harvest and use data were collected. There were five versions of the resource lists, depending upon the region. These were: Prince William Sound (Cordova, Valdez, Chenega Bay, Tatitlek); Cook Inlet (Kenai, Seldovia, Nanwalek, Port Graham); Kodiak Archipelago (Kodiak City, Akhiok, Larsen Bay, Karluk, Ouzinkie, Old Harbor, Port Lions); Alaska Peninsula (Chignik Bay, Chignik Lake); and Arctic (Kotzebue, Kivalina, Kaktovik, Nuiqsut).

Appendix A contains an example of the survey instrument used in Chenega Bay for the first study year (1991), which is generally representative of that used in all the study communities in each study year.

Additionally, there were some specific objectives for subsets of the study communities. For example, in Chenega Bay (in all three years) and Tatitlek (1991 only) evaluations of changes in use patterns of up to four harvest areas were sought, to follow-up on questions asked in previous interviews. In the Kodiak communities, perceptions of changes in sea lion populations were collected for 1991.

This document reports most of the findings from the harvest surveys in a series of standard tables and figures. For the convenience of the reader, these tables and figures are ordered in a standard sequence in all chapters, regardless of the order of their citation in the text. Responses to questions on use assessments are the source of most of the quotations regarding perceived changes in harvest and use patterns in the study communities.

The Social Effects Questionnaire

In addition, a series of objectives was developed to follow-up on research conducted for the MMS as part of the Social Indicators Project and other studies which had examined the effects of the *Exxon Valdez* oil spill. These objectives included collection of information in the following general topics:

1. Visiting patterns;
2. Sharing of wild foods;
3. Concern about the contamination of wild foods;
4. Perceptions of the effect of the oil spill on resource populations;

5. Participation in traditional activities;
6. Treatment of elders;
7. Leadership and political participation;
8. Significance of place;
9. Oil spill employment;
10. Child care;
11. Evaluation of services and responses to the oil spill; and
12. Perceptions of consequences of future OCS development.

Because the project intended to provide an analysis of the long-term consequences of the *Exxon Valdez* oil spill, it was necessary to develop a list of social activities and behaviors that reflect community concerns, such as subsistence activities, extended family ties, respect for elders, and sharing. To assist in formulating the questionnaire four goal families were identified that were thought to be both comprehensive (i.e., covering the entire range of issues, goals and values that contribute to social well-being) and relevant to residents of rural Alaskan villages. Each goal has several subgoals, and indicators were developed from these subgoals. The hierarchies of goals and subgoals within each goal family are presented in Table I-2. The four goal families include:

- Goal Family One : Continued Existence of Traditional Culture.
- Goal Family Two: Social Relations.
- Goal Family Three: Economic and Commercial Relations.
- Goal Family Four: Political and Administrative Activities and Relations.

These goals were developed following a review by the study team of prior work in social indicators research in general and those specifically related to assessments of the *Exxon Valdez* oil spill (cf. TM-3B-Questionnaire and Office of Management and Budget [OMB]-approval Package). In addition to division staff, participants in the development of the social effects questionnaire were: Don Callaway, Tracy Andrews, and Karen Gibson of the MMS Socioeconomic Studies program; Joseph Jorgensen of University of California Irvine (contractor on the final MMS' Social Indicators project); Stephen R. Braund, Lisa Moorehead, and William Simeone of Stephen R. Braund and Associates; and Jack Kruse, University of Alaska Anchorage Institute of Social and Economic Research.

The principal sources for objective self-report questions were (1) the final questionnaire from the Alaska OCS Social Indicator System (AOSIS), which itself was based upon extensive use in Alaska and drew upon a review of fieldwork international in scope and (2) the Oiled Mayors project which delved into the psychological impacts of the *Exxon Valdez* oil spill (Impact Assessment, Inc. 1990). In addition, questions were adapted from surveys on migration. The result was a questionnaire that addresses change in social and community organization which could be affected by OCS development, such as an

oil spill. The social effects questionnaire was pre-tested in Seward, following which minor changes were made before the first round of fieldwork in 1992. During the first year of the project only, respondents were compensated $20 for their participation in the research. This payment was dropped in subsequent years, primarily for two reasons. First, many respondents stated that the payment was unnecessary. Second, in order for the respondent to receive a check from ADF&G, their name and address had to be provided to the department's accounting section. Although these names were not linked to household identification numbers or any data, the collection of the names and addresses raised issues of confidentiality.

The survey received Office of Management and Budget approval No. 1010-0089 for use through April 30, 1995. Appendix B contains the social effects survey as used in Prince William Sound. There is regional variation in the surveys to account for locally-available species. In the 1991 study year, an abbreviated version of the social effects survey was used for the Kodiak Island communities of Karluk, Larsen Bay, and Ouzinkie. This special version eliminated sharing questions which could be determined from responses on the harvest survey and questions about species or practices which do not occur on Kodiak Island.

Following the first study year, project staff met to evaluate the first year's fieldwork, especially the performance of the social effects instrument. Comments are summarized in the overview of the first year's fieldwork prepared for MMS (Fall and Utermohle 1992). Generally, among project staff there was universal agreement that the social effects instrument was too long, especially when administered alongside the harvest survey. In several communities, respondents complained about the survey length, and it is likely that some households refused to do either survey because they learned from others just how long the interviews were taking. Also particularly difficult in some communities was administering a "battery of questions" on a particular topic. In some cases, this tended to tire the respondent, encouraging them to answer "I don't know" rather than give a response, in order to speed up the interview. Further, it was felt that due to the limited response options provided for certain social effects questions, many people were unable to talk about their deeper feelings and elaborate on their answers.

It was also noted that some of the subsequent secondary effects of the spill cleanup employment were not explored by the social effects survey. Some of these consequences were unforeseen tax burdens for money earned on the clean-up and resurgence of drug and alcohol abuse. Staff noted that more detailed information on some of these topics would be better obtained by methods other than individual interviews, such as group or household discussions.

Subsequently, a number of recommendations were adopted into a modified social effects questionnaire for the second and third study years. Several series of questions were eliminated. These included: feelings about sharing, the importance of places and the change in feelings about those places after the spill, and the use and effectiveness of local services in the two years after the spill. Thus, the overall instrument was substantially shortened. Some questions were added, however, such as a series which enabled respondents to express their views regarding OCS development in their regions. Staff

were instructed to encourage people to expand on their responses. Space was added to the form to accommodate these comments, which were subsequently typed for a field note database.

Despite these changes, staff in all three study years encountered an unusual level of negative comments about and resistance to the social effects questions which far exceeded those directed towards the harvest survey. Comments about the perceived excessive length of the surveys continued, which added to respondent and staff fatigue. Also, there were frequent comments about the content of the questionnaire itself. Following are some examples from post-interview summaries prepared by field staff working in Kodiak area communities.

> This is a third year respondent. He tries to seriously answer these (social effects) questions, though he thinks some of them are a bit ludicrous and gets a good laugh from them.
>
> This interview was the most difficult I've conducted this year to date. It was like pulling teeth! The respondent had numerous snide comments about many of the questions.
>
> Respondent had little enthusiasm for this part of the interview. He kept muttering, "Oh that stupid question again."
>
> The survey went real well. However, near the end of the survey he was getting a little tired of the questions; his concentration was drifting.
>
> The length of this survey was tiring, and the respondent lost interest in the questions. About half way through she began saying "I don't know" to everything, especially those questions which required thoughtful answers or retelling things from five years ago. Completing the survey was an ordeal for both of us.

On the other hand, not all respondents' comments on the social effects questions were negative or indifferent. For example, a number of respondents in Chenega Bay remarked that the social effects questions were "difficult" to answer, but nonetheless were good questions that needed to be asked. In Cordova, especially in the third study year, there was a great deal of interest in the project and in answering questions from both survey instruments. Staff attributed at least some of this interest to several consecutive poor fishing seasons and continuing concerns about the spill's effects on the natural resources of Prince William Sound.

Discussed in this report are selected findings from the social effects questionnaire which address some of the long-term consequences of the *Exxon Valdez* oil spill for subsistence hunting and fishing, social relations, and certain other economic, political, and administrative activities. These include responses to questions on uses of wild foods, assessments of changes in resource populations, sharing of wild resources, influence of elders, participation in public meetings and elections, reasons people live in their communities and satisfaction with living there, involvement of children in resource activities, assessments of effectiveness of organizations in responding to the spill, and attitudes towards OCS development.

STAFFING AND TRAINING

James Fall, Regional Program Manager for the division in Anchorage, and Charles Utermohle, head of the division's Data Management Unit, were the principal investigators for the project. They were responsible for project design, staffing, budgeting, training, and preparing the technical memoranda required under the agreement. Ronald Stanek, Subsistence Resource Specialist III, was project coordinator. Data management staff also included Louis Brown, Sarah Carpenter, Gretchen Jennings, Andree McLeod, Cheryl Scott, and Sandra Skaggs. Elizabeth Andrews, Regional Program Manager in Fairbanks, and Robert Wolfe, research director, also provided input into the project design and data analysis. Other division staff who conducted the fieldwork are listed in Table I-3. In addition, Don Callaway, Tracy Andrews, and Karen Gibson of MMS assisted with portions of the fieldwork and contributed to the design of the questionnaires. Susan Savage of the National Park Service, Katmai National Park, helped with the fieldwork on the Alaska Peninsula. Robert Stovall of the Kodiak National Wildlife Refuge assisted in Akhiok.

Also, a goal of the project was to train residents of study communities to conduct interviews. Table I-3 lists local assistants. Of the 2,381 interviews (harvest surveys) conducted during this project, 381 (16.0 percent) were done by local assistants. Local assistants completed interviews in all but six of the study communities. For communities included in all three years of the project, those with the largest percentage of interviews completed by local assistants were Port Graham (62.2 percent), Seldovia (35.7 percent), Larsen Bay (31.3 percent), Ouzinkie (20.0 percent), and Nanwalek (17.0 percent). A relatively large portion of the interviews in Kivalina (35.5 percent), which was only surveyed once, was also done by local assistants. This was a significant achievement, especially considering the complexity of the survey instruments and the length of time required to complete two questionnaires with each respondent (very often two hours or more), factors which discouraged other study community residents from helping with the survey administration.

Two training manuals were written to provide guidance to field researchers. The first covered the harvest survey and the second dealt with the social effects questionnaire. Both were used during formal training sessions as needed. In addition, after these formal training sessions, experienced division staff provided further instruction to newer staff on surveying methods in the study communities. This involved having the newer staff observe interviews, then promptly reviewing their own first few surveys. Also, as new staff were added during the project, they were trained by other project personnel. This training also usually took place in the study communities themselves.

After the fieldwork was underway, most field staff also received training in data coding. Data management staff developed a code book which guided this training and subsequent coding. As necessary new codes were developed for analysis of responses to open-ended questions, such as households' assessments of changes to subsistence uses.

In all of the communities where a majority of the population is Alaska Native, approval of the research was sought and obtained from the community governing body. Although interim reports submitted after each study year provide details on the community approval process, in a few cases, this process is described in the community chapters which follow (e.g., Tatitlek, Kaktovik, and Kotzebue) because it provides insights on important issues. In predominately non-Native communities with substantial Native populations, the local Native organization was informed of the project, but formal approval was not sought.

As is discussed in the final section of this chapter, soon after the spill, claims were filed in federal court against Exxon on behalf of an Alaska Native Class for damages to their subsistence way of life. The data collected as part of this study had direct application to the development of this case. Attorneys for the Alaska Native Class advised their clients to participate in the research. On behalf of the division, the Alaska Attorney General's Office negotiated a protective order which enabled experts for both the plaintiffs (the Native class) and Exxon (the defendants) to have access to the data while maintaining the confidentiality of the respondents.

SAMPLING GOALS AND ACHIEVEMENT

First Study Year, 1991

Detailed information about sampling procedures for each study community is provided in the individual study community chapters in three earlier reports submitted to the MMS (Fall and Utermohle 1992, 1993, 1994). As reported in Table I-4, a total of 968 household harvest surveys were conducted in the 16 communities pertaining to the first study year. This is approximately 11.1 percent of the total number of year-round households in the 16 communities. A total of 856 social effects questionnaires were also administered. There were two reasons for the difference between the sample achievements for the two questionnaires. First, most of the households living along the Kodiak road system but outside the city limits were not administered the social effects survey. Second, in most study communities, there were some respondents who declined to do the social effects interview after completing the harvest survey.

The study communities were placed in three groups based on population size for purposes of sampling. An attempt was made to interview 100 percent of the year-round households in eight relatively small communities. These were Tatitlek, Chenega Bay, Port Graham, Nanwalek, Larsen Bay, Karluk, Chignik Bay, and Chignik Lake. In total, 220 of the 283 households in these communities were interviewed, a sample achievement of 77.7 percent. The sampling percentage ranged from a high of 88 percent in Larsen Bay to a low of 68 percent in Chignik Bay.

In a second group of three communities, Seldovia, Ouzinkie, and Old Harbor, the goal was to interview a 50 percent random sample. This minimum goal was exceeded in all three communities.

Altogether, 140 households were interviewed from this second group, 59 percent of the estimated total of 237 year-round households.

The third group consisted of five communities with relatively large populations (over 2,000 people). The goal in these communities was to interview either 100 or 200 randomly selected households. The sampling goal was 100 households in Cordova, Valdez, Kenai, and Kotzebue. In Kodiak, the goal was 100 households within the city limits and 100 additional households along the remainder of the road system for a total sample of 200 households. All of these sampling goals were achieved. In the five large communities overall, 608 households were interviewed. This is about 7.4 percent of the total number of households in all five communities. The sampling fraction was highest at Cordova at 12.9 percent and lowest at Kenai, with 4.7 percent.

An additional goal in the first study year in the communities with random samples was to interview a panel selected from Social Indicators Study respondents. These panels were to make up 50 percent of the total sample in each of these study communities, including Cordova, Valdez, Kenai, Seldovia, and Kodiak. Each community chapter provides an overview of the composition of the sample between Social Indicators panel members and newly selected households.

Second Study Year, 1992

Following review of the first year's research and consultation with MMS, several important changes were made to the study design which emphasized collection of three years of social effects data for all the study communities in the oil spill region. Originally, several communities were to be surveyed only twice. Consequently, in order to accommodate an additional, third round of data collection in some study communities, five were dropped from further interviewing. These were Old Harbor, Karluk, Chignik Bay, Chignik Lake, and Kotzebue. Also, the Social Indicators panel households from the first study year were "retired" because of concerns about increasing levels of nonparticipation in the project.

Table I-5 gives sampling goals and achievements for the second study year. In total, 668 harvest survey interviews were conducted in 13 study communities, as well as 593 social effects interviews. Again, the goal was to interview 100 percent of the year-round households in the smaller communities of Chenega Bay, Port Graham, Nanwalek, Larsen Bay, Kaktovik, and Kivalina. In contrast to the previous year, a 100 percent sample was sought in Ouzinkie as well. Also, Akhiok was added to the list of study communities for the second year, although only the harvest survey was administered there. A total of 325 harvest survey interviews were conducted in these small communities for an overall sampling rate of 84.4 percent. Sampling fractions ranged from a high of 100 percent in Akhiok and 88.5 percent in Chenega Bay to a low of 74.6 percent in Kaktovik.

As in 1992, the sampling goal in Seldovia in 1993 was 65 households; this goal was achieved, for a sampling fraction of 47.4 percent. In contrast to the previous year, however, the sampling area for Seldovia included the road system outside the city limits of Seldovia itself.

In Valdez and Kodiak City, the goal was again a sample of 100 households. These goals were achieved, for a sampling fraction of 8.0 percent in Valdez and 5.7 percent in Kodiak. These samples included a panel of households from the previous year, with the balance being newly randomly selected households. In Cordova and Kenai, the 1993 goal was to interview a sample of up to 50 households from the previous year's sample. In total, 41 households were interviewed in Cordova and 37 households in Kenai, for 5.2 percent and 1.7 percent sampling fractions, respectively.

Third Study Year, 1993

Table I-6 reports the sampling goals and achievement for the third study year. Altogether, 745 harvest surveys were administered, comprising 10.4 percent of the total households in the 13 study communities. The total number of social effects questionnaires completed was 673.

As in previous years, a census sample was the goal in the smaller communities of Chenega Bay, Tatitlek, Nanwalek, Port Graham, Larsen Bay, and Ouzinkie. A total of 228 interviews were done in these villages, for a sampling fraction of 83.2 percent. The highest sampling fraction was achieved at Nanwalek (89.2 percent) and the lowest at Tatitlek (71.4 percent). For three medium-sized communities, relatively large random samples of 50 percent (Port Lions), 66 percent (Nuiqsut), and 65 total households (Seldovia; 42.5 percent) were sought and achieved. In Seldovia, the sample consisted of a panel of households interviewed in the two previous study years, plus a balance of newly selected households. The Seldovia study area again included the city itself and the area connected to it by road.

In the larger communities, samples of 100 households were sought in Cordova (11.0 percent of all households), Kenai (4.4 percent), and Kodiak City (5.3 percent). In each case, panels from previous years were embedded in these samples. Finally, the goal for the third year was just to reinterview the panel in Valdez; the 35 households represent a 2.5 percent sample of the total populations.

Refusal Rates

It should be noted that the project encountered a relatively high refusal rate. Almost 20 percent of the households that were contacted in 1992 (the first study year) (19.9 percent; 240 households) declined to participate in the project (Table I-4). This compares to a refusal rate of 9.4 percent during a harvest survey project in 15 oil spill communities in 1990 when 403 households were interviewed, and a refusal rate of 7.5 percent in 1991 when 221 households in seven oil spill communities were interviewed. It should also be noted that the refusal rate in the five large communities was 24 percent, more than double the approximately 11.5 percent rate of refusal encountered in the smaller communities. Researchers offered several explanations for the relatively high rate of refusals, including the long length of time required to administer the two questionnaires, several consecutive years of surveys in some communities (survey "burn out"), and study timing which conflicted with other activities in some communities (this was particularly an issue in Cordova, Chignik Bay, and Chignik Lake). Other reasons

included perceived irrelevance of the research, and distrust or dislike of government agencies (Fall and Utermohle 1992:148-149).

The refusal rate for the second study year dropped to 14.4 percent of households contacted (112 households) (Table I-5). For the smaller communities, refusals declined to 6.9 percent of contacts. A relatively shorter survey form, familiarity with the project, and the continued use of local assistants may be some reasons for the relatively low number of households which decided not to take part in the project. Dropping Tatitlek from the list of second-year study communities probably also lowered the refusal rate overall. On the other hand, the refusal rate in the three larger communities in which random samples were again selected (Valdez Kodiak, and Kenai) remained about the same as the year before at 24.2 percent, while that in Seldovia increased to 17.7 percent of contacts. In Cordova, nine of the potential panel members declined to participate in the second year of the study (a refusal rate of 18.0 percent); in contrast, only one such household decided not to participate in Kenai (a refusal rate of 2.6 percent).

In the third study year, the refusal rate overall was 16.4 percent, slightly higher than the year before but lower than the first year (Table I-6). Again, the rate of refusals was especially high in the large, primarily non-Native communities, at 23.5 percent more than double that of the Native villages where census samples were sought (10.9 percent). As in the first year, however, a relatively high rate a refusals (25.9 percent) was encountered in Tatitlek (see Chapter V).

INTERVIEW LENGTH

Table I-7 and Figure I-2 provide information about the length of the harvest survey interviews in each study community and for each year's research overall. For the total of 968 households interviewed for the first year, the average length of the interviews was 0.90 hours (54 minutes). This compares to an average length of time for administering a similar form in 403 households in 15 communities in 1990 of 1.03 hours (62 minutes) and an average of 1.06 hours (64 minutes) for administering a similar instrument in 221 households in seven communities in 1991. In 1992, the average length of the interviews was longest in Chignik Lake at 1.61 hours (97 minutes) and shortest in Kenai at 0.53 hours (32 minutes).

Several factors may have contributed to differences in interview lengths between communities in 1992. The two communities with the shortest average interviews, Valdez (0.66 hours) and Kenai (0.53 hours) also had the lowest community harvest levels and the narrowest range of resources used per household. Communities with high harvest levels and, especially, wide ranges of resources used, tended to have longer average interview lengths. Examples include Chignik Lake (1.61 hours), Tatitlek (1.30 hours), Nanwalek (1.26 hours) and Old Harbor (1.09 hours). On the other hand, the community with the highest per capita harvest, Kotzebue, had the fourth-shortest average interview length at 0.74 hours (44

minutes). Other factors which may have influenced length of interviews included particular households' familiarity with the survey instrument and the interviewing styles of particular researchers.

Harvest survey interview length declined substantially for the second study year. Overall, the interviews took just 0.53 hours (32 minutes) to complete, with a range of 0.9 hours (54 minutes) in Kivalina (which had not been surveyed previously) to just 0.22 hours (13 minutes) in Kenai, where a panel of previously interviewed households were surveyed in this community of relatively low levels of resource use (Fig. I-2). There were notable declines in the average length of interviews in every study community (Table I-7).

There were several reasons for the reduced length of harvest survey interviews in 1993. Most important, a number of questions were deleted from the questionnaire in the second year, including the section on use of equipment that had required a significant investment in time to complete. Second, for households that were reinterviewed, it was not necessary to collect much of the demographic data (such as birth dates and ethnicity) that had been recorded the first year. This information only had to be collected for new household members. Finally, most interviewers had participated in the project in the year before and were more familiar with the form and with interviewing procedures.

For the harvest survey interviews conducted in 1994 (study year 1993), the overall average length was 0.65 hours (39 minutes) (Table I-7). This was an increase over the year before (0.52), but remained below the first year's average (0.9 hours). Also, in all but one community (Nanwalek) that also had been surveyed in the second study year, the average length of the harvest survey increased in the third year. This was primarily because several sets of questions were added back into the questionnaire, such as respondent's evaluations of their resource uses compared to other years, average cost of food, and the percentage of total meat, fish, and poultry that was wild foods. The average harvest survey length ranged from a high of 1.16 hours (70 minutes) in Chenega Bay to a low of 0.35 hours (21 minutes) in Valdez. The questionnaires administered in Chenega Bay and Tatitlek (which had the second-highest average) had questions on harvest areas which were unique to those communities. This probably accounts for their longer average length.

Table I-8 and Figure I-2 report the average length of the social effects questionnaire interviews in all three study years. As with the harvest survey, the social effects questionnaire took longest to complete in the first study year, an average of 0.75 hours (45 minutes). Generally, the differences between communities fell within a narrower range than with the harvest survey, primarily because of the similarity of the questionnaire among all communities and the need to administer all the questions to all respondents. This was in contrast to the harvest survey, where non-harvesting or low-harvesting households could skip entire sections. In the first study year, the social effects questionnaire took longest to administer in Nanwalek (0.99 hours) and shortest in Kenai (0.60 hours).

Also similar to the harvest survey, the social effects instrument was shortened in the second and third study years, reducing the amount of time to administer it (Table I-8). On average, this was 0.64

hours (38 minutes) in the second year, and 0.63 hours (38 minutes) in the third. Again, there was not a great deal of difference between communities in the average length of the social effects interviews.

DATA MANAGEMENT PROCEDURES AND DATA ANALYSIS

Data Verification

Survey forms with responses assigned standardized codes were turned over to the division's Data Management Section for data entry and analysis. Data were entered into the R:Base 4.0 relational database system using specialized forms for each category of information, such as demographic information, harvest data, and employment history. As the original and coded responses are in juxtaposition, data entry personnel were able to evaluate each entry as to its meaning and appropriateness. This provision allowed for the first quality control measure by data management staff. A list of potential discrepancies was prepared during data entry for later rectification by the responsible researcher.

After the discrepancies located during data entry were resolved, output was prepared which mirrored the code lines on the survey. These 'line-by-line' verification sheets were used in lieu of double data entry both in consideration of efficiency and to provide researchers with an additional opportunity to review the survey responses. Working from the original survey forms, which are the source documents for all data entry and correction, the researcher compared the responses with the verification sheets. When data entry or coding errors were encountered, the necessary changes were made to the verification sheet and survey form. Corrections were then made to the database.

Following the above verification procedures for data entry, a series of reports were run from the R:Base database program which resulted in American Society for Information Interchange (ASCII) fixed format data files which conform to the entry format required by the Statistical Package for the Social Sciences (SPSS) for Windows program. The data were subjected to a series of 'logic checks' which were designed to highlight invalid codes, missing data, and apparent inconsistencies, such as when attempt to harvest was recorded as "no" when a harvest did occur. Data identified as potentially inconsistent were presented to the researcher for correction or verification. After the necessary corrections were made to the database and new data files created, frequency lists were produced for each variable. These lists were used by the researcher to identify extreme responses for subsequent review. Only after the above quality control procedures were completed were time and effort devoted to producing tabular results.

The production of draft tables and figures provided the first opportunity for researchers to view the pattern of responses and the interaction between variables. It was at this stage that information acceptable in terms of coding and knowledge of the community could be evaluated for accuracy. After

this last quality control step, the results of data analysis were translated into Excel spreadsheets and charts for incorporation in project documents and use in presentations.

Standardized Datasets

Following input of the information into the R:Base database program, the household-level data were exported as ASCII, fixed format files according to the column specifications of that specific record of information ('record type'). Record types were defined for each of the different kinds of information collected, i.e., demographic, resource specific, employment, other income, resource assessments, etc. The harvest survey instrument, in particular, was designed to record of a repetitive name, for example, the characteristics each household member or the use and harvest quantity of a wild resource. This data structure allows for the 'one-to-many' and 'many-to-one' relationships between record types. A unified structure of identification of each record is provided by the combination of record type number, community code, household identification number, study year (being either the calendar year or the starting year of study periods which cross years), and then the person number, resource code, or job number, as appropriate to the data. Thirty-three record formats were used in recording data for this project. Descriptions of each record type and its constituent variables were produced as Technical Memorandum (TM) 5, SPSS Data Files (Brown et al. 1994b) for this cooperative agreement. Job control language (JCL) required to translate the numeric codes for each record for analysis in SPSS programs were provided with the data on diskette with the submittal of TM 5.

In addition to this cooperative agreement covering the 1991 through 1993 study years, the division participated in another cooperative agreement (14-35-0001-30539) which covered harvest surveys conducted by the division in the Gulf of Alaska region prior to the 1991 study year (Brown et al. 1994a). Although the data structure of record types may differ between the projects, they can be linked through the use of unique variable names. In the two projects, like variables share the same name, and dissimilar variables are distinguished by possessing different names. After conversion into SPSS 'save' files, the data can be conveniently merged for analysis of the division's community baseline subsistence harvest surveys from the early 1980s through the 1993 study year.

The social effects survey data exist as an SPSS save file. This dataset shares the same variable convention of community, study year, and household identification number to allow linkage with the subsistence, demographic, and employment data contained in the harvest survey.

In order to maintain the explicit confidentiality of survey respondents, potential personal identifiers such as birth date, education, employment, for example, have been recoded to aggregated intervals. The household-level datasets and supporting documentation are available at cost to qualified researchers from the Alaska Department of Fish and Game, Division of Subsistence upon acceptance of the division's code of ethics concerning conduct of research. Inquiries should be made to the

Subsistence Research Director, PO Box 25526, Juneau, Alaska 99802-5526, or by telephone to (907) 465-4147.

The Division of Subsistence also maintains the Community Profile Database (CPDB)(Scott et al. 1993) which provides community-level summaries (as opposed to household-level data) for harvest surveys throughout the State of Alaska. These summarized data do not possess any confidentiality concerns and are available from the CPDB Coordinator at the above address and telephone number for the cost of the media and documentation. The CPDB currently exists as an R:Base relational database but can be readily converted to other data formats.

ORGANIZATION OF THE REPORT

The remainder of this report consists of 23 chapters in five additional volumes. The first 21 of these, in Volumes Two, Three, Four, and Five are focused on study findings for each of the study communities. Volume Two contains the chapters for the Prince William Sound, Volume Three pertains to Kenai Peninsula communities, Volume Four reports findings for the Kodiak Island Borough communities, and Volume Five has chapters on the Alaska Peninsula and Arctic communities. Two final chapters in Volume Six provide a comparative perspective on some of the study findings. It also contains the list of references cited and the appendices. Each community chapter is organized around a series of standard tables and figures and provides study findings on demography, employment, income, resource use, and resource harvests. Comparisons are made with prior years' harvest and use data. For the communities in the oil spill area, an emphasis is placed on identifying changes since the first two years after the spill. Each community chapter also presents selected findings from the social effects questionnaire, except for Akhiok, Port Lions, and Kaktovik, where this instrument was not administered.

In some cases, study findings for all 21 communities are presented in a single table or figure. These are included as a group at the end of this chapter (Chapter I). These summary tables include 1991 and 1993 household assessments of changes in levels of resource uses from the previous year (1990 or 1992) and the year before the *Exxon Valdez* oil spill (1988) and the reasons given for those changes (Tables I-9 - I-98), assessments of Steller sea lion populations (Tables I-99, Table I-100), information on monthly expenses for food (Tables I-101, Table I-102), household assessments of their financial condition during the study year in comparison with before the *Exxon Valdez* oil spill (Table I-103), the estimated percentage of meat, fish, and poultry used per household that was from wild foods in the first and third study years (Table I-104, Table I-105), salmon preservation methods (Table I-106), discarded resources (Table I-107), and plants used for medicinal purposes (Table I-108, Table I-109). Also included are some multi-community figures which report selected findings from the social effects questionnaire which are referenced in the community chapters (Fig. I-3 to Fig. I-15). These include findings from questions concerning resource uses (Fig. I-3); food safety (Fig. I-4, Fig. I-5); oil spill effects

on children's subsistence activities (Fig. I-6) and sharing (Fig. I-7); satisfaction with living in the community since the spill (Fig. I-8); assessment of adequacy of information about subsistence food safety (I-9); and predicted OCS development impacts (Fig. I-10 to Fig. I-15). Figure I-16 illustrates the percentage of households which said they used less wild resources in 1991/92 and in 1993/94 compared to 1988, the year before the *Exxon Valdez* oil spill.

OVERVIEW OF THE *EXXON VALDEZ* OIL SPILL[1]

This section provides a brief overview of selected aspects of the *Exxon Valdez* oil spill which will serve as background for discussions of the spill's effects on particular study communities which appear in the chapters which follow. It is intended for readers who need a general overview of the spill as it affected the study communities, and is not intended to be a comprehensive account of the spill itself or of studies which have assessed the spill's damages.[2]

The Spill and the Clean-up

The oil tanker *Exxon Valdez* grounded on Bligh Reef in eastern Prince William Sound on March 24, 1989. With the ship's hull rent open, almost 11 million gallons of crude oil (258,000 barrels) were eventually spilled into the sound's waters. Winds, tides, and currents carried the oil to the west and south, coating over a thousand miles of shoreline and killing hundreds of thousands of birds, sea mammals, and other marine life (U.S. Coast Guard 1993; ADF&G 1989a:8-10,21).

The spill response first focused on the protection of Prince William Sound salmon hatcheries, then shifted to cleaning oil from waters and beaches; the clean-up was underway by the middle of May (ADF&G 1989a:13; State of Alaska 1989:15). Eventually, about 11,000 workers, as well as hundreds of boats and aircraft, were employed on the clean-up in 1989 (Alaska Oil Spill Commission 1990:63). Methods included hot and cold water washing with high pressure hosing, removing and bagging oiled debris and wildlife by hand or with rakes for pick up, and wiping rocks clean of oil one-by-one with rags. Additionally, a chemical cleaning agent (COREXIT 9580) was used to treat some beaches. Another method used to facilitate cleaning was bioremediation, the spreading of fertilizer to enhance the growth of oil-eating bacteria on the beaches (State of Alaska 1989:17-19).

The degree to which shorelines were oiled varied within and between regions. The Shoreline Cleanup Assessment Team (SCAT) survey of September 1989 classified 26.5 percent of the oiled shoreline

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[1] Much of what follows is derived from a more detailed discussion in Division of Subsistence Technical Paper No 199 (Stratton et al. forthcoming).

[2] For detailed discussions of the spill and the subsequent clean-up, the reader should consult the federal on-scene coordinator's report, prepared by the U.S. Coast Guard (1993) and the final report on the State of Alaska's response to the spill (Piper 1993). Summaries of the damage assessment studies conducted for the state and federal governments appear in ADF&G (1993) and the abstracts volume prepared for the 1993 Oil Spill Symposium (Exxon Valdez Oil Spill Trustees 1993). A symposium proceedings volume was in preparation in late 1994 (Rice and Wright in press). Several accounts of the spill and the damage assessment studies, prepared for a general readership, have also been published (Davidson 1990, Keeble 1991, Lord 1992, Wheelwright 1994).

of Prince William Sound as "heavily oiled," 20.7 percent as "moderate," 34.2 percent as "light" and 18.6 percent as "very light." In contrast, outside Prince William sound, 7.9 percent of the oiled shorelines was classified as having heavy or moderate oiling, 14.6 percent as "light" and the remainder (77.5 percent) as "very light" (U.S. Coast Guard 1993:125).[3]

The first year's clean-up effort ended in mid-September 1989. However, the State of Alaska (1989:19) concluded that the clean-up was not over because

> There is still oil on the water and on beaches, and it is moving into new areas every day. Moreover, most of the 200 miles of heavily oiled shoreline in Prince William Sound has substantial amounts of oil still deep in the sand and gravel. It continues to leach to the surface and bleed into the water. . .

About 1,244 miles of shoreline had been contaminated, including 311 in Prince William Sound, 100 on the Kenai Peninsula, and over 833 on the Kodiak Island archipelago and Alaska Peninsula.[4] In Prince William Sound, 199 miles of shoreline had been "treated" during the first year's clean-up efforts, but even these were not necessarily "clean" or "environmentally stable." It was estimated after the first year that of the 258,000 barrels of oil that had been spilled, 32,500 barrels had been recovered, 77,100 had evaporated, and 114,000 barrels remained unrecovered in Prince William Sound and the Gulf of Alaska (State of Alaska 1989:25; *Exxon Valdez* Oil Spill Trustees 1992:2).

Clean-up activities continued at a reduced scale in the second (1990), third (1991) and fourth (1992) years after the spill. In March and April 1990, for example, as part of a local response program, over 150 people from Kodiak Island, Prince William Sound, and Chignik picked up 128,000 pounds of oily waste (Piper 1993:133). State and federal on-scene coordinators declared the clean-up over on June 12, 1992 (Piper 1993:146). However, limited, site-specific efforts to remove remaining surface and subsurface oil took place after this official end to the clean up. For example, as part of a restoration project in 1994, residents of Chenega Bay assisted in cleaning oiled mussel beds in western Prince William Sound.

Damage Assessment Studies

Certain wildlife populations were severely impacted by the spill by direct contact with the oil. According to a summary of some of the findings of scientific studies of the spill's effects on fish and wildlife,

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[3] Oil impact categories were as follows: heavy or wide = a band greater than six meters in width and greater than 50 percent oil cover: medium = a band greater than six meters in width and less than 50 percent oil cover, or a band three to six meters in width and greater than 10 percent oil cover; light or narrow = a band less than three meters in width and less than 10 percent oil cover; and very light = less than 10 percent oil cover regardless of width (Dewhurst et al. 1990:11).

[4] These estimates from the Alaska Department of Environmental Conservation (ADEC) represent "actual oiled miles." Discrepancies exist between these estimates and others provided by ADEC, Exxon, and the U.S. Coast Guard, because other estimates report the total length of oiled shoreline" segments," portions of which were unoiled (State of Alaska 1989:25). For example, the Shoreline Cleanup Assessment Team (SCAT) Survey in September 1989 identified 3,245.1 miles of oiled shoreline, including 789.6 miles in Prince William Sound and 2,455.5 miles in "western Alaska" (the remainder of the spill area) (U.S. Coast Guard 1993:125).

about 3,500 - 5,500 sea otters, 200 harbor seals, and 375,000 - 435,000 birds (such as murres, eagles, and sea ducks) died as a direct result of the spill (*Exxon Valdez* Oil Spill Trustees 1992:20-26).

The immediate and long-term effects on other wildlife were less clear, however. For example, sea lions swam near oiled areas, and some were observed with oiled pelts, but no sea lion deaths were known to have been caused by the spill. Deer feed on kelp on beaches in winter and were likely to ingest oiled kelp. Nevertheless, no deer whose deaths were caused directly by the spill were located after intensive searches of beaches. Black bears might also have been exposed to oil when they fed on beach grasses or sedges, dug for clams, or scavenged for birds, but no studies of possible injuries to black bear populations were done (ADF&G 1989a:28-30; *Exxon Valdez* Oil Spill Trustees 1992:19-30).

Within a week of the grounding of the *Exxon Valdez*, planning began on scientific studies to determine the spill's long-term biological effects (ADF&G 1989a:10). Over 100 "Natural Resource Damage Assessment Studies" were undertaken by government, university, and private-sector researchers. These studies were coordinated through the *Exxon Valdez* Oil Spill Trustee Council, with representation from three state and three federal agencies (Fraker 1993). Because of the litigation-sensitive nature of these studies, their findings were deemed confidential and results were not immediately available to the public (Gertler 1992). Some preliminary results were first released by the federal government in March 1991 (U.S. Fish and Wildlife Service 1991). A more complete summary of damage assessment study findings was included by the Trustee Council in its Oil Spill Restoration Framework and 1992 Draft Work Plan in April 1992. In early 1993, the Alaska Department of Fish and Game published overviews of some of the scientific studies and their findings in its magazine, *Alaska's Wildlife* (ADF&G 1993). In February 1993, a four-day *Exxon Valdez* Oil Spill Symposium took place in Anchorage during which the results of many of the damage assessment projects were presented and discussed (*Exxon Valdez* Oil Spill Trustee Council 1993).[5] Summaries of natural resource injuries also appear in the draft *Exxon Valdez* Oil Spill Restoration Plan. Table I-110 lists injured resource and services as described in the plan (*Exxon Valdez* Oil Spill Trustee Council 1994).[6]

The Issue of Subsistence Food Safety[7]

The primary issue for subsistence users of the spill area's resources was whether fish and wildlife were still safe to eat. While some plants and animals were obviously oiled and not edible, it was not clear to subsistence users if those without signs of oiling might also cause acute or chronic health

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[5] A publication of selected papers from this symposium was in preparation in late 1994 (Rice et al., forthcoming).

[6] It must be noted that Exxon Corporation also conducted its own damage assessment studies. As with the government-funded projects, these were considered "litigation sensitive." Consequently, there was no coordination of the government and Exxon studies, and the results of the Exxon-funded research were not available for public review until 1993. Exxon's scientists and contractors chose not participate in the Oil Spill Symposium in Anchorage in February 1993. Rather, the Exxon studies were presented in April 1993 at the meeting of the American Society of Testing and Materials (ASTM) in Atlanta, Georgia. For a critical review of these damage assessment studies, see Ott (1994).

[7] This section is based on Fall 1991b, Walker and Field 1991, and Fall and Field, forthcoming.

problems. Abnormal behavior and conditions of wildlife also raised questions about the spill's effects for subsistence users. Consequently, they rejected the advice that sight, smell, and taste alone (the "organolepic test") was sufficient to determine food safety. People were no longer confident in their own abilities to understand and evaluate the natural environment because the spill had created such unfamiliar and unsettling conditions. As a result, people discarded resources which they suspected had been tainted, or refrained from using subsistence foods entirely.

To respond to these concerns, an Oil Spill Health Task Force (OSHTF) was formed under the chairmanship of the federal Indian Health Service. The OSHTF coordinated and reviewed research on subsistence food safety, tried to develop a consensus on health issues, and communicated findings and advice to the villages. Regular participants in the OSHTF included the Indian Health Service, ADF&G Division of Subsistence, Alaska Department of Health and Social Services (ADHSS), Alaska Department of Environmental Conservation (DEC), the National Oceanic and Atmospheric Administration (NOAA), Exxon, and two Alaska Native regional organizations: the Kodiak Area Native Association (KANA) and the North Pacific Rim (later called Chugachmiut). The task force met biweekly in 1989, regularly through 1990, and sporadically after that. Its last meeting occurred in August 1993.

Programs to collect and test samples of subsistence resources for hydrocarbon contamination were developed by the Division of Subsistence and by Exxon, and were coordinated by the OSHTF. Exxon's program was also guided by a cooperative agreement with NOAA. Over a three year period (1989, 1990, and 1991), tests were run on 312 samples of fish, 1,061 samples of marine invertebrates, and samples from 43 harbor seals and sea lions. All the tests were run at NOAA's Northwest Fisheries Center in Seattle (Varanasi et al. 1993). Also as part of this program, samples from 19 sea ducks and 16 deer were tested at a laboratory at Texas A&M University.

After results from the first round of collections and testing in 1989 were available, NOAA convened a group of toxicologists and other health experts in Seattle in September 1989. This group, generally referred to as "the expert toxicological committee," concluded that levels of polycyclic aromatic hydrocarbons (PAHs) in the samples of fish were so low as to not be a health concern. Most samples of marine invertebrates also had safe levels of PAHs, but some collected at oiled beaches had elevated levels. The expert committee recommended therefore that marine invertebrates from oiled beaches not be consumed. This group met again in February 1990 when the full results of the 1989 collection and testing program were available, and reaffirmed its earlier conclusions. Findings from the 1990 and 1991 rounds of collections were consistent with these findings from the first year. Additionally, levels of PAHs in the tested samples of marine mammals, ducks, and deer all were deemed safe, although levels in the blubber of oiled seals were elevated. Seals tested in subsequent years had very low to nondetectable levels of PAHs. These findings and the health advice of the expert committee were communicated to subsistence users in a series of village meetings in September and October 1989 and again in June 1992, in health bulletins published by the ADHHS, in newsletters produced for the OSHTF by the

Division of Subsistence, and in a video, also produced by the division (with assistance from the Office of the Governor) for the OSHTF.

The OSHTF faced a number of difficult issues regarding subsistence food safety and risk communication. These were especially acute during the first and second spill years (1989 and 1990), and although they have lessened over time, many have persisted. Among these issues were:

- Lack of specific information. General statements about food safety were often received skeptically by residents of the Alaska Native communities. People wanted to know about specific places and resources.
- The adequacy of the sampling program. Were enough samples from enough beaches tested? Could the test results be generalized to untested areas? Could a clam be tested from one, clean section of the beach and be found safe, while another, just a short distance away, be contaminated?
- Changing conditions over time. With oil still on beaches, would the safety status of particular areas change over time?
- The range of resources tested. Could tests on mussels or clams be applied to chitons or crab? The testing program focused on fish and marine invertebrates. What about marine mammals, deer, bears, and birds?
- The timing of the program. Very little specific information was available until late summer and early fall of 1989. The full results of the 1989 testing program were not available until early 1990. Information about marine mammals, deer, and ducks, was not released until mid-1990.
- The lack of standards. There were no guidelines available as to what a safe and unsafe level of PAHs in foods might be. This was a special concern in the Alaska Native communities, where very large quantities of sea foods, far above the national average, are consumed.
- Communication methods. Health bulletins and newsletters often did not reach many subsistence user's households. Written reports were sometimes criticized as too technical and too hard to understand.
- The involvement of Exxon. For many, Exxon's involvement in the OSHTF represented a conflict of interest and raised questions about the trustworthiness of the programs. The OSHTF tried to deal with this issue in several ways: all its meetings were public, decisions were by consensus, local residents and scientists from NOAA participated in sample collection trips, the internationally recognized Northwest Fisheries Center laboratory was used to run the tests, the expert committee contained representatives from a variety of interests, and all the data that resulted from the project were made public. Nevertheless, a perception remained in some

communities and among some people that the OSHTF activities were compromised by Exxon's presence.

- The embargo on damage assessment study findings. The uncertainty of findings from ecological studies resulted in the perception that the OSHTF did not have access to all the relevant information.
- Cultural definitions of food safety and edibility. For many individuals and families, continued observations of sick and dead wildlife thought to be linked to the oil spill led to questioning of the OSHTF advice. Additionally difficult was the advice that ingestion of oil by an organism might injure the animal but not necessarily affect its edibility. Some reasoned, if the animal was sick, how could it be safe to eat? Animals exhibiting abnormal behavior or other signs of abnormality continued to be rejected by subsistence users as unsafe to eat. Examples of this, such as "target lesions" on sea lions and a viral infection in herring, are discussed in the chapters on Chenega Bay and Tatitlek.
- Voluntary versus involuntary risk. For some people, any increased level of risk was unacceptable in that it was an involuntary risk. The spill had polluted an area that had formerly been viewed as pristine and the spill contaminated resources that had been viewed as safe to use.

Subsistence Harvests and Uses in 1989 and 1990

As noted earlier, the division conducted research to document characteristics of subsistence uses in 15 Alaska Native communities in the year following the oil spill, and in 7 of those communities for the second post-spill year. As shown in Figure I-17, subsistence harvests declined from 9 percent to 77 percent compared to pre-spill averages in the 10 study communities of Prince William Sound, lower Cook Inlet, and the Kodiak Island Borough. The range of resources used for subsistence also declined, by as much as half or more, in most of these communities. The primary reasons respondents gave for these declines was concern that the resources had been contaminated by the oil. Other reasons given included reduced resource populations as a consequence of the spill and the disruptions caused by work on oil spill clean-up (Fall 1991b; Stratton et al., forthcoming; Stanek, forthcoming b; Mishler and Cohen, forthcoming).

As also shown in Figure I-17, subsistence harvests in the five Alaska Peninsula study communities in 1989 were about the same or higher than the single pre-spill estimate for 1984. Fewer households in these communities said that their use levels had declined over the entire post-spill year. In these communities, disruptions to particular uses occurred, such as marine invertebrates or salmon, but it appeared that most households were able to substitute other subsistence resources for these lost harvests (Fall 1991b, Fall et al., forthcoming).

For the second post-spill year, subsistence uses rebounded in the study communities of lower Cook Inlet and the Kodiak Island Borough (Fig. I-18). Some harvest levels in 1990/91 matched at least one pre-spill estimate, but overall, harvests remained below pre-spill norms. Although some respondents reported reduced levels of concern about oil contamination of subsistence foods, others said that they had returned to using these resources reluctantly, despite their misgivings, because they could no longer afford to do without them or because of their cultural value. In contrast to these increased harvests, subsistence uses in the two Prince William Sound communities of Chenega Bay and Tatitlek showed little signs of recovery during the second port-spill year. Contamination concerns remained high in these villages, and perceptions of severe reductions in many important resources (salmon, marine mammals, birds, marine invertebrates) were increasingly cited as causes of reduced levels of use (Fall 1992a, 1992b).

Litigation

Soon after the spill, law suits against Exxon and Exxon Shipping were filed in state and federal courts by federal, state, and local governments and by private plaintiffs, including an Alaska Native Class. In October 1991, the United States District Court in Anchorage approved an agreement which settled the claims by the United States and the State of Alaska. Under the terms of the settlement, the two companies pleaded guilty to various criminal charges and agreed to pay for certain civil damages. Under the criminal plea agreement, Exxon and Exxon Shipping were fined $150 million ($125 million of which was remitted) and also agreed to pay $100 million as restitution, $50 million to the United States and $50 million to the State of Alaska. These restitution funds must, according to the order of the US District Court, be used "exclusively for restoration projects, within the State of Alaska, relating to the *Exxon Valdez* oil spill." Under the settlement of the civil claims, Exxon agreed to pay the United States and the State of Alaska up to $900 million over a ten-year period. After reimbursement of certain cleanup costs, these funds are deposited in a restoration fund, which is administered by a six-member Trustee Council, consisting of representatives of three federal and three state agencies. These funds are to be used for restoration of injured natural resources and natural resource services (human uses), under terms set out in the Memorandum of Agreement and Consent Decree that was approved by the federal court (*Exxon Valdez* Oil Spill Trustee Council 1992).

Claims by the Alaska Native Class against the United States and the State of Alaska were settled in 1990. Under the terms of this settlement, experts for the Native Class gained access to data from government studies of natural resource damages.

The case of the Alaska Native Class against Exxon was based on the claim that the spill had injured the subsistence way of life and the Alaska Native culture. On March 23, 1994, Judge H. Russel Holland (1994a) ruled that claims for non-economic injury, such as the claim of the Alaska Native class that the spill had damaged the subsistence way of life, were not recognized by maritime law. The Alaska

Native Class had also argued that under maritime law, private individuals or classes who could show a special injury "different in kind from that suffered by the general public" could recover damages. Their claim was that the subsistence way of life was central to their culture in a way that was fundamentally different from the noncommercial resource uses of other Alaskans. This claim was also rejected by the court (Holland 1994a)

> The Alaska Natives' non-economic subsistence claims are not "of a kind different from [those] suffered by other members of the pubic exercising the right common to the general public that was the subject of interference." . . Although Alaska Natives may have suffered to a greater degree than members of the general public, "differences in the intensity with which a public harm is felt does not justify a private claim for public nuisance." . . All Alaskans have the right to lead subsistence lifestyles, not just Alaska Natives. All Alaskans, and not just Alaska Natives, have the right to obtain and share wild food, enjoy uncontaminated nature, and cultivate traditional, cultural, spiritual, and psychological benefits in pristine natural surroundings. Neither the length of time in which Alaska Natives have practiced a subsistence lifestyle nor the manner in which it is practiced makes the Alaska Native lifestyle unique. These attributes of the Alaska Native lifestyle only make it different in degree from the same subsistence lifestyle available to all Alaskans. The Alaska Natives do not have a viable, maritime, public nuisance claim, as their claim is only different in degree, not in kind, from that suffered by the general population of Alaska.

In dismissing these claims, the court added that, "the court does not reject the notion that there are cultural differences between Alaska Natives and many non-Native Alaskans," and that "the Court accepts without qualification the cultural importance of the subsistence lifestyle to residents of rural Alaska in general, and Alaska Natives in particular." And added (Holland 1994a),

> At risk of making this decision too long, and at the risk of straying too far from the legal field, the court would observe that the entry of oil companies into Alaska in the late 1950s and thereafter was not the first (and likely not the last) challenge to Native culture. Who moved in on whom as between the Alutik (sic), Indian, and Yupik/Inupiat peoples is lost in the anthropological fog of ten to fifty thousand years ago. Then came the Russians, then the American whalers, then the miners, and with them the United States Government came to Alaska.
>
> All of these incursions have impacted and, to a lesser or greater degree affected, native culture. . . If (and we think this is not the case) the Native culture was in such distress that the Exxon Valdez oil spill sapped the will of the Native peoples to carry on their way of life, then a native subsistence lifestyle was already lost before March 24, 1989. . . The Exxon Valdez oil spill was a disaster of major proportions, but it did not deprive Alaska Natives of their culture.
>
> The affront to Native culture occasioned by the escape of crude oil into Prince William Sound is not actionable on an individual basis. . . The Alaska Natives' claims for non-economic losses is (sic) rejected, and the plaintiffs must find recompense for interference with their culture from the public recoveries that have been demanded of and received from Exxon.

This ruling, which occurred in late March, just before the third year's fieldwork got underway in Chenega Bay and Tatitlek, was generally responded to in these villages with a mixture of outrage, disappointment, and grief. In some cases, people cited the ruling as one reason why they would not participate in any additional research.

In response to this ruling, the Alaska Native class argued that simply compensating them for the replacement cost of the lost harvest itself,

> Does not take account of the value placed by the Natives on their subsistence harvest activities, as revealed by their choice to engage in these activities, and is therefore wholly inadequate in assessing the actual economic injury to Alaska Natives resulting from lost subsistence harvests (cited in Holland 1994b).

On June 29, 1994, Judge Holland rejected this argument in clarifying the earlier ruling that the Alaska Native Class claim must be limited to the replacement value of lost subsistence harvests (Holland 1994b):

> The value Alaska Natives place on their choice to engage in subsistence activities is a non-economic "way of life" claim which this court has already rejected. In the case of subsistence harvests, to place a value on anything other than the lost harvest itself is to place a value on lifestyle. The court recognizes that lifestyle has a value, but that value is non-economic. Quite simply, the choice to "engage in [subsistence] activities" is a lifestyle choice, and damages to lifestyle were rejected in Order No. 190. The lifestyle choice was made before the spill and was not caused by the spill. . . Lest there be any doubt, the claims of the native subsistence harvesters are limited to the economic value of the lost subsistence harvest.

In a footnote, the court added:

> The court does not see any great difficulty in placing a value on a pound of bear meat, herring roe, or other such food not normally available in stores. The cost of equivalent foods may be employed.

The trial in United States District Court in Anchorage concerning private plaintiff claims against Exxon got under way in June 1994. While the federal trial was in its second of three scheduled phases, the Alaska Native Class reached a settlement with Exxon concerning the value of the lost subsistence harvests. The settlement was for $20 million. Judge Holland approved this settlement in November 1994. However, appeals of rulings regarding the non-economic portions of the Alaska Native's case were expected to be filed.

Restoration

As noted above, funds from the settlement of federal and state claims against Exxon are to be used for the restoration of injured natural resources and natural resource services. A "service" is defined

as a human use of a natural resource, such as recreation, subsistence, or commercial harvesting. As shown in Table I-110, subsistence is recognized in the restoration plan as an injured service which has not fully recovered from the effects of the spill. The restoration plan adopted a four-part strategy to restore subsistence (*Exxon Valdez* Oil Spill Trustee Council 1994:55-56). These parts are:

- Promote recovery of subsistence as soon as possible (through such means as increasing availability, reliability, or quality of resources used for subsistence, or increasing the confidence of subsistence users in the safety of resources)
- Remove or reduce residual oil if treatment is cost-effective and less harmful than leaving the oil in place.
- Protect subsistence resources from further degradation.
- Monitor recovery.

Further, the restoration plan adopted the following recovery objective for subsistence:

> Subsistence will have recovered when injured resources used for subsistence are healthy and productive and exist at prespill levels, and when people are confident that the resources are safe to eat. One indication that recovery has occurred is when the cultural values provided by gathering, preparing, and sharing food are reintegrated into community life.

Despite this recognition of the need to restore the subsistence uses, the Trustee Council also adopted a policy that projects designed to restore an injured service "must have a sufficient relationship to an injured resource," such as restoring or enhancing the resource, providing an alternative resource, or restoring access to the resource. Thus, all projects were to be natural resource oriented. In 1994, for example, projects proposed to restore subsistence uses through the development of a "spirit camp" and to provide financial support for Chenega Bay subsistence users to travel outside oiled areas to harvest resources, were rejected by the Council because these projects did not restore injured natural resources, but only addressed human uses. Fortunately, the three state trustees approved these latter two projects, as well as several others, for funding through grants from the Alaska Department of Community Regional Affairs from an appropriation of criminal settlement money by the Alaska Legislature for subsistence restoration.

Restoration work plans adopted by the full Trustee Council in 1993, 1994, and 1995 contained a number of subsistence restoration projects. These included:

- Subsistence Foods Testing
- Clam Restoration (Tatitlek, Port Graham, Nanwalek)
- Elders/Youth Conference

- Harbor Seal and Sea Otter Restoration
- Chenega Bay Chinook Salmon Remote Release
- Tatitlek Coho Salmon Release
- Subsistence Restoration Planning Project

Thus, six years after the spill, efforts to restore injured natural resources and the subsistence way of life continued, in recognition of the still incomplete recovery and the need to heal the damage that remains.

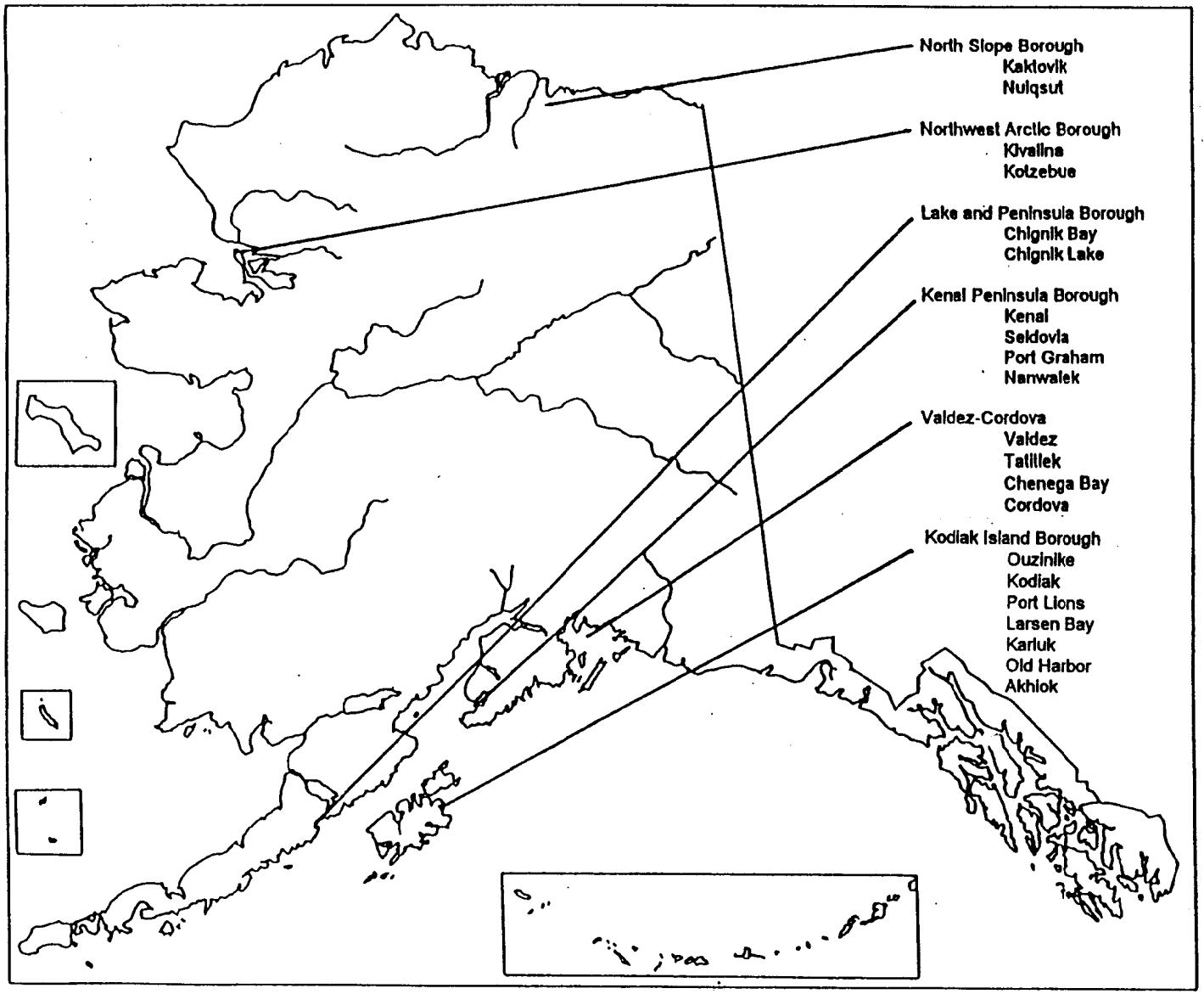

Figure I-1. Location of the Study Communities

Table I-1. Historic Population of Study Communities

Community	1880	1890	1900	1910	1920	1929	1939	1950	1960	1970	1980	1990
Chenega Bay						90	95	91				94
Tatitlek	80	71	140									
Nanwalek (English Bay)	73	90	149	156	187	70	75	89	96	111	68	119
Port Graham	88	107				107	48	75	78	58	124	158
Seldovia					47		93	92	139	107	161	166
Kenai	74	99	149	173	258	379	410	437	460	437	479	316
Cordova	44	264	290	250	332	286	303	321	778	3533	4324	6327
Valdez				1152	955	980	938	1165	1128	1164	1879	2110
			315	810	466	442	529	554	555	1005	3079	4068
Akhiok	114	420		106	94	86	82	72	84	115	105	77
Kodiak City/St. Paul	288	495	341	438	374	442	864	1710	2628	3798	4756	6365
Karluk	302	1123	470	549	99	192	189	144	129	98	96	71
Larsen Bay		20					38	53	72	109	168	147
Old Harbor	160	86			54	84	109	121	193	290	340	284
Ouzinkie	45	74			96	168	253	177	214	160	173	209
Port Lions	339	409	307	318	308	298	197	158	190	227	215	222
Chignik Bay		193		566			224	253	99	83	178	188
Chignik Lake									107	117	138	133
Kaktovik								46		123	165	224
Kivalina					87	99	98	117	142	188	241	317
Kotzebue				193	230	291	372	623	1290	1696	2054	2751
Nuiqsut											208	354

SOURCE: Rollins 1978; Alaska Department of Labor 1991; Alaska Department of Labor 1993.

Table I-2. Alaska OCS Social Effects Goals

GOAL FAMILY ONE:
CONTINUED EXISTENCE OF TRADITIONAL CULTURE

Goal One: Continued Harvest of Renewable Resources

111 Healthy wildlife populations
112 Unrestricted access to traditional hunting and fishing places
113 Presence of wildlife populations in traditional hunting and fishing areas
114 Interest in and use of renewable resources

Goal Two: Continued Traditional Social Relationships

121 Continued cooperative activities
122 Continued sharing of renewable resource products and equipment
123 Continued extended family relationships
124 Continued respect for elders
125 Intervillage social relationships
126 Continued cooperative child care/rearing

Goal Three: Continued Cultural Supports

131 Continued oral history tradition
132 Continued production of arts and craft
133 Continued traditional subsistence activities
134 Continued traditional other activities

GOAL FAMILY TWO:
SOCIAL RELATIONS

Goal One: Visiting

211 Visiting among community members
212 Visiting between communities

Goal Two: Significance of Place

221 Satisfying social relationships as reasons for living in a community
222 Continued use of places as locations of meaningful social activities
223 Kinship as a tie to place
224 Confidence in continued ability to make a living/conduct subsistence activities in a place

Goal Three: Family Well-Being

231 Continued transmission of skills and values to young people
232 Continued role of elders as sources of knowledge
233 Adequate care of children
234 Continued supply of subsistence foods

Table I-2 (continued). Alaska OCS Social Effects Goals

GOAL FAMILY THREE:
ECONOMIC AND COMMERCIAL RELATIONS

Goal One: Oil Spill Cleanup Employment

311 Non-disruptive oil spill employment
312 Ease of transition back to non-oil spill employment

Goal Two: Employer-Employee Relationships

321 Cordial relationships between employers and former employees
322 Adequate and predictable labor pool

Goal Three: Business Relations

331 Cordial relationships with business associates
332 Predictable business opportunities/climate

Goal Four: Costs of Living

341 Reasonable rents
342 Available housing
343 Available employment

GOAL FAMILY FOUR:
POLITICAL AND ADMINISTRATIVE ACTIVITIES AND RELATIONS

Goal One: Adequate Local Control

411 Sense of local control
412 Confidence in institutions and leaders

Goal Two: Adequate Participation

421 Participation in routine processes of Government: percent of adults voting in statewide elections
422 Continued role of elders in political/decision-making functions

Goal Three: Political and Administrative Effectiveness

431 Responsible government agencies
432 Responsible business institutions
433 Responsible membership organizations

Goal Four: Adequate and Effective Social Services

441 Timely and effective social services
442 Timely and effective medical services

Table I-3. Project Field Interviewers by Community and Study Year

Community	Staffing by Study Year		
	1991	1992	1993
Akhiok		Craig Mishler Rachel Mason * Marvin Agnot Robert Stovall	
Chenega Bay	Rita Miraglia	Jody Seitz * Diane Selanoff	Jody Seitz Vicki Vanek
Chignik Bay	Tracy Andrews Susan Savage Lisa Scarbrough		
Chignik Lake	Tracy Andrews Susan Savage Lisa Scarbrough		
Cordova	Jody Seitz Karen Gibsen Vera Kinzer Susan McNeil Jeniffer Sepez Barbara Winkley	Jody Seitz Rita Miraglia Lisa Tomrdle	Jody Seitz Lisa Scarbrough Roger Dunbar Leah Merritt Amy Paige Ron Stanek
Kaktovik		Clarence Alexander Tracy Andrews * Ida Angsan Tukulik Opie Sverre Pedersen Ron Stanek * Jane Thompson	
Karluk	Rachel Mason * Sheila Theriault Vicki Vanek		
Kenai	Brad Palach Susan McNeil Lisa Tomrdle Neil Shisido Ron Stanek	Brad Palach Susan McNeil Lisa Tomrdle	Brad Palach Susan McNeil Dave Andersen Lisa Scarbrough
Kivalina		Tracy Andrews * Gretchen Booth Jimmy Evak Jim Magdanz * Becky Norton Ron Stanek * Joe Swan, Jr.	
Kodiak	Jeff Bamhart Joe Dinnocenzo Vicki Vanek Rachel Mason Craig Mishler * David Pestrikoff Don Callaway	Jeff Bamhart Joe Dinnocenzo Vicki Vanek Rachel Mason	Jeff Bamhart Joe Dinnocenzo Vicki Vanek

(continued)

Table I-3. (continued) Project Field Interviewers by Community and Study Year

Community	Staffing by Study Year		
	1991	1992	1993
Kotzebue	Dave Andersen Jimmy Evak Jim Marcotte Neil Shishido * Donna Westdahl		
Larsen Bay	* Sheila Theriault Jeff Barnhart Rachel Mason Vicki Vanek Craig Mishler	* Sheila Theriault Jeff Barnhart Rachel Mason Vicki Vanek	* Sheila Theriault Jeff Barnhart Craig Mishler
Nanwalek	Ron Stanek Lisa Tomrdle * Nick Tanape * James Kvasnikoff	Ron Stanek Rita Miraglia * Nick Tanape	Ron Stanek Rita Miraglia Brad Palach
Nuiqsut			Clarence Alexander Tracy Andrews Tukulik Opie Sverre Pedersen
Old Harbor	Jeff Barnhart Don Callaway Rachel Mason Craig Mishler * David Pestrikoff		
Ouzinkie	Jeff Barnhart Vicki Vanek Craig Mishler Rachel Mason	Jeff Barnhart Vicki Vanek * Robert Katelnikof Rachel Mason * Tracy Squartsoff	Jeff Barnhart Vicki Vanek * Robert Katelnikof Jim Marcotte
Port Graham	Ron Stanek * Mary Malchoff * Lillian Elvsaas * Olga Fomin * Violet Yeaton	Ron Stanek * Mary Malchoff * Anne Metcalf Rita Miraglia Brad Palach	Ron Stanek * Mary Malchoff * Anne Metcalf Rita Miraglia Brad Palach
Port Lions			Craig Mishler Jeff Barnhart * Robert Nelson Vicki Vanek
Seldovia	* Lillian Elvsaas Lisa Tomrdle Ron Stanek * Gladys Yuth	* Lillian Elvsaas Lisa Tomrdle Susan McNeil	* Lillian Elvsaas Dave Andersen Susan McNeil Matt Kookesh
Tatitlek	Jody Seitz		Jody Seitz Susan McNeil
Valdez	Rita Miraglia Lisa Tomrdle Brad Palach Jeniffer Sepez * Laura Chase	Rita Miraglia Lisa Tomrdle Yvonne Howard * Brad Osborne Sverre Pedersen Jody Seitz	Rita Miraglia Dave Andersen

* = Local community reseach assistants

Table I-4. Summary of Sampling Goals and Achievement, 1991 Study Year

SAMPLE TYPE Community	Permanent Households	Sampling Goal	Households Interviewed	Percentage Interviewed	Refused	Refusal Rate*	Failed to Contact	Vacancies & Non-Resident HHs	Total HHs Attempted
CENSUS ATTEMPTED									
Tatitlek	27	100%	19	70.37%	8	29.63%	0	13	40
Chenega Bay	22	100%	18	81.82%	3	14.29%	1	3	25
Port Graham	58	100%	49	84.48%	2	3.92%	7	9	67
Nanwalek	41	100%	29	70.73%	1	3.33%	11	2	43
Larsen Bay	43	100%	38	88.37%	3	7.32%	2	17	60
Karluk	15	100%	13	86.67%	2	13.33%	0	4	19
Chignik Bay	44	100%	30	68.18%	4	11.76%	10	0	44
Chignik Lake	33	100%	24	72.73%	6	20.00%	3	0	33
Subtotal	283	100%	220	77.74%	29	11.65%	34	48	331
50% SAMPLE									
Seldovia	116	50%	66	56.90%	4	5.71%	10	47	127
Ouzinkie	55	50%	32	58.18%	4	11.11%	10	8	54
Old Harbor	66	50%	42	63.64%	10	19.23%	14	33	99
Subtotal	237	50%	140	59.07%	18	11.39%	34	88	280
SAMPLE OF 100 HOUSEHOLDS									
Cordova	784	13%	101	12.88%	40	28.37%	54	17	212
Valdez	1231	8%	100	8.12%	22	18.03%	53	12	187
Kenai	2137	5%	100	4.68%	32	24.24%	43	11	186
Kodiak City**	3207	6%	207	6.45%	62	23.05%	85	36	390
Kotzebue	809	12%	100	12.36%	37	27.01%	47	6	190
Subtotal	8168	7%	608	7.44%	193	24.09%	282	82	1165
OVERALL	8688	7%	968	11.14%	240	19.87%	350	218	1776

* Refusal rate = refusals divided by refusals and interviewed households.

** Kodiak City includes road-connected areas. Sampling goal was 200 households.

Source: Alaska Department of Fish & Game, Division of Subsistence, household surveys, 1992.

Table I-5. Summary of Sampling Goals and Achievement, 1992 Study Year

SAMPLE TYPE Community	Permanent Households	Sampling Goal	Households Interviewed	Percentage Interviewed	Refused	Refusal Rate*	Failed to Contact**	Vacancies & Non-Resident HHs	Total HHs Attempted
CENSUS ATTEMPTED									
Ahklok	24	100%	24	100.0%	0	0.0%	0	2	26
Chenega Bay	26	100%	23	88.5%	2	8.0%	1	0	26
Port Graham	58	100%	48	82.8%	5	9.4%	5	11	69
Nanwalek	41	100%	32	78.0%	1	3.0%	8	2	43
Ouzinkie	59	100%	52	88.1%	5	8.8%	2	1	60
Larsen Bay	42	100%	37	88.1%	1	2.6%	4	6	48
Kivalina	72	100%	62	86.1%	1	1.6%	9	0	72
Kaktovik	63	100%	47	74.6%	9	16.1%	7	0	63
Subtotal	385	100%	325	84.4%	24	6.9%	36	22	407
50% SAMPLE									
Seldovia	137	50%	65	47.4%	14	17.7%	16	67	162
Subtotal	137	50%	65	47.4%	14	17.7%	16	67	162
POST-TEST SAMPLE (NUMBER VARIES)									
Cordova	784	6%	41	5.2%	9	18.0%	5	0	55
Kenai	2137	2%	37	1.7%	1	2.6%	6	0	44
Subtotal	2921	3%	78	2.7%	10	11.4%	11	0	99
SAMPLE OF 100 HOUSEHOLDS (TEST AND POST-TEST)									
Valdez	1257	8%	100	8.0%	31	23.7%	34	12	177
Kodiak City***	1753	11%	100	5.7%	33	24.8%	12	16	161
Subtotal	3010	7%	200	6.6%	64	24.2%	46	28	338
OVERALL	6453	9%	668	10.4%	112	14.4%	109	117	1006

* Refusal rate = refusals divided by refusals and interviewed households.

** Failed to Contact includes failed to contact, unavailable, or impaired condition.

*** Kodiak City includes city limits only.

Source: Alaska Department of Fish & Game, Division of Subsistence, household surveys, 1993.

Table I-6. Summary of Sampling Goals and Achievement, 1993 Study Year

SAMPLE TYPE Community	Permanent Households	Sampling Goal	Households Interviewed	Percentage Interviewed	Refused	Refusal Rate*	Failed to Contact	Vacancies & Non-Resident HHs	Total HHs Attempted
CENSUS ATTEMPTED									
Tatitlek	28	100%	20	71.43%	7	25.93%	1	7	35
Chenega Bay	28	100%	23	82.14%	1	4.17%	4	2	30
Port Graham	61	100%	51	83.61%	8	13.56%	2	8	69
Nanwalek	37	100%	33	89.19%	0	0.00%	4	6	43
Ouzinkie	71	100%	61	85.92%	7	10.29%	3	0	71
Larsen Bay	49	100%	40	81.63%	5	11.11%	4	5	54
Subtotal	274	100%	228	83.21%	28	10.94%	18	28	302
PANEL SAMPLE									
Valdez	1388	NA	35	2.52%	3	7.89%	1	0	39
Subtotal	1388	NA	35	2.52%	3	7.89%	1	0	39
50% SAMPLE									
Port Lions	80	50%	45	56.25%	3	6.25%	5	1	54
Seldovia	153	42%	65	42.48%	11	14.47%	17	52	145
Subtotal	233	45%	110	47.21%	14	11.29%	22	53	199
66% SAMPLE									
Nuiqsut	91	66%	62	68.13%	6	8.82%	4	0	72
Subtotal	91	66%	62	68.13%	6	8.82%	4	0	72
SAMPLE OF 100 HOUSEHOLDS									
Cordova	946	11%	104	10.99%	23	18.11%	28	10	165
Kenai	2274	4%	101	4.44%	32	24.06%	42	19	194
Kodiak City	1994	5%	105	5.27%	40	27.59%	21	6	172
Subtotal	5214	6%	310	5.95%	95	23.46%	91	35	531
OVERALL	7200	10%	745	10.35%	146	16.39%	136	116	1143

* Refusal rate = refusals divided by refusals and interviewed households.

Source: Alaska Department of Fish & Game, Division of Subsistence, household surveys, 1994.

Table I-7. Length of Interviews, Harvest Surveys

Community	Study year 1991			Study year 1992			Study year 1993		
	Length of Interviews, Hours			Length of Interviews, Hours			Length of Interviews, Hours		
	Average	Minimum	Maximum	Average	Minimum	Maximum	Average	Minimum	Maximum
Chenega Bay	0.90	0.32	1.58	0.64	0.25	1.28	1.16	0.17	2.92
Cordova	0.94	0.25	2.58	0.45	0.13	1.50	0.82	0.25	1.83
Tatitlek	1.30	0.50	3.75				0.94	0.38	2.05
Valdez	0.66	0.13	1.63	0.34	0.05	1.77	0.35	0.07	1.12
Prince William Sound	0.85	0.13	3.75	0.41	0.05	1.77	0.79	0.07	2.92
Kenai	0.53	0.15	3.00	0.22	0.07	0.45	0.37	0.12	1.25
Nanwalek	1.26	0.43	2.50	0.71	0.17	1.83	0.66	0.13	2.17
Port Graham	0.92	0.17	2.00	0.57	0.25	1.80	0.64	0.17	1.50
Seldovia	0.71	0.17	1.58	0.36	0.07	1.50	0.50	0.20	1.35
Cook Inlet	0.74	0.15	3.00	0.45	0.07	1.83	0.50	0.12	2.17
Akhiok				0.83	0.33	1.83			
Karluk	1.01	0.42	1.50						
Kodiak	1.01	0.33	3.25	0.45	0.08	1.25	0.53	0.23	1.58
Larsen Bay	1.07	0.25	2.00	0.74	0.23	2.08	0.90	0.25	2.58
Old Harbor	1.09	0.47	2.00						
Ouzinkie	0.89	0.42	2.00	0.58	0.17	1.42	0.66	0.12	2.07
Port Lions							0.81	0.13	1.50
Kodiak Island	1.02	0.25	3.25	0.57	0.08	2.08	0.67	0.12	2.58
Chignik Bay	1.11	0.27	3.08						
Chignik Lake	1.61	0.45	6.50						
Alaska Peninsula	1.33	0.27	6.50						
Kaktovik				0.51	0.17	1.00			
Kivalina				0.90	0.25	3.17			
Kotzebue	0.74	0.17	2.00						
Nuiqsut							0.82	0.25	2.75
Arctic	0.74	0.17	2.00	0.75	0.17	3.17	0.82	0.25	2.75
All Communities	0.90	0.13	6.50	0.52	0.05	3.17	0.65	0.07	2.92

Table I-8. Length of Interviews, Social Effects Surveys

Community	Study year 1991			Study year 1992			Study year 1993		
	Length of Interviews, Hours			Length of Interviews, Hours			Length of Interviews, Hours		
	Average	Minimum	Maximum	Average	Minimum	Maximum	Average	Minimum	Maximum
Chenega Bay	0.77	0.47	1.50	0.67	0.25	1.83	0.64	0.27	1.50
Cordova	0.81	0.42	1.67	0.80	0.10	0.92	0.76	0.40	1.50
Tatitlek	0.71	0.33	1.18				0.54	0.22	1.42
Valdez	0.70	0.40	1.75	0.61	0.08	1.93	0.56	0.23	1.08
Prince William Sound	0.75	0.33	1.75	0.66	0.08	1.93	0.69	0.22	1.50
Kenai	0.60	0.25	1.48	0.49	0.28	0.75	0.52	0.13	1.47
Nanwalek	0.99	0.42	1.75	0.74	0.33	1.42	0.56	0.25	1.08
Port Graham	0.92	0.32	2.83	0.63	0.23	1.00	0.68	0.33	2.50
Seldovia	0.75	0.33	1.42	0.52	0.22	1.17	0.56	0.25	1.58
Cook Inlet	0.75	0.25	2.83	0.58	0.22	1.42	0.56	0.13	2.50
Karluk	0.80	0.42	1.92						
Kodiak	0.79	0.42	1.42	0.61	0.10	1.67	0.59	0.30	1.45
Larsen Bay	0.80	0.42	1.50	0.66	0.25	1.50	0.81	0.25	1.50
Old Harbor	0.84	0.42	1.57						
Ouzinkie	0.75	0.42	1.92	0.70	0.25	1.75	0.62	0.23	2.08
Kodiak Island	0.80	0.42	1.92	0.65	0.10	1.75	0.64	0.23	2.08
Chignik Bay	0.70	0.28	1.25						
Chignik Lake	0.78	0.30	1.15						
Alaska Peninsula	0.74	0.28	1.25						
Kivalina				0.74	0.25	1.67			
Kotzebue	0.65	0.27	1.83						
Nuiqsut							0.67		1.37
Arctic	0.65	0.27	1.83	0.74	0.25	1.67	0.67		1.37
All Communities	0.75	0.25	2.83	0.64	0.08	1.93	0.63		2.50

Note: social effects quesionnaires were not administered in Akhiok, Port Lions, or Kaktovik.

Figure I-2. Average Length of Interviews by Study Year

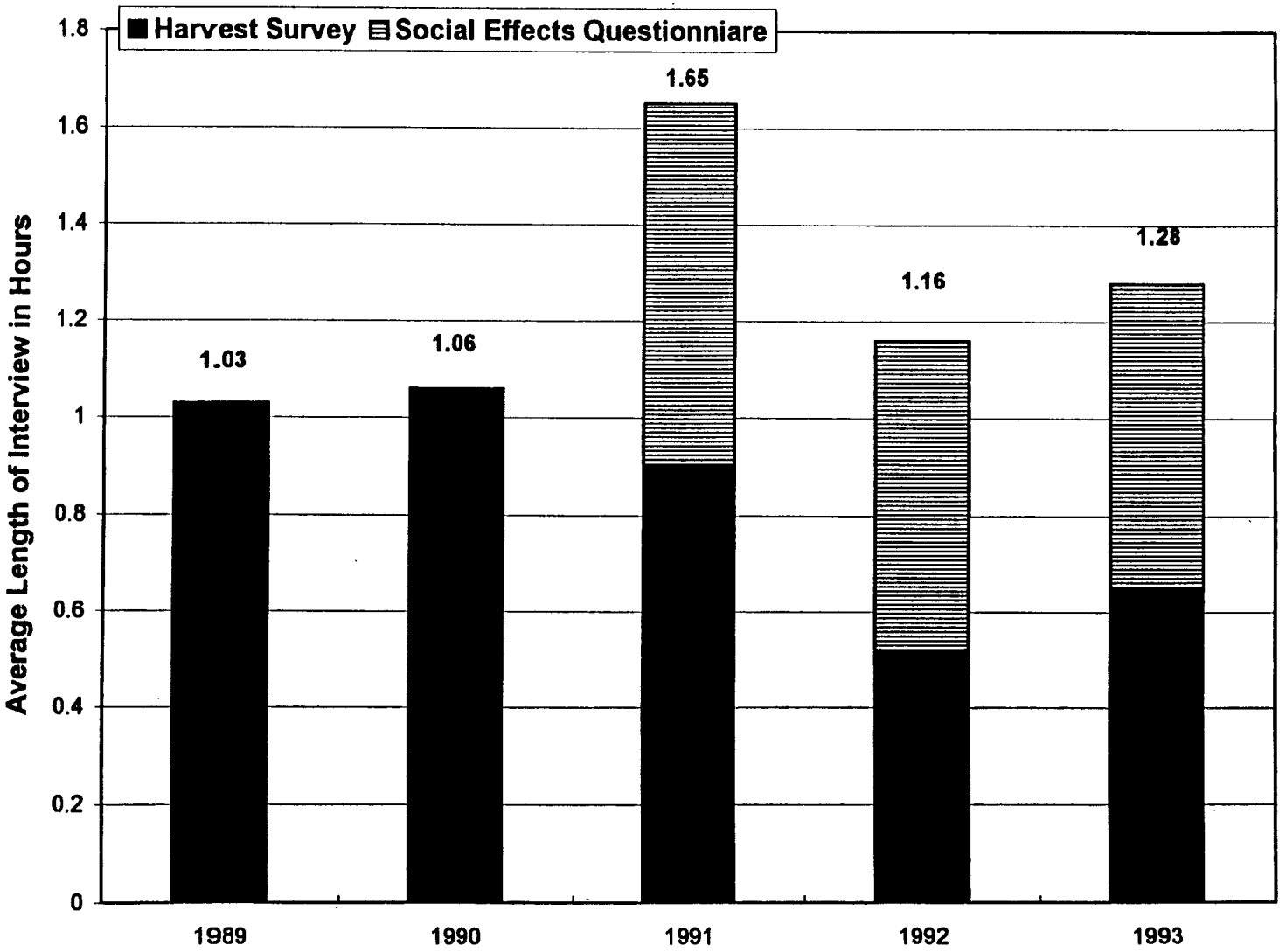

Table I-9. Household Assessment of Change in Salmon Uses Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	17	94.4%	2	11.8%	8	47.1%	7	41.2%
Cordova	101	1	1.0%	1	1.0%	0	0.0%	99	98.0%	15	15.2%	50	50.5%	34	34.3%
Tatitlek	19	0	0.0%	1	5.3%	0	0.0%	18	94.7%	2	11.1%	8	44.4%	8	44.4%
Valdez	100	2	2.0%	0	0.0%	0	0.0%	97	97.0%	10	10.3%	47	48.5%	40	41.2%
Lower Cook Inlet															
Kenai	100	2	2.0%	1	1.0%	1	1.0%	96	96.0%	15	15.6%	51	53.1%	30	31.3%
Nanwalek	29	0	0.0%	3	10.3%	0	0.0%	26	89.7%	11	42.3%	7	26.9%	8	30.8%
Port Graham	49	1	2.0%	0	0.0%	0	0.0%	48	98.0%	10	20.8%	17	35.4%	21	43.8%
Seldovia	66	0	0.0%	4	6.1%	0	0.0%	61	92.4%	9	14.8%	36	59.0%	16	26.2%
Kodiak Island															
Karluk	13	1	7.7%	0	0.0%	0	0.0%	12	92.3%	3	25.0%	8	66.7%	1	8.3%
Kodiak City	207	0	0.0%	6	2.9%	1	0.5%	200	96.6%	54	27.0%	82	41.0%	64	32.0%
Larsen Bay	38	0	0.0%	1	2.6%	1	2.6%	36	94.7%	12	33.3%	16	44.4%	8	22.2%
Old Harbor	42	1	2.4%	1	2.4%	0	0.0%	40	95.2%	5	12.5%	23	57.5%	12	30.0%
Ouzinkie	32	0	0.0%	0	0.0%	0	0.0%	32	100.0%	7	21.9%	19	59.4%	6	18.8%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	4	13.3%	0	0.0%	26	86.7%	12	46.2%	10	38.5%	4	15.4%
Chignik Lake	24	1	4.2%	1	4.2%	0	0.0%	21	87.5%	2	9.5%	13	61.9%	6	28.6%
Arctic															
Kotzebue	100	3	3.0%	0	0.0%	2	2.0%	94	94.0%	13	13.8%	57	60.6%	24	25.5%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-10. Household Assessment of Change in Salmon Uses Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	0	0.0%	4	22.2%	0	0.0%	14	77.8%	0	0.0%	3	21.4%	11	78.6%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	1	5.3%	2	10.5%	0	0.0%	16	84.2%	0	0.0%	3	18.8%	13	81.3%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet															
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	0	0.0%	2	6.9%	0	0.0%	27	93.1%	4	14.8%	6	22.2%	17	63.0%
Port Graham	49	1	2.0%	3	6.1%	0	0.0%	42	85.7%	8	19.0%	11	26.2%	23	54.8%
Seldovia	66	1	1.5%	11	16.7%	0	0.0%	53	80.3%	7	13.2%	34	64.2%	12	22.6%
Kodiak Island															
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	3	7.1%	4	9.5%	0	0.0%	35	83.3%	5	14.3%	13	37.1%	17	48.6%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula															
Chignik Bay	29	0	0.0%	11	37.9%	0	0.0%	18	62.1%	4	22.2%	12	66.7%	2	11.1%
Chignik Lake	24	3	12.5%	3	12.5%	0	0.0%	17	70.8%	1	5.9%	14	82.4%	2	11.8%
Arctic															
Kotzebue	100	3	3.0%	0	0.0%	2	2.0%	94	94.0%	11	11.7%	43	45.7%	40	42.6%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-11. Reasons for Increased Harvest/Use of Salmon Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Health/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	2	11.1%	0	0.0%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	0	0.0%
Cordova	101	15	14.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	2	10.5%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	10	10.0%	0	0.0%	2	20.0%	4	40.0%	0	0.0%	0	0.0%	0	0.0%	6	60.0%	0	0.0%
Lower Cook Inlet																			
Kenai	100	15	15.0%	0	0.0%	4	26.7%	3	20.0%	0	0.0%	0	0.0%	2	13.3%	7	46.7%	0	0.0%
Nanwalek	29	11	37.9%	5	45.5%	2	18.2%	1	9.1%	0	0.0%	0	0.0%	1	9.1%	0	0.0%	0	0.0%
Port Graham	49	10	20.4%	0	0.0%	1	10.0%	1	10.0%	1	10.0%	0	0.0%	4	40.0%	4	40.0%	0	0.0%
Seldovia	66	9	13.6%	0	0.0%	0	0.0%	3	33.3%	0	0.0%	0	0.0%	2	22.2%	4	44.4%	0	0.0%
Kodiak Island																			
Karluk	13	3	23.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Kodiak City	207	54	26.1%	0	0.0%	0	0.0%	3	5.6%	5	9.3%	1	1.9%	6	11.1%	12	22.2%	1	1.9%
Larsen Bay	38	12	31.6%	2	16.7%	0	0.0%	0	0.0%	1	8.3%	0	0.0%	3	25.0%	3	25.0%	0	0.0%
Old Harbor	42	5	11.9%	2	40.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%
Ouzinkie	32	7	21.9%	0	0.0%	1	14.3%	1	14.3%	0	0.0%	0	0.0%	2	28.6%	3	42.9%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	12	40.0%	0	0.0%	3	25.0%	1	8.3%	3	25.0%	0	0.0%	7	58.3%	2	16.7%	0	0.0%
Chignik Lake	24	2	8.3%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Arctic																			
Kotzebue	100	13	13.0%	0	0.0%	0	0.0%	0	0.0%	2	15.4%	0	0.0%	9	69.2%	1	7.7%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-12. Reasons for Increased Harvest/Use of Salmon Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Health/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	4	13.8%	0	0.0%	2	50.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%
Port Graham	49	8	16.3%	0	0.0%	0	0.0%	0	0.0%	3	37.5%	0	0.0%	2	25.0%	2	25.0%	0	0.0%
Seldovia	66	7	10.6%	0	0.0%	1	14.3%	2	28.6%	1	14.3%	0	0.0%	2	28.6%	2	28.6%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	5	11.9%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	0	0.0%	3	60.0%	0	0.0%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	4	13.8%	0	0.0%	1	25.0%	0	0.0%	2	50.0%	0	0.0%	2	50.0%	0	0.0%	0	0.0%
Chignik Lake	24	1	4.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Arctic																			
Kotzebue	100	11	11.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	36.4%	4	36.4%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-13. Reasons for Decreased Harvest/Use of Salmon Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	7	38.9%	1	14.3%	1	14.3%	0	0.0%	2	28.6%	0	0.0%	0	0.0%	1	14.3%	0	0.0%
Cordova	101	34	33.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	2.9%	0	0.0%
Tatitlek	19	8	42.1%	1	12.5%	3	37.5%	1	12.5%	2	25.0%	0	0.0%	1	12.5%	1	12.5%	0	0.0%
Valdez	100	40	40.0%	1	2.5%	19	47.5%	2	5.0%	9	22.5%	2	5.0%	4	10.0%	10	25.0%	0	0.0%
Lower Cook Inlet																			
Kenai	100	30	30.0%	0	0.0%	2	6.7%	12	40.0%	4	13.3%	4	13.3%	3	10.0%	7	23.3%	1	3.3%
Nanwalek	29	8	27.6%	1	12.5%	1	12.5%	0	0.0%	2	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	49	21	42.9%	1	4.8%	6	28.6%	8	38.1%	1	4.8%	1	4.8%	7	33.3%	1	4.8%	0	0.0%
Seldovia	66	16	24.2%	0	0.0%	6	37.5%	1	6.3%	1	6.3%	0	0.0%	3	18.8%	6	37.5%	0	0.0%
Kodiak Island																			
Karluk	13	1	7.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	207	64	30.9%	0	0.0%	4	6.3%	3	4.7%	11	17.2%	0	0.0%	12	18.8%	14	21.9%	2	3.1%
Larsen Bay	38	8	21.1%	0	0.0%	0	0.0%	1	12.5%	0	0.0%	0	0.0%	4	50.0%	0	0.0%	0	0.0%
Old Harbor	42	12	28.6%	1	8.3%	1	8.3%	1	8.3%	1	8.3%	0	0.0%	3	25.0%	2	16.7%	0	0.0%
Ouzinkie	32	6	18.8%	0	0.0%	0	0.0%	0	0.0%	1	16.7%	0	0.0%	2	33.3%	3	50.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	4	13.3%	0	0.0%	0	0.0%	1	25.0%	1	25.0%	0	0.0%	2	50.0%	0	0.0%	0	0.0%
Chignik Lake	24	6	25.0%	0	0.0%	1	16.7%	2	33.3%	2	33.3%	1	16.7%	1	16.7%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	24	24.0%	0	0.0%	3	12.5%	1	4.2%	0	0.0%	0	0.0%	5	20.8%	10	41.7%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-14. Reasons for Decreased Harvest/Use of Salmon Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	11	61.1%	3	27.3%	1	9.1%	0	0.0%	1	9.1%	0	0.0%	2	18.2%	3	27.3%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	13	68.4%	1	7.7%	6	46.2%	1	7.7%	2	15.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	17	58.6%	5	29.4%	2	11.8%	1	5.9%	3	17.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	49	23	46.9%	1	4.3%	9	39.1%	5	21.7%	0	0.0%	2	8.7%	4	17.4%	1	4.3%	0	0.0%
Seldovia	66	12	18.2%	1	8.3%	6	50.0%	0	0.0%	1	8.3%	0	0.0%	1	8.3%	3	25.0%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	17	40.5%	2	11.8%	4	23.5%	0	0.0%	1	5.9%	0	0.0%	3	17.6%	1	5.9%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	2	6.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Chignik Lake	24	2	8.3%	0	0.0%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	40	40.0%	0	0.0%	5	12.5%	2	5.0%	2	5.0%	0	0.0%	9	22.5%	13	32.5%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-15. Household Assessment of Change in Fish Other Than Salmon Uses Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	17	94.4%	5	29.4%	5	29.4%	7	41.2%
Cordova	101	2	2.0%	1	1.0%	0	0.0%	98	97.0%	12	12.2%	53	54.1%	33	33.7%
Tatitlek	19	0	0.0%	1	5.3%	0	0.0%	18	94.7%	1	5.6%	13	72.2%	4	22.2%
Valdez	100	2	2.0%	0	0.0%	0	0.0%	97	97.0%	9	9.3%	55	56.7%	33	34.0%
Lower Cook Inlet															
Kenai	100	2	2.0%	1	1.0%	0	0.0%	97	97.0%	14	14.4%	58	59.8%	25	25.8%
Nanwalek	29	0	0.0%	3	10.3%	0	0.0%	26	89.7%	8	30.8%	11	42.3%	7	26.9%
Port Graham	49	1	2.0%	0	0.0%	0	0.0%	48	98.0%	9	18.8%	24	50.0%	15	31.3%
Seldovia	66	0	0.0%	4	6.1%	0	0.0%	61	92.4%	2	3.3%	47	77.0%	12	19.7%
Kodiak Island															
Karluk	13	0	0.0%	0	0.0%	0	0.0%	13	100.0%	4	30.8%	6	46.2%	3	23.1%
Kodiak City	207	0	0.0%	6	2.9%	1	0.5%	200	96.6%	45	22.5%	107	53.5%	48	24.0%
Larsen Bay	38	0	0.0%	1	2.6%	1	2.6%	36	94.7%	9	25.0%	22	61.1%	5	13.9%
Old Harbor	42	2	4.8%	1	2.4%	1	2.4%	38	90.5%	5	13.2%	25	65.8%	8	21.1%
Ouzinkie	32	0	0.0%	0	0.0%	0	0.0%	32	100.0%	5	15.6%	21	65.6%	6	18.8%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	4	13.3%	0	0.0%	26	86.7%	4	15.4%	17	65.4%	5	19.2%
Chignik Lake	24	1	4.2%	1	4.2%	0	0.0%	21	87.5%	2	9.5%	16	76.2%	3	14.3%
Arctic															
Kotzebue	100	2	2.0%	0	0.0%	1	1.0%	97	97.0%	20	20.6%	56	57.7%	21	21.6%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-16. Household Assessment of Change in Fish Other Than Salmon Uses Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not In Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	0	0.0%	4	22.2%	0	0.0%	14	77.8%	1	7.1%	5	35.7%	8	57.1%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	2	10.5%	2	10.5%	0	0.0%	15	78.9%	3	20.0%	5	33.3%	7	46.7%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet															
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	1	3.4%	2	6.9%	0	0.0%	26	89.7%	3	11.5%	8	30.8%	15	57.7%
Port Graham	49	1	2.0%	3	6.1%	0	0.0%	42	85.7%	8	19.0%	18	42.9%	16	38.1%
Seldovia	66	1	1.5%	11	16.7%	0	0.0%	53	80.3%	3	5.7%	39	73.6%	11	20.8%
Kodiak Island															
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	5	11.9%	4	9.5%	1	2.4%	32	76.2%	3	9.4%	15	46.9%	14	43.8%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula															
Chignik Bay	30	2	6.7%	11	36.7%	0	0.0%	17	56.7%	3	17.6%	11	64.7%	3	17.6%
Chignik Lake	24	5	20.8%	3	12.5%	0	0.0%	15	62.5%	2	13.3%	12	80.0%	1	6.7%
Arctic															
Kotzebue	100	2	2.0%	0	0.0%	1	1.0%	97	97.0%	18	18.6%	47	48.5%	32	33.0%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not In Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-17. Reasons for Increased Harvest/Use of Fish Other Than Salmon Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	5	27.8%	0	0.0%	1	20.0%	1	20.0%	1	20.0%	0	0.0%	1	20.0%	2	40.0%	0	0.0%
Cordova	101	12	11.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	1	5.3%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	9	9.0%	0	0.0%	0	0.0%	2	22.2%	0	0.0%	0	0.0%	0	0.0%	8	88.9%	0	0.0%
Lower Cook Inlet																			
Kenai	100	14	14.0%	0	0.0%	2	14.3%	1	7.1%	0	0.0%	0	0.0%	3	21.4%	9	64.3%	1	7.1%
Nanwalek	29	8	27.6%	3	37.5%	0	0.0%	0	0.0%	1	12.5%	0	0.0%	1	12.5%	1	12.5%	0	0.0%
Port Graham	49	9	18.4%	0	0.0%	1	11.1%	1	11.1%	1	11.1%	0	0.0%	2	22.2%	5	55.6%	0	0.0%
Seldovia	66	2	3.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Kodiak Island																			
Karluk	13	4	30.8%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%
Kodiak City	207	45	21.7%	0	0.0%	1	2.2%	3	6.7%	2	4.4%	1	2.2%	7	15.6%	10	22.2%	2	4.4%
Larsen Bay	38	9	23.7%	0	0.0%	0	0.0%	3	33.3%	0	0.0%	0	0.0%	3	33.3%	3	33.3%	1	11.1%
Old Harbor	42	5	11.9%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	2	40.0%	2	40.0%	0	0.0%
Ouzinkie	32	5	15.6%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	4	80.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	4	13.3%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	2	50.0%	0	0.0%
Chignik Lake	24	2	8.3%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	20	20.0%	0	0.0%	0	0.0%	1	5.0%	1	5.0%	0	0.0%	8	40.0%	8	40.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-18. Reasons for Increased Harvest/Use of Fish Other Than Salmon Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	1	5.6%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	3	15.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	3	10.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%	0	0.0%
Port Graham	49	8	16.3%	0	0.0%	0	0.0%	1	12.5%	1	12.5%	0	0.0%	2	25.0%	3	37.5%	0	0.0%
Seldovia	66	3	4.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	2	66.7%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	3	7.1%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	3	10.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	100.0%	1	33.3%	0	0.0%
Chignik Lake	24	2	8.3%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Arctic																			
Kotzebue	100	18	18.0%	0	0.0%	1	5.6%	0	0.0%	0	0.0%	0	0.0%	5	27.8%	8	44.4%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-19. Reasons for Decreased Harvest/Use of Fish Other Than Salmon Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	7	38.9%	1	14.3%	1	14.3%	0	0.0%	3	42.9%	0	0.0%	0	0.0%	2	28.6%	0	0.0%
Cordova	101	33	32.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	4	21.1%	0	0.0%	1	25.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%
Valdez	100	33	33.0%	0	0.0%	4	12.1%	1	3.0%	8	24.2%	2	6.1%	8	24.2%	15	45.5%	0	0.0%
Lower Cook Inlet																			
Kenai	100	25	25.0%	0	0.0%	3	12.0%	6	24.0%	3	12.0%	4	16.0%	3	12.0%	9	36.0%	1	4.0%
Nanwalek	29	7	24.1%	1	14.3%	0	0.0%	0	0.0%	1	14.3%	0	0.0%	0	0.0%	1	14.3%	0	0.0%
Port Graham	49	15	30.6%	1	6.7%	3	20.0%	2	13.3%	2	13.3%	1	6.7%	5	33.3%	2	13.3%	0	0.0%
Seldovia	66	12	18.2%	0	0.0%	3	25.0%	0	0.0%	2	16.7%	0	0.0%	4	33.3%	4	33.3%	0	0.0%
Kodiak Island																			
Karluk	13	3	23.1%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%
Kodiak City	207	48	23.2%	0	0.0%	2	4.2%	1	2.1%	11	22.9%	2	4.2%	8	16.7%	14	29.2%	2	4.2%
Larsen Bay	38	5	13.2%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	1	20.0%	2	40.0%	2	40.0%	0	0.0%
Old Harbor	42	8	19.0%	0	0.0%	3	37.5%	0	0.0%	0	0.0%	0	0.0%	3	37.5%	0	0.0%	0	0.0%
Ouzinkie	32	6	18.8%	0	0.0%	0	0.0%	0	0.0%	2	33.3%	0	0.0%	1	16.7%	1	16.7%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	5	16.7%	0	0.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%	1	20.0%	1	20.0%	1	20.0%
Chignik Lake	24	3	12.5%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	21	21.0%	0	0.0%	2	9.5%	0	0.0%	1	4.8%	0	0.0%	2	9.5%	13	61.9%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-20. Reasons for Decreased Harvest/Use of Fish Other Than Salmon Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	8	44.4%	2	25.0%	2	25.0%	0	0.0%	2	25.0%	0	0.0%	0	0.0%	3	37.5%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	7	36.8%	2	28.6%	3	42.9%	0	0.0%	0	0.0%	0	0.0%	2	28.6%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	15	51.7%	4	26.7%	1	6.7%	2	13.3%	0	0.0%	0	0.0%	0	0.0%	1	6.7%	0	0.0%
Port Graham	49	16	32.7%	0	0.0%	5	31.3%	1	6.3%	1	6.3%	1	6.3%	4	25.0%	0	0.0%	0	0.0%
Seldovia	66	11	16.7%	0	0.0%	3	27.3%	1	9.1%	2	18.2%	0	0.0%	5	45.5%	1	9.1%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	14	33.3%	0	0.0%	5	35.7%	0	0.0%	1	7.1%	0	0.0%	5	35.7%	2	14.3%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	3	10.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	1	33.3%	0	0.0%
Chignik Lake	24	1	4.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	32	32.0%	0	0.0%	2	6.3%	3	9.4%	3	9.4%	0	0.0%	6	18.8%	14	43.8%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-21. Household Assessment of Change in Large Land Mammal Uses Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	16	88.9%	3	18.8%	7	43.8%	6	37.5%
Cordova	101	0	0.0%	1	1.0%	0	0.0%	100	99.0%	17	17.0%	52	52.0%	31	31.0%
Tatitlek	19	0	0.0%	1	5.3%	0	0.0%	18	94.7%	2	11.1%	5	27.8%	11	61.1%
Valdez	100	1	1.0%	0	0.0%	0	0.0%	98	98.0%	10	10.2%	64	65.3%	24	24.5%
Lower Cook Inlet															
Kenai	100	3	3.0%	1	1.0%	0	0.0%	96	96.0%	8	8.3%	71	74.0%	17	17.7%
Nanwalek	29	2	6.9%	3	10.3%	0	0.0%	24	82.8%	6	25.0%	13	54.2%	5	20.8%
Port Graham	49	0	0.0%	0	0.0%	0	0.0%	49	100.0%	10	20.4%	32	65.3%	7	14.3%
Seldovia	66	0	0.0%	4	6.1%	0	0.0%	61	92.4%	3	4.9%	49	80.3%	9	14.8%
Kodiak Island															
Karluk	13	0	0.0%	0	0.0%	0	0.0%	13	100.0%	7	53.8%	6	46.2%	0	0.0%
Kodiak City	207	0	0.0%	6	2.9%	2	1.0%	199	96.1%	46	23.1%	93	46.7%	60	30.2%
Larsen Bay	38	0	0.0%	1	2.6%	0	0.0%	37	97.4%	14	37.8%	17	45.9%	6	16.2%
Old Harbor	42	2	4.8%	1	2.4%	2	4.8%	37	88.1%	3	8.1%	20	54.1%	14	37.8%
Ouzinkie	32	1	3.1%	0	0.0%	0	0.0%	31	96.9%	8	25.8%	18	58.1%	5	16.1%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	4	13.3%	2	6.7%	24	80.0%	5	20.8%	13	54.2%	6	25.0%
Chignik Lake	24	0	0.0%	1	4.2%	0	0.0%	22	91.7%	5	22.7%	12	54.5%	5	22.7%
Arctic															
Kotzebue	100	2	2.0%	0	0.0%	1	1.0%	97	97.0%	11	11.3%	60	61.9%	26	26.8%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-22. Household Assessment of Change in Large Land Mammal Uses Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not In Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	0	0.0%	4	22.2%	0	0.0%	13	72.2%	0	0.0%	6	46.2%	7	53.8%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	1	5.3%	2	10.5%	0	0.0%	16	84.2%	0	0.0%	5	31.3%	11	68.8%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet															
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	3	10.3%	2	6.9%	0	0.0%	24	82.8%	2	8.3%	14	58.3%	8	33.3%
Port Graham	49	3	6.1%	3	6.1%	0	0.0%	40	81.6%	2	5.0%	32	80.0%	6	15.0%
Seldovia	66	1	1.5%	11	16.7%	0	0.0%	53	80.3%	0	0.0%	48	90.6%	5	9.4%
Kodiak Island															
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	4	9.5%	4	9.5%	3	7.1%	31	73.8%	2	6.5%	16	51.6%	13	41.9%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	11	36.7%	1	3.3%	18	60.0%	2	11.1%	11	61.1%	5	27.8%
Chignik Lake	24	3	12.5%	3	12.5%	0	0.0%	17	70.8%	2	11.8%	14	82.4%	1	5.9%
Arctic															
Kotzebue	100	2	2.0%	0	0.0%	1	1.0%	97	97.0%	11	11.3%	50	51.5%	36	37.1%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-23. Reasons for Increased Harvest/Use of Large Land Mammals Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	3	16.7%	0	0.0%	2	66.7%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	17	16.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	2	10.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	10	10.0%	0	0.0%	1	10.0%	2	20.0%	1	10.0%	0	0.0%	5	50.0%	1	10.0%	0	0.0%
Lower Cook Inlet																			
Kenai	100	8	8.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	7	87.5%	1	12.5%	0	0.0%
Nanwalek	29	6	20.7%	1	16.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	66.7%	0	0.0%	0	0.0%
Port Graham	49	10	20.4%	0	0.0%	0	0.0%	1	10.0%	0	0.0%	0	0.0%	9	90.0%	0	0.0%	0	0.0%
Seldovia	66	3	4.5%	0	0.0%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Kodiak Island																			
Karluk	13	7	53.8%	0	0.0%	2	28.6%	0	0.0%	0	0.0%	0	0.0%	2	28.6%	3	42.9%	0	0.0%
Kodiak City	207	46	22.2%	0	0.0%	4	8.7%	6	13.0%	0	0.0%	0	0.0%	4	8.7%	13	28.3%	1	2.2%
Larsen Bay	38	14	36.8%	0	0.0%	1	7.1%	0	0.0%	0	0.0%	0	0.0%	7	50.0%	4	28.6%	1	7.1%
Old Harbor	42	3	7.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	100.0%	0	0.0%	0	0.0%
Ouzinkie	32	8	25.0%	0	0.0%	0	0.0%	1	12.5%	0	0.0%	0	0.0%	4	50.0%	2	25.0%	1	12.5%
Alaska Peninsula																			
Chignik Bay	30	5	16.7%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	4	80.0%	1	20.0%	0	0.0%
Chignik Lake	24	5	20.8%	0	0.0%	2	40.0%	2	40.0%	0	0.0%	1	20.0%	2	40.0%	1	20.0%	0	0.0%
Arctic																			
Kotzebue	100	11	11.0%	0	0.0%	1	9.1%	0	0.0%	0	0.0%	0	0.0%	5	45.5%	3	27.3%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-24. Reasons for Increased Harvest/Use of Large Land Mammals Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	2	6.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Port Graham	49	2	4.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%
Seldovia	66	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	2	4.8%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	2	6.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Chignik Lake	24	2	8.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	0	0.0%
Arctic																			
Kotzebue	100	11	11.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	27.3%	3	27.3%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-25. Reasons for Decreased Harvest/Use of Large Land Mammals Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	6	33.3%	0	0.0%	5	83.3%	1	16.7%	1	16.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	31	30.7%	0	0.0%	0	0.0%	1	3.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	11	57.9%	0	0.0%	4	36.4%	2	18.2%	1	9.1%	0	0.0%	3	27.3%	2	18.2%	0	0.0%
Valdez	100	24	24.0%	0	0.0%	1	4.2%	8	33.3%	2	8.3%	2	8.3%	8	33.3%	6	25.0%	1	4.2%
Lower Cook Inlet																			
Kenai	100	17	17.0%	0	0.0%	1	5.9%	7	41.2%	3	17.6%	1	5.9%	4	23.5%	3	17.6%	0	0.0%
Nanwalek	29	5	17.2%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%
Port Graham	49	7	14.3%	0	0.0%	2	28.6%	3	42.9%	0	0.0%	0	0.0%	1	14.3%	2	28.6%	0	0.0%
Seldovia	66	9	13.6%	0	0.0%	3	33.3%	3	33.3%	1	11.1%	0	0.0%	0	0.0%	2	22.2%	0	0.0%
Kodiak Island																			
Karluk	13	60	461.5%	0	0.0%	3	5.0%	6	10.0%	11	18.3%	3	5.0%	6	10.0%	9	15.0%	3	5.0%
Kodiak City	207	6	2.9%	0	0.0%	0	0.0%	1	16.7%	0	0.0%	0	0.0%	2	33.3%	1	16.7%	0	0.0%
Larsen Bay	38	14	36.8%	0	0.0%	5	35.7%	1	7.1%	1	7.1%	0	0.0%	4	28.6%	3	21.4%	0	0.0%
Old Harbor	42	5	11.9%	0	0.0%	1	20.0%	0	0.0%	1	20.0%	0	0.0%	2	40.0%	1	20.0%	0	0.0%
Ouzinkie	32	6	18.8%	0	0.0%	2	33.3%	2	33.3%	0	0.0%	0	0.0%	2	33.3%	1	16.7%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	5	16.7%	0	0.0%	0	0.0%	2	40.0%	1	20.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%
Chignik Lake	24	26	108.3%	0	0.0%	1	3.8%	2	7.7%	3	11.5%	0	0.0%	2	7.7%	12	46.2%	1	3.8%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-26. Reasons for Decreased Harvest/Use of Large Land Mammals Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	7	38.9%	0	0.0%	5	71.4%	0	0.0%	1	14.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	11	57.9%	0	0.0%	8	72.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	8	27.6%	2	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	37.5%	2	25.0%	0	0.0%
Port Graham	49	6	12.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	16.7%	2	33.3%	2	33.3%	0	0.0%
Seldovia	66	5	7.6%	0	0.0%	1	20.0%	1	20.0%	1	20.0%	0	0.0%	2	40.0%	2	40.0%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	13	0.0%	2	15.4%	5	38.5%	0	0.0%	1	7.7%	0	0.0%	1	7.7%	2	15.4%	0	0.0%
Old Harbor	42	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	0	5	0.0%	0	0.0%	1	20.0%	0	0.0%	1	20.0%	0	0.0%	2	40.0%	1	20.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	1	3.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Chignik Lake	24	36	150.0%	0	0.0%	0	0.0%	1	2.8%	4	11.1%	0	0.0%	7	19.4%	11	30.6%	1	2.8%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-27. Household Assessment of Change in Small Land Mammal/Furbearer Uses Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	0	0.0%	1	5.6%	16	88.9%	1	6.3%	14	87.5%	1	6.3%
Cordova	101	1	1.0%	1	1.0%	0	0.0%	98	97.0%	6	6.1%	78	79.6%	14	14.3%
Tatitlek	19	0	0.0%	1	5.3%	0	0.0%	18	94.7%	0	0.0%	15	83.3%	3	16.7%
Valdez	100	3	3.0%	0	0.0%	0	0.0%	96	96.0%	3	3.1%	85	88.5%	8	8.3%
Lower Cook Inlet															
Kenai	100	3	3.0%	1	1.0%	0	0.0%	96	96.0%	2	2.1%	91	94.8%	3	3.1%
Nanwalek	29	1	3.4%	3	10.3%	4	13.8%	21	72.4%	0	0.0%	19	90.5%	2	9.5%
Port Graham	49	8	16.3%	0	0.0%	0	0.0%	41	83.7%	3	7.3%	35	85.4%	3	7.3%
Seldovia	66	0	0.0%	4	6.1%	1	1.5%	60	90.9%	1	1.7%	59	98.3%	0	0.0%
Kodiak Island															
Karluk	13	0	0.0%	0	0.0%	0	0.0%	13	100.0%	0	0.0%	12	92.3%	1	7.7%
Kodiak City	207	0	0.0%	6	2.9%	28	13.5%	173	83.6%	10	5.8%	150	86.7%	13	7.5%
Larsen Bay	38	0	0.0%	1	2.6%	1	2.6%	36	94.7%	0	0.0%	35	97.2%	1	2.8%
Old Harbor	42	1	2.4%	1	2.4%	11	26.2%	29	69.0%	3	10.3%	25	86.2%	1	3.4%
Ouzinkie	32	0	0.0%	0	0.0%	1	3.1%	31	96.9%	0	0.0%	31	100.0%	0	0.0%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	4	13.3%	11	36.7%	15	50.0%	1	6.7%	12	80.0%	2	13.3%
Chignik Lake	24	0	0.0%	1	4.2%	6	25.0%	16	66.7%	1	6.3%	13	81.3%	2	12.5%
Arctic															
Kotzebue	100	15	15.0%	0	0.0%	1	1.0%	83	83.0%	6	7.2%	64	77.1%	13	15.7%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-28. Household Assessment of Change in Small Land Mammal/Furbearer Uses Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	0	0.0%	4	22.2%	1	5.6%	13	72.2%	0	0.0%	11	84.6%	2	15.4%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	0	0.0%	2	10.5%	0	0.0%	17	89.5%	0	0.0%	13	76.5%	4	23.5%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet															
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	1	3.4%	2	6.9%	4	13.8%	22	75.9%	0	0.0%	20	90.9%	2	9.1%
Port Graham	49	8	16.3%	3	6.1%	0	0.0%	35	71.4%	1	2.9%	33	94.3%	1	2.9%
Seldovia	66	0	0.0%	11	16.7%	1	1.5%	53	80.3%	2	3.8%	51	96.2%	0	0.0%
Kodiak Island															
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	2	4.8%	4	9.5%	7	16.7%	29	69.0%	0	0.0%	27	93.1%	2	6.9%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	11	36.7%	5	16.7%	14	46.7%	1	7.1%	12	85.7%	1	7.1%
Chignik Lake	24	1	4.2%	4	16.7%	4	16.7%	14	58.3%	0	0.0%	10	71.4%	4	28.6%
Arctic															
Kotzebue	100	15	15.0%	0	0.0%	1	1.0%	83	83.0%	7	8.4%	60	72.3%	16	19.3%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-29. Reasons for Increased Harvest/Use of Small Land Mammals/Furbearers Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	1	5.6%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	6	5.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	3	15.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	3	100.0%	0	0.0%
Valdez	100	2	2.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	100	3	3.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Nanwalek	29	1	3.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Port Graham	49	10	20.4%	0	0.0%	2	20.0%	1	10.0%	1	10.0%	0	0.0%	1	10.0%	3	30.0%	1	10.0%
Seldovia	66	3	4.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%
Kodiak Island																			
Karluk	13	1	7.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Kodiak City	207	1	0.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	38	6	15.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	16.7%	2	33.3%	0	0.0%
Old Harbor	42	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	32	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Chignik Lake	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-30. Reasons for Increased Harvest/Use of Small Land Mammals/Furbearers Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Nanwalek	29	2	6.9%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Port Graham	49	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	66	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	0	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	7	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	4	57.1%	0	0.0%
Old Harbor	42	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Chignik Lake	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-31. Reasons for Decreased Harvest/Use of Small Land Mammals/Furbearers Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Health/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	1	5.6%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	14	13.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	3	15.8%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	8	8.0%	0	0.0%	3	37.5%	2	25.0%	0	0.0%	0	0.0%	0	0.0%	3	37.5%	0	0.0%
Lower Cook Inlet																			
Kenai	100	3	3.0%	0	0.0%	3	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	2	6.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	49	3	6.1%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Seldovia	66	1	1.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	1	100.0%	0	0.0%
Kodiak Island																			
Karluk	13	13	100.0%	0	0.0%	3	23.1%	0	0.0%	0	0.0%	1	7.7%	0	0.0%	5	38.5%	0	0.0%
Kodiak City	207	1	0.5%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Larsen Bay	38	1	2.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Old Harbor	42	2	4.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%
Ouzinkie	32	2	6.3%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	13	43.3%	0	0.0%	1	7.7%	0	0.0%	1	7.7%	0	0.0%	3	23.1%	4	30.8%	0	0.0%
Chignik Lake	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-32. Reasons for Decreased Harvest/Use of Small Land Mammals/Furbearers Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	2	11.1%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	4	21.1%	0	0.0%	2	50.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	2	6.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	49	1	2.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	66	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	2	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Old Harbor	42	1	2.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	0	4	0.0%	0	0.0%	0	0.0%	2	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	16	55.2%	0	0.0%	0	0.0%	0	0.0%	1	6.3%	0	0.0%	2	12.5%	4	25.0%	0	0.0%
Chignik Lake	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-33. Household Assessment of Change in Marine Mammal Uses Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	17	94.4%	2	11.8%	7	41.2%	8	47.1%
Cordova	101	0	0.0%	1	1.0%	0	0.0%	98	97.0%	1	1.0%	96	98.0%	1	1.0%
Tatitlek	19	1	5.3%	1	5.3%	0	0.0%	17	89.5%	1	5.9%	8	47.1%	8	47.1%
Valdez	100	1	1.0%	0	0.0%	1	1.0%	97	97.0%	1	1.0%	94	96.9%	2	2.1%
Lower Cook Inlet															
Kenai	100	3	3.0%	1	1.0%	1	1.0%	95	95.0%	0	0.0%	95	100.0%	0	0.0%
Nanwalek	29	1	3.4%	3	10.3%	0	0.0%	25	86.2%	3	12.0%	12	48.0%	10	40.0%
Port Graham	49	2	4.1%	0	0.0%	0	0.0%	47	95.9%	2	4.3%	21	44.7%	24	51.1%
Seldovia	66	0	0.0%	4	6.1%	1	1.5%	60	90.9%	0	0.0%	60	100.0%	0	0.0%
Kodiak Island															
Karluk	13	0	0.0%	0	0.0%	0	0.0%	13	100.0%	0	0.0%	10	76.9%	3	23.1%
Kodiak City	207	0	0.0%	6	2.9%	34	16.4%	166	80.2%	2	1.2%	163	98.2%	1	0.6%
Larsen Bay	38	0	0.0%	1	2.6%	0	0.0%	37	97.4%	7	18.9%	22	59.5%	8	21.6%
Old Harbor	42	1	2.4%	1	2.4%	5	11.9%	35	83.3%	3	8.6%	23	65.7%	9	25.7%
Ouzinkie	32	0	0.0%	0	0.0%	0	0.0%	32	100.0%	2	6.3%	27	84.4%	3	9.4%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	4	13.3%	8	26.7%	18	60.0%	1	5.6%	17	94.4%	0	0.0%
Chignik Lake	24	1	4.2%	1	4.2%	3	12.5%	18	75.0%	0	0.0%	13	72.2%	5	27.8%
Arctic															
Kotzebue	100	8	8.0%	0	0.0%	1	1.0%	91	91.0%	12	13.2%	56	61.5%	23	25.3%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-34. Household Assessment of Change in Marine Mammal Uses Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not In Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	0	0.0%	4	22.2%	0	0.0%	14	77.8%	1	7.1%	1	7.1%	12	85.7%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	0	0.0%	2	10.5%	0	0.0%	17	89.5%	0	0.0%	4	23.5%	13	76.5%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet															
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	1	3.4%	2	6.9%	0	0.0%	26	89.7%	1	3.8%	5	19.2%	20	76.9%
Port Graham	49	3	6.1%	3	6.1%	0	0.0%	40	81.6%	4	10.0%	12	30.0%	24	60.0%
Seldovia	66	0	0.0%	11	16.7%	1	1.5%	53	80.3%	0	0.0%	53	100.0%	0	0.0%
Kodiak Island															
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	2	4.8%	4	9.5%	2	4.8%	34	81.0%	3	8.8%	16	47.1%	15	44.1%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	11	36.7%	4	13.3%	15	50.0%	0	0.0%	15	100.0%	0	0.0%
Chignik Lake	24	3	12.5%	3	12.5%	2	8.3%	15	62.5%	0	0.0%	12	80.0%	3	20.0%
Arctic															
Kotzebue	100	8	8.0%	0	0.0%	1	1.0%	91	91.0%	13	14.3%	51	56.0%	27	29.7%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-35. Reasons for Increased Harvest/Use of Marine Mammals Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	2	11.1%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	1	5.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Valdez	100	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	100	3	3.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%	0	0.0%
Nanwalek	29	2	6.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	0	0.0%
Port Graham	49	2	4.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	66	7	10.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	28.6%	2	28.6%	0	0.0%
Kodiak Island																			
Karluk	13	3	23.1%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Kodiak City	207	2	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	38	1	2.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	12	28.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	6	50.0%	4	33.3%	0	0.0%
Ouzinkie	32	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Chignik Lake	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-36. Reasons for Increased Harvest/Use of Marine Mammals Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Nanwalek	29	4	13.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	75.0%	1	25.0%	0	0.0%
Port Graham	49	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	66	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	0	3	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	13	31.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	23.1%	7	53.8%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Chignik Lake	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-37. Reasons for Decreased Harvest/Use of Marine Mammals Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	8	44.4%	0	0.0%	7	87.5%	0	0.0%	1	12.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	8	42.1%	0	0.0%	7	87.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	2	2.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	100	10	10.0%	0	0.0%	5	50.0%	0	0.0%	0	0.0%	0	0.0%	2	20.0%	0	0.0%	0	0.0%
Nanwalek	29	24	82.8%	0	0.0%	15	62.5%	2	8.3%	0	0.0%	1	4.2%	6	25.0%	1	4.2%	0	0.0%
Port Graham	49	3	6.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	1	33.3%
Seldovia	66	1	1.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	13	8	61.5%	0	0.0%	2	25.0%	2	25.0%	1	12.5%	0	0.0%	4	50.0%	2	25.0%	0	0.0%
Kodiak City	207	9	4.3%	0	0.0%	5	55.6%	1	11.1%	0	0.0%	0	0.0%	1	11.1%	1	11.1%	0	0.0%
Larsen Bay	38	3	7.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	100.0%	0	0.0%	0	0.0%
Old Harbor	42	5	11.9%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	1	20.0%
Ouzinkie	32	23	71.9%	0	0.0%	2	8.7%	4	17.4%	2	8.7%	0	0.0%	4	17.4%	6	26.1%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Chignik Lake	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-38. Reasons for Decreased Harvest/Use of Marine Mammals Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	12	66.7%	2	16.7%	9	75.0%	0	0.0%	1	8.3%	0	0.0%	0	0.0%	1	8.3%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	13	68.4%	0	0.0%	7	53.8%	0	0.0%	0	0.0%	0	0.0%	1	7.7%	1	7.7%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	20	0.0%	3	15.0%	14	70.0%	0	0.0%	0	0.0%	0	0.0%	2	10.0%	0	0.0%	0	0.0%
Nanwalek	29	24	82.8%	1	4.2%	17	70.8%	0	0.0%	0	0.0%	1	4.2%	3	12.5%	0	0.0%	0	0.0%
Port Graham	49	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	66	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	15	0.0%	1	6.7%	6	40.0%	0	0.0%	0	0.0%	0	0.0%	2	13.3%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	3	7.1%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	0	27	0.0%	0	0.0%	4	14.8%	3	11.1%	2	7.4%	0	0.0%	5	18.5%	4	14.8%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Chignik Lake	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-39. Household Assessment of Change in Bird Uses Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	17	94.4%	2	11.8%	9	52.9%	6	35.3%
Cordova	101	2	2.0%	1	1.0%	0	0.0%	97	96.0%	12	12.4%	65	67.0%	20	20.6%
Tatitlek	19	0	0.0%	1	5.3%	0	0.0%	17	89.5%	1	5.9%	10	58.8%	6	35.3%
Valdez	100	2	2.0%	0	0.0%	0	0.0%	97	97.0%	2	2.1%	82	84.5%	13	13.4%
Lower Cook Inlet															
Kenai	100	3	3.0%	1	1.0%	1	1.0%	95	95.0%	5	5.3%	82	86.3%	8	8.4%
Nanwalek	29	0	0.0%	3	10.3%	3	10.3%	23	79.3%	2	8.7%	16	69.6%	5	21.7%
Port Graham	49	3	6.1%	0	0.0%	0	0.0%	46	93.9%	3	6.5%	27	58.7%	16	34.8%
Seldovia	66	1	1.5%	4	6.1%	1	1.5%	59	89.4%	0	0.0%	55	93.2%	4	6.8%
Kodiak Island															
Karluk	13	0	0.0%	0	0.0%	0	0.0%	13	100.0%	3	23.1%	9	69.2%	1	7.7%
Kodiak City	207	1	0.5%	6	2.9%	12	5.8%	176	85.0%	11	6.3%	147	83.5%	18	10.2%
Larsen Bay	38	0	0.0%	1	2.6%	0	0.0%	37	97.4%	4	10.8%	27	73.0%	6	16.2%
Old Harbor	42	3	7.1%	1	2.4%	2	4.8%	36	85.7%	1	2.8%	24	66.7%	11	30.6%
Ouzinkie	32	1	3.1%	0	0.0%	0	0.0%	31	96.9%	2	6.5%	21	67.7%	8	25.8%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	4	13.3%	6	20.0%	20	66.7%	4	20.0%	11	55.0%	5	25.0%
Chignik Lake	24	0	0.0%	1	4.2%	1	4.2%	21	87.5%	1	4.8%	11	52.4%	9	42.9%
Arctic															
Kotzebue	100	7	7.0%	0	0.0%	1	1.0%	92	92.0%	10	10.9%	54	58.7%	28	30.4%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-40. Household Assessment of Change in Bird Uses Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	0	0.0%	4	22.2%	0	0.0%	14	77.8%	0	0.0%	3	21.4%	11	78.6%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	0	0.0%	2	10.5%	0	0.0%	16	84.2%	2	12.5%	5	31.3%	9	56.3%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet															
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	0	0.0%	2	6.9%	3	10.3%	24	82.8%	1	4.2%	12	50.0%	11	45.8%
Port Graham	49	4	8.2%	3	6.1%	0	0.0%	39	79.6%	2	5.1%	20	51.3%	17	43.6%
Seldovia	66	1	1.5%	11	16.7%	1	1.5%	52	78.8%	1	1.9%	48	92.3%	3	5.8%
Kodiak Island															
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	4	9.5%	4	9.5%	0	0.0%	34	81.0%	1	2.9%	20	58.8%	13	38.2%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	11	36.7%	2	6.7%	17	56.7%	2	11.8%	12	70.6%	3	17.6%
Chignik Lake	24	4	16.7%	3	12.5%	0	0.0%	16	66.7%	1	6.3%	10	62.5%	5	31.3%
Arctic															
Kotzebue	100	8	8.0%	0	0.0%	1	1.0%	91	91.0%	7	7.7%	51	56.0%	33	36.3%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-41. Reasons for Increased Harvest/Use of Birds Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	2	11.1%	0	0.0%	2	100.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Cordova	101	12	11.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	1	5.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Valdez	100	2	2.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%
Lower Cook Inlet																			
Kenai	100	5	5.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	2	40.0%	0	0.0%
Nanwalek	29	2	6.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Port Graham	49	3	6.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	1	33.3%	0	0.0%
Seldovia	66	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	13	3	23.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Kodiak City	207	11	5.3%	0	0.0%	0	0.0%	1	9.1%	0	0.0%	0	0.0%	3	27.3%	1	9.1%	1	9.1%
Larsen Bay	38	4	10.5%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	1	25.0%	0	0.0%
Old Harbor	42	1	2.4%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	32	2	6.3%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	4	13.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	75.0%	0	0.0%	0	0.0%
Chignik Lake	24	1	4.2%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	10	10.0%	0	0.0%	1	10.0%	0	0.0%	0	0.0%	0	0.0%	3	30.0%	3	30.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-42. Reasons for Increased Harvest/Use of Birds Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	2	10.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	1	3.4%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	49	2	4.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	0	0.0%
Seldovia	66	1	1.5%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	1	2.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	2	6.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Chignik Lake	24	1	4.2%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	7	7.0%	0	0.0%	1	14.3%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	3	42.9%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-43. Reasons for Decreased Harvest/Use of Birds Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	6	33.3%	0	0.0%	5	83.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	50.0%	0	0.0%
Cordova	101	20	19.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	6	31.6%	0	0.0%	3	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	13	13.0%	0	0.0%	4	30.8%	2	15.4%	0	0.0%	0	0.0%	1	7.7%	6	46.2%	0	0.0%
Lower Cook Inlet																			
Kenai	100	8	8.0%	0	0.0%	0	0.0%	3	37.5%	1	12.5%	1	12.5%	0	0.0%	5	62.5%	0	0.0%
Nanwalek	29	5	17.2%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	49	16	32.7%	0	0.0%	2	12.5%	2	12.5%	1	6.3%	1	6.3%	6	37.5%	6	37.5%	0	0.0%
Seldovia	66	4	6.1%	0	0.0%	1	25.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	2	50.0%	0	0.0%
Kodiak Island																			
Karluk	13	1	7.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Kodiak City	207	18	8.7%	1	5.6%	0	0.0%	1	5.6%	1	5.6%	0	0.0%	1	5.6%	6	33.3%	0	0.0%
Larsen Bay	38	6	15.8%	0	0.0%	1	16.7%	0	0.0%	1	16.7%	0	0.0%	4	66.7%	0	0.0%	0	0.0%
Old Harbor	42	11	26.2%	0	0.0%	6	54.5%	0	0.0%	0	0.0%	0	0.0%	4	36.4%	2	18.2%	1	9.1%
Ouzinkie	32	8	25.0%	0	0.0%	0	0.0%	0	0.0%	1	12.5%	0	0.0%	3	37.5%	4	50.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	5	16.7%	0	0.0%	1	20.0%	0	0.0%	2	40.0%	0	0.0%	2	40.0%	1	20.0%	0	0.0%
Chignik Lake	24	9	37.5%	0	0.0%	1	11.1%	1	11.1%	2	22.2%	0	0.0%	4	44.4%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	28	28.0%	0	0.0%	2	7.1%	3	10.7%	5	17.9%	0	0.0%	4	14.3%	9	32.1%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-44. Reasons for Decreased Harvest/Use of Birds Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	11	61.1%	1	9.1%	9	81.8%	0	0.0%	1	9.1%	0	0.0%	0	0.0%	3	27.3%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	9	47.4%	1	11.1%	7	77.8%	0	0.0%	0	0.0%	0	0.0%	1	11.1%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	11	37.9%	3	27.3%	3	27.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	18.2%	0	0.0%
Port Graham	49	17	34.7%	0	0.0%	5	29.4%	1	5.9%	0	0.0%	2	11.8%	3	17.6%	4	23.5%	0	0.0%
Seldovia	66	3	4.5%	0	0.0%	2	66.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	13	31.0%	0	0.0%	5	38.5%	0	0.0%	0	0.0%	0	0.0%	2	15.4%	3	23.1%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	3	10.3%	0	0.0%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	2	66.7%	0	0.0%	0	0.0%
Chignik Lake	24	5	20.8%	0	0.0%	1	20.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	33	33.0%	0	0.0%	2	6.1%	3	9.1%	4	12.1%	0	0.0%	4	12.1%	13	39.4%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-45. Household Assessment of Change in Marine Invertebrate Uses Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	17	94.4%	2	11.8%	7	41.2%	8	47.1%
Cordova	101	0	0.0%	1	1.0%	0	0.0%	99	98.0%	9	9.1%	60	60.6%	30	30.3%
Tatitlek	19	3	15.8%	1	5.3%	0	0.0%	15	78.9%	3	20.0%	5	33.3%	7	46.7%
Valdez	100	0	0.0%	0	0.0%	0	0.0%	99	99.0%	4	4.0%	80	80.8%	15	15.2%
Lower Cook Inlet															
Kenai	100	2	2.0%	1	1.0%	0	0.0%	97	97.0%	5	5.2%	71	73.2%	21	21.6%
Nanwalek	29	0	0.0%	3	10.3%	0	0.0%	26	89.7%	5	19.2%	10	38.5%	11	42.3%
Port Graham	49	2	4.1%	0	0.0%	0	0.0%	47	95.9%	5	10.6%	23	48.9%	19	40.4%
Seldovia	66	0	0.0%	4	6.1%	0	0.0%	61	92.4%	5	8.2%	45	73.8%	11	18.0%
Kodiak Island															
Karluk	13	0	0.0%	0	0.0%	0	0.0%	13	100.0%	5	38.5%	7	53.8%	1	7.7%
Kodiak City	207	1	0.5%	6	2.9%	5	2.4%	191	92.3%	32	16.8%	111	58.1%	48	25.1%
Larsen Bay	38	0	0.0%	1	2.6%	0	0.0%	37	97.4%	10	27.0%	24	64.9%	3	8.1%
Old Harbor	42	0	0.0%	1	2.4%	1	2.4%	40	95.2%	4	10.0%	28	70.0%	8	20.0%
Ouzinkie	32	0	0.0%	0	0.0%	0	0.0%	32	100.0%	3	9.4%	25	78.1%	4	12.5%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	4	13.3%	0	0.0%	26	86.7%	8	30.8%	13	50.0%	5	19.2%
Chignik Lake	24	0	0.0%	1	4.2%	0	0.0%	22	91.7%	7	31.8%	12	54.5%	3	13.6%
Arctic															
Kotzebue	100	14	14.0%	0	0.0%	2	2.0%	84	84.0%	8	9.5%	69	82.1%	7	8.3%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-46. Household Assessment of Change in Marine Invertebrate Uses Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	0	0.0%	4	22.2%	0	0.0%	14	77.8%	2	14.3%	2	14.3%	10	71.4%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	2	10.5%	2	10.5%	0	0.0%	15	78.9%	1	6.7%	0	0.0%	14	93.3%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet															
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	0	0.0%	2	6.9%	0	0.0%	27	93.1%	2	7.4%	5	18.5%	20	74.1%
Port Graham	49	1	2.0%	3	6.1%	0	0.0%	42	85.7%	5	11.9%	15	35.7%	22	52.4%
Seldovia	66	0	0.0%	11	16.7%	0	0.0%	54	81.8%	2	3.7%	36	66.7%	16	29.6%
Kodiak Island															
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	2	4.8%	4	9.5%	1	2.4%	35	83.3%	1	2.9%	16	45.7%	18	51.4%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	11	36.7%	0	0.0%	19	63.3%	4	21.1%	12	63.2%	3	15.8%
Chignik Lake	24	1	4.2%	3	12.5%	0	0.0%	19	79.2%	3	15.8%	14	73.7%	2	10.5%
Arctic															
Kotzebue	100	14	14.0%	0	0.0%	2	2.0%	84	84.0%	9	10.7%	63	75.0%	12	14.3%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-47. Reasons for Increased Harvest/Use of Marine Invertebrates Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	2	11.1%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Cordova	101	9	8.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	11.1%	0	0.0%
Tatitlek	19	3	15.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	4	4.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	2	50.0%	0	0.0%
Lower Cook Inlet																			
Kenai	100	5	5.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	3	60.0%	0	0.0%
Nanwalek	29	5	17.2%	2	40.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%
Port Graham	49	5	10.2%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	0	0.0%	1	20.0%	3	60.0%	0	0.0%
Seldovia	66	5	7.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	60.0%	4	80.0%	0	0.0%
Kodiak Island																			
Karluk	13	5	38.5%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	0	0.0%
Kodiak City	207	32	15.5%	1	3.1%	1	3.1%	2	6.3%	1	3.1%	0	0.0%	10	31.3%	5	15.6%	0	0.0%
Larsen Bay	38	10	26.3%	1	10.0%	1	10.0%	0	0.0%	1	10.0%	0	0.0%	2	20.0%	4	40.0%	0	0.0%
Old Harbor	42	4	9.5%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	1	25.0%	0	0.0%
Ouzinkie	32	3	9.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	2	66.7%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	8	26.7%	0	0.0%	1	12.5%	1	12.5%	1	12.5%	0	0.0%	3	37.5%	5	62.5%	0	0.0%
Chignik Lake	24	7	29.2%	0	0.0%	2	28.6%	1	14.3%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	0	0.0%
Arctic																			
Kotzebue	100	8	8.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	37.5%	4	50.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-48. Reasons for Increased Harvest/Use of Marine Invertebrates Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	2	11.1%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	1	5.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	2	6.9%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	49	5	10.2%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%
Seldovia	66	2	3.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	2	100.0%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	1	2.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	4	13.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	1	25.0%
Chignik Lake	24	3	12.5%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Arctic																			
Kotzebue	100	9	9.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	44.4%	4	44.4%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-49. Reasons for Decreased Harvest/Use of Marine Invertebrates Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	8	44.4%	4	50.0%	1	12.5%	0	0.0%	2	25.0%	0	0.0%	0	0.0%	1	12.5%	0	0.0%
Cordova	101	30	29.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	7	36.8%	0	0.0%	6	85.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	15	15.0%	0	0.0%	4	26.7%	3	20.0%	1	6.7%	1	6.7%	3	20.0%	5	33.3%	0	0.0%
Lower Cook Inlet																			
Kenai	100	21	21.0%	1	4.8%	2	9.5%	3	14.3%	5	23.8%	2	9.5%	4	19.0%	6	28.6%	0	0.0%
Nanwalek	29	11	37.9%	3	27.3%	4	36.4%	0	0.0%	1	9.1%	0	0.0%	1	9.1%	0	0.0%	0	0.0%
Port Graham	49	19	38.8%	1	5.3%	9	47.4%	4	21.1%	1	5.3%	1	5.3%	5	26.3%	1	5.3%	0	0.0%
Seldovia	66	11	16.7%	2	18.2%	6	54.5%	4	36.4%	1	9.1%	0	0.0%	1	9.1%	3	27.3%	0	0.0%
Kodiak Island																			
Karluk	13	1	7.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	207	48	23.2%	2	4.2%	6	12.5%	0	0.0%	7	14.6%	0	0.0%	11	22.9%	10	20.8%	0	0.0%
Larsen Bay	38	3	7.9%	0	0.0%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Old Harbor	42	8	19.0%	4	50.0%	4	50.0%	0	0.0%	0	0.0%	0	0.0%	1	12.5%	0	0.0%	1	12.5%
Ouzinkie	32	4	12.5%	0	0.0%	0	0.0%	1	25.0%	2	50.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	5	16.7%	1	20.0%	2	40.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	0	0.0%
Chignik Lake	24	3	12.5%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	7	7.0%	0	0.0%	2	28.6%	0	0.0%	1	14.3%	0	0.0%	2	28.6%	1	14.3%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-50. Reasons for Decreased Harvest/Use of Marine Invertebrates Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Health/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	10	55.6%	3	30.0%	7	70.0%	0	0.0%	1	10.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	14	73.7%	1	7.1%	11	78.6%	0	0.0%	0	0.0%	0	0.0%	2	14.3%	1	7.1%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	20	69.0%	9	45.0%	5	25.0%	0	0.0%	1	5.0%	1	5.0%	1	5.0%	0	0.0%	0	0.0%
Port Graham	49	22	44.9%	5	22.7%	8	36.4%	6	27.3%	0	0.0%	0	0.0%	4	18.2%	0	0.0%	0	0.0%
Seldovia	66	16	24.2%	1	6.3%	8	50.0%	3	18.8%	2	12.5%	0	0.0%	5	31.3%	2	12.5%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	18	42.9%	5	27.8%	8	44.4%	0	0.0%	0	0.0%	0	0.0%	2	11.1%	1	5.6%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	3	10.3%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Chignik Lake	24	2	8.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	12	12.0%	0	0.0%	2	16.7%	0	0.0%	1	8.3%	0	0.0%	2	16.7%	2	16.7%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-51. Household Assessment of Change in Plant Uses Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	17	94.4%	3	17.6%	14	82.4%	0	0.0%
Cordova	101	3	3.0%	1	1.0%	0	0.0%	97	96.0%	16	16.5%	59	60.8%	22	22.7%
Tatitlek	19	0	0.0%	1	5.3%	0	0.0%	18	94.7%	2	11.1%	11	61.1%	5	27.8%
Valdez	100	1	1.0%	0	0.0%	0	0.0%	98	98.0%	7	7.1%	73	74.5%	18	18.4%
Lower Cook Inlet															
Kenai	100	1	1.0%	1	1.0%	1	1.0%	97	97.0%	4	4.1%	80	82.5%	13	13.4%
Nanwalek	29	0	0.0%	3	10.3%	0	0.0%	26	89.7%	6	23.1%	16	61.5%	4	15.4%
Port Graham	49	1	2.0%	0	0.0%	0	0.0%	48	98.0%	8	16.7%	26	54.2%	14	29.2%
Seldovia	66	0	0.0%	4	6.1%	0	0.0%	61	92.4%	6	9.8%	51	83.6%	4	6.6%
Kodiak Island															
Karluk	13	0	0.0%	0	0.0%	0	0.0%	13	100.0%	6	46.2%	6	46.2%	1	7.7%
Kodiak City	207	0	0.0%	6	2.9%	1	0.5%	198	95.7%	34	17.2%	123	62.1%	41	20.7%
Larsen Bay	38	0	0.0%	1	2.6%	0	0.0%	37	97.4%	7	18.9%	24	64.9%	6	16.2%
Old Harbor	42	2	4.8%	1	2.4%	1	2.4%	38	90.5%	6	15.8%	26	68.4%	6	15.8%
Ouzinkie	32	0	0.0%	0	0.0%	0	0.0%	32	100.0%	7	21.9%	20	62.5%	5	15.6%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	4	13.3%	3	10.0%	23	76.7%	3	13.0%	13	56.5%	7	30.4%
Chignik Lake	24	0	0.0%	1	4.2%	0	0.0%	22	91.7%	2	9.1%	14	63.6%	6	27.3%
Arctic															
Kotzebue	100	17	17.0%	0	0.0%	1	1.0%	82	82.0%	19	23.2%	53	64.6%	10	12.2%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-52. Household Assessment of Change in Plant Uses Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	0	0.0%	4	22.2%	0	0.0%	14	77.8%	1	7.1%	12	85.7%	1	7.1%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	2	10.5%	2	10.5%	0	0.0%	15	78.9%	1	6.7%	9	60.0%	5	33.3%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet															
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	0	0.0%	2	6.9%	0	0.0%	27	93.1%	2	7.4%	17	63.0%	8	29.6%
Port Graham	49	2	4.1%	3	6.1%	0	0.0%	41	83.7%	5	12.2%	26	63.4%	10	24.4%
Seldovia	66	0	0.0%	11	16.7%	0	0.0%	54	81.8%	2	3.7%	49	90.7%	3	5.6%
Kodiak Island															
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	1	2.4%	4	9.5%	0	0.0%	37	88.1%	6	16.2%	27	73.0%	4	10.8%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	11	36.7%	1	3.3%	18	60.0%	1	5.6%	14	77.8%	3	16.7%
Chignik Lake	24	4	16.7%	3	12.5%	0	0.0%	16	66.7%	0	0.0%	12	75.0%	4	25.0%
Arctic															
Kotzebue	100	17	17.0%	0	0.0%	1	1.0%	82	82.0%	10	12.2%	58	70.7%	14	17.1%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-53. Reasons for Increased Harvest/Use of Plants Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	3	16.7%	0	0.0%	1	33.3%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Cordova	101	16	15.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	2	10.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Valdez	100	7	7.0%	0	0.0%	2	28.6%	1	14.3%	0	0.0%	0	0.0%	0	0.0%	5	71.4%	0	0.0%
Lower Cook Inlet																			
Kenai	100	4	4.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	3	75.0%	0	0.0%
Nanwalek	29	6	20.7%	2	33.3%	2	33.3%	0	0.0%	1	16.7%	0	0.0%	1	16.7%	0	0.0%	0	0.0%
Port Graham	49	8	16.3%	0	0.0%	0	0.0%	2	25.0%	2	25.0%	0	0.0%	2	25.0%	2	25.0%	0	0.0%
Seldovia	66	6	9.1%	0	0.0%	2	33.3%	1	16.7%	0	0.0%	0	0.0%	1	16.7%	3	50.0%	0	0.0%
Kodiak Island																			
Karluk	13	6	46.2%	0	0.0%	1	16.7%	0	0.0%	0	0.0%	0	0.0%	1	16.7%	1	16.7%	0	0.0%
Kodiak City	207	34	16.4%	0	0.0%	5	14.7%	4	11.8%	0	0.0%	0	0.0%	3	8.8%	10	29.4%	0	0.0%
Larsen Bay	38	7	18.4%	0	0.0%	0	0.0%	1	14.3%	0	0.0%	0	0.0%	1	14.3%	3	42.9%	0	0.0%
Old Harbor	42	6	14.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	33.3%	0	0.0%	0	0.0%
Ouzinkie	32	7	21.9%	0	0.0%	2	28.6%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	3	42.9%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	3	10.0%	0	0.0%	1	33.3%	0	0.0%	1	33.3%	0	0.0%	1	33.3%	2	66.7%	0	0.0%
Chignik Lake	24	2	8.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Arctic																			
Kotzebue	100	19	19.0%	0	0.0%	9	47.4%	1	5.3%	0	0.0%	0	0.0%	0	0.0%	7	36.8%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-54. Reasons for Increased Harvest/Use of Plants Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	1	5.6%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	1	5.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	2	6.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	0	0.0%
Port Graham	49	5	10.2%	0	0.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%	2	40.0%	1	20.0%	0	0.0%
Seldovia	66	2	3.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	6	14.3%	0	0.0%	3	50.0%	0	0.0%	0	0.0%	0	0.0%	2	33.3%	0	0.0%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	1	3.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Chignik Lake	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	10	10.0%	0	0.0%	2	20.0%	2	20.0%	0	0.0%	0	0.0%	1	10.0%	4	40.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-55. Reasons for Decreased Harvest/Use of Plants Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Health/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	22	21.8%	0	0.0%	0	0.0%	1	4.5%	1	4.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	5	26.3%	0	0.0%	3	60.0%	1	20.0%	1	20.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%
Valdez	100	18	18.0%	0	0.0%	2	11.1%	4	22.2%	2	11.1%	0	0.0%	0	0.0%	10	55.6%	0	0.0%
Lower Cook Inlet																			
Kenai	100	13	13.0%	0	0.0%	8	61.5%	2	15.4%	0	0.0%	1	7.7%	0	0.0%	4	30.8%	0	0.0%
Nanwalek	29	4	13.8%	0	0.0%	1	25.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%
Port Graham	49	14	28.6%	1	7.1%	3	21.4%	3	21.4%	1	7.1%	2	14.3%	2	14.3%	2	14.3%	0	0.0%
Seldovia	66	4	6.1%	1	25.0%	3	75.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																			
Karluk	13	1	7.7%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	207	41	19.8%	0	0.0%	9	22.0%	0	0.0%	7	17.1%	1	2.4%	2	4.9%	8	19.5%	0	0.0%
Larsen Bay	38	6	15.8%	0	0.0%	0	0.0%	1	16.7%	0	0.0%	0	0.0%	1	16.7%	3	50.0%	0	0.0%
Old Harbor	42	6	14.3%	0	0.0%	2	33.3%	1	16.7%	0	0.0%	0	0.0%	1	16.7%	0	0.0%	0	0.0%
Ouzinkie	32	5	15.6%	0	0.0%	2	40.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	2	40.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	7	23.3%	0	0.0%	3	42.9%	2	28.6%	2	28.6%	0	0.0%	0	0.0%	2	28.6%	0	0.0%
Chignik Lake	24	6	25.0%	0	0.0%	4	66.7%	0	0.0%	1	16.7%	1	16.7%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	10	10.0%	0	0.0%	1	10.0%	0	0.0%	2	20.0%	0	0.0%	0	0.0%	4	40.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-56. Reasons for Decreased Harvest/Use of Plants Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Cordova	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	19	5	26.3%	0	0.0%	1	20.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	29	8	27.6%	1	12.5%	1	12.5%	1	12.5%	0	0.0%	0	0.0%	0	0.0%	2	25.0%	0	0.0%
Port Graham	49	10	20.4%	0	0.0%	3	30.0%	1	10.0%	0	0.0%	2	20.0%	3	30.0%	0	0.0%	0	0.0%
Seldovia	66	3	4.5%	0	0.0%	2	66.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Kodiak Island																			
Karluk	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	4	9.5%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	29	3	10.3%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Chignik Lake	24	4	16.7%	0	0.0%	1	25.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%
Arctic																			
Kotzebue	100	14	14.0%	0	0.0%	1	7.1%	0	0.0%	3	21.4%	1	7.1%	1	7.1%	6	42.9%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-57. Household Assessment of Change in Overall Wild Resource Uses Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	0	0.0%	0	0.0%	17	94.4%	5	29.4%	4	23.5%	8	47.1%
Cordova	101	1	1.0%	1	1.0%	0	0.0%	99	98.0%	14	14.1%	50	50.5%	35	35.4%
Tatitlek	19	1	5.3%	1	5.3%	0	0.0%	17	89.5%	2	11.8%	4	23.5%	11	64.7%
Valdez	100	0	0.0%	0	0.0%	0	0.0%	100	100.0%	9	9.0%	55	55.0%	36	36.0%
Lower Cook Inlet															
Kenai	100	1	1.0%	1	1.0%	0	0.0%	98	98.0%	15	15.3%	50	51.0%	33	33.7%
Nanwalek	29	0	0.0%	3	10.3%	0	0.0%	26	89.7%	8	30.8%	13	50.0%	5	19.2%
Port Graham	49	0	0.0%	0	0.0%	0	0.0%	49	100.0%	5	10.2%	19	38.8%	25	51.0%
Seldovia	66	0	0.0%	4	6.1%	0	0.0%	61	92.4%	9	14.8%	41	67.2%	11	18.0%
Kodiak Island															
Karluk	13	0	0.0%	0	0.0%	0	0.0%	13	100.0%	3	23.1%	10	76.9%	0	0.0%
Kodiak City	207	0	0.0%	6	2.9%	0	0.0%	200	96.6%	55	27.5%	83	41.5%	62	31.0%
Larsen Bay	38	0	0.0%	1	2.6%	0	0.0%	37	97.4%	13	35.1%	19	51.4%	5	13.5%
Old Harbor	42	0	0.0%	1	2.4%	0	0.0%	41	97.6%	6	14.6%	22	53.7%	13	31.7%
Ouzinkie	32	1	3.1%	0	0.0%	0	0.0%	31	96.9%	6	19.4%	21	67.7%	4	12.9%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	4	13.3%	0	0.0%	26	86.7%	9	34.6%	13	50.0%	4	15.4%
Chignik Lake	24	0	0.0%	1	4.2%	0	0.0%	22	91.7%	4	18.2%	15	68.2%	3	13.6%
Arctic															
Kotzebue	100	0	0.0%	0	0.0%	1	1.0%	99	99.0%	18	18.2%	57	57.6%	24	24.2%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-58. Household Assessment of Change in Overall Wild Resource Uses Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	18	1	5.6%	4	22.2%	0	0.0%	13	72.2%	0	0.0%	0	0.0%	13	100.0%
Cordova	101	1	1.0%	9	8.9%	2	2.0%	89	88.1%	12	13.5%	44	49.4%	33	37.1%
Tatitlek	19	3	15.8%	2	10.5%	0	0.0%	14	73.7%	1	7.1%	1	7.1%	12	85.7%
Valdez	100	2	2.0%	6	6.0%	0	0.0%	92	92.0%	7	7.6%	54	58.7%	31	33.7%
Lower Cook Inlet															
Kenai	100	0	0.0%	12	12.0%	0	0.0%	88	88.0%	10	11.4%	45	51.1%	33	37.5%
Nanwalek	29	1	3.4%	2	6.9%	0	0.0%	26	89.7%	3	11.5%	8	30.8%	15	57.7%
Port Graham	49	2	4.1%	3	6.1%	0	0.0%	44	89.8%	7	15.9%	15	34.1%	22	50.0%
Seldovia	66	2	3.0%	11	16.7%	0	0.0%	52	78.8%	1	1.9%	38	73.1%	13	25.0%
Kodiak Island															
Karluk	13	0	0.0%	0	0.0%	0	0.0%	12	92.3%	1	8.3%	8	66.7%	3	25.0%
Kodiak City	207	3	1.4%	16	7.7%	0	0.0%	168	81.2%	43	25.6%	61	36.3%	64	38.1%
Larsen Bay	38	0	0.0%	9	23.7%	0	0.0%	29	76.3%	7	24.1%	15	51.7%	7	24.1%
Old Harbor	42	2	4.8%	4	9.5%	0	0.0%	36	85.7%	1	2.8%	16	44.4%	19	52.8%
Ouzinkie	32	3	9.4%	3	9.4%	0	0.0%	26	81.3%	2	7.7%	14	53.8%	10	38.5%
Alaska Peninsula															
Chignik Bay	30	0	0.0%	11	36.7%	0	0.0%	19	63.3%	5	26.3%	12	63.2%	2	10.5%
Chignik Lake	24	2	8.3%	3	12.5%	0	0.0%	18	75.0%	1	5.6%	14	77.8%	3	16.7%
Arctic															
Kotzebue	100	0	0.0%	0	0.0%	1	1.0%	99	99.0%	18	18.2%	48	48.5%	33	33.3%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-59. Reasons for Increased Harvest/Use of Wild Resources Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	8	44.4%	1	12.5%	6	75.0%	0	0.0%	3	37.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	35	34.7%	1	2.9%	9	25.7%	1	2.9%	9	25.7%	2	5.7%	6	17.1%	7	20.0%	0	0.0%
Tatitlek	19	11	57.9%	0	0.0%	8	72.7%	0	0.0%	0	0.0%	0	0.0%	1	9.1%	0	0.0%	0	0.0%
Valdez	100	36	36.0%	2	5.6%	10	27.8%	11	30.6%	6	16.7%	1	2.8%	2	5.6%	12	33.3%	2	5.6%
Lower Cook Inlet																			
Kenai	100	33	33.0%	0	0.0%	7	21.2%	12	36.4%	4	12.1%	4	12.1%	2	6.1%	12	36.4%	0	0.0%
Nanwalek	29	5	17.2%	1	20.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%
Port Graham	49	25	51.0%	1	4.0%	7	28.0%	4	16.0%	1	4.0%	2	8.0%	8	32.0%	5	20.0%	0	0.0%
Seldovia	66	11	16.7%	1	9.1%	8	72.7%	6	54.5%	2	18.2%	0	0.0%	1	9.1%	2	18.2%	0	0.0%
Kodiak Island																			
Karluk	13	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	207	62	30.0%	0	0.0%	7	11.3%	3	4.8%	14	22.6%	3	4.8%	7	11.3%	10	16.1%	0	0.0%
Larsen Bay	38	5	13.2%	1	20.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	3	60.0%	1	20.0%	0	0.0%
Old Harbor	42	13	31.0%	1	7.7%	5	38.5%	1	7.7%	1	7.7%	0	0.0%	4	30.8%	0	0.0%	0	0.0%
Ouzinkie	32	4	12.5%	0	0.0%	1	25.0%	0	0.0%	2	50.0%	1	25.0%	1	25.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	4	13.3%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	2	50.0%	1	25.0%	0	0.0%
Chignik Lake	24	3	12.5%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Arctic																			
Kotzebue	100	24	24.0%	0	0.0%	2	8.3%	1	4.2%	5	20.8%	0	0.0%	3	12.5%	6	25.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-60. Reasons for Increased Harvest/Use of Wild Resources Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	12	11.9%	0	0.0%	0	0.0%	2	16.7%	3	25.0%	0	0.0%	4	33.3%	5	41.7%	0	0.0%
Tatitlek	19	1	5.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	7	7.0%	0	0.0%	2	28.6%	0	0.0%	1	14.3%	0	0.0%	1	14.3%	4	57.1%	0	0.0%
Lower Cook Inlet																			
Kenai	100	10	10.0%	0	0.0%	3	30.0%	0	0.0%	0	0.0%	0	0.0%	5	50.0%	5	50.0%	0	0.0%
Nanwalek	29	3	10.3%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Port Graham	49	7	14.3%	0	0.0%	1	14.3%	1	14.3%	2	28.6%	0	0.0%	2	28.6%	1	14.3%	0	0.0%
Seldovia	66	1	1.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	1	100.0%	0	0.0%
Kodiak Island																			
Karluk	13	1	7.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	207	43	20.8%	0	0.0%	0	0.0%	5	11.6%	2	4.7%	1	2.3%	10	23.3%	13	30.2%	0	0.0%
Larsen Bay	38	7	18.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	42.9%	3	42.9%	0	0.0%
Old Harbor	42	1	2.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	32	2	6.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	5	16.7%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	3	60.0%	1	20.0%	0	0.0%
Chignik Lake	24	1	4.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Kotzebue	100	18	18.0%	0	0.0%	0	0.0%	0	0.0%	1	5.6%	0	0.0%	5	27.8%	11	61.1%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-61. Reasons for Decreased Harvest/Use of Wild Resources Compared to the Previous Year (1990), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	8	44.4%	1	12.5%	6	75.0%	0	0.0%	3	37.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	101	35	34.7%	1	2.9%	9	25.7%	1	2.9%	9	25.7%	2	5.7%	6	17.1%	7	20.0%	0	0.0%
Tatitlek	19	11	57.9%	0	0.0%	8	72.7%	0	0.0%	0	0.0%	0	0.0%	1	9.1%	0	0.0%	0	0.0%
Valdez	100	36	36.0%	2	5.6%	10	27.8%	11	30.6%	6	16.7%	1	2.8%	2	5.6%	12	33.3%	2	5.6%
Lower Cook Inlet																			
Kenai	100	33	33.0%	0	0.0%	7	21.2%	12	36.4%	4	12.1%	4	12.1%	2	6.1%	12	36.4%	0	0.0%
Nanwalek	29	5	17.2%	1	20.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%
Port Graham	49	25	51.0%	1	4.0%	7	28.0%	4	16.0%	1	4.0%	2	8.0%	8	32.0%	5	20.0%	0	0.0%
Seldovia	66	11	16.7%	1	9.1%	8	72.7%	6	54.5%	2	18.2%	0	0.0%	1	9.1%	2	18.2%	0	0.0%
Kodiak Island																			
Karluk	13	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	207	62	30.0%	0	0.0%	7	11.3%	3	4.8%	14	22.6%	3	4.8%	7	11.3%	10	16.1%	0	0.0%
Larsen Bay	38	5	13.2%	1	20.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	3	60.0%	1	20.0%	0	0.0%
Old Harbor	42	13	31.0%	1	7.7%	5	38.5%	1	7.7%	1	7.7%	0	0.0%	4	30.8%	0	0.0%	0	0.0%
Ouzinkie	32	4	12.5%	0	0.0%	1	25.0%	0	0.0%	2	50.0%	1	25.0%	1	25.0%	0	0.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	4	13.3%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	2	50.0%	1	25.0%	0	0.0%
Chignik Lake	24	3	12.5%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Arctic																			
Kotzebue	100	24	24.0%	0	0.0%	2	8.3%	1	4.2%	5	20.8%	0	0.0%	3	12.5%	6	25.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-62. Reasons for Decreased Harvest/Use of Wild Resources Compared to the Year Before the *Exxon Valdez* Oil Spill (1988), 1991 Study Year

Region / Community	Households Surveyed	Responses		Resource Condition/ Food Safety		Resource Abundance		Access		Time Constraints		Heath/Age of Individuals		Economic Conditions		General Interest/Effort		Success/ Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	18	13	72.2%	2	15.4%	9	69.2%	0	0.0%	2	15.4%	0	0.0%	1	7.7%	0	0.0%	0	0.0%
Cordova	101	33	32.7%	3	9.1%	10	30.3%	8	24.2%	7	21.2%	2	6.1%	10	30.3%	6	18.2%	0	0.0%
Tatitlek	19	12	63.2%	1	8.3%	9	75.0%	1	8.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	100	31	31.0%	1	3.2%	4	12.9%	9	29.0%	4	12.9%	1	3.2%	5	16.1%	11	35.5%	1	3.2%
Lower Cook Inlet																			
Kenai	100	33	33.0%	1	3.0%	6	18.2%	5	15.2%	3	9.1%	4	12.1%	5	15.2%	12	36.4%	0	0.0%
Nanwalek	29	15	51.7%	6	40.0%	4	26.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	49	22	44.9%	2	9.1%	9	40.9%	1	4.5%	1	4.5%	2	9.1%	4	18.2%	3	13.6%	0	0.0%
Seldovia	66	13	19.7%	1	7.7%	6	46.2%	4	30.8%	2	15.4%	0	0.0%	4	30.8%	3	23.1%	0	0.0%
Kodiak Island																			
Karluk	13	3	23.1%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	207	64	30.9%	6	9.4%	6	9.4%	2	3.1%	12	18.8%	2	3.1%	7	10.9%	7	10.9%	1	1.6%
Larsen Bay	38	7	18.4%	4	57.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	0	0.0%	0	0.0%
Old Harbor	42	19	45.2%	3	15.8%	13	68.4%	0	0.0%	0	0.0%	0	0.0%	3	15.8%	0	0.0%	0	0.0%
Ouzinkie	32	10	31.3%	3	30.0%	1	10.0%	1	10.0%	1	10.0%	0	0.0%	0	0.0%	3	30.0%	0	0.0%
Alaska Peninsula																			
Chignik Bay	30	2	6.7%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Chignik Lake	24	3	12.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Arctic																			
Kotzebue	100	33	33.0%	0	0.0%	2	6.1%	2	6.1%	4	12.1%	0	0.0%	6	18.2%	10	30.3%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-63. Household Assessment of Change in Salmon Uses, 1993 Study Year

Region / Community	Households Surveyed	Change Compared to the Previous Year (1992)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	1	4.3%	3	13.0%	0	0.0%	19	82.6%	1	5.3%	5	26.3%	13	68.4%
Cordova	104	1	1.0%	3	2.9%	0	0.0%	100	96.2%	21	21.0%	46	46.0%	33	33.0%
Tatitlek	20	0	0.0%	1	5.0%	0	0.0%	19	95.0%	4	21.1%	4	21.1%	11	57.9%
Valdez	35	0	0.0%	0	0.0%	6	17.1%	29	82.9%	2	6.9%	11	37.9%	16	55.2%
Lower Cook Inlet															
Kenai	101	0	0.0%	1	1.0%	6	5.9%	94	93.1%	19	20.2%	35	37.2%	40	42.6%
Nanwalek	33	0	0.0%	0	0.0%	0	0.0%	33	100.0%	11	33.3%	8	24.2%	14	42.4%
Port Graham	51	1	2.0%	2	3.9%	0	0.0%	48	94.1%	13	27.1%	11	22.9%	24	50.0%
Seldovia	65	0	0.0%	4	6.2%	5	7.7%	56	86.2%	14	25.0%	25	44.6%	17	30.4%
Kodiak Island															
Kodiak City	105	1	1.0%	11	10.5%	2	1.9%	91	86.7%	25	27.5%	36	39.6%	30	33.0%
Larsen Bay	40	0	0.0%	5	12.5%	4	10.0%	31	77.5%	5	16.1%	17	54.8%	9	29.0%
Ouzinkie	61	2	3.3%	4	6.6%	0	0.0%	55	90.2%	10	18.2%	32	58.2%	13	23.6%
Port Lions	45	0	0.0%	0	0.0%	0	0.0%	45	100.0%	8	17.8%	32	71.1%	5	11.1%
Arctic															
Nuiqsut	62	0	0.0%	5	8.1%	0	0.0%	57	91.9%	7	12.3%	45	78.9%	5	8.8%

Region / Community	Households Surveyed	Change Compared to Year Before the *Exxon Valdez* Oil Spill (1988)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	2	8.7%	9	39.1%	0	0.0%	12	52.2%	2	16.7%	1	8.3%	9	75.0%
Cordova	104	1	1.0%	29	27.9%	0	0.0%	74	71.2%	16	21.6%	27	36.5%	31	41.9%
Tatitlek	20	2	10.0%	3	15.0%	0	0.0%	15	75.0%	0	0.0%	0	0.0%	15	100.0%
Valdez	35	0	0.0%	9	25.7%	6	17.1%	20	57.1%	2	10.0%	8	40.0%	10	50.0%
Lower Cook Inlet															
Kenai	101	2	2.0%	19	18.8%	3	3.0%	77	76.2%	14	18.2%	29	37.7%	34	44.2%
Nanwalek	33	0	0.0%	4	12.1%	0	0.0%	29	87.9%	4	13.8%	6	20.7%	19	65.5%
Port Graham	51	2	3.9%	4	7.8%	0	0.0%	45	88.2%	5	11.1%	7	15.6%	33	73.3%
Seldovia	65	3	4.6%	12	18.5%	5	7.7%	45	69.2%	11	24.4%	21	46.7%	13	28.9%
Kodiak Island															
Kodiak City	105	6	5.7%	32	30.5%	2	1.9%	65	61.9%	14	21.5%	23	35.4%	28	43.1%
Larsen Bay	40	1	2.5%	12	30.0%	2	5.0%	25	62.5%	5	20.0%	9	36.0%	11	44.0%
Ouzinkie	61	9	14.8%	9	14.8%	2	3.3%	41	67.2%	4	9.8%	20	48.8%	17	41.5%
Port Lions	45	1	2.2%	7	15.6%	0	0.0%	37	82.2%	8	21.6%	24	64.9%	5	13.5%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-64. Reasons for Increased Harvest/Use of Salmon, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	1	4.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Cordova	104	21	20.2%	0	0.0%	1	4.8%	3	14.3%	1	4.8%	0	0.0%	10	47.6%	11	52.4%	1	4.8%
Tatitlek	20	4	20.0%	1	25.0%	2	50.0%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	0	0.0%	0	0.0%
Valdez	35	2	5.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	19	18.8%	0	0.0%	3	15.8%	3	15.8%	3	15.8%	1	5.3%	6	31.6%	7	36.8%	2	10.5%
Nanwalek	33	11	33.3%	1	9.1%	4	36.4%	1	9.1%	2	18.2%	0	0.0%	0	0.0%	1	9.1%	0	0.0%
Port Graham	51	13	25.5%	1	7.7%	3	23.1%	2	15.4%	0	0.0%	1	7.7%	2	15.4%	5	38.5%	0	0.0%
Seldovia	65	14	21.5%	0	0.0%	4	28.6%	0	0.0%	0	0.0%	0	0.0%	3	21.4%	7	50.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	25	23.8%	0	0.0%	1	4.0%	1	4.0%	6	24.0%	0	0.0%	8	32.0%	14	56.0%	4	16.0%
Larsen Bay	40	5	12.5%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	3	60.0%	1	20.0%	0	0.0%
Ouzinkie	61	10	16.4%	2	20.0%	0	0.0%	0	0.0%	2	20.0%	0	0.0%	2	20.0%	4	40.0%	1	10.0%
Port Lions	45	8	17.8%	0	0.0%	1	12.5%	0	0.0%	2	25.0%	1	12.5%	2	25.0%	4	50.0%	0	0.0%
Arctic																			
Nuiqsut	62	7	11.3%	0	0.0%	1	14.3%	2	28.6%	0	0.0%	0	0.0%	2	28.6%	0	0.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	2	8.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	2	100.0%	0	0.0%
Cordova	104	16	15.4%	0	0.0%	0	0.0%	1	6.3%	3	18.8%	0	0.0%	9	56.3%	6	37.5%	0	0.0%
Tatitlek	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	2	5.7%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	14	13.9%	0	0.0%	2	14.3%	2	14.3%	2	14.3%	0	0.0%	3	21.4%	7	50.0%	0	0.0%
Nanwalek	33	4	12.1%	1	25.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	1	25.0%	2	50.0%	0	0.0%
Port Graham	51	5	9.8%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	3	60.0%	0	0.0%
Seldovia	65	11	16.9%	0	0.0%	5	45.5%	0	0.0%	0	0.0%	0	0.0%	2	18.2%	3	27.3%	0	0.0%
Kodiak Island																			
Kodiak City	105	14	13.3%	0	0.0%	0	0.0%	0	0.0%	2	14.3%	0	0.0%	4	28.6%	9	64.3%	3	21.4%
Larsen Bay	40	5	12.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	3	60.0%	0	0.0%
Ouzinkie	61	4	6.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	3	75.0%	0	0.0%
Port Lions	45	8	17.8%	0	0.0%	1	12.5%	0	0.0%	2	25.0%	0	0.0%	2	25.0%	5	62.5%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-65. Reasons for Decreased Harvest/Use of Salmon, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	13	56.5%	0	0.0%	5	38.5%	2	15.4%	6	46.2%	0	0.0%	5	38.5%	4	30.8%	2	15.4%
Cordova	104	33	31.7%	0	0.0%	10	30.3%	6	18.2%	11	33.3%	1	3.0%	7	21.2%	9	27.3%	5	15.2%
Tatitlek	20	11	55.0%	0	0.0%	9	81.8%	0	0.0%	1	9.1%	0	0.0%	1	9.1%	2	18.2%	0	0.0%
Valdez	35	16	45.7%	0	0.0%	5	31.3%	0	0.0%	3	18.8%	1	6.3%	0	0.0%	6	37.5%	2	12.5%
Lower Cook Inlet																			
Kenai	101	40	39.6%	0	0.0%	10	25.0%	10	25.0%	14	35.0%	0	0.0%	4	10.0%	10	25.0%	1	2.5%
Nanwalek	33	14	42.4%	0	0.0%	1	7.1%	0	0.0%	3	21.4%	1	7.1%	4	28.6%	6	42.9%	0	0.0%
Port Graham	51	24	47.1%	0	0.0%	11	45.8%	1	4.2%	1	4.2%	3	12.5%	3	12.5%	3	12.5%	0	0.0%
Seldovia	65	17	26.2%	0	0.0%	4	23.5%	0	0.0%	5	29.4%	0	0.0%	2	11.8%	5	29.4%	1	5.9%
Kodiak Island																			
Kodiak City	105	30	28.6%	0	0.0%	0	0.0%	1	3.3%	10	33.3%	2	6.7%	9	30.0%	13	43.3%	3	10.0%
Larsen Bay	40	9	22.5%	0	0.0%	0	0.0%	0	0.0%	4	44.4%	0	0.0%	4	44.4%	2	22.2%	1	11.1%
Ouzinkie	61	13	21.3%	0	0.0%	0	0.0%	0	0.0%	4	30.8%	0	0.0%	4	30.8%	7	53.8%	1	7.7%
Port Lions	45	5	11.1%	0	0.0%	0	0.0%	0	0.0%	4	80.0%	1	20.0%	0	0.0%	1	20.0%	0	0.0%
Arctic																			
Nuiqsut	62	5	8.1%	0	0.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	9	39.1%	1	11.1%	6	66.7%	1	11.1%	1	11.1%	0	0.0%	4	44.4%	2	22.2%	0	0.0%
Cordova	104	31	29.8%	0	0.0%	14	45.2%	10	32.3%	6	19.4%	1	3.2%	8	25.8%	9	29.0%	0	0.0%
Tatitlek	20	15	75.0%	0	0.0%	11	73.3%	0	0.0%	0	0.0%	1	6.7%	4	26.7%	1	6.7%	0	0.0%
Valdez	35	10	28.6%	0	0.0%	3	30.0%	0	0.0%	2	20.0%	1	10.0%	0	0.0%	3	30.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	34	33.7%	0	0.0%	7	20.6%	6	17.6%	10	29.4%	1	2.9%	7	20.6%	7	20.6%	0	0.0%
Nanwalek	33	19	57.6%	8	42.1%	8	42.1%	1	5.3%	1	5.3%	0	0.0%	1	5.3%	3	15.8%	0	0.0%
Port Graham	51	33	64.7%	2	6.1%	17	51.5%	3	9.1%	2	6.1%	3	9.1%	2	6.1%	2	6.1%	0	0.0%
Seldovia	65	13	20.0%	2	15.4%	6	46.2%	1	7.7%	1	7.7%	0	0.0%	1	7.7%	2	15.4%	0	0.0%
Kodiak Island																			
Kodiak City	105	28	26.7%	0	0.0%	3	10.7%	1	3.6%	6	21.4%	4	14.3%	8	28.6%	13	46.4%	2	7.1%
Larsen Bay	40	11	27.5%	1	9.1%	1	9.1%	1	9.1%	2	18.2%	0	0.0%	7	63.6%	1	9.1%	0	0.0%
Ouzinkie	61	17	27.9%	1	5.9%	1	5.9%	1	5.9%	1	5.9%	0	0.0%	5	29.4%	9	52.9%	0	0.0%
Port Lions	45	5	11.1%	0	0.0%	0	0.0%	0	0.0%	3	60.0%	0	0.0%	3	60.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-66. Oil Spill-Related Reasons for Decreased Harvest/Use of Salmon, 1993 Study Year

Region / Community	Households Surveyed	Reporting Less	Oil Spill-Related Reasons for Decrease Harvest Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
			Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
			No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																				
Chenega Bay	23	9	7	77.8%	1	14.3%	6	85.7%	1	14.3%	0	0.0%	0	0.0%	3	42.9%	1	14.3%	0	0.0%
Cordova	104	31	19	61.3%	0	0.0%	11	57.9%	7	36.8%	3	15.8%	1	5.3%	8	42.1%	3	15.8%	0	0.0%
Tatitlek	20	15	11	73.3%	0	0.0%	9	81.8%	0	0.0%	0	0.0%	0	0.0%	2	18.2%	1	9.1%	0	0.0%
Valdez	35	10	3	30.0%	0	0.0%	3	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																				
Kenai	101	34	7	20.6%	0	0.0%	4	57.1%	1	14.3%	0	0.0%	0	0.0%	2	28.6%	1	14.3%	0	0.0%
Nanwalek	33	19	13	68.4%	8	61.5%	7	53.8%	1	7.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	51	33	19	57.6%	2	10.5%	15	78.9%	2	10.5%	1	5.3%	0	0.0%	0	0.0%	1	5.3%	0	0.0%
Seldovia	65	13	5	38.5%	2	40.0%	2	40.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																				
Kodiak City	105	28	1	3.6%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	40	11	2	18.2%	1	50.0%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Ouzinkie	61	17	3	17.6%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Port Lions	45	5	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Arctic																				
Nuiqsut	62	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-67. Household Assessment of Change in Fish Other Than Salmon Uses, 1993 Study Year

Region / Community	Households Surveyed	Change Compared to the Previous Year (1992)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	1	4.3%	3	13.0%	1	4.3%	18	78.3%	1	5.6%	9	50.0%	8	44.4%
Cordova	104	1	1.0%	3	2.9%	0	0.0%	100	96.2%	22	22.0%	48	48.0%	30	30.0%
Tatitlek	20	0	0.0%	1	5.0%	0	0.0%	19	95.0%	1	5.3%	3	15.8%	15	78.9%
Valdez	35	0	0.0%	0	0.0%	6	17.1%	29	82.9%	2	6.9%	18	62.1%	9	31.0%
Lower Cook Inlet															
Kenai	101	0	0.0%	1	1.0%	14	13.9%	86	85.1%	18	20.9%	43	50.0%	25	29.1%
Nanwalek	33	0	0.0%	0	0.0%	0	0.0%	33	100.0%	11	33.3%	11	33.3%	11	33.3%
Port Graham	51	1	2.0%	2	3.9%	1	2.0%	47	92.2%	8	17.0%	21	44.7%	18	38.3%
Seldovia	65	0	0.0%	4	6.2%	5	7.7%	56	86.2%	3	5.4%	36	64.3%	17	30.4%
Kodiak Island															
Kodiak City	105	2	1.9%	11	10.5%	2	1.9%	90	85.7%	24	26.7%	43	47.8%	23	25.6%
Larsen Bay	40	0	0.0%	5	12.5%	2	5.0%	33	82.5%	6	18.2%	18	54.5%	9	27.3%
Ouzinkie	61	3	4.9%	4	6.6%	4	6.6%	50	82.0%	10	20.0%	26	52.0%	14	28.0%
Port Lions	45	4	8.9%	0	0.0%	2	4.4%	39	86.7%	5	12.8%	24	61.5%	10	25.6%
Arctic															
Nuiqsut	62	0	0.0%	5	8.1%	0	0.0%	57	91.9%	10	17.5%	30	52.6%	17	29.8%

Region / Community	Households Surveyed	Change Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	3	13.0%	9	39.1%	0	0.0%	11	47.8%	0	0.0%	3	27.3%	8	72.7%
Cordova	104	1	1.0%	29	27.9%	0	0.0%	74	71.2%	14	18.9%	29	39.2%	31	41.9%
Tatitlek	20	0	0.0%	3	15.0%	0	0.0%	17	85.0%	0	0.0%	0	0.0%	17	100.0%
Valdez	35	0	0.0%	9	25.7%	4	11.4%	22	62.9%	4	18.2%	13	59.1%	5	22.7%
Lower Cook Inlet															
Kenai	101	2	2.0%	19	18.8%	9	8.9%	71	70.3%	13	18.3%	33	46.5%	25	35.2%
Nanwalek	33	2	6.1%	4	12.1%	1	3.0%	26	78.8%	6	23.1%	9	34.6%	11	42.3%
Port Graham	51	3	5.9%	4	7.8%	1	2.0%	43	84.3%	6	14.0%	13	30.2%	24	55.8%
Seldovia	65	4	6.2%	12	18.5%	5	7.7%	44	67.7%	4	9.1%	24	54.5%	16	36.4%
Kodiak Island															
Kodiak City	105	9	8.6%	32	30.5%	2	1.9%	62	59.0%	15	24.2%	26	41.9%	21	33.9%
Larsen Bay	40	2	5.0%	12	30.0%	1	2.5%	25	62.5%	4	16.0%	11	44.0%	10	40.0%
Ouzinkie	61	12	19.7%	9	14.8%	7	11.5%	33	54.1%	4	12.1%	17	51.5%	12	36.4%
Port Lions	45	5	11.1%	7	15.6%	2	4.4%	31	68.9%	4	12.9%	20	64.5%	7	22.6%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-68. Reasons for Increased Harvest/Use of Fish Other Than Salmon, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	1	4.3%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Cordova	104	22	21.2%	0	0.0%	0	0.0%	1	4.5%	5	22.7%	0	0.0%	10	45.5%	13	59.1%	2	9.1%
Tatitlek	20	1	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Valdez	35	2	5.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	1	50.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	18	17.8%	0	0.0%	2	11.1%	1	5.6%	2	11.1%	0	0.0%	2	11.1%	10	55.6%	3	16.7%
Nanwalek	33	11	33.3%	2	18.2%	2	18.2%	1	9.1%	0	0.0%	0	0.0%	1	9.1%	4	36.4%	0	0.0%
Port Graham	51	8	15.7%	1	12.5%	0	0.0%	2	25.0%	0	0.0%	0	0.0%	2	25.0%	3	37.5%	0	0.0%
Seldovia	65	3	4.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	24	22.9%	0	0.0%	0	0.0%	1	4.2%	3	12.5%	0	0.0%	9	37.5%	13	54.2%	3	12.5%
Larsen Bay	40	6	15.0%	0	0.0%	0	0.0%	0	0.0%	2	33.3%	0	0.0%	2	33.3%	2	33.3%	0	0.0%
Ouzinkie	61	10	16.4%	1	10.0%	0	0.0%	0	0.0%	1	10.0%	0	0.0%	7	70.0%	1	10.0%	2	20.0%
Port Lions	45	5	11.1%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	2	40.0%	2	40.0%	0	0.0%
Arctic																			
Nuiqsut	62	10	16.1%	0	0.0%	4	40.0%	1	10.0%	2	20.0%	0	0.0%	1	10.0%	1	10.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	14	13.5%	0	0.0%	0	0.0%	2	14.3%	0	0.0%	0	0.0%	7	50.0%	6	42.9%	2	14.3%
Tatitlek	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	4	11.4%	0	0.0%	0	0.0%	1	25.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	13	12.9%	0	0.0%	2	15.4%	1	7.7%	1	7.7%	0	0.0%	3	23.1%	9	69.2%	0	0.0%
Nanwalek	33	6	18.2%	0	0.0%	0	0.0%	0	0.0%	2	33.3%	0	0.0%	0	0.0%	3	50.0%	0	0.0%
Port Graham	51	6	11.8%	0	0.0%	1	16.7%	0	0.0%	0	0.0%	0	0.0%	1	16.7%	3	50.0%	0	0.0%
Seldovia	65	4	6.2%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	3	75.0%	1	25.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	15	14.3%	0	0.0%	0	0.0%	1	6.7%	1	6.7%	0	0.0%	5	33.3%	10	66.7%	2	13.3%
Larsen Bay	40	4	10.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	2	50.0%	0	0.0%
Ouzinkie	61	4	6.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	2	50.0%	0	0.0%
Port Lions	45	4	8.9%	0	0.0%	0	0.0%	0	0.0%	3	75.0%	0	0.0%	1	25.0%	2	50.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-69. Reasons for Decreased Harvest/Use of Fish Other Than Salmon, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	8	34.8%	1	12.5%	4	50.0%	0	0.0%	2	25.0%	0	0.0%	4	50.0%	0	0.0%	1	12.5%
Cordova	104	30	28.8%	0	0.0%	8	26.7%	2	6.7%	8	26.7%	0	0.0%	11	36.7%	10	33.3%	2	6.7%
Tatitlek	20	15	75.0%	0	0.0%	14	93.3%	0	0.0%	0	0.0%	0	0.0%	3	20.0%	1	6.7%	2	13.3%
Valdez	35	9	25.7%	0	0.0%	0	0.0%	1	11.1%	4	44.4%	1	11.1%	2	22.2%	5	55.6%	1	11.1%
Lower Cook Inlet																			
Kenai	101	25	24.8%	0	0.0%	2	8.0%	4	16.0%	9	36.0%	0	0.0%	3	12.0%	8	32.0%	1	4.0%
Nanwalek	33	11	33.3%	0	0.0%	0	0.0%	0	0.0%	5	45.5%	1	9.1%	1	9.1%	2	18.2%	0	0.0%
Port Graham	51	18	35.3%	1	5.6%	5	27.8%	1	5.6%	2	11.1%	2	11.1%	2	11.1%	4	22.2%	1	5.6%
Seldovia	65	17	26.2%	0	0.0%	2	11.8%	1	5.9%	4	23.5%	0	0.0%	6	35.3%	4	23.5%	0	0.0%
Kodiak Island																			
Kodiak City	105	23	21.9%	0	0.0%	2	8.7%	0	0.0%	5	21.7%	0	0.0%	10	43.5%	8	34.8%	5	21.7%
Larsen Bay	40	9	22.5%	0	0.0%	1	11.1%	0	0.0%	3	33.3%	0	0.0%	3	33.3%	2	22.2%	0	0.0%
Ouzinkie	61	14	23.0%	0	0.0%	0	0.0%	0	0.0%	4	28.6%	0	0.0%	3	21.4%	5	35.7%	2	14.3%
Port Lions	45	10	22.2%	0	0.0%	1	10.0%	0	0.0%	5	50.0%	1	10.0%	3	30.0%	3	30.0%	0	0.0%
Arctic																			
Nuiqsut	62	17	27.4%	0	0.0%	2	11.8%	4	23.5%	2	11.8%	0	0.0%	4	23.5%	3	17.6%	1	5.9%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	8	34.8%	3	37.5%	4	50.0%	0	0.0%	0	0.0%	0	0.0%	3	37.5%	1	12.5%	1	12.5%
Cordova	104	31	29.8%	2	6.5%	12	38.7%	7	22.6%	6	19.4%	1	3.2%	9	29.0%	8	25.8%	0	0.0%
Tatitlek	20	17	85.0%	0	0.0%	15	88.2%	1	5.9%	0	0.0%	0	0.0%	3	17.6%	0	0.0%	0	0.0%
Valdez	35	5	14.3%	2	40.0%	2	40.0%	1	20.0%	0	0.0%	1	20.0%	0	0.0%	1	20.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	25	24.8%	0	0.0%	4	16.0%	4	16.0%	6	24.0%	0	0.0%	7	28.0%	8	32.0%	2	8.0%
Nanwalek	33	11	33.3%	3	27.3%	4	36.4%	0	0.0%	2	18.2%	1	9.1%	1	9.1%	0	0.0%	0	0.0%
Port Graham	51	24	47.1%	3	12.5%	11	45.8%	2	8.3%	2	8.3%	3	12.5%	3	12.5%	2	8.3%	0	0.0%
Seldovia	65	16	24.6%	1	6.3%	4	25.0%	1	6.3%	2	12.5%	0	0.0%	6	37.5%	2	12.5%	0	0.0%
Kodiak Island																			
Kodiak City	105	21	20.0%	0	0.0%	1	4.8%	0	0.0%	3	14.3%	1	4.8%	10	47.6%	10	47.6%	2	9.5%
Larsen Bay	40	10	25.0%	1	10.0%	1	10.0%	0	0.0%	3	30.0%	0	0.0%	2	20.0%	2	20.0%	0	0.0%
Ouzinkie	61	12	19.7%	2	16.7%	1	8.3%	0	0.0%	1	8.3%	0	0.0%	3	25.0%	5	41.7%	0	0.0%
Port Lions	45	7	15.6%	1	14.3%	0	0.0%	0	0.0%	3	42.9%	1	14.3%	1	14.3%	3	42.9%	2	28.6%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-70. Oil Spill-Related Reasons for Decreased Harvest/Use of Fish Other Than Salmon, 1993 Study Year

Region / Community	Households Surveyed	Reporting Less	Oil Spill-Related Reasons for Decrease Harvest Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
			Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
			No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																				
Chenega Bay	23	8	6	75.0%	3	50.0%	3	50.0%	0	0.0%	0	0.0%	0	0.0%	1	16.7%	0	0.0%	1	16.7%
Cordova	104	31	17	54.8%	1	5.9%	10	58.8%	4	23.5%	2	11.8%	0	0.0%	7	41.2%	3	17.6%	0	0.0%
Tatitlek	20	17	14	82.4%	0	0.0%	14	100.0%	1	7.1%	0	0.0%	0	0.0%	1	7.1%	0	0.0%	0	0.0%
Valdez	35	5	4	80.0%	2	50.0%	2	50.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																				
Kenai	101	25	4	16.0%	0	0.0%	3	75.0%	0	0.0%	1	25.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%
Nanwalek	33	11	5	45.5%	3	60.0%	4	80.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	51	24	12	50.0%	2	16.7%	10	83.3%	0	0.0%	1	8.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	65	16	3	18.8%	1	33.3%	1	33.3%	0	0.0%	1	33.3%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Kodiak Island																				
Kodiak City	105	21	1	4.8%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Larsen Bay	40	10	2	20.0%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	61	12	2	16.7%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	7	1	14.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	######
Arctic																				
Nuiqsut	62	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-71. Household Assessment of Change in Large Land Mammal Uses, 1993 Study Year

Region / Community	Households Surveyed	Change Compared to the Previous Year (1992)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	0	0.0%	3	13.0%	0	0.0%	20	87.0%	0	0.0%	3	15.0%	17	85.0%
Cordova	104	1	1.0%	3	2.9%	1	1.0%	99	95.2%	12	12.1%	47	47.5%	40	40.4%
Tatitlek	20	1	5.0%	1	5.0%	0	0.0%	18	90.0%	1	5.6%	7	38.9%	10	55.6%
Valdez	35	0	0.0%	0	0.0%	8	22.9%	27	77.1%	5	18.5%	14	51.9%	8	29.6%
Lower Cook Inlet															
Kenai	101	0	0.0%	1	1.0%	28	27.7%	72	71.3%	18	25.0%	34	47.2%	20	27.8%
Nanwalek	33	0	0.0%	0	0.0%	2	6.1%	31	93.9%	3	9.7%	16	51.6%	12	38.7%
Port Graham	51	2	3.9%	2	3.9%	2	3.9%	44	86.3%	7	15.9%	25	56.8%	12	27.3%
Seldovia	65	0	0.0%	4	6.2%	22	33.8%	39	60.0%	7	17.9%	17	43.6%	15	38.5%
Kodiak Island															
Kodiak City	105	1	1.0%	11	10.5%	14	13.3%	79	75.2%	20	25.3%	37	46.8%	22	27.8%
Larsen Bay	40	0	0.0%	5	12.5%	2	5.0%	33	82.5%	6	18.2%	17	51.5%	10	30.3%
Ouzinkie	61	1	1.6%	4	6.6%	1	1.6%	55	90.2%	9	16.4%	32	58.2%	14	25.5%
Port Lions	45	0	0.0%	0	0.0%	4	8.9%	41	91.1%	9	22.0%	16	39.0%	16	39.0%
Arctic															
Nuiqsut	62	0	0.0%	5	8.1%	0	0.0%	57	91.9%	6	10.5%	33	57.9%	18	31.6%

Region / Community	Households Surveyed	Change Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	2	8.7%	9	39.1%	0	0.0%	12	52.2%	0	0.0%	2	16.7%	10	83.3%
Cordova	104	2	1.9%	29	27.9%	0	0.0%	73	70.2%	10	13.7%	28	38.4%	35	47.9%
Tatitlek	20	2	10.0%	3	15.0%	0	0.0%	15	75.0%	0	0.0%	4	26.7%	11	73.3%
Valdez	35	0	0.0%	9	25.7%	5	14.3%	21	60.0%	4	19.0%	11	52.4%	6	28.6%
Lower Cook Inlet															
Kenai	101	3	3.0%	19	18.8%	21	20.8%	58	57.4%	11	19.0%	28	48.3%	19	32.8%
Nanwalek	33	3	9.1%	4	12.1%	2	6.1%	24	72.7%	3	12.5%	10	41.7%	11	45.8%
Port Graham	51	6	11.8%	4	7.8%	2	3.9%	38	74.5%	2	5.3%	25	65.8%	11	28.9%
Seldovia	65	3	4.6%	12	18.5%	18	27.7%	32	49.2%	5	15.6%	15	46.9%	12	37.5%
Kodiak Island															
Kodiak City	105	8	7.6%	32	30.5%	11	10.5%	54	51.4%	12	22.2%	15	27.8%	27	50.0%
Larsen Bay	40	0	0.0%	12	30.0%	1	2.5%	27	67.5%	2	7.4%	13	48.1%	12	44.4%
Ouzinkie	61	7	11.5%	9	14.8%	1	1.6%	44	72.1%	1	2.3%	27	61.4%	16	36.4%
Port Lions	45	1	2.2%	7	15.6%	3	6.7%	34	75.6%	7	20.6%	11	32.4%	16	47.1%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-72. *Reasons for Increased Harvest/Use of Large Land Mammals, 1993 Study Year*

Region / Community	Households Surveyed	Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		Compared to the Previous Year (1992)																	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	12	52.2%	0	0.0%	0	0.0%	1	8.3%	0	0.0%	0	0.0%	8	66.7%	1	8.3%	3	25.0%
Cordova	104	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Tatitlek	20	5	25.0%	0	0.0%	0	0.0%	2	40.0%	0	0.0%	0	0.0%	2	40.0%	1	20.0%	0	0.0%
Valdez	35	18	51.4%	0	0.0%	2	11.1%	2	11.1%	0	0.0%	0	0.0%	11	61.1%	3	16.7%	2	11.1%
Lower Cook Inlet																			
Kenai	101	3	3.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%	0	0.0%
Nanwalek	33	7	21.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	5	71.4%	1	14.3%	0	0.0%
Port Graham	51	7	13.7%	0	0.0%	1	14.3%	0	0.0%	1	14.3%	0	0.0%	2	28.6%	1	14.3%	2	28.6%
Seldovia	65	20	30.8%	0	0.0%	0	0.0%	0	0.0%	1	5.0%	0	0.0%	7	35.0%	9	45.0%	5	25.0%
Kodiak Island																			
Kodiak City	105	6	5.7%	0	0.0%	0	0.0%	0	0.0%	3	50.0%	0	0.0%	2	33.3%	1	16.7%	0	0.0%
Larsen Bay	40	9	22.5%	0	0.0%	2	22.2%	0	0.0%	0	0.0%	0	0.0%	3	33.3%	3	33.3%	0	0.0%
Ouzinkie	61	9	14.8%	0	0.0%	4	44.4%	0	0.0%	0	0.0%	0	0.0%	3	33.3%	3	33.3%	1	11.1%
Port Lions	45	6	13.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	33.3%	1	16.7%	0	0.0%
Arctic																			
Nuiqsut	62	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
		Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
Region / Community	Households Surveyed	Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	10	43.5%	0	0.0%	0	0.0%	1	10.0%	0	0.0%	0	0.0%	7	70.0%	2	20.0%	1	10.0%
Cordova	104	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	20	4	20.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%
Valdez	35	11	31.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	7	63.6%	3	27.3%	2	18.2%
Lower Cook Inlet																			
Kenai	101	3	3.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Nanwalek	33	2	6.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%
Port Graham	51	5	9.8%	0	0.0%	1	20.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%	1	20.0%	2	40.0%
Seldovia	65	12	18.5%	0	0.0%	0	0.0%	0	0.0%	1	8.3%	0	0.0%	3	25.0%	9	75.0%	4	33.3%
Kodiak Island																			
Kodiak City	105	2	1.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	1	50.0%
Larsen Bay	40	1	2.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Ouzinkie	61	7	11.5%	1	14.3%	1	14.3%	0	0.0%	3	42.9%	0	0.0%	1	14.3%	4	57.1%	0	0.0%
Port Lions	45	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-73. Reasons for Decreased Harvest/Use of Large Land Mammals, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	17	73.9%	0	0.0%	12	70.6%	5	29.4%	0	0.0%	0	0.0%	4	23.5%	1	5.9%	2	11.8%
Cordova	104	40	38.5%	0	0.0%	5	12.5%	14	35.0%	10	25.0%	1	2.5%	11	27.5%	7	17.5%	8	20.0%
Tatitlek	20	10	50.0%	0	0.0%	3	30.0%	0	0.0%	1	10.0%	0	0.0%	2	20.0%	1	10.0%	3	30.0%
Valdez	35	8	22.9%	0	0.0%	1	12.5%	2	25.0%	1	12.5%	1	12.5%	3	37.5%	1	12.5%	2	25.0%
Lower Cook Inlet																			
Kenai	101	20	19.8%	0	0.0%	0	0.0%	3	15.0%	5	25.0%	1	5.0%	9	45.0%	3	15.0%	2	10.0%
Nanwalek	33	12	36.4%	0	0.0%	3	25.0%	0	0.0%	2	16.7%	0	0.0%	5	41.7%	1	8.3%	2	16.7%
Port Graham	51	12	23.5%	0	0.0%	2	16.7%	1	8.3%	0	0.0%	1	8.3%	4	33.3%	4	33.3%	1	8.3%
Seldovia	65	15	23.1%	0	0.0%	1	6.7%	2	13.3%	2	13.3%	0	0.0%	3	20.0%	6	40.0%	1	6.7%
Kodiak Island																			
Kodiak City	105	22	21.0%	0	0.0%	0	0.0%	1	4.5%	1	4.5%	1	4.5%	12	54.5%	7	31.8%	7	31.8%
Larsen Bay	40	10	25.0%	0	0.0%	0	0.0%	0	0.0%	4	40.0%	0	0.0%	3	30.0%	4	40.0%	1	10.0%
Ouzinkie	61	14	23.0%	0	0.0%	2	14.3%	0	0.0%	2	14.3%	0	0.0%	3	21.4%	7	50.0%	4	28.6%
Port Lions	45	16	35.6%	0	0.0%	1	6.3%	4	25.0%	4	25.0%	0	0.0%	3	18.8%	9	56.3%	0	0.0%
Arctic																			
Nuiqsut	62	18	29.0%	0	0.0%	9	50.0%	0	0.0%	3	16.7%	0	0.0%	3	16.7%	0	0.0%	2	11.1%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	10	43.5%	0	0.0%	7	70.0%	2	20.0%	0	0.0%	0	0.0%	2	20.0%	0	0.0%	1	10.0%
Cordova	104	35	33.7%	0	0.0%	1	2.9%	8	22.9%	9	25.7%	2	5.7%	11	31.4%	9	25.7%	2	5.7%
Tatitlek	20	11	55.0%	0	0.0%	5	45.5%	0	0.0%	1	9.1%	0	0.0%	2	18.2%	0	0.0%	1	9.1%
Valdez	35	6	17.1%	0	0.0%	1	16.7%	2	33.3%	2	33.3%	0	0.0%	2	33.3%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	19	18.8%	0	0.0%	0	0.0%	2	10.5%	5	26.3%	1	5.3%	5	26.3%	7	36.8%	1	5.3%
Nanwalek	33	11	33.3%	2	18.2%	4	36.4%	1	9.1%	1	9.1%	0	0.0%	1	9.1%	2	18.2%	1	9.1%
Port Graham	51	11	21.6%	1	9.1%	2	18.2%	0	0.0%	0	0.0%	2	18.2%	3	27.3%	4	36.4%	1	9.1%
Seldovia	65	12	18.5%	0	0.0%	1	8.3%	1	8.3%	3	25.0%	0	0.0%	3	25.0%	5	41.7%	1	8.3%
Kodiak Island																			
Kodiak City	105	27	25.7%	0	0.0%	1	3.7%	2	7.4%	2	7.4%	4	14.8%	9	33.3%	13	48.1%	3	11.1%
Larsen Bay	40	12	30.0%	1	8.3%	1	8.3%	0	0.0%	2	16.7%	1	8.3%	5	41.7%	2	16.7%	0	0.0%
Ouzinkie	61	16	26.2%	2	12.5%	2	12.5%	0	0.0%	1	6.3%	2	12.5%	1	6.3%	9	56.3%	1	6.3%
Port Lions	45	16	35.6%	0	0.0%	4	25.0%	2	12.5%	2	12.5%	2	12.5%	2	12.5%	7	43.8%	1	6.3%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-74. Oil Spill-Related Reasons for Decreased Harvest/Use of Large Land Mammals, 1993 Study Year

Region / Community	Households Surveyed	Reporting Less	Oil Spill-Related Reasons for Decreased Harvest Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
			Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
			No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																				
Chenega Bay	23	10	7	70.0%	0	0.0%	7	100.0%	2	28.6%	0	0.0%	0	0.0%	1	14.3%	0	0.0%	0	0.0%
Cordova	104	35	7	20.0%	0	0.0%	1	14.3%	2	28.6%	3	42.9%	1	14.3%	1	14.3%	3	42.9%	0	0.0%
Tatitlek	20	11	7	63.6%	0	0.0%	5	71.4%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	0	0.0%	0	0.0%
Valdez	35	6	2	33.3%	0	0.0%	1	50.0%	1	50.0%	1	50.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Lower Cook Inlet																				
Kenai	101	19	2	10.5%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	1	50.0%
Nanwalek	33	11	3	27.3%	2	66.7%	2	66.7%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Port Graham	51	11	3	27.3%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Seldovia	65	12	1	8.3%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																				
Kodiak City	105	27	1	3.7%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	40	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	61	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																				
Nuiqsut	62	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-75. Household Assessment of Change in Small Land Mammal/Furbearer Uses, 1993 Study Year

Region / Community	Households Surveyed	Change Compared to the Previous Year (1992)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	1	4.3%	3	13.0%	15	65.2%	4	17.4%	1	25.0%	2	50.0%	1	25.0%
Cordova	104	1	1.0%	3	2.9%	12	11.5%	88	84.6%	6	6.8%	72	81.8%	10	11.4%
Tatitlek	20	0	0.0%	1	5.0%	14	70.0%	5	25.0%	1	20.0%	4	80.0%	0	0.0%
Valdez	35	0	0.0%	0	0.0%	31	88.6%	4	11.4%	1	25.0%	1	25.0%	2	50.0%
Lower Cook Inlet															
Kenai	101	0	0.0%	1	1.0%	88	87.1%	12	11.9%	2	16.7%	9	75.0%	1	8.3%
Nanwalek	33	0	0.0%	0	0.0%	25	75.8%	8	24.2%	2	25.0%	5	62.5%	1	12.5%
Port Graham	51	1	2.0%	2	3.9%	34	66.7%	14	27.5%	1	7.1%	13	92.9%	0	0.0%
Seldovia	65	0	0.0%	4	6.2%	56	86.2%	5	7.7%	1	20.0%	3	60.0%	1	20.0%
Kodiak Island															
Kodiak City	105	1	1.0%	11	10.5%	81	77.1%	12	11.4%	5	41.7%	3	25.0%	4	33.3%
Larsen Bay	40	0	0.0%	5	12.5%	29	72.5%	6	15.0%	1	16.7%	2	33.3%	3	50.0%
Ouzinkie	61	3	4.9%	4	6.6%	54	88.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	0	0.0%	0	0.0%	36	80.0%	9	20.0%	0	0.0%	3	33.3%	6	66.7%
Arctic															
Nuiqsut	62	0	0.0%	5	8.1%	3	4.8%	54	87.1%	6	11.1%	42	77.8%	6	11.1%

Region / Community	Households Surveyed	Change Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	4	17.4%	9	39.1%	7	30.4%	3	13.0%	0	0.0%	1	33.3%	2	66.7%
Cordova	104	2	1.9%	29	27.9%	9	8.7%	64	61.5%	5	7.8%	50	78.1%	9	14.1%
Tatitlek	20	1	5.0%	3	15.0%	14	70.0%	2	10.0%	0	0.0%	0	0.0%	2	100.0%
Valdez	35	0	0.0%	9	25.7%	22	62.9%	4	11.4%	1	25.0%	1	25.0%	2	50.0%
Lower Cook Inlet															
Kenai	101	3	3.0%	19	18.8%	67	66.3%	12	11.9%	1	8.3%	5	41.7%	6	50.0%
Nanwalek	33	0	0.0%	3	9.1%	24	72.7%	6	18.2%	1	16.7%	3	50.0%	2	33.3%
Port Graham	51	2	3.9%	4	7.8%	32	62.7%	13	25.5%	1	7.7%	12	92.3%	0	0.0%
Seldovia	65	0	0.0%	12	18.5%	49	75.4%	4	6.2%	2	50.0%	2	50.0%	0	0.0%
Kodiak Island															
Kodiak City	105	4	3.8%	32	30.5%	62	59.0%	7	6.7%	3	42.9%	1	14.3%	3	42.9%
Larsen Bay	40	0	0.0%	12	30.0%	25	62.5%	3	7.5%	0	0.0%	1	33.3%	2	66.7%
Ouzinkie	61	14	23.0%	9	14.8%	38	62.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	1	2.2%	7	15.6%	30	66.7%	7	15.6%	1	14.3%	3	42.9%	3	42.9%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-76. Reasons for Increased Harvest/Use of Small Land Mam[illegible]/Furbearers, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	1	4.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	6	5.8%	0	0.0%	0	0.0%	0	0.0%	2	33.3%	0	0.0%	2	33.3%	3	50.0%	1	16.7%
Tatitlek	20	1	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	1	2.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	2	2.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Nanwalek	33	2	6.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%
Port Graham	51	1	2.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Seldovia	65	1	1.5%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	5	4.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	4	80.0%	0	0.0%
Larsen Bay	40	1	2.5%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	61	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	6	13.3%	0	0.0%	2	33.3%	0	0.0%	0	0.0%	0	0.0%	2	33.3%	0	0.0%	1	16.7%
Arctic																			
Nuiqsut	62	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	5	4.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	3	60.0%	1	20.0%
Tatitlek	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	1	2.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Nanwalek	33	1	3.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Port Graham	51	1	2.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Seldovia	65	2	3.1%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	3	2.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	2	66.7%	0	0.0%
Larsen Bay	40	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	61	1	1.6%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-77. Reasons for Decreased Harvest/Use of Small Land Mammals/Furbearers, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	1	4.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%
Cordova	104	10	9.6%	0	0.0%	1	10.0%	0	0.0%	2	20.0%	0	0.0%	1	10.0%	5	50.0%	2	20.0%
Tatitlek	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	2	5.7%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	1	50.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Nanwalek	33	1	3.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	51	1	2.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Seldovia	65	4	6.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	3	75.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	3	2.9%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Larsen Bay	40	6	15.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	6	100.0%	0	0.0%
Ouzinkie	61	6	9.8%	0	0.0%	3	50.0%	0	0.0%	1	16.7%	0	0.0%	1	16.7%	0	0.0%	0	0.0%
Port Lions	45	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																			
Nuiqsut	62	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
		Responses		Conditions/Safely		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	2	8.7%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Cordova	104	9	8.7%	0	0.0%	2	22.2%	0	0.0%	3	33.3%	0	0.0%	0	0.0%	5	55.6%	0	0.0%
Tatitlek	20	2	10.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Valdez	35	2	5.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	6	5.9%	0	0.0%	2	33.3%	0	0.0%	0	0.0%	0	0.0%	1	16.7%	2	33.3%	0	0.0%
Nanwalek	33	2	6.1%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	51	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	65	3	4.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	100.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	2	1.9%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Larsen Bay	40	3	7.5%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%
Ouzinkie	61	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-78. Oil Spill-Related Reasons for Decreased Harvest/Use of Small Land Mammals/Furbearers, 1993 Study Year

Region / Community	Households Surveyed	Reporting Less	Oil Spill-Related Reasons for Decreased Harvest Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
			Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
			No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																				
Chenega Bay	23	2	2	100.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Cordova	104	9	3	33.3%	0	0.0%	1	33.3%	0	0.0%	2	66.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	20	2	2	100.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Valdez	35	2	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																				
Kenai	101	6	1	16.7%	1	100.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	33	2	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	51	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	65	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																				
Kodiak City	105	3	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	40	2	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	61	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	3	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																				
Nuiqsut	62	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-79. Household Assessment of Change in Marine Mammal Uses, 1993 Study Year

Region / Community	Households Surveyed	Change Compared to the Previous Year (1992)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	0	0.0%	3	13.0%	5	21.7%	15	65.2%	1	6.7%	5	33.3%	9	60.0%
Cordova	104	0	0.0%	3	2.9%	23	22.1%	78	75.0%	2	2.6%	75	96.2%	1	1.3%
Tatitlek	20	0	0.0%	1	5.0%	0	0.0%	19	95.0%	1	5.3%	7	36.8%	11	57.9%
Valdez	35	0	0.0%	0	0.0%	31	88.6%	4	11.4%	1	25.0%	1	25.0%	2	50.0%
Lower Cook Inlet															
Kenai	101	0	0.0%	1	1.0%	99	98.0%	1	1.0%	0	0.0%	1	100.0%	0	0.0%
Nanwalek	33	0	0.0%	0	0.0%	2	6.1%	31	93.9%	7	22.6%	11	35.5%	13	41.9%
Port Graham	51	1	2.0%	2	3.9%	4	7.8%	44	86.3%	7	15.9%	21	47.7%	16	36.4%
Seldovia	65	0	0.0%	4	6.2%	52	80.0%	9	13.8%	3	33.3%	4	44.4%	2	22.2%
Kodiak Island															
Kodiak City	105	0	0.0%	11	10.5%	91	86.7%	3	2.9%	0	0.0%	1	33.3%	2	66.7%
Larsen Bay	40	0	0.0%	5	12.5%	18	45.0%	17	42.5%	2	11.8%	7	41.2%	8	47.1%
Ouzinkie	61	3	4.9%	4	6.6%	23	37.7%	31	50.8%	4	12.9%	14	45.2%	13	41.9%
Port Lions	45	1	2.2%	0	0.0%	31	68.9%	13	28.9%	2	15.4%	5	38.5%	6	46.2%
Arctic															
Nuiqsut	62	0	0.0%	5	8.1%	0	0.0%	57	91.9%	9	15.8%	34	59.6%	14	24.6%

Region / Community	Households Surveyed	Change Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	2	8.7%	9	39.1%	1	4.3%	11	47.8%	0	0.0%	1	9.1%	10	90.9%
Cordova	104	1	1.0%	29	27.9%	14	13.5%	60	57.7%	1	1.7%	53	88.3%	6	10.0%
Tatitlek	20	0	0.0%	3	15.0%	0	0.0%	17	85.0%	0	0.0%	1	5.9%	16	94.1%
Valdez	35	0	0.0%	9	25.7%	22	62.9%	4	11.4%	1	25.0%	1	25.0%	2	50.0%
Lower Cook Inlet															
Kenai	101	2	2.0%	19	18.8%	79	78.2%	1	1.0%	1	100.0%	0	0.0%	0	0.0%
Nanwalek	33	3	9.1%	4	12.1%	0	0.0%	26	78.8%	4	15.4%	3	11.5%	19	73.1%
Port Graham	51	6	11.8%	4	7.8%	3	5.9%	38	74.5%	3	7.9%	16	42.1%	19	50.0%
Seldovia	65	0	0.0%	12	18.5%	44	67.7%	9	13.8%	2	22.2%	6	66.7%	1	11.1%
Kodiak Island															
Kodiak City	105	2	1.9%	32	30.5%	67	63.8%	4	3.8%	1	25.0%	0	0.0%	3	75.0%
Larsen Bay	40	0	0.0%	12	30.0%	14	35.0%	14	35.0%	2	14.3%	5	35.7%	7	50.0%
Ouzinkie	61	11	18.0%	9	14.8%	14	23.0%	27	44.3%	2	7.4%	8	29.6%	17	63.0%
Port Lions	45	2	4.4%	7	15.6%	27	60.0%	9	20.0%	3	33.3%	2	22.2%	4	44.4%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-80. Reasons for Increased Harvest/Use of Marine Mammals, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	1	4.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	2	1.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	0	0.0%
Tatitlek	20	1	5.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	1	2.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	1	100.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	33	7	21.2%	0	0.0%	1	14.3%	0	0.0%	1	14.3%	0	0.0%	4	57.1%	1	14.3%	0	0.0%
Port Graham	51	7	13.7%	0	0.0%	2	28.6%	0	0.0%	0	0.0%	0	0.0%	3	42.9%	2	28.6%	0	0.0%
Seldovia	65	3	4.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	2	66.7%	0	0.0%
Kodiak Island																			
Kodiak City	105	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	40	2	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	0	0.0%
Ouzinkie	61	4	6.6%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	4	100.0%	0	0.0%
Port Lions	45	2	4.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%
Arctic																			
Nuiqsut	62	9	14.5%	0	0.0%	4	44.4%	1	11.1%	0	0.0%	0	0.0%	3	33.3%	0	0.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Tatitlek	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	1	2.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	1	100.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Nanwalek	33	4	12.1%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	3	75.0%	0	0.0%
Port Graham	51	3	5.9%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Seldovia	65	2	3.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	1	1.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Larsen Bay	40	2	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Ouzinkie	61	2	3.3%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%
Port Lions	45	3	6.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	100.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-81. Reasons for Decreased Harvest/Use of Marine Mammals, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	9	39.1%	0	0.0%	5	55.6%	1	11.1%	1	11.1%	0	0.0%	3	33.3%	1	11.1%	0	0.0%
Cordova	104	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Tatitlek	20	11	55.0%	1	9.1%	6	54.5%	0	0.0%	0	0.0%	0	0.0%	4	36.4%	2	18.2%	0	0.0%
Valdez	35	2	5.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	1	50.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	13	12.9%	1	7.7%	8	61.5%	0	0.0%	1	7.7%	0	0.0%	4	30.8%	1	7.7%	0	0.0%
Nanwalek	33	16	48.5%	0	0.0%	10	62.5%	2	12.5%	0	0.0%	1	6.3%	2	12.5%	3	18.8%	1	6.3%
Port Graham	51	2	3.9%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Seldovia	65	2	3.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	8	7.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	5	62.5%	3	37.5%	0	0.0%
Larsen Bay	40	13	32.5%	0	0.0%	3	23.1%	0	0.0%	1	7.7%	1	7.7%	4	30.8%	2	15.4%	0	0.0%
Ouzinkie	61	6	9.8%	1	16.7%	0	0.0%	0	0.0%	1	16.7%	0	0.0%	4	66.7%	0	0.0%	1	16.7%
Port Lions	45	14	31.1%	0	0.0%	10	71.4%	2	14.3%	1	7.1%	0	0.0%	1	7.1%	0	0.0%	0	0.0%
Arctic																			
Nuiqsut	62	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	10	43.5%	1	10.0%	8	80.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	6	5.8%	1	16.7%	1	16.7%	0	0.0%	0	0.0%	0	0.0%	4	66.7%	1	16.7%	0	0.0%
Tatitlek	20	16	80.0%	0	0.0%	13	81.3%	0	0.0%	0	0.0%	1	6.3%	3	18.8%	1	6.3%	0	0.0%
Valdez	35	2	5.7%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	19	18.8%	1	5.3%	16	84.2%	0	0.0%	1	5.3%	1	5.3%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	33	19	57.6%	2	10.5%	15	78.9%	1	5.3%	0	0.0%	2	10.5%	3	15.8%	1	5.3%	1	5.3%
Port Graham	51	1	2.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	65	3	4.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	1	33.3%	0	0.0%
Kodiak Island																			
Kodiak City	105	7	6.7%	0	0.0%	1	14.3%	0	0.0%	0	0.0%	0	0.0%	4	57.1%	2	28.6%	0	0.0%
Larsen Bay	40	17	42.5%	0	0.0%	5	29.4%	1	5.9%	1	5.9%	1	5.9%	1	5.9%	6	35.3%	2	11.8%
Ouzinkie	61	4	6.6%	1	25.0%	2	50.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	2	50.0%	0	0.0%
Port Lions	45	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-82. Oil Spill-Realted Reasons for Decreased Harvest/Use of Marine Mammals, 1993 Study Year

Region / Community	Households Surveyed	Reporting Less	Oil Spill-Related Reasons for Decreased Harvest Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
			Responses		Conditions/Safety		Abundance		Access		Time		Health/Age		Economic		Interest/Effort		Luck	
			No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																				
Chenega Bay	23	10	9	90.0%	1	11.1%	7	77.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	6	2	33.3%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Tatitlek	20	16	15	93.8%	0	0.0%	13	86.7%	0	0.0%	0	0.0%	0	0.0%	3	20.0%	1	6.7%	0	0.0%
Valdez	35	2	2	100.0%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Lower Cook Inlet																				
Kenai	101	0	16	0.0%	1	6.3%	15	93.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	33	19	14	73.7%	2	14.3%	12	85.7%	1	7.1%	0	0.0%	1	7.1%	3	21.4%	1	7.1%	0	0.0%
Port Graham	51	19	1	5.3%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	65	1	1	100.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																				
Kodiak City	105	3	4	133.3%	0	0.0%	2	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%
Larsen Bay	40	7	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	61	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																				
Nuiqsut	62	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-83. Household Assessment of Change in Bird Uses, 1993 Study Year

Region / Community	Households Surveyed	Change Compared to the Previous Year (1992)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	1	4.3%	3	13.0%	5	21.7%	14	60.9%	3	21.4%	8	57.1%	3	21.4%
Cordova	104	1	1.0%	3	2.9%	6	5.8%	93	89.4%	8	8.6%	66	71.0%	19	20.4%
Tatitlek	20	2	10.0%	1	5.0%	0	0.0%	17	85.0%	1	5.9%	11	64.7%	5	29.4%
Valdez	35	0	0.0%	0	0.0%	23	65.7%	12	34.3%	1	8.3%	6	50.0%	5	41.7%
Lower Cook Inlet															
Kenai	101	0	0.0%	1	1.0%	66	65.3%	34	33.7%	9	26.5%	12	35.3%	13	38.2%
Nanwalek	33	0	0.0%	0	0.0%	7	21.2%	26	78.8%	3	11.5%	12	46.2%	11	42.3%
Port Graham	51	1	2.0%	2	3.9%	15	29.4%	33	64.7%	3	9.1%	17	51.5%	13	39.4%
Seldovia	65	0	0.0%	4	6.2%	40	61.5%	21	32.3%	1	4.8%	12	57.1%	8	38.1%
Kodiak Island															
Kodiak City	105	1	1.0%	11	10.5%	65	61.9%	28	26.7%	11	39.3%	10	35.7%	7	25.0%
Larsen Bay	40	1	2.5%	5	12.5%	13	32.5%	20	50.0%	5	25.0%	7	35.0%	8	40.0%
Ouzinkie	61	2	3.3%	4	6.6%	5	8.2%	50	82.0%	4	8.0%	28	56.0%	18	36.0%
Port Lions	45	1	2.2%	0	0.0%	12	26.7%	31	68.9%	1	3.2%	16	51.6%	14	45.2%
Arctic															
Nuiqsut	62	1	1.6%	5	8.1%	1	1.6%	55	88.7%	5	9.1%	36	65.5%	14	25.5%

Region / Community	Households Surveyed	Change Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	3	13.0%	9	39.1%	3	13.0%	8	34.8%	0	0.0%	1	12.5%	7	87.5%
Cordova	104	0	0.0%	29	27.9%	4	3.8%	71	68.3%	6	8.5%	46	64.8%	19	26.8%
Tatitlek	20	1	5.0%	3	15.0%	0	0.0%	16	80.0%	0	0.0%	5	31.3%	11	68.8%
Valdez	35	0	0.0%	9	25.7%	15	42.9%	11	31.4%	0	0.0%	6	54.5%	5	45.5%
Lower Cook Inlet															
Kenai	101	2	2.0%	19	18.8%	52	51.5%	28	27.7%	7	25.0%	12	42.9%	9	32.1%
Nanwalek	33	1	3.0%	4	12.1%	7	21.2%	21	63.6%	0	0.0%	6	28.6%	15	71.4%
Port Graham	51	4	7.8%	4	7.8%	13	25.5%	30	58.8%	3	10.0%	9	30.0%	18	60.0%
Seldovia	65	1	1.5%	12	18.5%	32	49.2%	20	30.8%	1	5.0%	9	45.0%	10	50.0%
Kodiak Island															
Kodiak City	105	5	4.8%	32	30.5%	45	42.9%	23	21.9%	8	34.8%	8	34.8%	7	30.4%
Larsen Bay	40	2	5.0%	12	30.0%	10	25.0%	16	40.0%	1	6.3%	6	37.5%	9	56.3%
Ouzinkie	61	7	11.5%	8	13.1%	4	6.6%	41	67.2%	1	2.4%	24	58.5%	16	39.0%
Port Lions	45	4	8.9%	7	15.6%	5	11.1%	29	64.4%	1	3.4%	14	48.3%	14	48.3%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-84. Reasons for Increased Harvest/Use of Birds, 1993 Study Year

Region / Community	Households Surveyed	Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Compared to the Previous Year (1992)																			
Prince William Sound																			
Chenega Bay	23	3	13.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	1	33.3%	1	33.3%
Cordova	104	8	7.7%	0	0.0%	0	0.0%	0	0.0%	1	12.5%	0	0.0%	3	37.5%	4	50.0%	1	12.5%
Tatitlek	20	1	5.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	1	2.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	9	8.9%	0	0.0%	1	11.1%	1	11.1%	0	0.0%	0	0.0%	2	22.2%	5	55.6%	1	11.1%
Nanwalek	33	3	9.1%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Port Graham	51	3	5.9%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Seldovia	65	1	1.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	11	10.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	27.3%	9	81.8%	0	0.0%
Larsen Bay	40	5	12.5%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	2	40.0%	2	40.0%	0	0.0%
Ouzinkie	61	4	6.6%	1	25.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	2	50.0%	0	0.0%	0	0.0%
Port Lions	45	1	2.2%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Arctic																			
Nuiqsut	62	5	8.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%
Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																			
Prince William Sound																			
Chenega Bay	23	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	6	5.8%	0	0.0%	0	0.0%	1	16.7%	0	0.0%	0	0.0%	4	66.7%	2	33.3%	1	16.7%
Tatitlek	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	7	6.9%	0	0.0%	0	0.0%	1	14.3%	1	14.3%	0	0.0%	2	28.6%	4	57.1%	0	0.0%
Nanwalek	33	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	51	3	5.9%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Seldovia	65	1	1.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%
Kodiak Island																			
Kodiak City	105	8	7.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%
Larsen Bay	40	1	2.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Ouzinkie	61	1	1.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	1	2.2%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-85. Reasons for Decreased Harvest/Use of Birds, 1993 Study Year

Region / Community	Households Surveyed	Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		Compared to the Previous Year (1992)																	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	3	13.0%	0	0.0%	2	66.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	1	33.3%
Cordova	104	19	18.3%	0	0.0%	4	21.1%	0	0.0%	8	42.1%	0	0.0%	1	5.3%	11	57.9%	2	10.5%
Tatitlek	20	5	25.0%	0	0.0%	3	60.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	1	20.0%
Valdez	35	5	14.3%	0	0.0%	0	0.0%	1	20.0%	2	40.0%	1	20.0%	0	0.0%	4	80.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	13	12.9%	0	0.0%	3	23.1%	0	0.0%	4	30.8%	0	0.0%	0	0.0%	6	46.2%	0	0.0%
Nanwalek	33	11	33.3%	1	9.1%	5	45.5%	0	0.0%	1	9.1%	0	0.0%	2	18.2%	2	18.2%	0	0.0%
Port Graham	51	13	25.5%	0	0.0%	2	15.4%	0	0.0%	1	7.7%	0	0.0%	5	38.5%	5	38.5%	0	0.0%
Seldovia	65	8	12.3%	0	0.0%	1	12.5%	0	0.0%	2	25.0%	0	0.0%	2	25.0%	2	25.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	7	6.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	2	28.6%	3	42.9%	1	14.3%
Larsen Bay	40	8	20.0%	0	0.0%	0	0.0%	0	0.0%	4	50.0%	0	0.0%	3	37.5%	4	50.0%	0	0.0%
Ouzinkie	61	18	29.5%	0	0.0%	1	5.6%	1	5.6%	4	22.2%	2	11.1%	5	27.8%	13	72.2%	0	0.0%
Port Lions	45	14	31.1%	0	0.0%	1	7.1%	2	14.3%	3	21.4%	1	7.1%	5	35.7%	8	57.1%	0	0.0%
Arctic																			
Nuiqsut	62	14	22.6%	0	0.0%	2	14.3%	2	14.3%	3	21.4%	1	7.1%	4	28.6%	1	7.1%	1	7.1%
		Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
Region / Community	Households Surveyed	Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	7	30.4%	1	14.3%	7	100.0%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	0	0.0%	0	0.0%
Cordova	104	19	18.3%	0	0.0%	4	21.1%	0	0.0%	5	26.3%	2	10.5%	3	15.8%	10	52.6%	0	0.0%
Tatitlek	20	11	55.0%	0	0.0%	11	100.0%	0	0.0%	0	0.0%	0	0.0%	1	9.1%	0	0.0%	0	0.0%
Valdez	35	5	14.3%	0	0.0%	0	0.0%	1	20.0%	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	9	8.9%	0	0.0%	1	11.1%	1	11.1%	3	33.3%	0	0.0%	2	22.2%	1	11.1%	0	0.0%
Nanwalek	33	15	45.5%	2	13.3%	7	46.7%	1	6.7%	1	6.7%	0	0.0%	2	13.3%	3	20.0%	0	0.0%
Port Graham	51	18	35.3%	3	16.7%	10	55.6%	0	0.0%	0	0.0%	0	0.0%	7	38.9%	1	5.6%	0	0.0%
Seldovia	65	10	15.4%	0	0.0%	3	30.0%	0	0.0%	2	20.0%	0	0.0%	2	20.0%	5	50.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	7	6.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	28.6%	2	28.6%	2	28.6%	0	0.0%
Larsen Bay	40	9	22.5%	0	0.0%	0	0.0%	0	0.0%	4	44.4%	1	11.1%	3	33.3%	3	33.3%	0	0.0%
Ouzinkie	61	16	26.2%	1	6.3%	4	25.0%	0	0.0%	3	18.8%	3	18.8%	2	12.5%	8	50.0%	1	6.3%
Port Lions	45	14	31.1%	0	0.0%	1	7.1%	0	0.0%	3	21.4%	1	7.1%	6	42.9%	8	57.1%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-86. Oil Spill-Related Reasons for Decreased Harvest/Use of Birds, 1993 Study Year

Region / Community	Households Surveyed	Reporting Less	Oil Spill-Related Reasons for Decreased Harvest Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
			Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
			No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																				
Chenega Bay	23	7	7	100.0%	1	14.3%	7	100.0%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	0	0.0%	0	0.0%
Cordova	104	19	6	31.6%	0	0.0%	3	50.0%	0	0.0%	2	33.3%	0	0.0%	1	16.7%	2	33.3%	0	0.0%
Tatitlek	20	11	11	100.0%	0	0.0%	11	100.0%	0	0.0%	0	0.0%	0	0.0%	1	9.1%	0	0.0%	0	0.0%
Valdez	35	5	1	20.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																				
Kenai	101	9	11	122.2%	2	18.2%	6	54.5%	0	0.0%	0	0.0%	0	0.0%	2	18.2%	3	27.3%	0	0.0%
Nanwalek	33	15	11	73.3%	2	18.2%	8	72.7%	0	0.0%	0	0.0%	0	0.0%	3	27.3%	0	0.0%	0	0.0%
Port Graham	51	18	1	5.6%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	65	10	3	30.0%	1	33.3%	2	66.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																				
Kodiak City	105	7	1	14.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	40	9	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	61	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																				
Nuiqsut	62	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-87. Household Assessment of Change in Marine Invertebrate Uses, 1993 Study Year

Region / Community	Households Surveyed	Change Compared to the Previous Year (1992)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	1	4.3%	3	13.0%	0	0.0%	19	82.6%	3	15.8%	3	15.8%	13	68.4%
Cordova	104	1	1.0%	3	2.9%	2	1.9%	98	94.2%	9	9.2%	59	60.2%	30	30.6%
Tatitlek	20	2	10.0%	1	5.0%	0	0.0%	17	85.0%	3	17.6%	7	41.2%	7	41.2%
Valdez	35	0	0.0%	0	0.0%	18	51.4%	17	48.6%	4	23.5%	11	64.7%	2	11.8%
Lower Cook Inlet															
Kenai	101	1	1.0%	1	1.0%	40	39.6%	59	58.4%	10	16.9%	31	52.5%	18	30.5%
Nanwalek	33	0	0.0%	0	0.0%	0	0.0%	33	100.0%	8	24.2%	15	45.5%	10	30.3%
Port Graham	51	1	2.0%	2	3.9%	0	0.0%	48	94.1%	2	4.2%	29	60.4%	17	35.4%
Seldovia	65	0	0.0%	4	6.2%	5	7.7%	56	86.2%	10	17.9%	35	62.5%	11	19.6%
Kodiak Island															
Kodiak City	105	2	1.9%	11	10.5%	14	13.3%	78	74.3%	14	17.9%	39	50.0%	25	32.1%
Larsen Bay	40	1	2.5%	5	12.5%	0	0.0%	34	85.0%	6	17.6%	19	55.9%	9	26.5%
Ouzinkie	61	1	1.6%	4	6.6%	1	1.6%	55	90.2%	6	10.9%	38	69.1%	11	20.0%
Port Lions	45	1	2.2%	0	0.0%	2	4.4%	42	93.3%	5	11.9%	22	52.4%	15	35.7%
Arctic															
Nuiqsut	0														

Region / Community	Households Surveyed	Change Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	2	8.7%	9	39.1%	0	0.0%	12	52.2%	0	0.0%	1	8.3%	11	91.7%
Cordova	104	1	1.0%	29	27.9%	1	1.0%	72	69.2%	5	6.9%	31	43.1%	36	50.0%
Tatitlek	20	1	5.0%	3	15.0%	0	0.0%	16	80.0%	0	0.0%	1	6.3%	15	93.8%
Valdez	35	1	2.9%	9	25.7%	11	31.4%	14	40.0%	2	14.3%	7	50.0%	5	35.7%
Lower Cook Inlet															
Kenai	101	3	3.0%	19	18.8%	28	27.7%	51	50.5%	9	17.6%	24	47.1%	18	35.3%
Nanwalek	33	0	0.0%	4	12.1%	0	0.0%	29	87.9%	3	10.3%	5	17.2%	21	72.4%
Port Graham	51	6	11.8%	4	7.8%	0	0.0%	41	80.4%	4	9.8%	13	31.7%	24	58.5%
Seldovia	65	2	3.1%	12	18.5%	5	7.7%	46	70.8%	9	19.6%	22	47.8%	15	32.6%
Kodiak Island															
Kodiak City	105	8	7.6%	32	30.5%	7	6.7%	58	55.2%	14	24.1%	19	32.8%	25	43.1%
Larsen Bay	40	2	5.0%	12	30.0%	0	0.0%	26	65.0%	4	15.4%	13	50.0%	9	34.6%
Ouzinkie	61	7	11.5%	9	14.8%	0	0.0%	45	73.8%	3	6.7%	22	48.9%	20	44.4%
Port Lions	44	1	2.3%	7	15.9%	1	2.3%	35	79.5%	4	11.4%	17	48.6%	14	40.0%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-88. Reasons for Increased Harvest/Use of Marine Invertebrates, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	3	13.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%
Cordova	104	9	8.7%	0	0.0%	3	33.3%	1	11.1%	4	44.4%	0	0.0%	5	55.6%	3	33.3%	0	0.0%
Tatitlek	20	3	15.0%	1	33.3%	0	0.0%	2	66.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	4	11.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	2	50.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	10	9.9%	0	0.0%	0	0.0%	0	0.0%	2	20.0%	0	0.0%	4	40.0%	6	60.0%	0	0.0%
Nanwalek	33	8	24.2%	2	25.0%	2	25.0%	0	0.0%	1	12.5%	0	0.0%	0	0.0%	2	25.0%	0	0.0%
Port Graham	51	2	3.9%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%
Seldovia	65	10	15.4%	0	0.0%	0	0.0%	0	0.0%	1	10.0%	0	0.0%	2	20.0%	7	70.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	14	13.3%	0	0.0%	1	7.1%	0	0.0%	2	14.3%	0	0.0%	9	64.3%	2	14.3%	1	7.1%
Larsen Bay	40	6	15.0%	0	0.0%	0	0.0%	0	0.0%	3	50.0%	0	0.0%	3	50.0%	0	0.0%	0	0.0%
Ouzinkie	61	6	9.8%	1	16.7%	0	0.0%	1	16.7%	1	16.7%	0	0.0%	2	33.3%	2	33.3%	2	33.3%
Port Lions	45	5	11.1%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	1	20.0%	1	20.0%	2	40.0%	0	0.0%
Arctic																			
Nuiqsut	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	5	4.8%	0	0.0%	2	40.0%	1	20.0%	1	20.0%	0	0.0%	2	40.0%	0	0.0%	0	0.0%
Tatitlek	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	2	5.7%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	9	8.9%	0	0.0%	0	0.0%	1	11.1%	2	22.2%	0	0.0%	4	44.4%	8	88.9%	0	0.0%
Nanwalek	33	3	9.1%	1	33.3%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Port Graham	51	4	7.8%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	75.0%	0	0.0%
Seldovia	65	9	13.8%	0	0.0%	0	0.0%	0	0.0%	1	11.1%	0	0.0%	2	22.2%	6	66.7%	0	0.0%
Kodiak Island																			
Kodiak City	105	14	13.3%	0	0.0%	0	0.0%	1	7.1%	2	14.3%	0	0.0%	5	35.7%	6	42.9%	2	14.3%
Larsen Bay	40	4	10.0%	0	0.0%	1	25.0%	1	25.0%	0	0.0%	0	0.0%	1	25.0%	1	25.0%	0	0.0%
Ouzinkie	61	3	4.9%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	2	66.7%	0	0.0%
Port Lions	44	4	9.1%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	0	0.0%	1	25.0%	2	50.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-89. Reasons for Decreased Harvest/Use of Marine Invertebrates, 1993 Study Year

Region / Community	Households Surveyed	Responses No.	Responses Pctg.	Conditions/Safety No.	Conditions/Safety Pctg.	Abundance No.	Abundance Pctg.	Access No.	Access Pctg.	Time No.	Time Pctg.	Heath/Age No.	Heath/Age Pctg.	Economic No.	Economic Pctg.	Interest/Effort No.	Interest/Effort Pctg.	Luck No.	Luck Pctg.
Compared to the Previous Year (1992)																			
Prince William Sound																			
Chenega Bay	23	13	56.5%	1	7.7%	4	30.8%	0	0.0%	2	15.4%	0	0.0%	6	46.2%	2	15.4%	1	7.7%
Cordova	104	30	28.8%	1	3.3%	14	46.7%	3	10.0%	5	16.7%	0	0.0%	11	36.7%	6	20.0%	2	6.7%
Tatitlek	20	7	35.0%	0	0.0%	6	85.7%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	1	14.3%	0	0.0%
Valdez	35	2	5.7%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	18	17.8%	0	0.0%	2	11.1%	3	16.7%	5	27.8%	0	0.0%	2	11.1%	5	27.8%	0	0.0%
Nanwalek	33	10	30.3%	2	20.0%	6	60.0%	2	20.0%	2	20.0%	0	0.0%	2	20.0%	0	0.0%	0	0.0%
Port Graham	51	17	33.3%	3	17.6%	7	41.2%	1	5.9%	0	0.0%	3	17.6%	3	17.6%	2	11.8%	0	0.0%
Seldovia	65	11	16.9%	0	0.0%	6	54.5%	3	27.3%	2	18.2%	0	0.0%	3	27.3%	2	18.2%	0	0.0%
Kodiak Island																			
Kodiak City	105	25	23.8%	2	8.0%	2	8.0%	0	0.0%	3	12.0%	2	8.0%	13	52.0%	8	32.0%	1	4.0%
Larsen Bay	40	9	22.5%	0	0.0%	2	22.2%	0	0.0%	3	33.3%	0	0.0%	3	33.3%	2	22.2%	0	0.0%
Ouzinkie	61	11	18.0%	0	0.0%	6	54.5%	0	0.0%	0	0.0%	0	0.0%	3	27.3%	4	36.4%	0	0.0%
Port Lions	45	15	33.3%	0	0.0%	8	53.3%	2	13.3%	4	26.7%	1	6.7%	1	6.7%	7	46.7%	0	0.0%
Arctic																			
Nuiqsut	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																			
Prince William Sound																			
Chenega Bay	23	11	47.8%	7	63.6%	10	90.9%	1	9.1%	0	0.0%	0	0.0%	1	9.1%	1	9.1%	0	0.0%
Cordova	104	36	34.6%	4	11.1%	18	50.0%	11	30.6%	3	8.3%	0	0.0%	9	25.0%	1	2.8%	0	0.0%
Tatitlek	20	15	75.0%	1	6.7%	12	80.0%	0	0.0%	0	0.0%	0	0.0%	1	6.7%	1	6.7%	0	0.0%
Valdez	35	5	14.3%	0	0.0%	3	60.0%	0	0.0%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	1	20.0%
Lower Cook Inlet																			
Kenai	101	18	17.8%	1	5.6%	3	16.7%	2	11.1%	4	22.2%	0	0.0%	4	22.2%	5	27.8%	0	0.0%
Nanwalek	33	21	63.6%	6	28.6%	10	47.6%	2	9.5%	1	4.8%	1	4.8%	2	9.5%	3	14.3%	0	0.0%
Port Graham	51	24	47.1%	3	12.5%	14	58.3%	0	0.0%	1	4.2%	4	16.7%	3	12.5%	1	4.2%	0	0.0%
Seldovia	65	15	23.1%	0	0.0%	6	40.0%	5	33.3%	3	20.0%	0	0.0%	4	26.7%	2	13.3%	0	0.0%
Kodiak Island																			
Kodiak City	105	25	23.8%	2	8.0%	6	24.0%	3	12.0%	1	4.0%	4	16.0%	13	52.0%	8	32.0%	1	4.0%
Larsen Bay	40	9	22.5%	2	22.2%	3	33.3%	1	11.1%	0	0.0%	0	0.0%	5	55.6%	1	11.1%	0	0.0%
Ouzinkie	61	20	32.8%	3	15.0%	12	60.0%	0	0.0%	0	0.0%	1	5.0%	1	5.0%	7	35.0%	0	0.0%
Port Lions	44	14	31.8%	2	14.3%	9	64.3%	0	0.0%	2	14.3%	0	0.0%	0	0.0%	4	28.6%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-90. Oil Spill-Related Reasons for Decreased Harvest/Use of Marine Invertebrates, 1993 Study Year

Region / Community	Households Surveyed	Reporting Less	Oil Spill-Related Reasons for Decreased Harvest Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
			Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
			No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																				
Chenega Bay	23	11	10	90.9%	7	70.0%	9	90.0%	1	10.0%	0	0.0%	0	0.0%	1	10.0%	1	10.0%	0	0.0%
Cordova	104	36	23	63.9%	3	13.0%	11	47.8%	8	34.8%	1	4.3%	0	0.0%	5	21.7%	0	0.0%	0	0.0%
Tatitlek	20	15	12	80.0%	1	8.3%	11	91.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	8.3%	0	0.0%
Valdez	35	5	3	60.0%	0	0.0%	3	100.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Lower Cook Inlet																				
Kenai	101	18	4	22.2%	1	25.0%	3	75.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%
Nanwalek	33	21	13	61.9%	5	38.5%	10	76.9%	1	7.7%	0	0.0%	0	0.0%	0	0.0%	1	7.7%	0	0.0%
Port Graham	51	24	14	58.3%	3	21.4%	10	71.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	7.1%	0	0.0%
Seldovia	65	15	3	20.0%	0	0.0%	2	66.7%	0	0.0%	1	33.3%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Kodiak Island																				
Kodiak City	105	25	1	4.0%	1	100.0%	1	100.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	40	9	2	22.2%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Ouzinkie	61	20	9	45.0%	3	33.3%	6	66.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	11.1%	0	0.0%
Port Lions	45	14	3	21.4%	2	66.7%	3	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																				
Nuiqsut	0	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-91. Household Assessment of Change in Plant Uses, 1993 Study Year

Region / Community	Households Surveyed	Change Compared to the Previous Year (1992)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	1	4.3%	3	13.0%	0	0.0%	19	82.6%	5	26.3%	10	52.6%	4	21.1%
Cordova	104	1	1.0%	4	3.8%	0	0.0%	99	95.2%	37	37.4%	49	49.5%	13	13.1%
Tatitlek	20	0	0.0%	1	5.0%	0	0.0%	19	95.0%	3	15.8%	14	73.7%	2	10.5%
Valdez	35	0	0.0%	0	0.0%	10	28.6%	25	71.4%	1	4.0%	17	68.0%	7	28.0%
Lower Cook Inlet															
Kenai	101	0	0.0%	1	1.0%	27	26.7%	73	72.3%	12	16.4%	38	52.1%	23	31.5%
Nanwalek	33	0	0.0%	0	0.0%	0	0.0%	33	100.0%	8	24.2%	19	57.6%	6	18.2%
Port Graham	51	1	2.0%	2	3.9%	0	0.0%	48	94.1%	16	33.3%	26	54.2%	6	12.5%
Seldovia	65	0	0.0%	4	6.2%	2	3.1%	59	90.8%	23	39.0%	30	50.8%	6	10.2%
Kodiak Island															
Kodiak City	105	1	1.0%	11	10.5%	13	12.4%	80	76.2%	30	37.5%	36	45.0%	14	17.5%
Larsen Bay	40	0	0.0%	5	12.5%	2	5.0%	33	82.5%	6	18.2%	19	57.6%	8	24.2%
Ouzinkie	61	4	6.6%	4	6.6%	0	0.0%	53	86.9%	22	41.5%	25	47.2%	6	11.3%
Port Lions	45	0	0.0%	0	0.0%	0	0.0%	45	100.0%	13	28.9%	24	53.3%	8	17.8%
Arctic															
Nuiqsut	62	0	0.0%	5	8.1%	0	0.0%	57	91.9%	8	14.0%	42	73.7%	7	12.3%

Region / Community	Households Surveyed	Change Compared to the Year Before the Exxon Valdez Oil Spill (1988)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	3	13.0%	9	39.1%	0	0.0%	11	47.8%	1	9.1%	6	54.5%	4	36.4%
Cordova	104	1	1.0%	28	26.9%	1	1.0%	74	71.2%	23	31.1%	36	48.6%	15	20.3%
Tatitlek	20	0	0.0%	3	15.0%	0	0.0%	17	85.0%	2	11.8%	15	88.2%	0	0.0%
Valdez	35	0	0.0%	9	25.7%	7	20.0%	19	54.3%	0	0.0%	13	68.4%	6	31.6%
Lower Cook Inlet															
Kenai	101	2	2.0%	19	18.8%	21	20.8%	59	58.4%	6	10.2%	33	55.9%	20	33.9%
Nanwalek	33	1	3.0%	4	12.1%	0	0.0%	28	84.8%	3	10.7%	19	67.9%	6	21.4%
Port Graham	51	6	11.8%	4	7.8%	0	0.0%	41	80.4%	6	14.6%	25	61.0%	10	24.4%
Seldovia	65	1	1.5%	12	18.5%	3	4.6%	49	75.4%	15	30.6%	30	61.2%	4	8.2%
Kodiak Island															
Kodiak City	105	9	8.6%	32	30.5%	12	11.4%	52	49.5%	13	25.0%	23	44.2%	16	30.8%
Larsen Bay	40	0	0.0%	12	30.0%	0	0.0%	28	70.0%	2	7.1%	19	67.9%	7	25.0%
Ouzinkie	61	7	11.5%	9	14.8%	0	0.0%	45	73.8%	7	15.6%	29	64.4%	9	20.0%
Port Lions	45	1	2.2%	7	15.6%	0	0.0%	37	82.2%	7	18.9%	23	62.2%	7	18.9%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-92. Reasons for Increased Harvest/Use of Plants, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	5	21.7%	0	0.0%	4	80.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	37	35.6%	0	0.0%	16	43.2%	5	13.5%	1	2.7%	0	0.0%	8	21.6%	16	43.2%	0	0.0%
Tatitlek	20	3	15.0%	0	0.0%	3	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	1	2.9%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	12	11.9%	0	0.0%	3	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	8	66.7%	1	8.3%
Nanwalek	33	8	24.2%	1	12.5%	6	75.0%	1	12.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	51	16	31.4%	0	0.0%	9	56.3%	5	31.3%	0	0.0%	0	0.0%	1	6.3%	3	18.8%	0	0.0%
Seldovia	65	23	35.4%	0	0.0%	18	78.3%	3	13.0%	0	0.0%	0	0.0%	1	4.3%	7	30.4%	0	0.0%
Kodiak Island																			
Kodiak City	105	30	28.6%	1	3.3%	10	33.3%	1	3.3%	3	10.0%	0	0.0%	2	6.7%	20	66.7%	1	3.3%
Larsen Bay	40	6	15.0%	0	0.0%	2	33.3%	0	0.0%	3	50.0%	0	0.0%	0	0.0%	1	16.7%	0	0.0%
Ouzinkie	61	22	36.1%	0	0.0%	13	59.1%	0	0.0%	1	4.5%	0	0.0%	2	9.1%	8	36.4%	1	4.5%
Port Lions	45	13	28.9%	0	0.0%	6	46.2%	1	7.7%	1	7.7%	1	7.7%	3	23.1%	3	23.1%	0	0.0%
Arctic																			
Nuiqsut	62	8	12.9%	0	0.0%	2	25.0%	1	12.5%	1	12.5%	0	0.0%	0	0.0%	2	25.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	1	4.3%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	23	22.1%	0	0.0%	7	30.4%	5	21.7%	2	8.7%	0	0.0%	8	34.8%	5	21.7%	0	0.0%
Tatitlek	20	2	10.0%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	6	5.9%	0	0.0%	0	0.0%	1	16.7%	1	16.7%	0	0.0%	0	0.0%	6	100.0%	0	0.0%
Nanwalek	33	3	9.1%	0	0.0%	1	33.3%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	1	33.3%	0	0.0%
Port Graham	51	6	11.8%	0	0.0%	1	16.7%	1	16.7%	0	0.0%	0	0.0%	0	0.0%	4	66.7%	0	0.0%
Seldovia	65	15	23.1%	0	0.0%	12	80.0%	3	20.0%	0	0.0%	0	0.0%	2	13.3%	1	6.7%	0	0.0%
Kodiak Island																			
Kodiak City	105	13	12.4%	0	0.0%	3	23.1%	0	0.0%	1	7.7%	0	0.0%	1	7.7%	12	92.3%	1	7.7%
Larsen Bay	40	2	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	0	0.0%
Ouzinkie	61	7	11.5%	0	0.0%	3	42.9%	0	0.0%	1	14.3%	0	0.0%	1	14.3%	3	42.9%	0	0.0%
Port Lions	45	7	15.6%	0	0.0%	3	42.9%	0	0.0%	2	28.6%	0	0.0%	1	14.3%	3	42.9%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-93. Reasons for Decreased Harvest/Use of Plants, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	4	17.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	2	50.0%	0	0.0%
Cordova	104	13	12.5%	0	0.0%	1	7.7%	1	7.7%	2	15.4%	0	0.0%	2	15.4%	8	61.5%	0	0.0%
Tatitlek	20	2	10.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%
Valdez	35	7	20.0%	0	0.0%	0	0.0%	0	0.0%	3	42.9%	1	14.3%	1	14.3%	5	71.4%	0	0.0%
Lower Cook Inlet																			
Kenai	101	23	22.8%	0	0.0%	7	30.4%	1	4.3%	6	26.1%	2	8.7%	1	4.3%	8	34.8%	0	0.0%
Nanwalek	33	6	18.2%	0	0.0%	1	16.7%	2	33.3%	1	16.7%	0	0.0%	1	16.7%	1	16.7%	0	0.0%
Port Graham	51	6	11.8%	0	0.0%	2	33.3%	0	0.0%	0	0.0%	2	33.3%	0	0.0%	3	50.0%	0	0.0%
Seldovia	65	6	9.2%	0	0.0%	0	0.0%	0	0.0%	1	16.7%	0	0.0%	1	16.7%	3	50.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	14	13.3%	0	0.0%	1	7.1%	0	0.0%	4	28.6%	2	14.3%	2	14.3%	9	64.3%	0	0.0%
Larsen Bay	40	8	20.0%	0	0.0%	1	12.5%	1	12.5%	3	37.5%	1	12.5%	3	37.5%	1	12.5%	0	0.0%
Ouzinkie	61	6	9.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	16.7%	5	83.3%	0	0.0%
Port Lions	45	8	17.8%	0	0.0%	2	25.0%	1	12.5%	4	50.0%	0	0.0%	1	12.5%	2	25.0%	0	0.0%
Arctic																			
Nuiqsut	62	7	11.3%	0	0.0%	1	14.3%	1	14.3%	2	28.6%	1	14.3%	1	14.3%	0	0.0%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	4	17.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	75.0%	0	0.0%	1	25.0%
Cordova	104	15	14.4%	0	0.0%	1	6.7%	1	6.7%	3	20.0%	0	0.0%	2	13.3%	11	73.3%	0	0.0%
Tatitlek	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	6	17.1%	0	0.0%	0	0.0%	0	0.0%	2	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	20	19.8%	0	0.0%	3	15.0%	1	5.0%	7	35.0%	3	15.0%	0	0.0%	9	45.0%	0	0.0%
Nanwalek	33	6	18.2%	2	33.3%	0	0.0%	1	16.7%	1	16.7%	0	0.0%	0	0.0%	1	16.7%	0	0.0%
Port Graham	51	10	19.6%	2	20.0%	2	20.0%	0	0.0%	1	10.0%	2	20.0%	1	10.0%	1	10.0%	0	0.0%
Seldovia	65	4	6.2%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	0	0.0%	1	25.0%	2	50.0%	0	0.0%
Kodiak Island																			
Kodiak City	105	16	15.2%	0	0.0%	2	12.5%	0	0.0%	1	6.3%	1	6.3%	3	18.8%	10	62.5%	2	12.5%
Larsen Bay	40	7	17.5%	0	0.0%	0	0.0%	0	0.0%	3	42.9%	1	14.3%	3	42.9%	1	14.3%	0	0.0%
Ouzinkie	61	9	14.8%	0	0.0%	1	11.1%	0	0.0%	1	11.1%	1	11.1%	1	11.1%	3	33.3%	2	22.2%
Port Lions	45	7	15.6%	0	0.0%	1	14.3%	1	14.3%	5	71.4%	0	0.0%	2	28.6%	1	14.3%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-94. Oil Spill-Related Reasons for Decreased Harvest/Use of Plants, 1993 Study Year

Region / Community	Households Surveyed	Reporting Less	Oil Spill-Related Reasons for Decreased Harvest Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)															
			Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
			No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																				
Chenega Bay	23	4	3	75.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	1	33.3%	1	33.3%	0	0.0%
Cordova	104	15	1	6.7%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Tatitlek	20	0	1	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Valdez	35	6	2	33.3%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lower Cook Inlet																				
Kenai	101	20	3	15.0%	2	66.7%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	33	6	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Graham	51	10	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Seldovia	65	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak Island																				
Kodiak City	105	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	40	7	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	61	9	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Port Lions	45	7	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																				
Nuiqsut	62	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-95. Household Assessment of Change in Overall Wild Resource Uses, 1993 Study Year

Region / Community	Households Surveyed	Change Compared to the Previous Year (1992)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	0	0.0%	3	13.0%	0	0.0%	20	87.0%	1	5.0%	3	15.0%	16	80.0%
Cordova	104	1	1.0%	3	2.9%	0	0.0%	100	96.2%	23	23.0%	42	42.0%	35	35.0%
Tatitlek	20	0	0.0%	1	5.0%	0	0.0%	19	95.0%	2	10.5%	5	26.3%	12	63.2%
Valdez	35	0	0.0%	0	0.0%	0	0.0%	35	100.0%	2	5.7%	26	74.3%	7	20.0%
Lower Cook Inlet															
Kenai	101	2	2.0%	1	1.0%	3	3.0%	95	94.1%	21	22.1%	48	50.5%	26	27.4%
Nanwalek	33	0	0.0%	0	0.0%	0	0.0%	33	100.0%	14	42.4%	6	18.2%	13	39.4%
Port Graham	51	1	2.0%	2	3.9%	0	0.0%	48	94.1%	11	22.9%	22	45.8%	15	31.3%
Seldovia	65	0	0.0%	4	6.2%	1	1.5%	60	92.3%	12	20.0%	34	56.7%	14	23.3%
Kodiak Island															
Kodiak City	105	1	1.0%	11	10.5%	0	0.0%	93	88.6%	29	31.2%	40	43.0%	24	25.8%
Larsen Bay	40	0	0.0%	5	12.5%	0	0.0%	35	87.5%	8	22.9%	18	51.4%	9	25.7%
Ouzinkie	61	3	4.9%	4	6.6%	0	0.0%	54	88.5%	12	22.2%	28	51.9%	14	25.9%
Port Lions	45	0	0.0%	0	0.0%	0	0.0%	45	100.0%	14	31.1%	24	53.3%	7	15.6%
Arctic															
Nuiqsut	62	0	0.0%	5	8.1%	0	0.0%	57	91.9%	9	15.8%	34	59.6%	14	24.6%

Region / Community	Households Surveyed	Change Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)													
		No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound															
Chenega Bay	23	2	8.7%	9	39.1%	0	0.0%	12	52.2%	1	8.3%	0	0.0%	11	91.7%
Cordova	104	2	1.9%	29	27.9%	0	0.0%	73	70.2%	17	23.3%	22	30.1%	34	46.6%
Tatitlek	20	0	0.0%	3	15.0%	0	0.0%	17	85.0%	0	0.0%	0	0.0%	17	100.0%
Valdez	35	0	0.0%	9	25.7%	0	0.0%	26	74.3%	4	15.4%	15	57.7%	7	26.9%
Lower Cook Inlet															
Kenai	101	4	4.0%	19	18.8%	0	0.0%	78	77.2%	14	17.9%	36	46.2%	28	35.9%
Nanwalek	33	0	0.0%	4	12.1%	1	3.0%	28	84.8%	5	17.9%	4	14.3%	19	67.9%
Port Graham	51	4	7.8%	4	7.8%	0	0.0%	43	84.3%	5	11.6%	17	39.5%	21	48.8%
Seldovia	65	3	4.6%	12	18.5%	2	3.1%	48	73.8%	9	18.8%	25	52.1%	14	29.2%
Kodiak Island															
Kodiak City	105	8	7.6%	32	30.5%	0	0.0%	65	61.9%	14	21.5%	19	29.2%	32	49.2%
Larsen Bay	40	0	0.0%	12	30.0%	0	0.0%	28	70.0%	4	14.3%	10	35.7%	14	50.0%
Ouzinkie	61	8	13.1%	9	14.8%	0	0.0%	44	72.1%	4	9.1%	16	36.4%	24	54.5%
Port Lions	45	0	0.0%	7	15.6%	0	0.0%	38	84.4%	6	15.8%	18	47.4%	14	36.8%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-96. Reasons for Increased Overall Wild Resource Harvest/Use, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	1	4.3%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Cordova	104	23	22.1%	0	0.0%	3	13.0%	4	17.4%	4	17.4%	0	0.0%	8	34.8%	11	47.8%	2	8.7%
Tatitlek	20	2	10.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%
Valdez	35	2	5.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%	1	50.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	21	20.8%	0	0.0%	3	14.3%	3	14.3%	4	19.0%	1	4.8%	6	28.6%	13	61.9%	2	9.5%
Nanwalek	33	14	42.4%	1	7.1%	6	42.9%	1	7.1%	1	7.1%	0	0.0%	3	21.4%	5	35.7%	0	0.0%
Port Graham	51	11	21.6%	0	0.0%	2	18.2%	1	9.1%	0	0.0%	1	9.1%	3	27.3%	5	45.5%	0	0.0%
Seldovia	65	12	18.5%	0	0.0%	4	33.3%	3	25.0%	0	0.0%	0	0.0%	4	33.3%	6	50.0%	1	8.3%
Kodiak Island																			
Kodiak City	105	29	27.6%	0	0.0%	1	3.4%	1	3.4%	4	13.8%	0	0.0%	10	34.5%	19	65.5%	4	13.8%
Larsen Bay	40	8	20.0%	0	0.0%	0	0.0%	0	0.0%	4	50.0%	0	0.0%	3	37.5%	2	25.0%	0	0.0%
Ouzinkie	61	12	19.7%	0	0.0%	1	8.3%	0	0.0%	1	8.3%	0	0.0%	5	41.7%	7	58.3%	2	16.7%
Port Lions	45	14	31.1%	0	0.0%	1	7.1%	0	0.0%	2	14.3%	1	7.1%	8	57.1%	6	42.9%	0	0.0%
Arctic																			
Nuiqsut	62	9	14.5%	0	0.0%	3	33.3%	1	11.1%	1	11.1%	0	0.0%	1	11.1%	1	11.1%	1	11.1%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	1	4.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
Cordova	104	17	16.3%	0	0.0%	1	5.9%	3	17.6%	1	5.9%	0	0.0%	12	70.6%	4	23.5%	0	0.0%
Tatitlek	20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Valdez	35	4	11.4%	0	0.0%	1	25.0%	0	0.0%	1	25.0%	0	0.0%	1	25.0%	2	50.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	14	13.9%	0	0.0%	0	0.0%	1	7.1%	6	42.9%	0	0.0%	6	42.9%	9	64.3%	1	7.1%
Nanwalek	33	5	15.2%	0	0.0%	1	20.0%	0	0.0%	2	40.0%	0	0.0%	2	40.0%	2	40.0%	0	0.0%
Port Graham	51	5	9.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	40.0%	3	60.0%	0	0.0%
Seldovia	65	9	13.8%	1	11.1%	2	22.2%	0	0.0%	2	22.2%	0	0.0%	2	22.2%	5	55.6%	0	0.0%
Kodiak Island																			
Kodiak City	105	14	13.3%	0	0.0%	0	0.0%	0	0.0%	2	14.3%	0	0.0%	6	42.9%	9	64.3%	2	14.3%
Larsen Bay	40	4	10.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	50.0%	3	75.0%	0	0.0%
Ouzinkie	61	4	6.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%	2	50.0%	0	0.0%
Port Lions	45	6	13.3%	0	0.0%	0	0.0%	0	0.0%	3	50.0%	0	0.0%	2	33.3%	3	50.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-97. Reasons for Decreased Overall Wild Resource Harvest/Use, 1993 Study Year

Region / Community	Households Surveyed	Compared to the Previous Year (1992)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	16	69.6%	0	0.0%	9	56.3%	3	18.8%	5	31.3%	0	0.0%	4	25.0%	3	18.8%	0	0.0%
Cordova	104	35	33.7%	0	0.0%	2	5.7%	6	17.1%	14	40.0%	1	2.9%	5	14.3%	11	31.4%	7	20.0%
Tatitlek	20	12	60.0%	0	0.0%	8	66.7%	0	0.0%	0	0.0%	0	0.0%	2	16.7%	4	33.3%	3	25.0%
Valdez	35	7	20.0%	0	0.0%	0	0.0%	1	14.3%	3	42.9%	1	14.3%	1	14.3%	1	14.3%	1	14.3%
Lower Cook Inlet																			
Kenai	101	26	25.7%	0	0.0%	2	7.7%	6	23.1%	13	50.0%	2	7.7%	0	0.0%	8	30.8%	0	0.0%
Nanwalek	33	13	39.4%	1	7.7%	2	15.4%	1	7.7%	5	38.5%	2	15.4%	3	23.1%	1	7.7%	0	0.0%
Port Graham	51	15	29.4%	2	13.3%	3	20.0%	0	0.0%	3	20.0%	2	13.3%	4	26.7%	4	26.7%	1	6.7%
Seldovia	65	14	21.5%	0	0.0%	6	42.9%	3	21.4%	2	14.3%	0	0.0%	3	21.4%	4	28.6%	1	7.1%
Kodiak Island																			
Kodiak City	105	24	22.9%	0	0.0%	1	4.2%	2	8.3%	5	20.8%	2	8.3%	8	33.3%	13	54.2%	0	0.0%
Larsen Bay	40	9	22.5%	0	0.0%	0	0.0%	0	0.0%	7	77.8%	0	0.0%	4	44.4%	1	11.1%	0	0.0%
Ouzinkie	61	14	23.0%	0	0.0%	1	7.1%	0	0.0%	6	42.9%	1	7.1%	2	14.3%	7	50.0%	0	0.0%
Port Lions	45	7	15.6%	0	0.0%	1	14.3%	1	14.3%	3	42.9%	2	28.6%	0	0.0%	1	14.3%	0	0.0%
Arctic																			
Nuiqsut	62	14	22.6%	0	0.0%	3	21.4%	2	14.3%	3	21.4%	1	7.1%	5	35.7%	1	7.1%	0	0.0%

Region / Community	Households Surveyed	Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
		Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																			
Chenega Bay	23	11	47.8%	1	9.1%	9	81.8%	0	0.0%	0	0.0%	0	0.0%	2	18.2%	0	0.0%	0	0.0%
Cordova	104	34	32.7%	3	8.8%	9	26.5%	7	20.6%	9	26.5%	2	5.9%	10	29.4%	10	29.4%	2	5.9%
Tatitlek	20	17	85.0%	0	0.0%	15	88.2%	0	0.0%	0	0.0%	0	0.0%	4	23.5%	3	17.6%	0	0.0%
Valdez	35	7	20.0%	0	0.0%	1	14.3%	1	14.3%	1	14.3%	0	0.0%	1	14.3%	0	0.0%	0	0.0%
Lower Cook Inlet																			
Kenai	101	28	27.7%	0	0.0%	3	10.7%	7	25.0%	11	39.3%	2	7.1%	4	14.3%	5	17.9%	1	3.6%
Nanwalek	33	19	57.6%	4	21.1%	10	52.6%	0	0.0%	2	10.5%	1	5.3%	3	15.8%	2	10.5%	0	0.0%
Port Graham	51	21	41.2%	4	19.0%	12	57.1%	1	4.8%	1	4.8%	2	9.5%	4	19.0%	2	9.5%	1	4.8%
Seldovia	65	14	21.5%	0	0.0%	5	35.7%	2	14.3%	2	14.3%	0	0.0%	4	28.6%	5	35.7%	0	0.0%
Kodiak Island																			
Kodiak City	105	32	30.5%	0	0.0%	3	9.4%	3	9.4%	4	12.5%	5	15.6%	10	31.3%	15	46.9%	1	3.1%
Larsen Bay	40	14	35.0%	2	14.3%	1	7.1%	0	0.0%	3	21.4%	1	7.1%	6	42.9%	3	21.4%	0	0.0%
Ouzinkie	61	24	39.3%	3	12.5%	9	37.5%	0	0.0%	6	25.0%	2	8.3%	2	8.3%	8	33.3%	1	4.2%
Port Lions	45	14	31.1%	1	7.1%	2	14.3%	0	0.0%	5	35.7%	3	21.4%	3	21.4%	1	7.1%	2	14.3%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-98. Oil Spill-Related Reasons for Decreased Overall Wild Resource Harvest/Use, 1993 Study Year

Region / Community	Households Surveyed	Reporting Less	Oil Spill-Related Reasons for Decreased Harvest Compared to the Year Before the *Exxon Valdez* Oil Spill (1988)																	
			Responses		Conditions/Safety		Abundance		Access		Time		Heath/Age		Economic		Interest/Effort		Luck	
			No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Prince William Sound																				
Chenega Bay	23	11	9	81.8%	1	11.1%	7	77.8%	0	0.0%	0	0.0%	0	0.0%	2	22.2%	0	0.0%	0	0.0%
Cordova	104	34	19	55.9%	2	10.5%	7	36.8%	6	31.6%	4	21.1%	1	5.3%	5	26.3%	3	15.8%	1	5.3%
Tatitlek	20	17	16	94.1%	0	0.0%	15	93.8%	0	0.0%	0	0.0%	0	0.0%	4	25.0%	2	12.5%	0	0.0%
Valdez	35	7	3	42.9%	0	0.0%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%
Lower Cook Inlet																				
Kenai	101	28	2	7.1%	0	0.0%	2	100.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nanwalek	33	19	12	63.2%	4	33.3%	9	75.0%	0	0.0%	0	0.0%	0	0.0%	1	8.3%	1	8.3%	0	0.0%
Port Graham	51	21	12	57.1%	4	33.3%	10	83.3%	0	0.0%	0	0.0%	0	0.0%	3	25.0%	0	0.0%	0	0.0%
Seldovia	65	14	5	35.7%	0	0.0%	4	80.0%	1	20.0%	1	20.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%
Kodiak Island																				
Kodiak City	105	32	1	3.1%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%
Larsen Bay	40	14	3	21.4%	2	66.7%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Ouzinkie	61	24	10	41.7%	3	30.0%	7	70.0%	0	0.0%	0	0.0%	1	10.0%	0	0.0%	2	20.0%	1	10.0%
Port Lions	45	14	2	14.3%	1	50.0%	1	50.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Arctic																				
Nuiqsut	62	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-99. Household Assessment of Change in Steller Sea Lion Population, 1991 Study Year

Region / Community	Households Surveyed	No Response		Not in Community		No Previous Use		Valid Responses		More		Same		Less	
		No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.	No.	Pctg.
Kodiak Island															
Karluk	13	6	46.2%	0	0.0%	0	0.0%	7	53.8%	2	28.6%	2	28.6%	3	42.9%
Kodiak City	207	41	19.8%	2	1.0%	3	1.4%	153	73.9%	48	31.4%	68	44.4%	37	24.2%
Larsen Bay	38	13	34.2%	1	2.6%	0	0.0%	23	60.5%	7	30.4%	12	52.2%	4	17.4%
Old Harbor	42	12	28.6%	0	0.0%	0	0.0%	30	71.4%	5	16.7%	4	13.3%	21	70.0%
Ouzinkie	32	3	9.4%	0	0.0%	0	0.0%	25	78.1%	10	40.0%	11	44.0%	4	16.0%
Alaska Peninsula															
Chignik Bay	30	6	20.0%	1	3.3%	0	0.0%	23	76.7%	15	65.2%	5	21.7%	3	13.0%
Chignik Lake	24	9	37.5%	1	4.2%	0	0.0%	14	58.3%	9	64.3%	4	28.6%	1	7.1%

Note: 'No Response' includes those who responded 'Don't Know.' 'Not in Community' includes those who did not live in the community during the comparison year.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-100. Reasons for Steller Sea Lion Population Changes, 1991 Study Year

Region / Community	Households Surveyed	Reasons for Increased Seller Sea Lion Populations: Responses No.	Pctg.	Resource Abundance No.	Pctg.	Regulations/ Commerical Fishing No.	Pctg.	Subsistence Needs No.	Pctg.	General/ Unspecified No.	Pctg.
Kodiak Island											
Karluk	13	2	15.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	207	48	23.2%	11	22.9%	2	4.2%	0	0.0%	0	0.0%
Larsen Bay	38	7	18.4%	1	14.3%	0	0.0%	0	0.0%	0	0.0%
Old Harbor	42	5	11.9%	1	20.0%	0	0.0%	0	0.0%	1	20.0%
Ouzinkie	32	10	31.3%	0	0.0%	1	10.0%	0	0.0%	0	0.0%
Alaska Peninsula											
Chignik Bay	30	15	50.0%	0	0.0%	0	0.0%	1	6.7%	9	60.0%
Chignik Lake	24	9	37.5%	0	0.0%	2	22.2%	0	0.0%	6	66.7%

Region / Community	Households Surveyed	Reasons for Decreased Seller Sea Lion Populations: Responses No.	Pctg.	Resource Abundance No.	Pctg.	Regulations/ Commerical Fishing No.	Pctg.	Subsistence Needs No.	Pctg.	General/ Unspecified No.	Pctg.
Kodiak Island											
Karluk	13	3	23.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Kodiak City	207	37	17.9%	5	13.5%	0	0.0%	0	0.0%	4	10.8%
Larsen Bay	38	4	10.5%	0	0.0%	1	25.0%	0	0.0%	0	0.0%
Old Harbor	42	21	50.0%	5	23.8%	5	23.8%	0	0.0%	3	14.3%
Ouzinkie	32	4	12.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Alaska Peninsula											
Chignik Bay	30	3	10.0%	0	0.0%	0	0.0%	2	66.7%	0	0.0%
Chignik Lake	24	1	4.2%	0	0.0%	0	0.0%	1	100.0%	0	0.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-101. Monthly Expenses for Food, All Study Communities, 1991 Study Year

Community	Households		Monthly Household Food Expense				
	Total	Responses	Median	Mean	Minimum	Maximum	Percent of Total Household Income*
Chenega Bay	18	15	$500	$610	$300	$1,800	20.08%
Chignik Bay	30	30	$400	$454	$0	$2,000	10.66%
Chignik Lake	24	24	$525	$540	$100	$1,500	19.26%
Cordova	101	97	$450	$505	$25	$1,550	8.93%
Karluk	13	13	$900	$815	$50	$1,700	33.80%
Kenai	100	90	$400	$441	$150	$1,000	9.49%
Kodiak City	100	98	$500	$538	$125	$1,600	9.67%
Kodiak Coast Guard	31	30	$400	$434	$200	$900	7.74%
Kodiak Road	76	75	$600	$598	$50	$1,500	11.61%
Kotzebue	100	91	$600	$711	$77	$2,000	12.59%
Larsen Bay	38	38	$525	$607	$300	$1,300	21.29%
Nanwalek	29	26	$400	$484	$125	$1,000	18.54%
Old Harbor	42	42	$450	$524	$150	$1,500	20.24%
Ouzinkie	32	30	$600	$632	$200	$1,200	14.79%
Port Graham	49	47	$500	$483	$100	$800	24.73%
Seldovia	66	63	$400	$437	$100	$1,300	11.27%
Tatitlek	19	14	$500	$574	$200	$1,000	18.43%
Valdez	100	94	$500	$562	$100	$2,000	8.02%

* Based upon median monthly expense for food. Kodiak City, Coast Guard and Road are all based upon median divided by household income of all three combined.

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-102. Monthly Expenses for Food, All Study Communities, 1993 Study Year

Community	Households		Monthly Household Food Expense				Mean HH Percent of Total Household Income*
	Total	Reponses	Median	Mean	Minimum	Maximum	
Chenega Bay	23.00	20.00	500.00	657.25	100.00	2000.00	14.45%
Cordova	104.00	101.00	450.00	532.13	100.00	2000.00	9.79%
Nanwalek	33.00	32.00	400.00	510.94	50.00	1450.00	16.14%
Kenai	101.00	96.00	400.00	427.92	100.00	1200.00	8.73%
Kodiak City	105.00	103.00	500.00	569.42	80.00	2100.00	9.29%
Larsen Bay	40.00	39.00	450.00	457.90	100.00	1300.00	16.21%
Nuiqsut	62.00	60.00	600.00	796.08	200.00	3500.00	12.69%
Ouzinkie	61.00	57.00	525.00	565.09	50.00	1100.00	15.78%
Port Graham	51.00	45.00	500.00	478.33	175.00	1000.00	21.78%
Port Lions	45.00	40.00	550.00	587.50	125.00	1700.00	14.29%
Seldovia	65.00	57.00	400.00	445.16	100.00	1200.00	9.74%
Tatitlek	20.00	13.00	600.00	675.38	200.00	1100.00	20.38%
Valdez	35.00	35.00	400.00	478.57	200.00	1500.00	5.84%

* Based upon median monthly expense for food.

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-103. Assessment of Household Financial Situation Since the Exxon Valdez Oil Spill, All Study Communities, 1991 Study Year

Community	Total Households Surveyed	Better than before the spill		About the same as before the spill		Worse than before the spill		No information provided	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Chenega Bay	18	5	27.78%	6	33.33%	4	22.22%	3	16.67%
Chignik Bay	30	12	40.00%	6	20.00%	10	33.33%	2	6.67%
Chignik Lake	24	3	12.50%	8	33.33%	9	37.50%	3	12.50%
Cordova	101	17	16.83%	36	35.64%	42	41.58%	6	5.94%
Karluk	13	3	23.08%	5	38.46%	5	38.46%	0	0.00%
Kenai	100	21	21.00%	49	49.00%	21	21.00%	9	9.00%
Kodiak City	100	16	16.00%	50	50.00%	27	27.00%	0	0.00%
Kodiak Coast Guard	31	3	9.68%	2	6.45%	0	0.00%	0	0.00%
Kodiak Road	76	21	27.63%	27	35.53%	27	35.53%	0	0.00%
Kotzebue	100	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Larsen Bay	38	9	23.68%	13	34.21%	12	31.58%	0	0.00%
Nanwalek	29	3	10.34%	14	48.28%	9	31.03%	3	10.34%
Old Harbor	42	2	4.76%	19	45.24%	21	50.00%	0	0.00%
Ouzinkie	32	4	12.50%	12	37.50%	11	34.38%	0	0.00%
Port Graham	49	8	16.33%	20	40.82%	21	42.86%	0	0.00%
Seldovia	66	7	10.61%	36	54.55%	19	28.79%	4	6.06%
Tatitlek	19	2	10.53%	3	15.79%	10	52.63%	4	21.05%
Valdez	100	32	32.00%	50	50.00%	17	17.00%	1	1.00%

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-104. Percentage of Food Consumed from Wild Resources, All Study Communities, 1991 Study Year

Community	Total Households Surveyed	Percentage of Food from Wild Resources*												No Information Provided	
		None		1 - 25%		26-50%		51-75%		76-99%		All			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Chenega Bay	18	0	0.0%	7	43.8%	2	12.5%	2	12.5%	4	25.0%	1	6.3%	2	11.1%
Chignik Bay	30	0	0.0%	19	63.3%	7	23.3%	2	6.7%	2	6.7%	0	0.0%	0	0.0%
Chignik Lake	24	0	0.0%	4	16.7%	8	33.3%	7	29.2%	5	20.8%	0	0.0%	0	0.0%
Cordova	101	4	4.0%	32	32.0%	14	14.0%	19	19.0%	28	28.0%	3	3.0%	1	1.0%
Karluk	13	0	0.0%	2	15.4%	6	46.2%	3	23.1%	2	15.4%	0	0.0%	0	0.0%
Kenai	100	3	3.0%	74	74.0%	11	11.0%	4	4.0%	7	7.0%	1	1.0%	0	0.0%
Kodiak City	100	2	2.0%	45	45.5%	25	25.3%	8	8.1%	16	16.2%	3	3.0%	1	1.0%
Kodiak Coast Guard	31	0	0.0%	24	77.4%	2	6.5%	4	12.9%	1	3.2%	0	0.0%	0	0.0%
Kodiak Road	76	5	6.7%	33	44.0%	20	26.7%	8	10.7%	8	10.7%	1	1.3%	1	1.3%
Kotzebue	100	1	1.0%	35	36.1%	25	25.8%	17	17.5%	16	16.5%	3	3.1%	3	3.0%
Larsen Bay	38	1	2.6%	12	31.6%	11	28.9%	8	21.1%	5	13.2%	1	2.6%	0	0.0%
Nanwalek	29	0	0.0%	10	35.7%	9	32.1%	7	25.0%	2	7.1%	0	0.0%	1	3.4%
Old Harbor	42	0	0.0%	11	26.2%	16	38.1%	9	21.4%	6	14.3%	0	0.0%	0	0.0%
Ouzinkie	32	0	0.0%	8	27.6%	15	51.7%	5	17.2%	1	3.4%	0	0.0%	3	9.4%
Port Graham	49	1	2.0%	17	34.7%	24	49.0%	6	12.2%	1	2.0%	0	0.0%	0	0.0%
Seldovia	66	1	1.5%	30	45.5%	14	21.2%	13	19.7%	8	12.1%	0	0.0%	0	0.0%
Tatitlek	19	0	0.0%	5	27.8%	5	27.8%	6	33.3%	0	0.0%	2	11.1%	1	5.3%
Valdez	100	6	6.1%	70	70.7%	9	9.1%	6	6.1%	6	6.1%	2	2.0%	1	1.0%

* Percentages based upon valid responses.

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-105. Percentage of Food Consumed from Wild Resources, All Study Communities, 1993 Study Year

Community	Total Households Surveyed	Percentage of Food from Wild Resources												No Information Provided	
		None		1 - 25%		26-50%		51-75%		76-99%		All			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Chenega Bay	23	0	0.00%	13	56.52%	4	17.39%	4	17.39%	1	4.35%	1	4.35%	0	0.00%
Cordova	104	1	0.96%	44	42.31%	14	13.46%	23	22.12%	18	17.31%	4	3.85%	0	0.00%
Nanwalek	33	0	0.00%	7	21.88%	14	43.75%	9	28.13%	2	6.25%	0	0.00%	1	3.03%
Kenai	101	9	9.00%	60	60.00%	11	11.00%	10	10.00%	10	10.00%	0	0.00%	1	0.99%
Kodiak City	105	2	1.94%	55	53.40%	29	28.16%	7	6.80%	5	4.85%	5	4.85%	2	1.90%
Larsen Bay	40	0	0.00%	13	32.50%	12	30.00%	8	20.00%	6	15.00%	1	2.50%	0	0.00%
Nuiqsut	62	0	0.00%	12	19.35%	11	17.74%	23	37.10%	15	24.19%	1	1.61%	0	0.00%
Ouzinkie	61	1	1.67%	28	46.67%	22	36.67%	7	11.67%	1	1.67%	1	1.67%	1	1.64%
Port Graham	51	0	0.00%	12	24.00%	29	58.00%	9	18.00%	0	0.00%	0	0.00%	1	1.96%
Port Lions	45	0	0.00%	15	37.50%	13	32.50%	4	10.00%	7	17.50%	1	2.50%	5	11.11%
Seldovia	65	6	9.23%	24	36.92%	16	24.62%	10	15.38%	6	9.23%	3	4.62%	0	0.00%
Tatitlek	20	0	0.00%	10	62.50%	0	0.00%	2	12.50%	2	12.50%	2	12.50%	4	20.00%
Valdez	35	5	14.29%	26	74.29%	1	2.86%	2	5.71%	1	2.86%	0	0.00%	0	0.00%

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1994.

Table I-106. Preservation of Salmon Methods, All Study Communities, 1991 Study Year

Community	Percentage of Households Preserving Salmon by Each Method										# Of Preservation Methods		
	Salting	Drying	Smoking	Pickling	Kippering	Freezing	Canning	Fermenting	Other	Any Method	Mean	Minimum	Maximum
Chenega Bay	16.67	0.00	38.89	16.67	5.56	61.11	16.67	0.00	0.00	61.11	1.56	1	6
Chignik Bay	30.00	33.33	40.00	30.00	13.33	83.33	30.00	3.33	0.00	90.00	2.63	1	7
Chignik Lake	54.17	62.50	54.17	45.83	25.00	95.83	50.00	8.33	0.00	95.83	3.96	1	7
Cordova	22.77	4.95	50.50	32.67	21.78	83.17	48.51	0.00	0.00	87.13	2.64	1	7
Karluk	61.54	61.54	61.54	7.69	0.00	92.31	7.69	0.00	0.00	100.00	2.92	1	5
Kenai	5.00	0.00	41.00	8.00	2.00	67.00	43.00	0.00	1.00	75.00	1.67	1	5
Kodiak City	6.00	1.00	38.00	13.00	2.00	88.00	28.00	0.00	0.00	91.00	1.76	1	5
Kodiak Coast Guard	0.00	0.00	51.61	0.00	0.00	87.10	16.13	0.00	0.00	90.32	1.55	1	3
Kodiak Road	6.58	0.00	42.11	15.79	3.95	84.21	35.53	0.00	0.00	90.79	1.88	1	5
Kotzebue	9.00	34.00	15.00	0.00	2.00	73.00	2.00	0.00	0.00	84.00	1.35	1	5
Larsen Bay	34.21	44.74	55.26	23.68	0.00	89.47	10.53	0.00	0.00	97.37	2.58	1	6
Nanwalek	62.50	78.13	78.13	31.25	15.63	87.50	43.75	34.38	6.25	90.63	4.38	1	9
Old Harbor	64.29	71.43	83.33	38.10	16.67	92.86	16.67	2.38	0.00	95.24	3.86	1	7
Ouzinkie	50.00	12.50	46.88	21.88	18.75	96.88	53.13	3.13	0.00	100.00	3.03	1	7
Port Graham	67.35	75.51	75.51	40.82	46.94	95.92	36.73	16.33	2.04	95.92	4.57	1	8
Seldovia	27.27	13.64	48.48	28.79	19.70	80.30	43.94	0.00	1.52	86.36	2.64	1	8
Tatitlek	47.37	15.79	52.63	15.79	31.58	78.95	42.11	0.00	0.00	84.21	2.84	1	7
Valdez	4.00	2.00	50.00	4.00	3.00	63.00	24.00	0.00	1.00	71.00	1.51	1	7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Table I-107. Percentage of Households that Discarded Resources, All Study Communities, 1991 Study Year

Community	Resource Category	Households that Discarded Resources		Reasons for Discarding*				Perceived Reasons for Abnormality*					Heard of Before the Spill?**		
		Number	Percentage	Pathological	Abnormal Appearance	Contamination Feared	Other	Oil Contamination	Normal Variation	Disease	Improper Handling	Unknown Cause	Yes	No	Missing
Chenega Bay	Salmon	1	5.6%	0.0%	0.0%	5.6%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Non Salmon Fish	1	5.6%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%
	Marine Mammals	2	11.1%	11.1%	0.0%	5.6%	0.0%	5.6%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%
	Marine Invertebrates	3	16.7%	11.1%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%
	Any Resource	6	33.3%	27.8%	5.6%	11.1%	0.0%	11.1%	0.0%	0.0%	0.0%	27.8%	0.0%	33.3%	0.0%
Chignik Bay	Unspecified Fish	1	3.3%	3.3%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%
	Salmon	3	10.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%
	Non Salmon Fish	1	3.3%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%
	Marine Invertebrates	1	3.3%	3.3%	3.3%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%
	Any Resource	5	16.7%	23.3%	6.7%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	23.3%	3.3%	13.3%	0.0%
Chignik Lake	Unspecified Fish	1	4.2%	4.2%	4.2%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Salmon	1	4.2%	4.2%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%
	Game	1	4.2%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%
	Birds	1	4.2%	0.0%	0.0%	0.0%	4.2%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Marine Invertebrates	2	8.3%	4.2%	4.2%	0.0%	4.2%	0.0%	4.2%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%
	Any Resource	5	20.8%	12.5%	16.7%	0.0%	8.3%	8.3%	4.2%	0.0%	0.0%	16.7%	8.3%	12.5%	0.0%
Cordova	Salmon	5	5.0%	3.0%	2.0%	1.0%	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%
	Non Salmon Fish	1	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
	Marine Invertebrates	1	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
	Any Resource	7	6.9%	3.0%	3.0%	1.0%	0.0%	1.0%	1.0%	1.0%	1.0%	3.0%	0.0%	5.9%	1.0%
Nanwalek	Resource Missing	1	3.4%	0.0%	3.4%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Salmon	9	31.0%	13.8%	20.7%	10.3%	0.0%	6.9%	0.0%	0.0%	0.0%	24.1%	0.0%	0.0%	0.0%
	Non Salmon Fish	3	10.3%	6.9%	6.9%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	6.9%	0.0%	0.0%	0.0%
	Game	1	3.4%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%
	Birds	1	3.4%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%
	Marine Invertebrates	5	17.2%	10.3%	10.3%	3.4%	0.0%	3.4%	0.0%	0.0%	3.4%	10.3%	0.0%	0.0%	0.0%
	Any Resource	14	48.3%	31.0%	55.2%	13.8%	0.0%	20.7%	0.0%	0.0%	3.4%	55.2%	0.0%	41.4%	6.9%
Karluk	Any Resource	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kenai	Resource Missing	1	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
	Salmon	1	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
	Non Salmon Fish	1	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
	Any Resource	3	3.0%	1.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	1.0%	2.0%	0.0%

Table I-107. Percentage of Households that Discarded Resources, All Study Communities, 1991 Study Year

Community	Resource Category	Households that Discarded Resources		Reasons for Discarding*				Perceived Reasons for Abnormality*					Heard of Before the Spill?**		
		Number	Percentage	Pathological	Abnormal Appearance	Contamination Feared	Other	Oil Contamination	Normal Variation	Disease	Improper Handling	Unknown Cause	Yes	No	Missing
Kodiak City	Unspecified Fish	2	2.0%	1.0%	1.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
	Salmon	3	3.0%	2.0%	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%	1.0%	2.0%	0.0%	0.0%	0.0%
	Non Salmon Fish	3	3.0%	2.0%	1.0%	0.0%	0.0%	0.0%	2.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Game	4	4.0%	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	3.0%	0.0%	0.0%	0.0%
	Marine Invertebrates	6	6.0%	0.0%	2.0%	2.0%	0.0%	2.0%	0.0%	0.0%	1.0%	3.0%	0.0%	0.0%	0.0%
	Any Resource	18	18.0%	8.0%	7.0%	3.0%	1.0%	2.0%	3.0%	3.0%	2.0%	10.0%	6.0%	9.0%	3.0%
Kodiak Coast Guard	Non Salmon Fish	2	6.5%	3.2%	6.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	0.0%	0.0%	0.0%
	Game	1	3.2%	3.2%	0.0%	0.0%	0.0%	3.2%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%
	Any Resource	3	9.7%	6.5%	6.5%	0.0%	0.0%	3.2%	0.0%	3.2%	0.0%	6.5%	0.0%	6.5%	3.2%
Kodiak Road	Salmon	2	2.6%	2.6%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%
	Marine Invertebrates	1	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%
	Any Resource	3	3.9%	2.6%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	2.6%	1.3%	1.3%	1.3%
Kotzebue	Salmon	1	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
	Game	9	9.0%	5.0%	3.0%	0.0%	1.0%	0.0%	0.0%	1.0%	1.0%	8.0%	0.0%	0.0%	0.0%
	Any Resource	10	10.0%	6.0%	3.0%	0.0%	1.0%	0.0%	0.0%	1.0%	1.0%	9.0%	8.0%	2.0%	0.0%
Larsen Bay	Non Salmon Fish	1	2.6%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%
	Game	2	5.3%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%
	Marine Invertebrates	6	15.8%	5.3%	13.2%	0.0%	0.0%	2.6%	2.6%	0.0%	0.0%	10.5%	0.0%	0.0%	0.0%
	Any Resource	9	23.7%	5.3%	23.7%	0.0%	0.0%	2.6%	2.6%	0.0%	0.0%	21.1%	2.6%	18.4%	2.6%
Old Harbor	Salmon	9	21.4%	9.5%	11.9%	0.0%	0.0%	11.9%	0.0%	0.0%	0.0%	9.5%	0.0%	0.0%	0.0%
	Non Salmon Fish	3	7.1%	7.1%	2.4%	0.0%	0.0%	4.8%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%
	Game	1	2.4%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%
	Marine Invertebrates	3	7.1%	2.4%	7.1%	4.8%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Any Resource	11	26.2%	23.8%	26.2%	4.8%	0.0%	31.0%	0.0%	0.0%	0.0%	16.7%	11.9%	19.0%	0.0%
Ouzinkie	Salmon	5	15.6%	9.4%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.6%	0.0%	0.0%	0.0%
	Birds	2	6.3%	0.0%	3.1%	0.0%	3.1%	0.0%	0.0%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%
	Marine Invertebrates	4	12.5%	3.1%	9.4%	0.0%	0.0%	3.1%	3.1%	0.0%	0.0%	6.3%	0.0%	0.0%	0.0%
	Any Resource	11	34.4%	18.8%	31.3%	0.0%	3.1%	3.1%	3.1%	0.0%	6.3%	28.1%	9.4%	25.0%	0.0%
Port Graham	Unspecified Fish	2	4.1%	0.0%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	0.0%	0.0%
	Salmon	2	4.1%	2.0%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	0.0%	0.0%
	Non Salmon Fish	1	2.0%	0.0%	2.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Marine Mammals	1	2.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%
	Birds	2	4.1%	0.0%	4.1%	0.0%	0.0%	2.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%
	Marine Invertebrates	3	6.1%	4.1%	0.0%	0.0%	2.0%	4.1%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%
	Plants/Berries	1	2.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%
	Any Resource	10	20.4%	6.1%	18.4%	0.0%	2.0%	8.2%	0.0%	0.0%	2.0%	14.3%	2.0%	18.4%	0.0%

Table I-107. Percentage of Households that Discarded Resources, All Study Communities, 1991 Study Year

Community	Resource Category	Households that Discarded Resources		Reasons for Discarding*				Perceived Reasons for Abnormality*					Heard of Before the Spill?**		
		Number	Percentage	Pathological	Abnormal Appearance	Contamination Feared	Other	Oil Contamination	Normal Variation	Disease	Improper Handling	Unknown Cause	Yes	No	Missing
Seldovia	Resource Missing	1	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%
	Salmon	2	3.0%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%
	Non Salmon Fish	2	3.0%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%
	Game	1	1.5%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%
	Marine Invertebrates	3	4.5%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	0.0%	0.0%	0.0%
	Plants/Berries	1	1.5%	1.5%	1.5%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Any Resource	8	12.1%	6.1%	7.6%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	13.6%	0.0%	9.1%	3.0%
Tatitlek	Salmon	1	5.3%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%
	Non Salmon Fish	1	5.3%	0.0%	5.3%	5.3%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Any Resource	2	10.5%	5.3%	5.3%	5.3%	0.0%	5.3%	0.0%	0.0%	0.0%	5.3%	0.0%	10.5%	0.0%
Valdez	Salmon	1	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Non Salmon Fish	4	4.0%	4.0%	0.0%	0.0%	0.0%	1.0%	0.0%	1.0%	0.0%	2.0%	0.0%	0.0%	0.0%
	Marine Invertebrates	2	2.0%	2.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Any Resource	7	7.0%	6.0%	1.0%	0.0%	0.0%	3.0%	1.0%	1.0%	0.0%	2.0%	2.0%	5.0%	0.0%

* Households may have provided multiple reasons for discarding and perceived reasons for abnormality.

** Households may have responded to this question on each resource discarded.

Source: Alaska Department of Fish and Game, Division of Fish and Game, Household Surveys, 1992.

Table I-108. Common and Scientific Names of Plants Used as Medicine, All Communities, 1991

Common Name	Scientific Name*
Alder	*Alnus*
Bethelem's Star/Wintergreen	*Pyrola*
Birch	*Betula*
Blackberry	
Bog Orchid	*Platanthera Hyperborea*
Camomile/Pineapple Weed	*Matricaria matricariodes*
Chickweed	*Stellaria*
Clover Flowers	*Trifolium*
Cottonwood	*Populus trichocarpa*
Cranberries	*Oxycoccus*
"Dahilzo"	
Daisies	*Chrysanthemum arcticum*
Dandelion	*Taraxacum officinale*
Devil's Club	*Oplopanax horridus/Echinopanax horridum*
Ferns	*Athyrium filix-femina, Matteuccia struthiopterus, Dryopteris dilatata*
Fireweed	*Epilobium angustifolium*
Goosetongue/Plantain	*Plantago maritima*
Hemlock	*Tsaga*
High Bush Cranberries	*Viburnum edule*
Horsetail	*Equisetum arrense*
Indian Rice/Chocolate Lily	*Fritillaria camschatcensis*
Juniper	*Juniperus communis*
"Kongonahoke"	
Labrador Tea	*Ledum*
Liverwort	
March Marigolds	*Caltha*
Moss	
Mountain Ash	*Sorbus*
Nettles	*Urtica gracilis*
"Petrushkies"/Wild Parsley/Beach Lovage	*Ligusticum scoticum*
Pine	*Pinaceae*
Putchkies/Wild Celery/Cow Parsnip	*Heracleum lanatum*
Raspberry	*Rubus idaeus*
Rose	*Rosa*
Spruce	*Picea sitchensis*
Stinkweed/Wormwood	*Artemisia*
"Sugvik"	
"Swamp Grass"	
"Taahiks"	
Willow	*Salix*
Yarrow	*Achillea*

Source: Pratt, Verna E., Field Guide to Alaskan Wildflowers, Anchorage: Alaskakrafts Publishing, 1989.

Table I-109. Plants Used for Medicine, All Study Communities, 1991 Study Year

Community	Plant	Number of Households Using Plant	Percent of Sampled Households	Uses
Chenega Bay	Any Plant	5	27.78%	
	Alder/cones	1	5.56%	Steam bath
	Chamomile	1	5.56%	Unspecified
	Cranberries	2	11.11%	Unspecified
	Fireweed	1	5.56%	Gas/Indigestion
Chignik Bay	Any Plant	2	6.67%	
	High Bush Cranberries	2	6.67%	Colds/Coughs
Chignik Lake	Any Plant	6	25.00%	
	Cranberries	2	8.33%	Colds/Coughs
	"Dahilzo"	1	4.17%	Aspirin/Pain Killer
	"Kongonahoke"	2	8.33%	Steam Bath
	Putchkies/Wild Celery	1	4.17%	Colds/Coughs
	Swamp Grass	1	4.17%	Steam Bath
Cordova	Any Plant	7	6.93%	
	Chamomile	2	1.98%	Hair Care
	Devil's Club	3	2.97%	Foot Bath, Sore Throat, Aspirin/Pain Killer
	Hemlock/leaves	1	0.99%	Soothing lotion
	Labrador Tea	1	0.99%	Unspecified
	Rose/rosehips	1	0.99%	Soothing lotion
	Willow	2	1.98%	Aspirin/Pain Killer
	Yarrow	2	1.98%	Mosquito repellent, Aspirin/Pain Killer

Table I-109. Plants Used for Medicine, All Study Communities, 1991 Study Year

Community	Plant	Number of Households Using Plant	Percent of Sampled Households	Uses
Nanwalek	Any Plant	23	79.31%	
	"Bethlehem's Star"	3	10.34%	Sore Throat
	Cranberries	1	3.45%	Colds/Cough
	Devil's Club	11	37.93%	Colds/Cough, Arthritis, Leukemia
	Ferns	1	3.45%	Colds/Cough,
	High Bush Cranberries	1	3.45%	Unspecified
	Mountain Ash	3	10.34%	Colds/Cough, Tuberculosis
	Yarrow	15	51.72%	Colds/Cough,
Karluk	Any Plant	1	7.69%	
	Alder	1	7.69%	Sore Throat
Kenai	Any Plant	2	1.98%	
	Fireweed	1	0.99%	Unspecified
	Rose/rosehips	1	0.99%	Unspecified
Kodiak City	Any Plant	8	8.00%	
	Alder	1	1.00%	Aspririn/Pain killer
	Chamomile	1	1.00%	Unspecified
	Chickweed	1	1.00%	Unspecified
	Clover flowers	1	1.00%	Colds/Cough
	Cranberries	1	1.00%	Colds/Cough
	Goosetongue/Plantain	1	1.00%	Unspecified
	Petrushkies	1	1.00%	Unspecified

Table I-109. Plants Used for Medicine, All Study Communities, 1991 Study Year

Community	Plant	Number of Households Using Plant	Percent of Sampled Households	Uses
Kodiak Road	Any Plant	5	6.58%	
	Cranberries	1	1.32%	Colds/Cough
	Devil's Club	1	1.32%	Unspecified
	Ferns	1	1.32%	Unspecified
	Herbs	1	1.32%	Unspecified
	Labrador Tea	1	1.32%	Unspecified
	Rose/rosehips	2	2.63%	Unspecified
Kotzebue	Any Plant	46	46.00%	
	Juniper/berries	1	1.00%	Unspecified
	Labrador Tea	3	3.00%	Unspecified
	Stinkweed	46	46.00%	Colds/Cough, Infections,Diaper Rash, Sore Muscles, Gas/Indigestion
	"Sugvik"	1	1.00%	Unspecified
Larsen Bay	Any Plant	6	15.79%	
	Alder	2	5.26%	Sore Throat, Steam Bath
	High Bush Cranberries	1	2.63%	Sore Throat
	"Pineappleweed"	1	2.63%	Unspecified
	Roots/Grass roots	1	2.63%	Unspecified

Table I-109. Plants Used for Medicine, All Study Communities, 1991 Study Year

Community	Plant	Number of Households Using Plant	Percent of Sampled Households	Uses
Old Harbor	Any Plant	5	11.90%	
	Alder	1	2.38%	Unspecified
	Birch	1	2.38%	Unspecified
	Blackberry/roots	1	2.38%	Unspecified
	Bog Orchid	1	2.38%	Unspecified
	Chamomile	1	2.38%	Unspecified
	Chickweed	1	2.38%	Unspecified
	Cottonwood	1	2.38%	Unspecified
	Devil's Club	1	2.38%	Unspecified
	Fireweed	1	2.38%	Unspecified
	High Bush Cranberries	1	2.38%	Sore Throat
	Horsetail	1	2.38%	Unspecified
	Liverwort	1	2.38%	Unspecified
	Moss	1	2.38%	Unspecified
	Nettles	1	2.38%	Unspecified
	Parsnip	1	2.38%	Unspecified
	Putchkie/Wild Celery	1	2.38%	Unspecified
	Roots/grass roots	2	4.76%	Arthritis, Steam Bath
	Rose/rosehips	1	2.38%	Unspecified
	Taahiks	2	4.76%	Sore muscles, Gas/indigestion
	Yarrow	1	2.38%	Unspecified
Ouzinkie	Any Plant	5	15.63%	
	Cottonwood/"ciquq"	1	3.13%	Hangover
	High Bush Cranberries	4	12.50%	Sore Throat

Table I-109. Plants Used for Medicine, All Study Communities, 1991 Study Year

Community	Plant	Number of Households Using Plant	Percent of Sampled Households	Uses
Port Graham	Any Plant	15	30.61%	
	"Bethelem's Star"	2	4.08%	Unspecified
	Cranberries	5	10.20%	Colds/Cough
	Daisies	1	2.04%	Unspecified
	Devil's Club	4	8.16%	Unspecified
	Ferns	3	6.12%	Unspecified
	Goosetongue/Plantain	1	2.04%	Unspecified
	High Bush Cranberries	1	2.04%	Unspecified
	Mountain Ash	2	4.08%	Steam bath
	Nettles	1	2.04%	Unspecified
	Pine/pitch	1	2.04%	Colds/cough
	"Que-ane-woks"	1	2.04%	Unspecified
	Spruce/tips/branches	1	2.04%	Unspecified
	Yarrow	6	12.24%	Unspecified
Seldovia	Any Plant	9	13.64%	
	Chamomile	5	7.58%	Unspecified
	Chickweed	1	1.52%	Unspecified
	Dandelion	2	3.03%	Unspecified
	Ferns	1	1.52%	Unspecified
	Goosetongue/Plantain	1	1.52%	Unspecified
	High Bush Cranberies	1	1.52%	Unspecified
	Indian Rice	1	1.52%	Unspecified
	Labrador Tea	1	1.52%	Diuretic
	Marsh marigolds	1	1.52%	Unspecified
	Moss	1	1.52%	Unspecified
	Raspberry/branches/leaves	2	3.03%	Unspecified
	Rose/rosehips	1	1.52%	Unspecified
	Spruce/tips/branches	1	1.52%	Constipation
	Stinkweed	1	1.52%	Unspecified
	Willow	1	1.52%	Unspecified
	Yarrow	2	3.03%	Unspecified

Table I-109. Plants Used for Medicine, All Study Communities, 1991 Study Year

Community	Plant	Number of Households Using Plant	Percent of Sampled Households	Uses
Tatitlek	Any Plant	5	26.32%	
	Alder	1	5.26%	Sore Throat
	Devil's Club	1	5.26%	Arthritis
	Ferns	1	5.26%	Steam Bath
	High Bush Cranberries	1	5.26%	Sore Throat
	Putchkie	1	5.26%	Unspecified
	Stinkweed	1	5.26%	Boils, Infection
Valdez	Any Plant	6	6.00%	
	Birch	1	1.00%	Unspecified
	Chamomile	2	2.00%	Relaxant
	Labrador Tea	1	1.00%	Kidney ailments
	Stinkweed	1	1.00%	Unspecified
	Yarrow	1	1.00%	Unspecified

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1992.

Figure I-3. Percentage of Respondents Who Had Eaten a Wild Food the Day Before the Interview, 1991, 1992, and 1993 Study Years

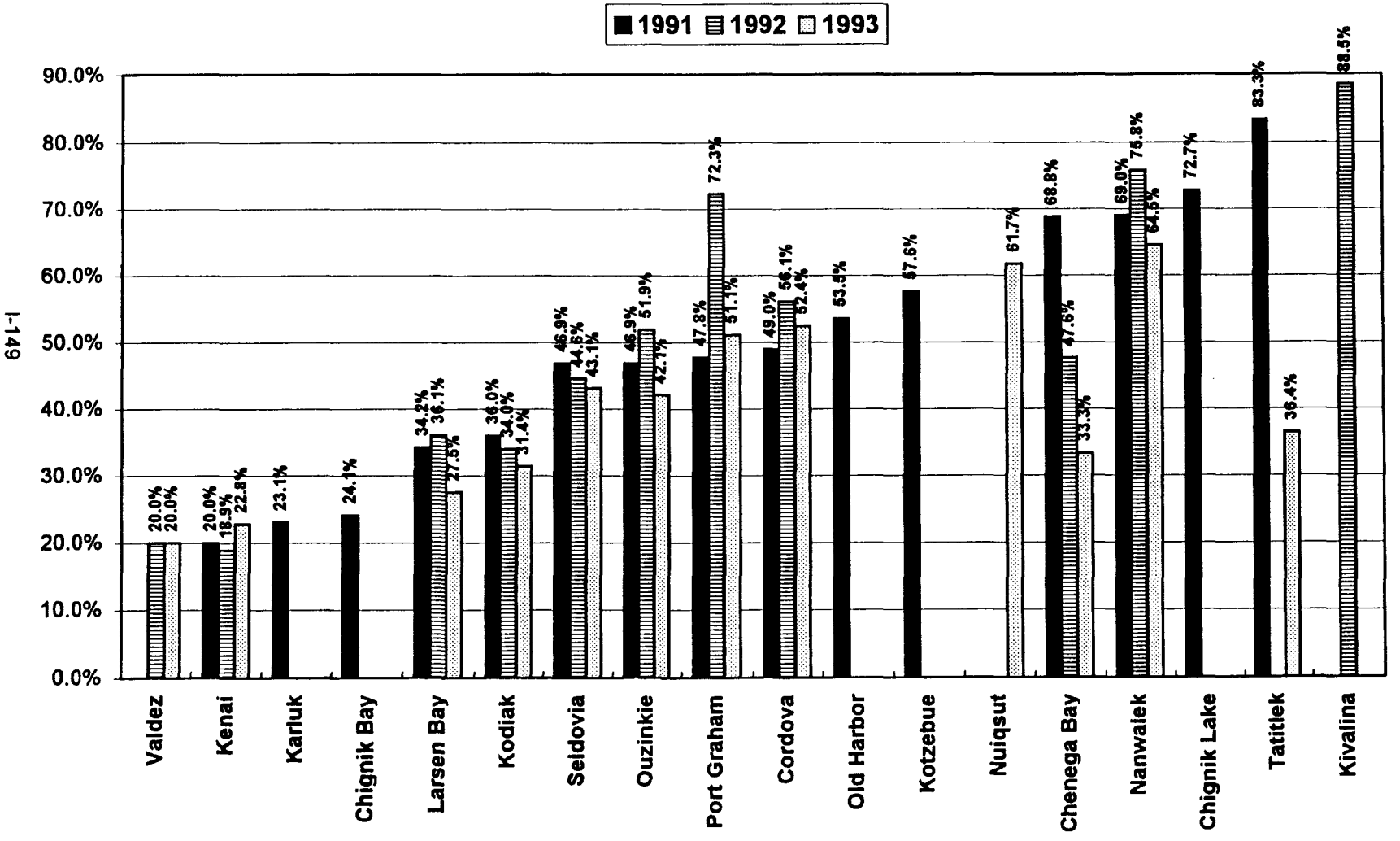

Figure I-4. Are Clams Safe for Children to Eat? Percentage of Respondents Saying "No" or "Not Sure", 1991, 1992, and 1993 Study Years

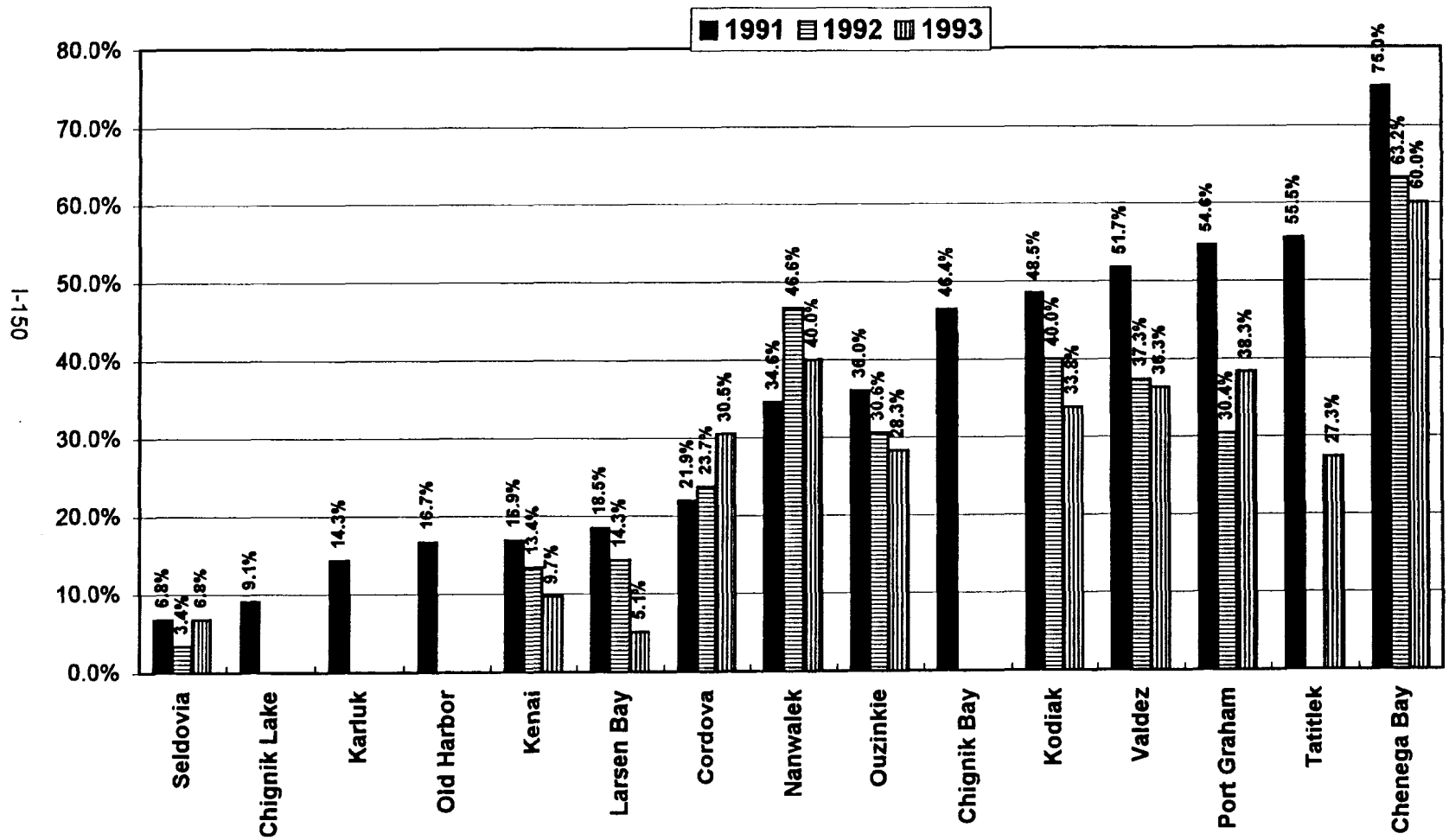

Figure I-5. Are Seals Safe for Children to Eat? Percentage of Respondents Saying "No" or "Not Sure", 1991, 1992, and 1993 Study Years

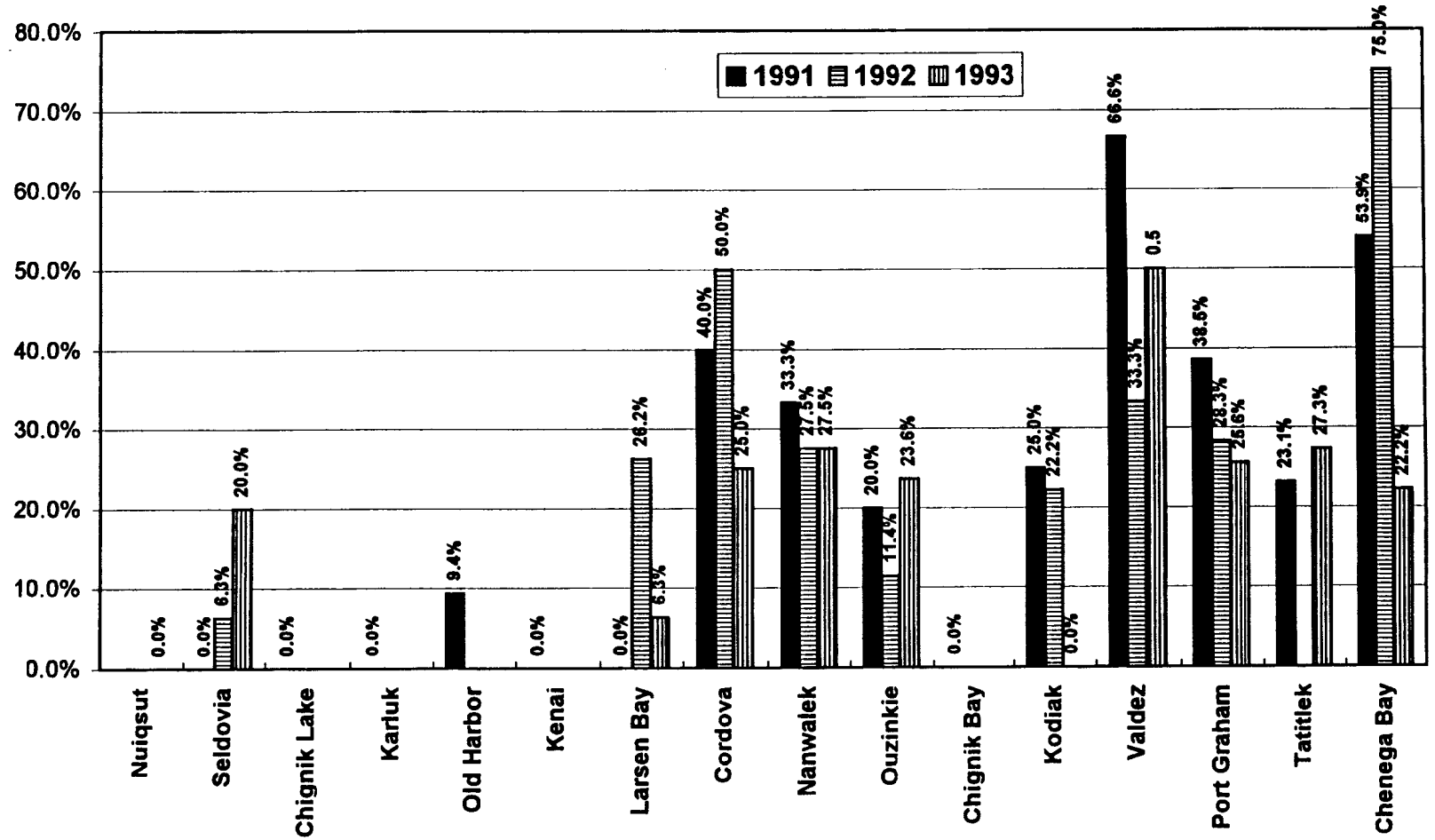

Figure I-6. Did the Spill Affect Children's Participation in Subsistence Activities? Percentage of Respondents Answering "Yes", 1991, 1992, and 1993 Study Years

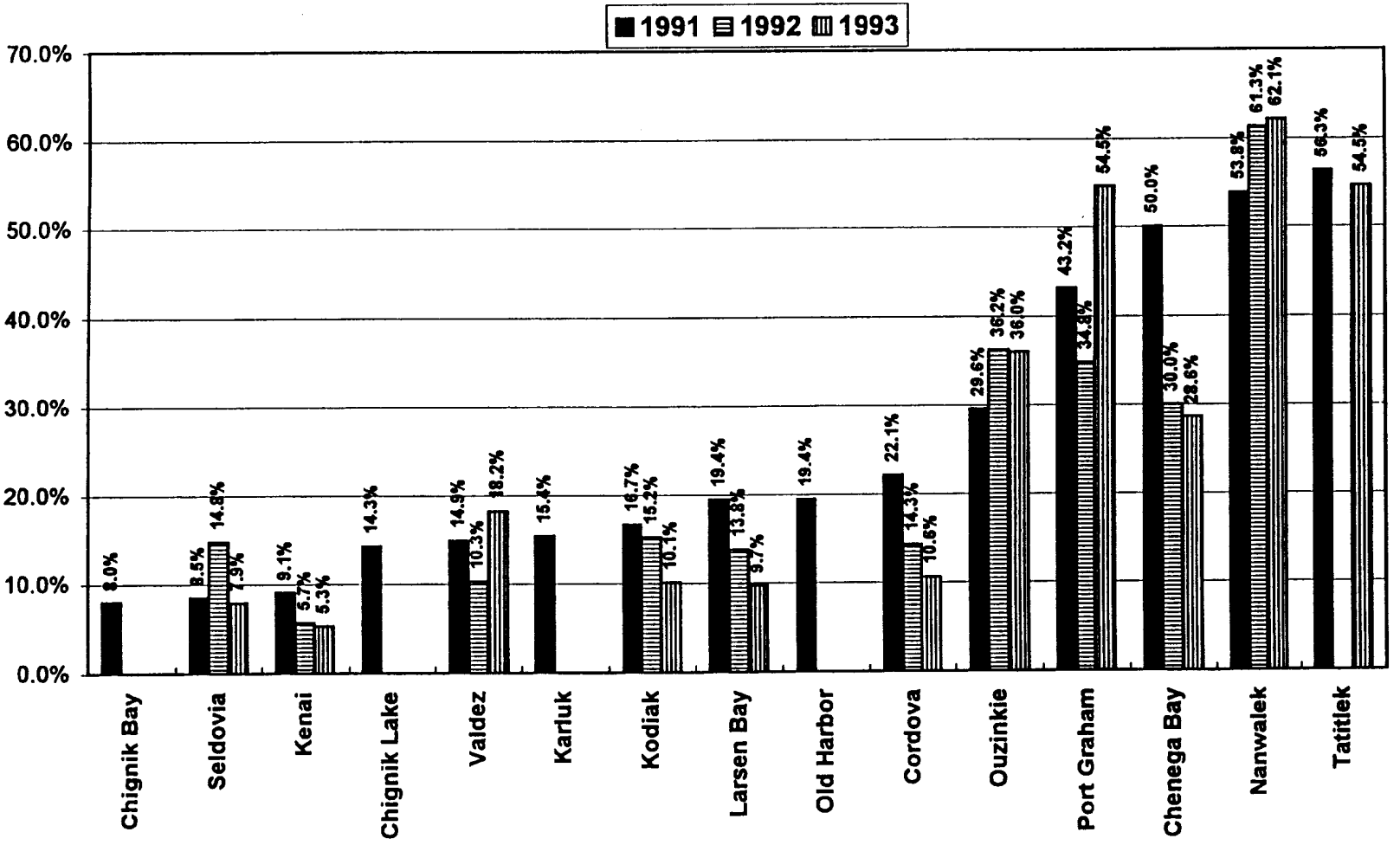

Figure I-7. Percentage of Respondents Reporting Less Sharing of Wild Resources than Before the Spill, 1991, 1992, and 1993 Study Years

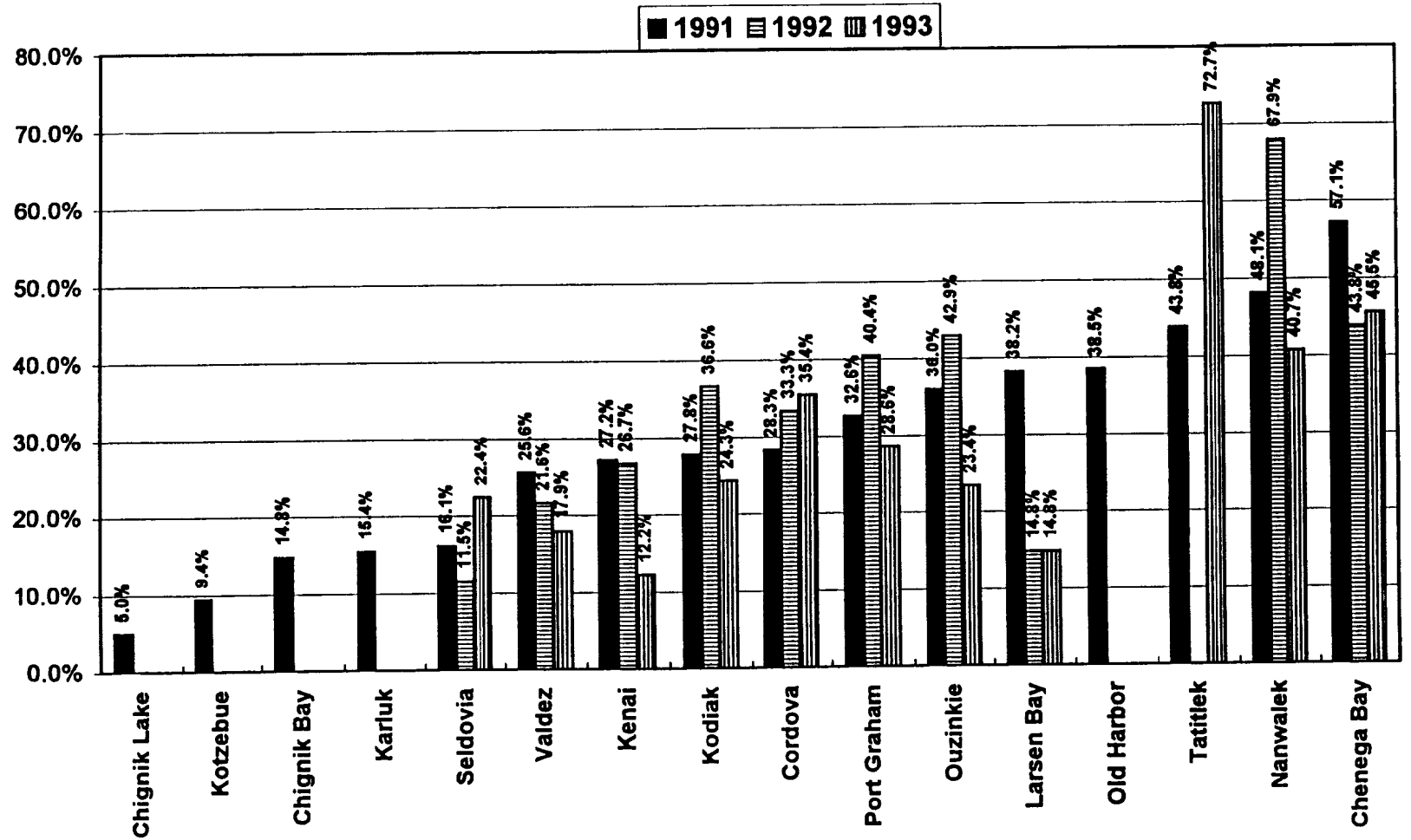

Figure I-8. Since the Oil Spill, Do You Like Living Here Less, the Same or More? Percentage of Respondents Answering "Less", 1991, 1992, and 1993 Study Years

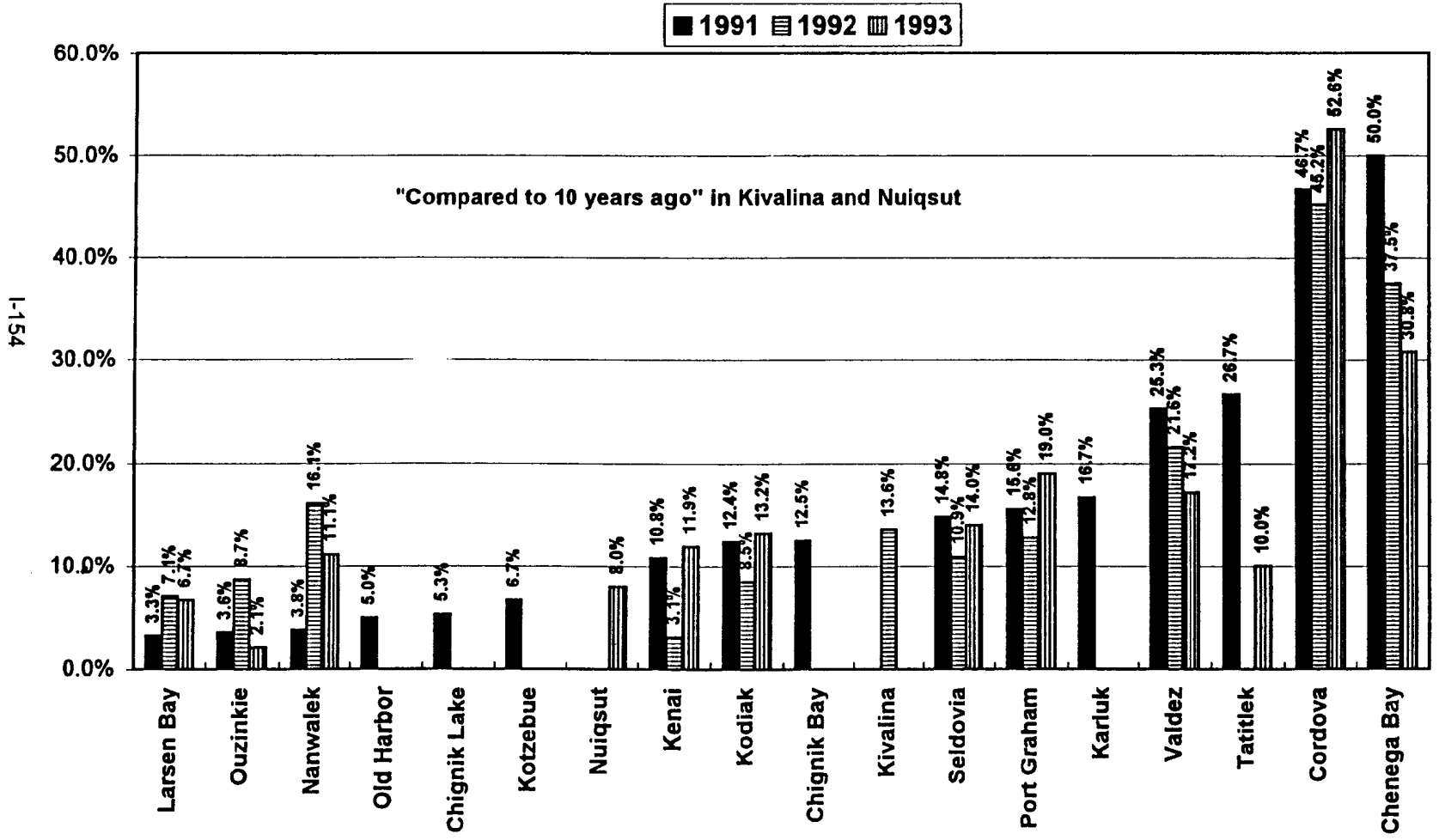

Figure I-9. Percentage of Households Reporting Being Adequately Informed about Subsistence Food Safety, 1991, 1992, and 1993 Study Years

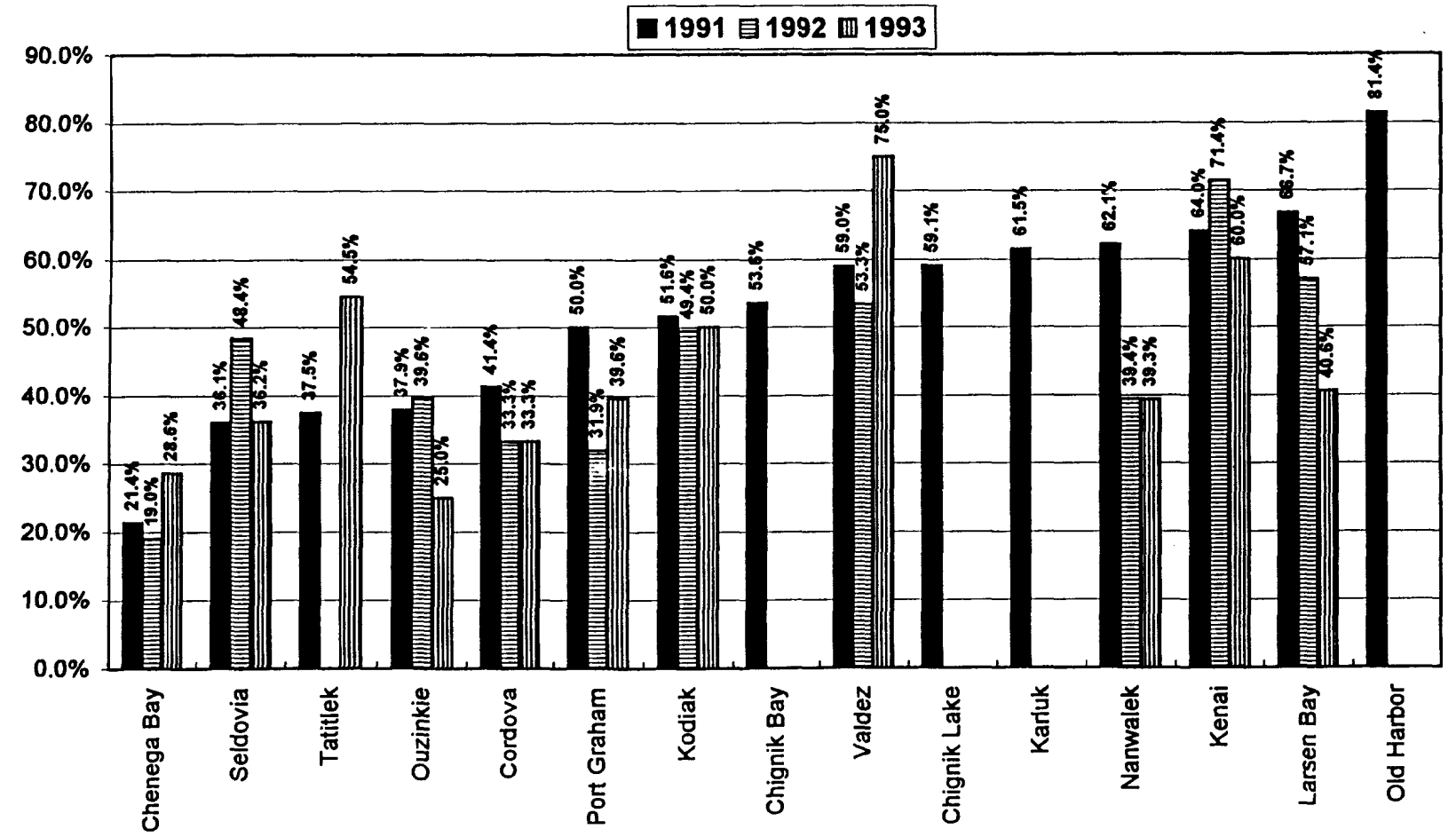

Figure I-10. Percentage of Respondents Predicting Lower Populations of Fish as a Consequence of OCS Development, 1991, 1992, and 1993 Study Years

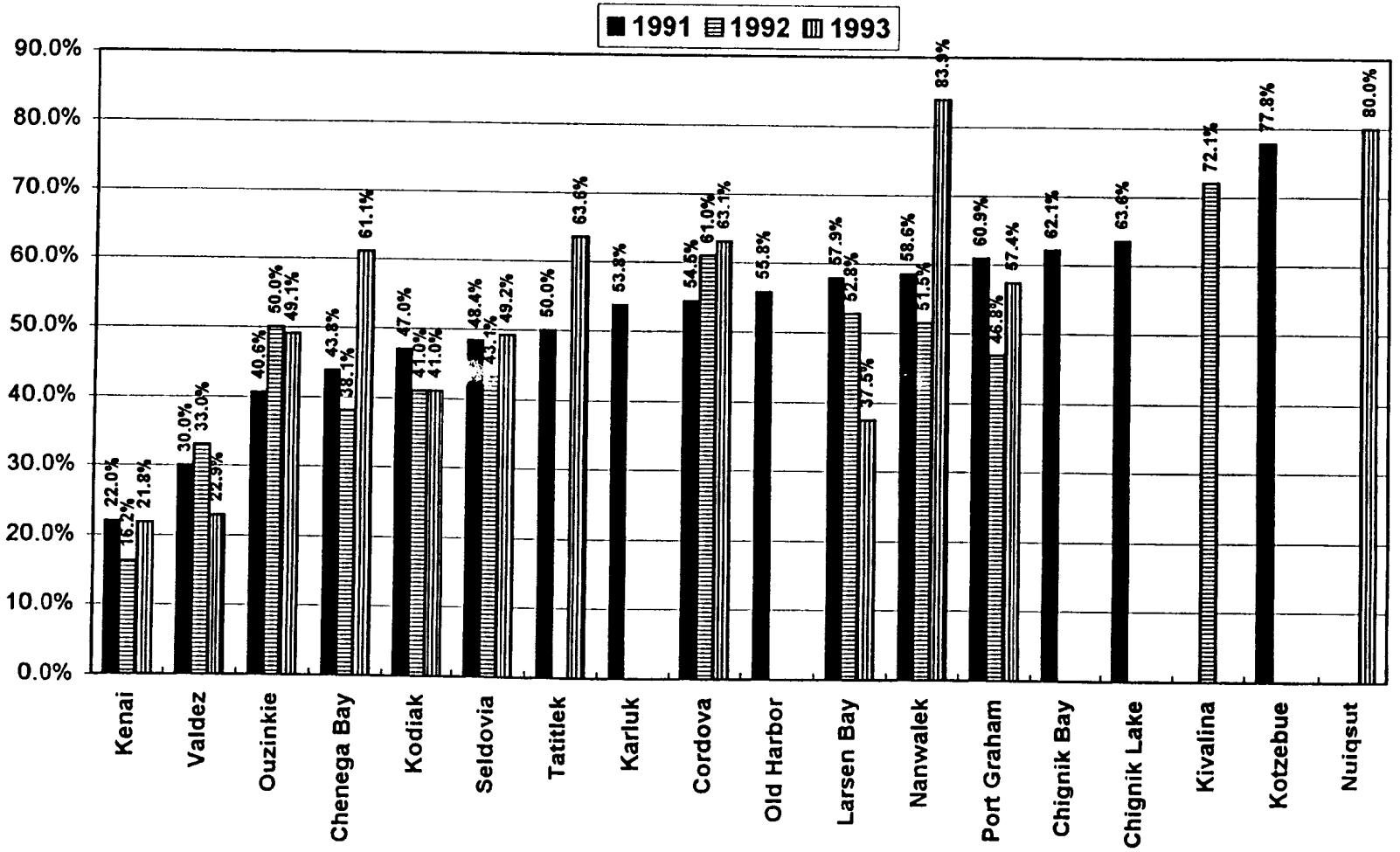

Figure I-11. Percentage of Respondents Predicting Lower Populations of Marine Invertebrates as a Consequence of OCS Development, 1991, 1992, and 1993 Study Years

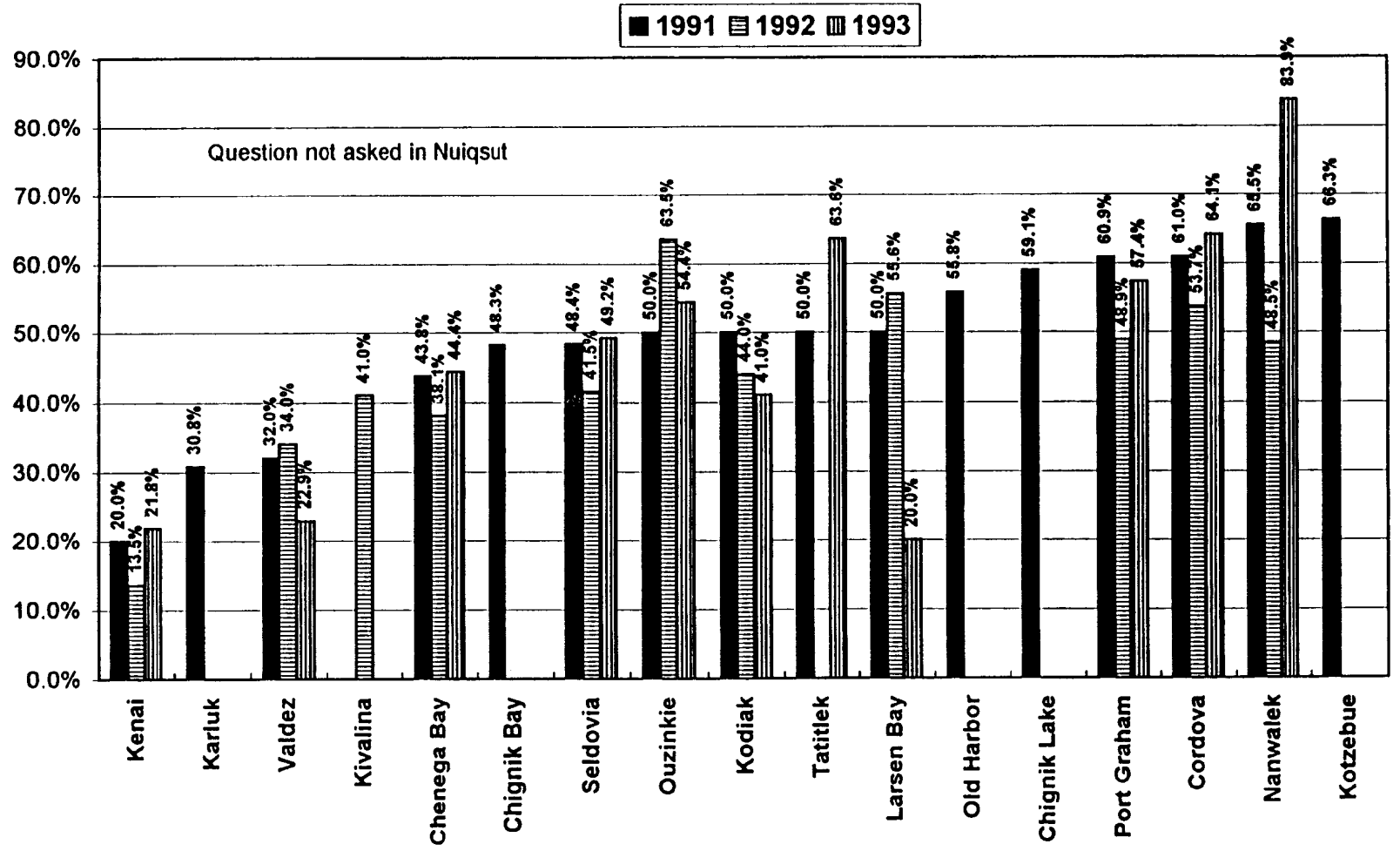

Figure I-12. Percentage of Respondents Predicting Lower Populations of Marine Mammals as a Consequence of OCS Development, 1991, 1992, and 1993 Study Years

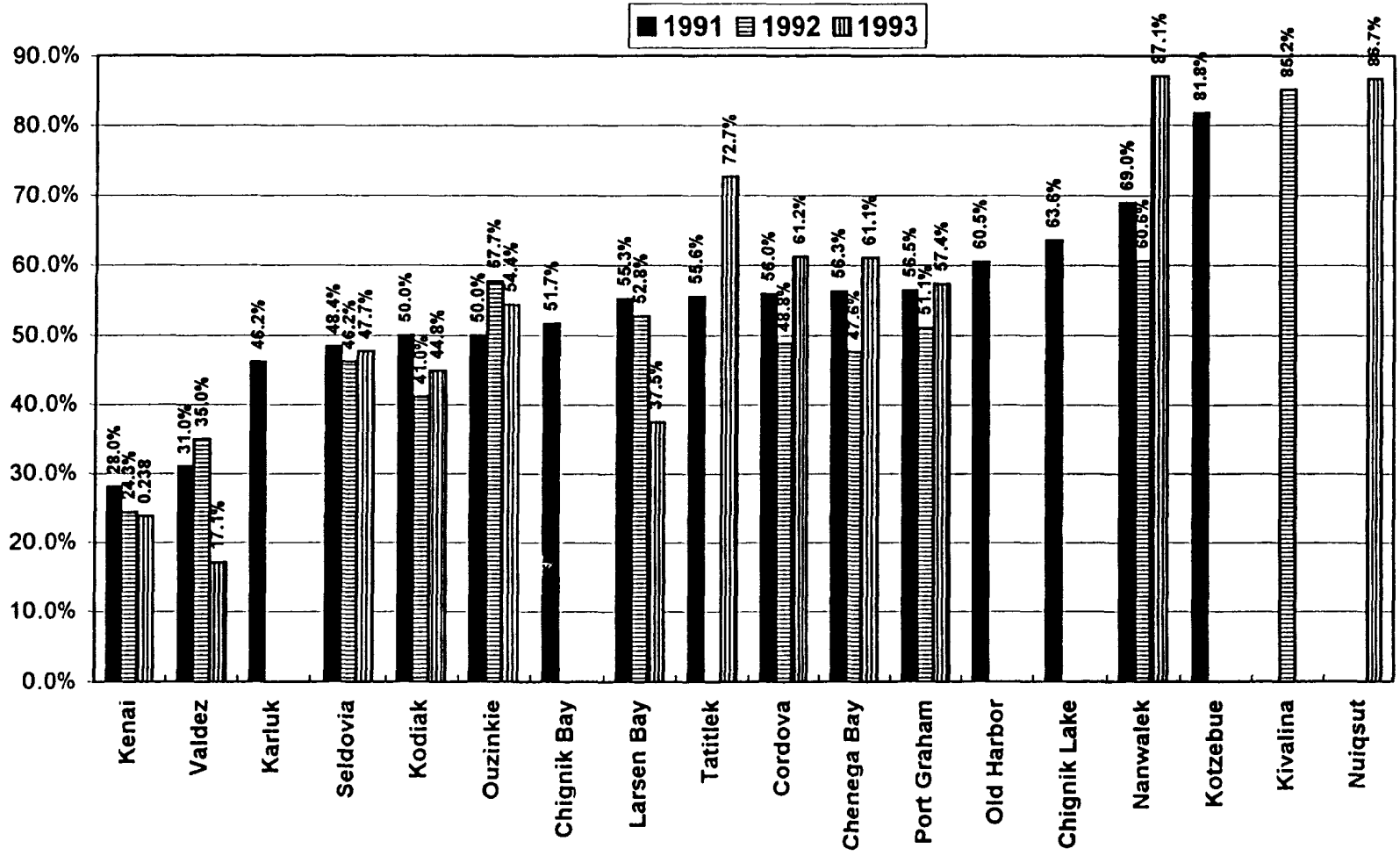

Figure I-13. Percentage of Respondents Predicting Lower Populations of Land Mammals as a Consequence of OCS Development, 1991, 1992, and 1993 Study Years

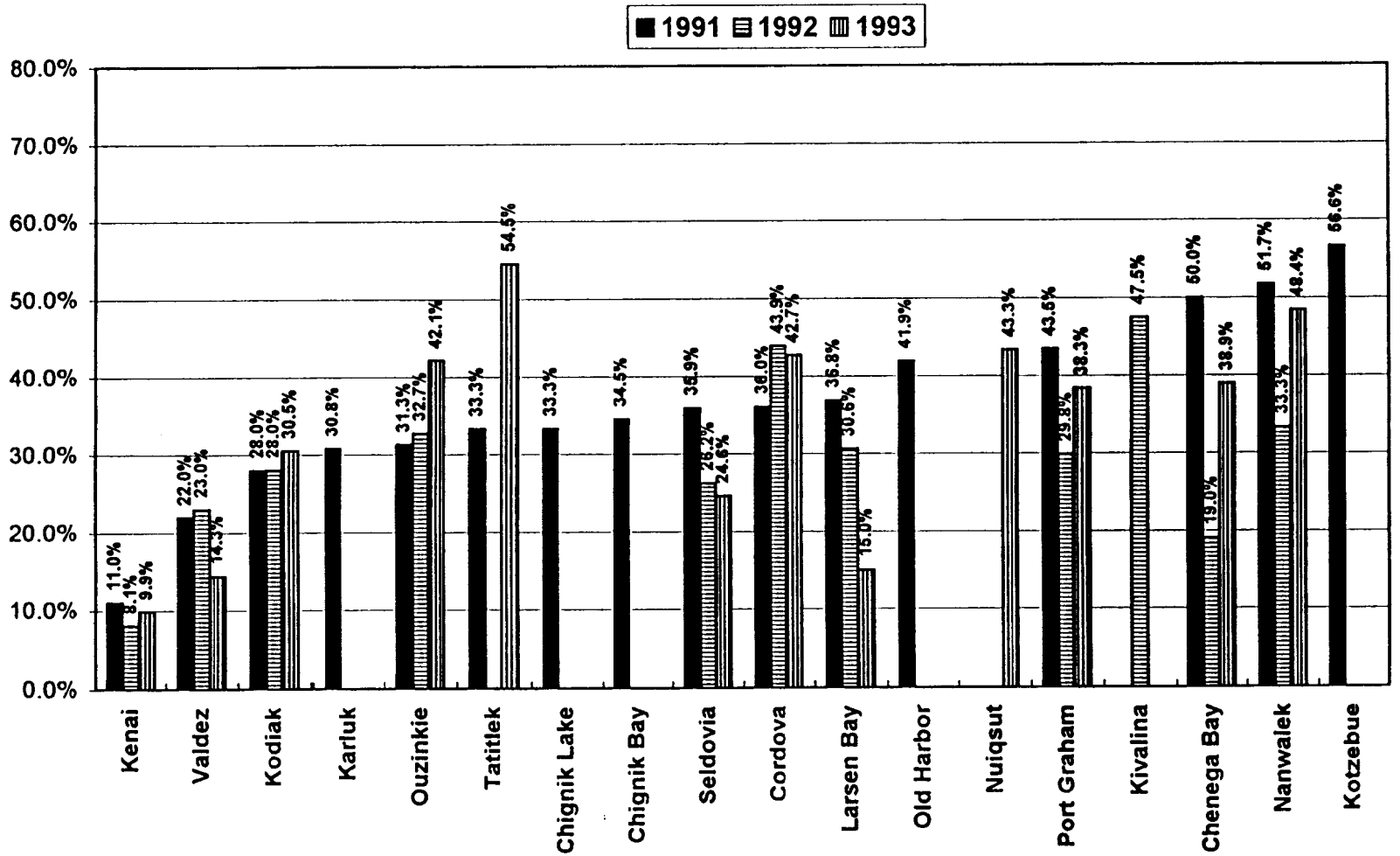

Figure I-14. Percentage of Respondents Predicting Lower Populations of Birds as a Consequence of OCS Development, 1991, 1992, and 1993 Study Years

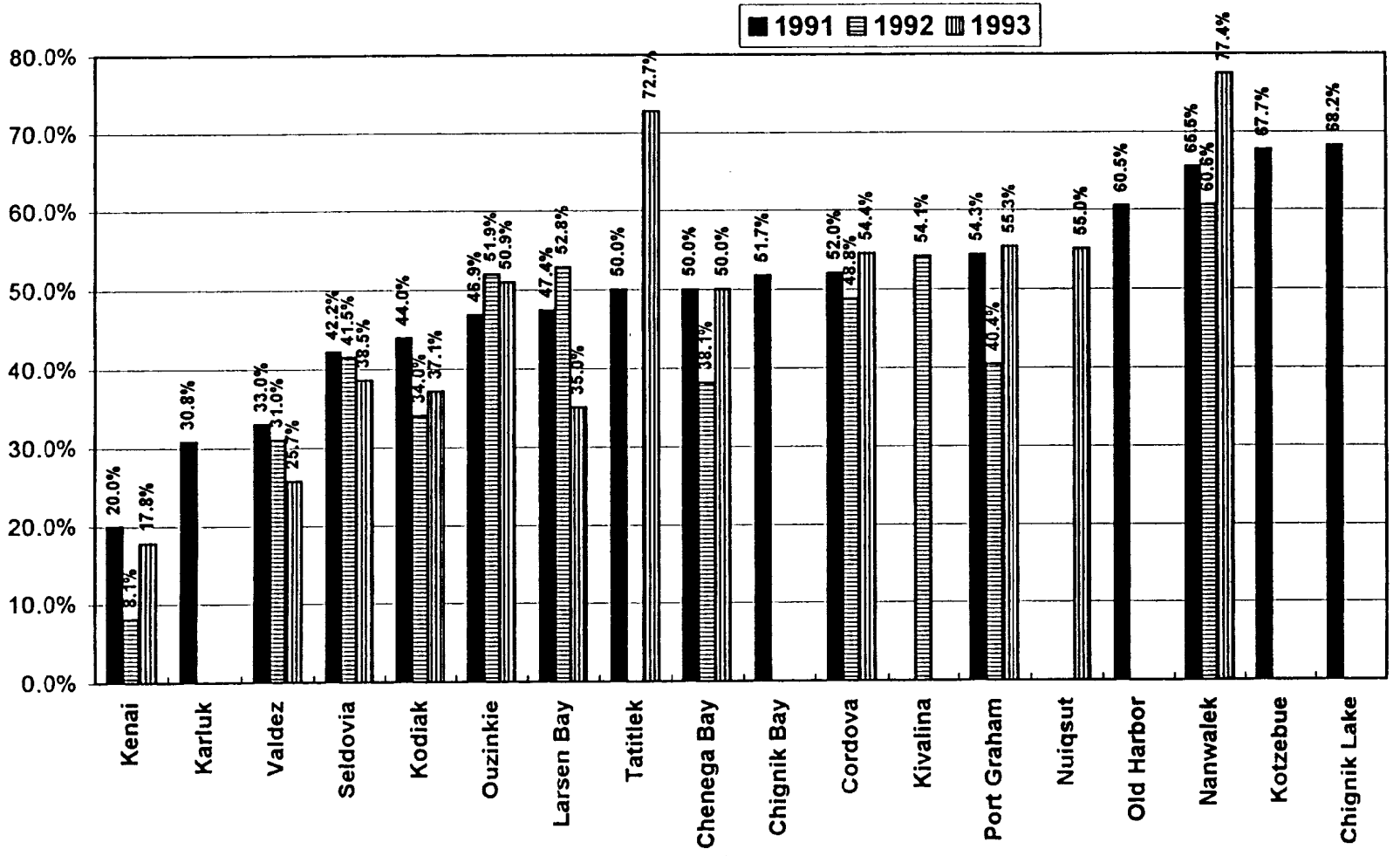

Figure I-15. Percentage of Respondents Predicting More Jobs Available as a Consequence of OCS Development, 1991, 1992, and 1993 Study Years

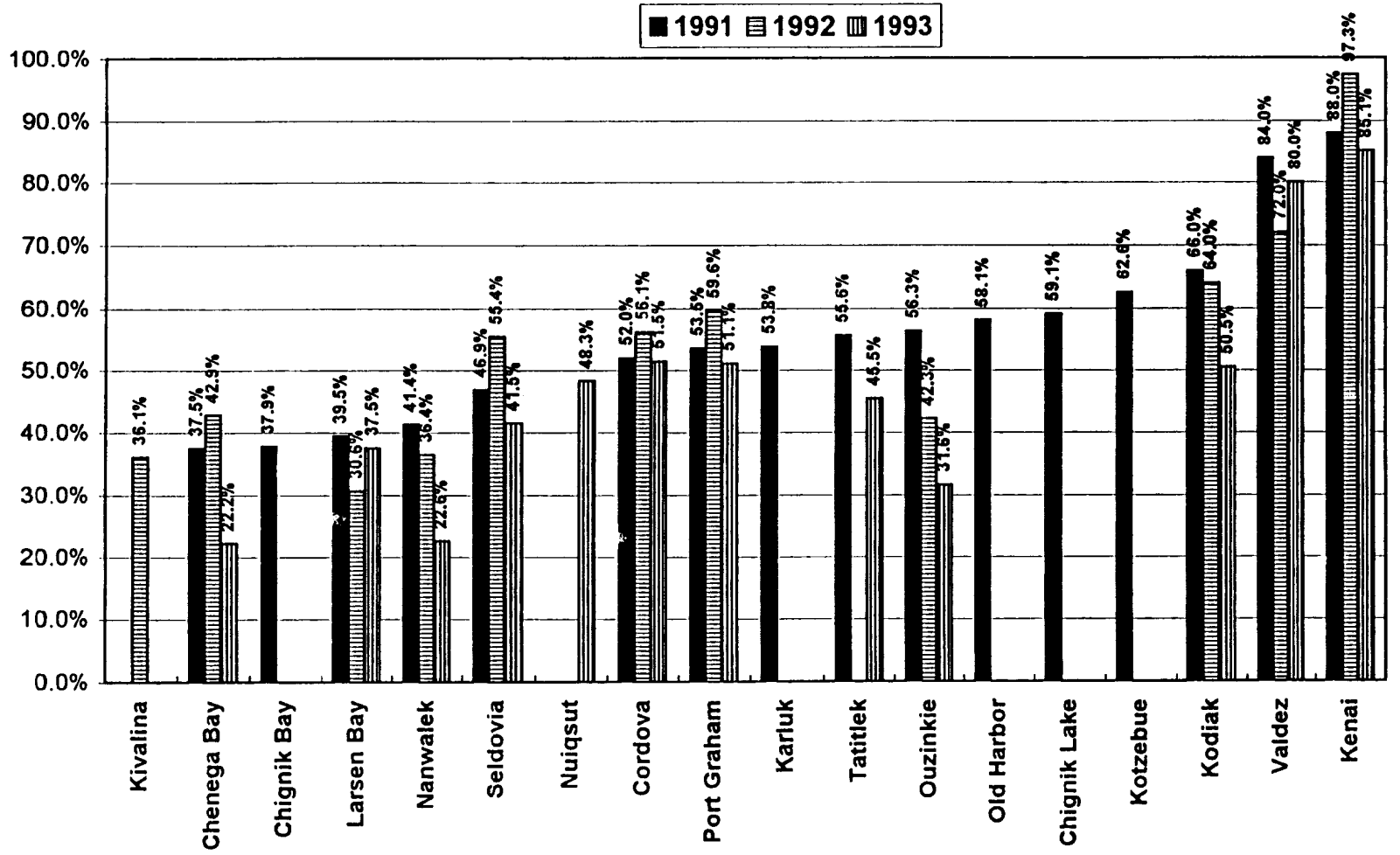

Figure I-16. Percentage of Households Reporting Lower Levels of Uses of Wild Resources Compared to 1988, the Year Before the Exxon Valdez Oil Spill, Study Communities

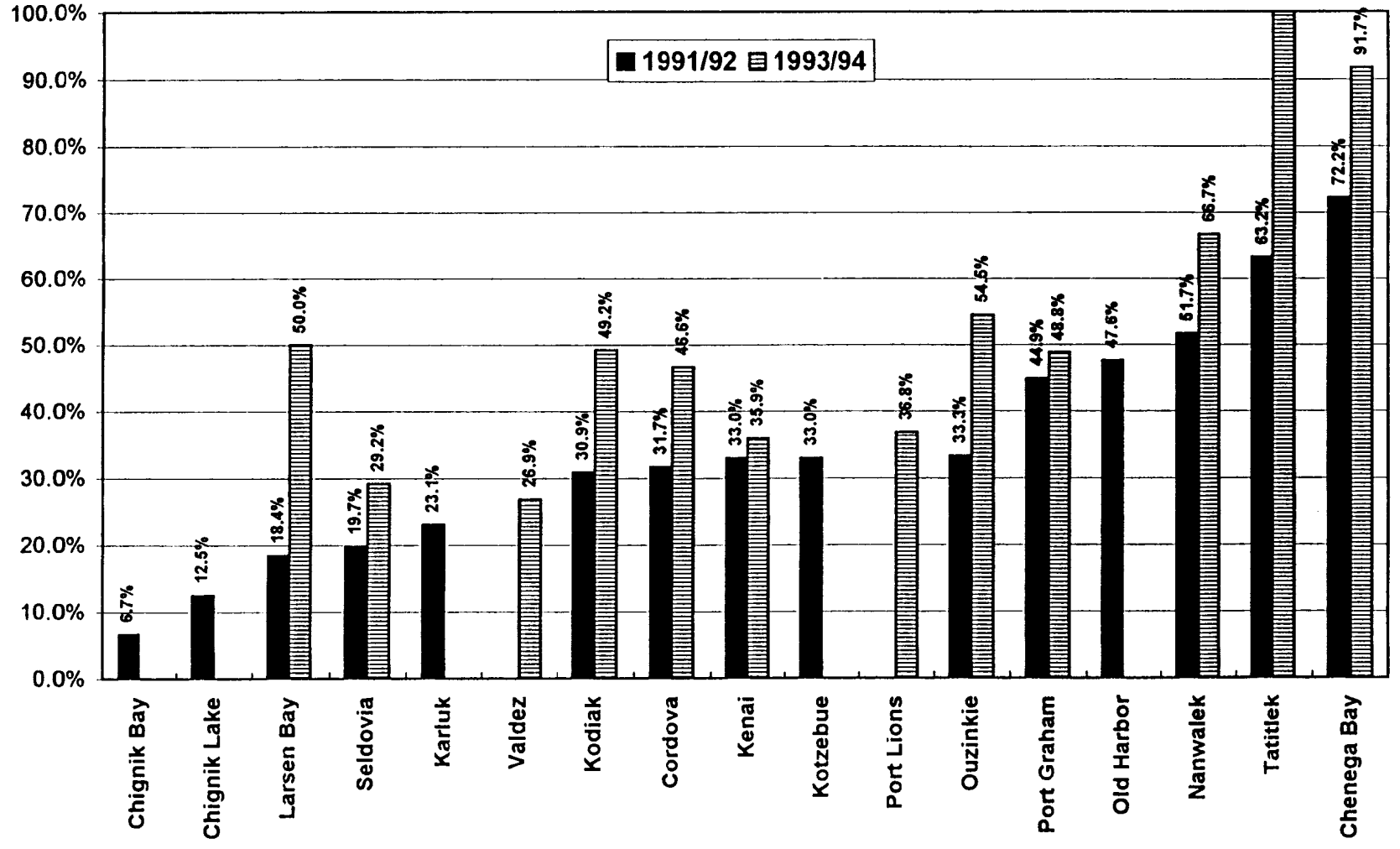

Figure I-17. Changes in Subsistence Harvest Levels in the Year After the Exxon Valdez Oil Spill

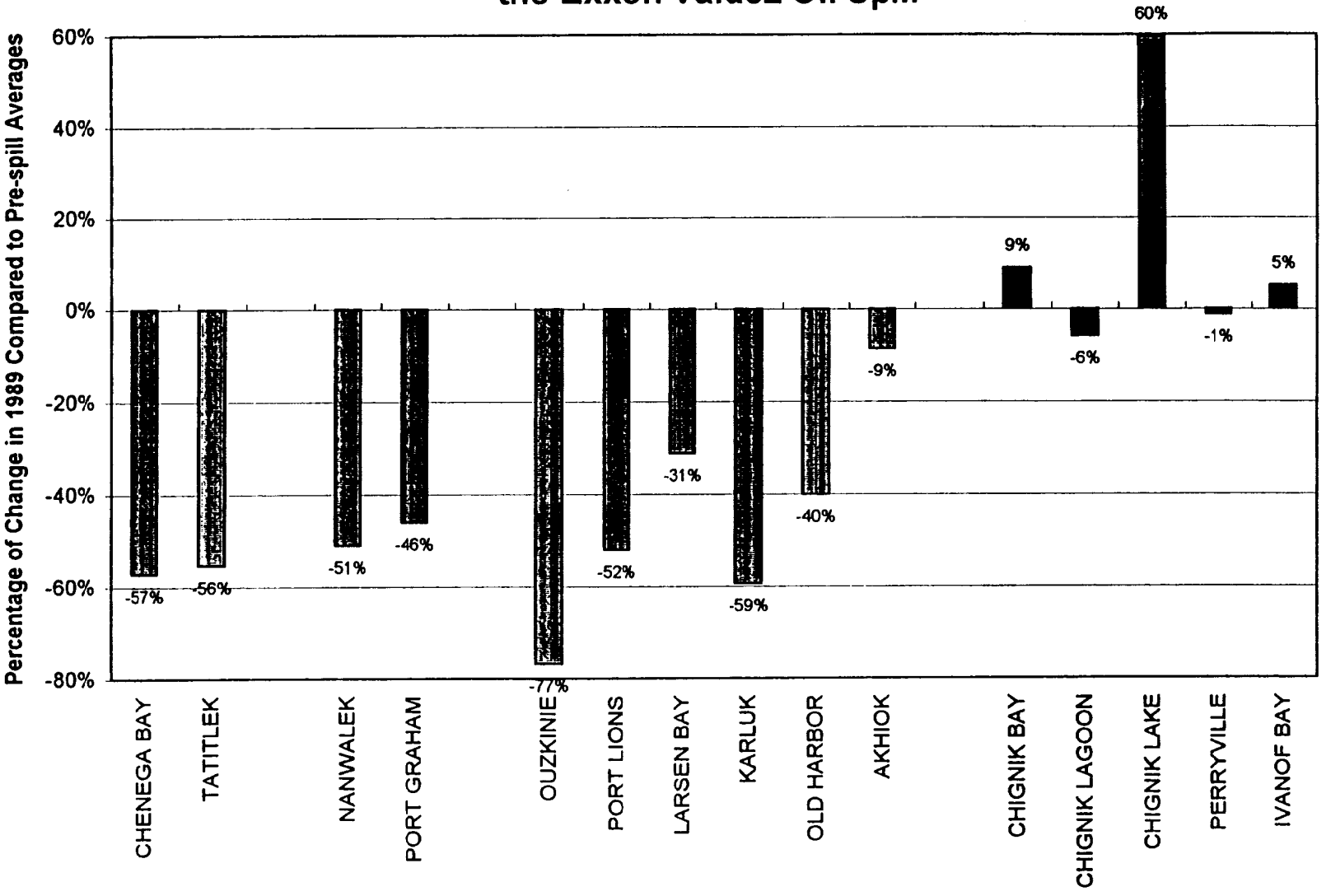

Figure I-18. Subsistence Harvests in 1990/91 Compared to Pre-spill Averages and 1989, Selected Spill-Area Communities

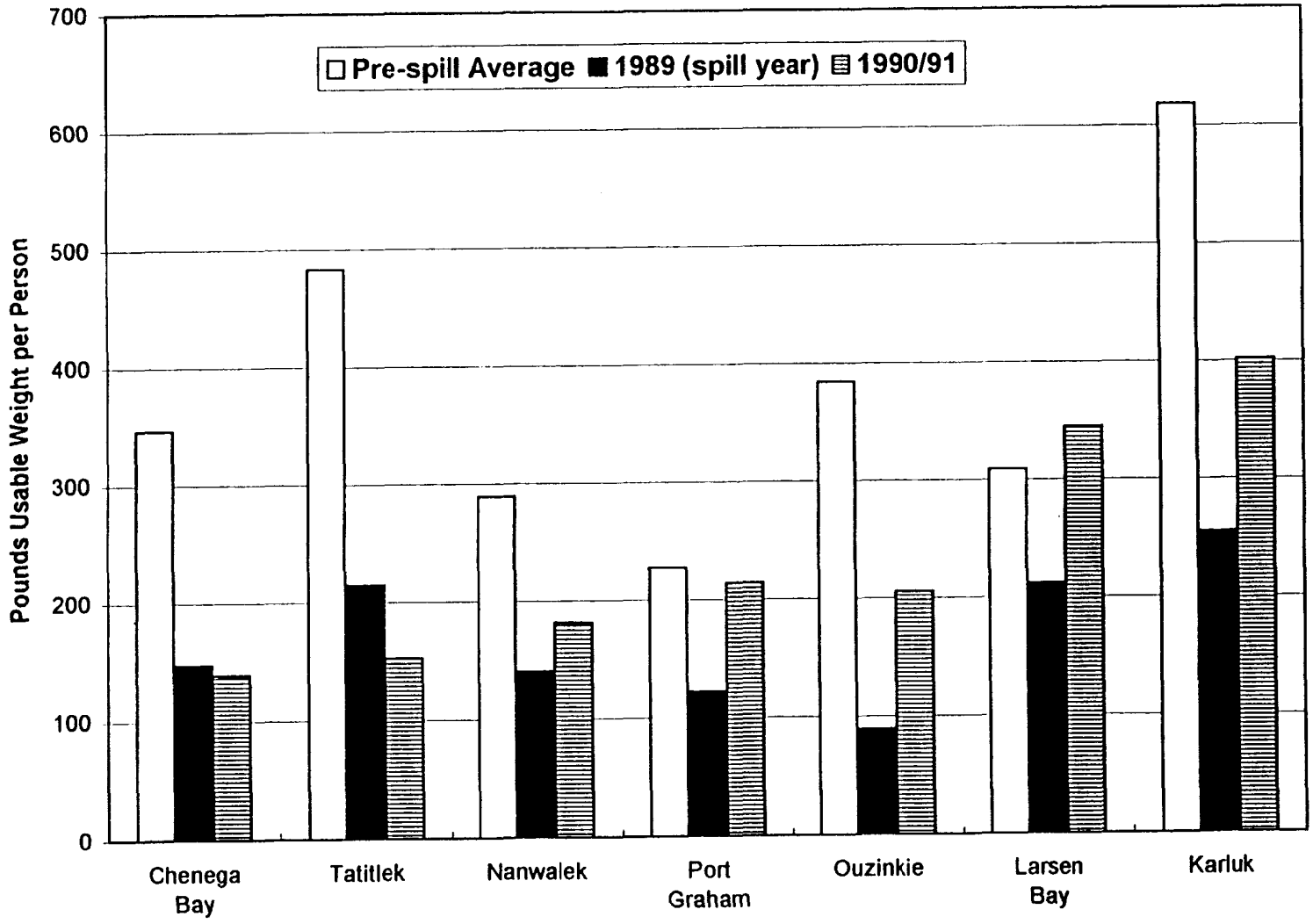

Table I-110. Resources and Services Injured by the *Exxon Valdez* Oil Spill

Injured Resources			Lost or Reduced Services
Biological Resources		Other	
Recovering	**Not Recovering**	Archaeological resources	Commercial fishing
Bald eagle	Common murre	Designated wilderness areas	Passive uses
Black oystercatcher	Harbor seal	Sediment	Recreation and Tourism
Intertidal organisms (some)	Harlequin duck		Subsistence
Killer whale	Intertidal organisms (some)		
Mussels	Marbled murrelet		
Sockeye salmon (Red Lake)	Pacific herring		
Subtidal organisms (some)	Pigeon guillemot		
Recovery Unknown	Pink salmon		
Clams	Sea otter		
Cutthroat trout	Sockeye salmon		
Dolly Varden	(Kenai and Akalura systems)		
River otter	Subtidal organisms (some)		
Rockfish			

Source: *Exxon Valdez* Oil Spill Trustee Council 1994:32

The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places;
and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Royalty Management** Program meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.