

**The Subsistence Harvest of
Harbor Seals and Sea Lions
by Alaska Natives in 2000**

Technical Paper No. 266

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ABSTRACT

This report describes the subsistence takes of harbor seals (*Phoca vitulina*) and Steller sea lions (*Eumetopias jubatus*) by Alaska Natives in 2000, including quantity, seasons, geographic distribution, and age and sex of the harvest. Information is summarized at the state, region, and community levels, and is compared with annual takes since 1992. The research was conducted by the Division of Subsistence, Alaska Department of Fish and Game under contract with the National Oceanic and Atmospheric Administration and the National Marine Fisheries Service. Information derives from systematic interviews with hunters and users of marine mammals in 1,560 households in 62 coastal communities within the geographic ranges of the two species. Local researchers conducted most of the household interviews as part of local and regional research networks. The project received generous support from leaders of a number of Native governments and regional and statewide associations.

During 2000, the estimated subsistence take of harbor seals by Alaska Natives was 2,229 seals, with a 95 percent confidence range of between 1,731 to 3,014 seals. Of the take, 11.2 percent (250 seals) were stuck and lost and 88.8 percent (1,979 seals) were harvested. The 2000 take of harbor seals came from the following stocks: Southeast Alaska stock (1,361 seals), Gulf of Alaska stock (779 seals), and Bering Sea stock (90 seals). Harbor seals were taken in 57 of 62 surveyed communities. Hunters reported taking males over females by about 2.6 to 1, and adults (80.3 percent) over juveniles (16.9 percent) or pups (2.8 percent). The 2000 take of harbor seals was the lowest recorded since 1992 – 2,854 (1992), 2,736 (1993), 2,621 (1994), 2,742 (1995), 2,741 (1996), 2,546 (1997), and 2,597 (1998).

During 2000, the estimated subsistence take of sea lions by Alaska Natives was 205 sea lions, with a 95 percent confidence range of between 147 to 306 sea lions. Of the take, 17.1 percent (35 sea lions) were struck and lost and 82.8 percent (170 sea lions) were harvested. Sea lions were taken in 18 of 62 surveyed communities. Hunters reported taking males over females by about 4 to 1, and adults (43.8 percent) and juveniles (44.5 percent) over pups (11.6 percent). The 2000 take of sea lions was the largest since 1995 – 549 (1992), 487 (1993), 416 (1994), 339 (1995), 186 (1996), 164 (1997), and 178 (1998). Declines in sea lion takes are associated with decreasing numbers of hunters hunting sea lions, which is probably linked to local sea lion scarcities.

ACKNOWLEDGEMENTS

This project would not have been possible without tremendous local support in every community where we conducted the survey. We wish to thank each tribal council, city council, and all of the regional Native organizations that facilitated our work. Heartfelt thanks are owed to the many elders and local marine mammal experts who allowed us to interview them at length about their lifelong use and observations of sea lions and harbor seals. In addition, we are deeply indebted to the many hundreds of hunters who volunteered to report their subsistence harvests to our staff and to locally hired research assistants.

The forty-seven local researchers who conducted household interviews deserve to be recognized individually for their high level of interest and work. We look forward to working with many again in the near future as the project moves into its ninth year:

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Antone Shelikoff, Akutan
Nina Tinker, Aleknagik
Harriet Silva, Angoon
George Eleshansky, Chenega Bay
Polly Aleck, Chignik Bay
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Frederick Hamilton, Craig
Dora Andrew, Dillingham
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Carleen Hoblet, False Pass
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Karen Kalmakoff, Ivanof Bay
Harold Frank, Juneau
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Lydia Shade, Port Heiden
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Paula Homan, Seward
Vicki Bartels, Sitka
Kelly Kompkoff, Tattilek
Elizabeth Myas, Togiak
Kevin Ayojiak, Togiak
Jeweline Gloko, Twin Hills
Janice Krukoff, Unalaska
Sandra Churchill, Wrangell
Raymond Sensmeier, Yakutat

ADDENDUM

As noted in the *Methodology* section, the Division of Subsistence did not collect harvest information for 2000 in St. Paul because a harvest monitoring program was being conducted by the St. Paul Tribal Government. The Division did not receive findings from that program in time for inclusion in the analysis of subsistence takes of sea lions in this technical paper. Instead, the estimate from the most recent set of household surveys in St. Paul, pertaining to 1998, was used to develop the estimate for subsistence sea lion takes in 2000 -- 58 sea lions (41 harvested and 17 struck and lost). This estimate derived from systematic interviews of 74 households in two strata (39 of 45 active hunting households and a random sample of 35 of 104 other households), administered by tribal researchers under contract to ADF&G during the 1998 survey year. It was the sixth year in which a household survey was administered in St. Paul.

On October 12, 2001, as this technical paper was in the final stages of production, the Division received a report of findings from the St. Paul tribal harvest monitoring program (*1999 – 2000 Steller Sea Lion Subsistence Report* by Aquilina D. Lestenkof and Phillip A. Zavadil, Aleut Community of St. Paul Island, Tribal Government, Ecosystem Conservation Office, St. Paul Island, Pribilof Islands, Alaska, 2001). The report (page 5) provides an estimated subsistence take of 23 sea lions in St. Paul during 2000 – 12 retrieved, 4 struck and lost, and 7 unreported. This estimate was based primarily on voluntary reports from hunters, corrected for an assumed non-reported kill rate of 40%. The 2000 survey period was the second year of the tribal harvest assessment program.

The estimate of the subsistence take of 58 sea lions in this technical paper is 35 sea lions more than the estimate of 23 sea lions in the tribal report for St. Paul during 2000. Therefore, there may be an overestimate of the sea lion take in St. Paul in this technical paper, to the extent that the estimate from the tribal program is a complete accounting of sea lion takes in 2000.



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INTRODUCTION

This report describes the subsistence takes of harbor seals (*Phoca vitulina*) and Steller sea lions (*Eumetopias jubatus*) by Alaska Natives during calendar year 2000. The report covers the eighth year documenting subsistence takes of harbor seals and sea lions in Alaska. Subsistence takes have been documented from 1992 through 2000, with no surveys in 1999 (Wolfe and Mishler 1993, 1994, 1995, 1996, 1997, 1998; Wolfe and Hutchinson-Scarborough 1999). The research for calendar year 2000 was conducted by the Division of Subsistence of the Alaska Department of Fish and Game under contract with the National Oceanic and Atmospheric Administration and the National Marine Fisheries Service. The research has been conducted in cooperation with tribal governments and organizations representing Alaska Native marine mammal hunters, including the Alaska Native Harbor Seal Commission and the Indigenous People's Council for Marine Mammals.

This report provides information on the subsistence takes of harbor seals and sea lions during 2000, including size, seasons, geographic distributions, and age and sex of harvested animals. Information on subsistence uses derives from systematic interviews with marine mammal hunters in 62 communities (Fig. 1, Table 2). Information was collected principally by local researchers trained in each community, working within a network of local and regional researchers organized by the Division of Subsistence.

The geographic area covered by this report was defined as the Alaska coastal waters south of Cape Newenham, including the Pribilof Islands, which corresponds with the general distributions of harbor seals and sea lions in Alaska (Figs. 2 and 3, from Burns, Frost, and Lowry 1985). The use of harbor seals and sea lions by Alaska Natives for food and raw materials has a long tradition in this part of Alaska, since before historic contact through to the present. The Alaska Native groups using harbor

seals include the Aleut of the Aleutian Islands, the Alutiiq and Eyak of the Pacific Gulf coast, the Tlingit, Haida, and Tsimshian of the southeast archipelago, and the Yup'ik of southwest Alaska. More occasional use of harbor seals is made by the Dena'ina of Cook Inlet. The Aleut of the Aleutian and Pribilof islands and the Alutiiq of certain communities of Kodiak Island and the Gulf of Alaska currently are the primary users of sea lions. Sea lions are used more occasionally by Tlingit, Haida, Tsimshian, and Yup'ik groups. Subsistence products derived from harbor seals and sea lions by Alaska Natives include oil, meat, and skins, as described in Wolfe and Mishler (1993).

This report is organized in several sections. The Methodology section describes the methods used to collect information. Two sections (The Subsistence Take of Harbor Seals in 2000 and The Subsistence Take of Sea Lions in 2000) present information on the statewide takes of harbor seals and sea lions, summarized by community and region. In the Discussion section are interpretations of the 2000 survey year, including summaries of harvest patterns since 1992. Appendix A contains a copy of the survey instrument used in household interviews with marine mammal hunters. Appendix B contains regional summaries of the subsistence takes of harbor seals and sea lions. Appendix C contains materials on the subsistence takes of harbor seals and sea lions by community.

METHODOLOGY

Information on the subsistence takes of harbor seals and sea lions was collected through interviews with persons in 1,560 Alaska Native households in 62 coastal communities (Table 2). Respondents were asked to recall information about their household's use of these marine mammals during the previous year. The survey instrument administered in household interviews was similar to one used 1992-1998, first developed in consultation with the Rural Alaska Community Action Program (RurAL

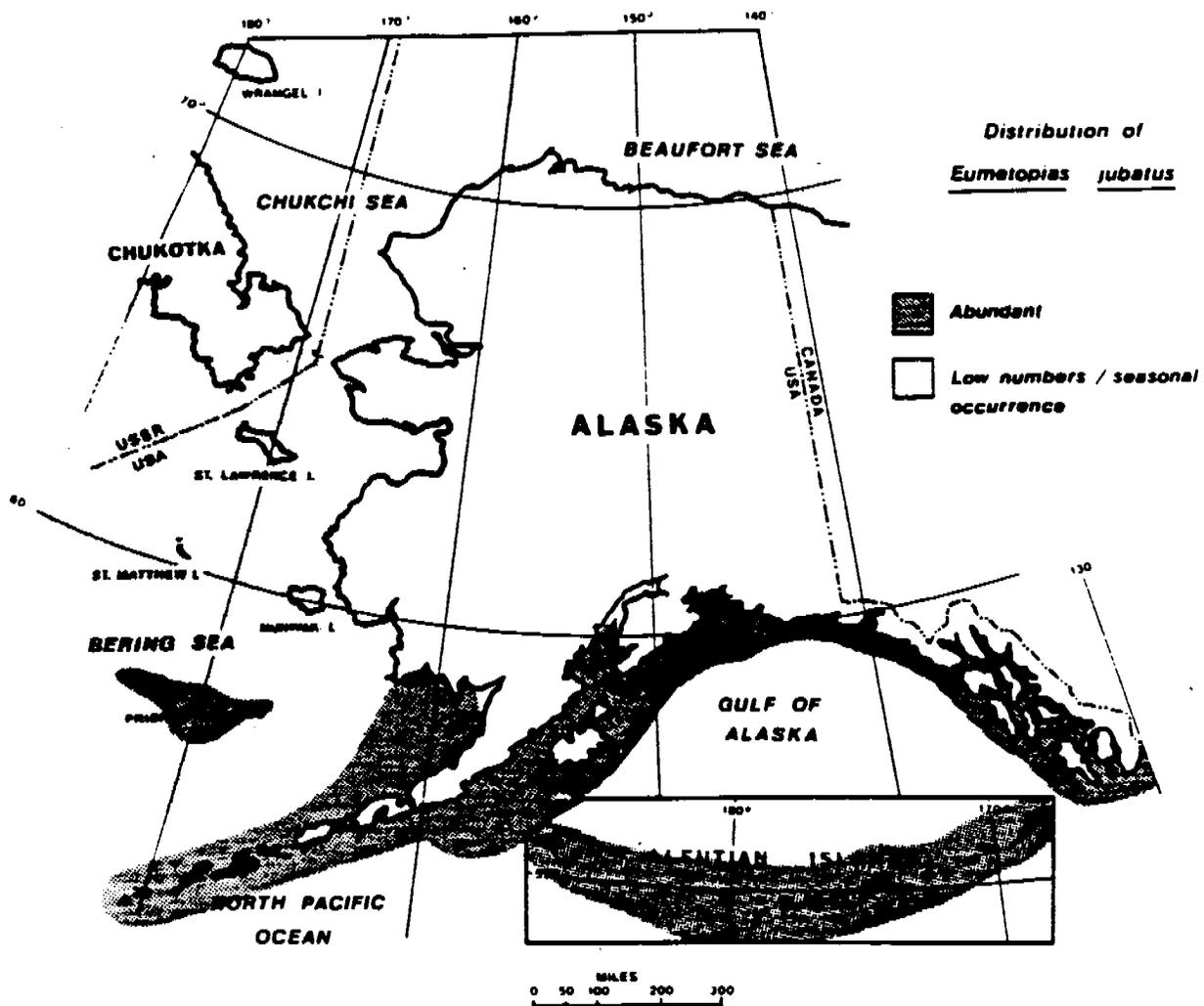


Fig. 2. General distribution of sea lion in Alaska. (Source: Burns, Frost, and Lowry 1985)

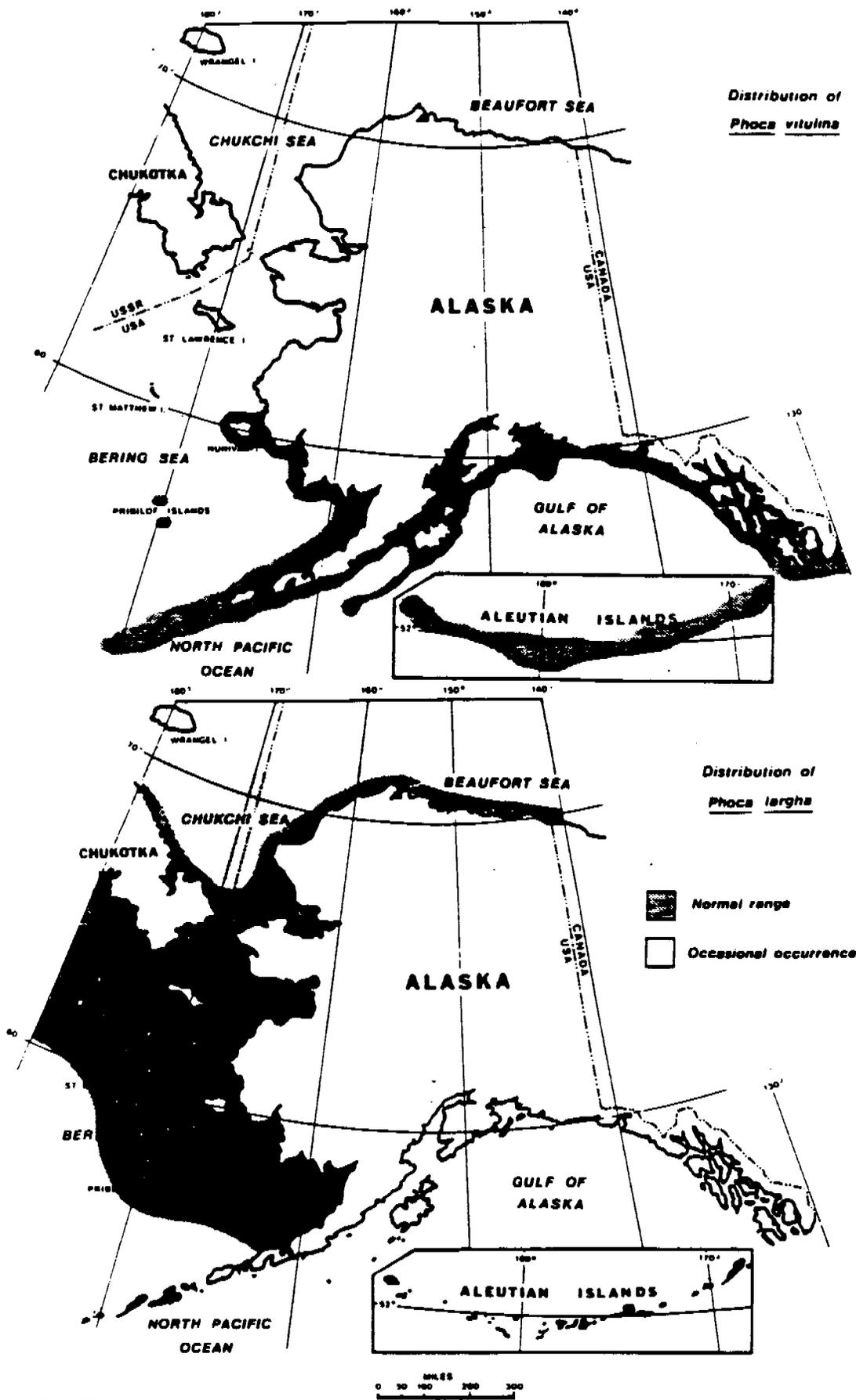


Fig. 3. [Top] General distribution of harbor seal (*Phoca vitulina*) in Alaska. [Bottom] General distribution of spotted seal (*Phoca largha*) in Alaska. (Source: Burns, Frost, and Lowry 1985)

CAP) and the Indigenous People's Council for Marine Mammals (IPCoMM) (see Appendix A). Hunters and household heads were asked to recall the numbers of sea lions and harbor seals taken by household members during each month over the past year. The survey contained questions that pertained to harvest numbers, struck and lost animals, age of animals, and sex of animals. The survey also asked whether the household used, harvested, received, or gave away sea lions or harbor seals during the last year. For the first time, the survey asked about population trends in the areas where households hunted, and about hunting time and effort compared with five years ago. Interviews were conducted by local researchers hired and trained as part of the project, augmented by regional Division of Subsistence researchers in select communities. A single survey was administered in January 2001 to cover the period from January through December 2000.

The project was designed to be a collaborative effort with Alaska Native hunters and organizations. During the first year of the study, a number of Native governments, Native leaders, and associations with interests in harbor seals and sea lions management were contacted to obtain suggestions about project design, including the Alaska Federation of Natives, the Aleutians East Borough, Aleutian-Pribilof Islands Association, Bristol Bay Native Association, Central Council of Tlingit and Haida Indian Tribes of Alaska, Cook Inlet Region, Inc., IPCoMM (meeting through RurAL CAP), Kodiak Area Native Association, and the North Pacific Rim (Chugachmiut). RurAL CAP and IPCoMM were asked to be the formal technical oversight organizations for the first five years of the project, through a subcontract with the Division of Subsistence. Since 1997, formal technical oversight for the project has been provided by the Alaska Native Harbor Seal Commission, through a subcontract. Each year, oversight groups have reviewed the project, data analysis, and preliminary findings of the study.

Following standard procedures of the Division of Subsistence (Fall 1990), support for the project was solicited from local Native governments or leaders of local

government entities, for each community where surveys were conducted. During the first project year, contacts were made with representatives of all the entities listed in Table 1, and the project received support in the communities listed in Table 2. Many local governments have been extremely helpful during the course of the project, especially by identifying Native households, potential local researchers, and marine mammal experts in the community to contact.

The project was designed to protect the identities of surveyed participants. Marine mammal hunters and other respondents were informed that participation in interviews was completely voluntary. Respondents were told that their identities would be kept confidential in reports presenting the information. Permission to administer the household harvest survey was asked of each individual respondent, face-to-face at the person's home or during an initial phone contact. At this time, the purpose of the project was described. If a person declined to participate in the study, the person was thanked for his or her time and a survey was not conducted. Persons who were interviewed as part of the harvest survey were not paid. Most marine mammal hunters generously offered their assistance to the study.

As stated above, a research network of locally-hired researchers and regional Division of Subsistence researchers was used to collect information on subsistence takes of sea lions and harbor seals during 2000. In 52 of the 62 communities selected for surveys, one or two local residents were hired as local researchers. Newly-hired local researchers received in-person training from regional researchers, whereas local researchers who successfully conducted surveys on previous rounds usually worked with regional researchers through telephone, fax, and the mail. Local researchers performed tasks such as updating community lists of households and hunters, implementing household sampling regimes, administering household surveys during the yearly cycle, data proofing of surveys and survey tracking forms, and mailing surveys and tracking sheets for data entry and analysis. Regional researchers

**Table 1.
Organizations Contacted During the Project**

Community	Government/Organization
Akhiok	Akhiok Tribal Council City of Akhiok
Akutan	Akutan Traditional Village Council City of Akutan Akutan Corporation
Aleknagik	Aleknagik Tribal Council
Anchorage	Cook Inlet Tribal Council Alaska Federation of Natives
Angoon	City of Angoon
Atka	Atka IRA Council City of Atka
Chenega Bay	Chenega Bay IRA Council
Chignik Bay	Chignik Bay Traditional Village Council
Chignik Lagoon	Chignik Lagoon Traditional Village Council
Chignik Lake	Chignik Lake Traditional Village Council
Clark's Point	Clark's Point Traditional Council
Cordova	Traditional Village of Eyak
Craig	Shaan-Seet, Inc. City of Craig
Dillingham	Dillingham Traditional Council
Egegik	Egegik Traditional Council
False Pass	False Pas Tribal Council City of False Pass
Haines	Chilkat Indian Association
Hoonah	Hoonah Traditional Council
Hydaburg	Haida Corporation City of Hydaburg
Iliamna	Iliamna Village Council
Ivanof Bay	Ivanof Bay Traditional Village Council
Juneau	Tlingit and Haida Central Council Sealaska Auke Tribe Council Alaska Native Brotherhood/Sisterhood
Kake	Organized Village of Kake City of Kake
Karluk	Karluk IRA Council
Kenai	Kenaitze Indian Tribe IRA Cook Inlet Region, Inc.
Ketchikan	Ketchikan Indian Tribe IRA Ketchikan Indian Association
King Cove	Agdaagux Tribe of King Cove Belkofsky Village Council City of King Cove
King Salmon	King Salmon Traditional Council
Klawock	Klawock Cooperative Association Klawock Heenya Corporation
Klukwan	Chilkat Indian Village
Kodiak City	Kodiak Tribal Council Kodiak Area Native Association
Larsen Bay	Larsen Bay Tribal Council City of Larsen Bay
Levelock	Levelock Traditional Council

Community	Government/Organization
Manokotak	Manokotak Traditional Council
Metlakatla	Council Annette Islands Reserve Metlakatla Indian Community
Naknek	Naknek Traditional Council
Nanwalek	Nanwalek Traditional Council English Bay Corporation
Nelson Lagoon	Nelson Lagoon Village Council
Newhalen	Newhalen Traditional Council
Nikolski	Nikolski IRA Council Chaluka Corporation
Old Harbor	Old Harbor Tribal Council City of Old Harbor
Ouzinkie	Ouzinkie Native Corporation Ouzinkie Tribal Council City of Ouzinkie
Pelican	Tlingit and Haida Indians of Pelican Community Council City of Pelican
Perryville	Perryville Traditional Village Council
Petersburg	Petersburg Indian Association
Pilot Point	Pilot Point Traditional Council
Port Graham	Port Graham Village Council Port Graham Corporation
Port Heiden	Port Heiden Traditional Council
Port Lions	Port Lions Tribal Council City of Port Lions
Saint George	Saint George Traditional IRA Council Saint George Tanaq Corporation City of Saint George
Saint Paul	Tribal Government of Saint Paul City of Saint Paul
Sand Point	Unga Tribal Council Qagan Tayagugin Tribe of Sand Point City of Sand Point
Saxman	Saxman IRA Council City of Saxman
Seldovia	Seldovia Native Association
Seward	Qutekcaq Native Tribe
Sitka	Sitka Tribal Council Alaska Native Brotherhood
South Naknek	South Naknek Traditional Council
Tatitlek	Tatitlek IRA Council
Togiak	Togiak Traditional Council
Twin Hills	Twin Hills Village
Tyonek	Native Village of Tyonek
Unalaska	Quawalangin Tribal Council
Valdez	Valdez Native Association
Wrangell	Wrangell Cooperative Association
Yakutat	Yakutat Native Association Yak-Tat Kwaan Alaska Native Brotherhood/Alaska Native Sisterhood

performed tasks such as obtaining formal support for the project from Native organizations, recruiting and selecting local hires, developing household sampling regimes, training and supervising local researchers, proofing survey data, consulting local researchers to resolve data questions in preparation for data entry and analysis, writing reports on each community's survey experience, and entering field notes into a centralized database. Data analysis was performed by Division of Subsistence data management program.

In 2000, new harvest information was not collected in nine communities (Anchorage, Atka, Homer, Hydaburg, Kenai, Nikolski, St. George, Tyonek, and Valdez) because local surveyors could not be secured. Funding constraints did not allow for additional work by regional researchers to deal with these issues. In this report, data from the 1998 survey (the most recent survey cycle) are used as estimates of the takes in 2000 for the nine unsurveyed places. In 1998, hunters from the nine communities together reported taking 41 sea lions and 176 harbor seals. In addition, documentation of subsistence takes at St. Paul was conducted by a local hunter association as a separate research project funded by the National Marine Fisheries Service. Findings from the St. Paul research were requested from NMFS for inclusion in this report; however, they were unavailable at the time of this writing. Consequently, data from the 1998 survey are used as estimates of takes in 2000 at St. Paul (58 sea lions and 5 harbor seals).

Households were selected using three main designs, depending upon the community -- census sampling, two-strata random sampling, and chain referral sampling. The type of design used for each community is shown in Table 2. Sampling designs and expansion methods were similar to those used the first study year, as described in Wolfe and Mishler (1993:17-19). For communities with census or chain referral sampling, 74.5 percent of identified households (1,078 of 1,447 households) were successfully contacted and interviewed. For communities with two-strata designs,

Table 2
Sampling Methodology By Community
Harbor Seal and Sea Lion Surveys, 2000

<u>Region and Community</u>	<u>Estimated Native Population</u>	<u>Type of Design</u>	<u>Identified Household Universe¹</u>	<u>Surveyed Households</u>	<u>Percentage Households Surveyed</u>
1. SOUTHEAST					
Angoon	494	Chain Referral	51	50	98.0%
Craig	432	Chain Referral	26	26	100.0%
Haines	335	Chain Referral	16	11	68.8%
Hoonah	597	Chain Referral	47	41	87.2%
* Hydaburg	342	Chain Referral	16	10	62.5%
Juneau	5,084	Chain Referral	74	21	28.4%
Kake	530	Chain Referral	69	19	27.5%
Ketchikan	1,802	Chain Referral	17	7	41.2%
Klawock	496	Chain Referral	25	19	76.0%
Klukwan	123	Chain Referral	6	1	16.7%
Pelican	42	Chain Referral	16	15	93.8%
Petersburg	388	Chain Referral	30	29	96.7%
Saxman	302	Chain Referral	19	10	52.6%
Sitka	2,178	Chain Referral	80	74	92.5%
Wrangell	550	Chain Referral	9	6	66.7%
Yakutat	375	Chain Referral	48	38	79.2%
Region Total	14,070		549	377	68.7%
2. NORTH PACIFIC RIM					
Chenega Bay	67	Census	15	9	60.0%
Cordova	368	Two Strata	182	44	24.2%
Nanwalek	165	Census	40	31	77.5%
Port Graham	151	Census	67	40	59.7%
Seldovia	66	Two Strata	18	14	77.8%
Seward	592	Two Strata	32	32	100.0%
Tatitlek	91	Census	27	14	51.9%
* Valdez	372	Chain Referral	5	3	60.0%
Region Total	1,872		386	187	48.4%
3. UPPER KENAI-COOK INLET					
* Anchorage	14,569	Chain Referral	30	24	80.0%
* Homer	189	Chain Referral	36	30	83.3%
* Kenai	1715	Chain Referral	31	27	87.1%
* Tyonek	174	Chain Referral	3	3	100.0%
Region Total	16,647		100	84	84.0%
4. KODIAK ISLAND					
Akhiok	75	Census	16	10	62.5%
Karluk	26	Census	15	10	66.7%
Kodiak City	829	Chain Referral	12	10	83.3%
Larsen Bay	91	Census	31	25	80.6%
Old Harbor	203	Chain Referral	43	40	93.0%
Ouzinkie	197	Chain Referral	32	32	100.0%
Port Lions	163	Chain Referral	9	7	77.8%
Region Total	1,584		158	134	84.8%

* Numbers for these communities are based on 1998 survey sampling.

¹ For Chain Referral communities, the "Identified Household Universe" is smaller than the total number of Native households.

Table 2, (Continued)
Sampling Methodology by Community,
Harbor Seal and Sea Lion Surveys, 2000

<u>Region and Community</u>	<u>Estimated Native Population</u>	<u>Type of Design</u>	<u>Identified Household Universe</u>	<u>Surveyed Households</u>	<u>Percentage Households Surveyed</u>
5. SOUTH ALASKA PENINSULA					
Chignik Bay	48	Census	17	16	94.1%
Chignik Lagoon	85	Census	23	19	82.6%
Chignik Lake	127	Census	25	23	92.0%
False Pass	42	Census	16	13	81.3%
Ivanof Bay	21	Census	8	5	62.5%
King Cove	379	Two Strata	33	23	69.7%
Perryville	105	Census	27	18	66.7%
Sand Point	421	Chain Referral	15	12	80.0%
Region Total	1,228		164	129	78.7%
6. ALEUTIAN ISLANDS					
Akutan	117	Census	27	20	74.1%
* Atka	73	Census	26	17	65.4%
* Nikolski	26	Census	11	10	90.9%
Unalaska	397	Two Strata	103	41	39.8%
Region Total	614		167	88	52.7%
7. PRIBILOF ISLANDS					
* St. George	147	Census	47	44	93.6%
* St. Paul	465	Two Strata	151	74	49.0%
Region Total	613		198	118	59.6%
8. SOUTH BRISTOL BAY					
Egegik	89	Census	24	24	100.0%
King Salmon	133	Census	26	16	61.5%
Levelock	116	Census	34	24	70.6%
Naknek	319	Two Strata	59	38	64.4%
Pilot Point	86	Census	17	16	94.1%
Port Heiden	93	Census	24	22	91.7%
South Naknek	115	Census	27	20	74.1%
Region Total	951		211	160	75.8%
9. NORTH BRISTOL BAY					
Aleknagik	187	Census	43	35	81.4%
Clark's Point	69	Census	21	15	71.4%
Dillingham	1,503	Two Strata	369	32	8.7%
Manokotak	378	Two Strata	79	62	78.5%
Togiak	750	Two Strata	132	122	92.4%
Twin Hills	65	Chain Referral	28	17	60.7%
Region Total	2,952		672	283	42.1%
TOTAL	40,530		2,605	1,560	59.9%
(Excl. Anchorage)	(25,961)		(2,575)	(1,536)	(59.7%)

* Numbers for these communities are based on 1998 survey sampling.

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 3
Sampling Methodology for Communities
With Two Strata Designs,
Harbor Seal and Sea Lion Surveys, 2000

<u>Community</u>	<u>Number</u> <u>High Stratum</u> <u>Households</u>	<u>Sampled</u> <u>High Stratum</u> <u>Households</u>	<u>Percent</u> <u>High</u> <u>Stratum</u>	<u>Number</u> <u>Low Stratum</u> <u>Households</u>	<u>Sampled</u> <u>Low Stratum</u> <u>Households</u>	<u>Percent</u> <u>Low</u> <u>Stratum</u>
Cordova	14	14	100.0%	168	30	17.9%
Dillingham	25	21	84.0%	344	11	3.2%
King Cove	15	14	93.3%	18	9	50.0%
Manokotak	34	29	85.3%	45	33	73.3%
Naknek	14	12	85.7%	45	26	57.8%
Seldovia	5	5	100.0%	13	9	69.2%
Seward	7	7	100.0%	25	25	100.0%
* St. Paul	45	39	86.7%	106	35	33.0%
Togiak	75	66	88.0%	57	56	98.2%
Unalaska	24	14	58.3%	79	27	34.2%
Total	258	221	85.7%	900	261	29.0%

* Numbers for St. Paul are based on 1998 survey sampling.

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

85.7 percent of high stratum household were successfully contacted and interviewed (221 of 258 households), while a 29.0% percent random sample of low stratum households were interviewed (261 of 900 households) (Tables 2 and 3). These are relatively high sampling fractions for studies using survey methodologies which rely upon voluntary participation by surveyed households. Overall, the level of cooperation by households in the harvest survey was high in all communities. The non-response rate was due in large part to logistical problems in contacting households, rather than refusals to participate. However, the sampling fractions for census and chain referral communities were lower than previous survey years. The lower sample attainment may indicate a need to invest additional time in communities, providing support to local researchers and information to hunters.

In the appendices, the statistical analysis presents harvest data in three different tables for each community. In the first table, the unexpanded reported take is presented for each community, representing actual animals reported killed by surveyed hunters with no fractions of animals. The second table presents the combined estimated expanded take for each stratum in the community. In this table, takes of surveyed hunters are expanded to unsurveyed hunters within the stratum, using different methods depending upon the household sampling design as described above. In this expansion, the proportions of the seasonal takes of the surveyed households are preserved, so takes with unknown months exist in the table. The expansion treats each community as a separate sampling universe. Fractions of animals commonly result from the expansion, which are rounded to the nearest tenth. The third table presents a seasonally-adjusted expanded take: takes with unknown months are assigned to months based on the proportion of the known take. The numbers in this third table form the basis for the numbers in the report's narrative.

The calculation of the confidence range around the estimate follow methods for stratified samples in Cochran (1977:5.13, 5.15). In this process, the unexpanded, reported take was used as the lower range for a community if it was higher than the statistically-calculated lower take estimate. This was done because the unexpanded take represents known kills (not hypothetical kills).

THE SUBSISTENCE TAKE OF HARBOR SEALS IN 2000

Estimated Size of the Harbor Seals Take, 2000

The estimated size of the total take of harbor seals (*Phoca vitulina*) by Alaska Natives in 2000 is presented in Tables 4 and 5. In 2000, there were an estimated 2,229 harbor seals taken by Alaska Natives for subsistence uses (with a 95 percent confidence range of between 1,721 to 3,014 animals) (Table 4). Of the 2000 subsistence take, 11.2 percent (250 harbor seals) were struck and lost, and 88.8 percent (1,979 harbor seals) were harvested.

The total state estimate for harbor seals is necessarily somewhat indeterminate because of species identification problems in the Bristol Bay area. As discussed in Wolfe and Mishler (1993:61-69), in Bristol Bay there are areas with a seasonal geographic overlap of harbor seals (*Phoca vitulina*) and spotted seals (*Phoca largha*) (see Fig. 3). Local indigenous Yup'ik taxonomies categorize adults of the two Linnaean species as a single type (*issuriq*) in this area, and categorize pups into two different types. Of the total North Bristol Bay take, we classified 12 seals as *Phoca vitulina* and 258 seals as *Phoca largha*, based on ecological features of the kill (degree of association with seasonal ice) (Appendix B, Table 9). Of the animals classified as *Phoca largha*, 15.7 percent (41 animals) were reported struck and lost, and 84.3 percent (217 animals) were harvested (Appendix B, Table 9). In Table 4, we also assumed the entire South Bristol Bay take of 73 animals was *Phoca vitulina*. Changing these assumptions will change the total statewide take estimate up or down. As stated above, we believe the best estimate of the subsistence take in 2000 is 2,229 harbor seals, based on the assumptions above.

Table 4
Estimated Subsistence Takes of
Harbor Seal (*Phoca vitulina*)
By Alaska Natives, 1992 - 2000

<u>Year</u>	<u>Estimated Total</u>		<u>Total</u> <u>Take</u>	<u>Lower and Upper</u> <u>Confidence Range</u> <u>for Total Take</u>
	<u>Harvest</u>	<u>Struck</u> <u>and Lost</u>		
1992	2,501 87.6%	353 12.4%	2,854 100.0%	2,293 - 3,692
1993	2,365 86.4%	371 13.6%	2,736 100.0%	2,334 - 3,471
1994	2,313 88.2%	308 11.8%	2,621 100.0%	2,110 - 3,457
1995	2,498 91.1%	243 8.9%	2,742 100.0%	2,184 - 3,679
1996	2,415 88.1%	327 11.9%	2,741 100.0%	2,378 - 3,479
1997	2,195 86.2%	351 13.8%	2,546 100.0%	2,069 - 3,309
1998	2,286 88.1%	310 11.9%	2,597 100.0%	2,235 - 3,212
2000	1,979 88.8%	250 11.2%	2,229 100.0%	1,731 - 3,014

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 5
Regional Distribution of Subsistence Takes of
Harbor Seal (*Phoca vitulina*) by Alaska Natives, 2000
With Confidence Intervals and Statistical Ranges

Region	Estimated Total		Take	Total Take		Percentage of Take by Region	Per Capita Harvest	Struck and Lost Rate
	Harvest	Struck and Lost		Confidence Interval (+/- %)	Lower Range Estimate			
Southeast	1209.7	151.4	1361.1	29.8%	1063.8	61.1%	0.09	11.1%
North Pacific Rim	289.9	29.8	319.7	50.4%	227.0	14.3%	0.15	9.3%
Upper Kenai-Cook Inlet	79.2	13.5	92.7	41.7%	76.0	4.2%	0.00	14.6%
Kodiak Island	185.9	7.3	193.2	24.8%	166.0	8.7%	0.12	3.8%
South Alaska Peninsula	65.4	18.4	83.8	38.5%	65.0	3.8%	0.05	21.9%
Aleutian Islands	79.0	10.5	89.5	59.7%	59.0	4.0%	0.13	11.8%
Pribilof Islands	4.6	0.0	4.6	56.1%	4.0	0.2%	0.01	0.0%
South Bristol Bay	55.4	17.6	73.0	49.7%	61.0	3.3%	0.06	24.1%
North Bristol Bay	10.4	1.1	11.6	59.4%	9.7	0.5%	0.00	9.9%
ALASKA	1979.4	249.6	2229.0	35.2%	1731.4	100.0%		11.2%
Percentage of Take	88.8%	11.2%	100.0%					

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 6
Subsistence Harbor Seal Harvest, Take, and Use by Alaska Natives, 2000
With Confidence Intervals and Statistical Ranges, by Community

Community	Harbor Seal Harvested Per Capita	Percent of Native Households Harvesting Harbor Seal	Percent of Native Households Using Harbor Seal	Harbor Seal Harvested	Harbor Seal Struck and Lost	Total Harbor Seal Take	Total Take		
							Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
SOUTHEAST ALASKA									
Angoon	.13	--	--	64.3	6.1	70.4	8.7%	69.0	76.5
Craig	.08	--	--	35.0	3.0	38.0	0.0%	38.0	38.0
Haines	.05	--	--	17.5	0.0	17.5	65.6%	12.0	28.9
Hoonah	.25	--	--	147.9	16.0	163.9	13.3%	143.0	185.7
Hydaburg	.04	--	--	14.4	0.0	14.4	54.3%	9.0	22.2
Juneau	.01	--	--	59.9	3.5	63.4	42.8%	36.3	90.6
Kake	.19	--	--	101.7	3.6	105.3	61.1%	41.0	169.6
Ketchikan	.06	--	--	111.7	0.0	111.7	125.1%	46.0	251.4
Klawock	.14	--	--	67.1	0.0	67.1	21.4%	52.8	81.4
Klukwan	.15	--	--	18.0	0.0	18.0	0.0%	18.0	18.0
Pelican	.18	--	--	7.5	0.0	7.5	20.1%	7.0	9.0
Petersburg	.05	--	--	20.7	7.2	27.9	6.3%	27.0	29.7
Saxman	.15	--	--	45.6	1.9	47.5	42.0%	27.6	67.4
Sitka	.13	--	--	276.8	41.1	317.8	5.4%	300.6	335.1
Wrangell	.05	--	--	28.5	12.0	40.5	80.0%	27.0	72.9
Yakutat	.52	--	--	193.3	56.8	250.1	16.2%	209.6	290.6
NORTH PACIFIC RIM									
Chenega Bay	.22	33.3%	100.0%	15.0	0.0	15.0	74.5%	9.0	26.2
Cordova	.24	7.5%	45.5%	87.8	14.0	101.8	29.3%	88.0	131.6
Nanwalek	.32	25.8%	96.8%	52.9	3.9	56.8	35.0%	44.0	76.6
Port Graham	.27	10.0%	92.5%	40.2	1.7	41.9	80.5%	25.0	75.6
Seldovia	.03	5.6%	100.0%	2.0	0.0	2.0	0.0%	2.0	2.0
Seward	.01	6.3%	12.5%	4.0	0.0	4.0	0.0%	4.0	4.0
Tatitlek	.51	28.6%	92.9%	46.3	1.9	48.2	64.9%	25.0	79.5
Valdez	.11	--	--	41.7	8.3	50.0	70.5%	30.0	85.2
UPPER KENAI-COOK INLET									
Anchorage	.00	--	--	43.8	7.5	51.3	32.8%	41.0	68.0
Homer	.12	--	--	22.8	6.0	28.8	60.2%	24.0	46.1
Kenai	.01	--	--	12.6	0.0	12.6	36.0%	11.0	17.2
Tyonek	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
KODIAK ISLAND									
Akhiok	.23	50.0%	100.0%	17.6	0.0	17.6	50.0%	11.0	26.4
Karluk	.75	50.0%	80.0%	19.5	1.5	21.0	38.5%	14.0	29.1
Kodiak City	.03	--	--	21.6	4.8	26.4	34.6%	22.0	35.5
Larsen Bay	.20	24.0%	48.0%	18.6	0.0	18.6	35.2%	15.0	25.1
Old Harbor	.29	--	--	59.1	0.0	59.1	20.7%	55.0	71.4
Ouzinkie	.22	--	--	43.0	1.0	44.0	0.0%	44.0	44.0
Port Lions	.04	--	--	6.4	0.0	6.4	46.5%	5.0	9.4
SOUTH ALASKA PENINSULA									
Chignik Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Chignik Lagoon	.01	5.3%	5.3%	1.2	0.0	1.2	81.7%	1.0	2.2
Chignik Lake	.03	8.7%	60.9%	3.3	0.0	3.3	40.6%	3.0	4.6
False Pass	.06	15.4%	76.9%	2.5	1.2	3.7	61.1%	3.0	5.9
Ivanof Bay	.15	40.0%	100.0%	3.2	0.0	3.2	73.5%	2.0	5.6
King Cove	.05	32.5%	96.8%	19.3	2.1	21.4	11.6%	20.0	23.9
Perryville	.20	27.8%	94.4%	21.0	15.0	36.0	48.0%	24.0	53.3
Sand Point	.04	--	--	15.0	0.0	15.0	37.4%	12.0	20.6

Table 6, (Continued)
Subsistence Harbor Seal Harvest, Take, and Use by Alaska Natives, 2000
With Confidence Intervals and Statistical Ranges, by Community

Community	Harbor Seal Harvested Per Capita	Percent of Native Households Harvesting Harbor Seal ¹	Percent of Native Households Using Harbor Seal ¹	Harbor Seal Harvested	Harbor Seal Struck and Lost	Total Harbor Seal Take	Total Take		
							Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
ALEUTIAN ISLANDS									
Akutan	.22	30.0%	60.0%	25.7	5.4	31.1	50.5%	23.0	46.7
Atka	.23	11.8%	100.0%	16.8	0.0	16.8	87.7%	11.0	31.6
Nikolski	.08	10.0%	10.0%	2.2	0.0	2.2	59.1%	2.0	3.5
Unalaska	.09	10.0%	25.9%	34.3	5.1	39.4	55.1%	23.0	61.2
PRIBILOF ISLANDS									
St. George	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
St. Paul	.01	1.5%	3.1%	4.6	0.0	4.6	56.1%	4.0	7.2
SOUTH BRISTOL BAY									
Egegik	.04	8.3%	12.5%	4.0	3.0	7.0	0.0%	7.0	7.0
King Salmon	.02	12.5%	31.3%	3.3	9.8	13.0	106.4%	8.0	26.8
Levelock	.02	8.3%	70.8%	2.8	0.0	2.8	73.5%	2.0	4.9
Naknek	.05	7.9%	13.8%	16.3	0.0	16.3	52.3%	14.0	24.9
Pilot Point	.06	18.8%	25.0%	5.3	2.1	7.4	28.0%	7.0	9.5
Port Heiden	.21	18.2%	31.8%	19.6	0.0	19.6	30.1%	18.0	25.5
South Naknek	.04	10.0%	20.0%	4.1	2.7	6.8	57.0%	5.0	10.6
NORTH BRISTOL BAY									
Aleknagik	.01	11.4%	77.1%	2.5	0.0	2.5	84.5%	2.0	4.5
Clark's Point	.00	40.0%	100.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Dillingham	.00	1.6%	63.5%	0.0	0.0	0.0	0.0%	0.0	0.0
Manokotak	.00	13.6%	73.8%	1.2	0.0	1.2	75.2%	1.0	2.1
Togiak	.01	38.4%	68.9%	5.1	1.1	6.3	30.0%	5.7	8.2
Twin Hills	.03	--	--	1.6	0.0	1.6	122.8%	1.0	3.7
ALASKA TOTAL				1979.4	249.6	2229.0	35.2%	1731.4	3014.3
SPOTTED SEALS, NORTH BRISTOL BAY									
Aleknagik	.03	11.4%	77.1%	6.1	2.5	8.6	54.2%	7.0	13.3
Clark's Point	.32	40.0%	100.0%	22.4	1.4	23.8	45.9%	17.0	34.7
Dillingham	.01	1.6%	63.5%	11.9	3.6	15.5	49.0%	13.0	23.1
Manokotak	.06	13.6%	73.8%	23.0	4.7	27.7	34.0%	23.0	37.2
Togiak	.20	38.4%	68.9%	147.0	26.7	173.6	12.7%	154.3	195.7
Twin Hills	.10	--	--	6.6	1.6	8.2	69.5%	5.0	14.0
TOTAL WITH OTHER SEALS				2196.4	290.1	2486.5	34.0%	1950.8	3332.1

¹ In North Bristol Bay, percentage of households harvesting and using *Issuriq*, as was done in last year's report.

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Geographic Distribution of Harbor Seals Takes

Table 5 shows the regional distribution of harbor seal takes by Alaska Natives in 2000. The largest takes in absolute numbers were by the Tlingit and Haida of the Southeast region. About 61.1 percent of the statewide take of harbor seals (1,361 animals), were taken by hunters in Southeast Alaska (Table 5). The regions ranked second and third were the North Pacific Rim (320 seals, or 14.3 percent of the statewide take) and Kodiak Island (193 seals, or 8.7 percent). The remainder of the statewide harbor seal take (344 animals, or 15.9 percent) was distributed among the other six regions.

The geographic distribution of harbor seal takes by community is shown in Table 6. Of the top ten communities (in absolute numbers of harbor seals taken in 2000), eight were in the Southeast region, one in the North Pacific Rim region, and one in the Kodiak Island region. The ten top ranking communities were Sitka (318 seals), Yakutat (250 seals), Hoonah (164 seals), Ketchikan (112 seals), Kake (105 seals), Cordova (102 seals), Angoon (70 seals), Klawock (67 seals), Juneau (63 seals), and Old Harbor (59 seals). There were five surveyed communities with no reported harbor seals taken in 2000 -- Chignik Bay, Clark's Point, Dillingham, St. George, and Tyonek (spotted seals were reported taken at Clark's Point and Dillingham).

Per capita harvests are the number of harbor seals harvested per Alaska Native living in a community. It is an estimate of the amount harvested per person in an area, controlling for differences in population size. The top ten communities in terms of harvests per capita in 2000 were Karluk (.75 harbor seals harvested per person), Yakutat (.52), Tatitlek (.51), Nanwalek (.32), Old Harbor (.29), Port Graham (.27), Hoonah (.25), Cordova (.24), Akhiok (.23), and Chenega Bay (.33). There was greater parity across regions in per capita harvests compared with total community take (Table 6). Among the top ten communities for per capita harvests, four were in the North

Pacific Rim, three in the Kodiak Islands, two in the Southeast Region, and one in the Aleutian Islands.

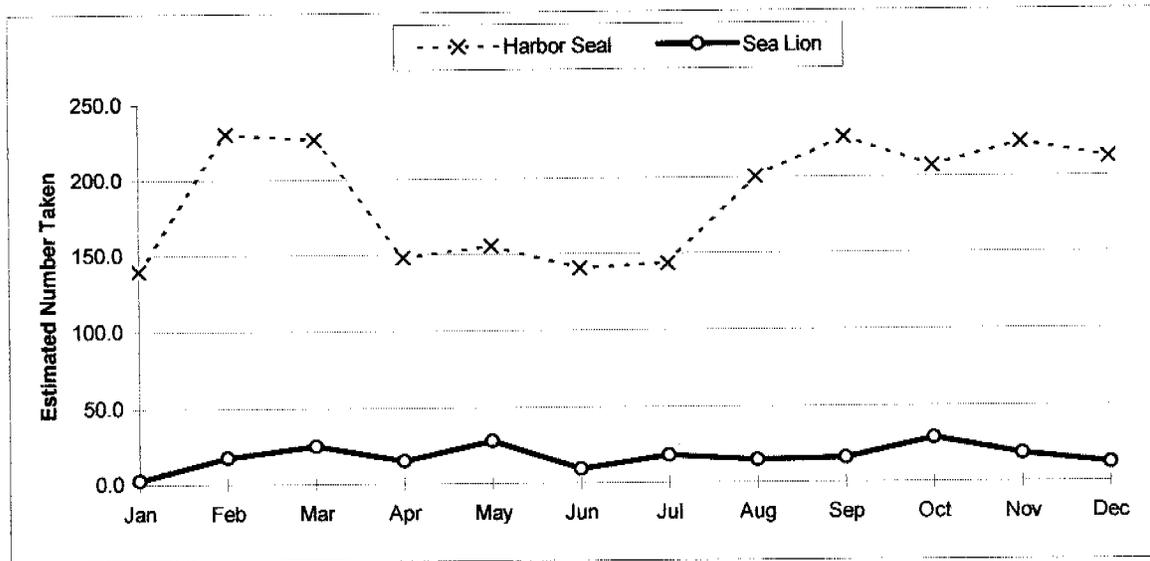
Seasonal Distribution of Harbor Seal Takes

The seasonal distribution of the statewide harbor seal take in 2000 is depicted in Figs. 4 and 5, and conforms with the general seasonal patterns for previous years. Harbor seals were reported killed during every month of 2000. In 2000, there were two seasonal hunting peaks – one during February-March and a second during fall and early winter (September-December). Lower hunting productivity occurred during April-July and January (see Fig. 5). The fall-early winter hunting period was exceptionally poor during 2000. October to December displayed the lowest hunting productivity for those months since surveys began in 1992 (see Fig. 5). Seasonal hunting patterns of each region and community are depicted in the tables and figures of Appendices B and C.

Age and Sex Composition of Harbor Seal Harvests

The estimated age and sex composition of the 2000 harbor seal harvests are shown in Tables 7 and 8 by geographic region. Hunters reported harvesting male harbor seals over female harbor seals by a ratio of about 2.6 to 1 (1,085 males to 417 females of harvests with reported sex). Hunters also reported harvesting substantially more adult harbor seals (80.3 percent) than juveniles (16.9 percent) or pups (2.8 percent). Overall, adult females (342 animals) comprised about 23.9 percent of the total known harvest of harbor seals in 2000. Hunters did not report the sex for 17.7 percent of the harvest or the age for about 4.4 percent of the harvest. The age and sex are also unknown for animals which were struck and lost. A further analysis of age and sex composition is found in the Discussion section.

Figure 4
Seasonally Adjusted Takes of
Harbor Seals and Sea Lions
By Alaska Natives, 2000



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Harbor Seal	139.5	230.5	226.8	147.8	155.3	140.6	143.4	200.2	226.3	207.1	222.6	212.7
Percentage	6.2%	10.2%	10.1%	6.6%	6.9%	6.2%	6.4%	8.9%	10.0%	9.2%	9.9%	9.4%
Cum. Percent	6.2%	16.4%	26.5%	33.1%	39.9%	46.2%	52.6%	61.4%	71.5%	80.7%	90.6%	100%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sea Lion	2.5	17.7	25.2	15.1	27.8	9.4	17.8	14.7	15.9	28.8	18.4	12.2
Percentage	1.2%	8.6%	12.3%	7.4%	13.5%	4.6%	8.6%	7.2%	7.8%	14.0%	9.0%	5.9%
Cum. Percent	1.2%	9.8%	22.1%	29.4%	43.0%	47.5%	56.2%	63.3%	71.1%	85.1%	94.1%	100%

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 7
Age and Sex Composition of Harbor Seal Harvests
By Alaska Natives, 2000

	Male	Female	Unknown Sex	Total
Adult	836.2	341.6	253.5	1,431.3
Row Percent	58.4%	23.9%	17.7%	100.0%
Column Percent	77.1%	81.9%	53.0%	72.3%
Juvenile	177.0	58.8	65.0	300.8
Row Percent	58.9%	19.5%	21.6%	100.0%
Column Percent	16.3%	14.1%	13.6%	15.2%
Pup	24.4	4.9	21.4	50.7
Row Percent	48.1%	9.7%	42.2%	100.0%
Column Percent	2.2%	1.2%	4.5%	2.6%
Unknown Age	47.4	11.9	138.0	197.3
Row Percent	24.0%	6.0%	70.0%	100.0%
Column Percent	4.4%	2.8%	28.9%	10.0%
Total	1,085.0	417.2	477.9	1,980.0
Row Percent	54.8%	21.1%	24.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 8
Age and Sex Composition of Harbor Seal Harvests
By Alaska Natives by Region, 2000

AGE AND SEX	Southeast	North Pacific Rim	Upper		South Alaska Peninsula	Aleutian Islands	Pribilof Islands	South Bristol Bay	North Bristol Bay	Alaska
			Kenai-Cook Inlet	Kodiak Island						
Adult Male	522.1	102.3	41.2	90.4	27.4	23.5	3.5	22.3	3.6	836.2
Adult Female	241.9	28.3	2.4	36.9	8.2	5.8	0.0	18.2	0.0	341.6
Adult Unknown Sex	160.6	28.7	15.0	16.5	14.2	7.6	0.0	6.2	4.6	253.5
Juvenile Male	114.1	28.5	0.0	11.1	2.1	16.1	1.2	2.3	1.6	177.0
Juvenile Female	33.7	15.4	0.0	5.8	0.0	1.7	0.0	1.2	1.1	58.8
Juvenile Unknown Sex	9.9	43.0	0.0	5.3	0.0	6.9	0.0	0.0	0.0	65.0
Pup Male	18.4	1.7	0.0	2.6	0.0	1.7	0.0	0.0	0.0	24.4
Pup Female	3.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9
Pup Unknown Sex	5.6	9.7	1.3	1.5	1.1	0.0	0.0	2.3	0.0	21.4
Male Unknown Age	35.5	7.7	0.0	1.2	1.2	1.7	0.0	0.0	0.0	47.4
Female Unknown Age	2.2	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
Unknown Age and Sex	62.5	13.5	19.4	14.6	11.2	14.0	0.0	2.8	0.0	138.0
TOTAL	1,209.7	289.9	79.2	185.9	65.4	79.0	4.6	55.4	11.1	1,980.0
AGE ONLY										
Adult	924.5	159.2	58.6	143.8	49.8	36.9	3.5	46.7	8.3	1431.3
Juvenile	157.6	86.8	0.0	22.1	2.1	24.6	1.2	3.5	2.8	300.8
Pup	27.3	13.0	1.3	4.1	1.1	1.7	0.0	2.3	0.0	50.7
Unknown Age	100.2	30.9	19.4	15.8	12.4	15.8	0.0	2.8	0.0	197.3
TOTAL	1,209.7	289.9	79.2	185.9	65.4	79.0	4.6	55.4	11.1	1,980.0
SEX ONLY										
Male	690.2	140.1	41.2	105.3	30.7	42.9	4.6	24.6	5.3	1085.0
Female	281.0	54.9	2.4	42.6	8.2	7.5	0.0	19.4	1.1	417.2
Unknown Sex	238.5	94.8	35.6	37.9	26.5	28.5	0.0	11.4	4.6	477.9
TOTAL	1,209.7	289.9	79.2	185.9	65.4	79.0	4.6	55.4	11.1	1,980.0

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Hunter Assessments of Harbor Seal Population Trends

Surveyed households were asked to make subjective assessments of harbor seal population trends in their hunting areas. Households were asked, "compared to five years ago, has the harbor seal population where members of your household have hunted 'increased', 'remained stable', 'declined', 'do not know', or 'not applicable (do not hunt)'?" The subjective assessments of local population trends are summarized in Table 9 by region. Responses of 'do not know' or 'not applicable (do not hunt)' are removed in this analysis.

In all regions, a portion of households reported that local harbor seal populations had "increased", "remained stable", or "declined". In the Southeast region, most households reported that harbor seal populations had either "increased" (43.6 percent) or "remained stable" (46.3 percent) in household hunting areas over the past five years. Declining populations were reported by only 10.1 percent of households. A similar pattern of responses is found for South Bristol Bay. By contrast, most households reported that local harbor seal populations had "declined" in the North Pacific Rim (60.0 percent) and South Alaska Peninsula (55.8 percent). On Kodiak Island, most households reported that local seal populations had "remained stable" (48.0 percent), while 33.3 percent reported declines and 18.7 percent reported increases. In North Bristol Bay, decreasing seal populations were reported by 58.5 percent of households, observations which may refer primarily to spotted seals, the predominate type of *issuriq* in the region.

Table 9
Local Harbor Seal Population Changes
Compared to Five Years Ago, Hunters' Assessments

Region	Increased	Remained Stable	Declined
Southeast Alaska	43.6%	46.3%	10.1%
North Pacific Rim	5.7%	34.3%	60.0%
Kodiak Island	18.7%	48.0%	33.3%
South Alaska Peninsula	19.5%	24.7%	55.8%
Aleutian Islands	23.1%	38.5%	38.5%
South Bristol Bay	60.0%	37.5%	2.5%
North Bristol Bay*	2.6%	38.9%	58.5%

* May refer primarily to spotted seals in the mixed harbor seal-spotted seal population.
Source: ADF&G, Division of Subsistence, Household Surveys, 2001.

Table 10
Estimated Subsistence Takes of
Sea Lion (*Eumetopias jubatus*)
By Alaska Natives, 1992 - 2000

<u>Year</u>	<u>Estimated Total</u>		<u>Total Take</u>	<u>Lower and Upper Confidence Range for Total Take</u>
	<u>Harvest</u>	<u>Struck and Lost</u>		
1992	370 67.4%	179 32.6%	549 100.0%	452 - 712
1993	348 71.4%	139 28.6%	487 100.0%	390 - 629
1994	336 80.8%	80 19.2%	416 100.0%	330 - 554
1995	307 90.5%	32 9.5%	339 100.0%	258 - 465
1996	152 81.7%	34 18.3%	186 100.0%	165 - 226
1997	146 89.1%	18 10.9%	164 100.0%	132 - 227
1998	131 73.6%	47 26.4%	178 100.0%	137 - 257
2000	170 82.9%	35 17.1%	205 100.0%	147 - 306

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

THE SUBSISTENCE TAKE OF SEA LIONS IN 2000

Estimated Size of the Sea Lion Take, 2000

The estimated size of the total take of Steller sea lions by Alaska Natives in 2000 is presented in Tables 10 and 11. In 2000, there were an estimated 205 sea lions taken by Alaska Natives for subsistence uses (with a 95 percent confidence range of between 147 to 306 animals) (Table 10). Of the 2000 subsistence take, 17.1 percent (35 sea lions) were struck and lost, and 82.9 percent (170 sea lions) were harvested.

Geographic Distribution of Sea Lion Takes

Table 11 shows the regional distribution of sea lion takes in 2000 by Alaska Natives. In 2000, the takes were split among two main regions – the Pribilof Islands (78 sea lions, or 38.0 percent of the total statewide take of sea lions) and the Aleutian Islands (76 sea lions, or 37 percent). Other regions harvesting sea lions were the Kodiak Islands (19 sea lions, or 26.4 percent), North Pacific Rim (17 sea lions, or 8.1 percent), South Alaska Peninsula (14 sea lions, 6.7 percent), and Southeast Alaska (2 sea lions, 1.1 percent) (Table 11).

The geographic distribution of sea lion takes by community is shown in Table 12. In 2000, 18 of 62 surveyed communities reported harvesting sea lions. Only eight communities had harvests of five or more sea lions in 2000. Ten more communities reported a take of less than five sea lions. The six top ranking communities were St. Paul (58 sea lions), Unalaska (53 sea lions), St. George (20 sea lions), Atka (17 sea lions), Old Harbor (13 sea lions), and Narwalek (6 sea lions). These six communities accounted for 167 sea lions, or 81.3 percent of the total Alaska take.

Table 11
Regional Distribution of Subsistence Takes of
Sea Lion (*Eumetopias jubatus*) by Alaska Natives, 2000
With Confidence Intervals and Statistical Ranges

Region	Estimated Total		Total Take			Percentage of Take by Region	Per Capita Harvest	Struck and Lost Rate
	Harvest	Struck	Confidence Interval (+/-)%	Range Estimate				
				Lower	Upper			
Southeast	2.3	0.0	66.1%	2.0	3.9	1.1%	0.00	0.0%
North Pacific Rim	11.7	5.0	88.8%	11.0	31.6	8.1%	0.01	30.0%
Upper Kenai-Cook Inlet	0.0	0.0	0.0%	0.0	0.0	0.0%	0.00	0.0%
Kodiak Island	18.5	0.0	42.7%	16.0	26.4	9.0%	0.01	0.0%
South Alaska Peninsula	13.8	0.0	55.5%	11.0	21.4	6.7%	0.01	0.0%
Aleutian Islands	71.2	4.8	58.9%	46.0	120.7	37.0%	0.12	6.3%
Pribilof Islands	52.7	25.4	30.2%	61.0	101.7	38.0%	0.09	32.5%
South Bristol Bay	0.0	0.0	0.0%	0.0	0.0	0.0%	0.00	0.0%
North Bristol Bay	0.0	0.0	0.0%	0.0	0.0	0.0%	0.00	0.0%
ALASKA	170.2	35.2	48.8%	147.0	305.8	100.0%	0.00	17.1%
Percentage of Take	82.9%	17.1%						

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Seasonal Distribution of Sea Lion Takes

The seasonal distribution of the sea lion take in 2000 is depicted in Figs. 4 and 6. Sea lions were reported killed during every month in 2000. Productivity was greatest in May and October, and lowest in January and June. Overall, the monthly productivity of sea lion hunting in 2000 was somewhat better than 1998, but substantially poorer compared with the period 1992 through 1995. The decline of productivity during the fall is particularly notable in Fig. 6. Seasonal hunting patterns of each region and community are depicted in the tables and figures of Appendices B and C.

Age and Sex Composition of Sea Lion Harvests

The reported age and sex compositions of the 2000 sea lion harvests are shown in Tables 13 and 14 by geographic region. Hunters reported harvesting male sea lions over female sea lions by a ratio of about 4 to 1 (98 males to 24 females of animals with sex reported). In 2000, sea lion harvests were evenly split between adult sea lions (64 adults, 43.8 percent) and juvenile sea lions (65 juveniles, 44.5 percent), with an additional 17 pups (11.6 percent). From 1992 to 1995, juvenile harvests outnumbered adult harvests by at least 2 to 1 -- 2.3:1 (1992), 1.9:1 (1993), 2.2:1 (1994), and 2.0:1 (1995). Since 1996, the ratio of juveniles to adults has decreased substantially -- 1:1 (1996), 1.4:1 (1997), 0.7:1 (1998), and 1:1 (2000). Adult females (14 animals) comprised about 11.4 percent of the total harvest of sea lions of known age and sex in 2000. Hunters did not report the sex for 28.1 percent of the harvest or the age for about 14.1 percent of the harvest. The age and sex also are unknown for sea lions which were struck and lost.

Table 12
Subsistence Sea Lion Harvest, Take, and Use by Alaska Natives, 2000
With Confidence Intervals and Statistical Ranges, by Community

Community	Sea Lion Harvested Per Capita	Percent of Native Households Harvesting Sea Lion	Percent of Native Households Using Sea Lion	Sea Lion Harvested	Sea Lion Struck and Lost	Total Sea Lion Take	Total Take		
							Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
SOUTHEAST ALASKA									
Angoon	.00	--	--	1.0	0.0	1.0	27.4%	1.0	1.3
Craig	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Haines	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Hoonah	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Hydaburg	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Juneau	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Kake	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Ketchikan	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Klawock	.00	--	--	1.3	0.0	1.3	96.0%	1.0	2.6
Klukwan	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Pelican	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Petersburg	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Saxman	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Sitka	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Wrangell	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Yakutat	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
NORTH PACIFIC RIM									
Chenega Bay	.00	0.0%	55.6%	0.0	0.0	0.0	0.0%	0.0	0.0
Cordova	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Nanwalek	.04	9.7%	51.6%	6.5	0.0	6.5	54.1%	5.0	9.9
Port Graham	.01	2.5%	45.0%	1.7	3.4	5.0	91.8%	3.0	9.6
Seldovia	.00	0.0%	21.6%	0.0	0.0	0.0	0.0%	0.0	0.0
Seward	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Tatitlek	.02	7.1%	42.9%	1.9	0.0	1.9	136.0%	1.0	4.6
Valdez	.00	--	--	1.7	1.7	3.3	124.0%	2.0	7.5
UPPER KENAI-COOK INLET									
Anchorage	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Homer	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Kenai	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Tyonek	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
KODIAK ISLAND									
Akhiok	.04	10.0%	10.0%	3.2	0.0	3.2	120.0%	2.0	7.0
Karluk	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Kodiak City	.00	--	--	2.4	0.0	2.4	80.0%	2.0	4.3
Larsen Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Old Harbor	.06	--	--	12.9	0.0	12.9	16.6%	12.0	15.0
Ouzinkie	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
Port Lions	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
SOUTH ALASKA PENINSULA									
Chignik Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Chignik Lagoon	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Chignik Lake	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
False Pass	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Ivanof Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
King Cove	.01	6.5%	9.7%	4.3	0.0	4.3	34.4%	4.0	5.8
Perryville	.04	11.1%	22.2%	4.5	0.0	4.5	82.3%	3.0	8.2
Sand Point	.01	--	--	5.0	0.0	5.0	49.4%	4.0	7.5

Table 12 (Continued)
Subsistence Sea Lion Harvest, Take, and Use by Alaska Natives, 2000
With Confidence Intervals and Statistical Ranges, by Community

Community	Sea Lion Harvested Per Capita	Percent of Native Households Harvesting Sea Lion	Percent of Native Households Using Sea Lion	Sea Lion Harvested	Sea Lion Struck and Lost	Total Sea Lion Take	Total Take		
							Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
ALEUTIAN ISLANDS									
Akutan	.03	10.0%	40.0%	4.1	1.4	5.4	68.7%	4.0	9.1
Atka	.23	23.5%	100.0%	16.8	0.0	16.8	59.1%	11.0	26.8
Nikolski	.04	10.0%	10.0%	1.1	0.0	1.1	59.1%	1.0	1.8
Unalaska	.12	16.2%	46.7%	49.2	3.4	52.6	57.9%	30.0	83.1
PRIBILOF ISLANDS									
St. George	.08	15.9%	59.1%	11.8	8.5	20.3	19.9%	19.0	24.3
St. Paul	.09	13.7%	63.5%	41.0	16.9	57.8	33.8%	42.0	77.4
SOUTH BRISTOL BAY									
Egegik	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
King Salmon	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Levelock	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Naknek	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Pilot Point	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Port Heiden	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
South Naknek	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
SOUTH BRISTOL BAY									
Aleknagik	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Clark's Point	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Dillingham	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Manokotak	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Togiak	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Twin Hills	.00	--	--	0.0	0.0	0.0	0.0%	0.0	0.0
ALASKA TOTAL				170.2	35.2	205.5	48.8%	147.0	305.8

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 13
Age and Sex Composition of Sea Lion Harvests
By Alaska Natives, 2000

	Male	Female	Unknown Sex	Total
Adult	36.9	14.0	13.1	64.0
Row Percent	57.7%	21.9%	20.4%	100.0%
Column Percent	37.6%	57.9%	27.3%	37.6%
Juvenile	47.2	10.2	7.7	65.1
Row Percent	72.5%	15.6%	11.9%	100.0%
Column Percent	48.0%	42.1%	16.1%	38.2%
Pup	14.1	0.0	3.0	17.2
Row Percent	21.7%	0.0%	4.7%	26.4%
Column Percent	14.4%	0.0%	6.3%	10.1%
Unknown Age	0.0	0.0	24.0	24.0
Row Percent	0.0%	0.0%	100.0%	100.0%
Column Percent	0.0%	0.0%	50.2%	14.1%
Total	98.3	24.2	47.8	170.2
Row Percent	57.7%	14.2%	28.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 14
Age and Sex Composition of Sea Lion Harvests
By Alaska Natives by Region, 2000

AGE AND SEX	Southeast	North	Upper	Kodiak	South	Aleutian	Pribilof	South	North	Alaska
		Pacific	Kenai-		Alaska			Bristol	Bristol	
		Rim	Cook	Island	Peninsula	Islands	Islands	Bay	Bay	
Adult Male	1.0	1.7	0.0	9.9	4.7	14.1	5.5	0.0	0.0	36.9
Adult Female	0.0	3.2	0.0	3.2	1.1	6.5	0.0	0.0	0.0	14.0
Adult Unknown Sex	0.0	1.3	0.0	2.2	5.5	3.1	1.1	0.0	0.0	13.1
Juvenile Male	1.3	0.0	0.0	3.2	1.3	15.7	25.8	0.0	0.0	47.2
Juvenile Female	0.0	1.7	0.0	0.0	0.0	6.4	2.1	0.0	0.0	10.2
Juvenile Unknown Sex	0.0	3.9	0.0	0.0	1.3	1.5	1.1	0.0	0.0	7.7
Pup Male	0.0	0.0	0.0	0.0	0.0	0.0	14.1	0.0	0.0	14.1
Pup Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pup Unknown Sex	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0
Male Unknown Age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Female Unknown Age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown Age and Sex	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	24.0
TOTAL	2.3	11.7	0.0	18.5	13.8	71.2	52.7	0.0	0.0	170.2
AGE ONLY										
Adult	1.0	6.2	0.0	15.3	11.3	23.6	6.6	0.0	0.0	64.0
Juvenile	1.3	5.5	0.0	3.2	2.5	23.6	29.0	0.0	0.0	65.1
Pup	0.0	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0	17.2
Unknown Age	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	24.0
TOTAL	2.3	11.7	0.0	18.5	13.8	71.2	52.7	0.0	0.0	170.2
SEX ONLY										
Male	2.3	1.7	0.0	13.1	6.0	29.8	45.4	0.0	0.0	98.3
Female	0.0	4.9	0.0	3.2	1.1	12.8	2.1	0.0	0.0	24.2
Unknown Sex	0.0	5.2	0.0	2.2	6.8	28.6	5.2	0.0	0.0	47.8
TOTAL	2.3	11.7	0.0	18.5	13.8	71.2	52.7	0.0	0.0	170.2

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 15
Local Sea Lion Population Changes
Compared to Five Years Ago, Hunters' Assessments

Region	Increased	Remained Stable	Declined
Southeast Alaska	41.8%	5.5%	52.7%
North Pacific Rim	9.1%	24.2%	66.7%
Kodiak Island	17.9%	3.6%	78.6%
South Alaska Peninsula	24.2%	12.1%	63.6%
Aleutian Islands	15.7%	31.4%	52.9%
Bristol Bay	33.3%	11.1%	55.6%

Source: ADF&G, Division of Subsistence, Household Surveys, 2001.

Hunter Assessments of Sea Lion Population Trends

Surveyed households were asked to make subjective assessments of sea lion population trends in their hunting areas. Households were asked, “compared to five years ago, has the sea lion population where members of your household have hunted -- ‘increased’, ‘remained stable’, ‘declined’, ‘do not know’, or ‘not applicable (do not hunt)’?” The subjective assessments of population trends are shown in Table 15 by region. Responses of ‘do not know’ or ‘not applicable (do not hunt)’ are removed in this analysis. Bristol Bay is combined as a single area because of the small number of households that ventured assessments in North Bristol Bay (9 households) and South Bristol Bay (3 households).

In all regions, a majority of households reported that local sea lion populations had “declined” in household hunting areas compared with five years ago. By ranked area, the percentages of households reporting sea lion declines included Kodiak Island (78.6 percent), North Pacific Rim (66.7 percent), South Alaska Peninsula (63.6 percent), Bristol Bay (55.6 percent), Aleutian Islands (52.9 percent), and Southeast Alaska (52.7 percent). Only in Southeast Alaska did a large proportion of households report “increases” in sea lion populations in household hunting areas. In Southeast Alaska, local sea lion populations were reported to have “increased” by 41.8 percent of households. Local sea lion populations in the Aleutian Islands were reported to have “remained stable” by 31.4 percent of households and “increased” by 15.7 percent of households.

Table 16
Participation Rates of Alaska Native Households in
Hunting Harbor Seal or Sea Lion, 1992 - 2000

	HARBOR SEAL			SEA LION		
	Household Universe	Percentage of Household Universe	Percentage of Hunting Households	Household Universe	Percentage of Household Universe	Percentage of Hunting Households
STUDY YEAR 1992						
Did Not Hunt	2,698	73%	--	3,513	95%	--
Hunted Unsuccessfully	290	8%	29%	59	2%	30%
Hunted Successfully	724	19%	71%	140	4%	70%
Total Households	3,712	100%	--	3,712	100%	--
Total Hunting Households	1,014	27%	100%	199	5%	100%
STUDY YEAR 1993						
Did Not Hunt	3,510	80%	--	4,142	95%	--
Hunted Unsuccessfully	216	5%	25%	78	2%	35%
Hunted Successfully	638	15%	75%	144	3%	65%
Total Households	4,364	100%	--	4,364	100%	--
Total Hunting Households	854	20%	100%	222	5%	100%
STUDY YEAR 1994						
Did Not Hunt	3,311	77%	--	4,072	95%	--
Hunted Unsuccessfully	362	8%	37%	85	2%	40%
Hunted Successfully	608	14%	63%	125	3%	60%
Total Households	4,282	100%	--	4,282	100%	--
Total Hunting Households	971	23%	100%	210	5%	100%
STUDY YEAR 1995						
Did Not Hunt	2,926	78%	--	3,573	96%	--
Hunted Unsuccessfully	208	6%	26%	39	1%	24%
Hunted Successfully	597	16%	74%	120	3%	76%
Total Households	3,731	100%	--	3,731	100%	--
Total Hunting Households	805	22%	100%	158	4%	100%
STUDY YEAR 1996						
Did Not Hunt	2,781	76%	--	3,510	96%	--
Hunted Unsuccessfully	240	7%	28%	45	1%	35%
Hunted Successfully	619	17%	72%	85	2%	65%
Total Households	3,640	100%	--	3,640	100%	--
Total Hunting Households	859	24%	100%	130	4%	100%
STUDY YEAR 1997						
Did Not Hunt	2,172	75%	--	2,813	97%	--
Hunted Unsuccessfully	150	5%	20%	23	1%	23%
Hunted Successfully	588	20%	80%	75	3%	77%
Total Households	2,910	100%	--	2,910	100%	--
Total Hunting Households	738	25%	100%	97	3%	100%
STUDY YEAR 1998						
Did Not Hunt	1,862	72%	--	2,458	96%	--
Hunted Unsuccessfully	100	4%	14%	36	1%	33%
Hunted Successfully	607	24%	86%	75	3%	67%
Total Households	2,569	100%	--	2,569	100%	--
Total Hunting Households	707	28%	100%	111	4%	100%
STUDY YEAR 2000						
Did Not Hunt	1,858	71%	--	2,488	96%	--
Hunted Unsuccessfully	124	5%	17%	30	1%	25%
Hunted Successfully	623	24%	83%	88	3%	75%
Total Households	2,605	100%	--	2,605	100%	--
Total Hunting Households	747	29%	100%	117	4%	100%

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Figure 7
Specialization in Harbor Seal Takes:
Percentage of Hunting Households by Percentage of Take, 2000

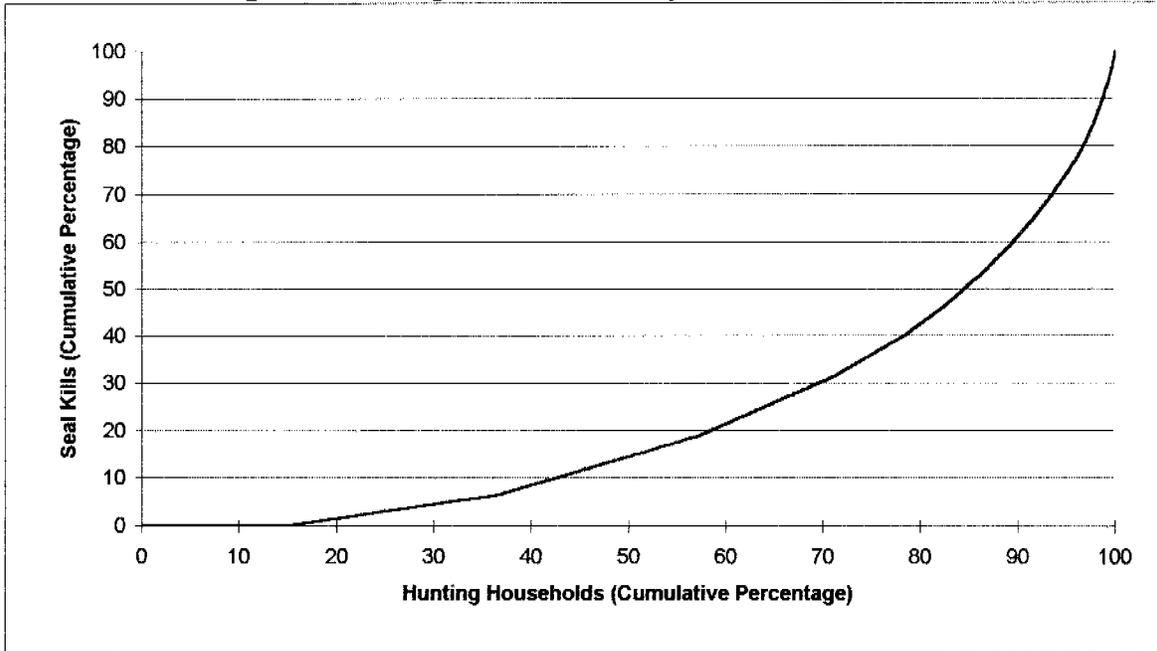
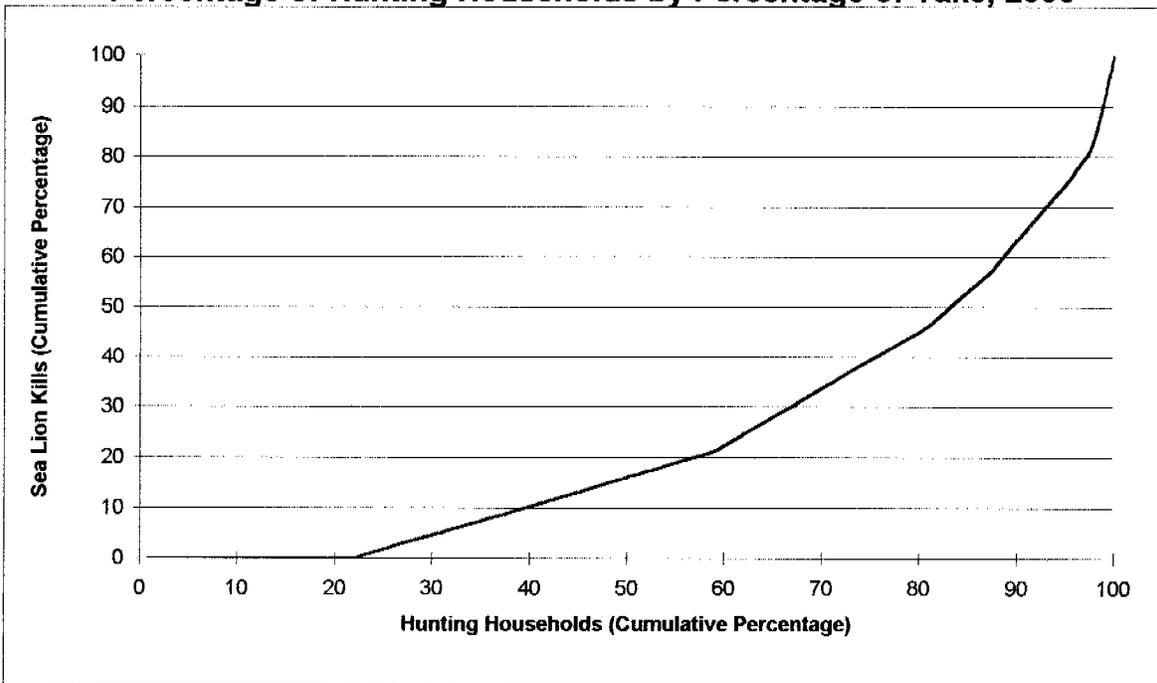


Figure 8
Specialization in Sea Lion Takes:
Percentage of Hunting Households by Percentage of Take, 2000



Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 17
Time and Effort Spent Hunting Harbor Seal in 2000
Compared with Five Years Ago, Hunters' Assessments

Region	More Time and Effort	Same Time and Effort	Less Time and Effort	Hunted Then but Have Stopped
Southeast Alaska	8.7%	54.7%	30.2%	6.4%
North Pacific Rim	33.7%	34.9%	14.0%	17.4%
Kodiak Island	29.5%	38.9%	11.6%	20.0%
South Alaska Peninsula	23.0%	31.1%	41.9%	4.1%
Aleutian Islands	42.6%	34.0%	23.4%	0.0%
South Bristol Bay	15.9%	52.3%	22.7%	9.1%
North Bristol Bay*	41.3%	37.7%	11.1%	9.8%

* May refer primarily to spotted seals in North Bristol Bay's mixed harbor seal-spotted seal population.
Source: ADF&G, Division of Subsistence, Household Surveys, 2001.

Table 18
Time and Effort Spent Hunting Sea Lion in 2000
Compared with Five Years Ago, Hunters' Assessments

Region	More Time and Effort	Same Time and Effort	Less Time and Effort	Hunted Then but Have Stopped
North Pacific Rim	18.4%	44.7%	28.9%	7.9%
Kodiak Island	55.3%	21.1%	2.6%	21.1%
South Alaska Peninsula	12.5%	12.5%	37.5%	37.5%
Aleutian Islands	67.3%	21.2%	5.8%	5.8%

Source: ADF&G, Division of Subsistence, Household Surveys, 2001.

HUNTING PARTICIPATION AND EFFORT

In calendar year 2000, there were 747 households hunting harbor seals and 117 households hunting sea lions. Since 1992, there has been an overall decline in the numbers of hunters for harbor seals and for sea lions. Based on survey findings, the estimated numbers of households that reported at least one member hunting harbor seals were 1,014 (1992), 854 (1993), 971 (1994), 805 (1995), 859 (1996), 738 (1997), 707 (1998), and 747 (2000) (Table 16). The estimated numbers of households that reported at least one member hunting sea lions were 199 (1992), 222 (1993), 210 (1994), 158 (1995), 130 (1996), 97 (1997), 111 (1998), and 117 (2000).

The percentage of hunting households that reported hunting unsuccessfully for harbor seals in 2000 was only 17 percent, the second lowest in the last eight years -- 29 percent (1992), 25 percent (1993), 37 percent (1994), 26 percent (1995), 28 percent (1996), 20 percent (1997), and 14 percent (1998). Therefore, seal hunter success rates have improved while the absolute number of hunters have fallen. The percentage of unsuccessful hunting households for sea lions was 25 percent in 2000, in the lower range of other years -- 30 percent (1992), 35 percent (1993), 40 percent (1994), 24 percent (1995), 35 percent (1997), 23 percent (1997), and 33 percent (1998).

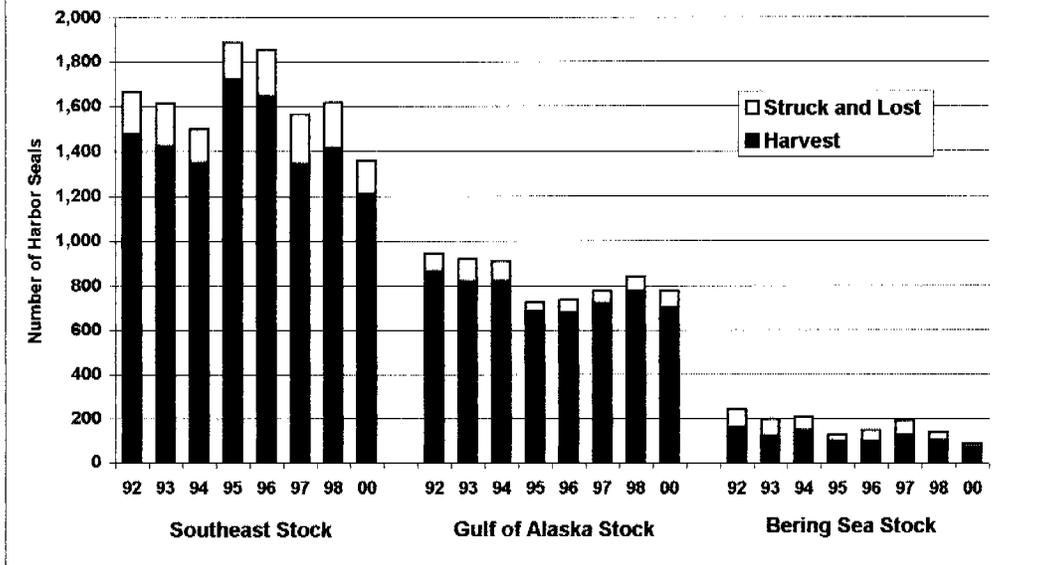
Surveyed households were asked to make a subjective assessment of their hunting effort in 2000 compared with five years before. Households were asked, "compared to five years ago, does harbor seal hunting now take your household -- 'more time and effort', 'about the same time and effort', 'less time and effort', 'hunted then but now stopped', or 'not applicable (no hunting last five years)'" A similar question was asked for sea lion hunting. The subjective assessments for hunting households are shown in Tables 17 and 18 (responses of households not hunting during the previous five years are removed in this analysis).

In all regions, a portion of hunting households reported “more”, the “same”, or “less” time and effort in hunting harbor seals in 2000 (Table 17). In the Southeast region, where most harbor seals are taken, about 54.7 percent reported taking the “same time and effort” for hunting seals, while 30.2 percent reported taking “less time and effort”. Only 8.7 percent of households reported taking “more time and effort” compared with five years ago. By contrast, larger percentages of households reported taking “more time and effort” in seal hunting in the Aleutian Islands (42.6 percent), North Pacific Rim (33.7 percent), and Kodiak Island (29.5 percent). In the North Pacific Rim and Kodiak Island regions, a substantial percentage of households reported that they had stopped hunting harbor seals sometime during the past five years – 17.4 percent (North Pacific Rim) and 20.0 percent (Kodiak Island).

Table 18 shows the subjective assessments of sea lion hunting time and effort by region. As with harbor seals, in all regions some households reported “more”, the “same”, or “less” time and effort in hunting sea lions in 2000 compared with five years ago. More than half of the households reported taking “more time and effort” in hunting sea lions in the Aleutian Islands (67.3 percent) and the Kodiak Islands (55.3 percent). In the North Pacific Rim, 44.7 percent reported taking the “same time and effort” and 28.9 percent reported “less time and effort”. A relatively large percentage of households reported that they had stopped hunting sea lions during the past five years in the South Alaska Peninsula (37.5 percent) and Kodiak Island (21.1 percent).

Hunting harbor seals or sea lions is a relatively specialized subsistence activity in Alaska communities. The large majority of Native households in the study's sampling universe did not attempt to hunt harbor seals or sea lions, as shown in Table 16. In 2000, about 71 percent of surveyed households did not hunt harbor seals and about 96 percent did not hunt sea lions. Among hunters, there also was substantial specialization in productivity (see Figs. 7 and 8). A relatively small core of highly-productive hunters reported taking most of the subsistence kills during 2000, similar to

Figure 9. Harbor Seal Take Trends
by Harbor Seal Stock, 1992-2000



Year	Harvest	Struck and Lost	Take
Southeast Alaska Stock			
1992	1,477	189	1,666
1993	1,425	190	1,615
1994	1,348	151	1,500
1995	1,719	171	1,890
1996	1,642	216	1,858
1997	1,343	224	1,567
1998	1,414	202	1,616
2000	1,210	151	1,361
Gulf of Alaska Stock			
1992	865	81	946
1993	818	103	921
1994	819	94	913
1995	683	42	724
1996	679	56	735
1997	719	57	777
1998	772	70	842
2000	699	80	779
Bering Sea Stock			
1992	160	83	243
1993	122	78	200
1994	145	63	208
1995	97	31	127
1996	94	54	148
1997	127	68	195
1998	100	38	138
2000	71	19	90

Figure 10. Harbor Seal Take Trends Reported by Alaska Native Hunters by Major Area, 1992-2000

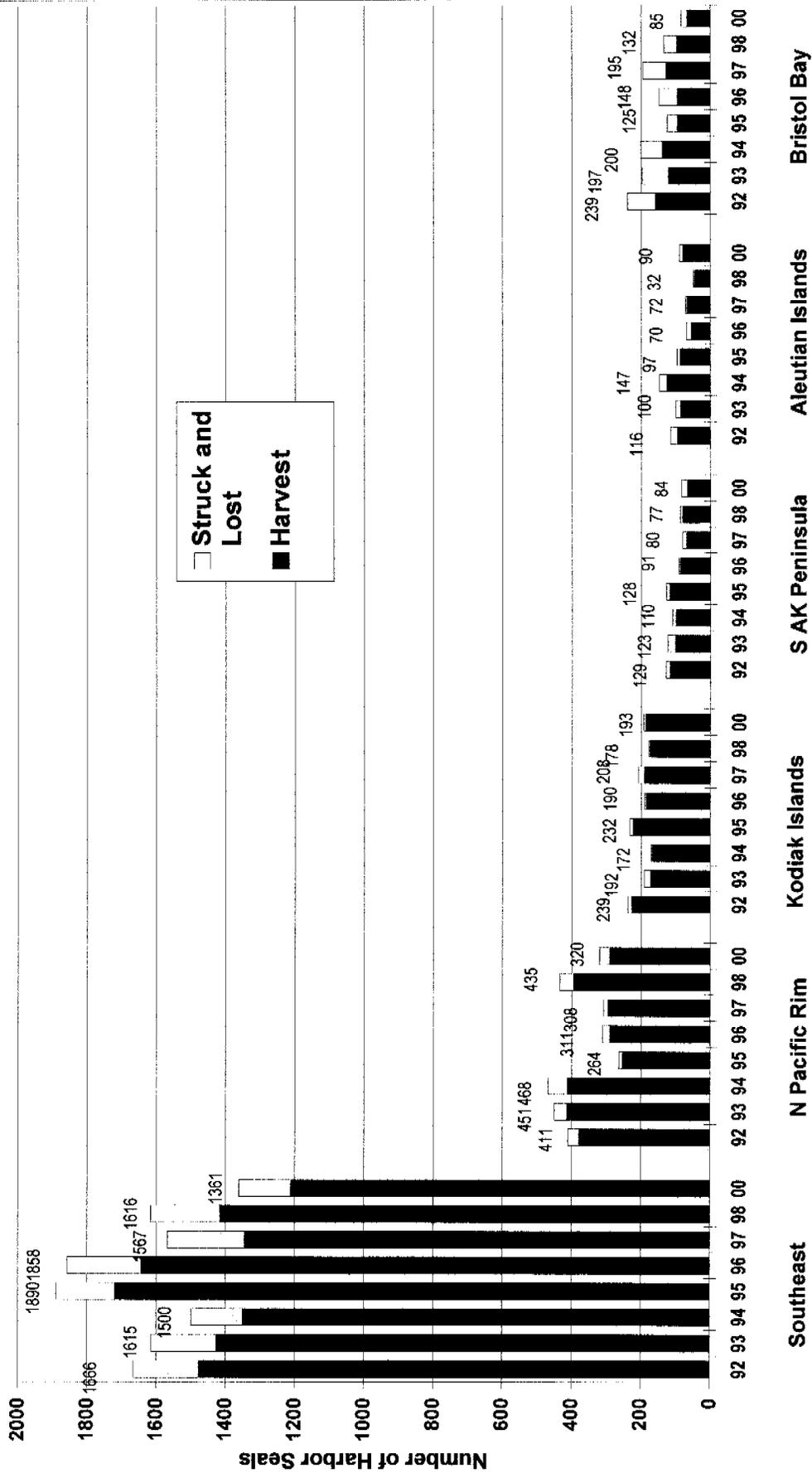


Figure 11. Sea Lion Takes Reported by
Alaska Native Hunters by Area, 1992-2000

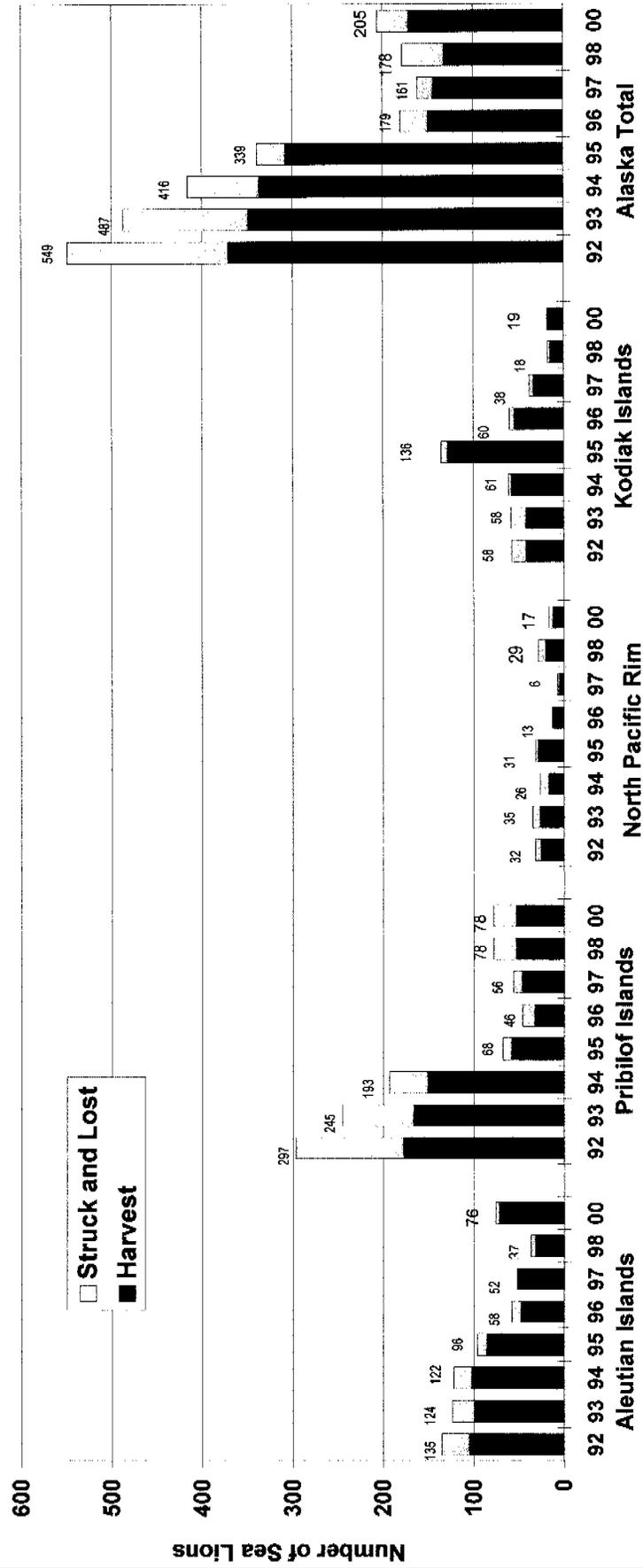
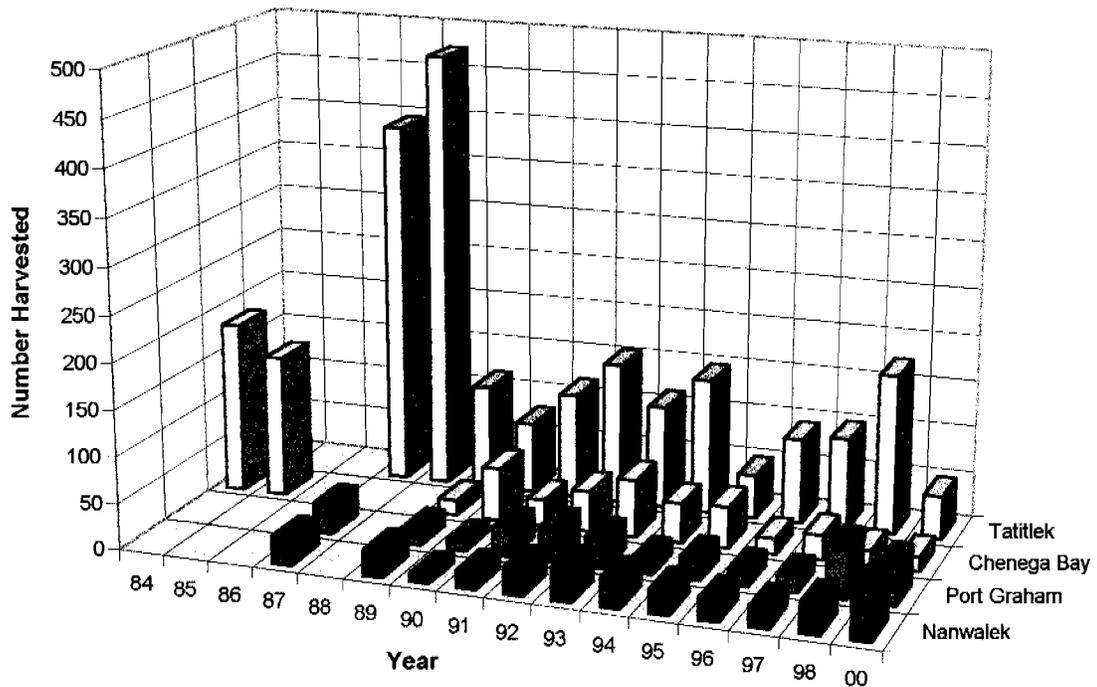
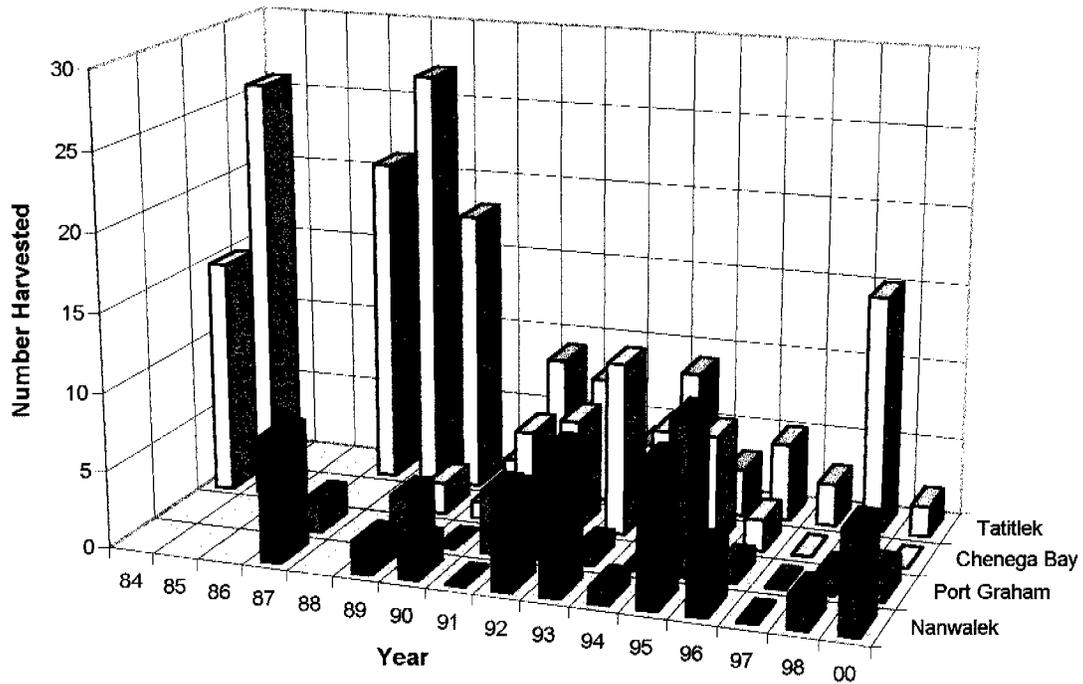


Figure 12
Change in Harbor Seal Harvests,
North Pacific Rim Communities



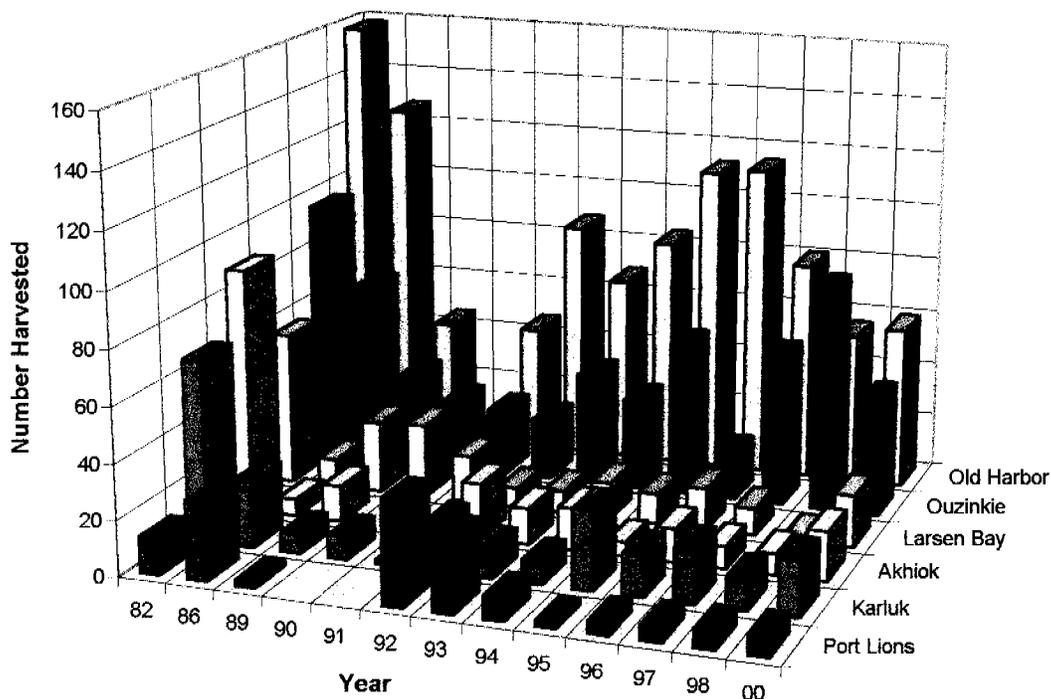
HARBOR SEAL HARVESTS				
Year	Nanwalek	Port Graham	Chenega Bay	Tatitlek
84			186	
85			154	
86				
87	29	32		393
88				473
89	27	17	16	113
90	9	10	57	76
91	18	30	28	114
92	28	36	43	153
93	34	31	61	111
94	29	16	42	146
95	24	23	44	46
96	22	16	16	91
97	20	16	26	97
98	31	52	16	171
00	53	40	15	46

Figure 13
Change in Sea Lion Harvests,
North Pacific Rim Communities



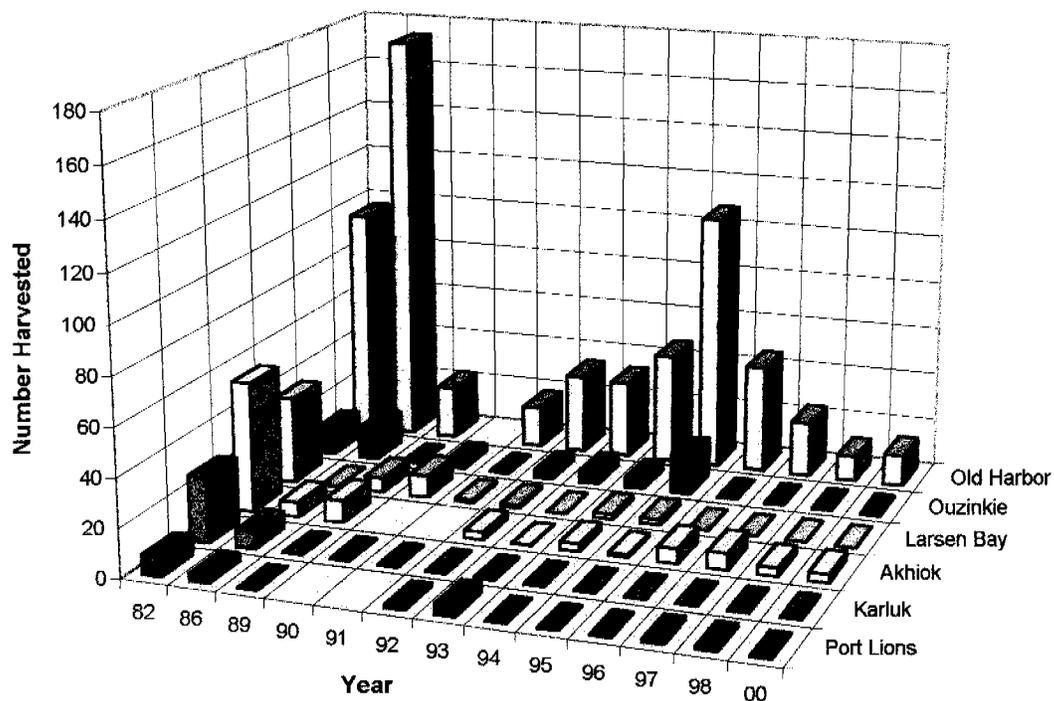
SEA LION HARVESTS				
Year	Nanwalek	Port Graham	Chenega Bay	Tatitlek
84			15	
85			27	
86				
87	8	2		21
88				27
89	2	3	2	18
90	2	0	1	2
91	0	4	6	9
92	6	4	7	8
93	9	1	11	4
94	1	0	7	9
95	9	10	7	3
96	4	1	2	5
97	0	0	0	3
98	2	1	0	15
00	6	2	0	2

Figure 14
Change in Harbor Seal Harvests,
Kodiak Island Communities



HARBOR SEAL HARVESTS						
	Port Lions	Karluk	Akhiok	Larsen Bay	Ouzinkie	Old Harbor
82	13	66	89	56	96	158
86	28	24	6	10	67	127
89	2	7	13	26	34	45
90		8		27	26	
91		1		17	24	46
92	37	17	20	7	22	87
93	26	10	13	8	41	68
94	8	8	15	13	33	84
95	2	28	5	11	56	112
96	4	15	12	15	17	114
97	5	19	8	10	55	80
98	6	11	7	2	82	55
00	6	20	18	19	43	59

Figure 15
Change in Sea Lion Harvests,
Kodiak Island Communities



	SEA LION HARVESTS					
	Port Lions	Karluk	Akhiok	Larsen Bay	Ouzinkie	Old Harbor
82	8	27	54	36	11	96
86	3	7	6	0	13	173
89	0	0	9	6	0	22
90		0		9	3	
91		0		1	0	17
92	1	0	3	1	3	33
93	4	0	0	0	5	32
94	0	0	3	2	4	46
95	0	0	1	2	16	107
96	0	0	6	0	0	45
97	1	0	7	0	0	23
98	1	0	3	0	0	10
00	0	0	3	0	0	13

Figure 16.
Subsistence Takes of Harbor Seals
by Alaska Natives, 1992 - 2000

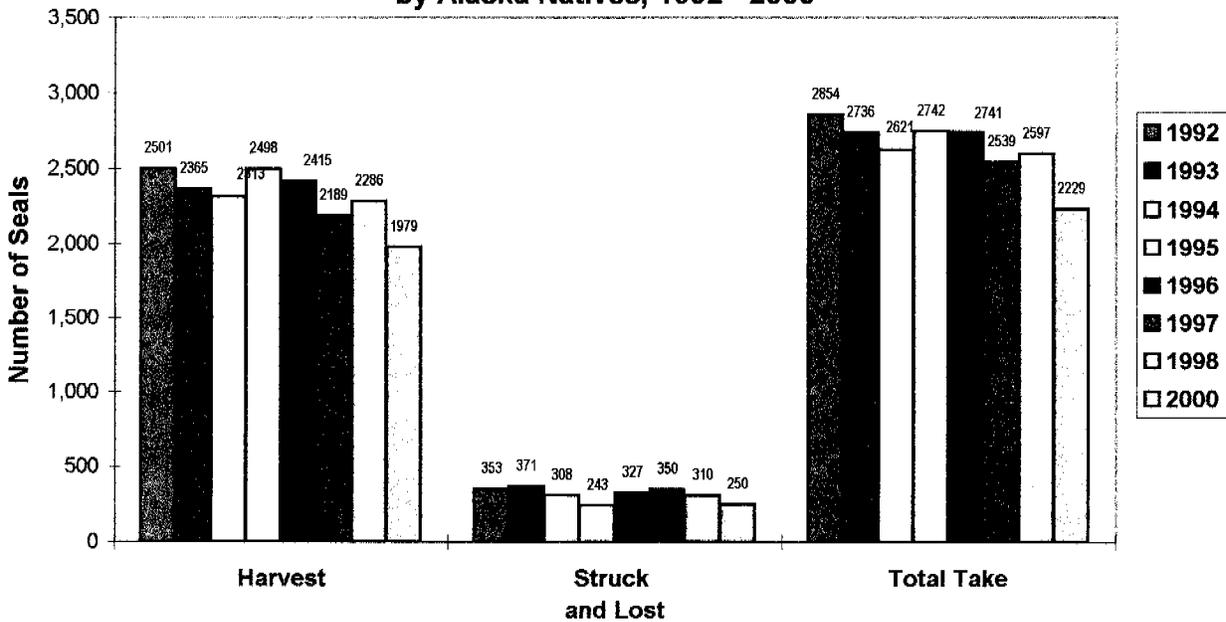
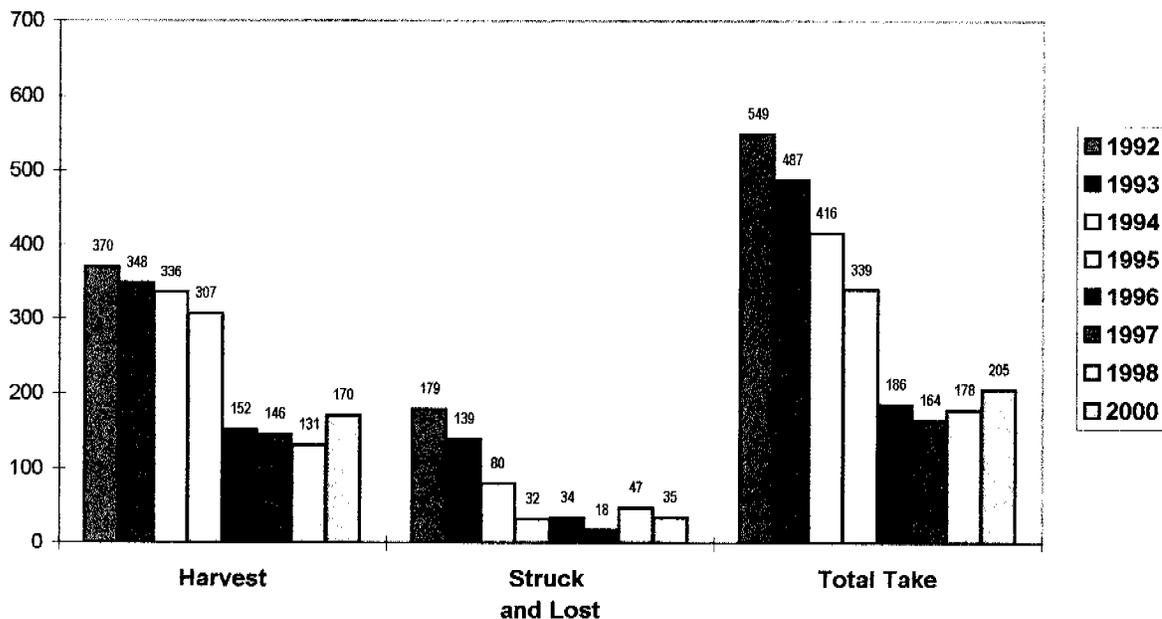


Figure 17.
Subsistence Takes of Sea Lions
by Alaska Natives, 1992 - 2000



previous years. About 30 percent of the hunters reported taking about 70 percent of all harbor seals and sea lions. Highly-productive hunters commonly distributed marine mammal products among a wider range of households through non-commercial systems of sharing and trade.

DISCUSSION

Distinctly different trends characterize the subsistence takes of harbor seals and sea lions since 1992. At the state level, subsistence takes of harbor seals show no clear trends up or down, while subsistence takes of sea lions have leveled off after declining substantially during the early 1990s. The following section discusses trends in more detail for each species, examining total take, age of harvest, and sex of harvest broken out by region.

Harbor Seal Subsistence Trends, 1992-2000

At the state level, there are no clear trends either up or down in subsistence takes of harbor seals since 1992. The 2000 harvest (1,979 seals) and total take (2,229 seals) were the lowest since surveys began in 1992 (Table 4, Fig. 16). The total take was a 14 percent decrease from the most-recent prior survey year (1998) (Fig. 18). The 2000 struck and lost estimate was the second lowest in terms of absolute numbers (250 seals) and rates (11.9 percent). While comparatively low, the total take of harbor seals in 2000 was not markedly different from takes from previous survey years, which have ranged from 2,229 to 2,854 seals annually since 1992 (Fig. 16). Overall, statewide harbor seal takes continue to be relatively consistent from year to year. The timing of subsistence takes for harbor seals since 1992 also has shown substantial between-year similarities (see Fig. 5)

Harbor seal populations in Alaska are divided into three stocks for biological assessment – the Southeast Alaska stock, Gulf of Alaska stock, and Bering Sea stock. Harbor seal takes from the three stocks are shown in Figure 9. Total annual takes from the Southeast Alaska stock were highest in 1995 and 1996 and lowest in 2000. Takes from the Gulf of Alaska stock were lowest in 1995 and have shown slight increases since then. Takes from the Bering Sea stock appear to be declining, from about 243 seals in 1992 to 90 seals in 2000.

Regional takes are shown in Figure 10. The overall direction in annual harbor seal takes at the regional level appears to be downward, however, it is difficult to say that this is a clear trend in any particular region. Trends in annual takes at the community level can be found in Appendix C. It is likely that most between-year differences in yearly subsistence takes of communities represent fluctuations due to seasonal hunting conditions, local food needs, local prey availability, and personal circumstances of hunters. Several examples may illustrate these types of factors. In Wrangell, harvests were lower in 2000 because a high harvester who normally takes around 40 seals a year was ill during the past year and did not hunt. In Yakutat, we were told that people did not hunt as much in 2000 due to poor commercial fishing, which left some hunters without sufficient money for fuel, ammunition, and other gear for seal hunting (Mike Turek, personal communication). In Ketchikan, harvests were substantially higher in 2000 due primarily to efforts from one hunter who hunts for food and skins for crafts.

For harvests in two regions -- the North Pacific Rim and Kodiak Island -- a longer time series is available, shown as Figures 12 and 14 (struck and lost numbers are not available prior to 1992, so these figures compare only harvest numbers). In the North Pacific Rim, subsistence harvests of harbor seals have been substantially lower during the most recent eight-year survey period compared with harvests recorded prior to 1989, the year of the *Exxon Valdez* oil spill (Fig. 12). Families in Prince William

Figure 18.
Percentage Annual Changes in Harvest, Struck and Lost, and
Total Take, Harbor Seals, 1992 - 2000

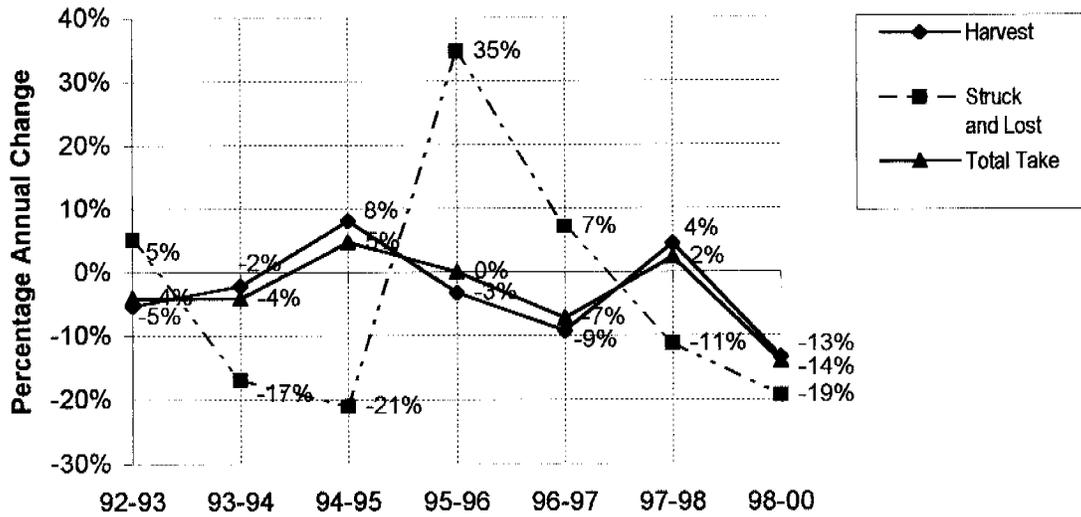


Figure 19.
Percentage Annual Changes in Harvest, Struck and Lost,
and Total Take, Sea Lions, 1992 - 2000

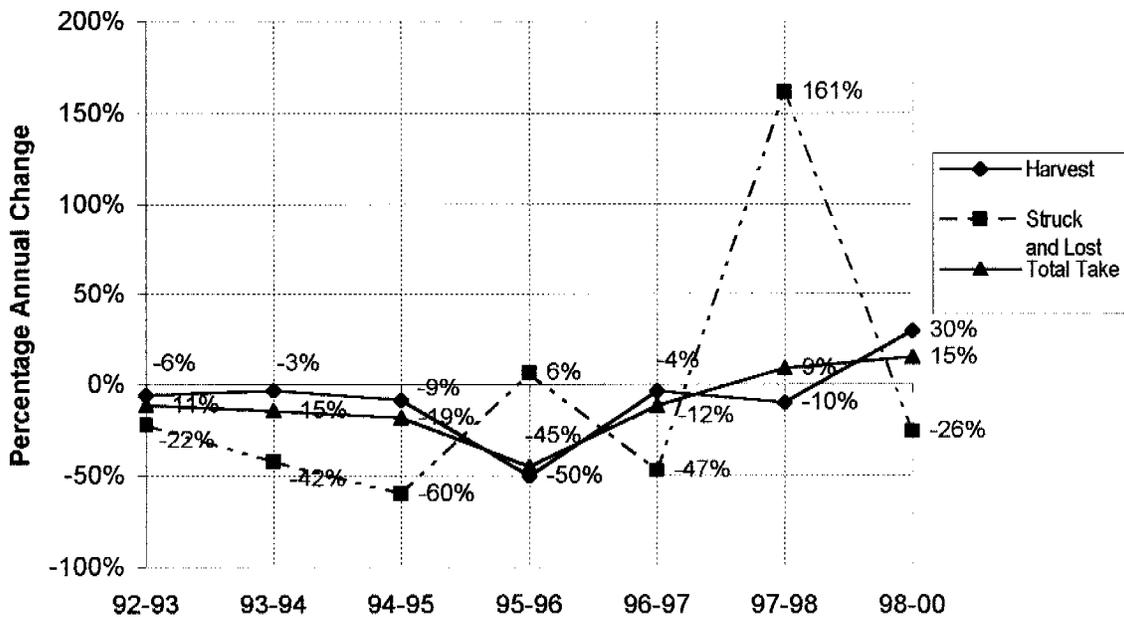


Table 19
Subsistence Harbor Seal and Sea Lion Takes
By Region, 1992 - 2000

	Struck & Harvest			Struck & Lost			Struck & Take			Struck & Harvest		
	Harvest	Lost	Take	Harvest	Lost	Take	Harvest	Lost	Take	Harvest	Lost	Take
Harbor Seal	1992			1993			1994			1995		
Southeast Alaska	1476.8	189.5	1666.2	1425.0	190.0	1615.0	1348.5	151.4	1499.9	1719.1	170.9	1890.0
North Pacific Rim	377.6	33.4	411.0	412.3	38.5	450.8	411.2	56.8	468.0	252.1	11.7	263.9
U. Kenai-Cook Inlet	51.6	0.0	51.6	49.2	5.6	54.8	16.2	0.0	16.2	3.7	0.0	3.7
Kodiak Island	225.5	13.1	238.6	171.7	20.1	191.8	168.2	3.6	171.7	223.0	9.2	232.2
S. AK Peninsula	115.5	13.1	128.6	100.0	23.1	123.1	98.6	11.1	109.8	117.0	11.1	128.0
Aleutian Islands	94.3	21.4	115.7	85.0	15.4	100.4	124.9	22.6	147.5	86.9	9.7	96.6
Pribilof Islands	2.3	1.2	3.5	2.3	1.2	3.5	7.3	0.0	7.3	2.5	0.0	2.5
South Bristol Bay	99.0	68.6	167.6	73.6	57.3	130.9	121.6	59.3	180.9	68.3	28.3	96.6
North Bristol Bay	58.4	13.2	71.6	46.1	20.0	66.1	16.2	3.3	19.5	25.9	2.4	28.3
	2501.0	353.4	2854.4	2365.3	371.1	2736.4	2312.8	308.0	2620.8	2498.5	243.3	2741.8
Harbor Seal	1996			1997			1998			2000		
Southeast Alaska	1641.6	216.3	1857.8	1343.4	224.1	1567.4	1414.0	202.4	1616.4	1209.7	151.4	1361.1
North Pacific Rim	289.0	22.1	311.1	295.0	12.8	307.7	393.5	41.4	434.9	289.9	29.8	319.7
U. Kenai-Cook Inlet	64.3	8.8	73.1	101.7	8.8	110.5	79.2	13.5	92.7	79.2	13.5	92.7
Kodiak Island	185.2	4.9	190.1	189.8	18.3	208.2	174.0	3.7	177.7	185.9	7.3	193.2
S. AK Peninsula	86.3	5.0	91.3	68.3	12.1	80.4	79.9	7.5	87.4	65.4	18.4	83.8
Aleutian Islands	55.0	15.2	70.2	70.5	6.3	76.9	45.8	3.8	49.6	79.0	10.5	89.5
Pribilof Islands	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	4.6	4.6	0.0	4.6
South Bristol Bay	63.8	44.2	108.0	107.8	66.3	174.1	62.2	34.3	96.5	55.4	17.6	73.0
North Bristol Bay	29.6	10.0	39.6	18.8	2.1	20.9	33.2	3.6	36.8	10.4	1.1	11.6
	2414.7	326.6	2741.3	2195.3	350.8	2546.2	2286.4	310.3	2596.7	1979.4	249.6	2229.0
Sea Lion	1992			1993			1994			1995		
Southeast Alaska	5.2	1.3	6.4	0.0	1.1	1.1	3.5	1.1	4.6	0.0	0.0	0.0
North Pacific Rim	25.1	6.5	31.5	26.2	8.7	34.9	16.6	9.7	26.3	28.4	3.0	31.4
U. Kenai-Cook Inlet	5.7	3.8	9.5	7.8	3.3	11.1	1.4	0.0	1.4	0.0	0.0	0.0
Kodiak Island	41.5	16.3	57.8	41.5	16.9	58.4	57.1	4.2	61.3	127.9	7.7	135.7
S. AK Peninsula	2.4	0.0	2.4	4.6	1.2	5.7	4.6	1.1	5.7	8.1	0.0	8.1
Aleutian Islands	104.3	30.9	135.2	99.0	24.8	123.8	101.8	20.5	122.3	85.0	11.1	96.1
Pribilof Islands	176.6	120.2	296.8	165.4	80.0	245.4	149.8	43.5	193.3	57.6	10.3	67.9
South Bristol 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
North Bristol Bay	7.8	0.0	7.8	3.3	3.3	6.5	1.2	0.0	1.2	0.0	0.0	0.0
	368.5	178.9	547.4	347.8	139.3	487.1	336.0	80.1	416.1	307.1	32.1	339.2
Sea Lion	1996			1997			1998			2000		
Southeast Alaska	0.0	0.0	0.0	0.0	0.0	0.0	3.3	4.4	7.6	2.3	0.0	2.3
North Pacific Rim	12.4	1.1	13.5	4.5	1.4	5.8	20.0	8.5	28.5	11.7	5.0	16.7
U. Kenai-Cook Inlet	3.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak Island	53.9	6.3	60.2	33.3	4.9	38.2	14.5	3.3	17.8	18.5	0.0	18.5
S. AK Peninsula	3.7	1.3	5.0	8.3	0.0	8.3	9.2	0.0	9.2	13.8	0.0	13.8
Aleutian Islands	46.5	11.3	57.9	50.7	1.3	51.9	31.6	5.5	37.0	71.2	4.8	76.0
Pribilof Islands	32.2	14.2	46.4	45.5	10.4	55.9	52.7	25.4	78.1	52.7	25.4	78.1
South Bristol 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
North Bristol Bay	0.0	0.0	0.0	3.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0
	152.1	34.1	186.2	145.7	17.9	163.7	131.2	47.0	178.2	170.2	35.2	205.5

Table 20
Subsistence Harbor Seal Takes by Alaska Natives
By Community, 1992 - 2000

	Struck			Struck			Struck			Struck		
	Harvest	& Lost	Take									
	1992			1993			1994			1995		
SOUTHEAST												
Angoon	125.1	28.9	154.0	56.6	9.9	66.5	66.9	21.1	88.0	80.9	9.7	90.6
Craig	74.2	0.0	74.2	51.1	9.8	60.9	42.7	6.6	49.3	69.4	13.6	83.1
Haines	30.5	7.9	38.4	23.0	2.3	25.3	39.3	2.2	41.5	24.0	9.0	33.0
Hoonah	350.2	24.8	375.0	324.4	35.8	360.2	240.7	15.0	255.8	236.6	19.7	256.3
Hydaburg	30.0	2.1	32.1	14.0	0.0	14.0	10.0	0.0	10.0	6.5	0.0	6.5
Juneau	122.6	7.6	130.2	59.0	21.6	80.6	78.6	13.5	92.1	42.9	1.3	44.2
Kake	173.9	12.3	186.2	100.8	15.2	115.9	99.3	7.4	106.6	72.0	1.5	73.5
Kasaan	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--
Ketchikan	90.2	6.5	96.8	42.4	2.9	45.3	31.4	0.0	31.4	46.4	0.0	46.4
Klawock	39.0	1.4	40.3	39.8	0.0	39.8	71.1	0.0	71.1	263.8	0.0	263.8
Klukwan	8.0	2.0	10.0	1.2	0.0	1.2	3.8	1.3	5.0	35.2	6.4	41.6
Metlakatla	1.3	0.0	1.3	--	--	--	--	--	--	--	--	--
Pelican	8.3	1.4	9.7	5.3	1.1	6.4	4.4	1.1	5.6	13.5	0.0	13.5
Petersburg	22.4	2.6	25.0	4.5	4.5	9.0	15.2	1.3	16.4	13.6	1.1	14.7
Saxman	22.2	1.2	23.5	5.6	0.0	5.6	16.5	0.0	16.5	15.9	0.0	15.9
Sitka	124.7	21.4	146.1	109.3	20.6	129.9	110.5	20.1	130.6	93.8	6.3	100.0
Wrangell	6.0	8.0	14.0	19.5	9.0	28.5	101.0	27.0	128.0	89.3	22.8	112.0
Yakutat	248.0	61.3	309.3	568.4	57.4	625.8	417.1	35.0	452.1	615.5	79.6	695.1
N. PACIFIC RIM												
Chenega Bay	42.6	2.3	44.9	60.8	2.2	63.0	42.0	3.9	45.9	44.4	1.6	46.0
Cordova	103.8	8.8	112.5	147.4	5.5	152.9	135.8	9.1	144.9	83.4	2.0	85.4
Nanwalek	27.9	0.0	27.9	33.9	3.2	37.1	29.0	4.6	33.7	23.6	0.0	23.6
Port Graham	36.2	4.7	40.8	30.6	3.2	33.7	15.5	5.2	20.7	23.0	0.0	23.0
Seldovia	12.4	0.0	12.4	7.9	4.9	12.8	8.0	0.0	8.0	4.0	0.0	4.0
Seward	2.0	0.0	2.0	0.0	0.0	0.0	5.0	0.0	5.0	10.9	5.5	16.4
Tatitlek	152.9	17.7	170.6	110.8	15.5	126.4	145.9	30.9	176.8	46.1	2.6	48.7
Valdez	0.0	0.0	0.0	21.0	4.0	25.0	30.0	3.0	33.0	16.8	0.0	16.8
U.KENAI-COOK												
Anchorage	17.1	0.0	17.1	24.4	5.6	30.0	4.2	0.0	4.2	3.7	0.0	3.7
Homer	--	--	--	4.8	0.0	4.8	12.0	0.0	12.0	0.0	0.0	0.0
Kenai	33.3	0.0	33.3	20.0	0.0	20.0	--	--	--	--	--	--
Tyonek	1.1	0.0	1.1	--	--	--	--	--	--	--	--	--
KODIAK IS												
Akhiok	20.0	3.0	23.0	13.3	0.0	13.3	14.5	0.0	14.5	5.0	0.0	5.0
Karluk	16.5	1.5	18.0	10.0	1.3	11.3	7.5	0.0	7.5	28.1	6.8	34.9
Kodiak City	36.9	0.0	36.9	6.0	1.0	7.0	7.6	0.0	7.6	8.8	0.0	8.8
Larsen Bay	6.5	0.0	6.5	7.7	5.5	13.2	13.4	2.2	15.7	11.0	0.0	11.0
Old Harbor	86.8	5.3	92.1	67.6	2.7	70.3	83.7	1.3	85.0	112.0	2.4	114.4
Ouzinkie	21.8	1.1	23.0	41.2	8.7	49.8	33.4	0.0	33.4	56.1	0.0	56.1
Port Lions	36.9	2.2	39.1	26.0	1.0	27.0	8.0	0.0	8.0	2.0	0.0	2.0

Table 20 (Continued)
Subsistence Harbor Seal Takes by Alaska Natives
By Community, 1992 - 2000

	Struck			Struck			Struck			Struck		
	Harvest	& Lost	Take	Harvest	& Lost	Take	Harvest	& Lost	Take	Harvest	& Lost	Take
	1992			1993			1994			1995		
S. ALASKA PEN.												
Chignik Bay	2.4	1.2	3.6	6.3	5.0	11.3	3.4	0.0	3.4	0.0	0.0	0.0
Chignik Lagoon	4.0	0.0	4.0	4.3	1.1	5.3	0.0	1.0	1.0	0.0	0.0	0.0
Chignik Lake	8.3	2.1	10.3	15.2	5.5	20.8	20.8	1.3	22.1	3.2	1.1	4.3
False Pass	18.0	0.0	18.0	19.0	0.0	19.0	12.6	2.1	14.7	25.9	1.2	27.1
Ivanof Bay	10.0	1.0	11.0	16.3	4.7	21.0	12.0	1.3	13.3	18.7	2.7	21.3
King Cove	26.0	6.7	32.7	12.8	3.5	16.3	20.9	1.1	22.0	49.0	3.0	52.0
Nelson Lagoon	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--
Perryville	8.9	2.2	11.1	12.8	2.1	15.0	21.1	0.0	21.1	11.0	3.1	14.1
Sand Point	37.9	0.0	37.9	13.3	1.2	14.4	7.8	4.3	12.1	9.2	0.0	9.2
ALEUTIAN IS.												
Akutan	12.9	4.3	17.1	15.6	4.5	20.1	13.8	3.5	17.3	7.0	0.0	7.0
Atka	28.6	9.9	38.5	32.7	0.0	32.7	73.7	8.7	82.3	42.5	0.0	42.5
Nikolski	5.8	3.5	9.3	4.0	1.0	5.0	6.0	0.0	6.0	0.0	0.0	0.0
Unalaska	47.0	3.7	50.8	32.7	9.9	42.6	31.4	10.5	41.8	37.4	9.7	47.1
PRIBILOF IS.												
St. George	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St. Paul	2.3	1.2	3.5	2.3	1.2	3.5	7.3	0.0	7.3	2.5	0.0	2.5
S. BRISTOL BAY												
Egegik	3.3	14.3	17.7	7.7	3.3	11.0	12.8	0.0	12.8	1.4	0.0	1.4
King Salmon	10.2	0.0	10.2	21.3	10.7	32.0	17.0	4.5	21.5	13.0	3.0	16.0
Levelock	10.8	0.0	10.8	2.7	5.4	8.1	0.0	0.0	0.0	0.0	0.0	0.0
Naknek	26.6	7.0	33.6	2.7	0.0	2.7	21.4	8.3	29.7	34.8	15.3	50.2
Pilot Point	5.4	4.3	9.7	2.2	0.0	2.2	3.1	0.0	3.1	0.0	0.0	0.0
Port Heiden	40.5	36.0	76.5	30.7	19.9	50.6	63.0	45.3	108.3	17.0	10.0	27.0
South Naknek	2.3	6.9	9.2	6.4	18.0	24.4	4.4	1.1	5.5	2.1	0.0	2.1
N. BRISTOL BAY												
Aleknagik	0.0	3.6	3.6	0.0	0.0	0.0	0.0	3.3	3.3	0.0	0.0	0.0
Clark's Point	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dillingham	29.2	3.8	32.9	18.0	4.2	22.2	16.2	0.0	16.2	13.3	0.0	13.3
Manokotak	4.9	3.8	8.7	3.2	0.0	3.2	0.0	0.0	0.0	9.3	2.4	11.7
Togiak	24.3	2.0	26.3	24.9	15.8	40.7	0.0	0.0	0.0	3.3	0.0	3.3
Twin Hills	--	--	--	--	--	--	--	--	--	--	--	--

Table 20 (Continued)
Subsistence Harbor Seal Takes by Alaska Natives
By Community, 1992 - 2000

	Struck			Struck			Struck			Struck		
	Harvest	& Lost	Take									
	1996			1997			1998			2000		
SOUTHEAST												
Angoon	71.0	2.0	73.0	51.0	7.1	58.1	53.0	2.0	55.0	64.3	6.1	70.4
Craig	48.2	8.0	56.3	62.0	7.5	69.5	52.7	5.2	57.9	35.0	3.0	38.0
Haines	41.1	3.4	44.6	36.8	10.5	47.3	30.7	10.6	41.3	17.5	0.0	17.5
Hoonah	359.7	48.6	408.3	143.8	9.9	153.8	169.7	19.8	189.6	147.9	16.0	163.9
Hydaburg	15.0	0.0	15.0	11.5	0.0	11.5	14.4	0.0	14.4	14.4	0.0	14.4
Juneau	32.8	1.3	34.1	99.0	0.0	99.0	90.4	15.3	105.7	59.9	3.5	63.4
Kake	86.4	0.0	86.4	68.4	7.6	76.0	123.0	6.1	129.1	101.7	3.6	105.3
Kasaan	--	--	--	--	--	--	--	--	--	--	--	--
Ketchikan	25.0	0.0	25.0	27.4	4.3	31.8	26.7	0.0	26.7	111.7	0.0	111.7
Klawock	69.8	0.0	69.8	94.0	0.0	94.0	83.0	0.0	83.0	67.1	0.0	67.1
Klukwan	6.3	0.0	6.3	1.1	0.0	1.1	10.5	0.0	10.5	18.0	0.0	18.0
Metlakatla	--	--	--	--	--	--	--	--	--	--	--	--
Pelican	15.4	0.0	15.4	14.5	0.0	14.5	15.8	2.4	18.2	7.5	0.0	7.5
Petersburg	19.5	2.4	21.9	11.8	4.3	16.2	23.9	9.3	33.2	20.7	7.2	27.9
Saxman	4.9	0.0	4.9	11.0	0.0	11.0	19.6	0.0	19.6	45.6	1.9	47.5
Sitka	126.8	4.1	130.9	150.6	3.7	154.3	237.6	29.4	267.0	276.8	41.1	317.8
Wrangell	79.3	22.2	101.5	68.8	29.2	98.0	174.0	30.0	204.0	28.5	12.0	40.5
Yakutat	640.3	124.1	764.5	491.5	139.9	631.5	289.0	72.3	361.3	193.3	56.8	250.1
N. PACIFIC RIM												
Chenega Bay	16.0	3.0	19.0	25.7	0.0	25.7	15.6	0.0	15.6	15.0	0.0	15.0
Cordova	122.2	8.6	130.8	120.8	0.0	120.8	79.1	9.3	88.3	87.8	14.0	101.8
Nanwalek	22.4	0.0	22.4	20.2	0.0	20.2	30.9	1.0	31.9	52.9	3.9	56.8
Port Graham	15.5	2.2	17.7	15.8	3.2	19.0	52.3	3.6	55.9	40.2	1.7	41.9
Seldovia	3.0	0.0	3.0	2.8	2.8	5.5	3.0	0.0	3.0	2.0	0.0	2.0
Seward	5.6	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.0
Tatitlek	90.8	3.8	94.6	97.2	6.8	104.0	171.1	19.2	190.2	46.3	1.9	48.2
Valdez	13.5	4.5	18.0	12.5	0.0	12.5	41.7	8.3	50.0	41.7	8.3	50.0
U. KENAI-COOK												
Anchorage	28.9	6.2	35.1	23.6	1.2	24.8	43.8	7.5	51.3	43.8	7.5	51.3
Homer	10.5	1.5	12.0	41.1	2.6	43.7	22.8	6.0	28.8	22.8	6.0	28.8
Kenai	22.9	1.1	24.0	35.0	5.0	40.0	12.6	0.0	12.6	12.6	0.0	12.6
Tyonek	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
KODIAK IS												
Akhiok	12.0	1.0	13.0	7.9	0.0	7.9	7.3	0.0	7.3	17.6	0.0	17.6
Karluk	15.1	0.0	15.1	19.0	0.0	19.0	11.0	0.0	11.0	19.5	1.5	21.0
Kodiak City	9.0	0.0	9.0	13.0	0.0	13.0	11.0	0.0	11.0	21.6	4.8	26.4
Larsen Bay	15.0	0.0	15.0	9.8	4.2	13.9	1.7	0.0	1.7	18.6	0.0	18.6
Old Harbor	113.5	1.3	114.8	80.0	4.8	84.8	55.1	1.1	56.2	59.1	0.0	59.1
Ouzinkie	16.7	2.6	19.3	55.2	9.4	64.6	82.0	2.5	84.5	43.0	1.0	44.0
Port Lions	4.0	0.0	4.0	5.0	0.0	5.0	6.0	0.0	6.0	6.4	0.0	6.4

Table 20 (Continued)
Subsistence Harbor Seal Takes by Alaska Natives
By Community, 1992 - 2000

	Struck Harvest & Lost Take			Struck Harvest & Lost Take			Struck Harvest & Lost Take			Struck Harvest & Lost Take		
	1996			1997			1998			2000		
S. ALASKA PEN.												
Chignik Bay	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chignik Lagoon	0.0	0.0	0.0	1.3	1.3	2.7	0.0	0.0	0.0	1.2	0.0	1.2
Chignik Lake	3.5	0.0	3.5	2.2	1.1	3.3	1.9	0.0	1.9	3.3	0.0	3.3
False Pass	13.9	0.0	13.9	8.0	0.0	8.0	17.8	1.3	19.1	2.5	1.2	3.7
Ivanof Bay	13.2	0.0	13.2	9.0	1.8	10.8	9.0	1.8	10.8	3.2	0.0	3.2
King Cove	14.0	5.0	19.0	16.9	2.1	19.1	18.2	0.0	18.2	19.3	2.1	21.4
Nelson Lagoon	--	--	--	--	--	--	--	--	--	--	--	--
Perryville	20.5	0.0	20.5	21.7	5.7	27.4	21.0	4.4	25.4	21.0	15.0	36.0
Sand Point	20.2	0.0	20.2	9.1	0.0	9.1	12.0	0.0	12.0	15.0	0.0	15.0
ALEUTIAN IS.												
Akutan	8.0	7.0	15.0	14.0	3.8	17.8	14.0	3.8	17.8	25.7	5.4	31.1
Atka	22.7	2.2	24.8	26.0	1.5	27.5	16.8	0.0	16.8	16.8	0.0	16.8
Nikolski	4.0	1.0	5.0	4.0	1.0	5.0	2.2	0.0	2.2	2.2	0.0	2.2
Unalaska	20.3	5.1	25.4	26.5	0.0	26.5	12.7	0.0	12.7	34.3	5.1	39.4
PRIBILOF IS.												
St. George	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St. Paul	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	4.6	4.6	0.0	4.6
S. BRISTOL BAY												
Egegik	2.8	0.0	2.8	1.6	0.0	1.6	0.0	0.0	0.0	4.0	3.0	7.0
King Salmon	9.5	2.4	11.9	9.7	0.0	9.7	5.2	0.0	5.2	3.3	9.8	13.0
Levelock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.8
Naknek	16.2	7.5	23.7	24.8	6.5	31.2	15.7	7.8	23.5	16.3	0.0	16.3
Pilot Point	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	2.1	7.4
Port Heiden	34.3	34.3	68.6	69.2	50.0	119.2	36.1	18.6	54.7	19.6	0.0	19.6
South Naknek	1.0	0.0	1.0	2.5	9.8	12.3	5.2	7.9	13.1	4.1	2.7	6.8
N. BRISTOL BAY												
Aleknagik	0.0	0.0	0.0	1.2	0.0	1.2	3.1	0.0	3.1	2.5	0.0	2.5
Clark's Point	0.0	0.0	0.0	1.3	0.0	1.3	1.3	0.0	1.3	0.0	0.0	0.0
Dillingham	0.0	0.0	0.0	1.2	0.0	1.2	8.5	0.0	8.5	0.0	0.0	0.0
Manokotak	2.4	3.6	6.0	0.0	0.0	0.0	4.0	0.0	4.0	1.2	0.0	1.2
Togiak	3.9	0.0	3.9	6.7	0.0	6.7	14.1	1.4	15.5	5.1	1.1	6.3
Twin Hills	23.3	6.5	29.8	8.4	2.1	10.5	2.2	2.2	4.4	1.6	0.0	1.6

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001.

Table 21
Subsistence Sea Lion Takes by Alaska Natives
By Community, 1992 - 2000

	Struck			Struck			Struck			Struck		
	Harvest	& Lost	Take									
	1992			1993			1994			1995		
SOUTHEAST												
Angoon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Craig	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Haines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hoonah	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hydaburg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Juneau	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0
Kake	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
Kasaan	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--
Ketchikan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Klawock	1.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Klukwan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Metlakatla	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--
Pelican	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petersburg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saxman	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sitka	3.8	1.3	5.0	0.0	1.1	1.1	1.1	1.1	2.2	0.0	0.0	0.0
Wrangell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yakutat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N. PACIFIC RIM												
Chenega Bay	6.9	1.2	8.1	11.1	6.6	17.7	6.6	0.0	6.6	6.6	0.0	6.6
Cordova	0.0	0.0	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	1.0	1.0
Nanwalek	6.3	0.0	6.3	8.5	1.1	9.5	1.2	2.3	3.5	9.2	0.0	9.2
Port Graham	3.5	1.2	4.7	1.1	0.0	1.1	0.0	0.0	0.0	10.0	2.0	12.0
Seldovia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Seward	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	8.3	4.2	12.5	4.1	1.0	5.2	8.8	7.4	16.2	2.6	0.0	2.6
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
U. KENAI-COOK												
Anchorage	5.7	3.8	9.5	7.8	3.3	11.1	1.4	0.0	1.4	0.0	0.0	0.0
Homer	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kenai	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--	--	--
Tyonek	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--
KODIAK IS.												
Akhiok	3.0	1.0	4.0	0.0	0.0	0.0	3.2	0.0	3.2	1.0	1.0	2.0
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
Kodiak City	0.0	0.0	0.0	0.0	12.7	12.7	1.1	0.0	1.1	2.2	0.0	2.2
Larsen Bay	1.1	0.0	1.1	0.0	0.0	0.0	2.2	0.0	2.2	2.0	1.0	3.0
Old Harbor	32.9	13.2	46.1	32.1	1.0	33.2	46.2	1.3	47.5	107.1	5.7	112.9
Ouzinkie	3.4	0.0	3.4	5.4	2.2	7.6	4.4	2.9	7.3	15.6	0.0	15.6
Port Lions	1.1	2.2	3.3	4.0	1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 21 (Continued)
Subsistence Sea Lion Takes by Alaska Natives
By Community, 1992 - 2000

	Struck			Struck			Struck			Struck		
	Harvest	& Lost	Take	Harvest	& Lost	Take	Harvest	& Lost	Take	Harvest	& Lost	Take
	1992			1993			1994			1995		
S. ALASKA PEN.												
Chignik 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
Chignik Lagoon	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Chignik Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
False Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ivanof Bay	0.0	0.0	0.0	2.3	1.2	3.5	0.0	0.0	0.0	0.0	0.0	0.0
King Cove	1.3	0.0	1.3	1.2	0.0	1.2	3.2	1.1	4.3	5.0	0.0	5.0
Nelson Lagoon	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--
Perryville	1.1	0.0	1.1	0.0	0.0	0.0	1.4	0.0	1.4	3.1	0.0	3.1
Sand Point	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALEUTIAN IS.												
Akutan	25.7	4.3	30.0	14.5	8.9	23.4	12.7	3.5	16.2	6.0	0.0	6.0
Atka	28.6	9.9	38.5	25.1	0.0	25.1	45.5	8.7	54.2	40.0	0.0	40.0
Nikolski	8.2	0.0	8.2	6.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
Unalaska	41.8	16.7	58.5	53.4	15.9	69.3	43.6	8.4	51.9	39.0	11.1	50.1
PRIBILOF IS.												
St. George	14.9	55.0	69.9	3.7	14.8	18.6	2.8	17.1	19.9	4.0	4.0	8.0
St. Paul	161.7	65.2	226.8	161.7	65.2	226.8	147.0	26.4	173.4	53.6	6.3	59.9
S. BRISTOL BAY												
Egegik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
King Salmon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Levelock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Naknek	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pilot Point	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 Heiden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Naknek	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N. BRISTOL BAY												
Aleknagik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Clark's Point	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dillingham	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manokotak	3.9	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Togiak	3.9	0.0	3.9	3.3	3.3	6.5	1.2	0.0	1.2	0.0	0.0	0.0
Twin Hills	--	--	--	--	--	--	--	--	--	--	--	--

Table 21 (Continued)
Subsistence Sea Lion Takes by Alaska Natives
By Community, 1992 - 2000

	Struck			Struck			Struck			Struck		
	Harvest	& Lost	Take									
	1996			1997			1998			2000		
SOUTHEAST												
Angoon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
Craig	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Haines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hoonah	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hydaburg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Juneau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kake	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kasaan	--	--	--	--	--	--	--	--	--	--	--	--
Ketchikan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Klawock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.3
Klukwan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Metlakatla	--	--	--	--	--	--	--	--	--	--	--	--
Pelican	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petersburg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saxman	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sitka	0.0	0.0	0.0	0.0	0.0	0.0	3.3	4.4	7.6	0.0	0.0	0.0
Wrangell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yakutat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N. PACIFIC RIM												
Chenega Bay	2.0	0.0	2.0	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
Nanwalek	4.3	1.1	5.3	0.0	0.0	0.0	2.1	0.0	2.1	6.5	0.0	6.5
Port Graham	1.1	0.0	1.1	0.0	0.0	0.0	1.2	0.0	1.2	1.7	3.4	5.0
Seldovia	0.0	0.0	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
Seward	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	5.0	0.0	5.0	2.7	1.4	4.1	15.1	6.8	21.9	1.9	0.0	1.9
Valdez	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	3.3	1.7	1.7	3.3
U. KENAI-COOK												
Anchorage	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Homer	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	2.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tyonek	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 IS.												
Akhiok	6.0	1.0	7.0	6.6	1.3	7.9	3.1	0.0	3.1	3.2	0.0	3.2
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
Kodiak City	3.0	0.0	3.0	3.0	0.0	3.0	0.0	1.0	1.0	2.4	0.0	2.4
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
Old Harbor	44.9	5.3	50.2	22.7	3.6	26.3	10.3	2.3	12.6	12.9	0.0	12.9
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
Port Lions	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0

Table 21 (Continued)
Subsistence Sea Lion Takes by Alaska Natives
By Community, 1992 - 2000

	Struck			Struck			Struck			Struck		
	Harvest	& Lost	Take									
	1996			1997			1998			2000		
S. ALASKA PEN.												
Chignik 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
Chignik Lagoon	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
False Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ivanof Bay	2.4	0.0	2.4	1.8	0.0	1.8	1.8	0.0	1.8	0.0	0.0	0.0
King Cove	0.0	0.0	0.0	4.2	0.0	4.2	4.3	0.0	4.3	4.3	0.0	4.3
Nelson Lagoon	--	--	--	--	--	--	--	--	--	--	--	--
Perryville	1.3	1.3	2.6	2.3	0.0	2.3	1.1	0.0	1.1	4.5	0.0	4.5
Sand Point	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	5.0	0.0	5.0
ALEUTIAN IS.												
Akutan	11.0	5.0	16.0	6.4	0.0	6.4	6.4	0.0	6.4	4.1	1.4	5.4
Atka	17.3	0.0	17.3	12.2	0.0	12.2	16.8	0.0	16.8	16.8	0.0	16.8
Nikolski	3.0	0.0	3.0	3.0	0.0	3.0	1.1	0.0	1.1	1.1	0.0	1.1
Unalaska	15.2	6.3	21.6	29.1	1.3	30.3	7.3	5.5	12.7	49.2	3.4	52.6
PRIBILOF IS.												
St. George	4.0	4.0	8.0	19.6	8.1	27.7	11.8	8.5	20.3	11.8	8.5	20.3
St. Paul	28.2	10.2	38.4	25.9	2.3	28.2	41.0	16.9	57.8	41.0	16.9	57.8
S. BRISTOL BAY												
Egegik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
King Salmon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Levelock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Naknek	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pilot Point	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 Heiden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Naknek	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N. BRISTOL BAY												
Aleknagik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Clark's Point	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dillingham	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manokotak	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Togiak	0.0	0.0	0.0	3.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0
Twin Hills	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, 2001.

Figure 20.
Sex Ratios (Males:Females)
of Harbor Seal and Sea Lion Harvests
Reported by Alaska Native Hunters, 1992 - 2000

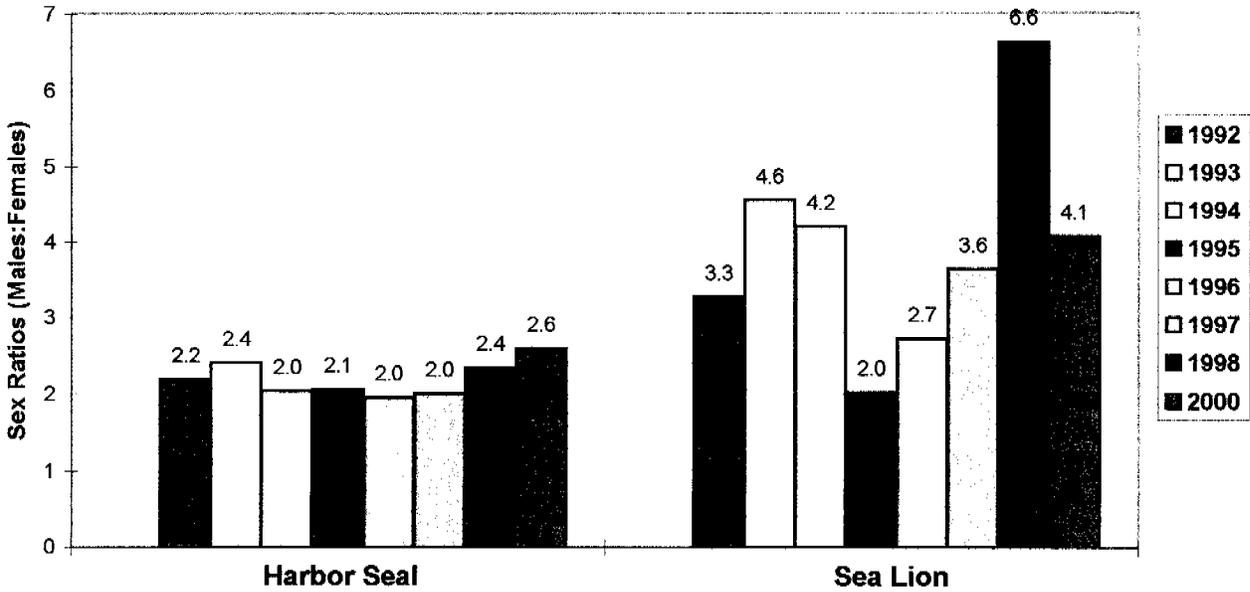


Figure 21.
Age Structure (Pups, Juveniles, Adults)
of Harbor Seal and Sea Lion Harvests
Reported by Alaska Native Hunters, 1992 - 2000

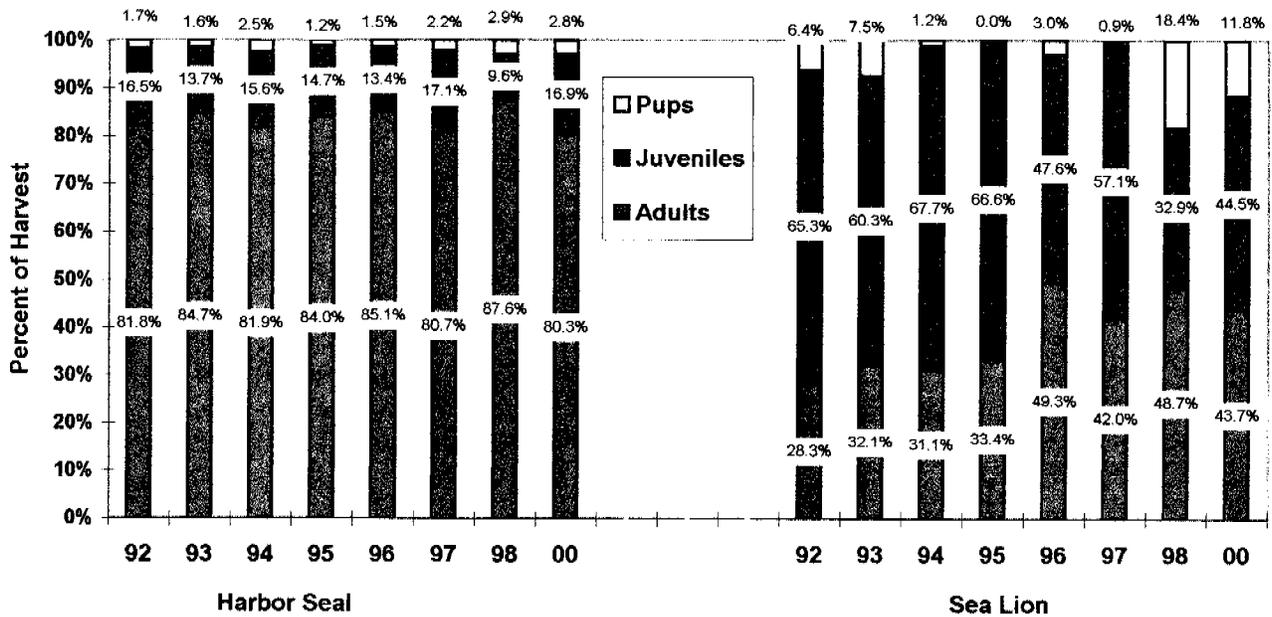


Figure 22. Percentage of Harbor Seal Harvests Reported as Male Seals by Hunters, 1992 - 2000

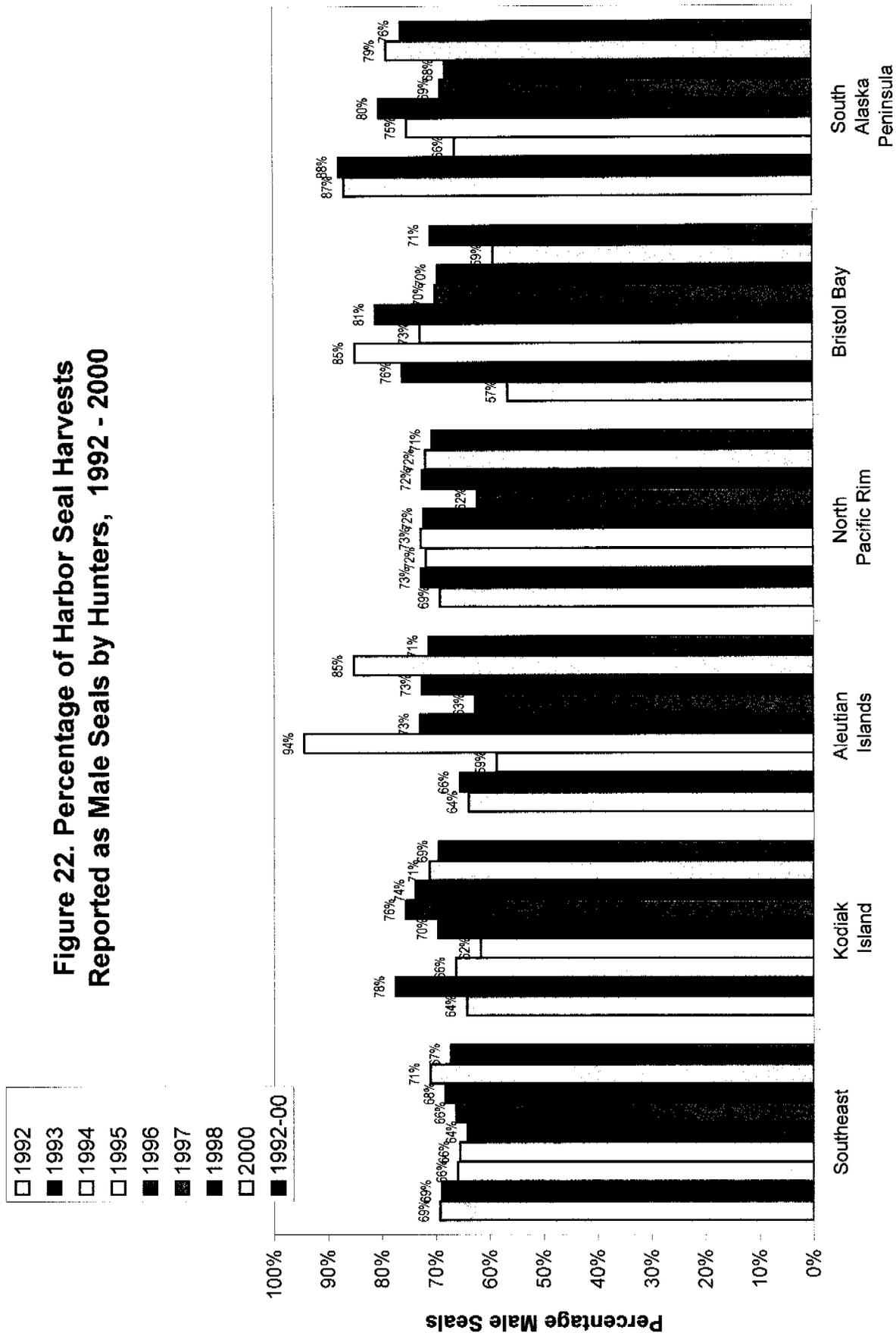


Figure 23. Percentage of Harbor Seal Harvests Reported as Juvenile Seals by Hunters, 1992 - 2000

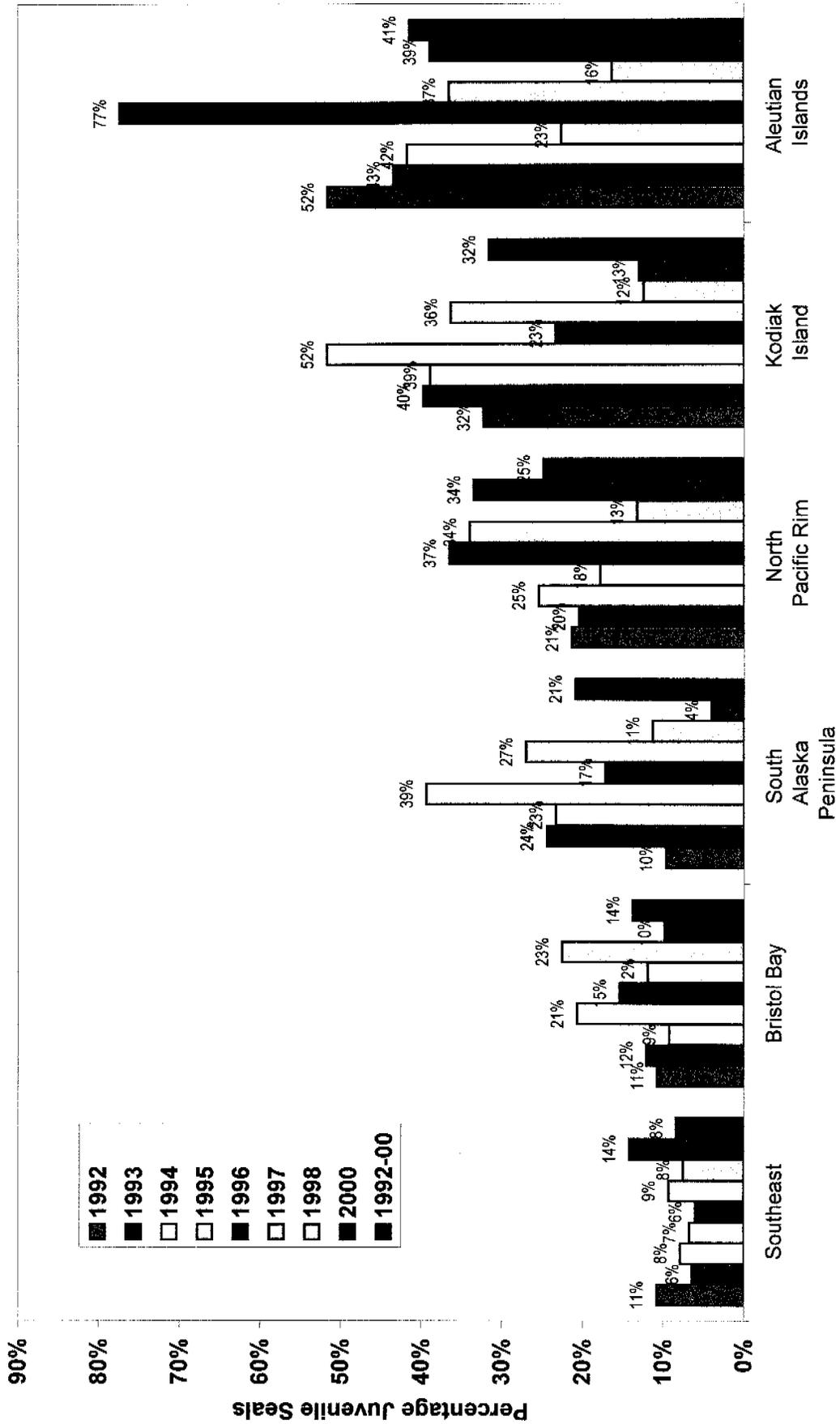


Fig. 24. Adult and Juvenile Harbor Seal Harvests by Month, January 1992 - December 2000, Southeast Alaska

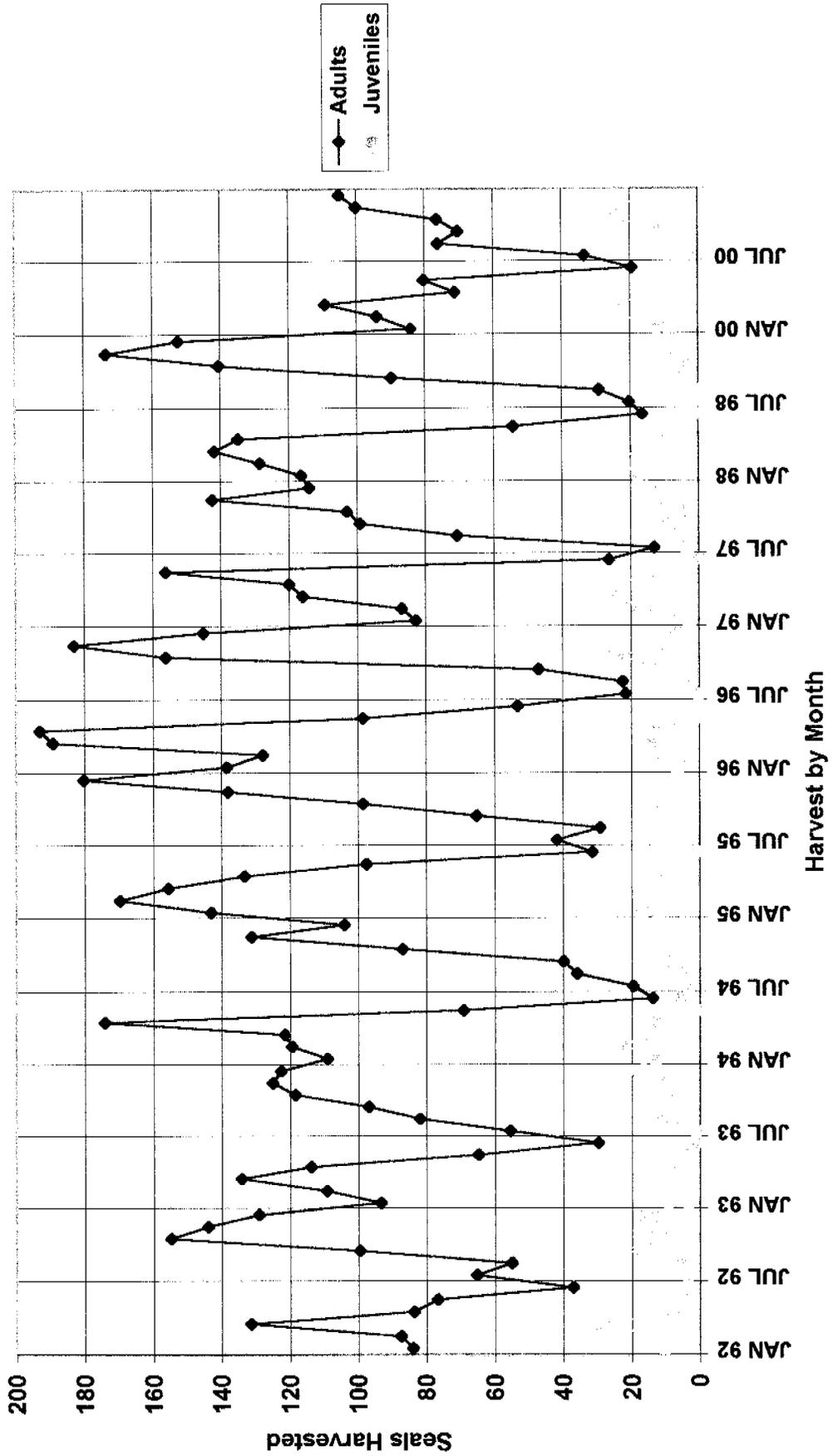


Fig. 25. Adult and Juvenile Harbor Seal Harvests by Month, January 1992 - December 2000, Kodiak Island Region

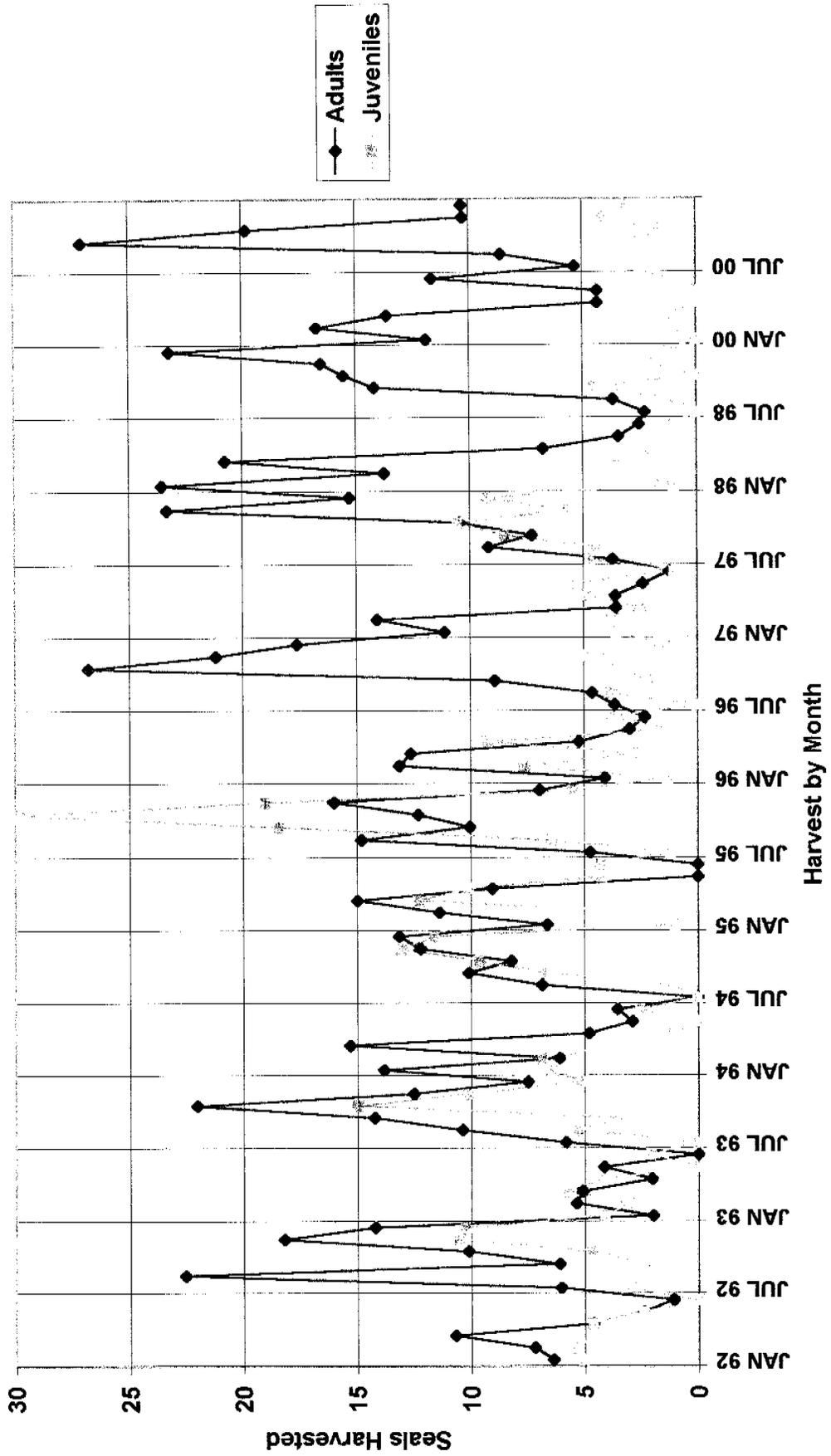
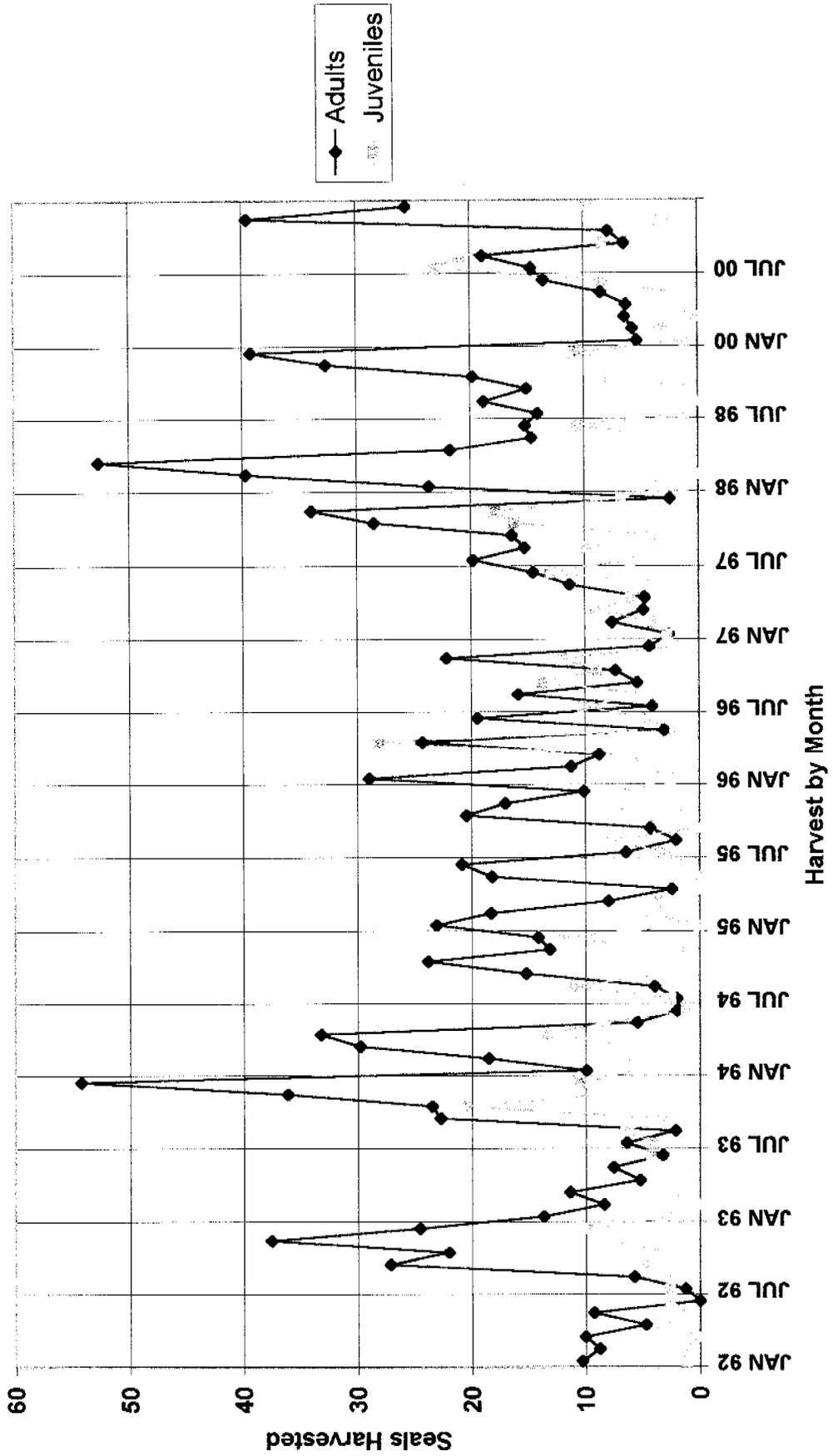


Fig. 26. Adult and Juvenile Harbor Seal Harvests by Month, January 1992 - December 2000, North Pacific Rim Region



Sound reduced their subsistence activities the year of the spill because of the uncertainties of the health safety of consuming wild foods harvested from oiled areas. Subsistence harvest levels showed signs of some recovery since the spill. In 2000, harvests were relatively larger in Nanwalek and Port Graham but lower in Chenega Bay and Tatitlek. For Kodiak Island villages, the 163 seals harvested in 2000 were fewer than those recorded a decade before -- 478 seals (1982) and 262 seals (1986) (Fig. 14). In this area, harbor seal harvests appear to have been declining during the 1980s, followed by increases again during the 1990s at Old Harbor and Ouzinkie. In other Kodiak Island communities, harvests have remained low and variable during the 1990s.

The longer time series represented by the North Pacific Rim and Kodiak Island areas provide a cautionary note about interpreting the apparent "stability" to subsistence patterns described since 1992, the start of the most recent survey series. Reported harbor seal harvests were substantially higher a decade earlier in the North Pacific Rim and Kodiak Island areas. The pattern of use documented for 1992-2000 in those areas may represent observations at relatively low points of longer-term harvest cycles. The longer time series above may better represent the potential ranges of subsistence takes in these areas. Should conditions return to those during the 1980s, subsistence harvests of harbor seals may increase as well.

In addition to relatively stable subsistence takes of harbor seals from 1992-2000, there has been remarkable consistency in the reported age and sex composition of the statewide harbor seal harvest. Figures 20 and 21 compare statewide patterns in the age and sex composition of the subsistence harvests of harbor seals since 1992. At the statewide level, hunters consistently have reported harvesting more male than female harbor seals each year. Considering kills of known sex, male to female sex ratios have been similar across survey years for harbor seals -- 2.2:1 (1992), 2.4:1 (1993), 2.0:1 (1994), 2.1:1 (1995), 2.0:1 (1996), 2.0:1 (1997), 2.4:1 (1998), and 2.6:1

(2000) (Fig. 20). At the statewide level, age composition also is similar between years (Fig. 21) -- hunters continued to report harvesting primarily adult harbor seals (from 81 to 88 percent of the annual harvest), with smaller proportions of juvenile seals (10 to 17 percent) and pups (1 to 3 percent).

Figures 22 and 23 compare age and sex compositions of harbor seal harvests at the regional level. There is considerable similarity between regions and years for harbor seal sex composition, shown in Fig. 23. Counting harvested animals whose sex was reported between 1992-2000, all regions showed more male seals to female seals harvested -- Southeast (67 percent males), North Pacific Rim (71 percent males), Kodiak Island (69 percent males), South Alaska Peninsula (76 percent males), Aleutian Islands (71 percent males), and North and South Bristol Bay (71 percent males). A number of variables probably contribute to the predominance of males over females in the subsistence harvest of harbor seals across regions and years, as discussed in Wolfe and Mishler (1998). The higher number of males harvested likely reflects the greater availability of males in the groups of animals hunted due to sex segregation in seal groups, and due to female seals being more elusive than male seals when disturbed in a group, presenting comparatively fewer or more difficult targets (see Wolfe and Mishler 1998:60-61; Wolfe et al 1999).

The age composition of the subsistence harvest of harbor seals has varied substantially between regions and presents a more complex picture than sex ratios (Fig. 23). Since 1992, hunters have been asked to classify the seal harvest into three categories -- "pups", "juveniles", and "adults". Probably most hunters answer this question using size and behavior as main indicators, so that the smallest seals with their mothers are classified as "pups", small-sized seals are classified as "juveniles", and medium to large seals are classified as "adults". The hunters' category of "juveniles" probably primarily includes yearlings (6 - 17.9 months), which are about 30 percent of adult weight, and perhaps include some 2-year-old seals (18 - 29.9 months)

and 3-year-old seals (30 - 41.9 months), which have gained on average about 50 percent of adult weight (Bigg 1969: 21; Pitcher and Caulkins 1979:30).

Based on hunter reports, the percentages of juveniles in the harvest differed substantially between regions between 1992-2000 (Fig. 23). Of all the seals harvested between 1992-2000 in the Southeast Region, only 8 percent were reported to be juvenile seals. Bristol Bay seal harvests also had a relatively low juvenile composition of 14 percent juvenile seals. Other regions had substantially greater proportions of juvenile seals in their annual harvests, including South Alaska Peninsula (21 percent), North Pacific Rim (25 percent), Kodiak Islands (32 percent), and the Aleutian Islands (41 percent). These age patterns possibly reflect differences in the age compositions of seal populations accessible to hunters, perhaps due to different population structures in each region. The older ages of harvested seals in the Southeast region may reflect relatively large and stable seal populations with proportionately larger older age classes in the population, while the younger ages of seals harvested in other regions may reflect populations which are rebuilding, with proportionately larger young age classes.

As shown in Fig. 23, the reported age compositions of the seal harvests have seen substantial between-year changes for some regions. In 1998 and 2000, the proportions of juvenile seals fell substantially in the Kodiak Islands (12 percent, 13 percent) and the South Alaska Peninsula (11 percent, 4 percent). In both areas, the lower juvenile proportions resembled those of the Southeast and Bristol Bay regions. In the North Pacific Rim and Aleutian Islands, the juvenile proportions fell markedly in 1998, but rose again in 2000 to the relatively high levels of previous years.

The reasons for these dramatic single-year changes in age composition are not known. If the age composition of the harvest reflects the age structures of local seal populations, which is speculation at this time, then at least two potential explanations present themselves. One interpretation might be that low juvenile harvests of hunters

on particular years may reflect a relatively low production of young seals in a region during spring and summer. If this is the case, the juvenile proportion may be an index of annual biological productivity of a local population. However, a second interpretation of the age composition data may relate the juvenile proportion to aging cohorts. A relatively high production of young seals during a particular year may create a relatively large cohort of young seals on a particular year. In another year or two, harvested seals from this aging cohort will likely be classified primarily as "adults" by hunters. Under this second interpretation, the decrease of juveniles on a particular year may be due to a greater number of available new adults in a local population than due to a change in the production of young seals.

It is beyond the scope of this research to test for the likelihood of these or other potential explanations. However, the changes in age composition over time in three regions are illustrated in Figs. 24 to 26, which present adult and juvenile harbor seal harvests by month from January 1992 through December 2000 for the Southeast, Kodiak Island, and North Pacific Rim regions (no data are available for 1999). This time series does not arbitrarily divide years between December 31 and January 1, as in Fig. 23, but allows for a combination of the calendar years to better assess trends. A comparison of the Southeast harvest (Fig. 24) with the Kodiak harvest (Fig. 25) clearly illustrates the difference in the proportion of juveniles in the harvests – in southeast juveniles are a relatively low part of the harvest compared with Kodiak Island. The Kodiak Island harvest time series (Fig. 25) suggests that, compared with the previous several years, there were lower juvenile harvests relative to adults in July 1996 through June 1997 as well as November 1997 through December 1998 and January 2000 through December 2000. By contrast, in the neighboring North Pacific Rim (see Fig. 26), juvenile harvests were high relative to adults in July 1996 through 1997, low from January 1998 through December, and high from January through October 2000. Such

complex patterning of age composition of harbor seal harvests over time and across regions begs future explanation.

Sea Lion Subsistence Trends, 1992-2000

In contrast with the stability in harbor seal takes, total subsistence takes of sea lions by Alaska Natives sharply declined between 1992 and 1997 (Fig 17). Annual rates of decline in sea lion harvests ranged between 3 to 10 percent annually, except for one single-year decline of 45 percent between 1995 and 1996 (Fig. 19). The lowest recorded sea lion takes occurred in 1997. Since then, sea lion takes have increased slightly, by 9 percent in 1998 and by 15 percent in 2000. Overall, the subsistence take of sea lions in 2000 (205 animals) was only 37 percent of the subsistence take in 1992 (549 animals), even with the slight recovery of harvests since 1997.

At the regional level, notable declines in sea lion takes have been reported by hunters from the Pribilof Islands (see Fig. 11), where total sea lion takes fell from 297 to 78 animals from 1992 to 1998 (a decline of 73.7 percent). The sea lion take in the Aleutian Islands area increased to 76 animals in 2000 from 37 animals in 1998, but was below the 135 animals taken in 1992. In Kodiak Island areas, the sea lion take in 2000 (19 animals) was almost the same as in 1998 (18 animals) and represented a 67.0 percent decrease from 1992 (58 animals) (Fig. 11).

In the North Pacific Rim and Kodiak Island regions, longer time series are available (see Figs. 13 and 15). Documented sea lion harvests in Tatitlek and Chenega Bay ranged as high as 27 animals in each place during the 1980s. In 2000, Tatitlek harvests were two sea lions while in Chenega Bay no sea lions were harvested (Fig. 13). Harvests at Nanwalek and Port Graham show substantial yearly variation (between one and nineteen animals). Eight sea lions were harvested between the two communities in 2000. On Kodiak Island, sea lion harvests declined substantially during the 1980s – 232 (1982), 202 (1986) and 37 (1989) – but rebounded again to 107 in

1995 because of increased harvests at Old Harbor and Ouzinkie. Kodiak Island harvests fell to 14 animals in 1998 and 16 animals in 2000, with none reported for four of six villages (Fig 15). The longer time series indicate that sea lion harvests have been declining in the North Pacific Rim and Kodiak Island areas, with the declines commencing during the 1980s for Kodiak Island communities.

Declines in sea lion takes documented over the last seven years appear to be associated with drops in hunter numbers, as illustrated with four communities in Figs. 27-30, which depict annual changes in three factors: (1) the number of households hunting sea lions, (2) the number of households harvesting sea lions, and (3) the mean number of sea lions harvested per successful household. As shown in Fig. 27, there was a substantial decrease in the number of households hunting sea lions at Unalaska (24 to 4 households from 1992 to 1998), while the number of households successfully harvesting sea lions declined from 20 to 4 households. While hunters declined during this period, there were no clear indications of declining success rates for households that did hunt – annual mean harvests per household ranged from 1.9 to 5.6 sea lions per successful hunter at Unalaska. In 2000, there was an increase in the number of households with hunters (17 households), all successful in harvesting sea lions. The mean harvest per household was 3.0 sea lions.

Hunting patterns at Old Harbor display somewhat different trends (Figs. 28). At Old Harbor, there were increasing numbers of households hunting sea lions from 1992 to 1995 (from 21 households to 43 households), followed by a decrease to 12 households by 1997. In 1998 and 2000 there were ten successful sea lion hunters at Old Harbor. Mean harvests per successful hunter (1.3 animals) in 2000 is toward the lower end of previous ranges (1.0 to 2.6 animals).

The pattern of hunting factors at Akutan is shown in Fig. 29. Numbers of successful sea lion hunting households have ranged between three and seven since 1992. Mean harvests per successful hunter have ranged from 1.5 to 5.5 sea

Fig. 27. Sea Lion Hunters and Success Rates, Unalaska, 1992 - 2000

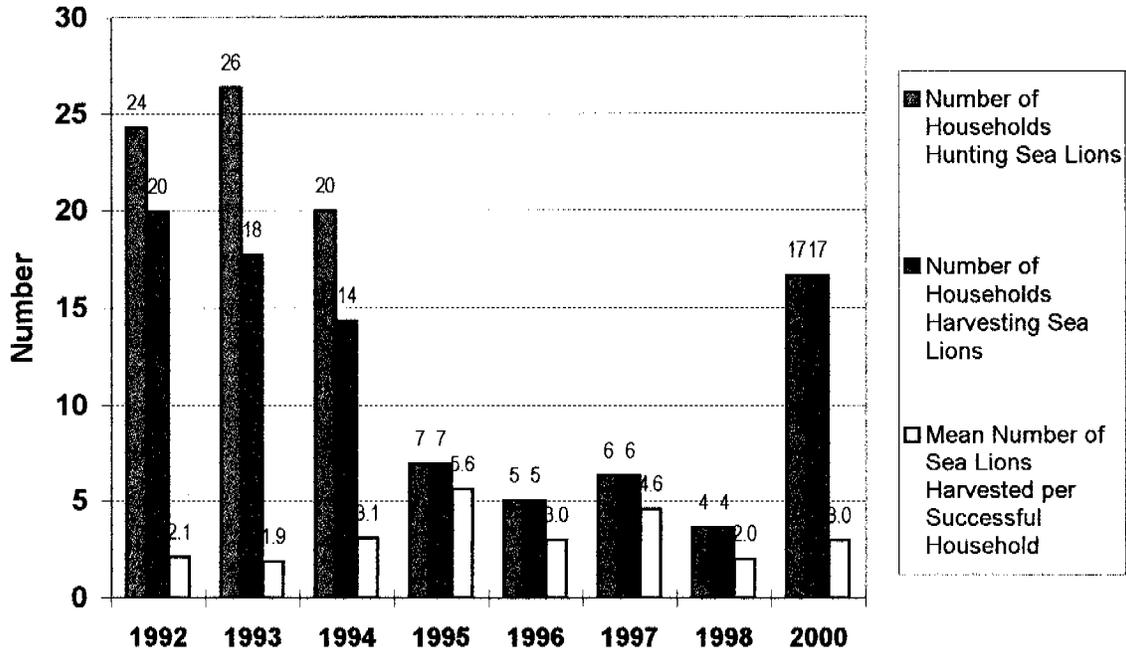


Fig. 28. Sea Lion Hunters and Success Rates, Old Harbor, 1992 - 2000

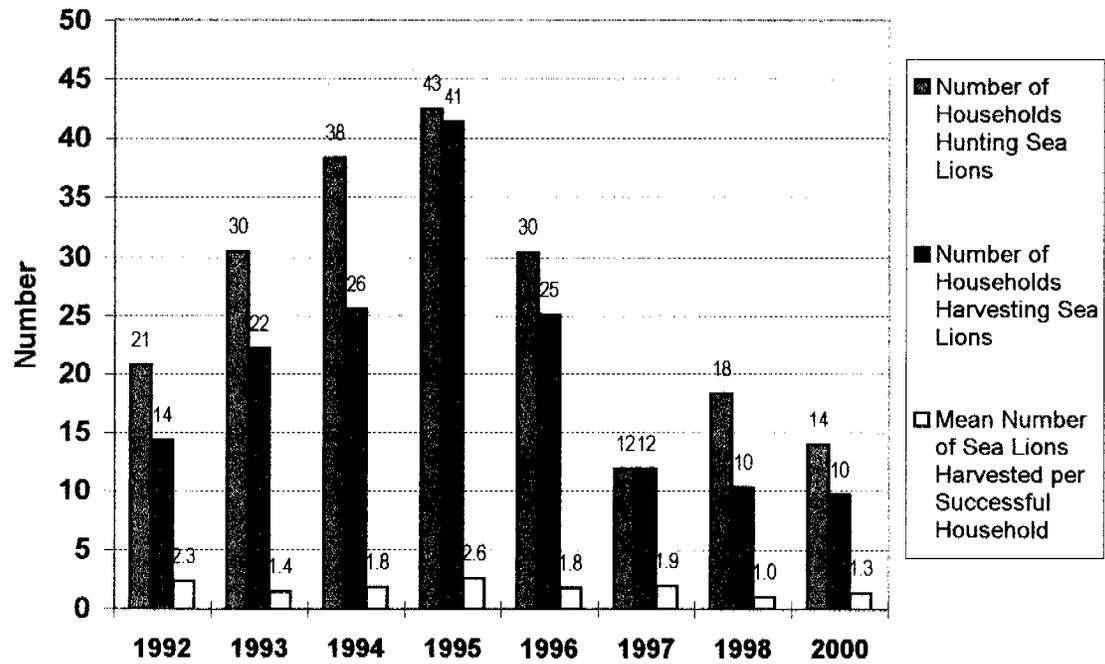


Fig. 29. Sea Lion Hunters and Success Rates, Akutan, 1992 - 2000

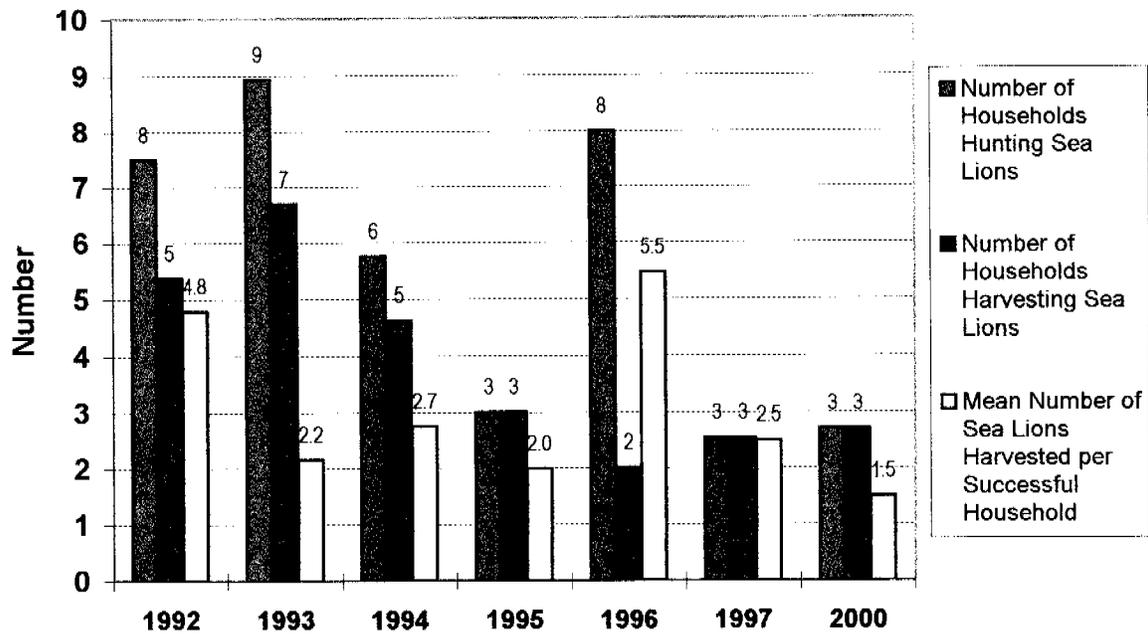
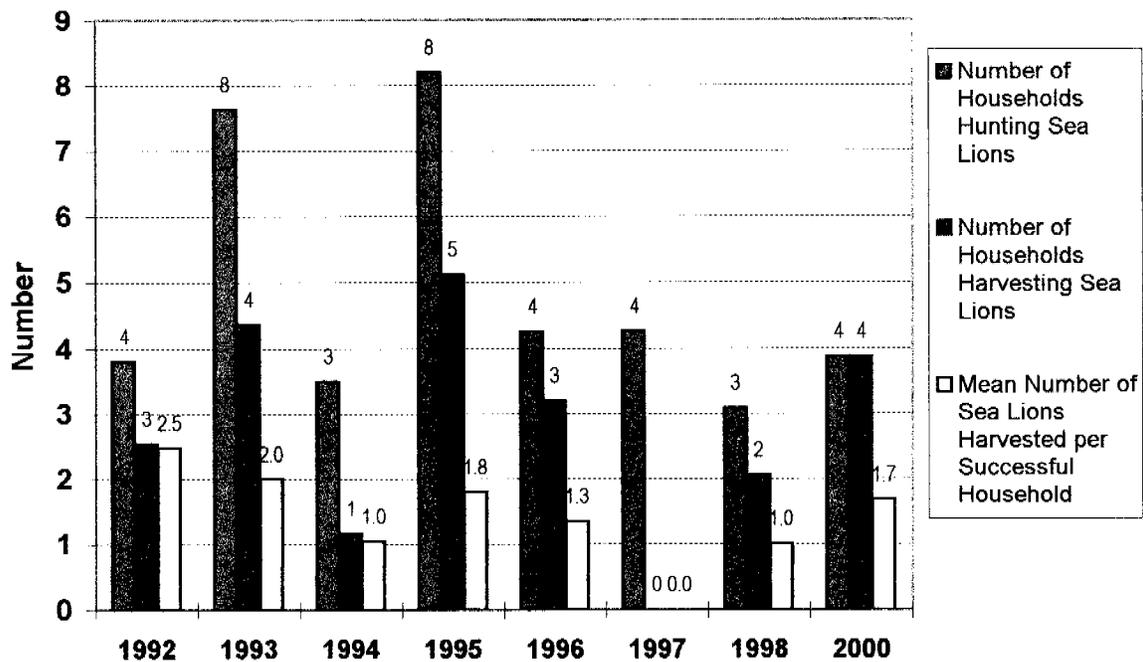


Fig. 30. Sea Lion Hunters and Success Rates, Nanwalek, 1992 - 2000



lions. Hunting participation and success rates were relatively low in 2000. The pattern at Nanwalek is similar (Fig. 30).

As with seal hunting, there are probably a variety of local factors related to the year-to-year changes in the number of households hunting sea lions in particular communities, including seasonal hunting conditions, local food needs, and personal circumstances of hunters. It is likely that the declines in the numbers of sea lion hunters in many communities are because sea lions are increasingly harder to find in local hunting areas and consequently more difficult and expensive to hunt. As sea lions become scarcer in a community's hunting area, an increasing number of hunters in the community probably choose to stop hunting them. While the hunters that continue to hunt appear to maintain annual harvest rates similar to past years, hunters are having to invest more time and effort in pursuit of the sea lions harvested. As shown in Table 18, 67.3 percent of the Aleutian Island hunters and 55.3 percent of Kodiak Island hunters reported taking "more time and effort" in hunting sea lions in 2000 compared with five years ago.

In addition to these factors, it is quite likely that some sea lion hunters have chosen to reduce their hunting activity because of perceived problems with sea lion populations. Hunters commonly are astute observers of the condition and health of local sea lion stocks. During the course of this study, many key respondents have reported concerns about the health of local sea lion populations used by their communities. Also, the general decline of sea lion populations in the Gulf of Alaska and Aleutian-Pribilof areas has been publicized widely. Some portion of the decline in hunting effort probably reflects hunters choosing not to hunt in order to help conserve the sea lion population.

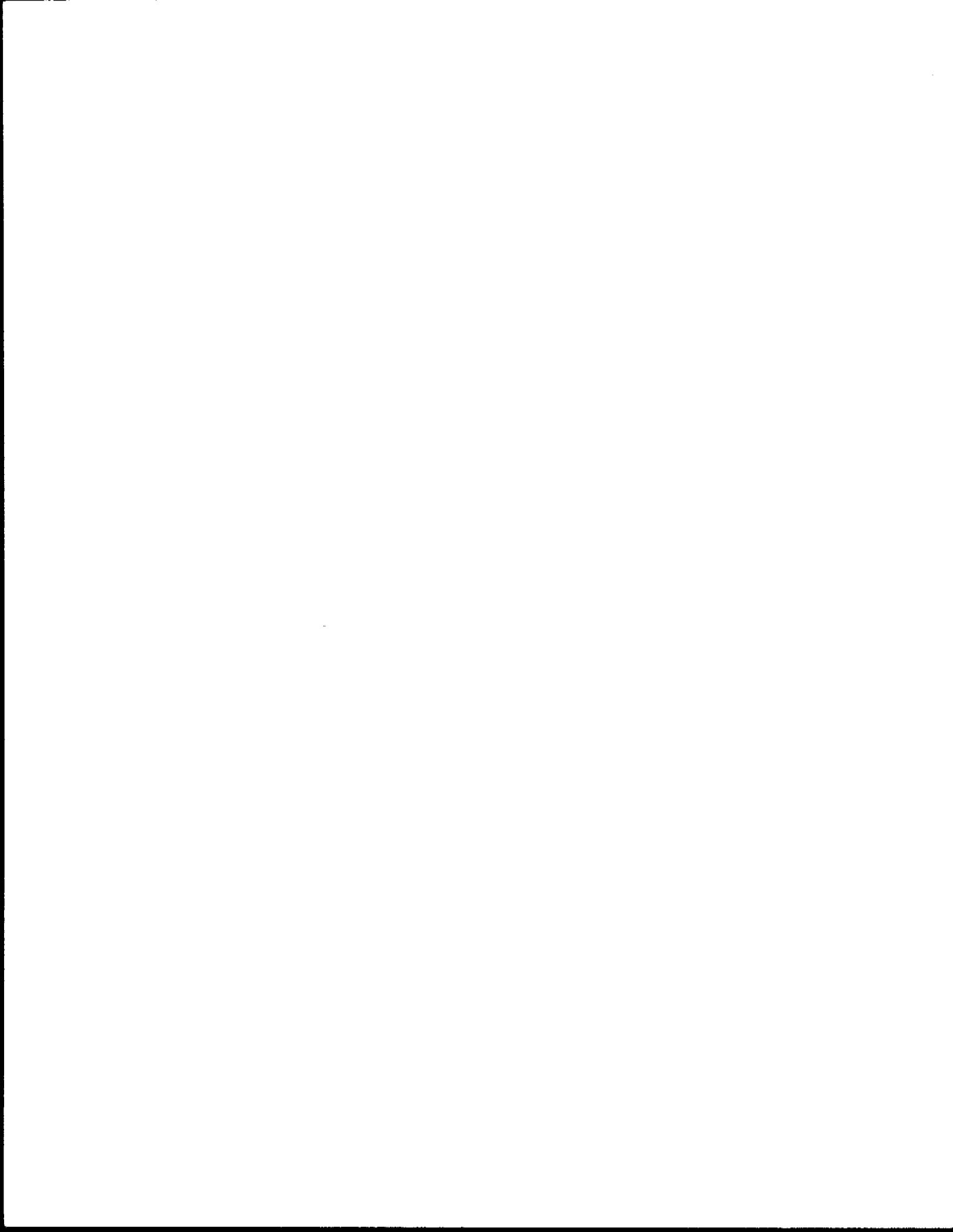
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APPENDIX A
SURVEY INSTRUMENT USED
IN HOUSEHOLD INTERVIEWS, 2000

The Subsistence Harvest of Harbor Seals and Sea Lions by Alaska Natives in 2000, by Robert J. Wolfe, Technical Paper No. 266, Division of Subsistence, Alaska Department of Fish and Game, Juneau, August 1999. Final Report For Year Eight, Subsistence Study and Monitor System (No. 50ABNF400080), National Marine Fisheries Service.



MARINE MAMMAL SURVEY

ARE ANY MEMBERS OF YOUR HOUSEHOLD ALASKA NATIVES?

YES: _____ NO: _____ THANK YOU FOR YOUR COOPERATION. This survey is only relevant to Native households.

How many people lived in your household in 2000? _____

IF YOU HUNTED OUTSIDE YOUR REGION: Where did you hunt? _____

CHECK IF APPROPRIATE	
No	Contact

HARBOR SEAL

DID YOU OR MEMBERS OF YOUR HOUSEHOLD HUNT OR USE HARBOR SEALS IN 2000?

YES _____ NO _____

(IF YES, PLEASE COMPLETE THE FOLLOWING QUESTIONS.)

During 2000, did you or your household:

- Use harbor seals (meat, hides, or oil)?
- Hunt harbor seals?
- Kill and retrieve harbor seals?
- Receive harbor seals from other households or communities?
- Give away harbor seals to other households or communities?

	Yes	No
1.		
2.		
3.		
4.		
5.		

HUNT OR USE SEA LIONS?	
NO	Go to Questions
YES	Go to Sea Lion form

IF YES TO QUESTION 2 OR 3 ABOVE, GO TO QUESTION 6. IF NO, COMPLETE SEA LION SURVEY.

6. How many harbor seals did your household kill and retrieve? [Enter in total box.]

7. In which months were they killed and retrieved? How many in (January, etc.)? [Enter the numbers by month.]

HARBOR SEAL	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	UNKNOWN	TOTAL
TOTAL														

8. Of the harbor seals killed and retrieved in (January, etc.), how many were male, female, and how many were pups, juveniles, or adults?

[Enter the numbers by month.]

HARBOR SEAL (Detail)	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	UNKNOWN	TOTAL
ADULT														
MALE														
FEMALE														
UNKNOWN														
JUVENILE														
MALE														
FEMALE														
UNKNOWN														
PUP														
MALE														
FEMALE														
UNKNOWN														
UNKNOWN AGE														
MALE														
FEMALE														
UNKNOWN														

During 2000, 9. How many harbor seal were struck and lost by your household? [Enter number in total box.]

10. In which months were they struck and lost? [Enter numbers by month.]

HARBOR SEAL	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	UNKNOWN	TOTAL
STRUCK AND LOST														

SEA LIONS

DID YOU OR MEMBERS OF YOUR HOUSEHOLD HUNT OR USE SEA LIONS IN 2000?

YES _____ NO _____ (IF YES, PLEASE COMPLETE THE FOLLOWING QUESTIONS:) (IF NO, PLEASE GO TO THE SUPPLEMENTARY QUESTIONS.)

During 2000, did you or your household:

1. Use sea lions (meat, hides, or oil)?
2. Hunt sea lions?
3. Kill and retrieve sea lions?
4. Receive sea lions from other households or communities?
5. Give away sea lions to other households or communities?

Yes	No

IF YES TO QUESTION 2 OR 3 ABOVE, GO TO QUESTION 6. IF NO, THIS COULD BE NO, PLEASE GO TO THE SUPPLEMENTARY QUESTIONS.

6. How many sea lions did your household kill and retrieve? [Enter total number in box.]
7. In which months were they killed and retrieved? How many in (January, etc.)? [Enter the numbers by month.]

SEA LIONS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	UNKNOWN	TOTAL
TOTAL														

8. Of the sea lions killed and retrieved in (January, etc.), how many were male, female, and how many were pups, juveniles, or adults? [Enter the numbers by month.]

SEA LIONS (Detail)	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	UNKNOWN	TOTAL
ADULT														
MALE														
FEMALE														
UNKNOWN														
JUVENILE														
MALE														
FEMALE														
UNKNOWN														
PUP														
MALE														
FEMALE														
UNKNOWN														
UNKNOWN														
MALE														
FEMALE														
UNKNOWN														

During 2000,

9. How many sea lions were struck and lost by your household? [Enter number in total box.]
10. In which months were they struck and lost? [Enter numbers by month.]

SEA LIONS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	UNKNOWN	TOTAL
STRUCK AND LOST														

THANK YOU FOR YOUR COOPERATION.

SUPPLEMENTAL QUESTIONS

PLEASE ANSWER ALL QUESTIONS

HARBOR SEAL

COMPARED TO FIVE YEARS AGO, DOES HARBOR SEAL HUNTING NOW TAKE YOUR HOUSEHOLD: MORE TIME AND EFFORT (1) ABOUT THE SAME TIME AND EFFORT (2) LESS TIME AND EFFORT (3) HUNTED THEN BUT NOW STOPPED (4) NOT APPLICABLE (NO HUNTING LAST 5 YRS) (0)

COMPARED TO FIVE YEARS AGO, HAS THE HARBOR SEAL POPULATION WHERE MEMBERS OF YOUR HOUSEHOLD HAVE HUNTED: INCREASED (1) REMAINED STABLE (2) DECLINED (3) DO NOT KNOW (-8) NOT APPLICABLE (DO NOT HUNT) (0)

THIS SET OF QUESTIONS HAS TO DO WITH THE AMOUNT OF BLOOD (AND DIETARY IRON) LEFT IN HARBOR SEAL MEAT AFTER PREPARATION, AND WHETHER VERY YOUNG CHILDREN EAT FOODS WITH IRON (TO HELP AGAINST ANEMIA). WE ARE WORKING ON A PUBLIC HEALTH ISSUE ABOUT WHY YOUNG CHILDREN HAVE ANEMIA IN SOME RURAL AREAS.

1. AFTER YOUR SEAL IS KILLED, IS THE ANIMAL BLED TO REMOVE SOME OF THE BLOOD? YES (1) NO (2) NOT APPLICABLE (DO NOT HUNT OR PROCESS) (0)

WHY? 2. IN BUTCHERING YOUR SEAL, IS SOME OF THE BLOOD IN THE BODY CAVITY SAVED FOR USE IN SOUPS, STEWS, ETC.? YES (1) NO (2) NOT APPLICABLE (DO NOT HUNT OR PROCESS) (0)

WHY? 3. IN PREPARING YOUR SEAL MEAT FOR COOKING, IS THE MEAT SOAKED TO REMOVE SOME OF THE BLOOD? YES (1) NO (2) NOT APPLICABLE (DO NOT HUNT OR PROCESS) (0)

WHY? 4. IS IT COMMON FOR SMALL CHILDREN (LESS THAN 6 YEARS OLD) TO EAT SOUPS OR STEWS WITH SEAL MEAT IN YOUR EXTENDED FAMILY? COMMON (1) OCCURS, BUT IS NOT COMMON (2) HARDLY EVER OCCURS (3) NOT APPLICABLE (DO NOT EAT SEAL MEAT) (0)

SEA LION

COMPARED TO FIVE YEARS AGO, DOES SEA LION HUNTING NOW TAKE YOUR HOUSEHOLD: MORE TIME AND EFFORT (1) ABOUT THE SAME TIME AND EFFORT (2) LESS TIME AND EFFORT (3) HUNTED THEN BUT NOW STOPPED (4) NOT APPLICABLE (NO HUNTING LAST 5 YRS) (0)

COMPARED TO FIVE YEARS AGO, HAS THE SEA LION POPULATION WHERE MEMBERS OF YOUR HOUSEHOLD HAVE HUNTED: INCREASED (1) REMAINED STABLE (2) DECLINED (3) DO NOT KNOW (-8) NOT APPLICABLE (DO NOT HUNT) (0)

THANK YOU FOR YOUR PARTICIPATION!



APPENDIX B

SUBSISTENCE TAKES OF HARBOR SEAL AND SEA LION BY REGION

- 1-2 SOUTHEAST ALASKA**
- 3-4 NORTH PACIFIC RIM**
- 5-6 UPPER KENAI - COOK INLET**
- 7-8 KODIAK ISLAND**
- 9-10 SOUTH ALASKA PENINSULA**
- 11-12 ALEUTIAN ISLANDS**
- 13-14 PRIBILOF ISLANDS**
- 15-16 SOUTH BRISTOL BAY**
- 17-18 NORTH BRISTOL BAY**



Table 1. SEA LION AND HARBOR SEAL HARVESTS: SOUTHEAST ALASKA, 2000

SAMPLING DESIGN:		Total
CHAIN REFERRAL	Total Referred Households	549
	Surveyed Households	377
	Sampling Fraction	68.7%
	Sample Household Members	1222
	Estimated Household Members	1730.1
	Estimated Native Population	14070

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):		Sea	Harbor
	Sea Lion	Harbor Seal			Lion	Seal
Used	N/A	N/A	Total Number Harvested		2.3	1209.7
Hunted	N/A	N/A	Total Number Struck and Lost		0.0	151.4
Harvested	N/A	N/A	Total Number Taken		2.3	1361.1
Received	N/A	N/A	Number Harvested Per Capita		0.00	0.09
Gave Away	N/A	N/A				

SEA LION HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	1	1	0	0	0	0	0	0	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	1	1	0	0	0	0	0	0	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	1.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	1.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
Total Take (%)	0.0%	0.0%	0.0%	43.7%	56.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Cum. Take	0.0	0.0	0.0	1.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
Cum. Take (%)	0.0%	0.0%	0.0%	43.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	71	106	97	58	59	13	27	51	67	72	91	87	73	872
Struck & Lost	9	12	12	1	12	9	5	14	17	16	8	7	2	124
Total Take	80	118	109	59	71	22	32	65	84	88	99	94	75	996
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	93.7	134.7	131.7	83.4	83.7	25.1	34.1	86.6	86.2	104.7	128.3	117.7	99.7	1209.7
Struck & Lost	10.5	13.0	13.4	1.1	16.8	13.4	6.2	17.2	20.1	18.4	8.6	10.3	2.3	151.4
Total Take	104.3	147.7	145.0	84.5	100.5	38.5	40.3	103.8	106.4	123.1	136.9	128.1	102.1	1361.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	101.4	141.6	140.9	92.8	91.2	27.7	41.1	96.2	96.2	111.1	140.6	128.9		1209.7
Struck & Lost	10.7	13.3	13.7	1.1	16.9	13.6	6.3	17.6	20.4	18.7	8.7	10.4		151.4
Total Take	112.1	154.9	154.6	93.9	108.1	41.3	47.4	113.7	116.6	129.8	149.3	139.3		1361.1
Total Take (%)	8.2%	11.4%	11.4%	6.9%	7.9%	3.0%	3.5%	8.4%	8.6%	9.5%	11.0%	10.2%		100%
Cum. Take	112.1	267.0	421.6	515.5	623.6	664.9	712.3	826.0	942.6	1072.4	1221.8	1361.1		
Cum. Take (%)	8.2%	19.6%	31.0%	37.9%	45.8%	48.9%	52.3%	60.7%	69.3%	78.8%	89.8%	100.0%		

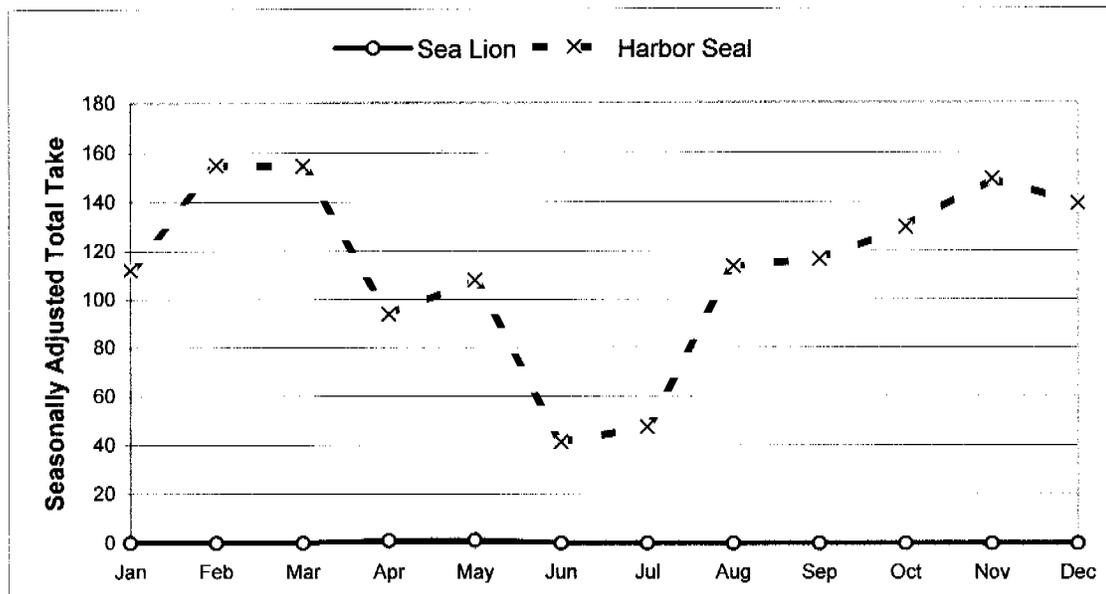
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 1. (cont.) SEA LION AND HARBOR SEAL HARVESTS: SOUTHEAST ALASKA, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	50.0%	1.0	43.7%	366	42.0%	522.1	43.2%
Adult Female	0	0.0%	0.0	0.0%	169	19.4%	241.9	20.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	111	12.7%	160.6	13.3%
Juvenile Male	1	50.0%	1.3	56.3%	80	9.2%	114.1	9.4%
Juvenile Female	0	0.0%	0.0	0.0%	31	3.6%	33.7	2.8%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	9	1.0%	9.9	0.8%
Pup Male	0	0.0%	0.0	0.0%	17	1.9%	18.4	1.5%
Pup Female	0	0.0%	0.0	0.0%	3	0.3%	3.2	0.3%
Pup Unknown Sex	0	0.0%	0.0	0.0%	5	0.6%	5.6	0.5%
Male Unknown Age	0	0.0%	0.0	0.0%	33	3.8%	35.5	2.9%
Female Unknown Age	0	0.0%	0.0	0.0%	2	0.2%	2.2	0.2%
Unknown Sex and Age	0	0.0%	0.0	0.0%	46	5.3%	62.5	5.2%
Total	2	100.0%	2.3	100.0%	872	100.0%	1209.7	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	5.2	1.3	6.4	1992	1476.8	189.5	1666.2
1993	0.0	1.1	1.1	1993	1425.0	190.0	1615.0
1994	3.5	1.1	4.6	1994	1348.5	151.4	1499.9
1995	0.0	0.0	0.0	1995	1719.1	170.9	1890.0
1996	0.0	0.0	0.0	1996	1641.6	216.3	1857.8
1997	0.0	0.0	0.0	1997	1343.4	224.1	1567.4
1998	3.3	4.4	7.6	1998	1414.0	202.4	1616.4
2000	2.3	0.0	2.3	2000	1209.7	151.4	1361.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 2. SEA LION AND HARBOR SEAL HARVESTS: NORTH PACIFIC RIM, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	31	355	386
	Surveyed Households	29	158	187
	Sampling Fraction	93.5%	44.5%	48.4%
	Sample Household Members	80	481	561
	Estimated Household Members	87.3	946.3	1033.6
	Estimated Native Population	---	---	1871.6

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>	
	<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Sea Lion</u>	<u>Harbor Seal</u>
Used	N/A	N/A	Total Number Harvested	11.7 289.9
Hunted	N/A	N/A	Total Number Struck and Lost	5.0 29.8
Harvested	N/A	N/A	Total Number Taken	16.7 319.7
Received	N/A	N/A		
Gave Away	N/A	N/A	Number Harvested Per Capita	0.01 0.15

SEA LION HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	1	0	0	0	0	3	3	1	8
Struck & Lost	0	1	0	1	0	0	0	0	0	0	1	0	0	3
Total Take	0	1	0	1	0	1	0	0	0	0	4	3	1	11
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	3.9	4.2	1.9	11.7
Struck & Lost	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	5.0
Total Take	0.0	1.7	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	5.5	4.2	1.9	16.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.2	0.2	0.2	0.2	0.2	1.8	0.2	0.2	0.2	0.2	4.0	4.4		11.7
Struck & Lost	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0		5.0
Total Take	0.2	1.8	0.2	1.8	0.2	1.8	0.2	0.2	0.2	0.2	5.7	4.4		16.7
Total Take (%)	1.0%	10.9%	1.0%	11.0%	1.0%	11.0%	1.0%	1.0%	1.0%	1.0%	34.1%	26.3%		100%
Cum. Take	0.2	2.0	2.1	4.0	4.1	6.0	6.1	6.3	6.5	6.6	12.3	16.7		
Cum. Take (%)	1.0%	11.9%	12.8%	23.8%	24.8%	35.7%	36.7%	37.7%	38.6%	39.6%	73.7%	100.0%		

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	6	12	9	7	7	18	28	27	13	9	25	24	18	203
Struck & Lost	0	0	3	1	1	6	3	4	1	1	2	1	1	24
Total Take	6	12	12	8	8	24	31	31	14	10	27	25	19	227
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	6.0	18.0	15.6	8.2	10.6	24.0	37.7	36.3	17.3	10.6	39.1	32.7	33.7	289.9
Struck & Lost	0.0	0.0	5.0	1.0	1.0	7.5	3.0	5.3	1.0	1.0	2.0	1.0	1.9	29.8
Total Take	6.0	18.0	20.6	9.2	11.6	31.5	40.7	41.7	18.3	11.6	41.1	33.7	35.6	319.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	6.0	32.8	29.1	8.2	12.0	24.0	37.7	36.3	17.3	12.0	39.1	35.3		289.9
Struck & Lost	0.0	1.0	6.0	1.0	1.0	7.5	3.0	5.3	1.0	1.0	2.0	1.0		29.8
Total Take	6.0	33.8	35.1	9.2	13.0	31.5	40.7	41.7	18.3	13.0	41.1	36.3		319.7
Total Take (%)	1.9%	10.6%	11.0%	2.9%	4.1%	9.9%	12.7%	13.0%	5.7%	4.1%	12.9%	11.4%		100%
Cum. Take	6.0	39.8	74.9	84.1	97.0	128.5	169.2	210.9	229.3	242.2	283.3	319.7		
Cum. Take (%)	1.9%	12.4%	23.4%	26.3%	30.3%	40.2%	52.9%	66.0%	71.7%	75.8%	88.6%	100.0%		

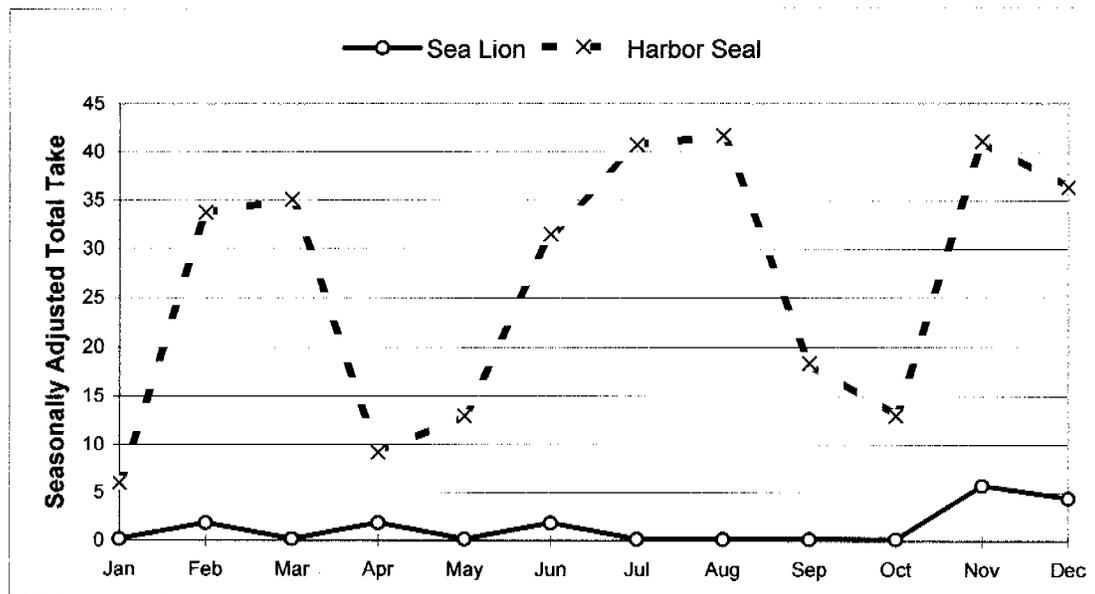
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 2. (cont.) SEA LION AND HARBOR SEAL HARVESTS: NORTH PACIFIC RIM, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	12.5%	1.7	14.2%	75	36.9%	102.3	35.3%
Adult Female	2	25.0%	3.2	27.5%	24	11.8%	28.3	9.8%
Adult Unknown Sex	1	12.5%	1.3	11.0%	14	6.9%	28.7	9.9%
Juvenile Male	0	0.0%	0.0	0.0%	21	10.3%	28.5	9.8%
Juvenile Female	1	12.5%	1.7	14.3%	12	5.9%	15.4	5.3%
Juvenile Unknown Sex	3	37.5%	3.9	33.0%	32	15.8%	43.0	14.8%
Pup Male	0	0.0%	0.0	0.0%	1	0.5%	1.7	0.6%
Pup Female	0	0.0%	0.0	0.0%	1	0.5%	1.7	0.6%
Pup Unknown Sex	0	0.0%	0.0	0.0%	6	3.0%	9.7	3.3%
Male Unknown Age	0	0.0%	0.0	0.0%	4	2.0%	7.7	2.7%
Female Unknown Age	0	0.0%	0.0	0.0%	5	2.5%	9.6	3.3%
Unknown Sex and Age	0	0.0%	0.0	0.0%	8	3.9%	13.5	4.7%
Total	8	100.0%	11.7	100.0%	203	100.0%	289.9	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	25.1	6.5	31.5	1992	377.6	33.4	411.0
1993	26.2	8.7	34.9	1993	412.3	38.5	450.8
1994	16.6	9.7	26.3	1994	411.2	56.8	468.0
1995	28.4	3.0	31.4	1995	252.1	11.7	263.9
1996	12.4	1.1	13.5	1996	289.0	22.1	311.1
1997	4.5	1.4	5.8	1997	295.0	12.8	307.7
1998	20.0	8.5	28.5	1998	393.5	41.4	434.9
2000	11.7	5.0	16.7	2000	289.9	29.8	319.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 3. SEA LION AND HARBOR SEAL HARVESTS: UPPER KENAI-COOK INLET, 2000

SAMPLING DESIGN:		Total
CHAIN REFERRAL	Total Referred Households	100
	Surveyed Households	84
	Sampling Fraction	84.0%
	Sample Household Members	257
	Estimated Household Members	308.4
	Estimated Native Population	16647

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):		Sea	Harbor
	Sea Lion	Harbor Seal			Lion	Seal
Used	N/A	N/A		Total Number Harvested	0.0	79.2
Hunted	N/A	N/A		Total Number Struck and Lost	0.0	13.5
Harvested	N/A	N/A		Total Number Taken	0.0	92.7
Received	N/A	N/A				
Gave Away	N/A	N/A		Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH												Unknown	Total	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cum. Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	

HARBOR SEAL HARVEST BY MONTH												Unknown	Total	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	3	3	9	4	12	5	0	13	8	1	7	0	65
Struck & Lost	0	0	0	0	0	2	2	0	0	6	0	0	1	11
Total Take	0	3	3	9	4	14	7	0	13	14	1	7	1	76
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.8	3.6	10.8	4.9	14.5	5.9	0.0	16.3	9.6	1.2	8.7	0.0	79.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	2.4	2.4	0.0	0.0	7.5	0.0	0.0	1.2	13.5
Total Take	0.0	3.8	3.6	10.8	4.9	16.9	8.3	0.0	16.3	17.1	1.2	8.7	1.2	92.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.8	3.6	10.8	4.9	14.5	5.9	0.0	16.3	9.6	1.2	8.7		79.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	7.5	0.0	0.0		13.5
Total Take	0.0	3.8	3.6	10.8	4.9	17.5	8.9	0.0	16.3	17.1	1.2	8.7		92.7
Total Take (%)	0.0%	4.0%	3.9%	11.6%	5.3%	18.9%	9.7%	0.0%	17.5%	18.4%	1.3%	9.3%		100%
Cum. Take	0.0	3.8	7.4	18.1	23.0	40.5	49.5	49.5	65.7	82.8	84.0	92.7		
Cum. Take (%)	0.0%	4.0%	7.9%	19.6%	24.9%	43.7%	53.4%	53.4%	70.9%	89.4%	90.7%	100.0%		

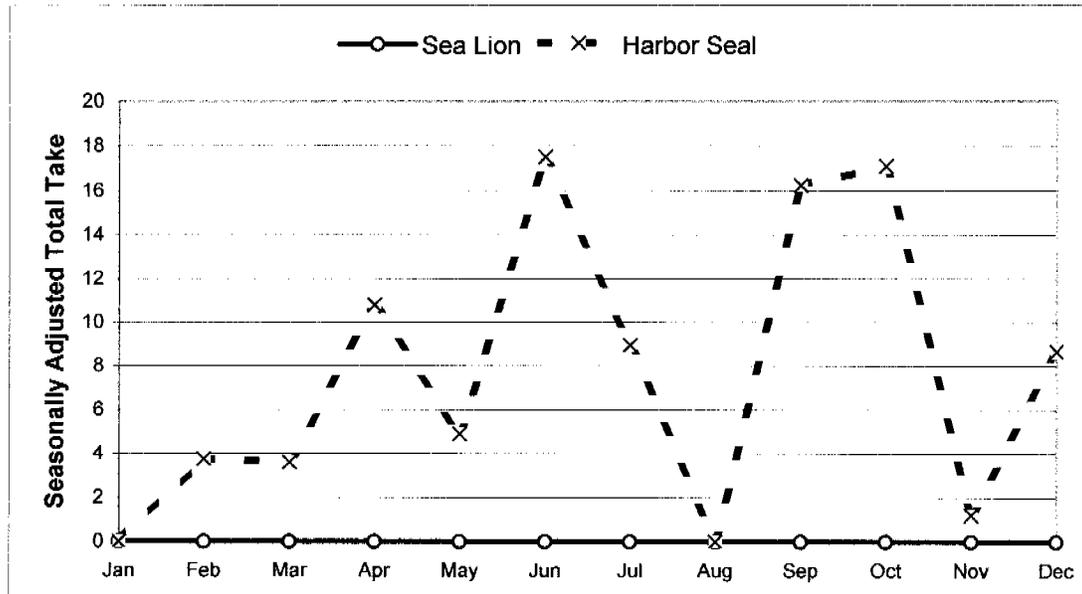
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 3. (cont.) SEA LION AND HARBOR SEAL HARVESTS: UPPER KENAI-COOK INLET, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	34	52.3%	41.2	52.1%
Adult Female	0	--	0.0	--	2	3.1%	2.4	3.0%
Adult Unknown Sex	0	--	0.0	--	12	18.5%	15.0	18.9%
Juvenile Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	--	0.0	--	1	1.5%	1.3	1.6%
Male Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Female Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	--	0.0	--	16	24.6%	19.4	24.4%
Total	0	--	0.0	--	65	100.0%	79.2	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	5.7	3.8	9.5	1992	51.6	0.0	51.6
1993	7.8	3.3	11.1	1993	49.2	5.6	54.8
1994	1.4	0.0	1.4	1994	16.2	0.0	16.2
1995	0.0	0.0	0.0	1995	3.7	0.0	3.7
1996	3.3	0.0	3.3	1996	64.3	8.8	73.1
1997	0.0	0.0	0.0	1997	101.7	8.8	110.5
1998	0.0	0.0	0.0	1998	79.2	13.5	92.7
2000	0.0	0.0	0.0	2000	79.2	13.5	92.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 4. SEA LION AND HARBOR SEAL HARVESTS: KODIAK ISLAND, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	96	62	158
	Surveyed Households	89	45	134
	Sampling Fraction	92.7%	72.6%	84.8%
	Sample Household Members	341	150	491
	Estimated Household Members	368.0	210.5	578.5
	Estimated Native Population	---	---	1584.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>	
	<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Sea Lion</u>	<u>Harbor Seal</u>
Used	N/A	N/A	Total Number Harvested	18.5 185.9
Hunted	N/A	N/A	Total Number Struck and Lost	0.0 7.3
Harvested	N/A	N/A	Total Number Taken	18.5 193.2
Received	N/A	N/A		
Gave Away	N/A	N/A	Number Harvested Per Capita	0.01 0.12

SEA LION HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	3	3	1	1	0	0	1	2	0	4	0	1	16
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	3	3	1	1	0	0	1	2	0	4	0	1	16
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.2	3.2	1.1	1.1	0.0	0.0	1.2	3.2	0.0	4.3	0.0	1.2	18.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	3.2	3.2	1.1	1.1	0.0	0.0	1.2	3.2	0.0	4.3	0.0	1.2	18.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.2	3.2	1.1	1.1	0.0	0.0	2.4	3.2	0.0	4.3	0.0		18.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	3.2	3.2	1.1	1.1	0.0	0.0	2.4	3.2	0.0	4.3	0.0		18.5
Total Take (%)	0.0%	17.4%	17.4%	5.8%	5.8%	0.0%	0.0%	13.0%	17.3%	0.0%	23.2%	0.0%		100%
Cum. Take	0.0	3.2	6.5	7.5	8.6	8.6	8.6	11.0	14.2	14.2	18.5	18.5		
Cum. Take (%)	0.0%	17.4%	34.9%	40.7%	46.5%	46.5%	46.5%	59.5%	76.8%	76.8%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	13	15	12	4	4	12	8	10	26	18	16	14	8	160
Struck & Lost	0	0	1	0	0	0	1	1	1	1	1	0	0	6
Total Take	13	15	13	4	4	12	9	11	27	19	17	14	8	166
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	14.3	17.9	14.7	4.3	4.3	12.5	8.7	10.9	29.2	22.6	19.2	16.8	10.5	185.9
Struck & Lost	0.0	0.0	1.2	0.0	0.0	0.0	1.0	1.2	1.2	1.5	1.2	0.0	0.0	7.3
Total Take	14.3	17.9	15.9	4.3	4.3	12.5	9.7	12.1	30.4	24.1	20.4	16.8	10.5	193.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	15.2	17.9	16.1	4.3	4.3	12.5	9.6	12.3	31.1	24.9	20.5	17.2		185.9
Struck & Lost	0.0	0.0	1.2	0.0	0.0	0.0	1.0	1.2	1.2	1.5	1.2	0.0		7.3
Total Take	15.2	17.9	17.3	4.3	4.3	12.5	10.6	13.5	32.3	26.4	21.7	17.2		193.2
Total Take (%)	7.9%	9.2%	8.9%	2.2%	2.2%	6.5%	5.5%	7.0%	16.7%	13.7%	11.3%	8.9%		100%
Cum. Take	15.2	33.0	50.3	54.6	58.9	71.4	82.0	95.5	127.8	154.2	175.9	193.2		
Cum. Take (%)	7.9%	17.1%	26.0%	28.3%	30.5%	37.0%	42.5%	49.4%	66.2%	79.8%	91.1%	100.0%		

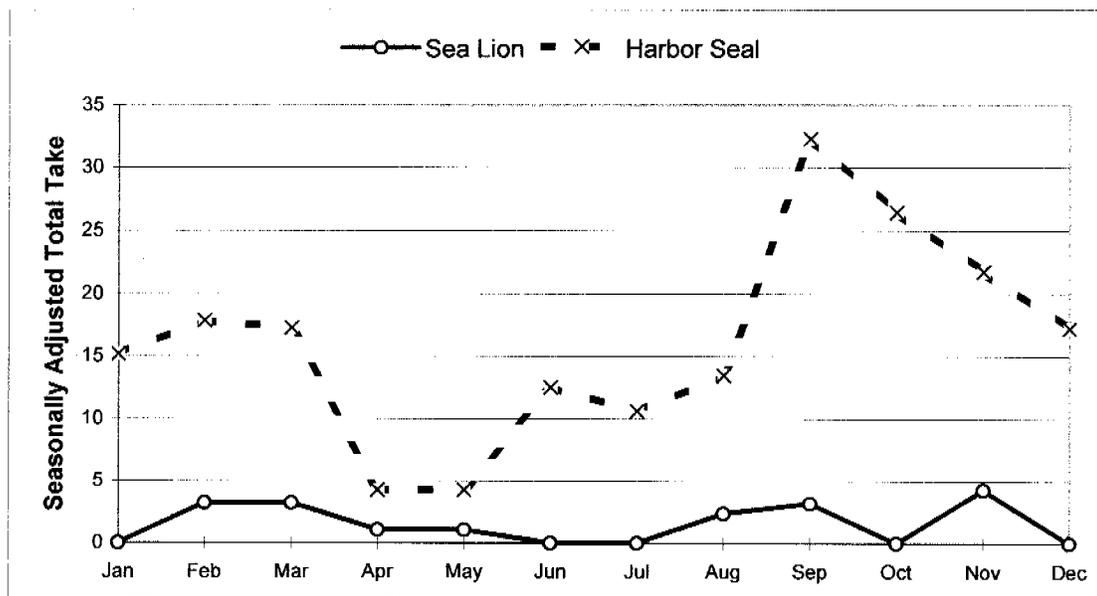
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 4. (cont.) SEA LION AND HARBOR SEAL HARVESTS: KODIAK ISLAND, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	9	56.3%	9.9	53.6%	79	49.4%	90.4	48.7%
Adult Female	3	18.8%	3.2	17.4%	34	21.3%	36.9	19.8%
Adult Unknown Sex	2	12.5%	2.2	11.6%	14	8.8%	16.5	8.9%
Juvenile Male	2	12.5%	3.2	17.3%	9	5.6%	11.1	6.0%
Juvenile Female	0	0.0%	0.0	0.0%	5	3.1%	5.8	3.1%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	4	2.5%	5.3	2.8%
Pup Male	0	0.0%	0.0	0.0%	2	1.3%	2.6	1.4%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	1	0.6%	1.5	0.8%
Male Unknown Age	0	0.0%	0.0	0.0%	1	0.6%	1.2	0.7%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	11	6.9%	14.6	7.9%
Total	16	100.0%	18.5	100.0%	160	100.0%	185.9	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	41.5	16.3	57.8	1992	225.5	13.1	238.6
1993	41.5	16.9	58.4	1993	171.7	20.1	191.8
1994	57.1	4.2	61.3	1994	168.2	3.6	171.7
1995	127.9	7.7	135.7	1995	223.0	9.2	232.2
1996	53.9	6.3	60.2	1996	185.2	4.9	190.1
1997	33.3	4.9	38.2	1997	189.8	18.3	208.2
1998	14.5	3.3	17.8	1998	174.0	3.7	177.7
2000	18.5	0.0	18.5	2000	185.9	7.3	193.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 5. SEA LION AND HARBOR SEAL HARVESTS: SOUTH ALASKA PENINSULA, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	30	134	164
	Surveyed Households	26	103	129
	Sampling Fraction	86.7%	76.9%	78.7%
	Sample Household Members	103	336	439
	Estimated Household Members	119.6	434.4	554.1
	Estimated Native Population	---	---	1228.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>	
	<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Sea Lion</u>	<u>Harbor Seal</u>
Used	N/A	N/A	Total Number Harvested	13.8 65.4
Hunted	N/A	N/A	Total Number Struck and Lost	0.0 18.4
Harvested	N/A	N/A	Total Number Taken	13.8 83.8
Received	N/A	N/A		
Gave Away	N/A	N/A	Number Harvested Per Capita	0.01 0.05

SEA LION HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	2	0	1	0	1	0	0	1	4	1	0	0	11
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	2	0	1	0	1	0	0	1	4	1	0	0	11
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.3	2.1	0.0	1.5	0.0	1.3	0.0	0.0	1.1	5.1	1.5	0.0	0.0	13.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	1.3	2.1	0.0	1.5	0.0	1.3	0.0	0.0	1.1	5.1	1.5	0.0	0.0	13.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.3	2.1	0.0	1.5	0.0	1.3	0.0	0.0	1.1	5.1	1.5	0.0	0.0	13.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	1.3	2.1	0.0	1.5	0.0	1.3	0.0	0.0	1.1	5.1	1.5	0.0	0.0	13.8
Total Take (%)	9.1%	15.5%	0.0%	10.9%	0.0%	9.1%	0.0%	0.0%	7.8%	36.8%	10.9%	0.0%	0.0%	100%
Cum. Take	1.3	3.4	3.4	4.9	4.9	6.1	6.1	6.1	7.2	12.3	13.8	13.8		
Cum. Take (%)	9.1%	24.6%	24.6%	35.5%	35.5%	44.6%	44.6%	44.6%	52.3%	89.1%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	3	4	3	4	2	3	1	5	13	7	2	3	2	52
Struck & Lost	1	4	1	1	1	1	0	0	1	0	1	1	1	13
Total Take	4	8	4	5	3	4	1	5	14	7	3	4	3	65
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.2	4.3	4.4	5.1	2.6	3.8	1.3	6.1	16.6	9.1	3.1	3.4	2.6	65.4
Struck & Lost	1.5	5.1	1.5	1.5	1.5	1.2	0.0	0.0	1.5	0.0	1.5	1.5	1.5	18.4
Total Take	4.7	9.5	5.9	6.6	4.1	5.0	1.3	6.1	18.1	9.1	4.6	4.9	4.1	83.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.2	5.4	4.5	5.2	2.7	3.8	1.3	6.2	17.2	9.4	3.2	3.4	2.6	65.4
Struck & Lost	1.7	5.5	1.7	1.7	1.7	1.2	0.0	0.0	1.7	0.0	1.7	1.7	1.7	18.4
Total Take	4.9	10.9	6.1	6.8	4.4	5.0	1.3	6.2	18.9	9.4	4.9	5.1	4.1	83.8
Total Take (%)	5.8%	13.0%	7.3%	8.2%	5.2%	5.9%	1.5%	7.4%	22.5%	11.3%	5.8%	6.0%	4.9%	100%
Cum. Take	4.9	15.8	21.9	28.7	33.1	38.1	39.3	45.6	64.4	73.9	78.7	83.8		
Cum. Take (%)	5.8%	18.8%	26.1%	34.3%	39.5%	45.4%	46.9%	54.4%	76.9%	88.1%	94.0%	100.0%		

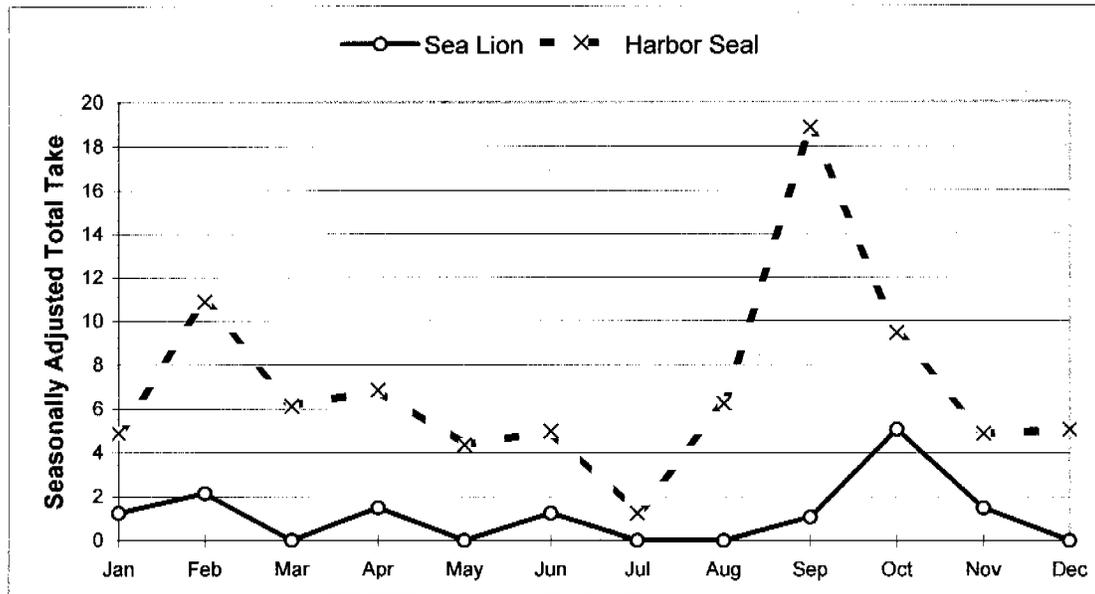
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 5. (cont.) SEA LION AND HARBOR SEAL HARVESTS: SOUTH ALASKA PENINSULA, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	4	36.4%	4.7	34.2%	22	42.3%	27.4	41.8%
Adult Female	1	9.1%	1.1	7.8%	7	13.5%	8.2	12.5%
Adult Unknown Sex	4	36.4%	5.5	39.9%	11	21.2%	14.2	21.8%
Juvenile Male	1	9.1%	1.3	9.1%	2	3.8%	2.1	3.3%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	1	9.1%	1.3	9.1%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	1	1.9%	1.1	1.7%
Male Unknown Age	0	0.0%	0.0	0.0%	1	1.9%	1.2	1.9%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	8	15.4%	11.2	17.1%
Total	11	100.0%	13.8	100.0%	52	100.0%	65.4	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	2.4	0.0	2.4	1992	115.5	13.1	128.6
1993	4.6	1.2	5.7	1993	100.0	23.1	123.1
1994	4.6	1.1	5.7	1994	98.6	11.1	109.8
1995	0.0	8.1	8.1	1995	117.0	11.1	128.0
1996	3.7	1.3	5.0	1996	86.3	5.0	91.3
1997	8.3	0.0	8.3	1997	68.3	12.1	80.4
1998	9.2	0.0	9.2	1998	79.9	7.5	87.4
2000	13.8	0.0	13.8	2000	65.4	18.4	83.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 6. SEA LION AND HARBOR SEAL HARVESTS: ALEUTIAN ISLANDS, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	24	143	167
	Surveyed Households	14	74	88
	Sampling Fraction	58.3%	51.7%	52.7%
	Sample Household Members	44	189	233
	Estimated Household Members	75.4	366.8	442.3
	Estimated Native Population	---	---	613.8

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>	
	<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Sea Lion</u>	<u>Harbor Seal</u>
Used	51.5%	41.9%	Total Number Harvested	71.2 79.0
Hunted	18.7%	18.9%	Total Number Struck and Lost	4.8 10.5
Harvested	15.9%	13.5%	Total Number Taken	76.0 89.5
Received	42.1%	36.1%		
Gave Away	29.1%	20.8%	Number Harvested Per Capita	0.12 0.13

<i>SEA LION HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>														
Harvest	0	1	2	2	0	1	6	4	4	4	0	2	17	43
Struck & Lost	0	0	2	1	0	0	0	0	0	0	0	0	0	3
Total Take	0	1	4	3	0	1	6	4	4	4	0	2	17	46
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	1.5	3.1	3.1	0.0	1.5	9.9	6.7	7.1	6.5	0.0	3.2	28.6	71.2
Struck & Lost	0.0	0.0	3.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Total Take	0.0	1.5	6.1	4.8	0.0	1.5	9.9	6.7	7.1	6.5	0.0	3.2	28.6	76.0
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	2.1	4.7	4.7	0.0	2.1	17.6	12.1	11.5	10.9	0.0	5.4		71.2
Struck & Lost	0.0	0.0	3.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		4.8
Total Take	0.0	2.1	7.8	6.4	0.0	2.1	17.6	12.1	11.5	10.9	0.0	5.4		76.0
Total Take (%)	0.0%	2.8%	10.2%	8.4%	0.0%	2.8%	23.2%	16.0%	15.1%	14.3%	0.0%	7.2%		100%
Cum. Take	0.0	2.1	9.9	16.3	16.3	18.4	36.0	48.1	59.6	70.5	70.5	76.0		
Cum. Take (%)	0.0%	2.8%	13.0%	21.4%	21.4%	24.2%	47.3%	63.3%	78.5%	92.8%	92.8%	100.0%		

<i>HARBOR SEAL HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>														
Harvest	1	3	2	3	4	8	11	7	3	3	3	4	0	52
Struck & Lost	0	0	0	0	0	0	5	0	1	1	0	0	0	7
Total Take	1	3	2	3	4	8	16	7	4	4	3	4	0	59
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	1.4	5.1	3.1	4.6	6.1	12.8	15.8	9.9	4.5	5.1	4.4	6.1	0.0	79.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	1.7	1.7	0.0	0.0	0.0	10.5
Total Take	1.4	5.1	3.1	4.6	6.1	12.8	22.9	9.9	6.2	6.9	4.4	6.1	0.0	89.5
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	1.4	5.1	3.1	4.6	6.1	12.8	15.8	9.9	4.5	5.1	4.4	6.1		79.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	1.7	1.7	0.0	0.0		10.5
Total Take	1.4	5.1	3.1	4.6	6.1	12.8	22.9	9.9	6.2	6.9	4.4	6.1		89.5
Total Take (%)	1.5%	5.7%	3.4%	5.1%	6.8%	14.3%	25.6%	11.1%	7.0%	7.7%	4.9%	6.8%		100%
Cum. Take	1.4	6.5	9.6	14.2	20.3	33.1	55.9	65.9	72.1	79.0	83.4	89.5		
Cum. Take (%)	1.5%	7.3%	10.7%	15.8%	22.7%	37.0%	62.5%	73.6%	80.6%	88.2%	93.2%	100.0%		

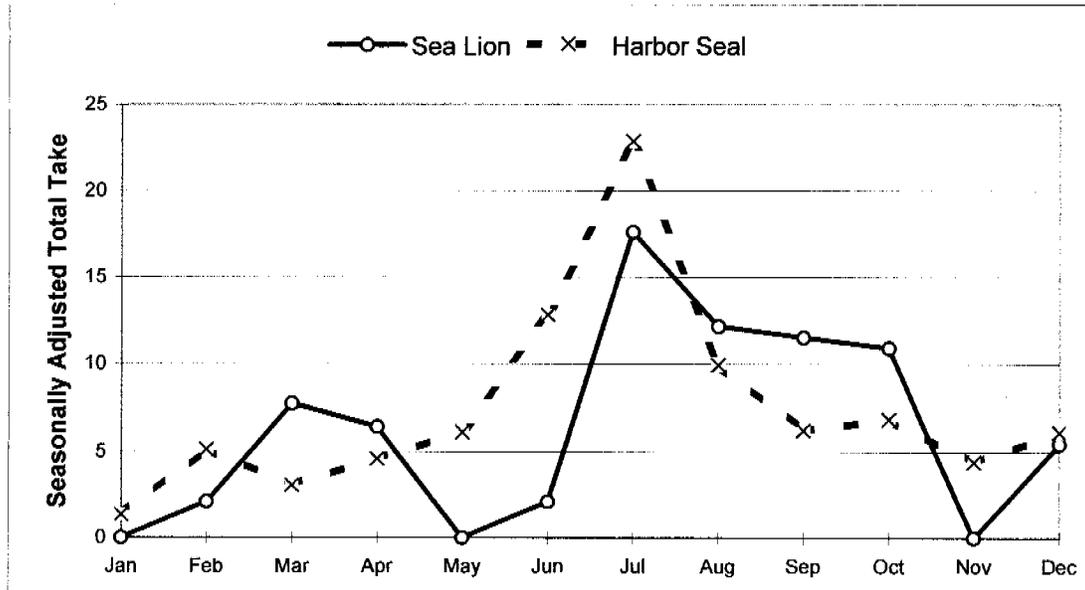
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 6. (cont.) SEA LION AND HARBOR SEAL HARVESTS: ALEUTIAN ISLANDS, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	9	20.9%	14.1	19.8%	16	30.8%	23.5	29.7%
Adult Female	4	9.3%	6.5	9.1%	4	7.7%	5.8	7.3%
Adult Unknown Sex	2	4.7%	3.1	4.3%	5	9.6%	7.6	9.7%
Juvenile Male	10	23.3%	15.7	22.0%	10	19.2%	16.1	20.3%
Juvenile Female	3	7.0%	6.4	8.9%	1	1.9%	1.7	2.2%
Juvenile Unknown Sex	1	2.3%	1.5	2.1%	4	7.7%	6.9	8.7%
Pup Male	0	0.0%	0.0	0.0%	1	1.9%	1.7	2.2%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	1	1.9%	1.7	2.2%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	14	32.6%	24.0	33.7%	10	19.2%	14.0	17.8%
Total	43	100.0%	71.2	100.0%	52	100.0%	79.0	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	104.3	30.9	135.2	1992	94.3	21.4	115.7
1993	99.0	24.8	123.8	1993	85.0	15.4	100.4
1994	101.8	20.5	122.3	1994	124.9	22.6	147.5
1995	85.0	11.1	96.1	1995	86.9	9.7	96.6
1996	46.5	11.3	57.9	1996	55.0	15.2	70.2
1997	50.7	1.3	51.9	1997	70.5	6.3	76.9
1998	31.6	5.5	37.0	1998	45.8	3.8	49.6
2000	71.2	4.8	76.0	2000	79.0	10.5	89.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 7. SEA LION AND HARBOR SEAL HARVESTS: PRIBILOF ISLANDS, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	45	153	198
	Surveyed Households	39	79	118
	Sampling Fraction	86.7%	51.6%	59.6%
	Sample Household Members	146	236	382
	Estimated Household Members	168.5	444.2	612.7
	Estimated Native Population	---	---	612.7

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>	
	<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Sea Lion</u>	<u>Harbor Seal</u>
Used	62.5%	2.3%	Total Number Harvested	52.7 4.6
Hunted	23.2%	1.2%	Total Number Struck and Lost	25.4 0.0
Harvested	14.2%	1.2%	Total Number Taken	78.1 4.6
Received	60.1%	1.2%		
Gave Away	15.9%	1.7%	Number Harvested Per Capita	0.09 0.01

<i>SEA LION HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>														
Harvest	0	5	5	2	13	2	0	0	0	9	3	1	0	40
Struck & Lost	1	1	8	1	4	0	0	0	0	2	3	1	0	21
Total Take	1	6	13	3	17	2	0	0	0	11	6	2	0	61
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	7.3	5.3	2.1	18.7	4.2	0.0	0.0	0.0	10.4	3.5	1.2	0.0	52.7
Struck & Lost	1.1	1.1	8.7	1.2	6.5	0.0	0.0	0.0	0.0	2.3	3.5	1.2	0.0	25.4
Total Take	1.1	8.4	14.1	3.3	25.2	4.2	0.0	0.0	0.0	12.7	6.9	2.3	0.0	78.1
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	7.3	5.3	2.1	18.7	4.2	0.0	0.0	0.0	10.4	3.5	1.2		52.7
Struck & Lost	1.1	1.1	8.7	1.2	6.5	0.0	0.0	0.0	0.0	2.3	3.5	1.2		25.4
Total Take	1.1	8.4	14.1	3.3	25.2	4.2	0.0	0.0	0.0	12.7	6.9	2.3		78.1
Total Take (%)	1.4%	10.7%	18.0%	4.2%	32.3%	5.4%	0.0%	0.0%	0.0%	16.2%	8.9%	3.0%		100%
Cum. Take	1.1	9.4	23.5	26.8	52.0	56.2	56.2	56.2	56.2	68.9	75.8	78.1		
Cum. Take (%)	1.4%	12.1%	30.1%	34.3%	66.6%	71.9%	71.9%	71.9%	71.9%	88.2%	97.0%	100.0%		

<i>HARBOR SEAL HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>														
Harvest	0	0	0	0	2	0	0	0	0	2	0	0	0	4
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	2	0	0	0	0	2	0	0	0	4
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	4.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	4.6
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	2.3	0.0	0.0		4.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	2.3	0.0	0.0		4.6
Total Take (%)	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%		100%
Cum. Take	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	4.6	4.6	4.6		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%		

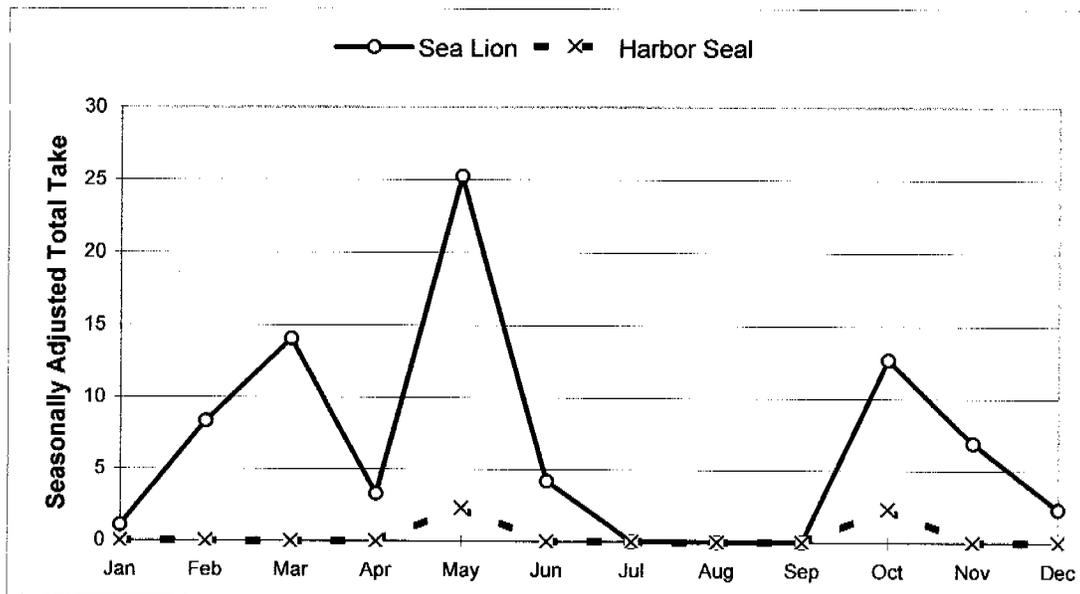
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 7. (cont.) SEA LION AND HARBOR SEAL HARVESTS: PRIBILOF ISLANDS, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	5	12.5%	5.5	10.5%	3	75.0%	3.5	75.0%
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	1	2.5%	1.1	2.0%	0	0.0%	0.0	0.0%
Juvenile Male	21	52.5%	25.8	48.9%	1	25.0%	1.2	25.0%
Juvenile Female	2	5.0%	2.1	4.1%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	1	2.5%	1.1	2.0%	0	0.0%	0.0	0.0%
Pup Male	9	22.5%	14.1	26.8%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	1	2.5%	3.0	5.7%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	40	100.0%	52.7	100.0%	4	100.0%	4.6	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	176.6	120.2	296.8	1992	2.3	1.2	3.5
1993	165.4	80.0	245.4	1993	2.3	1.2	3.5
1994	149.8	43.5	193.3	1994	7.3	0.0	7.3
1995	57.6	10.3	67.9	1995	2.5	0.0	2.5
1996	32.2	14.2	46.4	1996	0.0	0.0	0.0
1997	45.5	10.4	55.9	1997	0.0	0.0	0.0
1998	52.7	25.4	78.1	1998	4.6	0.0	4.6
2000	52.7	25.4	78.1	2000	4.6	0.0	4.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 8. SEA LION AND HARBOR SEAL HARVESTS: SOUTH BRISTOL BAY, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	14	197	211
	Surveyed Households	12	148	160
	Sampling Fraction	85.7%	75.1%	75.8%
	Sample Household Members	31	451	482
	Estimated Household Members	36.2	602.5	638.7
	Estimated Native Population	--	--	951.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>				<i>Estimated Community Harvest and Take (Expanded):</i>		
	Sea	Harbor		Sea	Harbor	
	<u>Lion</u>	<u>Seal</u>		<u>Lion</u>	<u>Seal</u>	
Used	0.0%	28.7%		Total Number Harvested	0.0	55.4
Hunted	0.0%	15.9%		Total Number Struck and Lost	0.0	17.6
Harvested	0.0%	10.9%		Total Number Taken	0.0	73.0
Received	0.0%	21.7%				
Gave Away	0.0%	13.5%		Number Harvested Per Capita	0.00	0.06

<i>SEA LION HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

<i>HARBOR SEAL HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>														
Harvest	0	0	0	5	10	10	4	9	9	1	0	0	0	48
Struck & Lost	0	0	0	0	0	6	5	0	0	0	0	0	2	13
Total Take	0	0	0	5	10	16	9	9	9	1	0	0	2	61
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	5.6	12.3	10.9	4.7	10.9	9.7	1.4	0.0	0.0	0.0	55.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	7.9	6.9	0.0	0.0	0.0	0.0	0.0	2.7	17.6
Total Take	0.0	0.0	0.0	5.6	12.3	18.8	11.6	10.9	9.7	1.4	0.0	0.0	2.7	73.0
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	5.6	12.3	10.9	4.7	10.9	9.7	1.4	0.0	0.0	0.0	55.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	7.9	6.9	1.8	0.0	0.9	0.0	0.0	0.0	17.6
Total Take	0.0	0.0	0.0	5.6	12.3	18.8	11.6	12.7	9.7	2.3	0.0	0.0	0.0	73.0
Total Take (%)	0.0%	0.0%	0.0%	7.7%	16.8%	25.7%	15.9%	17.4%	13.3%	3.1%	0.0%	0.0%	0.0%	100%
Cum. Take	0.0	0.0	0.0	5.6	17.9	36.7	48.3	61.0	70.7	73.0	73.0	73.0	73.0	73.0
Cum. Take (%)	0.0%	0.0%	0.0%	7.7%	24.5%	50.3%	66.1%	83.6%	96.9%	100.0%	100.0%	100.0%	100.0%	100.0%

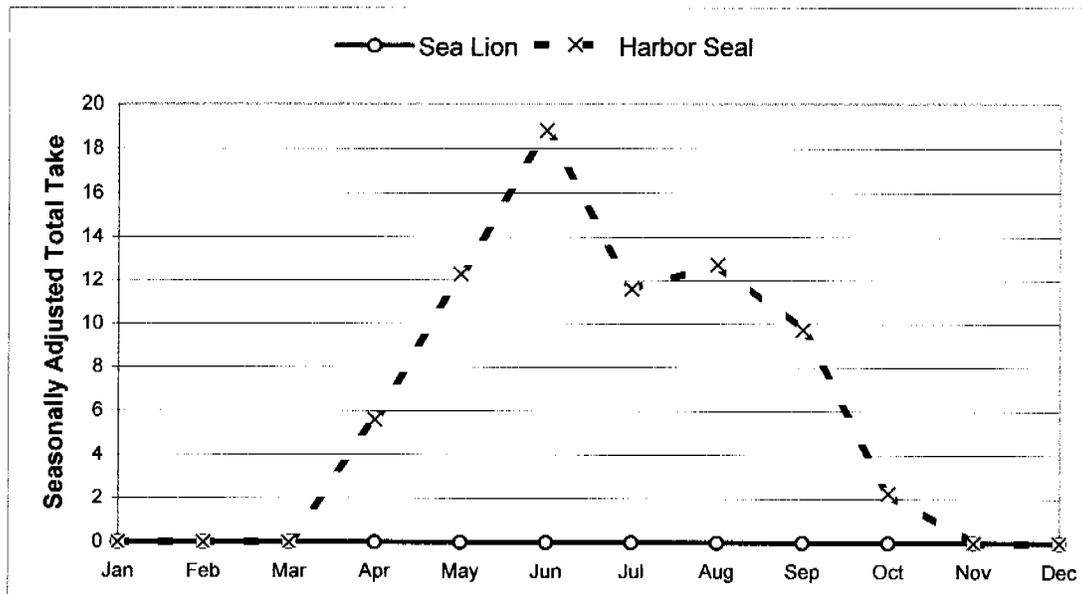
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 8. (cont.) SEA LION AND HARBOR SEAL HARVESTS: SOUTH BRISTOL BAY, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	20	41.7%	22.3	40.2%
Adult Female	0	--	0.0	--	16	33.3%	18.2	32.9%
Adult Unknown Sex	0	--	0.0	--	5	10.4%	6.2	11.2%
Juvenile Male	0	--	0.0	--	2	4.2%	2.3	4.2%
Juvenile Female	0	--	0.0	--	1	2.1%	1.2	2.1%
Juvenile Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	--	0.0	--	2	4.2%	2.3	4.2%
Male Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Female Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	--	0.0	--	2	4.2%	2.8	5.1%
Total	0	--	0.0	--	48	100.0%	55.4	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	99.0	68.6	167.6
1993	0.0	0.0	0.0	1993	73.6	57.3	130.9
1994	0.0	0.0	0.0	1994	121.6	59.3	180.9
1995	0.0	0.0	0.0	1995	68.3	28.3	96.6
1996	0.0	0.0	0.0	1996	63.8	44.2	108.0
1997	0.0	0.0	0.0	1997	107.8	66.3	174.1
1998	0.0	0.0	0.0	1998	62.2	34.3	96.5
2000	0.0	0.0	0.0	2000	55.4	17.6	73.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 9. SEA LION AND HARBOR SEAL HARVESTS: NORTH BRISTOL BAY, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	162	510	672
	Surveyed Households	133	150	283
	Sampling Fraction	82.1%	29.4%	42.1%
	Sample Household Members	599	558	1157
	Estimated Household Members	716.0	1686.2	2402.2
	Estimated Native Population	--	--	2952.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>			
	Sea Lion	Harbor Seal and Spotted Seal		Sea Lion	Harbor Seal	Spotted Seal
Used	N/A	N/A	Total Number Harvested	0.0	10.4	217.0
Hunted	N/A	N/A	Total Number Struck and Lost	0.0	1.1	40.4
Harvested	N/A	N/A	Total Number Taken	0.0	11.6	257.5
Received	N/A	N/A				
Gave Away	N/A	N/A	Number Harvested Per Capita	0.00	0.00	0.07

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH														Unknown Month	Total
	<u>Spotted Seal</u>					<u>Harbor Seal</u>				<u>Spotted Seal</u>					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)															
Harvest	9	9	24	54	42	1	0	1	6	13	2	16	16	193	
Struck & Lost	3	0	3	11	10	0	0	1	0	2	1	2	3	36	
Total Take	12	9	27	65	52	1	0	2	6	15	3	18	19	229	
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	10.2	11.1	28.6	64.7	49.2	1.2	0.0	1.1	7.5	16.0	2.2	18.2	17.5	227.5	
Struck & Lost	3.4	0.0	3.4	13.4	11.5	0.0	0.0	1.0	0.0	2.4	1.1	2.2	3.2	41.6	
Total Take	13.6	11.1	32.0	78.1	60.7	1.2	0.0	2.2	7.5	18.4	3.3	20.3	20.6	269.0	
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	11.6	11.7	30.9	69.4	53.8	1.2	0.0	1.3	8.0	16.7	2.4	20.5		227.5	
Struck & Lost	3.8	0.0	3.7	14.2	12.5	0.0	0.0	1.1	0.0	2.4	1.3	2.4		41.6	
Total Take	15.4	11.7	34.7	83.7	66.3	1.2	0.0	2.4	8.0	19.1	3.7	23.0		269.0	
Total Take (%)	5.7%	4.3%	12.9%	31.1%	24.6%	0.4%	0.0%	0.9%	3.0%	7.1%	1.4%	8.5%		100.0%	
Cum. Take	15.4	27.1	61.7	145.4	211.7	212.9	212.9	215.3	223.2	242.4	246.1	269.0			
Cum. Take (%)	5.7%	10.1%	22.9%	54.0%	78.7%	79.1%	79.1%	80.0%	83.0%	90.1%	91.5%	100.0%			

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

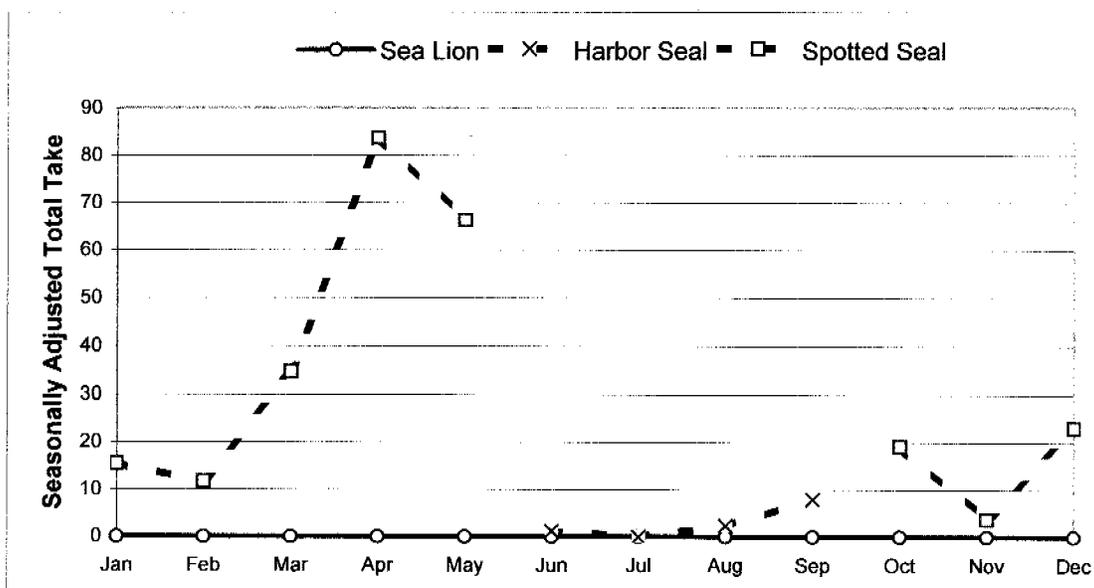
Table 9. (cont.) SEA LION AND HARBOR SEAL HARVESTS: NORTH BRISTOL BAY, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	3	37.5%	3.6	32.8%	29	17.2%	39.1	18.1%
Adult Female	0	--	0.0	--	0	0.0%	0.0	0.0%	13	7.7%	15.9	7.4%
Adult Unknown Sex	0	--	0.0	--	3	37.5%	4.6	42.0%	18	10.7%	25.3	11.7%
Juvenile Male	0	--	0.0	--	1	12.5%	1.6	14.9%	15	8.9%	18.3	8.5%
Juvenile Female	0	--	0.0	--	1	12.5%	1.1	10.3%	6	3.6%	7.3	3.4%
Juvenile Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%	56	33.1%	70.8	32.7%
Pup Male	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	--	0.0	--	0	0.0%	0.0	0.0%	1	0.6%	1.1	0.5%
Pup Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%	7	4.1%	10.0	4.6%
Male Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%	2	1.2%	2.3	1.1%
Female Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	--	0.0	--	0	0.0%	0.0	0.0%	22	13.0%	26.1	12.1%
Total	0	--	0.0	--	8	100.0%	11.1	100.0%	169	100.0%	216.4	100%

* Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column.

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	7.8	0.0	7.8	1992	58.4	13.2	71.6	1992	364.1	72.5	436.6
1993	3.3	3.3	6.5	1993	46.1	20.0	66.1	1993	215.1	49.1	264.1
1994	1.2	0.0	1.2	1994	16.2	3.3	19.5	1994	226.5	42.9	269.5
1995	0.0	0.0	0.0	1995	25.9	2.4	28.3	1995	163.7	33.5	197.2
1996	0.0	0.0	0.0	1996	29.6	10.0	39.6	1996	202.1	25.0	227.1
1997	3.6	0.0	3.6	1997	18.8	2.1	20.9	1997	133.6	16.6	150.2
1998	0.0	0.0	0.0	1998	33.2	3.6	36.8	1998	145.9	25.4	171.3
2000	0.0	0.0	0.0	2000	10.4	1.1	11.6	2000	217.0	40.4	257.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

APPENDIX C
SUBSISTENCE TAKES OF
HARBOR SEAL AND SEA LION
BY COMMUNITY

SOUTHEAST ALASKA

1-2 Angoon
3-4 Craig
5-6 Haines
7-8 Hoonah
9-10 Hydaburg
11-12 Juneau
13-14 Kake
15-16 Ketchikan
17-18 Klawock
19-20 Klukwan
21-22 Pelican
23-24 Petersburg
25-26 Saxman
27-28 Sitka
29-30 Wrangell
31-32 Yakutat

NORTH PACIFIC RIM

33-34 Chenega Bay
35-36 Cordova
37-38 Nanwalek
39-40 Port Graham
41-42 Seldovia
43-44 Seward
45-46 Tatitlek
47-48 Valdez

UPPER KENAI-COOK INLET

49-50 Anchorage
51-52 Homer
53-54 Kenai
55-56 Tyonek

KODIAK ISLAND

57-58 Akhiok
59-60 Karluk
61-62 Kodiak City
63-64 Larsen Bay
65-66 Old Harbor
67-68 Ouzinkie
69-70 Port Lions

SOUTH ALASKA PENINSULA

71-72 Chignik Bay
73-74 Chignik Lagoon
75-76 Chignik Lake
77-78 False Pass
79-80 Ivanof Bay
81-82 King Cove
83-84 Perryville
85-86 Sand Point

ALEUTIAN ISLANDS

87-88 Akutan
89-90 Atka
91-92 Nikolski
93-94 Unalaska

PRIBILOF ISLANDS

95-96 St. George
97-98 St. Paul

SOUTH BRISTOL BAY

99-100 Egegik
101-102 King Salmon
103-104 Levelock
105-106 Naknek
107-108 Pilot Point
109-110 Port Heiden
111-112 South Naknek

NORTH BRISTOL BAY

113-114 Aleknagik
115-116 Clark's Point
117-118 Dillingham
119-120 Manokotak
121-122 Togiak
123-124 Twin Hills

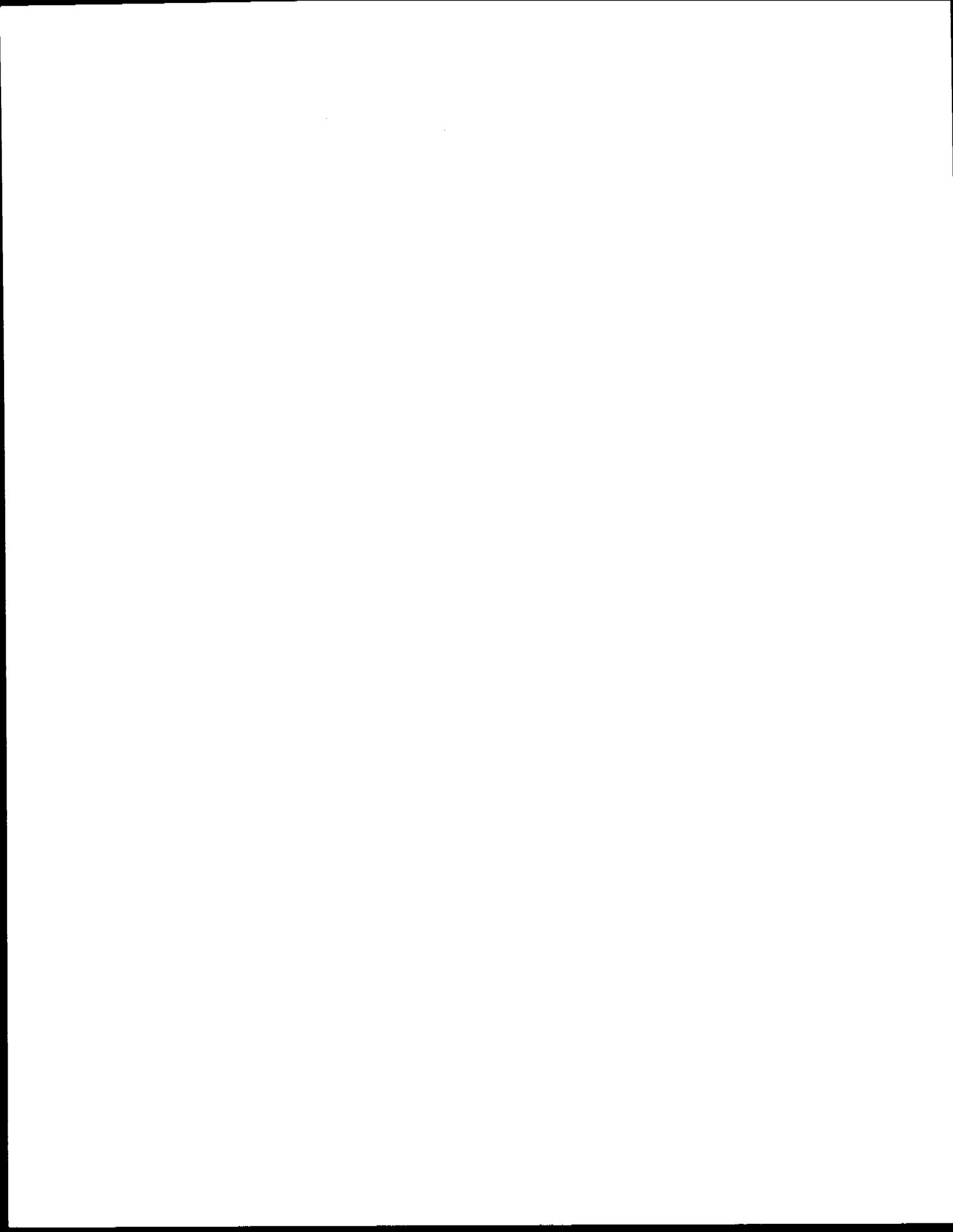


Table 1. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Angoon, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	51
Surveyed Households	50
Sampling Fraction	98%
Sample Household Members	194
Estimated Household Members	197.9
Estimated Native Population	494.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	2.0%	84.0%
Hunted	2.0%	32.0%
Harvested	2.0%	32.0%
Received	0.0%	66.0%
Gave Away	2.0%	36.0%

Estimated Community Harvest and Take (Expanded):

	Sea Lion	Harbor Seal
Total Number Harvested	1.0	64.3
Total Number Struck and Lost	0.0	6.1
Total Number Taken	1.0	70.4
Number Harvested Per Capita	0.00	0.13

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	1	0	0	0	0	0	0	0	0	0	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Total Take (%)	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Cum. Take (%)	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	16	2	5	3	0	0	2	2	7	4	8	14	0	63
Struck & Lost	3	0	1	0	0	0	0	0	0	2	0	0	0	6
Total Take	19	2	6	3	0	0	2	2	7	6	8	14	0	69
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	16.3	2.0	5.1	3.1	0.0	0.0	2.0	2.0	7.1	4.1	8.2	14.3	0.0	64.3
Struck & Lost	3.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	6.1
Total Take	19.4	2.0	6.1	3.1	0.0	0.0	2.0	2.0	7.1	6.1	8.2	14.3	0.0	70.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	16.3	2.0	5.1	3.1	0.0	0.0	2.0	2.0	7.1	4.1	8.2	14.3	0.0	64.3
Struck & Lost	3.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	6.1
Total Take	19.4	2.0	6.1	3.1	0.0	0.0	2.0	2.0	7.1	6.1	8.2	14.3	0.0	70.4
Total Take (%)	27.5%	2.9%	8.7%	4.3%	0.0%	0.0%	2.9%	2.9%	10.1%	8.7%	11.6%	20.3%	0.0%	100.0%
Cum. Take	19.4	21.4	27.5	30.6	30.6	30.6	32.6	34.7	41.8	47.9	56.1	70.4		
Cum. Take (%)	27.5%	30.4%	39.1%	43.5%	43.5%	43.5%	46.4%	49.3%	59.4%	68.1%	79.7%	100.0%		

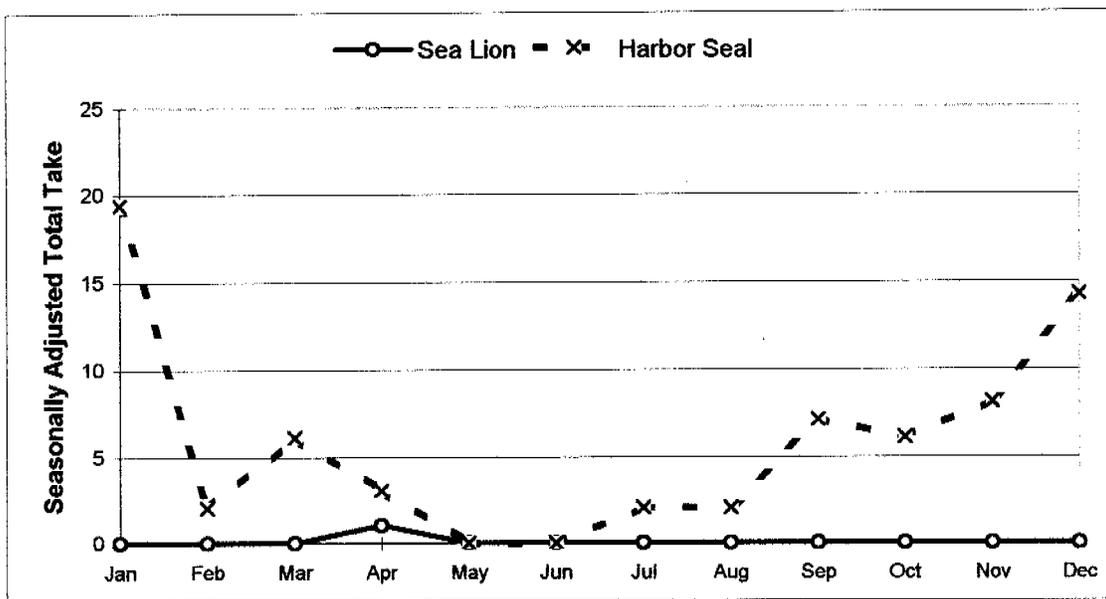
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Angoon, 2000.

Table 1. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Angoon, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	100.0%	1.0	100.0%	24	38.1%	24.5	38.1%
Adult Female	0	0.0%	0.0	0.0%	2	3.2%	2.0	3.2%
Adult Unknown Sex	0	0.0%	0.0	0.0%	28	44.4%	28.6	44.4%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	4	6.3%	4.1	6.3%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	3	4.8%	3.1	4.8%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	2	3.2%	2.0	3.2%
Total	1	100.0%	1.0	100.0%	63	100.0%	64.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	125.1	28.9	154.0
1993	0.0	0.0	0.0	1993	56.6	9.9	66.5
1994	0.0	0.0	0.0	1994	66.9	21.1	88.0
1995	0.0	0.0	0.0	1995	80.9	9.0	90.6
1996	0.0	0.0	0.0	1996	71.0	2.0	73.0
1997	0.0	0.0	0.0	1997	51.0	7.1	58.1
1998	0.0	0.0	0.0	1998	53.0	2.0	55.0
2000	1.0	0.0	1.0	2000	64.3	6.1	70.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Angoon, 2000.

Table 2. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Craig, 2000

SAMPLING DESIGN:

CHAIN REFERRAL	Total Referred Households	26
	Surveyed Households	26
	Sampling Fraction	100.0%
	Sample Household Members	84
	Estimated Household Members	84.0
	Estimated Native Population	432.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	0.0%	57.7%	Total Number Harvested	0.0	35.0
Hunted	0.0%	38.5%	Total Number Struck and Lost	0.0	3.0
Harvested	0.0%	38.5%	Total Number Taken	0.0	38.0
Received	0.0%	26.9%			
Gave Away	0.0%	38.5%	Number Harvested Per Capita	0.00	0.08

SEA LION HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	9	1	6	9	2	0	1	0	1	1	2	3	0	35
Struck & Lost	0	0	1	0	1	0	0	0	0	0	0	1	0	3
Total Take	9	1	7	9	3	0	1	0	1	1	2	4	0	38
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	9.0	1.0	6.0	9.0	2.0	0.0	1.0	0.0	1.0	1.0	2.0	3.0	0.0	35.0
Struck & Lost	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	3.0
Total Take	9.0	1.0	7.0	9.0	3.0	0.0	1.0	0.0	1.0	1.0	2.0	4.0	0.0	38.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	9.0	1.0	6.0	9.0	2.0	0.0	1.0	0.0	1.0	1.0	2.0	3.0	0.0	35.0
Struck & Lost	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	3.0
Total Take	9.0	1.0	7.0	9.0	3.0	0.0	1.0	0.0	1.0	1.0	2.0	4.0	0.0	38.0
Total Take (%)	23.7%	2.6%	18.4%	23.7%	7.9%	0.0%	2.6%	0.0%	2.6%	2.6%	5.3%	10.5%	0.0%	100.0%
Cum. Take	9.0	10.0	17.0	26.0	29.0	29.0	30.0	30.0	31.0	32.0	34.0	38.0	38.0	38.0
Cum. Take (%)	23.7%	26.3%	44.7%	68.4%	76.3%	76.3%	78.9%	78.9%	81.6%	84.2%	89.5%	100.0%	100.0%	100.0%

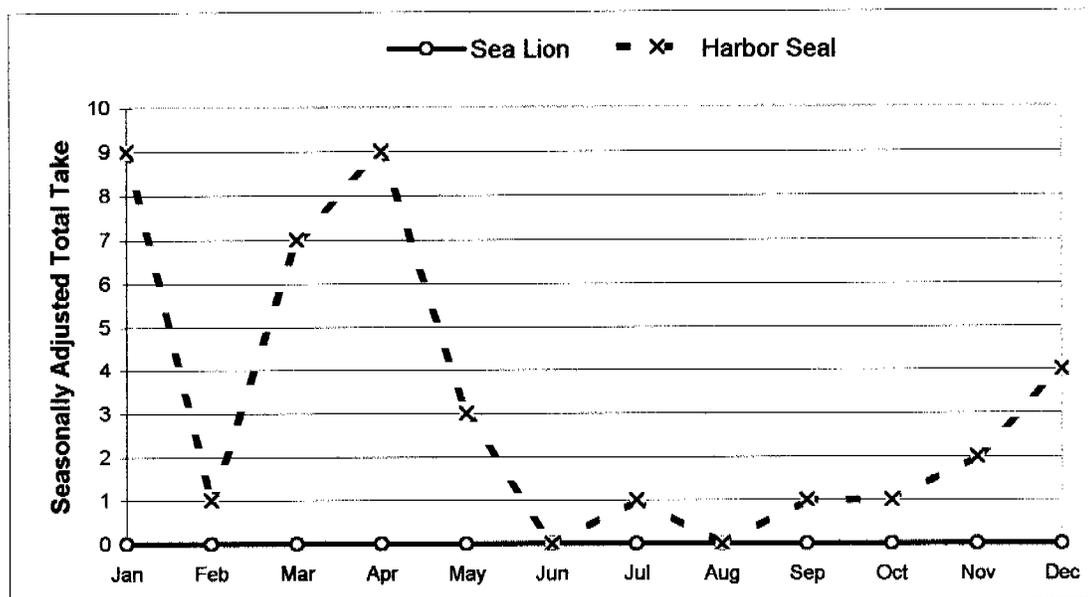
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Craig and Shaan-Seet, Inc., 2000.

Table 2. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Craig, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	15	42.9%	15.0	42.9%
Adult Female	0	---	0.0	---	12	34.3%	12.0	34.3%
Adult Unknown Sex	0	---	0.0	---	1	2.9%	1.0	2.9%
Juvenile Male	0	---	0.0	---	6	17.1%	6.0	17.1%
Juvenile Female	0	---	0.0	---	1	2.9%	1.0	2.9%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	35	100.0%	35.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	74.2	0.0	74.2
1993	0.0	0.0	0.0	1993	51.1	9.8	60.9
1994	0.0	0.0	0.0	1994	42.7	6.6	49.3
1995	0.0	0.0	0.0	1995	69.4	9.0	83.1
1996	0.0	0.0	0.0	1996	48.2	8.0	56.3
1997	0.0	0.0	0.0	1997	62.0	7.5	69.5
1998	0.0	0.0	0.0	1998	52.7	5.2	57.9
2000	0.0	0.0	0.0	2000	35.0	3.0	38.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Craig and Shaan-Seet, Inc., 2000.

Table 3. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Haines, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	16
Surveyed Households	11
Sampling Fraction	68.8%
Sample Household Members	31
Estimated Household Members	45.1
Estimated Native Population	335.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	0.0%	90.9%	Total Number Harvested	0.0	17.5
Hunted	0.0%	36.4%	Total Number Struck and Lost	0.0	0.0
Harvested	0.0%	36.4%	Total Number Taken	0.0	17.5
Received	0.0%	72.7%			
Gave Away	0.0%	45.5%	Number Harvested Per Capita	0.00	0.05

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	2	8	2	0	12
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	2	8	2	0	12
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	11.6	2.9	0.0	17.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	11.6	2.9	0.0	17.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	11.6	2.9	0.0	17.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	11.6	2.9	0.0	17.5
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	66.7%	16.7%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	14.5	17.5	0.0	17.5
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%	0.0%	100.0%

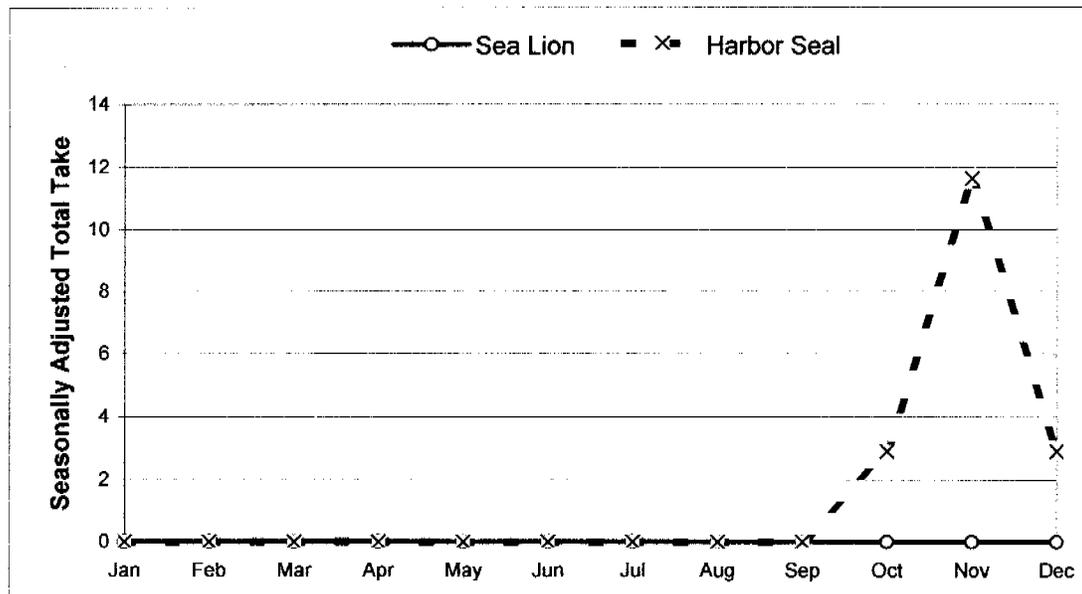
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chilkat Indian Association, 2000.

Table 3. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Haines, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	10	83.3%	14.5	83.3%
Adult Female	0	--	0.0	--	2	16.7%	2.9	16.7%
Adult Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Male Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Female Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Total	0	--	0.0	--	12	100.0%	17.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	30.5	7.9	38.4
1993	0.0	0.0	0.0	1993	23.0	2.3	25.3
1994	0.0	0.0	0.0	1994	39.3	2.2	41.5
1995	0.0	0.0	0.0	1995	24.0	9.0	33.0
1996	0.0	0.0	0.0	1996	41.1	3.4	44.6
1997	0.0	0.0	0.0	1997	36.8	10.5	47.3
1998	0.0	0.0	0.0	1998	30.7	10.6	41.3
2000	0.0	0.0	0.0	2000	17.5	0.0	17.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chilkat Indian Association, 2000.

Table 4. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Hoonah, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	47
Surveyed Households	41
Sampling Fraction	87.2%
Sample Household Members	128
Estimated Household Members	146.7
Estimated Native Population	597.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	65.9%
Hunted	0.0%	63.4%
Harvested	0.0%	63.4%
Received	0.0%	14.6%
Gave Away	0.0%	51.2%

Estimated Community Harvest and Take (Expanded):

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	147.9
Total Number Struck and Lost	0.0	16.0
Total Number Taken	0.0	163.9
Number Harvested Per Capita	0.00	0.25

SEA LION HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

HARBOR SEAL HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	2	3	1	2	3	12	11	19	11	18	15	31	129
Struck & Lost	0	0	0	0	0	0	1	1	6	3	2	1	0	14
Total Take	1	2	3	1	2	3	13	12	25	14	20	16	31	143
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.1	2.3	3.4	1.1	2.3	3.4	13.8	12.6	21.8	12.6	20.6	17.2	35.5	147.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	6.9	3.4	2.3	1.1	0.0	16.0
Total Take	1.1	2.3	3.4	1.1	2.3	3.4	14.9	13.8	28.7	16.0	22.9	18.3	35.5	163.9
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.5	3.0	4.5	1.5	3.0	4.5	18.1	16.6	28.7	16.6	27.2	22.6		147.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	6.9	3.4	2.3	1.1		16.0
Total Take	1.5	3.0	4.5	1.5	3.0	4.5	19.3	17.7	35.5	20.0	29.5	23.8		163.9
Total Take (%)	0.9%	1.8%	2.8%	0.9%	1.8%	2.8%	11.7%	10.8%	21.7%	12.2%	18.0%	14.5%		100.0%
Cum. Take	1.5	4.5	9.1	10.6	13.6	18.1	37.4	55.1	90.7	110.7	140.1	163.9		
Cum. Take (%)	0.9%	2.8%	5.5%	6.4%	8.3%	11.0%	22.8%	33.6%	55.3%	67.5%	85.5%	100.0%		

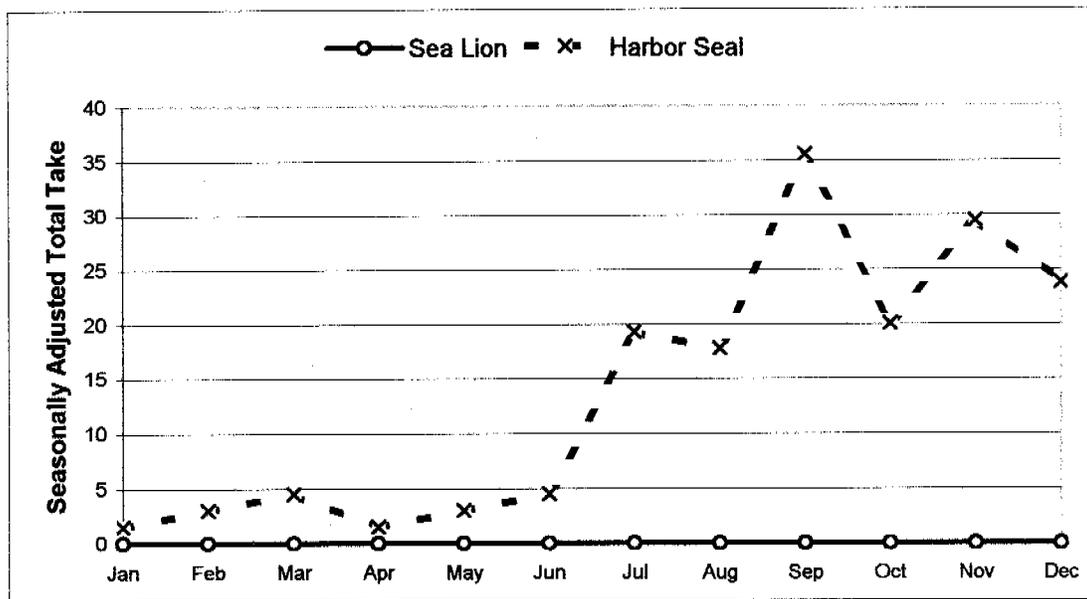
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Hoonah Traditional Council, 2000.

Table 4. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Hoonah, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	48	37.2%	55.0	37.2%
Adult Female	0	---	0.0	---	39	30.2%	44.7	30.2%
Adult Unknown Sex	0	---	0.0	---	31	24.0%	35.5	24.0%
Juvenile Male	0	---	0.0	---	4	3.1%	4.6	3.1%
Juvenile Female	0	---	0.0	---	2	1.6%	2.3	1.6%
Juvenile Unknown Sex	0	---	0.0	---	1	0.8%	1.1	0.8%
Pup Male	0	---	0.0	---	1	0.8%	1.1	0.8%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	2	1.6%	2.3	1.6%
Female Unknown Age	0	---	0.0	---	1	0.8%	1.1	0.8%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	129	100.0%	147.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	350.2	24.8	375.0
1993	0.0	0.0	0.0	1993	324.4	35.8	360.2
1994	0.0	0.0	0.0	1994	240.7	15.0	255.8
1995	0.0	0.0	0.0	1995	236.6	9.0	256.3
1996	0.0	0.0	0.0	1996	359.7	48.6	408.3
1997	0.0	0.0	0.0	1997	143.8	9.9	153.8
1998	0.0	0.0	0.0	1998	169.7	19.8	189.6
2000	0.0	0.0	0.0	2000	147.9	16.0	163.9

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Hoonah Traditional Council, 2000.

Table 5. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Hydaburg, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	16
Surveyed Households	10
Sampling Fraction	62.5%
Sample Household Members	27
Estimated Household Members	43.2
Estimated Native Population	342.1

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	0.0%	40.0%
Hunted	0.0%	40.0%
Harvested	0.0%	40.0%
Received	0.0%	0.0%
Gave Away	0.0%	20.0%

**Estimated Community Harvest
and Take (Expanded):**

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	14.4
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	14.4
Number Harvested Per Capita	0.00	0.04

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	2	2	2	0	0	0	0	0	0	1	1	1	9
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	2	2	2	0	0	0	0	0	0	1	1	1	9
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.2	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	14.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	3.2	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	14.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.6	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	14.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	3.6	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	14.4
Total Take (%)	0.0%	25.0%	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	12.5%	12.5%	100.0%
Cum. Take	0.0	3.6	7.2	10.8	10.8	10.8	10.8	10.8	10.8	10.8	12.6	14.4	14.4	14.4
Cum. Take (%)	0.0%	25.0%	50.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	87.5%	100.0%	100.0%	100.0%

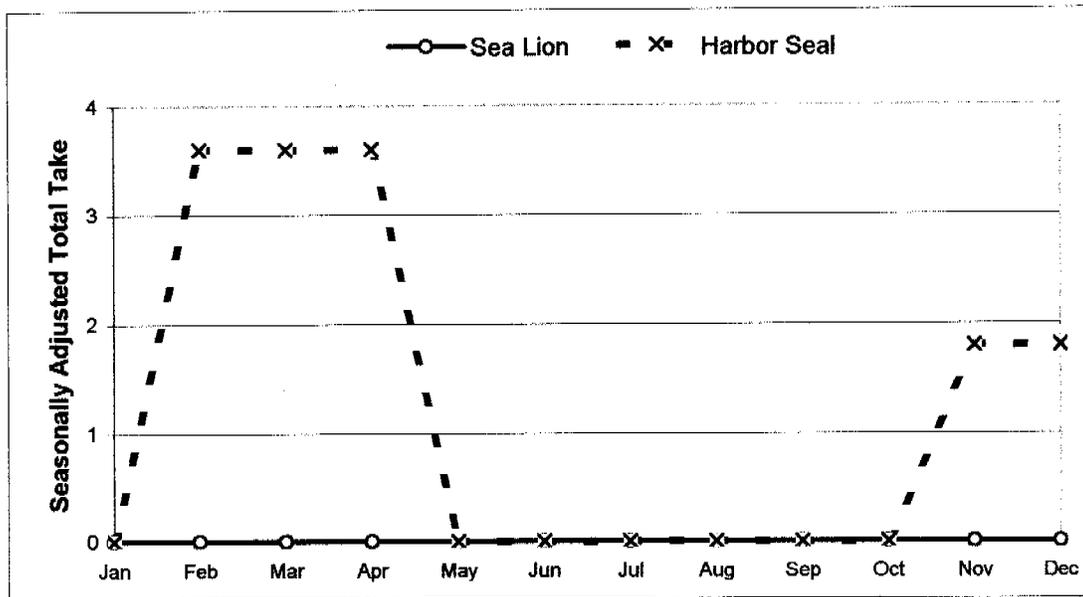
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Hydaburg and Haida Corporation. (Numbers based on 1998 survey estimates).

Table 5. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Hydaburg, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	4	44.4%	6.4	44.4%
Adult Female	0	---	0.0	---	3	33.3%	4.8	33.3%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	2	22.2%	3.2	22.2%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	9	100.0%	14.4	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	30.0	2.1	32.1
1993	0.0	0.0	0.0	1993	14.0	0.0	14.0
1994	0.0	0.0	0.0	1994	10.0	0.0	10.0
1995	0.0	0.0	0.0	1995	6.5	9.0	6.5
1996	0.0	0.0	0.0	1996	15.0	0.0	15.0
1997	0.0	0.0	0.0	1997	11.5	0.0	11.5
1998	0.0	0.0	0.0	1998	14.4	0.0	14.4
2000	0.0	0.0	0.0	2000	14.4	0.0	14.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Hydaburg and Haida Corporation. (Numbers based on 1998 survey estimates).

Table 6. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Juneau, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	74
Surveyed Households	21
Sampling Fraction	28.4%
Sample Household Members	63
Estimated Household Members	222.0
Estimated Native Population	5084.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	90.5%
Hunted	0.0%	57.1%
Harvested	0.0%	47.6%
Received	0.0%	71.4%
Gave Away	0.0%	57.1%

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	59.9
Total Number Struck and Lost	0.0	3.5
Total Number Taken	0.0	63.4
Number Harvested Per Capita	0.00	0.01

SEA LION HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	2	0	2	2	1	3	1	0	4	2	0	17
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Take	0	0	2	0	2	2	1	3	1	0	4	3	0	18
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	7.0	0.0	7.0	7.0	3.5	10.6	3.5	0.0	14.1	7.0	0.0	59.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	3.5
Total Take	0.0	0.0	7.0	0.0	7.0	7.0	3.5	10.6	3.5	0.0	14.1	10.6	0.0	63.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	7.0	0.0	7.0	7.0	3.5	10.6	3.5	0.0	14.1	7.0		59.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5		3.5
Total Take	0.0	0.0	7.0	0.0	7.0	7.0	3.5	10.6	3.5	0.0	14.1	10.6		63.4
Total Take (%)	0.0%	0.0%	11.1%	0.0%	11.1%	11.1%	5.6%	16.7%	5.6%	0.0%	22.2%	16.7%		100.0%
Cum. Take	0.0	0.0	7.0	7.0	14.1	21.1	24.7	35.2	38.8	38.8	52.9	63.4		
Cum. Take (%)	0.0%	0.0%	11.1%	11.1%	22.2%	33.3%	38.9%	55.6%	61.1%	61.1%	83.3%	100.0%		

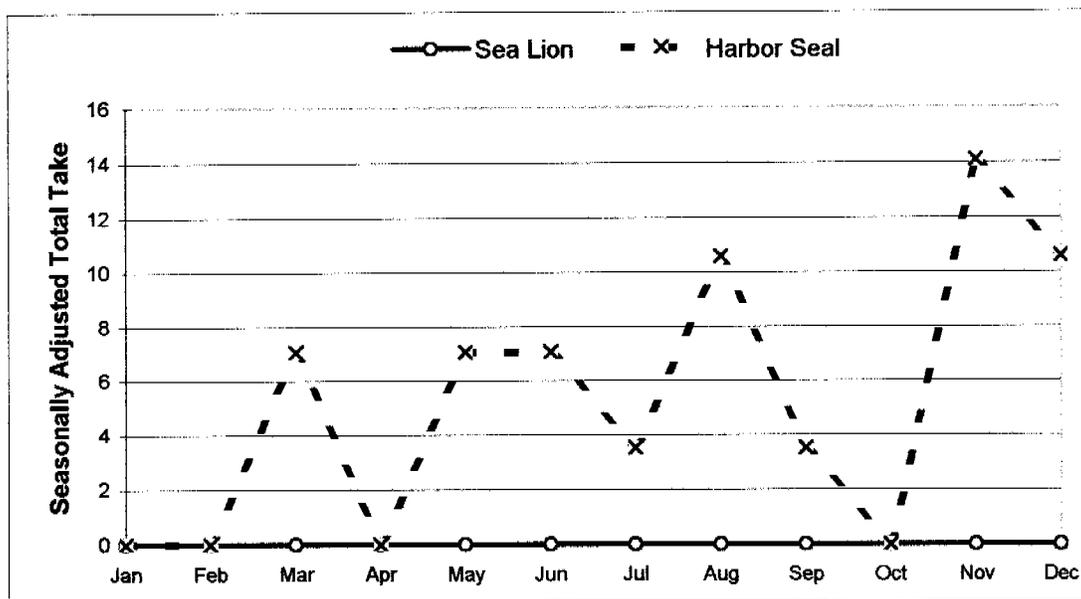
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Tlingit and Haida Central Council, Sealaska, Auke Tribe Council, and ANB/ANS, 2000.

Table 6. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Juneau, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	9	52.9%	31.7	52.9%
Adult Female	0	---	0.0	---	4	23.5%	14.1	23.5%
Adult Unknown Sex	0	---	0.0	---	4	23.5%	14.1	23.5%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	17	100.0%	59.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	122.6	7.6	130.2
1993	0.0	0.0	0.0	1993	59.0	21.6	80.6
1994	1.1	0.0	1.1	1994	78.6	13.5	92.1
1995	0.0	0.0	0.0	1995	42.9	9.0	44.2
1996	0.0	0.0	0.0	1996	32.8	1.3	34.1
1997	0.0	0.0	0.0	1997	99.0	0.0	99.0
1998	0.0	0.0	0.0	1998	90.4	15.3	105.7
2000	0.0	0.0	0.0	2000	59.9	3.5	63.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Tlingit and Haida Central Council, Sealaska, Auke Tribe Council, and ANB/ANS, 2000.

Table 7. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Kake, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	69
Surveyed Households	19
Sampling Fraction	27.5%
Sample Household Members	56
Estimated Household Members	203.4
Estimated Native Population	530.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	68.4%
Hunted	0.0%	52.6%
Harvested	0.0%	47.4%
Received	0.0%	31.6%
Gave Away	0.0%	42.1%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	101.7
Total Number Struck and Lost	0.0	3.6
Total Number Taken	0.0	105.3
Number Harvested Per Capita	0.00	0.19

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	1	1	1	1	2	0	4	3	7	4	4	0	28
Struck & Lost	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Total Take	0	1	1	1	1	3	0	4	3	7	4	4	0	29
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.6	3.6	3.6	3.6	7.3	0.0	14.5	10.9	25.4	14.5	14.5	0.0	101.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Total Take	0.0	3.6	3.6	3.6	3.6	10.9	0.0	14.5	10.9	25.4	14.5	14.5	0.0	105.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.6	3.6	3.6	3.6	7.3	0.0	14.5	10.9	25.4	14.5	14.5	0.0	101.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Total Take	0.0	3.6	3.6	3.6	3.6	10.9	0.0	14.5	10.9	25.4	14.5	14.5	0.0	105.3
Total Take (%)	0.0%	3.4%	3.4%	3.4%	3.4%	10.3%	0.0%	13.8%	10.3%	24.1%	13.8%	13.8%	0.0%	100.0%
Cum. Take	0.0	3.6	7.3	10.9	14.5	25.4	25.4	39.9	50.8	76.3	90.8	105.3	105.3	105.3
Cum. Take (%)	0.0%	3.4%	6.9%	10.3%	13.8%	24.1%	24.1%	37.9%	48.3%	72.4%	86.2%	100.0%	100.0%	100.0%

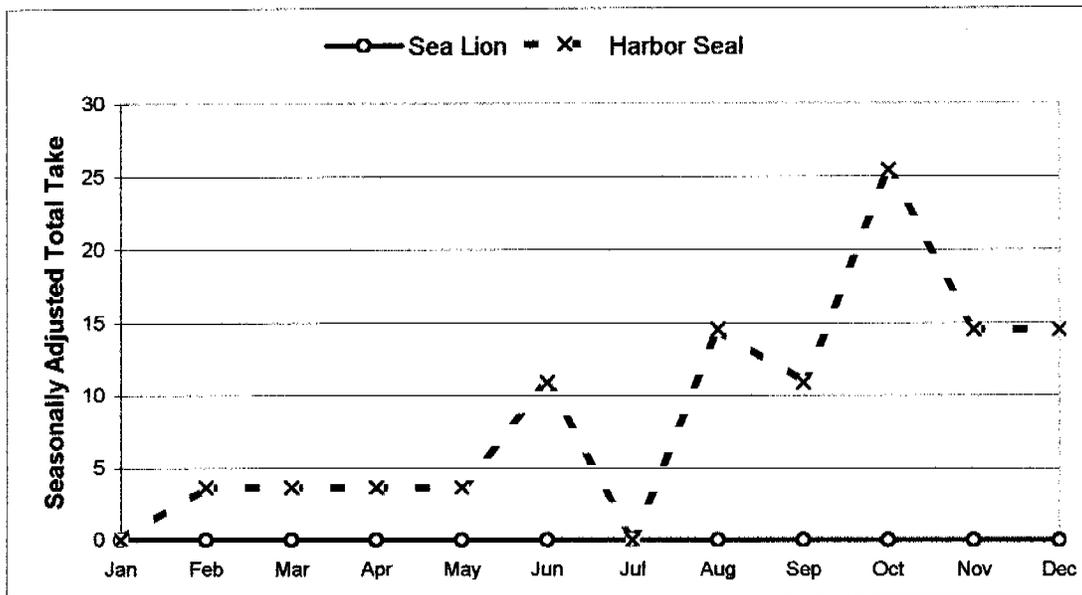
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Organized Village of Kake and City of Kake, 2000.

Table 7. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Kake, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	10	35.7%	36.3	35.7%
Adult Female	0	---	0.0	---	2	7.1%	7.3	7.1%
Adult Unknown Sex	0	---	0.0	---	4	14.3%	14.5	14.3%
Juvenile Male	0	---	0.0	---	10	35.7%	36.3	35.7%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	2	7.1%	7.3	7.1%
Total	0	---	0.0	---	28	100.0%	101.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	173.9	12.3	186.2
1993	0.0	0.0	0.0	1993	100.8	15.2	115.9
1994	1.2	0.0	1.2	1994	99.3	7.4	106.6
1995	0.0	0.0	0.0	1995	72.0	9.0	73.5
1996	0.0	0.0	0.0	1996	86.4	0.0	86.4
1997	0.0	0.0	0.0	1997	68.4	7.6	76.0
1998	0.0	0.0	0.0	1998	123.0	6.1	129.1
2000	0.0	0.0	0.0	2000	101.7	3.6	105.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska; with assistance from the Organized Village of Kake and City of Kake, 2000.

Table 8. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Ketchikan, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	17
Surveyed Households	7
Sampling Fraction	41.2%
Sample Household Members	17
Estimated Household Members	41.3
Estimated Native Population	1802.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	0.0%	42.9%
Hunted	0.0%	42.9%
Harvested	0.0%	42.9%
Received	0.0%	0.0%
Gave Away	0.0%	42.9%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	111.7
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	111.7
Number Harvested Per Capita	0.00	0.06

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	10	10	10	9	0	0	0	0	0	0	0	1	6	46
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	10	10	10	9	0	0	0	0	0	0	0	1	6	46
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	24.3	24.3	24.3	21.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	14.6	111.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	24.3	24.3	24.3	21.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	14.6	111.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	27.9	27.9	27.9	25.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8		111.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	27.9	27.9	27.9	25.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8		111.7
Total Take (%)	25.0%	25.0%	25.0%	22.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%		100.0%
Cum. Take	27.9	55.9	83.8	108.9	108.9	108.9	108.9	108.9	108.9	108.9	108.9	111.7		
Cum. Take (%)	25.0%	50.0%	75.0%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	100.0%		

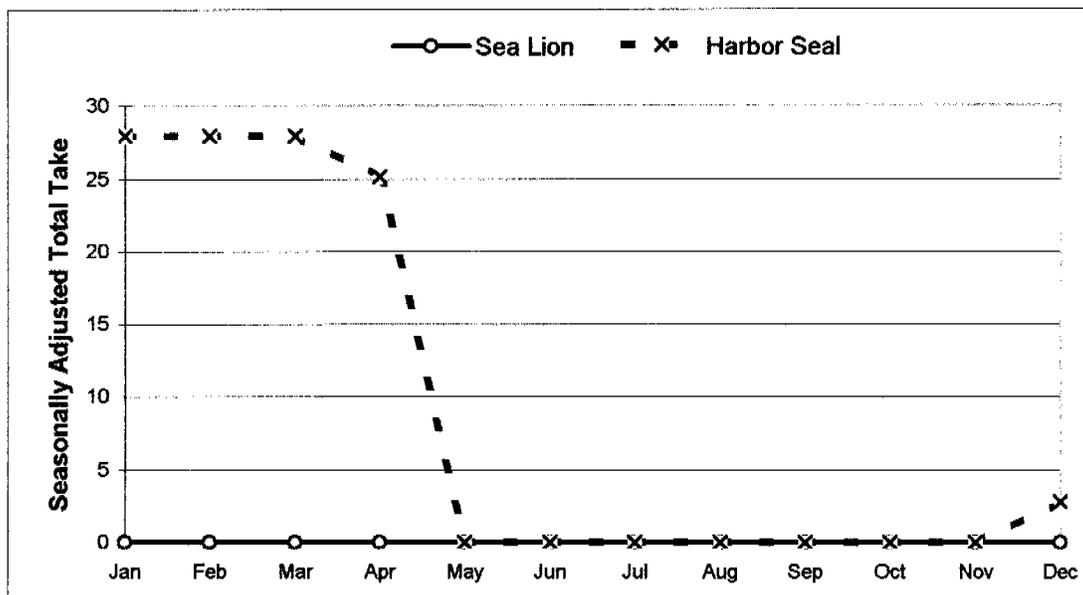
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska; with assistance from the Ketchikan IRA Council and Ketchikan Indian Corporation, 2000.

Table 8. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Ketchikan, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	20	43.5%	48.6	43.5%
Adult Female	0	---	0.0	---	19	41.3%	46.1	41.3%
Adult Unknown Sex	0	---	0.0	---	7	15.2%	17.0	15.2%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	46	100.0%	111.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	90.2	6.5	96.8
1993	0.0	0.0	0.0	1993	42.4	2.9	45.3
1994	0.0	0.0	0.0	1994	31.4	0.0	31.4
1995	0.0	0.0	0.0	1995	46.4	9.0	46.4
1996	0.0	0.0	0.0	1996	25.0	0.0	25.0
1997	0.0	0.0	0.0	1997	27.4	4.3	31.8
1998	0.0	0.0	0.0	1998	26.7	0.0	26.7
2000	0.0	0.0	0.0	2000	111.7	0.0	111.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Ketchikan IRA Council and Ketchikan Indian Corporation, 2000.

Table 9. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Klawock, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	25
Surveyed Households	19
Sampling Fraction	76%
Sample Household Members	72
Estimated Household Members	94.4
Estimated Native Population	496.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	5.3%	89.5%	Total Number Harvested	1.3	67.1
Hunted	5.3%	73.7%	Total Number Struck and Lost	0.0	0.0
Harvested	5.3%	68.4%	Total Number Taken	1.3	67.1
Received	0.0%	42.1%	Number Harvested Per Capita	0.00	0.14
Gave Away	5.3%	57.9%			

SEA LION HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	1	0	0	0	0	0	0	0	0	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Total Take (%)	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

HARBOR SEAL HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	5	8	9	11	5	0	1	0	0	3	1	8	0	51
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	5	8	9	11	5	0	1	0	0	3	1	8	0	51
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	6.6	10.5	11.8	14.5	6.6	0.0	1.3	0.0	0.0	3.9	1.3	10.5	0.0	67.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	6.6	10.5	11.8	14.5	6.6	0.0	1.3	0.0	0.0	3.9	1.3	10.5	0.0	67.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	6.6	10.5	11.8	14.5	6.6	0.0	1.3	0.0	0.0	3.9	1.3	10.5	0.0	67.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	6.6	10.5	11.8	14.5	6.6	0.0	1.3	0.0	0.0	3.9	1.3	10.5	0.0	67.1
Total Take (%)	9.8%	15.7%	17.6%	21.6%	9.8%	0.0%	2.0%	0.0%	0.0%	5.9%	2.0%	15.7%	0.0%	100.0%
Cum. Take	6.6	17.1	28.9	43.4	50.0	50.0	51.3	51.3	51.3	55.3	56.6	67.1	67.1	
Cum. Take (%)	9.8%	25.5%	43.1%	64.7%	74.5%	74.5%	76.5%	76.5%	76.5%	82.4%	84.3%	100.0%	100.0%	

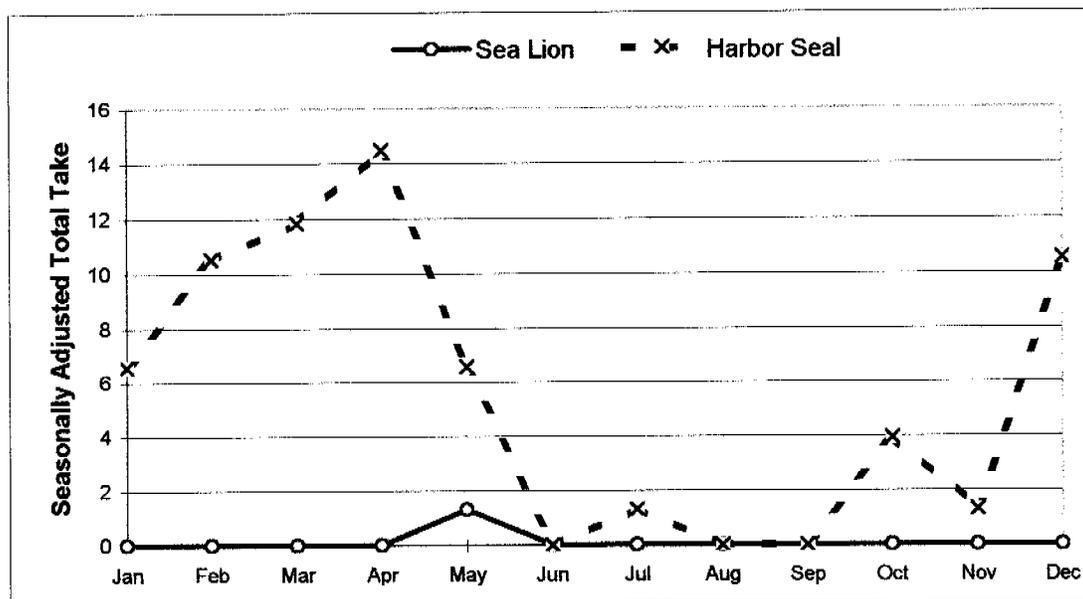
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Klawock Cooperative Association and Klawock Heenya Corporation, 2000.

Table 9. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Klawock, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	44	86.3%	57.9	86.3%
Adult Female	0	0.0%	0.0	0.0%	1	2.0%	1.3	2.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	1	100.0%	1.3	100.0%	6	11.8%	7.9	11.8%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	1	100.0%	1.3	100.0%	51	100.0%	67.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	1.4	0.0	1.4	1992	39.0	1.4	40.3
1993	0.0	0.0	0.0	1993	39.8	0.0	39.8
1994	0.0	0.0	0.0	1994	71.1	0.0	71.1
1995	0.0	0.0	0.0	1995	263.8	9.0	263.8
1996	0.0	0.0	0.0	1996	69.8	0.0	69.8
1997	0.0	0.0	0.0	1997	94.0	0.0	94.0
1998	0.0	0.0	0.0	1998	83.0	0.0	83.0
2000	1.3	0.0	1.3	2000	67.1	0.0	67.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Klawock Cooperative Association and Klawock Heenya Corporation, 2000.

Table 10. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Klukwan, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	6
Surveyed Households	1
Sampling Fraction	16.7%
Sample Household Members	2
Estimated Household Members	12.0
Estimated Native Population	123.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	0.0%	100.0%
Hunted	0.0%	100.0%
Harvested	0.0%	100.0%
Received	0.0%	100.0%
Gave Away	0.0%	100.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	18.0
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	18.0
Number Harvested Per Capita	0.00	0.15

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	2	0	1	0	0	0	3
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	2	0	1	0	0	0	3
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	6.0	0.0	0.0	0.0	18.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	6.0	0.0	0.0	0.0	18.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	6.0	0.0	0.0	0.0	18.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	6.0	0.0	0.0	0.0	18.0
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	66.7%	0.0%	33.3%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	12.0	18.0	18.0	18.0	18.0	18.0
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	66.7%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%

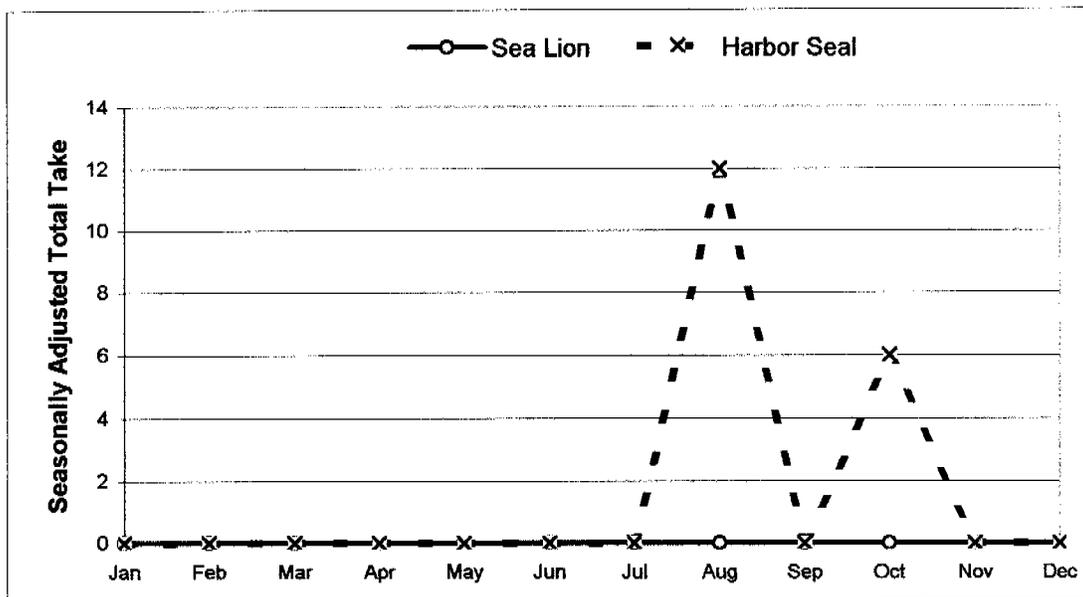
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Chikot Indian Village, 2000.

Table 10. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Klukwan, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	3	100.0%	18.0	100.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	3	100.0%	18.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	8.0	2.0	10.0
1993	0.0	0.0	0.0	1993	1.2	0.0	1.2
1994	0.0	0.0	0.0	1994	3.8	1.3	5.0
1995	0.0	0.0	0.0	1995	35.2	9.0	41.6
1996	0.0	0.0	0.0	1996	6.3	0.0	6.3
1997	0.0	0.0	0.0	1997	1.1	0.0	1.1
1998	0.0	0.0	0.0	1998	10.5	0.0	10.5
2000	0.0	0.0	0.0	2000	18.0	0.0	18.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Chilkat Indian Village, 2000.

Table 11. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Pelican, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	16
Surveyed Households	15
Sampling Fraction	93.8%
Sample Household Members	41
Estimated Household Members	43.7
Estimated Native Population	42.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):	
	Sea Lion	Harbor Seal	Sea Lion	Harbor Seal
Used	0.0%	60.0%	Total Number Harvested	0.0 7.5
Hunted	0.0%	40.0%	Total Number Struck and Lost	0.0 0.0
Harvested	0.0%	33.3%	Total Number Taken	0.0 7.5
Received	0.0%	33.3%		
Gave Away	0.0%	46.7%	Number Harvested Per Capita	0.00 0.18

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	1	1	0	0	0	0	1	1	3	0	0	7
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	1	1	0	0	0	0	1	1	3	0	0	7
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	1.1	1.1	3.2	0.0	0.0	7.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	1.1	1.1	3.2	0.0	0.0	7.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	1.1	1.1	3.2	0.0	0.0	7.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	1.1	1.1	3.2	0.0	0.0	7.5
Total Take (%)	0.0%	0.0%	14.3%	14.3%	0.0%	0.0%	0.0%	0.0%	14.3%	14.3%	42.9%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	1.1	2.1	2.1	2.1	2.1	2.1	3.2	4.3	7.5	7.5	7.5	7.5
Cum. Take (%)	0.0%	0.0%	14.3%	28.6%	28.6%	28.6%	28.6%	28.6%	42.9%	57.1%	100.0%	100.0%	100.0%	100.0%

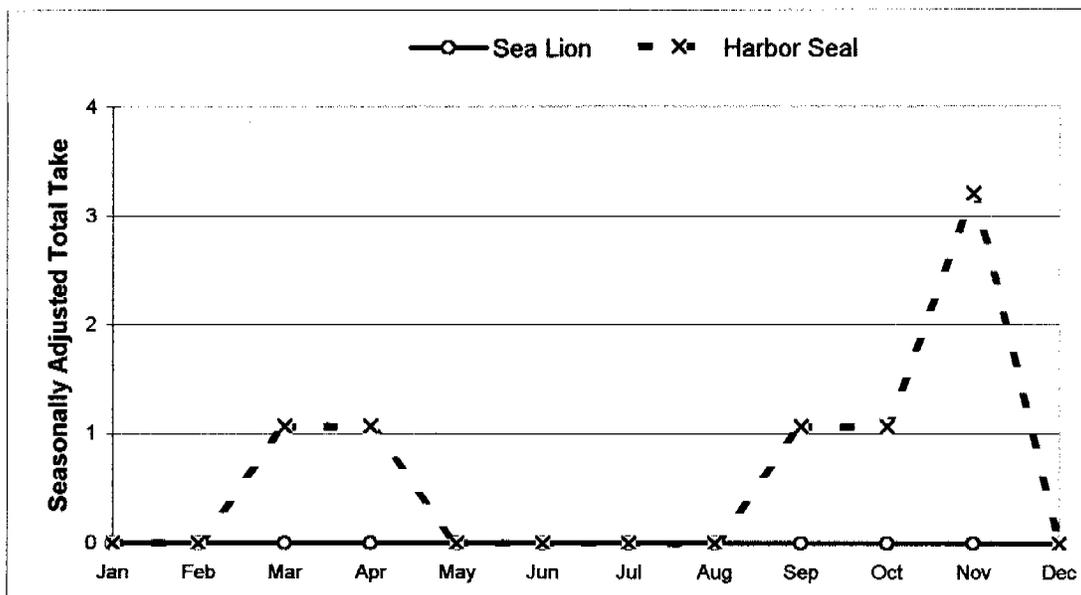
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Pelican, Tlingit and Haida Indians of Pelican Community Council, 2000.

Table 11. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Pelican, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	6	85.7%	6.4	85.7%
Adult Female	0	---	0.0	---	1	14.3%	1.1	14.3%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	7	100.0%	7.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	8.3	1.4	9.7
1993	0.0	0.0	0.0	1993	5.3	1.1	6.4
1994	0.0	0.0	0.0	1994	4.4	1.1	5.6
1995	0.0	0.0	0.0	1995	13.5	9.0	13.5
1996	0.0	0.0	0.0	1996	15.4	0.0	15.4
1997	0.0	0.0	0.0	1997	14.5	0.0	14.5
1998	0.0	0.0	0.0	1998	15.8	2.4	18.2
2000	0.0	0.0	0.0	2000	7.5	0.0	7.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Pelican, Tlingit and Haida Indians of Pelican Community Council, 2000.

Table 12. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Petersburg, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	30
Surveyed Households	29
Sampling Fraction	96.7%
Sample Household Members	96
Estimated Household Members	99.3
Estimated Native Population	388.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	0.0%	96.6%
Hunted	0.0%	62.1%
Harvested	0.0%	51.7%
Received	0.0%	89.7%
Gave Away	0.0%	75.9%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	20.7
Total Number Struck and Lost	0.0	7.2
Total Number Taken	0.0	27.9
Number Harvested Per Capita	0.00	0.05

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	0	1	0	0	0	0	0	4	3	6	5	0	20
Struck & Lost	0	0	0	0	0	0	0	0	2	1	3	1	0	7
Total Take	1	0	1	0	0	0	0	0	6	4	9	6	0	27
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	4.1	3.1	6.2	5.2	0.0	20.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0	3.1	1.0	0.0	7.2
Total Take	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	6.2	4.1	9.3	6.2	0.0	27.9
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	4.1	3.1	6.2	5.2	0.0	20.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0	3.1	1.0	0.0	7.2
Total Take	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	6.2	4.1	9.3	6.2	0.0	27.9
Total Take (%)	3.7%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	22.2%	14.8%	33.3%	22.2%	0.0%	100.0%
Cum. Take	1.0	1.0	2.1	2.1	2.1	2.1	2.1	2.1	8.3	12.4	21.7	27.9	27.9	27.9
Cum. Take (%)	3.7%	3.7%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%	29.6%	44.4%	77.8%	100.0%	100.0%	100.0%

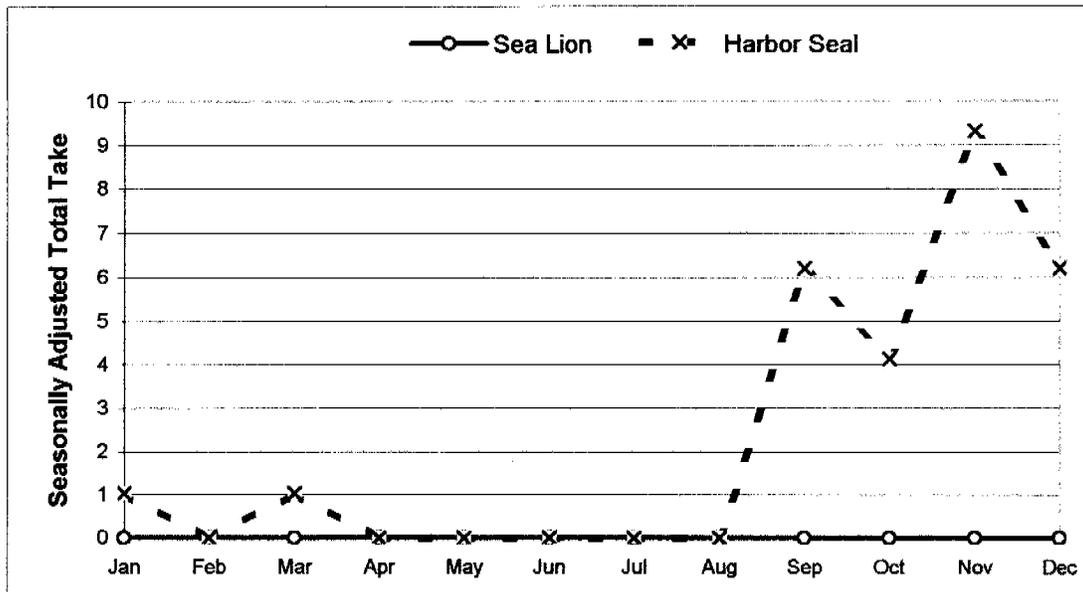
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Petersburg Indian Association, 2000.

Table 12. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Petersburg, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	8	40.0%	8.3	40.0%
Adult Female	0	---	0.0	---	4	20.0%	4.1	20.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	2	10.0%	2.1	10.0%
Juvenile Female	0	---	0.0	---	2	10.0%	2.1	10.0%
Juvenile Unknown Sex	0	---	0.0	---	1	5.0%	1.0	5.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	2	10.0%	2.1	10.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	1	5.0%	1.0	5.0%
Total	0	---	0.0	---	20	100.0%	20.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	22.4	2.6	25.0
1993	0.0	0.0	0.0	1993	4.5	4.5	9.0
1994	0.0	0.0	0.0	1994	15.2	1.3	16.4
1995	0.0	0.0	0.0	1995	13.6	9.0	14.7
1996	0.0	0.0	0.0	1996	19.5	2.4	21.9
1997	0.0	0.0	0.0	1997	11.8	4.3	16.2
1998	0.0	0.0	0.0	1998	23.9	9.3	33.2
2000	0.0	0.0	0.0	2000	20.7	7.2	27.9

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Petersburg Indian Association, 2000.

Table 13. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Saxman, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	19
Surveyed Households	10
Sampling Fraction	52.6%
Sample Household Members	27
Estimated Household Members	51.3
Estimated Native Population	302.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	80.0%
Hunted	0.0%	70.0%
Harvested	0.0%	70.0%
Received	0.0%	40.0%
Gave Away	0.0%	60.0%

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	45.6
Total Number Struck and Lost	0.0	1.9
Total Number Taken	0.0	47.5
Number Harvested Per Capita	0.00	0.15

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	4	0	0	0	0	0	0	0	3	2	6	3	6	24
Struck & Lost	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Take	5	0	0	0	0	0	0	0	3	2	6	3	6	25
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	3.8	11.4	5.7	11.4	45.6
Struck & Lost	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Total Take	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	3.8	11.4	5.7	11.4	47.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	5.1	15.2	7.6		45.6
Struck & Lost	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.9
Total Take	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	5.1	15.2	7.6		47.5
Total Take (%)	25.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	10.7%	32.0%	16.0%		100.0%
Cum. Take	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	19.6	24.7	39.9	47.5		
Cum. Take (%)	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	41.3%	52.0%	84.0%	100.0%		

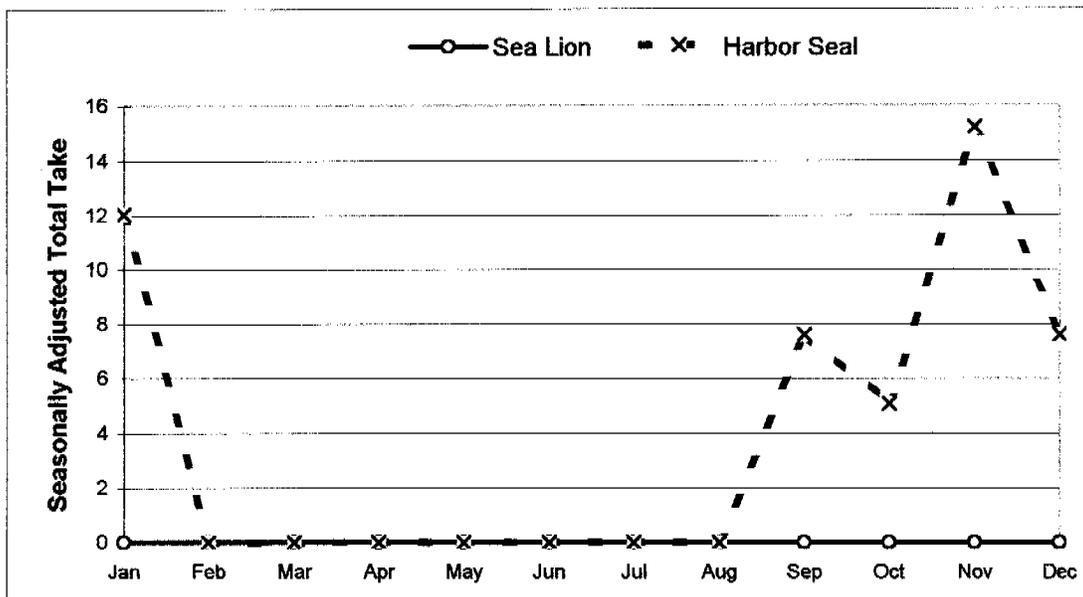
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Saxman and Saxman IRA Council, 2000.

Table 13. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Saxman, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	8	33.3%	15.2	33.3%
Adult Female	0	---	0.0	---	6	25.0%	11.4	25.0%
Adult Unknown Sex	0	---	0.0	---	8	33.3%	15.2	33.3%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	2	8.3%	3.8	8.3%
Total	0	---	0.0	---	24	100.0%	45.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	22.2	1.2	23.5
1993	0.0	0.0	0.0	1993	5.6	0.0	5.6
1994	0.0	0.0	0.0	1994	16.5	0.0	16.5
1995	0.0	0.0	0.0	1995	15.9	9.0	15.9
1996	0.0	0.0	0.0	1996	4.9	0.0	4.9
1997	0.0	0.0	0.0	1997	11.0	0.0	11.0
1998	0.0	0.0	0.0	1998	19.6	0.0	19.6
2000	0.0	0.0	0.0	2000	45.6	1.9	47.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Saxman and Saxman IRA Council, 2000.

Table 14. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Sitka, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	80
Surveyed Households	74
Sampling Fraction	92.5%
Sample Household Members	239
Estimated Household Members	258.4
Estimated Native Population	2178.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):	
	Sea Lion	Harbor Seal	Sea Lion	Harbor Seal
Used	0.0%	91.9%	Total Number Harvested	0.0 276.8
Hunted	0.0%	87.8%	Total Number Struck and Lost	0.0 41.1
Harvested	0.0%	85.1%	Total Number Taken	0.0 317.8
Received	0.0%	17.6%		
Gave Away	0.0%	86.5%	Number Harvested Per Capita	0.00 0.13

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	21	73	41	3	7	1	1	10	24	33	24	18	0	256
Struck & Lost	4	12	7	1	0	2	0	2	1	4	3	1	1	38
Total Take	25	85	48	4	7	3	1	12	25	37	27	19	1	294
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	22.7	78.9	44.3	3.2	7.6	1.1	1.1	10.8	25.9	35.7	25.9	19.5	0.0	276.8
Struck & Lost	4.3	13.0	7.6	1.1	0.0	2.2	0.0	2.2	1.1	4.3	3.2	1.1	1.1	41.1
Total Take	27.0	91.9	51.9	4.3	7.6	3.2	1.1	13.0	27.0	40.0	29.2	20.5	1.1	317.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	22.7	78.9	44.3	3.2	7.6	1.1	1.1	10.8	25.9	35.7	25.9	19.5		276.8
Struck & Lost	4.4	13.3	7.8	1.1	0.0	2.2	0.0	2.2	1.1	4.4	3.3	1.1		41.1
Total Take	27.1	92.2	52.1	4.4	7.6	3.3	1.1	13.0	27.1	40.1	29.3	20.6		317.8
Total Take (%)	8.5%	29.0%	16.4%	1.4%	2.4%	1.0%	0.3%	4.1%	8.5%	12.6%	9.2%	6.5%		100.0%
Cum. Take	27.1	119.4	171.5	175.8	183.4	186.7	187.8	200.8	227.9	268.0	297.3	317.8		
Cum. Take (%)	8.5%	37.6%	54.0%	55.3%	57.7%	58.7%	59.1%	63.2%	71.7%	84.3%	93.5%	100.0%		

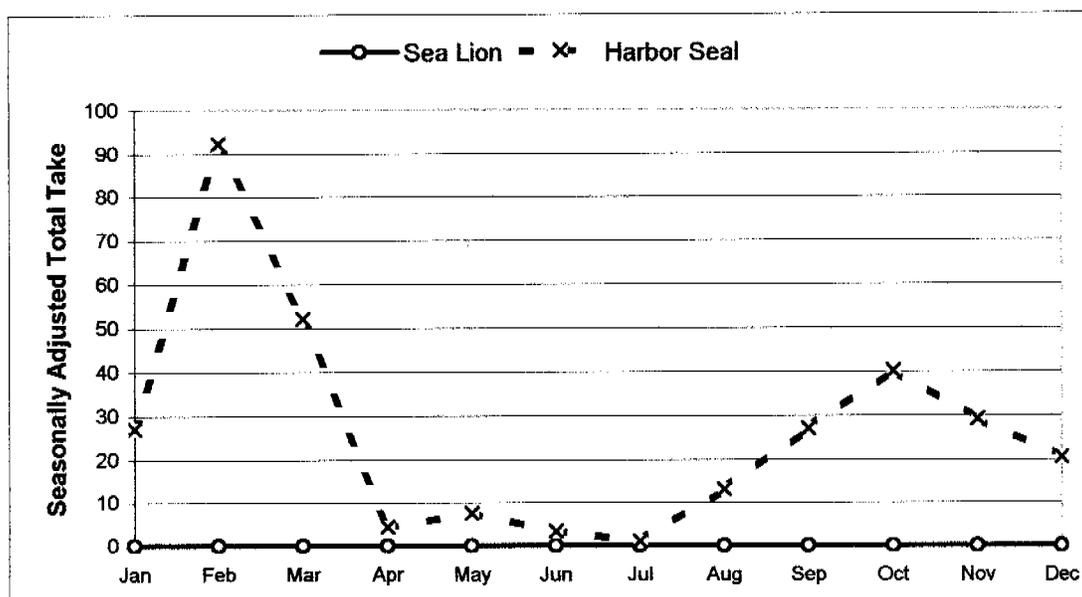
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the ANB and Sitka Tribal Association, 2000.

Table 14. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Sitka, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	89	34.8%	96.2	34.8%
Adult Female	0	---	0.0	---	32	12.5%	34.6	12.5%
Adult Unknown Sex	0	---	0.0	---	4	1.6%	4.3	1.6%
Juvenile Male	0	---	0.0	---	50	19.5%	54.1	19.5%
Juvenile Female	0	---	0.0	---	25	9.8%	27.0	9.8%
Juvenile Unknown Sex	0	---	0.0	---	1	0.4%	1.1	0.4%
Pup Male	0	---	0.0	---	16	6.3%	17.3	6.3%
Pup Female	0	---	0.0	---	3	1.2%	3.2	1.2%
Pup Unknown Sex	0	---	0.0	---	4	1.6%	4.3	1.6%
Male Unknown Age	0	---	0.0	---	26	10.2%	28.1	10.2%
Female Unknown Age	0	---	0.0	---	1	0.4%	1.1	0.4%
Unknown Sex and Age	0	---	0.0	---	5	2.0%	5.4	2.0%
Total	0	---	0.0	---	256	100.0%	276.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	3.8	1.3	5.0	1992	124.7	21.4	146.1
1993	0.0	1.1	1.1	1993	109.3	20.6	129.9
1994	1.1	1.1	2.2	1994	110.5	20.1	130.6
1995	0.0	0.0	0.0	1995	93.8	9.0	100.0
1996	0.0	0.0	0.0	1996	126.8	4.1	130.9
1997	0.0	0.0	0.0	1997	150.6	3.7	154.3
1998	3.3	4.4	7.6	1998	237.6	29.4	267.0
2000	0.0	0.0	0.0	2000	276.8	41.1	317.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the ANB and Sitka Tribal Association, 2000.

Table 15. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Wrangell, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	9
Surveyed Households	6
Sampling Fraction	67%
Sample Household Members	18
Estimated Household Members	27.0
Estimated Native Population	550.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	33.3%
Hunted	0.0%	33.3%
Harvested	0.0%	33.3%
Received	0.0%	0.0%
Gave Away	0.0%	0.0%

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	28.5
Total Number Struck and Lost	0.0	12.0
Total Number Taken	0.0	40.5
Number Harvested Per Capita	0.00	0.05

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	2	0	17	0	0	0	0	0	0	0	0	19
Struck & Lost	0	0	0	0	8	0	0	0	0	0	0	0	0	8
Total Take	0	0	2	0	25	0	0	0	0	0	0	0	0	27
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5
Struck & Lost	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0
Total Take	0.0	0.0	3.0	0.0	37.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5
Struck & Lost	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0
Total Take	0.0	0.0	3.0	0.0	37.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.5
Total Take (%)	0.0%	0.0%	7.4%	0.0%	92.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	3.0	3.0	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Cum. Take (%)	0.0%	0.0%	7.4%	7.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

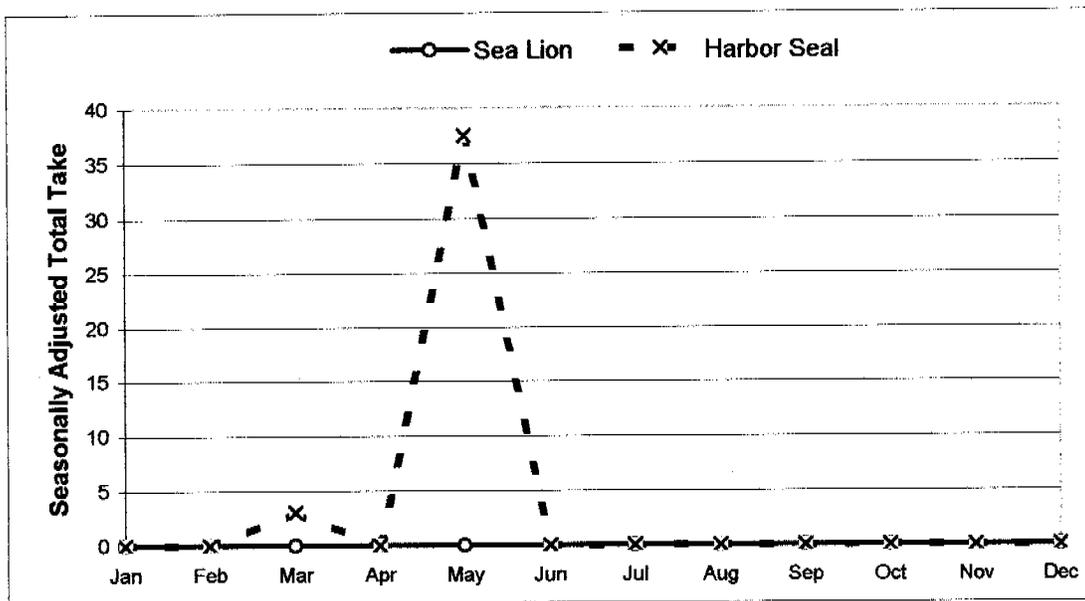
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Wrangell Cooperative Association, 2000.

Table 15. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Wrangell, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	9	47.4%	13.5	47.4%
Adult Female	0	---	0.0	---	10	52.6%	15.0	52.6%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	19	100.0%	28.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	6.0	8.0	14.0
1993	0.0	0.0	0.0	1993	19.5	9.0	28.5
1994	0.0	0.0	0.0	1994	101.0	27.0	128.0
1995	0.0	0.0	0.0	1995	89.3	9.0	112.0
1996	0.0	0.0	0.0	1996	79.3	22.2	101.5
1997	0.0	0.0	0.0	1997	68.8	29.2	98.0
1998	0.0	0.0	0.0	1998	174.0	30.0	204.0
2000	0.0	0.0	0.0	2000	28.5	12.0	40.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Wrangell Cooperative Association, 2000.

Table 16. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Yakutat, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	48
Surveyed Households	38
Sampling Fraction	79.2%
Sample Household Members	127
Estimated Household Members	160.4
Estimated Native Population	375.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:	Sea	Harbor	Estimated Community Harvest and Take (Expanded):	Sea	Harbor
	Lion	Seal		Lion	Seal
Used	0.0%	100.0%	Total Number Harvested	0.0	193.3
Hunted	0.0%	84.2%	Total Number Struck and Lost	0.0	56.8
Harvested	0.0%	78.9%	Total Number Taken	0.0	250.1
Received	0.0%	71.1%	Number Harvested Per Capita	0.00	0.52
Gave Away	0.0%	92.1%			

SEA LION HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	4	7	14	18	23	5	9	19	4	4	6	11	29	153
Struck & Lost	1	0	3	0	3	6	4	11	8	6	0	2	1	45
Total Take	5	7	17	18	26	11	13	30	12	10	6	13	30	198
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	5.1	8.8	17.7	22.7	29.1	6.3	11.4	24.0	5.1	5.1	7.6	13.9	36.6	193.3
Struck & Lost	1.3	0.0	3.8	0.0	3.8	7.6	5.1	13.9	10.1	7.6	0.0	2.5	1.3	56.8
Total Take	6.3	8.8	21.5	22.7	32.8	13.9	16.4	37.9	15.2	12.6	7.6	16.4	37.9	250.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	6.2	10.9	21.8	28.1	35.8	7.8	14.0	29.6	6.2	6.2	9.4	17.1		193.3
Struck & Lost	1.3	0.0	3.9	0.0	3.9	7.8	5.2	14.2	10.3	7.8	0.0	2.6		56.8
Total Take	7.5	10.9	25.7	28.1	39.7	15.5	19.2	43.8	16.6	14.0	9.4	19.7		250.1
Total Take (%)	3.0%	4.4%	10.3%	11.2%	15.9%	6.2%	7.7%	17.5%	6.6%	5.6%	3.7%	7.9%		100.0%
Cum. Take	7.5	18.4	44.1	72.2	111.9	127.5	146.6	190.5	207.0	221.0	230.4	250.1		
Cum. Take (%)	3.0%	7.4%	17.6%	28.9%	44.7%	51.0%	58.6%	76.2%	82.8%	88.4%	92.1%	100.0%		

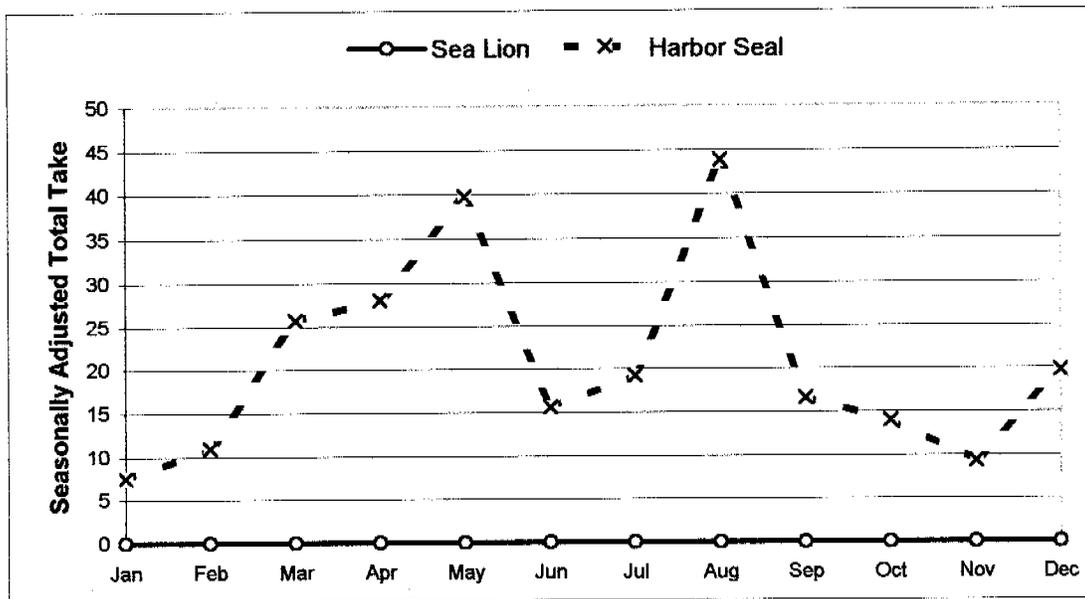
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Yakutat ANB/ANS, Yakutat Native Association, and Yak-Tat Kwaan, Inc., 2000.

Table 16. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Yakutat, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	59	38.6%	74.5	38.6%
Adult Female	0	---	0.0	---	32	20.9%	40.4	20.9%
Adult Unknown Sex	0	---	0.0	---	24	15.7%	30.3	15.7%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	1	0.7%	1.3	0.7%
Juvenile Unknown Sex	0	---	0.0	---	2	1.3%	2.5	1.3%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	1	0.7%	1.3	0.7%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	34	22.2%	42.9	22.2%
Total	0	---	0.0	---	153	100.0%	193.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	248.0	61.3	309.3
1993	0.0	0.0	0.0	1993	568.4	57.4	625.8
1994	0.0	0.0	0.0	1994	417.1	35.0	452.1
1995	0.0	0.0	0.0	1995	615.5	9.0	695.1
1996	0.0	0.0	0.0	1996	640.3	124.1	764.5
1997	0.0	0.0	0.0	1997	491.5	139.9	631.5
1998	0.0	0.0	0.0	1998	289.0	72.3	361.3
2000	0.0	0.0	0.0	2000	193.3	56.8	250.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Yakutat ANB/ANS, Yakutat Native Association, and Yak-Tat Kwaan, Inc., 2000.

Table 17. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Chenega Bay, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	15
Surveyed Households	9
Sampling Fraction	60.0%
Sample Household Members	34
Estimated Household Members	56.7
Estimated Native Population	67.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	55.6%	100.0%
Hunted	0.0%	44.4%
Harvested	0.0%	33.3%
Received	55.6%	77.8%
Gave Away	22.2%	55.6%

*Estimated Community Harvest
and Take (Expanded):*

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	15.0
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	15.0
Number Harvested Per Capita	0.00	0.26

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)	--	--	--	--	--	--	--	--	--	--	--	--		--
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Cum. Take (%)	--	--	--	--	--	--	--	--	--	--	--	--		--

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	1	0	0	1	0	0	0	0	1	0	2	4	9
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	1	0	0	1	0	0	0	0	1	0	2	4	9
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.7	0.0	0.0	1.7	0.0	0.0	0.0	0.0	1.7	0.0	3.3	6.7	15.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	1.7	0.0	1.7	1.7	0.0	0.0	0.0	0.0	1.7	0.0	3.3	6.7	15.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	6.0		15.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	6.0		15.0
Total Take (%)	0.0%	20.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	40.0%		100.0%
Cum. Take	0.0	3.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	9.0	9.0	15.0		15.0
Cum. Take (%)	0.0%	20.0%	20.0%	20.0%	40.0%	40.0%	40.0%	40.0%	40.0%	60.0%	60.0%	100.0%		100.0%

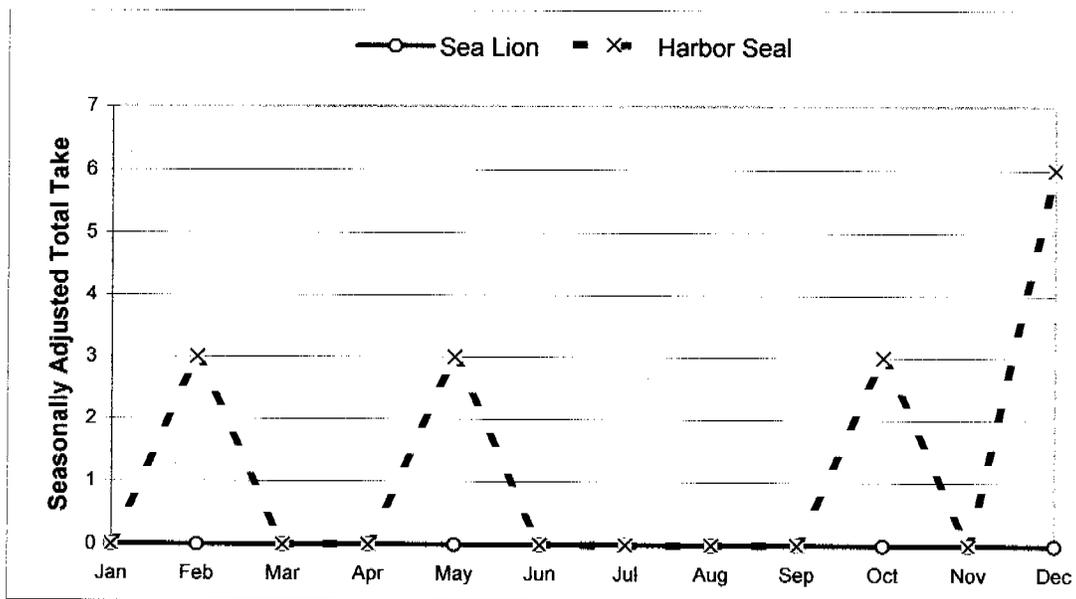
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chenega Bay IRA Council, 2000.

Table 17. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Chenega Bay, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	5	55.6%	8.3	55.6%
Adult Female	0	—	0.0	—	3	33.3%	5.0	33.3%
Adult Unknown Sex	0	—	0.0	—	1	11.1%	1.7	11.1%
Juvenile Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Total	0	—	0.0	—	9	100.0%	15.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	6.9	1.2	8.1	1992	42.6	2.3	44.9
1993	11.1	6.6	17.7	1993	60.8	2.2	63.0
1994	6.6	0.0	6.6	1994	42.0	3.9	45.9
1995	6.6	0.0	6.6	1995	44.4	1.6	46.0
1996	2.0	0.0	2.0	1996	16.0	3.0	19.0
1997	0.0	0.0	0.0	1997	25.7	0.0	25.7
1998	0.0	0.0	0.0	1998	15.6	0.0	15.6
2000	0.0	0.0	0.0	2000	15.0	0.0	15.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chenega Bay IRA Council, 2000.

Table 18. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Cordova, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>TWO-STRATA</i>				
	Total Native Households	14	168	182
	Surveyed Households	14	30	44
	Sampling Fraction	100.0%	17.9%	24.2%
	Sample Household Members	32	61	93
	Estimated Household Members	32.0	341.6	373.6
	Estimated Native Population	---	---	368

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>	
	<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Sea Lion</u>	<u>Harbor Seal</u>
Used	0.0%	45.5%	Total Number Harvested	0.0 87.8
Hunted	0.0%	8.0%	Total Number Struck and Lost	0.0 14.0
Harvested	0.0%	7.5%	Total Number Taken	0.0 101.8
Received	0.0%	43.3%		
Gave Away	0.0%	22.9%	Number Harvested Per Capita	0.00 0.24

<i>SEA LION HARVEST BY MONTH</i>													<u>Unknown Month</u>	<u>Total</u>
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>		
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

<i>HARBOR SEAL HARVEST BY MONTH</i>													<u>Unknown Month</u>	<u>Total</u>
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>		
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>														
Harvest	6	3	1	2	1	4	7	7	2	6	24	11	0	74
Struck & Lost	0	0	0	1	1	2	3	2	1	1	2	1	0	14
Total Take	6	3	1	3	2	6	10	9	3	7	26	12	0	88
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	6.0	3.0	1.0	2.0	1.0	4.0	7.0	7.0	2.0	6.0	37.8	11.0	0.0	87.8
Struck & Lost	0.0	0.0	0.0	1.0	1.0	2.0	3.0	2.0	1.0	1.0	2.0	1.0	0.0	14.0
Total Take	6.0	3.0	1.0	3.0	2.0	6.0	10.0	9.0	3.0	7.0	39.8	12.0	0.0	101.8
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	6.0	3.0	1.0	2.0	1.0	4.0	7.0	7.0	2.0	6.0	37.8	11.0	0.0	87.8
Struck & Lost	0.0	0.0	0.0	1.0	1.0	2.0	3.0	2.0	1.0	1.0	2.0	1.0	0.0	14.0
Total Take	6.0	3.0	1.0	3.0	2.0	6.0	10.0	9.0	3.0	7.0	39.8	12.0	0.0	101.8
Total Take (%)	5.9%	2.9%	1.0%	2.9%	2.0%	5.9%	9.8%	8.8%	2.9%	6.9%	39.1%	11.8%	0.0%	100.0%
Cum. Take	6.0	9.0	10.0	13.0	15.0	21.0	31.0	40.0	43.0	50.0	89.8	101.8	0.0	101.8
Cum. Take (%)	5.9%	8.8%	9.8%	12.8%	14.7%	20.6%	30.5%	39.3%	42.2%	49.1%	88.2%	100.0%	0.0%	100.0%

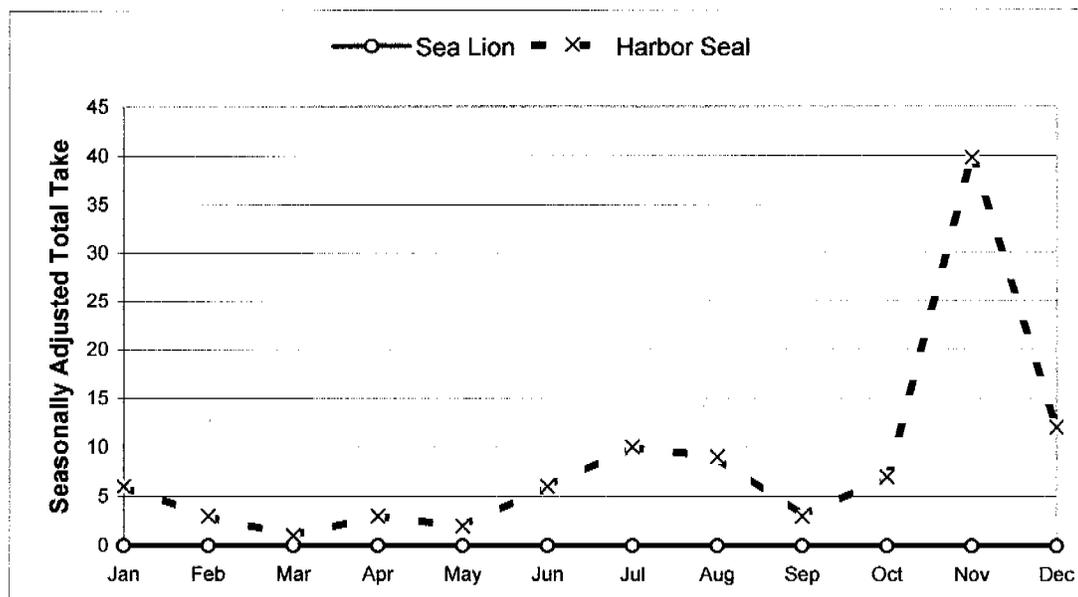
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Traditional Village of Eyak, 2000.

Table 18. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Cordova, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	38	51.4%	42.6	48.5%
Adult Female	0	--	0.0	--	17	23.0%	17.0	19.4%
Adult Unknown Sex	0	--	0.0	--	2	2.7%	11.2	12.8%
Juvenile Male	0	--	0.0	--	8	10.8%	8.0	9.1%
Juvenile Female	0	--	0.0	--	7	9.5%	7.0	8.0%
Juvenile Unknown Sex	0	--	0.0	--	2	2.7%	2.0	2.3%
Pup Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Male Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Female Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Total	0	--	0.0	--	74	100.0%	87.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	103.8	8.8	112.5
1993	1.5	0.0	1.5	1993	147.4	5.5	152.9
1994	0.0	0.0	0.0	1994	135.8	9.1	144.9
1995	0.0	1.0	1.0	1995	83.4	2.0	85.4
1996	0.0	0.0	0.0	1996	122.2	8.6	130.8
1997	0.0	0.0	0.0	1997	120.8	0.0	120.8
1998	0.0	0.0	0.0	1998	79.1	9.3	88.3
2000	0.0	0.0	0.0	2000	87.8	14.0	101.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Traditional Village of Eyak, 2000.

Table 19. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Nanwalek, 2000

SAMPLING DESIGN:

CENSUS	Total Native Households	40
	Surveyed Households	31
	Sampling Fraction	77.5%
	Sample Household Members	133
	Estimated Household Members	171.6
	Estimated Native Population	165

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	51.6%	96.8%
Hunted	9.7%	25.8%
Harvested	9.7%	25.8%
Received	51.6%	93.5%
Gave Away	6.5%	29.0%

Estimated Community Harvest and Take (Expanded):

	Sea Lion	Harbor Seal
Total Number Harvested	6.5	52.9
Total Number Struck and Lost	0.0	3.9
Total Number Taken	6.5	56.8
Number Harvested Per Capita	0.04	0.31

SEA LION HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	3	2	0	5
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	3	2	0	5
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	2.6	0.0	6.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	2.6	0.0	6.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	2.6		6.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	2.6		6.5
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%	40.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	6.5		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	4	1	9	8	9	8	1	1	0	0	41
Struck & Lost	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Total Take	0	0	0	4	1	12	8	9	8	1	1	0	0	44
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	5.2	1.3	11.6	10.3	11.6	10.3	1.3	1.3	0.0	0.0	52.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
Total Take	0.0	0.0	0.0	1.3	1.3	15.5	10.3	11.6	10.3	1.3	1.3	0.0	0.0	56.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	5.2	1.3	11.6	10.3	11.6	10.3	1.3	1.3	0.0		52.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0		3.9
Total Take	0.0	0.0	0.0	5.2	1.3	15.5	10.3	11.6	10.3	1.3	1.3	0.0		56.8
Total Take (%)	0.0%	0.0%	0.0%	9.1%	2.3%	27.3%	18.2%	20.5%	18.2%	2.3%	2.3%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	5.2	6.5	21.9	32.3	43.9	54.2	55.5	56.8	56.8		
Cum. Take (%)	0.0%	0.0%	0.0%	9.1%	11.4%	38.6%	56.8%	77.3%	95.5%	97.7%	100.0%	100.0%		

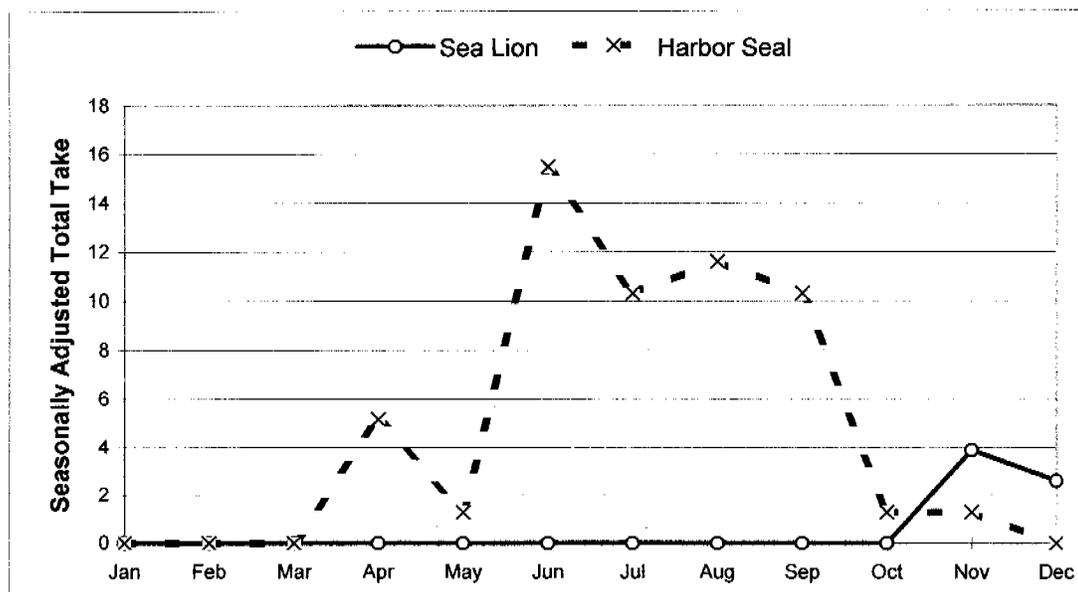
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Nanwalek Traditional Council and English Bay Corporation, 2000.

Table 19. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Nanwalek, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	1	2.4%	1.3	2.4%
Adult Female	1	20.0%	1.3	20.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	1	20.0%	1.3	20.0%	5	12.2%	6.5	12.2%
Juvenile Male	0	0.0%	0.0	0.0%	4	9.8%	5.2	9.8%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	3	60.0%	3.9	60.0%	25	61.0%	32.3	61.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	3	7.3%	3.9	7.3%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	3	7.3%	3.9	7.3%
Total	5	100.0%	6.5	100.0%	41	100.0%	52.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	6.3	0.0	6.3	1992	27.9	0.0	27.9
1993	8.5	1.1	9.5	1993	33.9	3.2	37.1
1994	1.2	2.3	3.5	1994	29.0	4.6	33.7
1995	9.2	0.0	9.2	1995	23.6	0.0	23.6
1996	4.3	1.1	5.3	1996	22.4	0.0	22.4
1997	0.0	0.0	0.0	1997	20.2	0.0	20.2
1998	2.1	0.0	2.1	1998	30.9	1.0	31.9
2000	6.5	0.0	6.5	2000	52.9	3.9	56.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Nanwalek Traditional Council and English Bay Corporation, 2000.

Table 20. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Port Graham, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	67
Surveyed Households	40
Sampling Fraction	59.7%
Sample Household Members	103
Estimated Household Members	172.5
Estimated Native Population	151

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	45.0%	92.5%
Hunted	5.0%	17.5%
Harvested	2.5%	10.0%
Received	42.5%	90.0%
Gave Away	7.5%	30.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	1.7	40.2
Total Number Struck and Lost	3.4	1.7
Total Number Taken	5.0	41.9
Number Harvested Per Capita	0.01	0.23

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Struck & Lost	0	0	0	1	0	0	0	0	0	0	1	0	0	2
Total Take	0	0	0	1	0	1	0	0	0	0	1	0	0	3
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Struck & Lost	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	3.4
Total Take	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	1.7	0.0	0.0	5.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Struck & Lost	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	3.4
Total Take	0.0	0.0	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	1.7	0.0	0.0	5.0
Total Take (%)	0.0%	0.0%	0.0%	33.3%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	1.7	1.7	3.4	3.4	3.4	3.4	3.4	5.0	5.0	5.0	5.0
Cum. Take (%)	0.0%	0.0%	0.0%	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	66.7%	100.0%	100.0%	100.0%	100.0%

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	1	0	0	0	2	9	8	3	0	0	1	0	24
Struck & Lost	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total Take	0	1	0	0	0	2	9	9	3	0	0	1	0	25
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.7	0.0	0.0	0.0	3.4	15.1	13.4	5.0	0.0	0.0	1.7	0.0	40.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	1.7
Total Take	0.0	1.7	0.0	0.0	0.0	3.4	15.1	15.1	5.0	0.0	0.0	1.7	0.0	41.9
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.7	0.0	0.0	0.0	3.4	15.1	13.4	5.0	0.0	0.0	1.7	0.0	40.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	1.7
Total Take	0.0	1.7	0.0	0.0	0.0	3.4	15.1	15.1	5.0	0.0	0.0	1.7	0.0	41.9
Total Take (%)	0.0%	4.0%	0.0%	0.0%	0.0%	8.0%	36.0%	36.0%	12.0%	0.0%	0.0%	4.0%	0.0%	100.0%
Cum. Take	0.0	1.7	1.7	1.7	1.7	5.0	20.1	35.2	40.2	40.2	40.2	41.9	41.9	41.9
Cum. Take (%)	0.0%	4.0%	4.0%	4.0%	4.0%	12.0%	48.0%	84.0%	96.0%	96.0%	96.0%	100.0%	100.0%	100.0%

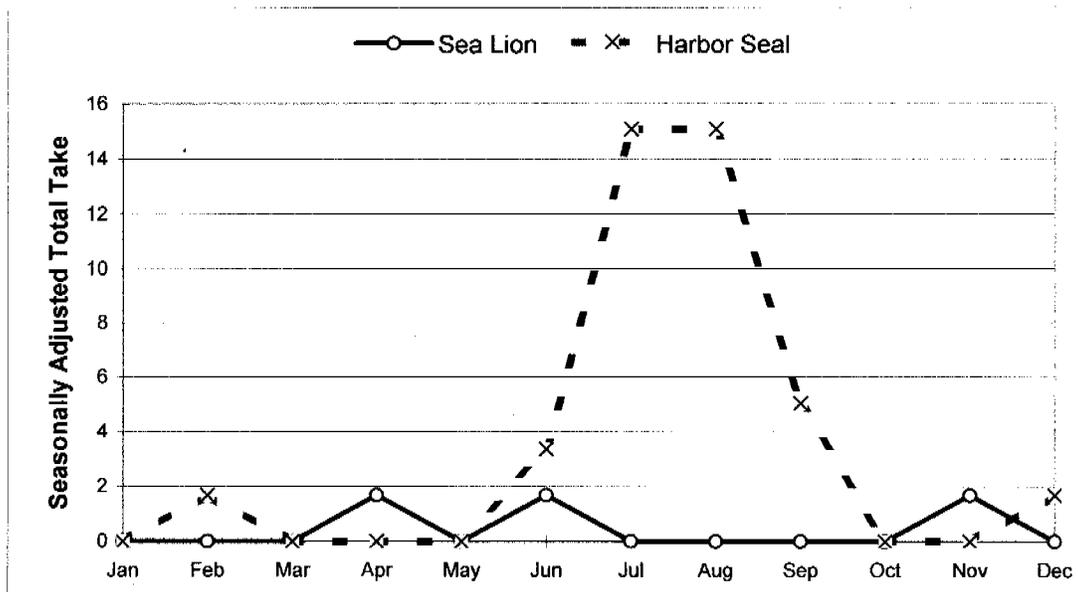
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Port Graham Village Council and Port Graham Corporation, 2000.

Table 20. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Port Graham, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	13	54.2%	21.8	54.2%
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	2	8.3%	3.4	8.3%
Juvenile Male	0	0.0%	0.0	0.0%	7	29.2%	11.7	29.2%
Juvenile Female	1	100.0%	1.7	100.0%	2	8.3%	3.4	8.3%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	1	100.0%	1.7	100.0%	24	100.0%	40.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	3.5	1.2	4.7	1992	36.2	4.7	40.8
1993	1.1	0.0	1.1	1993	30.6	3.2	33.7
1994	0.0	0.0	0.0	1994	15.5	5.2	20.7
1995	10.0	2.0	12.0	1995	23.0	0.0	23.0
1996	1.1	0.0	1.1	1996	15.5	2.2	17.7
1997	0.0	0.0	0.0	1997	15.8	3.2	19.0
1998	1.2	0.0	1.2	1998	52.3	3.6	55.9
2000	1.7	3.4	5.0	2000	40.2	1.7	41.9

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Port Graham Village Council and Port Graham Corporation, 2000.

Table 21. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Seldovia, 2000

SAMPLING DESIGN:		Active	Other	Total
TWO-STRATA				
	Total Native Households	5	13	18
	Surveyed Households	5	9	14
	Sampling Fraction	100%	69.2%	77.8%
	Sample Household Members	12	23	35
	Estimated Household Members	12.0	33.2	45.2
	Estimated Native Population	---	---	66

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):	
	Sea Lion	Harbor Seal	Sea Lion	Harbor Seal
Used	21.6%	100.0%	Total Number Harvested	0.0 2.0
Hunted	0.0%	5.6%	Total Number Struck and Lost	0.0 0.0
Harvested	0.0%	5.6%	Total Number Taken	0.0 2.0
Received	21.6%	100.0%		
Gave Away	0.0%	24.7%	Number Harvested Per Capita	0.00 0.04

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	1	0	0	0	1	0	0	0	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	1	0	0	0	1	0	0	0	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	2.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	2.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	2.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	2.0
Total Take (%)	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Cum. Take (%)	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

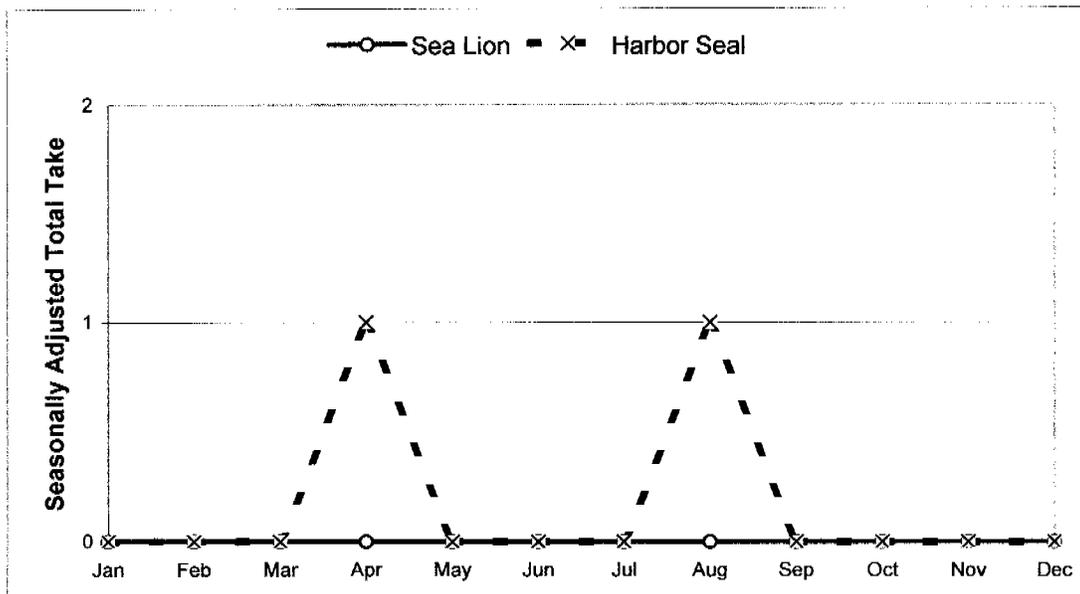
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Seldovia Native Association, 2000.

Table 21. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Seldovia, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	2	100.0%	2.0	100.0%
Adult Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Total	0	—	0.0	—	2	100.0%	2.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	12.4	0.0	12.4
1993	0.0	0.0	0.0	1993	7.9	4.9	12.8
1994	0.0	0.0	0.0	1994	8.0	0.0	8.0
1995	0.0	0.0	0.0	1995	4.0	0.0	4.0
1996	0.0	0.0	0.0	1996	3.0	0.0	3.0
1997	1.7	0.0	1.7	1997	2.8	2.8	5.5
1998	0.0	0.0	0.0	1998	3.0	0.0	3.0
2000	0.0	0.0	0.0	2000	2.0	0.0	2.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Seldovia Native Association, 2000.

Table 22. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Seward, 2000

SAMPLING DESIGN:		Active	Other	Total
TWO-STRATA				
	Total Native Households	7	25	32
	Surveyed Households	7	25	32
	Sampling Fraction	100%	100.0%	100.0%
	Sample Household Members	25	80	105
	Estimated Household Members	25.0	80.0	105.0
	Estimated Native Population	---	---	592

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	0.0%	12.5%	Total Number Harvested	0.0	4.0
Hunted	0.0%	6.3%	Total Number Struck and Lost	0.0	0.0
Harvested	0.0%	6.3%	Total Number Taken	0.0	4.0
Received	0.0%	6.3%			
Gave Away	0.0%	3.1%	Number Harvested Per Capita	0.00	0.05

SEA LION HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	2	0	0	0	0	2	0	0	0	0	0	0	4
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	2	0	0	0	0	2	0	0	0	0	0	0	4
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Total Take (%)	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Cum. Take (%)	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

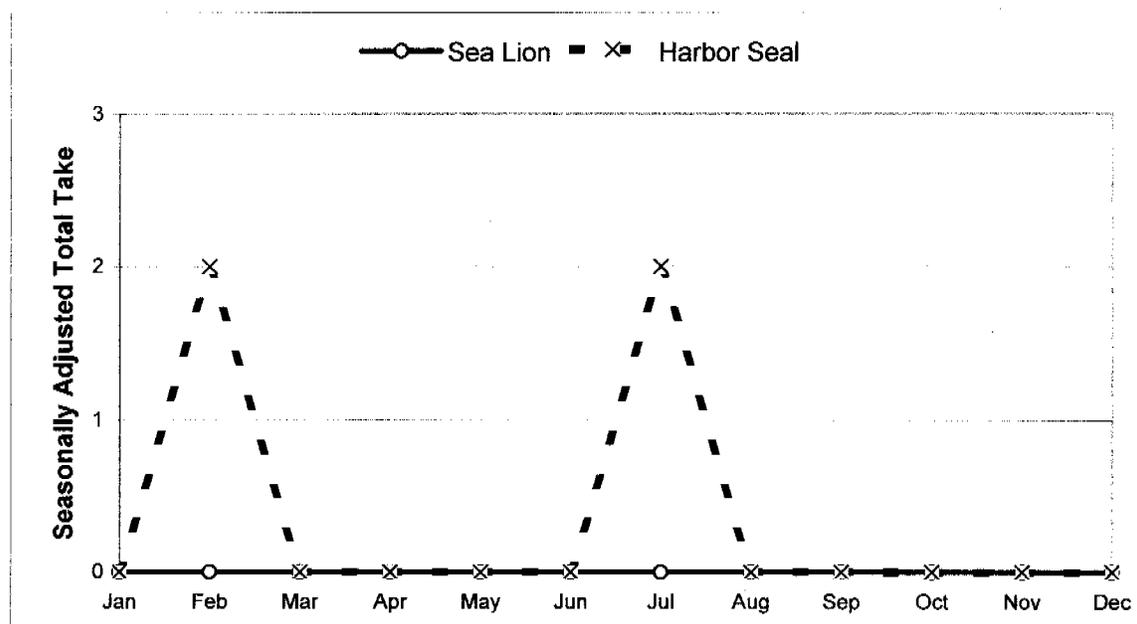
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Qutekcaq Native Tribe, 2000.

Table 22. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Seward, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	1	25.0%	1.0	25.0%
Adult Female	0	---	0.0	---	1	25.0%	1.0	25.0%
Adult Unknown Sex	0	---	0.0	---	1	25.0%	1.0	25.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	1	25.0%	1.0	25.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	4	100.0%	4.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	2.0	0.0	2.0
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0
1994	0.0	0.0	0.0	1994	5.0	0.0	5.0
1995	0.0	0.0	0.0	1995	10.9	5.5	16.4
1996	0.0	0.0	0.0	1996	5.6	0.0	5.6
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	4.0	0.0	4.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Qutekcaq Native Tribe, 2000.

Table 23. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Tatitlek, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	27
Surveyed Households	14
Sampling Fraction	51.9%
Sample Household Members	47
Estimated Household Members	90.6
Estimated Native Population	91.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	42.9%	92.9%
Hunted	7.1%	28.6%
Harvested	7.1%	28.6%
Received	42.9%	85.7%
Gave Away	21.4%	42.9%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	1.9	46.3
Total Number Struck and Lost	0.0	1.9
Total Number Taken	1.9	48.2
Number Harvested Per Capita	0.02	0.51

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	1	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		1.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		1.9
Total Take (%)	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%		100.0%
Cum. Take	0.2	0.3	0.5	0.6	0.8	1.0	1.1	1.3	1.4	1.6	1.8	1.9		
Cum. Take (%)	8.3%	16.7%	25.0%	33.3%	41.7%	50.0%	58.3%	66.7%	75.0%	83.3%	91.7%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	5	5	0	0	0	0	0	0	0	0	0	14	24
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total Take	0	5	5	0	0	0	0	0	0	0	0	0	15	25
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	9.6	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	46.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
Total Take	0.0	9.6	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.9	48.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	23.1	23.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		46.3
Struck & Lost	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.9
Total Take	0.0	24.1	24.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		48.2
Total Take (%)	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	24.1	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2		
Cum. Take (%)	0.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

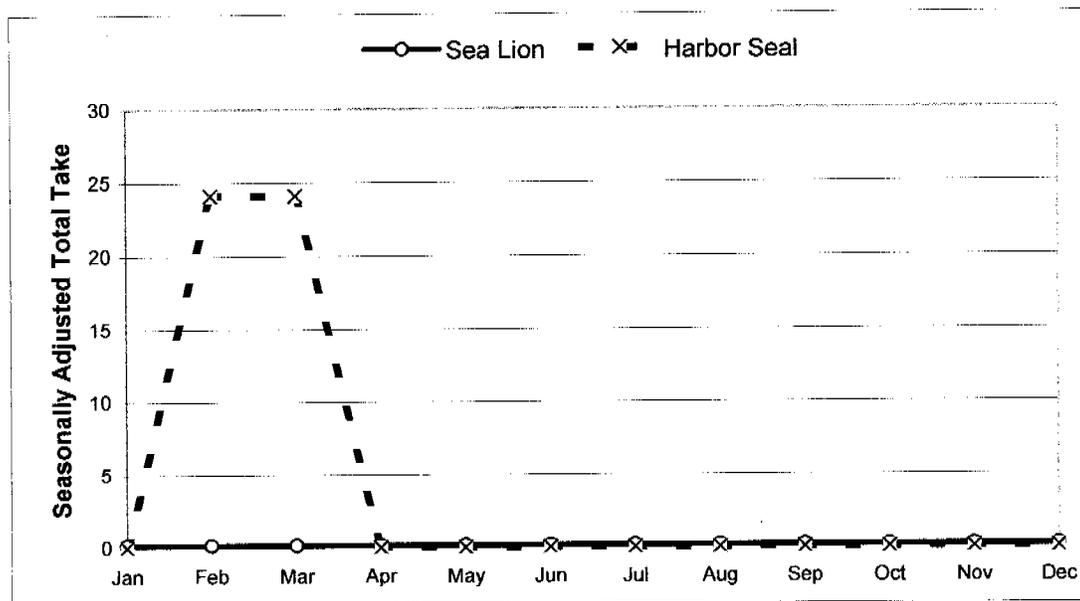
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Tatitlek IRA Council, 2000.

Table 23. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Tatitlek, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	1	4.2%	1.9	4.2%
Adult Female	1	100.0%	1.9	100.0%	1	4.2%	1.9	4.2%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	1	4.2%	1.9	4.2%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	4	16.7%	7.7	16.7%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	3	12.5%	5.8	12.5%
Male Unknown Age	0	0.0%	0.0	0.0%	4	16.7%	7.7	16.7%
Female Unknown Age	0	0.0%	0.0	0.0%	5	20.8%	9.6	20.8%
Unknown Sex and Age	0	0.0%	0.0	0.0%	5	20.8%	9.6	20.8%
Total	1	100.0%	1.9	100.0%	24	100.0%	46.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	8.3	4.2	12.5	1992	152.9	17.7	170.6
1993	4.1	1.0	5.2	1993	110.8	15.5	126.4
1994	8.8	7.4	16.2	1994	145.9	30.9	176.8
1995	2.6	0.0	2.6	1995	46.1	2.6	48.7
1996	5.0	0.0	5.0	1996	90.8	3.8	94.6
1997	2.7	1.4	4.1	1997	97.2	6.8	104.0
1998	15.1	6.8	21.9	1998	171.1	19.2	190.2
2000	1.9	0.0	1.9	2000	46.3	1.9	48.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Tatitlek IRA Council, 2000.

Table 24. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Valdez, 2000

SAMPLING DESIGN:

CHAIN REFERRAL	Total Referred Households	5
	Surveyed Households	3
	Sampling Fraction	60.0%
	Sample Household Members	11
	Estimated Household Members	18.3
	Estimated Native Population	371.6

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	66.7%	100.0%	Total Number Harvested	1.7	41.7
Hunted	33.3%	100.0%	Total Number Struck and Lost	1.7	8.3
Harvested	33.3%	100.0%	Total Number Taken	3.3	50.0
Received	66.7%	66.7%			
Gave Away	66.7%	100.0%	Number Harvested Per Capita	0.00	0.11

SEA LION HARVEST BY MONTH													Unknown Month	Total	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)															
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Struck & Lost	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Take	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7
Struck & Lost	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Total Take	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	3.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7
Struck & Lost	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Total Take	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	3.3
Total Take (%)	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	100.0%
Cum. Take	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.3	3.3	
Cum. Take (%)	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	3	0	4	3	2	2	0	1	0	10	0	25
Struck & Lost	0	0	3	0	0	1	0	1	0	0	0	0	0	5
Total Take	0	0	6	0	4	4	2	3	0	1	0	10	0	30
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	5.0	0.0	6.7	5.0	3.3	3.3	0.0	1.7	0.0	16.7	0.0	41.7
Struck & Lost	0.0	0.0	5.0	0.0	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	8.3
Total Take	0.0	0.0	10.0	6.7	6.7	6.7	3.3	5.0	0.0	1.7	0.0	16.7	0.0	50.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	5.0	0.0	6.7	5.0	3.3	3.3	0.0	1.7	0.0	16.7	0.0	41.7
Struck & Lost	0.0	0.0	5.0	0.0	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	8.3
Total Take	0.0	0.0	10.0	0.0	6.7	6.7	3.3	5.0	0.0	1.7	0.0	16.7	0.0	50.0
Total Take (%)	0.0%	0.0%	20.0%	0.0%	13.3%	13.3%	6.7%	10.0%	0.0%	3.3%	0.0%	33.3%	0.0%	100.0%
Cum. Take	0.0	0.0	10.0	10.0	16.7	23.3	26.7	31.7	31.7	33.3	33.3	50.0	50.0	
Cum. Take (%)	0.0%	0.0%	20.0%	20.0%	33.3%	46.7%	53.3%	63.3%	63.3%	66.7%	66.7%	100.0%	100.0%	

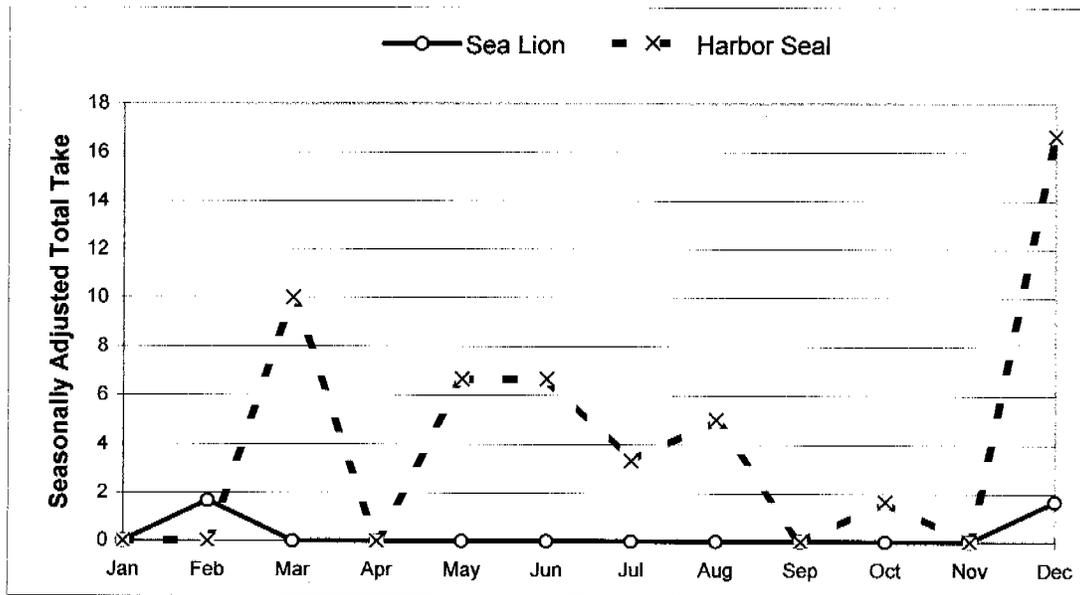
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Valdez Native Association. (Numbers based on 1998 survey estimates).

Table 24. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Valdez, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	100.0%	1.7	100.0%	14	56.0%	23.3	56.0%
Adult Female	0	0.0%	0.0	0.0%	2	8.0%	3.3	8.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	3	12.0%	5.0	12.0%
Juvenile Male	0	0.0%	0.0	0.0%	1	4.0%	1.7	4.0%
Juvenile Female	0	0.0%	0.0	0.0%	3	12.0%	5.0	12.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	1	4.0%	1.7	4.0%
Pup Female	0	0.0%	0.0	0.0%	1	4.0%	1.7	4.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	1	100.0%	1.7	100.0%	25	100.0%	41.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	0.0	0.0	0.0
1993	0.0	0.0	0.0	1993	21.0	4.0	25.0
1994	0.0	0.0	0.0	1994	30.0	3.0	33.0
1995	0.0	0.0	0.0	1995	16.8	0.0	16.8
1996	0.0	0.0	0.0	1996	13.5	4.5	18.0
1997	0.0	0.0	0.0	1997	12.5	0.0	12.5
1998	1.7	1.7	3.3	1998	41.7	8.3	50.0
2000	1.7	1.7	3.3	2000	41.7	8.3	50.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Valdez Native Association. (Numbers based on 1998 survey estimates).

Table 25. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Anchorage, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	30
Surveyed Households	24
Sampling Fraction	80.0%
Sample Household Members	91
Estimated Household Members	113.8
Estimated Native Population	14569

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	0.0%	87.5%
Hunted	0.0%	66.7%
Harvested	0.0%	41.7%
Received	0.0%	58.3%
Gave Away	0.0%	70.8%

**Estimated Community Harvest
and Take (Expanded):**

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	43.8
Total Number Struck and Lost	0.0	7.5
Total Number Taken	0.0	51.3
Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	3	0	3	2	5	0	0	13	4	0	5	0	35
Struck & Lost	0	0	0	0	0	0	0	0	0	6	0	0	0	6
Total Take	0	3	0	3	2	5	0	0	13	10	0	5	0	41
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.8	0.0	3.8	2.5	6.3	0.0	0.0	16.3	5.0	0.0	6.3	0.0	43.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	7.5
Total Take	0.0	3.8	0.0	2.5	2.5	6.3	0.0	0.0	16.3	12.5	0.0	6.3	0.0	51.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.8	0.0	3.8	2.5	6.3	0.0	0.0	16.3	5.0	0.0	6.3	0.0	43.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	7.5
Total Take	0.0	3.8	0.0	3.8	2.5	6.3	0.0	0.0	16.3	12.5	0.0	6.3	0.0	51.3
Total Take (%)	0.0%	7.3%	0.0%	7.3%	4.9%	12.2%	0.0%	0.0%	31.7%	24.4%	0.0%	12.2%	0.0%	100.0%
Cum. Take	0.0	3.8	3.8	7.5	10.0	16.3	16.3	16.3	32.5	45.0	45.0	51.3	51.3	51.3
Cum. Take (%)	0.0%	7.3%	7.3%	14.6%	19.5%	31.7%	31.7%	31.7%	63.4%	87.8%	87.8%	100.0%	100.0%	100.0%

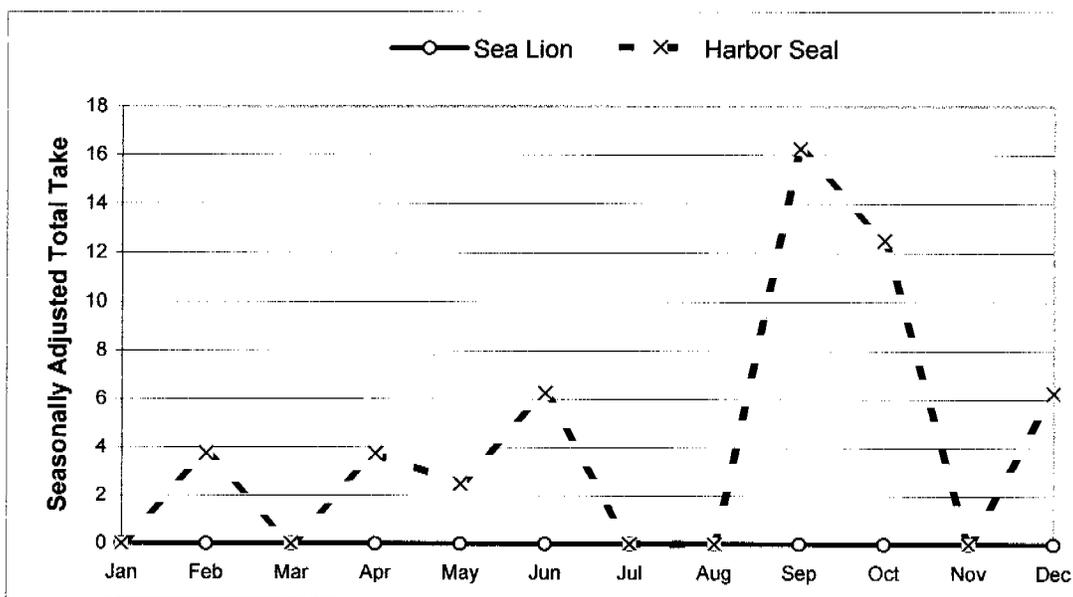
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Cook Inlet Tribal Council and Alaska Federation of Natives. (Numbers based on 1998 survey estimates).

Table 25. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Anchorage, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	19	54.3%	23.8	54.3%
Adult Female	0	—	0.0	—	1	2.9%	1.3	2.9%
Adult Unknown Sex	0	—	0.0	—	11	31.4%	13.8	31.4%
Juvenile Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	1	2.9%	1.3	2.9%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	3	8.6%	3.8	8.6%
Total	0	—	0.0	—	35	100.0%	43.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	5.7	3.8	9.5	1992	17.1	0.0	17.1
1993	7.8	3.3	11.1	1993	24.4	5.6	30.0
1994	1.4	0.0	1.4	1994	4.2	0.0	4.2
1995	0.0	0.0	0.0	1995	3.7	0.0	3.7
1996	1.0	0.0	1.0	1996	28.9	6.2	35.1
1997	0.0	0.0	0.0	1997	23.6	1.2	24.8
1998	0.0	0.0	0.0	1998	43.8	7.5	51.3
2000	0.0	0.0	0.0	2000	43.8	7.5	51.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Cook Inlet Tribal Council and Alaska Federation of Natives. (Numbers based on 1998 survey estimates).

Table 26. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Homer, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	36
Surveyed Households	30
Sampling Fraction	83.3%
Sample Household Members	86
Estimated Household Members	103.2
Estimated Native Population	189.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	0.0%	73.3%
Hunted	0.0%	30.0%
Harvested	0.0%	16.7%
Received	0.0%	70.0%
Gave Away	0.0%	43.3%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	22.8
Total Number Struck and Lost	0.0	6.0
Total Number Taken	0.0	28.8
Number Harvested Per Capita	0.00	0.12

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	3	3	2	4	4	0	0	0	1	2	0	19
Struck & Lost	0	0	0	0	0	2	2	0	0	0	0	0	1	5
Total Take	0	0	3	3	2	6	6	0	0	0	1	2	1	24
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.6	3.6	2.4	4.8	4.8	0.0	0.0	0.0	1.2	2.4	0.0	22.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	2.4	2.4	0.0	0.0	0.0	0.0	0.0	1.2	6.0
Total Take	0.0	0.0	3.6	2.4	2.4	7.2	7.2	0.0	0.0	0.0	1.2	2.4	1.2	28.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.6	3.6	2.4	4.8	4.8	0.0	0.0	0.0	1.2	2.4	0.0	22.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Total Take	0.0	0.0	3.6	3.6	2.4	7.8	7.8	0.0	0.0	0.0	1.2	2.4	0.0	28.8
Total Take (%)	0.0%	0.0%	12.5%	12.5%	8.3%	27.1%	27.1%	0.0%	0.0%	0.0%	4.2%	8.3%	0.0%	100.0%
Cum. Take	0.0	0.0	3.6	7.2	9.6	17.4	25.2	25.2	25.2	25.2	26.4	28.8	28.8	28.8
Cum. Take (%)	0.0%	0.0%	12.5%	25.0%	33.3%	60.4%	87.5%	87.5%	87.5%	87.5%	91.7%	100.0%	100.0%	100.0%

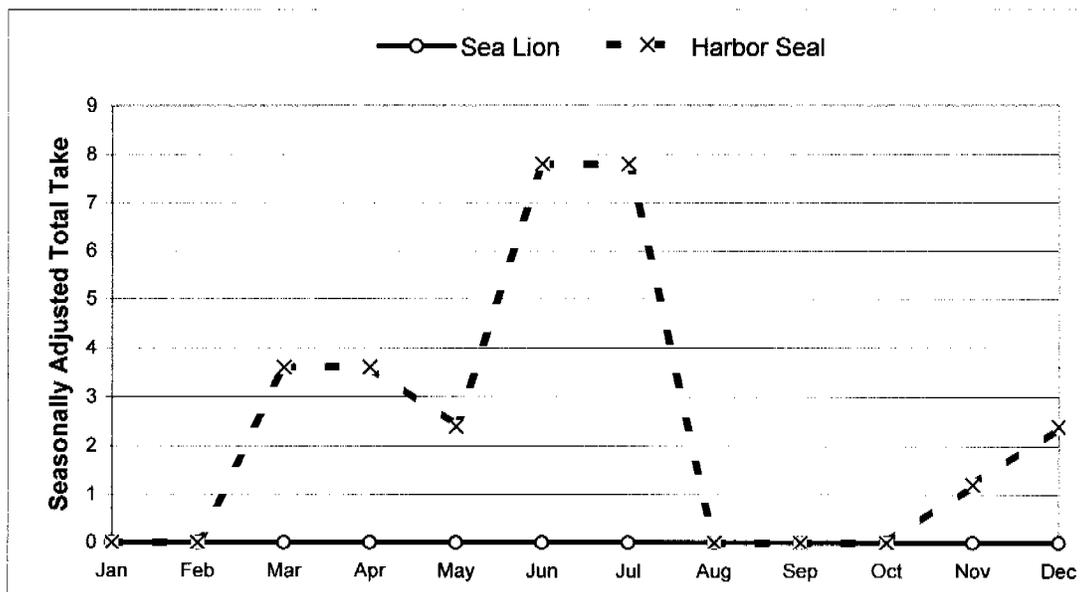
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.
(Numbers based on 1998 survey estimates).

Table 26. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Homer, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	5	26.3%	6.0	26.3%
Adult Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	—	0.0	—	1	5.3%	1.2	5.3%
Juvenile Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	13	68.4%	15.6	68.4%
Total	0	—	0.0	—	19	100.0%	22.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	—	—	—	1992	—	—	—
1993	0.0	0.0	0.0	1993	4.8	0.0	4.8
1994	0.0	0.0	0.0	1994	12.0	0.0	12.0
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0
1996	0.0	0.0	0.0	1996	10.5	1.5	12.0
1997	0.0	0.0	0.0	1997	41.1	2.6	43.7
1998	0.0	0.0	0.0	1998	22.8	6.0	28.8
2000	0.0	0.0	0.0	2000	22.8	6.0	28.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

(Numbers based on 1998 survey estimates).

Table 26B. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Kenai, 2000

SAMPLING DESIGN:

CHAIN REFERRAL	Total Referred Households	31
	Surveyed Households	27
	Sampling Fraction	87.1%
	Sample Household Members	77
	Estimated Household Members	88.4
	Estimated Native Population	1715.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	0.0%	77.8%	Total Number Harvested	0.0	12.6
Hunted	0.0%	33.3%	Total Number Struck and Lost	0.0	0.0
Harvested	0.0%	14.8%	Total Number Taken	0.0	12.6
Received	0.0%	66.7%			
Gave Away	0.0%	33.3%	Number Harvested Per Capita	0.00	0.01

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---		---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---		---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	3	0	3	1	0	0	4	0	0	0	11
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	3	0	3	1	0	0	4	0	0	0	11
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	3.4	0.0	3.4	1.1	0.0	0.0	4.6	0.0	0.0	0.0	12.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	3.4	1.1	0.0	0.0	4.6	0.0	0.0	0.0	12.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	3.4	0.0	3.4	1.1	0.0	0.0	4.6	0.0	0.0		12.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	3.4	0.0	3.4	1.1	0.0	0.0	4.6	0.0	0.0		12.6
Total Take (%)	0.0%	0.0%	0.0%	27.3%	0.0%	27.3%	9.1%	0.0%	0.0%	36.4%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	3.4	3.4	6.9	8.0	8.0	8.0	12.6	12.6	12.6		
Cum. Take (%)	0.0%	0.0%	0.0%	27.3%	27.3%	54.5%	63.6%	63.6%	63.6%	100.0%	100.0%	100.0%		

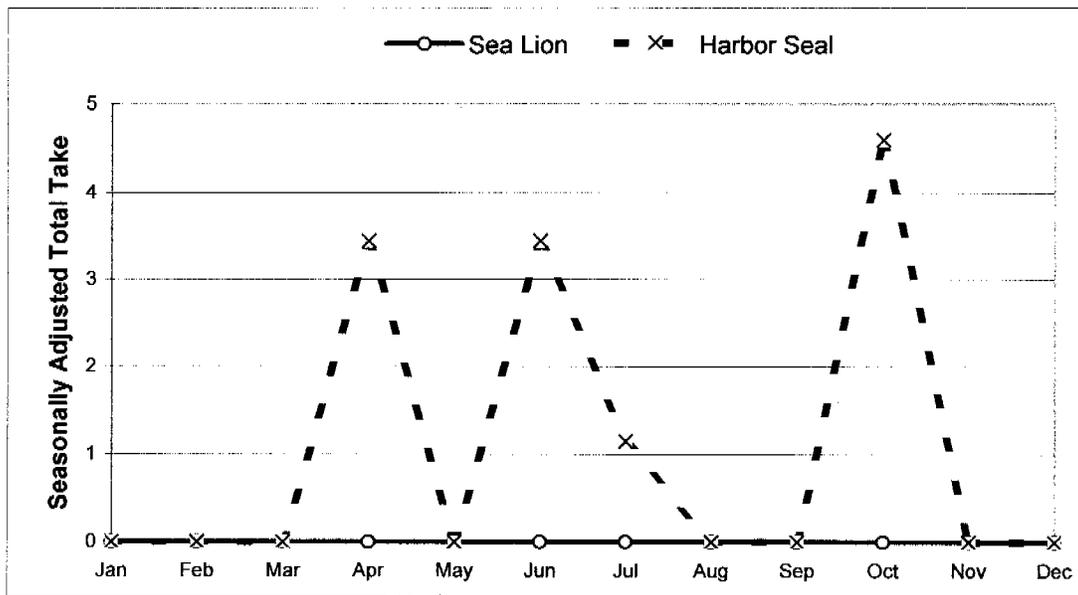
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Kenaitze Indian Tribe IRA and Cook Inlet Region, Inc. (Numbers based on 1998 survey estimates).

Table 26b. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Kenai, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	10	90.9%	11.5	90.9%
Adult Female	0	—	0.0	—	1	9.1%	1.1	9.1%
Adult Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Total	0	—	0.0	—	11	100.0%	12.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	33.3	0.0	33.3
1993	0.0	0.0	0.0	1993	20.0	0.0	20.0
1994	---	---	---	1994	---	---	---
1995	---	---	---	1995	---	---	---
1996	2.3	0.0	2.3	1996	22.9	1.1	24.0
1997	0.0	0.0	0.0	1997	35.0	5.0	40.0
1998	0.0	0.0	0.0	1998	12.6	0.0	12.6
2000	0.0	0.0	0.0	2000	12.6	0.0	12.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Kenaitze Indian Tribe IRA and Cook Inlet Region, Inc. (Numbers based on 1998 survey estimates).

Table 26c. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Tyonek, 2000

SAMPLING DESIGN:

CHAIN REFERRAL	Total Referred Households	3
	Surveyed Households	3
	Sampling Fraction	100%
	Sample Household Members	3
	Estimated Household Members	3.0
	Estimated Native Population	173.7

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	0.0%	0.0%	Total Number Harvested	0.0	0.0
Hunted	0.0%	0.0%	Total Number Struck and Lost	0.0	0.0
Harvested	0.0%	0.0%	Total Number Taken	0.0	0.0
Received	0.0%	0.0%			
Gave Away	0.0%	0.0%	Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
HARBOR SEAL HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

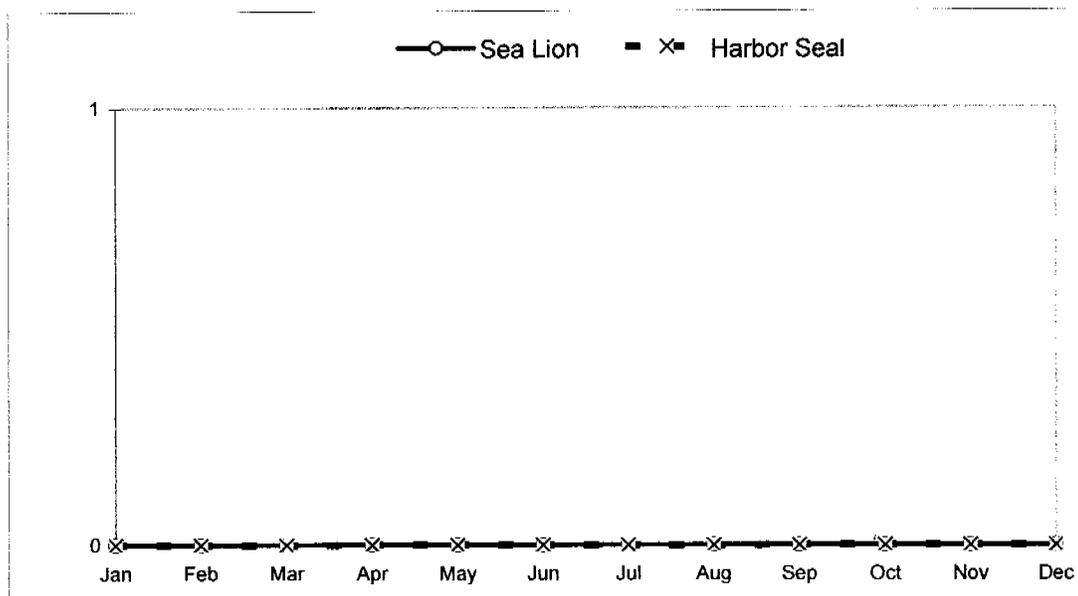
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Native Village of Tyonek. (Numbers based on 1998 survey estimates).

Table 26b. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Tyonek, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	0	—	0.0	—
Adult Female	0	—	0.0	—	0	—	0.0	—
Adult Unknown Sex	0	—	0.0	—	0	—	0.0	—
Juvenile Male	0	—	0.0	—	0	—	0.0	—
Juvenile Female	0	—	0.0	—	0	—	0.0	—
Juvenile Unknown Sex	0	—	0.0	—	0	—	0.0	—
Pup Male	0	—	0.0	—	0	—	0.0	—
Pup Female	0	—	0.0	—	0	—	0.0	—
Pup Unknown Sex	0	—	0.0	—	0	—	0.0	—
Male Unknown Age	0	—	0.0	—	0	—	0.0	—
Female Unknown Age	0	—	0.0	—	0	—	0.0	—
Unknown Sex and Age	0	—	0.0	—	0	—	0.0	—
Total	0	—	0.0	—	0	—	0.0	—

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	1.1	0.0	1.1
1993	—	—	—	1993	—	—	—
1994	—	—	—	1994	—	—	—
1995	—	—	—	1995	—	—	—
1996	0.0	0.0	0.0	1996	2.0	0.0	2.0
1997	—	—	—	1997	—	—	—
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Native Village of Tyonek. (Numbers based on 1998 survey estimates).

Table 29. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Akhiok, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	16
Surveyed Households	10
Sampling Fraction	62.5%
Sample Household Members	42
Estimated Household Members	67.2
Estimated Native Population	75.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	10.0%	100.0%
Hunted	10.0%	70.0%
Harvested	10.0%	50.0%
Received	0.0%	60.0%
Gave Away	10.0%	50.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	3.2	17.6
Total Number Struck and Lost	0.0	0.0
Total Number Taken	3.2	17.6
Number Harvested Per Capita	0.05	0.26

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	2	0	0	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	3.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	3.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	3.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	3.2
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	3.2	3.2	3.2	3.2	3.2
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	3	2	0	0	0	0	0	2	2	1	1	0	11
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	3	2	0	0	0	0	0	2	2	1	1	0	11
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	4.8	3.2	0.0	0.0	0.0	0.0	0.0	3.2	3.2	1.6	1.6	0.0	17.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	4.8	3.2	0.0	0.0	0.0	0.0	0.0	3.2	3.2	1.6	1.6	0.0	17.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	4.8	3.2	0.0	0.0	0.0	0.0	0.0	3.2	3.2	1.6	1.6	0.0	17.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	4.8	3.2	0.0	0.0	0.0	0.0	0.0	3.2	3.2	1.6	1.6	0.0	17.6
Total Take (%)	0.0%	27.3%	18.2%	0.0%	0.0%	0.0%	0.0%	0.0%	18.2%	18.2%	9.1%	9.1%	0.0%	100.0%
Cum. Take	0.0	4.8	8.0	8.0	8.0	8.0	8.0	8.0	11.2	14.4	16.0	17.6	17.6	17.6
Cum. Take (%)	0.0%	27.3%	45.5%	45.5%	45.5%	45.5%	45.5%	45.5%	63.6%	81.8%	90.9%	100.0%	100.0%	100.0%

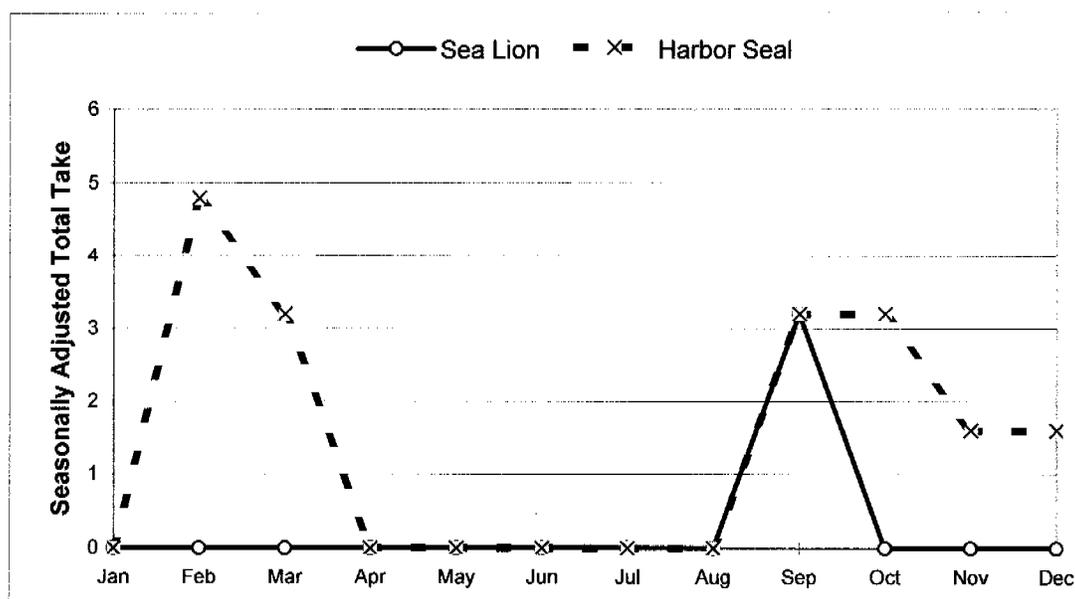
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Akhiok and Akhiok Tribal Council, 2000.

Table 29. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Akhiok, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	8	72.7%	12.8	72.7%
Adult Female	0	0.0%	0.0	0.0%	2	18.2%	3.2	18.2%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	2	100.0%	3.2	100.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	1	9.1%	1.6	9.1%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	2	100.0%	3.2	100.0%	11	100.0%	17.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	3.0	1.0	4.0	1992	20.0	3.0	23.0
1993	0.0	0.0	0.0	1993	13.3	0.0	13.3
1994	3.2	0.0	3.2	1994	14.5	0.0	14.5
1995	1.0	1.0	2.0	1995	5.0	0.0	5.0
1996	6.0	1.0	7.0	1996	12.0	1.0	13.0
1997	6.6	1.3	7.9	1997	7.9	0.0	7.9
1998	3.1	0.0	3.1	1998	7.3	0.0	7.3
2000	3.2	0.0	3.2	2000	17.6	0.0	17.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Akhiok and Akhiok Tribal Council, 2000.

Table 30. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Karluk, 2000

SAMPLING DESIGN:

CENSUS

Total Native Households	15
Surveyed Households	10
Sampling Fraction	67%
Sample Household Members	36
Estimated Household Members	54.0
Estimated Native Population	26.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	80.0%
Hunted	0.0%	50.0%
Harvested	0.0%	50.0%
Received	0.0%	70.0%
Gave Away	0.0%	50.0%

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	19.5
Total Number Struck and Lost	0.0	1.5
Total Number Taken	0.0	21.0
Number Harvested Per Capita	0.00	0.36

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	2	0	0	0	0	0	1	4	2	1	3	13
Struck & Lost	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Total Take	0	0	2	0	0	0	0	0	1	5	2	1	3	14
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	1.5	6.0	3.0	1.5	4.5	19.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.5
Total Take	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	1.5	7.5	3.0	1.5	4.5	21.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	2.0	7.8	3.9	2.0		19.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0		1.5
Total Take	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	2.0	9.3	3.9	2.0		21.0
Total Take (%)	0.0%	0.0%	18.6%	0.0%	0.0%	0.0%	0.0%	0.0%	9.3%	44.3%	18.6%	9.3%		100.0%
Cum. Take	0.0	0.0	3.9	3.9	3.9	3.9	3.9	3.9	5.9	15.2	19.1	21.0		
Cum. Take (%)	0.0%	0.0%	18.6%	18.6%	18.6%	18.6%	18.6%	18.6%	27.9%	72.1%	90.7%	100.0%		

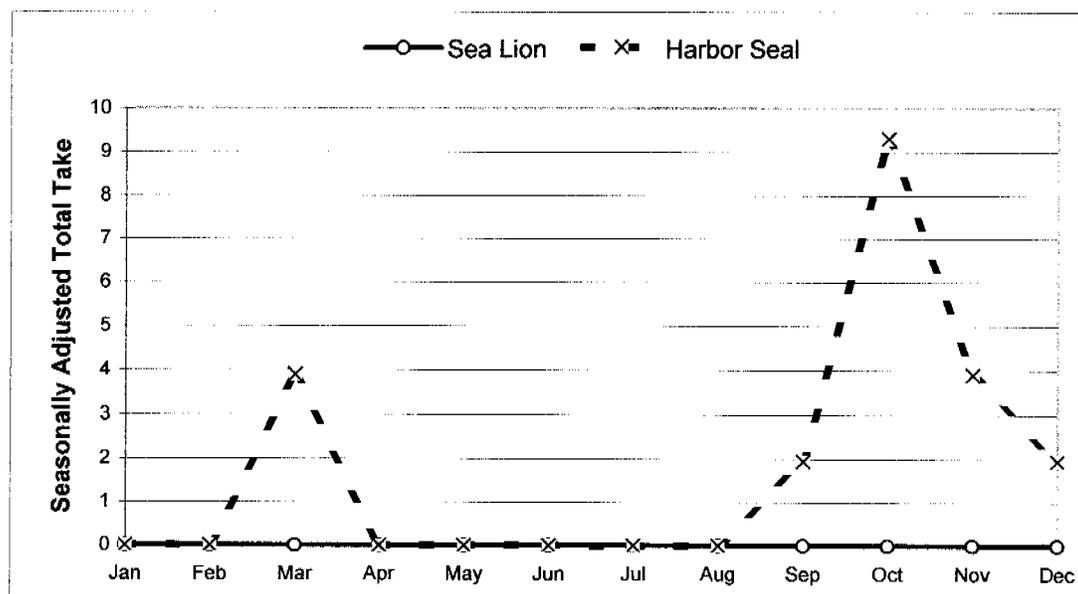
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Karluk IRA Council, 2000.

Table 30. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Karluk, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	5	38.5%	7.5	38.5%
Adult Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	—	0.0	—	1	7.7%	1.5	7.7%
Juvenile Male	0	—	0.0	—	2	15.4%	3.0	15.4%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	1	7.7%	1.5	7.7%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	4	30.8%	6.0	30.8%
Total	0	—	0.0	—	13	100.0%	19.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	16.5	1.5	18.0
1993	0.0	0.0	0.0	1993	10.0	1.3	11.3
1994	0.0	0.0	0.0	1994	7.5	0.0	7.5
1995	0.0	0.0	0.0	1995	28.1	6.8	34.9
1996	0.0	0.0	0.0	1996	15.1	0.0	15.1
1997	0.0	0.0	0.0	1997	19.0	0.0	19.0
1998	0.0	0.0	0.0	1998	11.0	0.0	11.0
2000	0.0	0.0	0.0	2000	19.5	1.5	21.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Karluk IRA Council, 2000.

Table 31. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Kodiak City, 2000

SAMPLING DESIGN:

CHAIN REFERRAL	Total Referred Households	12
	Surveyed Households	10
	Sampling Fraction	83%
	Sample Household Members	42
	Estimated Household Members	50.4
	Estimated Native Population	829.0

HARVEST AND USE INFORMATION

<i>Percentage of Sample Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	20.0%	60.0%	Total Number Harvested	2.4	21.6
Hunted	10.0%	70.0%	Total Number Struck and Lost	0.0	4.8
Harvested	10.0%	50.0%	Total Number Taken	2.4	26.4
Received	10.0%	20.0%			
Gave Away	10.0%	40.0%	Number Harvested Per Capita	0.00	0.03

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	1	0	0	0	0	1	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	2.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	2.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0		2.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0		2.4
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.4	2.4	2.4	2.4		2.4
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	2	0	1	0	0	0	2	3	3	1	1	0	5	18
Struck & Lost	0	0	1	0	0	0	0	1	1	0	1	0	0	4
Total Take	2	0	2	0	0	0	2	4	4	1	2	0	5	22
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.4	0.0	1.2	0.0	0.0	0.0	2.4	3.6	3.6	1.2	1.2	0.0	6.0	21.6
Struck & Lost	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	1.2	0.0	1.2	0.0	0.0	4.8
Total Take	2.4	0.0	2.4	0.0	0.0	0.0	2.4	4.8	4.8	1.2	2.4	0.0	6.0	26.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.3	0.0	1.7	0.0	0.0	0.0	3.3	5.0	5.0	1.7	1.7	0.0		21.6
Struck & Lost	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	1.2	0.0	1.2	0.0		4.8
Total Take	3.3	0.0	2.9	0.0	0.0	0.0	3.3	6.2	6.2	1.7	2.9	0.0		26.4
Total Take (%)	12.6%	0.0%	10.8%	0.0%	0.0%	0.0%	12.6%	23.4%	23.4%	6.3%	10.8%	0.0%		100.0%
Cum. Take	3.3	3.3	6.2	6.2	6.2	6.2	9.5	15.7	21.9	23.5	26.4	26.4		26.4
Cum. Take (%)	12.6%	12.6%	23.4%	23.4%	23.4%	23.4%	36.0%	59.4%	82.9%	89.2%	100.0%	100.0%		100.0%

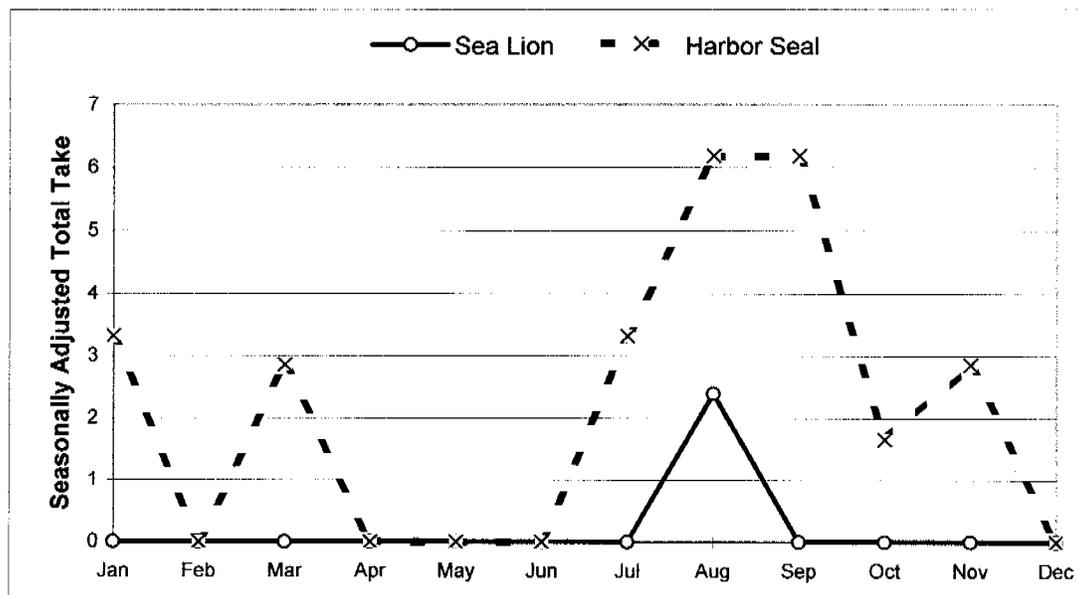
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Kodiak Tribal Council and Kodiak Area Native Association, 2000.

Table 31. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Kodiak City, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	2	100.0%	2.4	100.0%	4	22.2%	4.8	22.2%
Adult Female	0	0.0%	0.0	0.0%	3	16.7%	3.6	16.7%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	4	22.2%	4.8	22.2%
Juvenile Female	0	0.0%	0.0	0.0%	3	16.7%	3.6	16.7%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	2	11.1%	2.4	11.1%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	2	11.1%	2.4	11.1%
Total	2	100.0%	2.4	100.0%	18	100.0%	21.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	36.9	0.0	36.9
1993	0.0	12.7	12.7	1993	6.0	1.0	7.0
1994	1.1	0.0	1.1	1994	7.6	0.0	7.6
1995	2.2	0.0	2.2	1995	8.8	0.0	8.8
1996	3.0	0.0	3.0	1996	9.0	0.0	9.0
1997	3.0	0.0	3.0	1997	13.0	0.0	13.0
1998	0.0	1.0	1.0	1998	11.0	0.0	11.0
2000	2.4	0.0	2.4	2000	21.6	4.8	26.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Kodiak Tribal Council and Kodiak Area Native Association, 2000.

Table 32. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Larsen Bay, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	31
Surveyed Households	25
Sampling Fraction	80.6%
Sample Household Members	72
Estimated Household Members	89.3
Estimated Native Population	91.0

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	0.0%	48.0%	Total Number Harvested	0.0	18.6
Hunted	0.0%	24.0%	Total Number Struck and Lost	0.0	0.0
Harvested	0.0%	24.0%	Total Number Taken	0.0	18.6
Received	0.0%	28.0%			
Gave Away	0.0%	20.0%	Number Harvested Per Capita	0.00	0.21

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	2	1	0	0	0	0	0	0	3	3	3	3	0	15
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	2	1	0	0	0	0	0	0	3	3	3	3	0	15
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7	3.7	3.7	0.0	18.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7	3.7	3.7	0.0	18.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7	3.7	3.7	0.0	18.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7	3.7	3.7	0.0	18.6
Total Take (%)	13.3%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	0.0%	100.0%
Cum. Take	2.5	3.7	3.7	3.7	3.7	3.7	3.7	3.7	7.4	11.2	14.9	18.6	18.6	18.6
Cum. Take (%)	13.3%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	40.0%	60.0%	80.0%	100.0%	100.0%	100.0%

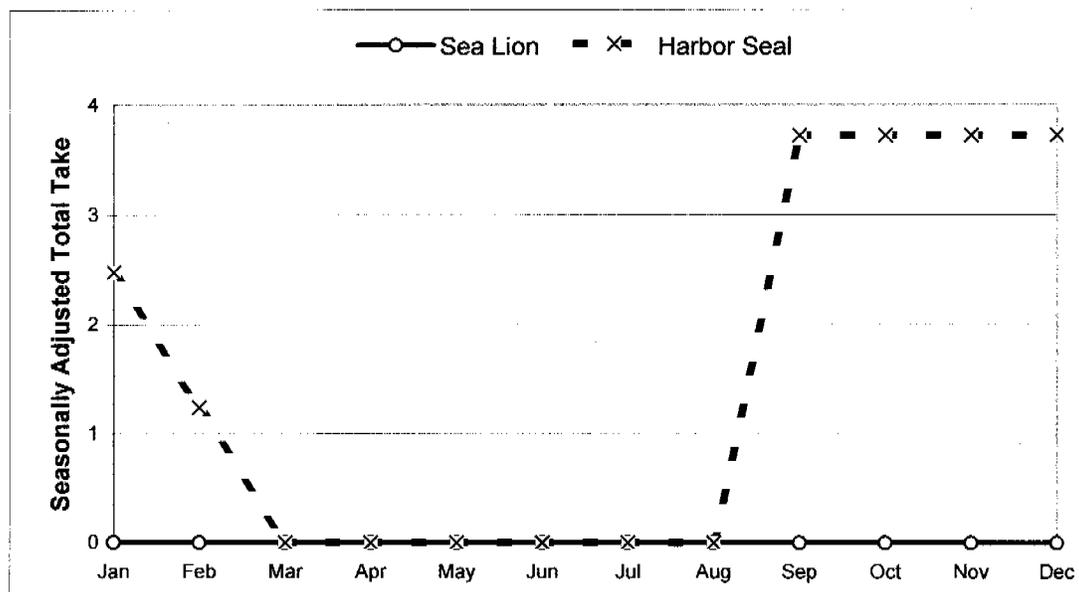
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Larsen Bay and Larsen Bay Tribal Council, 2000.

Table 32. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Larsen Bay, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	2	13.3%	2.5	13.3%
Adult Female	0	--	0.0	--	1	6.7%	1.2	6.7%
Adult Unknown Sex	0	--	0.0	--	6	40.0%	7.4	40.0%
Juvenile Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Male Unknown Age	0	--	0.0	--	1	6.7%	1.2	6.7%
Female Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	--	0.0	--	5	33.3%	6.2	33.3%
Total	0	--	0.0	--	15	100.0%	18.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	1.1	0.0	1.1	1992	6.5	0.0	6.5
1993	0.0	0.0	0.0	1993	7.7	5.5	13.2
1994	2.2	0.0	2.2	1994	13.4	2.2	15.7
1995	2.0	1.0	3.0	1995	11.0	0.0	11.0
1996	0.0	0.0	0.0	1996	15.0	0.0	15.0
1997	0.0	0.0	0.0	1997	9.8	4.2	13.9
1998	0.0	0.0	0.0	1998	1.7	0.0	1.7
2000	0.0	0.0	0.0	2000	18.6	0.0	18.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Larsen Bay and Larsen Bay Tribal Council, 2000.

Table 33. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Old Harbor, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	43
Surveyed Households	40
Sampling Fraction	93.0%
Sample Household Members	164
Estimated Household Members	176.3
Estimated Native Population	203.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	55.0%	90.0%
Hunted	32.5%	57.5%
Harvested	22.5%	42.5%
Received	45.0%	70.0%
Gave Away	30.0%	70.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	12.9	59.1
Total Number Struck and Lost	0.0	0.0
Total Number Taken	12.9	59.1
Number Harvested Per Capita	0.06	0.29

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	3	3	1	1	0	0	0	0	0	4	0	0	12
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	3	3	1	1	0	0	0	0	0	4	0	0	12
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.2	3.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	12.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	3.2	3.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	12.9
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.2	3.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	12.9
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	3.2	3.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	12.9
Total Take (%)	0.0%	25.0%	25.0%	8.3%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	100.0%
Cum. Take	0.0	3.2	6.5	7.5	8.6	8.6	8.6	8.6	8.6	8.6	12.9	12.9		
Cum. Take (%)	0.0%	25.0%	50.0%	58.3%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	5	7	4	4	4	3	4	4	3	7	5	5	0	55
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	5	7	4	4	4	3	4	4	3	7	5	5	0	55
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	5.4	7.5	4.3	4.3	4.3	3.2	4.3	4.3	3.2	7.5	5.4	5.4	0.0	59.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	5.4	7.5	4.3	4.3	4.3	3.2	4.3	4.3	3.2	7.5	5.4	5.4	0.0	59.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	5.4	7.5	4.3	4.3	4.3	3.2	4.3	4.3	3.2	7.5	5.4	5.4	0.0	59.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	5.4	7.5	4.3	4.3	4.3	3.2	4.3	4.3	3.2	7.5	5.4	5.4	0.0	59.1
Total Take (%)	9.1%	12.7%	7.3%	7.3%	7.3%	5.5%	7.3%	7.3%	5.5%	12.7%	9.1%	9.1%	0.0%	100.0%
Cum. Take	5.4	12.9	17.2	21.5	25.8	29.0	33.3	37.6	40.9	48.4	53.8	59.1		
Cum. Take (%)	9.1%	21.8%	29.1%	36.4%	43.6%	49.1%	56.4%	63.6%	69.1%	81.8%	90.9%	100.0%		

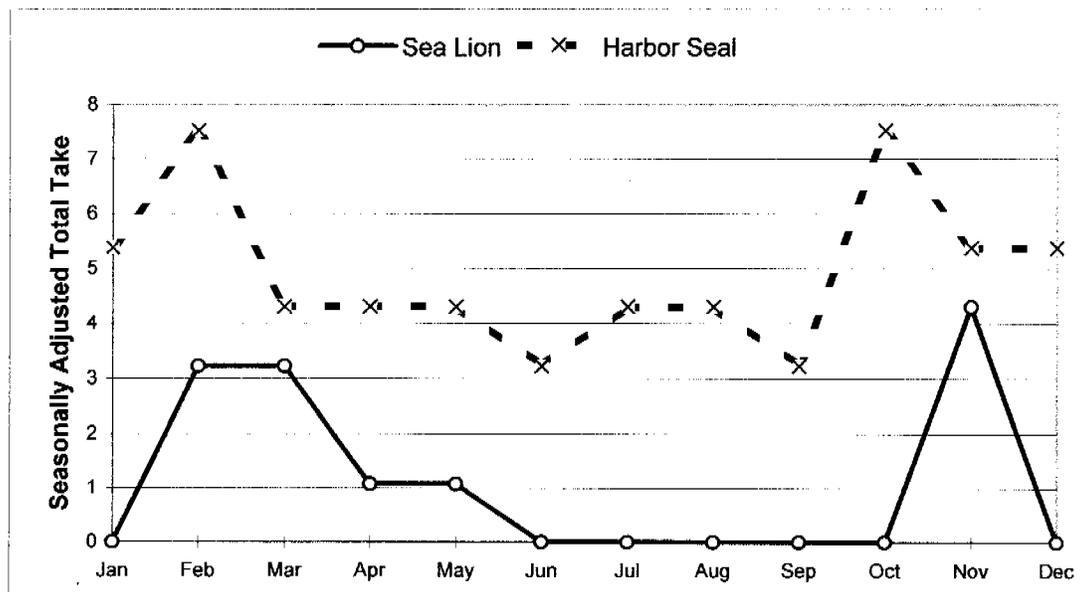
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Old Harbor and Old Harbor Tribal Council, 2000.

Table 33. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Old Harbor, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	7	58.3%	7.5	58.3%	38	69.1%	40.9	69.1%
Adult Female	3	25.0%	3.2	25.0%	11	20.0%	11.8	20.0%
Adult Unknown Sex	2	16.7%	2.2	16.7%	4	7.3%	4.3	7.3%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	2	3.6%	2.2	3.6%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	12	100.0%	12.9	100.0%	55	100.0%	59.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	32.9	13.2	46.1	1992	86.8	5.3	92.1
1993	32.1	1.0	33.2	1993	67.6	2.7	70.3
1994	46.2	1.3	47.5	1994	83.7	1.3	85.0
1995	107.1	5.7	112.9	1995	112.0	2.4	114.4
1996	44.9	5.3	50.2	1996	113.5	1.3	114.8
1997	22.7	3.6	26.3	1997	80.0	4.8	84.8
1998	10.3	2.3	12.6	1998	55.1	1.1	56.2
2000	12.9	0.0	12.9	2000	59.1	0.0	59.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Old Harbor and Old Harbor Tribal Council, 2000.

Table 34. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Ouzinkie, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	32
Surveyed Households	32
Sampling Fraction	100.0%
Sample Household Members	113
Estimated Household Members	113.0
Estimated Native Population	197.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	84.4%
Hunted	0.0%	59.4%
Harvested	0.0%	59.4%
Received	0.0%	40.6%
Gave Away	0.0%	34.4%

*Estimated Community Harvest
and Take (Expanded):*

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	43.0
Total Number Struck and Lost	0.0	1.0
Total Number Taken	0.0	44.0
Number Harvested Per Capita	0.00	0.22

SEA LION HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	4	3	3	0	0	8	2	3	14	1	3	2	0	43
Struck & Lost	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Total Take	4	3	3	0	0	8	3	3	14	1	3	2	0	44
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	4.0	3.0	3.0	0.0	0.0	8.0	2.0	3.0	14.0	1.0	3.0	2.0	0.0	43.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Total Take	4.0	3.0	3.0	0.0	0.0	8.0	3.0	3.0	14.0	1.0	3.0	2.0	0.0	44.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	4.0	3.0	3.0	0.0	0.0	8.0	2.0	3.0	14.0	1.0	3.0	2.0	0.0	43.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Total Take	4.0	3.0	3.0	0.0	0.0	8.0	3.0	3.0	14.0	1.0	3.0	2.0	0.0	44.0
Total Take (%)	9.1%	6.8%	6.8%	0.0%	0.0%	18.2%	6.8%	6.8%	31.8%	2.3%	6.8%	4.5%	0.0%	100.0%
Cum. Take	4.0	7.0	10.0	10.0	10.0	18.0	21.0	24.0	38.0	39.0	42.0	44.0	44.0	44.0
Cum. Take (%)	9.1%	15.9%	22.7%	22.7%	22.7%	40.9%	47.7%	54.5%	86.4%	88.6%	95.5%	100.0%	100.0%	100.0%

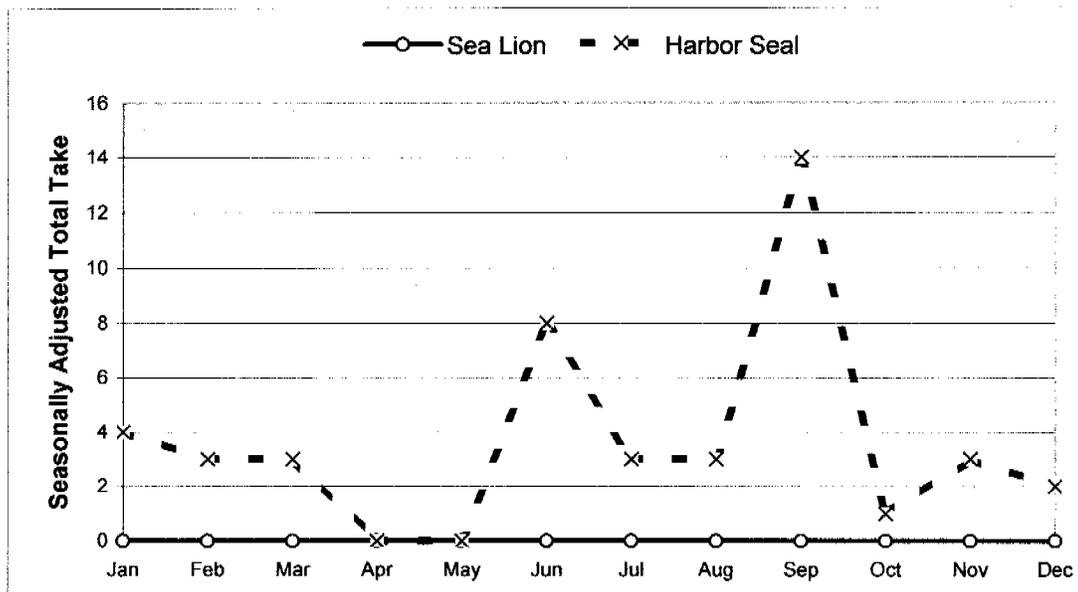
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Ouzinkie Native Corporation, City of Ouzinkie, and Ouzinkie Tribal Council, 2000.

Table 34. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Ouzinkie, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	22	51.2%	22.0	51.2%
Adult Female	0	—	0.0	—	17	39.5%	17.0	39.5%
Adult Unknown Sex	0	—	0.0	—	2	4.7%	2.0	4.7%
Juvenile Male	0	—	0.0	—	2	4.7%	2.0	4.7%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Total	0	—	0.0	—	43	100.0%	43.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	3.4	0.0	3.4	1992	21.8	1.1	23.0
1993	5.4	2.2	7.6	1993	41.2	8.7	49.8
1994	4.4	2.9	7.3	1994	33.4	0.0	33.4
1995	15.6	0.0	15.6	1995	56.1	0.0	56.1
1996	0.0	0.0	0.0	1996	16.7	2.6	19.3
1997	0.0	0.0	0.0	1997	55.2	9.4	64.6
1998	0.0	0.0	0.0	1998	82.0	2.5	84.5
2000	0.0	0.0	0.0	2000	43.0	1.0	44.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Ouzinkie Native Corporation, City of Ouzinkie, and Ouzinkie Tribal Council, 2000.

Table 35. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Port Lions, 2000

**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	9
Surveyed Households	7
Sampling Fraction	78%
Sample Household Members	22
Estimated Household Members	28.3
Estimated Native Population	163.0

HARVEST AND USE INFORMATION

<i>Percentage of Sample Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>		
	Sea <u>Lion</u>	Harbor <u>Seal</u>		Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	71.4%	Total Number Harvested	0.0	6.4
Hunted	0.0%	42.9%	Total Number Struck and Lost	0.0	0.0
Harvested	0.0%	42.9%	Total Number Taken	0.0	6.4
Received	0.0%	42.9%			
Gave Away	0.0%	42.9%	Number Harvested Per Capita	0.00	0.04

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	1	0	0	0	1	0	0	0	0	1	2	0	5
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	1	0	0	0	1	0	0	0	0	1	2	0	5
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.3	2.6	0.0	6.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	1.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.3	2.6	0.0	6.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.3	2.6	0.0	6.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	1.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.3	2.6	0.0	6.4
Total Take (%)	0.0%	20.0%	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	20.0%	40.0%	0.0%	100.0%
Cum. Take	0.0	1.3	1.3	1.3	1.3	2.6	2.6	2.6	2.6	2.6	3.9	6.4	6.4	6.4
Cum. Take (%)	0.0%	20.0%	20.0%	20.0%	20.0%	40.0%	40.0%	40.0%	40.0%	40.0%	60.0%	100.0%	100.0%	100.0%

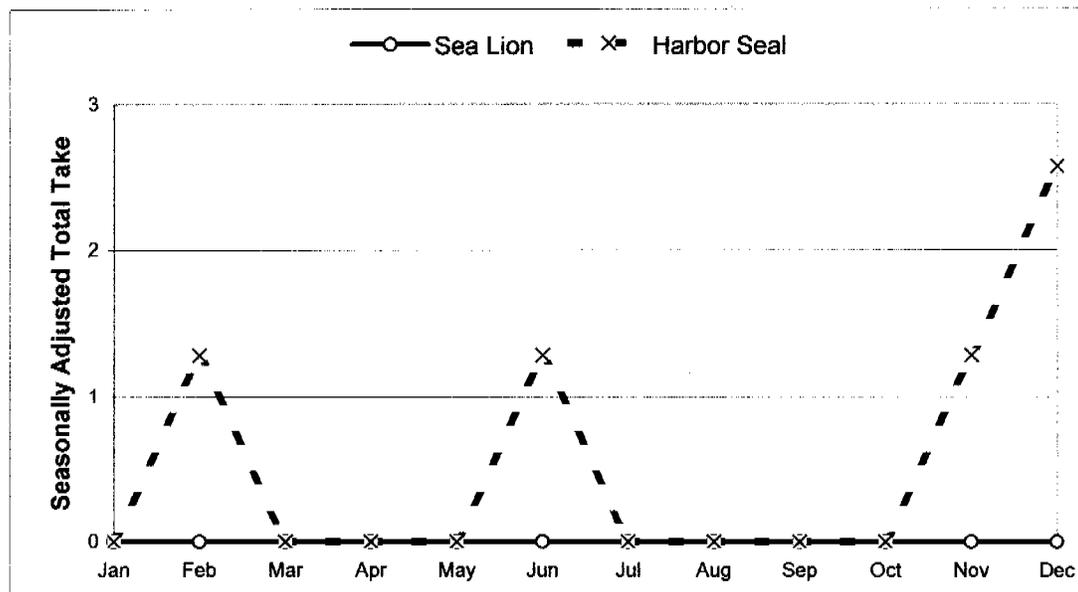
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Port Lions Tribal Council and City of Port Lions, 2000.

Table 35. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Port Lions, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Adult Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	—	0.0	—	1	20.0%	1.3	20.0%
Juvenile Male	0	—	0.0	—	1	20.0%	1.3	20.0%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	1	20.0%	1.3	20.0%
Pup Male	0	—	0.0	—	2	40.0%	2.6	40.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Total	0	—	0.0	—	5	100.0%	6.4	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	1.1	2.2	3.3	1992	36.9	2.2	39.1
1993	4.0	1.0	5.0	1993	26.0	1.0	27.0
1994	0.0	0.0	0.0	1994	8.0	0.0	8.0
1995	0.0	0.0	0.0	1995	2.0	0.0	2.0
1996	0.0	0.0	0.0	1996	4.0	0.0	4.0
1997	1.0	0.0	1.0	1997	5.0	0.0	5.0
1998	1.0	0.0	1.0	1998	6.0	0.0	6.0
2000	0.0	0.0	0.0	2000	6.4	0.0	6.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Port Lions Tribal Council and City of Port Lions, 2000.

Table 36. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Chignik Bay, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	17
Surveyed Households	16
Sampling Fraction	94.1%
Sample Household Members	35
Estimated Household Members	37.2
Estimated Native Population	48.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	0.0%
Hunted	0.0%	0.0%
Harvested	0.0%	0.0%
Received	0.0%	0.0%
Gave Away	0.0%	0.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	0.0
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	0.0
Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

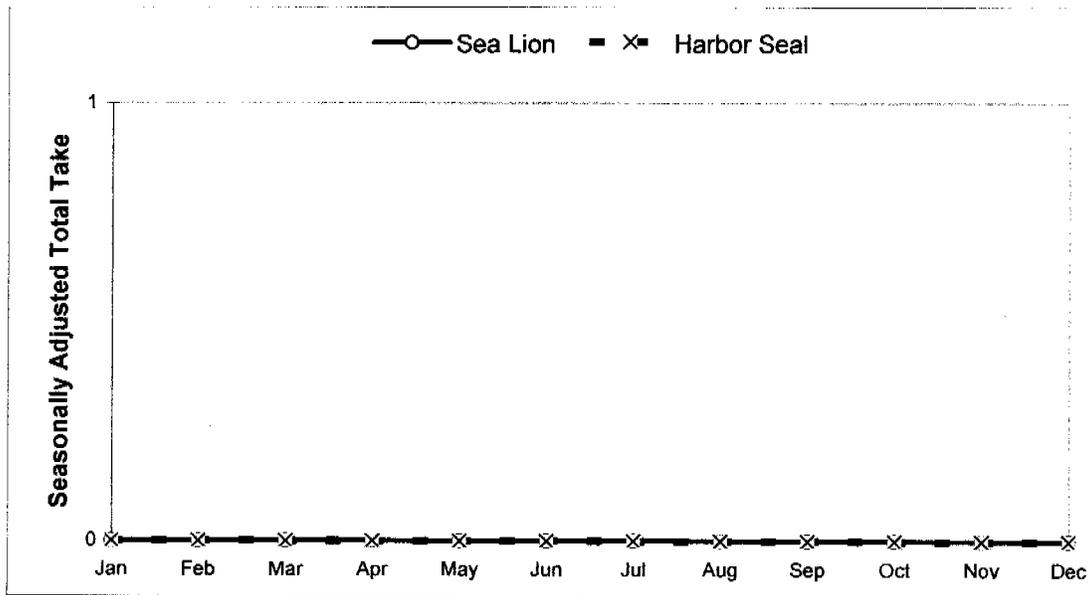
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Bay Traditional Village Council, 2000.

Table 36. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Chignik Bay, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	0	--	0.0	--
Adult Female	0	--	0.0	--	0	--	0.0	--
Adult Unknown Sex	0	--	0.0	--	0	--	0.0	--
Juvenile Male	0	--	0.0	--	0	--	0.0	--
Juvenile Female	0	--	0.0	--	0	--	0.0	--
Juvenile Unknown Sex	0	--	0.0	--	0	--	0.0	--
Pup Male	0	--	0.0	--	0	--	0.0	--
Pup Female	0	--	0.0	--	0	--	0.0	--
Pup Unknown Sex	0	--	0.0	--	0	--	0.0	--
Male Unknown Age	0	--	0.0	--	0	--	0.0	--
Female Unknown Age	0	--	0.0	--	0	--	0.0	--
Unknown Sex and Age	0	--	0.0	--	0	--	0.0	--
Total	0	--	0.0	--	0	--	0.0	--

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	2.4	1.2	3.6
1993	0.0	0.0	0.0	1993	6.3	5.0	11.3
1994	0.0	0.0	0.0	1994	3.4	0.0	3.4
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0
1996	0.0	0.0	0.0	1996	1.0	0.0	1.0
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Bay Traditional Village Council, 2000.

Table 37. SEA LION AND HARBOR SEAL HARVEST / TAKE ESTIMATES: Chignik Lagoon, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	23
Surveyed Households	19
Sampling Fraction	82.6%
Sample Household Members	70
Estimated Household Members	84.7
Estimated Native Population	85.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	0.0%	5.3%
Hunted	0.0%	5.3%
Harvested	0.0%	5.3%
Received	0.0%	0.0%
Gave Away	0.0%	0.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	1.2
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	1.2
Number Harvested Per Capita	0.00	0.01

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%

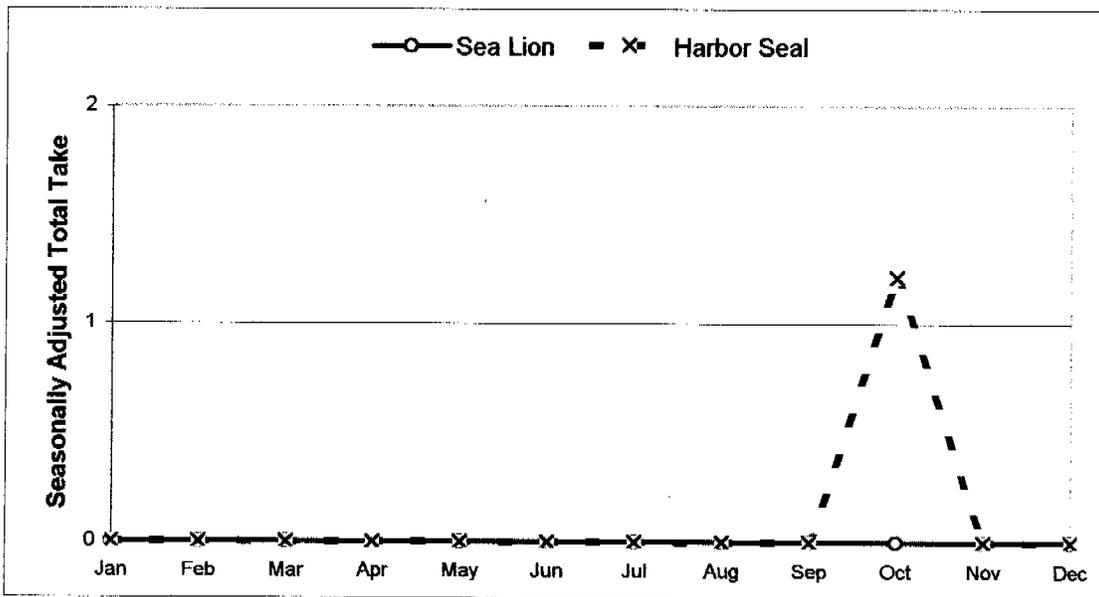
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Lagoon Traditional Village Council, 2000.

Table 37. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Chignik Lagoon, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	1	100.0%	1.2	100.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	1	100.0%	1.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	4.0	0.0	4.0
1993	1.1	0.0	1.1	1993	4.3	1.1	5.3
1994	0.0	0.0	0.0	1994	0.0	1.0	1.0
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0
1997	0.0	0.0	0.0	1997	1.3	1.3	2.7
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	1.2	0.0	1.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Lagoon Traditional Village Council, 2000.

Table 38. SEA LION AND HARBOR SEAL HARVEST / TAKE ESTIMATES: Chignik Lake, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	25
Surveyed Households	23
Sampling Fraction	92.0%
Sample Household Members	88
Estimated Household Members	95.7
Estimated Native Population	127.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	60.9%
Hunted	0.0%	8.7%
Harvested	0.0%	8.7%
Received	0.0%	56.5%
Gave Away	0.0%	8.7%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	3.3
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	3.3
Number Harvested Per Capita	0.00	0.03

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	2	0	0	0	0	0	0	0	0	0	0	1	3
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	2	0	0	0	0	0	0	0	0	0	0	1	3
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	3.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	3.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Total Take (%)	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Cum. Take (%)	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

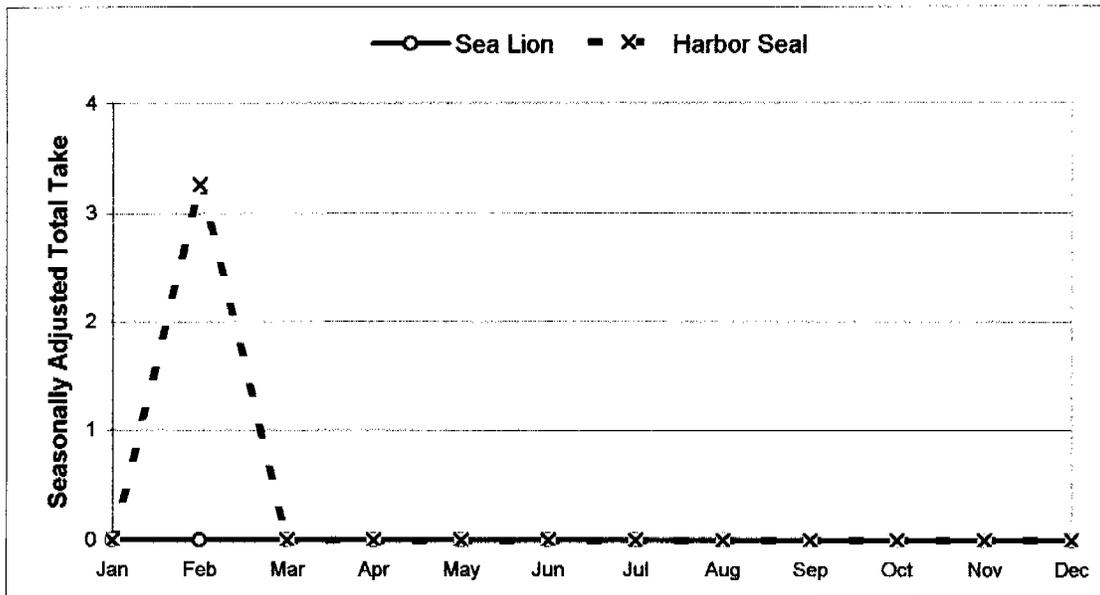
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Lake Traditional Village Council, 2000.

Table 38. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Chignik Lake, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	1	33.3%	1.1	33.3%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	2	66.7%	2.2	66.7%
Total	0	---	0.0	---	3	100.0%	3.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	8.3	2.1	10.3
1993	0.0	0.0	0.0	1993	15.2	5.5	20.8
1994	0.0	0.0	0.0	1994	20.8	1.3	22.1
1995	0.0	0.0	0.0	1995	3.2	1.1	4.3
1996	0.0	0.0	0.0	1996	3.5	0.0	3.5
1997	0.0	0.0	0.0	1997	2.2	1.1	3.3
1998	0.0	0.0	0.0	1998	1.9	0.0	1.9
2000	0.0	0.0	0.0	2000	3.3	0.0	3.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Lake Traditional Village Council, 2000.

Table 39. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: False Pass, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	16
Surveyed Households	13
Sampling Fraction	81.3%
Sample Household Members	45
Estimated Household Members	55.4
Estimated Native Population	42.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	0.0%	76.9%
Hunted	7.7%	23.1%
Harvested	0.0%	15.4%
Received	0.0%	76.9%
Gave Away	0.0%	30.8%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	2.5
Total Number Struck and Lost	0.0	1.2
Total Number Taken	0.0	3.7
Number Harvested Per Capita	0.00	0.04

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	1	0	0	0	1	0	0	0	0	0	2
Struck & Lost	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Total Take	0	0	0	1	0	1	0	1	0	0	0	0	0	3
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	2.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Total Take	0.0	0.0	0.0	1.2	0.0	1.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	3.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	2.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Total Take	0.0	0.0	0.0	1.2	0.0	1.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	3.7
Total Take (%)	0.0%	0.0%	0.0%	33.3%	0.0%	33.3%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	1.2	1.2	2.5	2.5	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Cum. Take (%)	0.0%	0.0%	0.0%	33.3%	33.3%	66.7%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

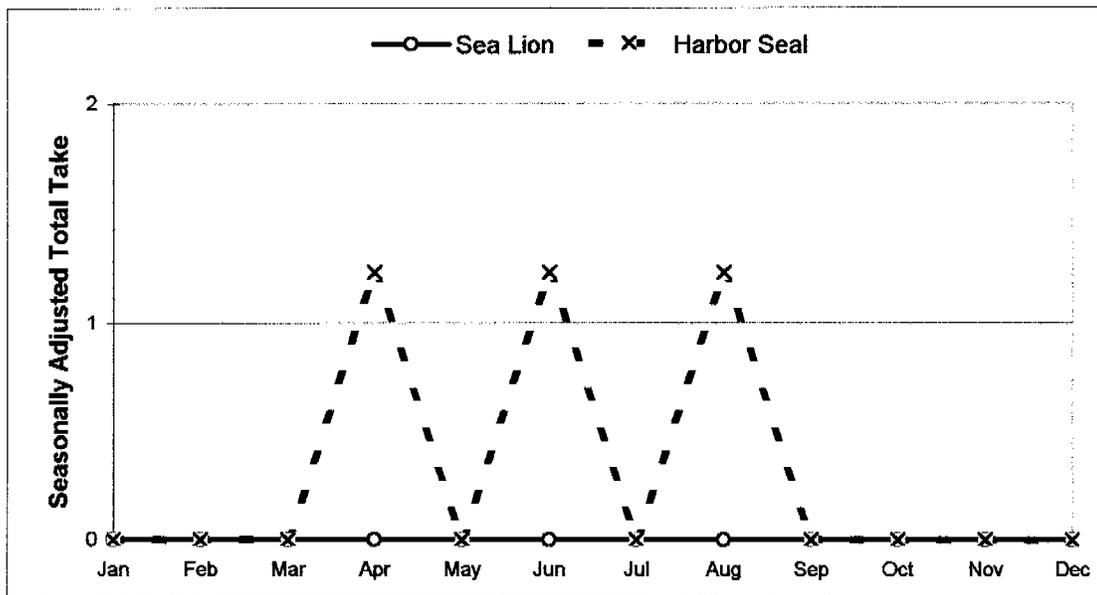
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the False Pass Tribal Council and City of False Pass, 2000.

Table 39. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: False Pass, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	1	50.0%	1.2	50.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	1	50.0%	1.2	50.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	2	100.0%	2.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	18.0	0.0	18.0
1993	0.0	0.0	0.0	1993	19.0	0.0	19.0
1994	0.0	0.0	0.0	1994	12.6	2.1	14.7
1995	0.0	0.0	0.0	1995	25.9	1.2	27.1
1996	0.0	0.0	0.0	1996	13.9	0.0	13.9
1997	0.0	0.0	0.0	1997	8.0	0.0	8.0
1998	0.0	0.0	0.0	1998	17.8	1.3	19.1
2000	0.0	0.0	0.0	2000	2.5	1.2	3.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the False Pass Tribal Council and City of False Pass, 2000.

Table 40. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Ivanof Bay, 2000

SAMPLING DESIGN:

CENSUS	Total Native Households	8
	Surveyed Households	5
	Sampling Fraction	62.5%
	Sample Household Members	17
	Estimated Household Members	27.2
	Estimated Native Population	21.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>	
	Sea <u>Lion</u>	Harbor <u>Seal</u>	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	100.0%	Total Number Harvested	0.0 3.2
Hunted	0.0%	60.0%	Total Number Struck and Lost	0.0 0.0
Harvested	0.0%	40.0%	Total Number Taken	0.0 3.2
Received	0.0%	80.0%		
Gave Away	0.0%	60.0%	Number Harvested Per Capita	0.00 0.12

SEA LION HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	1	0	0	0	0	0	0	0	1	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	3.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	3.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	3.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	3.2
Total Take (%)	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	3.2	3.2	3.2
Cum. Take (%)	0.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%

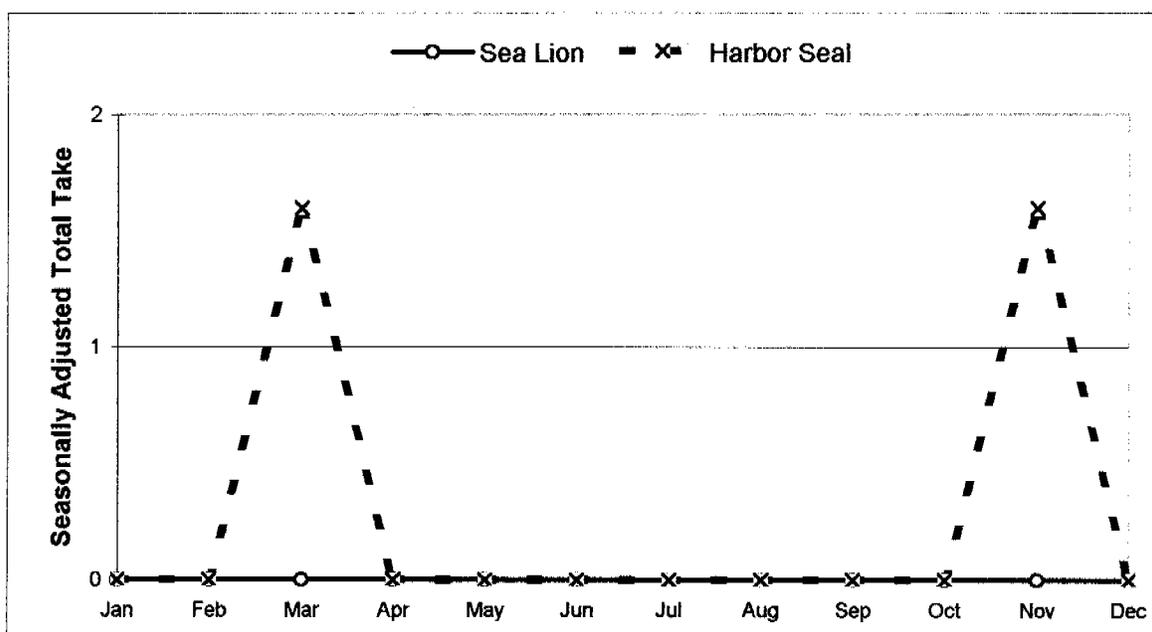
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Ivanof Bay Traditional Village Council, 2000.

Table 40. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Ivanof Bay, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	1	50.0%	1.6	50.0%
Adult Female	0	—	0.0	—	1	50.0%	1.6	50.0%
Adult Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	0.0%	0.0	0.0%
Total	0	—	0.0	—	2	100.0%	3.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	10.0	1.0	11.0
1993	2.3	1.2	3.5	1993	16.3	4.7	21.0
1994	0.0	0.0	0.0	1994	12.0	1.3	13.3
1995	0.0	0.0	0.0	1995	18.7	2.7	21.3
1996	2.4	0.0	2.4	1996	13.2	0.0	13.2
1997	1.8	0.0	1.8	1997	9.0	1.8	10.8
1998	1.8	0.0	1.8	1998	9.0	1.8	10.8
2000	0.0	0.0	0.0	2000	3.2	0.0	3.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Ivanof Bay Traditional Village Council, 2000.

Table 41. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: King Cove, 2000

SAMPLING DESIGN:		Active	Other	Total
TWO-STRATA				
	Total Native Households	15	18	33
	Surveyed Households	14	9	23
	Sampling Fraction	93.3%	50.0%	69.7%
	Sample Household Members	51	26	77
	Estimated Household Members	54.6	51.8	106.4
	Estimated Native Population	---	---	379.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):		Sea	Harbor
	Sea Lion	Harbor Seal			Lion	Seal
Used	9.7%	96.8%	Total Number Harvested		4.3	19.3
Hunted	6.5%	32.5%	Total Number Struck and Lost		0.0	2.1
Harvested	6.5%	32.5%	Total Number Taken		4.3	21.4
Received	6.5%	90.3%	Number Harvested Per Capita		0.08	0.37
Gave Away	6.5%	32.5%				

SEA LION HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	2	0	0	0	0	0	0	1	1	0	0	0	4
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	2	0	0	0	0	0	0	1	1	0	0	0	4
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0	4.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0	4.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0		4.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0		4.3
Total Take (%)	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2	4.3	4.3	4.3		
Cum. Take (%)	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	75.0%	100.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	3	2	0	1	1	0	0	2	5	2	0	2	0	18
Struck & Lost	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total Take	3	4	0	1	1	0	0	2	5	2	0	2	0	20
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.2	2.1	0.0	1.1	1.1	0.0	0.0	2.1	5.4	2.1	0.0	2.1	0.0	19.3
Struck & Lost	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Total Take	3.2	4.3	0.0	1.1	1.1	0.0	0.0	2.1	5.4	2.1	0.0	2.1	0.0	21.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.2	2.1	0.0	1.1	1.1	0.0	0.0	2.1	5.4	2.1	0.0	2.1		19.3
Struck & Lost	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		2.1
Total Take	3.2	4.3	0.0	1.1	1.1	0.0	0.0	2.1	5.4	2.1	0.0	2.1		21.4
Total Take (%)	15.0%	20.0%	0.0%	5.0%	5.0%	0.0%	0.0%	10.0%	25.0%	10.0%	0.0%	10.0%		100.0%
Cum. Take	3.2	7.5	7.5	8.6	9.6	9.6	9.6	11.8	17.1	19.3	19.3	21.4		
Cum. Take (%)	15.0%	35.0%	35.0%	40.0%	45.0%	45.0%	45.0%	55.0%	80.0%	90.0%	90.0%	100.0%		

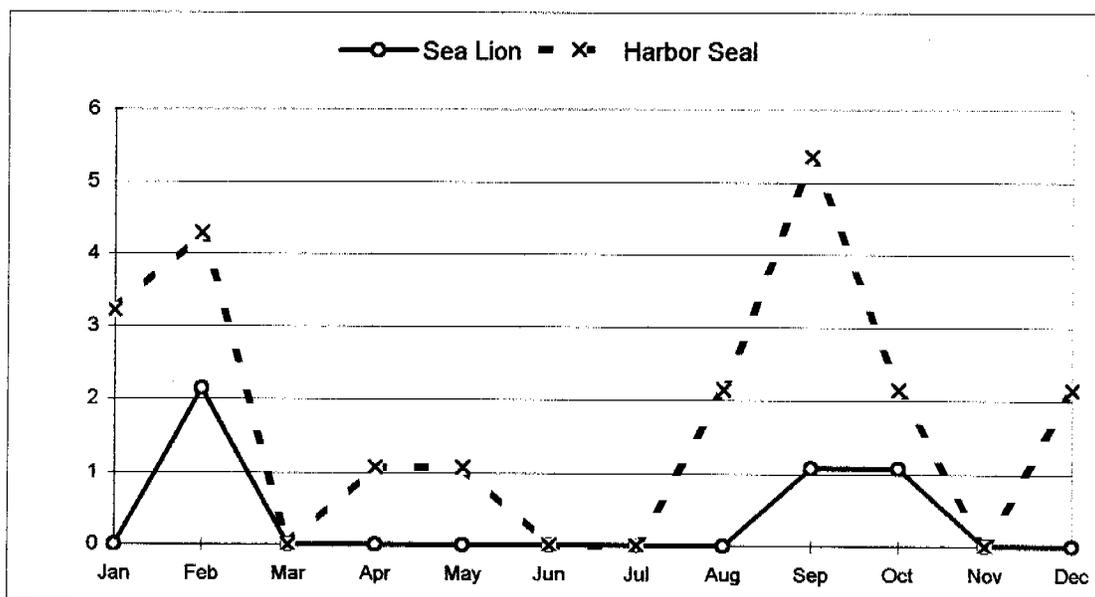
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Agdaagux Tribe of King Cove, Belofski Village Council, and City of King Cove, 2000.

Table 41. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: King Cove, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	3	75.0%	3.2	75.0%	11	61.1%	11.8	61.1%
Adult Female	1	25.0%	1.1	25.0%	5	27.8%	5.4	27.8%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	2	11.1%	2.1	11.1%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	4	100.0%	4.3	100.0%	18	100.0%	19.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	1.3	0.0	1.3	1992	26.0	6.7	32.7
1993	1.2	0.0	1.2	1993	12.8	3.5	16.3
1994	3.2	1.1	4.3	1994	20.9	1.1	22.0
1995	5.0	0.0	5.0	1995	49.0	3.0	52.0
1996	0.0	0.0	0.0	1996	14.0	5.0	19.0
1997	4.2	0.0	4.2	1997	16.9	2.1	19.1
1998	4.3	0.0	4.3	1998	18.2	0.0	18.2
2000	4.3	0.0	4.3	2000	19.3	2.1	21.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Agdaagux Tribe of King Cove, Belofski Village Council, and City of King Cove, 2000.

Table 42. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Perryville, 2000

SAMPLING DESIGN:

CENSUS

Total Native Households	27
Surveyed Households	18
Sampling Fraction	66.7%
Sample Household Members	55
Estimated Household Members	82.5
Estimated Native Population	105.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	22.2%	94.4%
Hunted	11.1%	55.6%
Harvested	11.1%	27.8%
Received	11.1%	83.3%
Gave Away	11.1%	50.0%

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	4.5	21.0
Total Number Struck and Lost	0.0	15.0
Total Number Taken	4.5	36.0
Number Harvested Per Capita	0.05	0.25

SEA LION HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	1	0	0	0	0	0	1	1	0	0	3
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	1	0	0	0	0	0	1	1	0	0	3
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	4.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	4.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	0.0		4.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	0.0		4.5
Total Take (%)	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	33.3%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	3.0	4.5	4.5		
Cum. Take (%)	0.0%	0.0%	0.0%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	66.7%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	1	1	1	0	0	1	5	3	1	0	1	14
Struck & Lost	1	2	1	1	1	0	0	0	1	0	1	1	1	10
Total Take	1	2	2	2	2	0	0	1	6	3	2	1	2	24
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.5	1.5	1.5	0.0	0.0	1.5	7.5	4.5	1.5	0.0	1.5	21.0
Struck & Lost	1.5	3.0	1.5	1.5	1.5	0.0	0.0	0.0	1.5	0.0	1.5	1.5	1.5	15.0
Total Take	1.5	3.0	3.0	3.0	3.0	0.0	0.0	1.5	9.0	4.5	3.0	1.5	3.0	36.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.6	1.6	1.6	0.0	0.0	1.6	8.1	4.8	1.6	0.0		21.0
Struck & Lost	1.7	3.3	1.7	1.7	1.7	0.0	0.0	0.0	1.7	0.0	1.7	1.7		15.0
Total Take	1.7	3.3	3.3	3.3	3.3	0.0	0.0	1.6	9.7	4.8	3.3	1.7		36.0
Total Take (%)	4.6%	9.3%	9.1%	9.1%	9.1%	0.0%	0.0%	4.5%	27.1%	13.5%	9.1%	4.6%		100.0%
Cum. Take	1.7	5.0	8.3	11.6	14.8	14.8	14.8	16.5	26.2	31.1	34.3	36.0		
Cum. Take (%)	4.6%	13.9%	23.0%	32.1%	41.2%	41.2%	41.2%	45.7%	72.8%	86.3%	95.4%	100.0%		

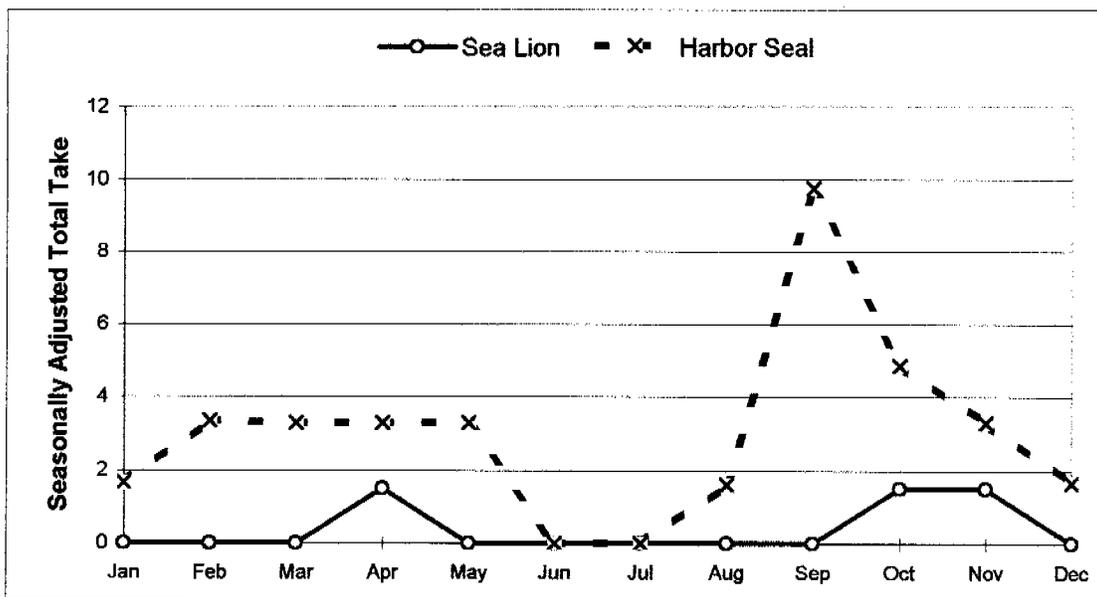
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Perryville Traditional Village Council, 2000.

Table 42. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Perryville, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	33.3%	1.5	33.3%	6	42.9%	9.0	42.9%
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	2	66.7%	3.0	66.7%	2	14.3%	3.0	14.3%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	6	42.9%	9.0	42.9%
Total	3	100.0%	4.5	100.0%	14	100.0%	21.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	1.1	0.0	1.1	1992	8.9	2.2	11.1
1993	0.0	0.0	0.0	1993	12.8	2.1	15.0
1994	1.4	0.0	1.4	1994	21.1	0.0	21.1
1995	3.1	0.0	3.1	1995	11.0	3.1	14.1
1996	1.3	1.3	2.6	1996	20.5	0.0	20.5
1997	2.3	0.0	2.3	1997	21.7	5.7	27.4
1998	1.1	0.0	1.1	1998	21.0	4.4	25.4
2000	4.5	0.0	4.5	2000	21.0	15.0	36.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Perryville Traditional Village Council, 2000.

Table 43. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Sand Point, 2000

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	15
Surveyed Households	12
Sampling Fraction	80.0%
Sample Household Members	52
Estimated Household Members	65.0
Estimated Native Population	421.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	25.0%	91.7%
Hunted	25.0%	50.0%
Harvested	25.0%	50.0%
Received	0.0%	66.7%
Gave Away	8.3%	66.7%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	5.0	15.0
Total Number Struck and Lost	0.0	0.0
Total Number Taken	5.0	15.0
Number Harvested Per Capita	0.01	0.04

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	0	0	0	0	1	0	0	0	2	0	0	0	4
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	0	0	0	0	1	0	0	0	2	0	0	0	4
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.3	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	2.5	0.0	0.0	0.0	5.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	1.3	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	2.5	0.0	0.0	0.0	5.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.3	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	2.5	0.0	0.0	0.0	5.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	1.3	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	2.5	0.0	0.0	0.0	5.0
Total Take (%)	25.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	1.3	1.3	1.3	1.3	1.3	2.5	2.5	2.5	2.5	5.0	5.0	5.0	5.0	5.0
Cum. Take (%)	25.0%	25.0%	25.0%	25.0%	25.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	1	1	0	3	1	1	3	1	0	1	0	12
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	1	1	0	3	1	1	3	1	0	1	0	12
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.3	1.3	0.0	3.8	1.3	1.3	3.8	1.3	0.0	1.3	0.0	15.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	1.3	1.3	0.0	3.8	1.3	1.3	3.8	1.3	0.0	1.3	0.0	15.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.3	1.3	0.0	3.8	1.3	1.3	3.8	1.3	0.0	1.3	0.0	15.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	1.3	1.3	0.0	3.8	1.3	1.3	3.8	1.3	0.0	1.3	0.0	15.0
Total Take (%)	0.0%	0.0%	8.3%	8.3%	0.0%	25.0%	8.3%	8.3%	25.0%	8.3%	0.0%	8.3%	0.0%	100.0%
Cum. Take	0.0	0.0	1.3	2.5	2.5	6.3	7.5	8.8	12.5	13.8	13.8	15.0	15.0	15.0
Cum. Take (%)	0.0%	0.0%	8.3%	16.7%	16.7%	41.7%	50.0%	58.3%	83.3%	91.7%	91.7%	100.0%	100.0%	100.0%

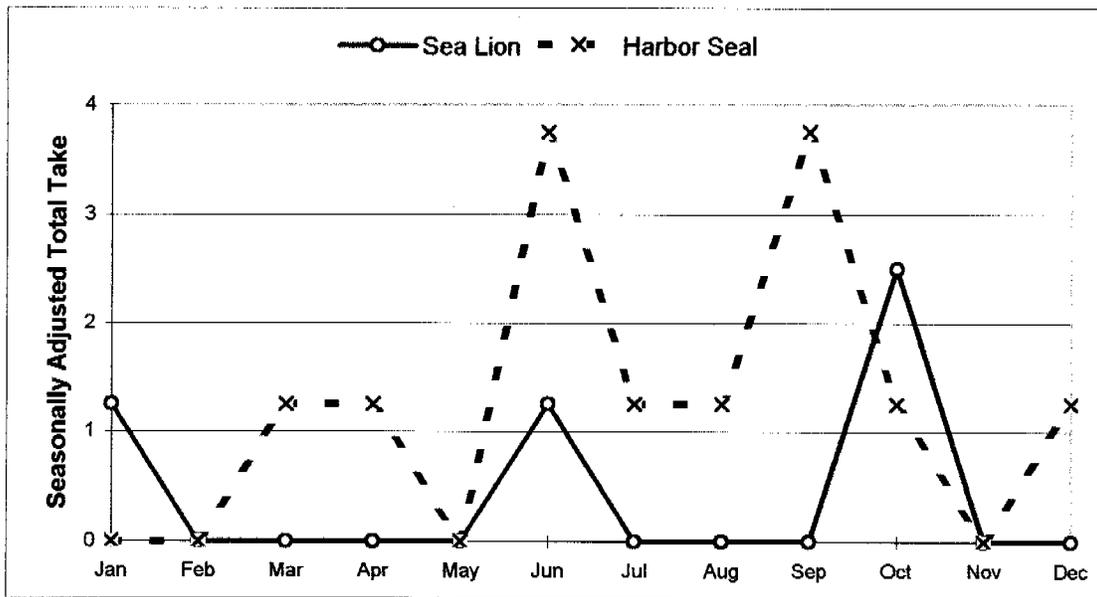
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Sand Point, Unga Tribal Council, and Qagan Tayagungi Tribe of Sand Point, 2000.

Table 43. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Sand Point, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	3	25.0%	3.8	25.0%
Adult Female	0	0.0%	0.0	0.0%	1	8.3%	1.3	8.3%
Adult Unknown Sex	2	50.0%	2.5	50.0%	8	66.7%	10.0	66.7%
Juvenile Male	1	25.0%	1.3	25.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	1	25.0%	1.3	25.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	4	100.0%	5.0	100.0%	12	100.0%	15.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	37.9	0.0	37.9
1993	0.0	0.0	0.0	1993	13.3	1.2	14.4
1994	0.0	0.0	0.0	1994	7.8	4.3	12.1
1995	0.0	0.0	0.0	1995	9.2	0.0	9.2
1996	0.0	0.0	0.0	1996	20.2	0.0	20.2
1997	0.0	0.0	0.0	1997	9.1	0.0	9.1
1998	2.0	0.0	2.0	1998	12.0	0.0	12.0
2000	5.0	0.0	5.0	2000	15.0	0.0	15.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Sand Point, Unga Tribal Council, and Qagan Tayagungi Tribe of Sand Point, 2000.

Table 44. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Akutan, 2000

SAMPLING DESIGN:

CENSUS	Total Native Households	27
	Surveyed Households	20
	Sampling Fraction	74.1%
	Sample Household Members	47
	Estimated Household Members	63.5
	Estimated Native Population	117.0

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):		
	Sea <u>Lion</u>	Harbor <u>Seal</u>		Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	40.0%	60.0%	Total Number Harvested	4.1	25.7
Hunted	10.0%	35.0%	Total Number Struck and Lost	1.4	5.4
Harvested	10.0%	30.0%	Total Number Taken	5.4	31.1
Received	35.0%	60.0%			
Gave Away	15.0%	25.0%	Number Harvested Per Capita	0.06	0.40

SEA LION HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	1	1	0	0	0	0	1	0	0	0	0	3
Struck & Lost	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Take	0	0	2	1	0	0	0	0	1	0	0	0	0	4
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.4	1.4	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	4.1
Struck & Lost	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Total Take	0.0	0.0	2.7	1.4	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	5.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.4	1.4	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0		4.1
Struck & Lost	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.4
Total Take	0.0	0.0	2.7	1.4	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0		5.4
Total Take (%)	0.0%	0.0%	50.0%	25.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	2.7	4.1	4.1	4.1	4.1	4.1	5.4	5.4	5.4	5.4		
Cum. Take (%)	0.0%	0.0%	50.0%	75.0%	75.0%	75.0%	75.0%	75.0%	100.0%	100.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	0	1	1	1	2	8	3	0	0	1	1	0	19
Struck & Lost	0	0	0	0	0	0	4	0	0	0	0	0	0	4
Total Take	1	0	1	1	1	2	12	3	0	0	1	1	0	23
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.4	0.0	1.4	1.4	1.4	2.7	10.8	4.1	0.0	0.0	1.4	1.4	0.0	25.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5.4
Total Take	1.4	0.0	1.4	1.4	1.4	2.7	16.2	4.1	0.0	0.0	1.4	1.4	0.0	31.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.4	0.0	1.4	1.4	1.4	2.7	10.8	4.1	0.0	0.0	1.4	1.4		25.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0		5.4
Total Take	1.4	0.0	1.4	1.4	1.4	2.7	16.2	4.1	0.0	0.0	1.4	1.4		31.1
Total Take (%)	4.3%	0.0%	4.3%	4.3%	4.3%	8.7%	52.2%	13.0%	0.0%	0.0%	4.3%	4.3%		100.0%
Cum. Take	1.4	1.4	2.7	4.1	5.4	8.1	24.3	28.4	28.4	28.4	29.7	31.1		
Cum. Take (%)	4.3%	4.3%	8.7%	13.0%	17.4%	26.1%	78.3%	91.3%	91.3%	91.3%	95.7%	100.0%		

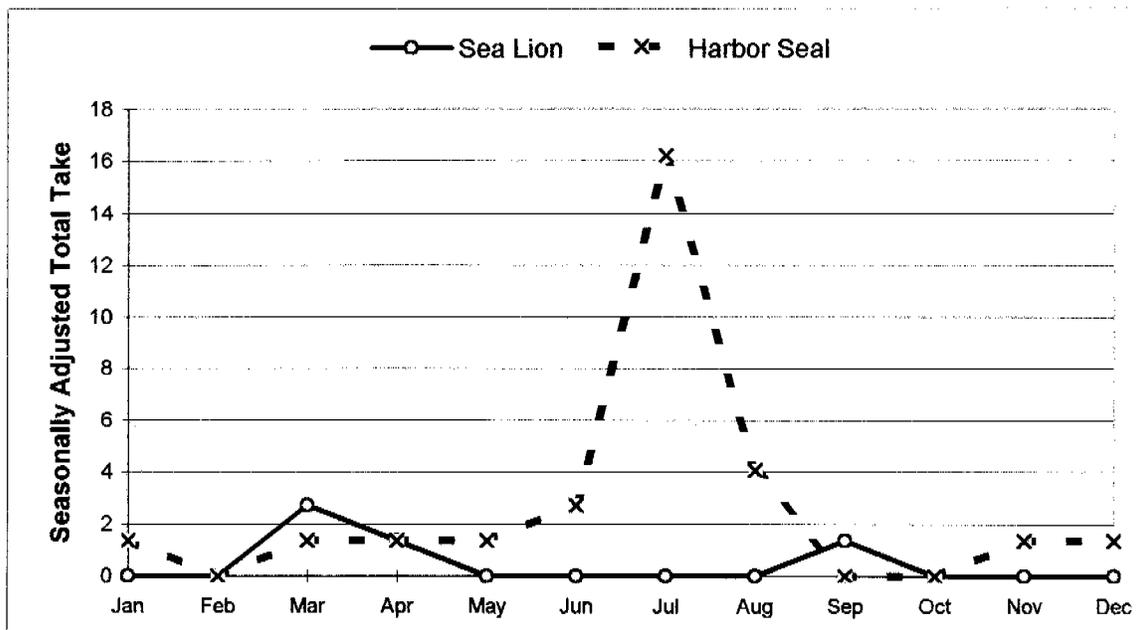
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Akutan Traditional Village Council, City of Akutan, and Akutan Corporation, 2000.

Table 44. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Akutan, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	7	36.8%	9.5	36.8%
Adult Female	0	0.0%	0.0	0.0%	2	10.5%	2.7	10.5%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	3	100.0%	4.1	100.0%	3	15.8%	4.1	15.8%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	7	36.8%	9.5	36.8%
Total	3	100.0%	4.1	100.0%	19	100.0%	25.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	25.7	4.3	30.0	1992	12.9	4.3	17.1
1993	14.5	8.9	23.4	1993	15.6	4.5	20.1
1994	12.7	3.5	16.2	1994	13.8	3.5	17.3
1995	6.0	0.0	6.0	1995	7.0	0.0	7.0
1996	11.0	5.0	16.0	1996	8.0	7.0	15.0
1997	6.4	0.0	6.4	1997	14.0	3.8	17.8
1998	6.4	0.0	6.4	1998	14.0	3.8	17.8
2000	4.1	1.4	5.4	2000	25.7	5.4	31.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Akutan Traditional Village Council, City of Akutan, and Akutan Corporation, 2000.

Table 45. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Atka, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	26
Surveyed Households	17
Sampling Fraction	65.4%
Sample Household Members	48
Estimated Household Members	73.4
Estimated Native Population	73.4

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	100.0%	100.0%
Hunted	41.2%	41.2%
Harvested	23.5%	11.8%
Received	100.0%	100.0%
Gave Away	47.1%	41.2%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	16.8	16.8
Total Number Struck and Lost	0.0	0.0
Total Number Taken	16.8	16.8
Number Harvested Per Capita	0.23	0.23

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	1	0	0	0	1	2	1	0	2	0	1	3	11
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	1	0	0	0	1	2	1	0	2	0	1	3	11
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.5	0.0	0.0	0.0	1.5	3.1	1.5	0.0	3.1	0.0	1.5	4.6	16.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	1.5	0.0	0.0	0.0	1.5	3.1	1.5	0.0	3.1	0.0	1.5	4.6	16.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.1	0.0	0.0	0.0	2.1	4.2	2.1	0.0	4.2	0.0	2.1		16.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	2.1	0.0	0.0	0.0	2.1	4.2	2.1	0.0	4.2	0.0	2.1		16.8
Total Take (%)	0.0%	12.5%	0.0%	0.0%	0.0%	12.5%	25.0%	12.5%	0.0%	25.0%	0.0%	12.5%		100.0%
Cum. Take	0.0	2.1	2.1	2.1	2.1	4.2	8.4	10.5	10.5	14.7	14.7	16.8		
Cum. Take (%)	0.0%	12.5%	12.5%	12.5%	12.5%	25.0%	50.0%	62.5%	62.5%	87.5%	87.5%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	1	2	1	1	2	0	0	2	2	0	11
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	1	2	1	1	2	0	0	2	2	0	11
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.5	3.1	1.5	1.5	3.1	0.0	0.0	3.1	3.1	0.0	16.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	1.5	3.1	1.5	1.5	3.1	0.0	0.0	3.1	3.1	0.0	16.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.5	3.1	1.5	1.5	3.1	0.0	0.0	3.1	3.1		16.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	1.5	3.1	1.5	1.5	3.1	0.0	0.0	3.1	3.1		16.8
Total Take (%)	0.0%	0.0%	0.0%	9.1%	18.2%	9.1%	9.1%	18.2%	0.0%	0.0%	18.2%	18.2%		100.0%
Cum. Take	0.0	0.0	0.0	1.5	4.6	6.1	7.6	10.7	10.7	10.7	13.8	16.8		
Cum. Take (%)	0.0%	0.0%	0.0%	9.1%	27.3%	36.4%	45.5%	63.6%	63.6%	63.6%	81.8%	100.0%		

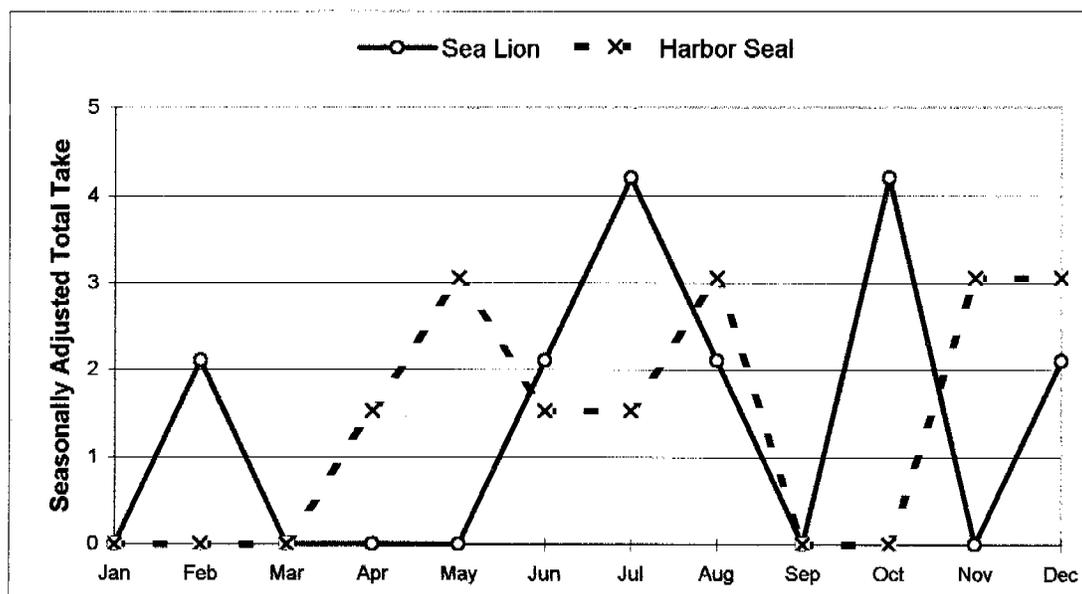
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Atka IRA Council and City of Atka. (Numbers based on 1998 survey estimates).

Table 45. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Atka, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	4	36.4%	6.1	36.4%	1	9.1%	1.5	9.1%
Adult Female	2	18.2%	3.1	18.2%	2	18.2%	3.1	18.2%
Adult Unknown Sex	2	18.2%	3.1	18.2%	5	45.5%	7.6	45.5%
Juvenile Male	2	18.2%	3.1	18.2%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	1	9.1%	1.5	9.1%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	3	27.3%	4.6	27.3%
Total	11	100.0%	16.8	100.0%	11	100.0%	16.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	28.6	9.9	38.5	1992	28.6	9.9	38.5
1993	25.1	0.0	25.1	1993	32.7	0.0	32.7
1994	45.5	8.7	54.2	1994	73.7	8.7	82.3
1995	40.0	0.0	40.0	1995	42.5	0.0	42.5
1996	17.3	0.0	17.3	1996	22.7	2.2	24.8
1997	12.2	0.0	12.2	1997	26.0	1.5	27.5
1998	16.8	0.0	16.8	1998	16.8	0.0	16.8
2000	16.8	0.0	16.8	2000	16.8	0.0	16.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Atka IRA Council and City of Atka. (Numbers based on 1998 survey estimates).

Table 46. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Nikolski, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	11
Surveyed Households	10
Sampling Fraction	90.9%
Sample Household Members	24
Estimated Household Members	26.4
Estimated Native Population	26.4

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	10.0%	10.0%
Hunted	10.0%	10.0%
Harvested	10.0%	10.0%
Received	0.0%	0.0%
Gave Away	10.0%	10.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	1.1	2.2
Total Number Struck and Lost	0.0	0.0
Total Number Taken	1.1	2.2
Number Harvested Per Capita	0.04	0.08

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	1	0	0	0	0	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0		1.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0		1.1
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	1	1	0	0	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	2.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	2.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0		2.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0		2.2
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2	2.2	2.2	2.2		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	100.0%	100.0%	100.0%	100.0%		

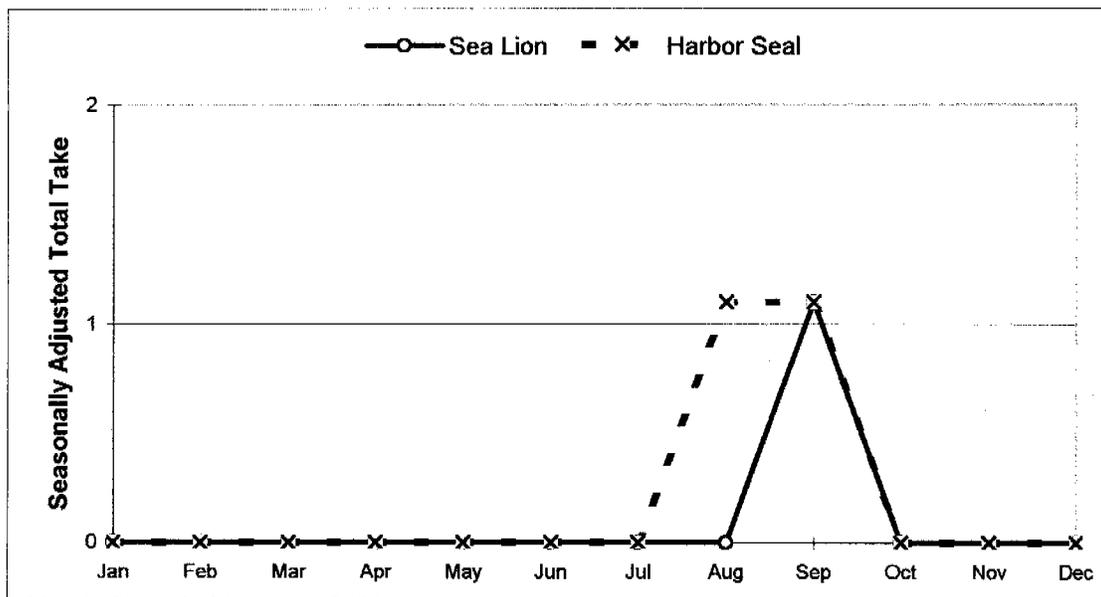
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Nikolski IRA Council and Chaluka Corporation. (Numbers based on 1998 survey estimates).

Table 46. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Nikolski, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	100.0%	1.1	100.0%	2	100.0%	2.2	100.0%
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	1	100.0%	1.1	100.0%	2	100.0%	2.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	8.2	0.0	8.2	1992	5.8	3.5	9.3
1993	6.0	0.0	6.0	1993	4.0	1.0	5.0
1994	0.0	0.0	0.0	1994	6.0	0.0	6.0
1995	---	---	---	1995	---	---	---
1996	3.0	0.0	3.0	1996	4.0	1.0	5.0
1997	3.0	0.0	3.0	1997	4.0	1.0	5.0
1998	1.1	0.0	1.1	1998	2.2	0.0	2.2
2000	1.1	0.0	1.1	2000	2.2	0.0	2.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Nikolski IRA Council and Chaluka Corporation. (Numbers based on 1998 survey estimates).

Table 47. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Unalaska, 2000

SAMPLING DESIGN:		Active	Other	Total
TWO-STRATA				
	Total Native Households	24	79	103
	Surveyed Households	14	27	41
	Sampling Fraction	58.3%	34.2%	39.8%
	Sample Household Members	44	70	114
	Estimated Household Members	75.4	203.6	279.0
	Estimated Native Population	---	---	397.0

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):	
	Sea Lion	Harbor Seal	Sea Lion	Harbor Seal
Used	46.7%	25.9%	Total Number Harvested	49.2 34.3
Hunted	16.2%	10.0%	Total Number Struck and Lost	3.4 5.1
Harvested	16.2%	10.0%	Total Number Taken	52.6 39.4
Received	33.9%	17.5%		
Gave Away	30.4%	15.7%	Number Harvested Per Capita	0.18 0.12

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	1	1	0	0	4	3	2	2	0	1	14	28
Struck & Lost	0	0	1	1	0	0	0	0	0	0	0	0	0	2
Total Take	0	0	2	2	0	0	4	3	2	2	0	1	14	30
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.7	1.7	0.0	0.0	6.9	5.1	4.6	3.4	0.0	1.7	24.0	49.2
Struck & Lost	0.0	0.0	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
Total Take	0.0	0.0	3.4	3.4	0.0	0.0	6.9	5.1	4.6	3.4	0.0	1.7	24.0	52.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.3	3.3	0.0	0.0	13.4	10.0	9.1	6.7	0.0	3.3		49.2
Struck & Lost	0.0	0.0	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		3.4
Total Take	0.0	0.0	5.1	5.1	0.0	0.0	13.4	10.0	9.1	6.7	0.0	3.3		52.6
Total Take (%)	0.0%	0.0%	9.6%	9.6%	0.0%	0.0%	25.4%	19.1%	17.2%	12.7%	0.0%	6.4%		100.0%
Cum. Take	0.0	0.0	5.1	10.1	10.1	10.1	23.5	33.5	42.6	49.3	49.3	52.6		
Cum. Take (%)	0.0%	0.0%	9.6%	19.2%	19.2%	19.2%	44.7%	63.7%	80.9%	93.6%	93.6%	100.0%		

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	3	1	1	1	5	2	1	2	3	0	1	0	20
Struck & Lost	0	0	0	0	0	0	1	0	1	1	0	0	0	3
Total Take	0	3	1	1	1	5	3	1	3	4	0	1	0	23
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	5.1	1.7	1.7	1.7	8.6	3.4	1.7	3.4	5.1	0.0	1.7	0.0	34.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7	1.7	0.0	0.0	0.0	5.1
Total Take	0.0	5.1	1.7	1.7	1.7	8.6	5.1	1.7	5.1	6.9	0.0	1.7	0.0	39.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	5.1	1.7	1.7	1.7	8.6	3.4	1.7	3.4	5.1	0.0	1.7		34.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7	1.7	0.0	0.0		5.1
Total Take	0.0	5.1	1.7	1.7	1.7	8.6	5.1	1.7	5.1	6.9	0.0	1.7		39.4
Total Take (%)	0.0%	13.0%	4.3%	4.3%	4.3%	21.7%	13.0%	4.3%	13.0%	17.4%	0.0%	4.3%		100.0%
Cum. Take	0.0	5.1	6.9	8.6	10.3	18.9	24.0	25.7	30.9	37.7	37.7	39.4		
Cum. Take (%)	0.0%	13.0%	17.4%	21.7%	26.1%	47.8%	60.9%	65.2%	78.3%	95.7%	95.7%	100.0%		

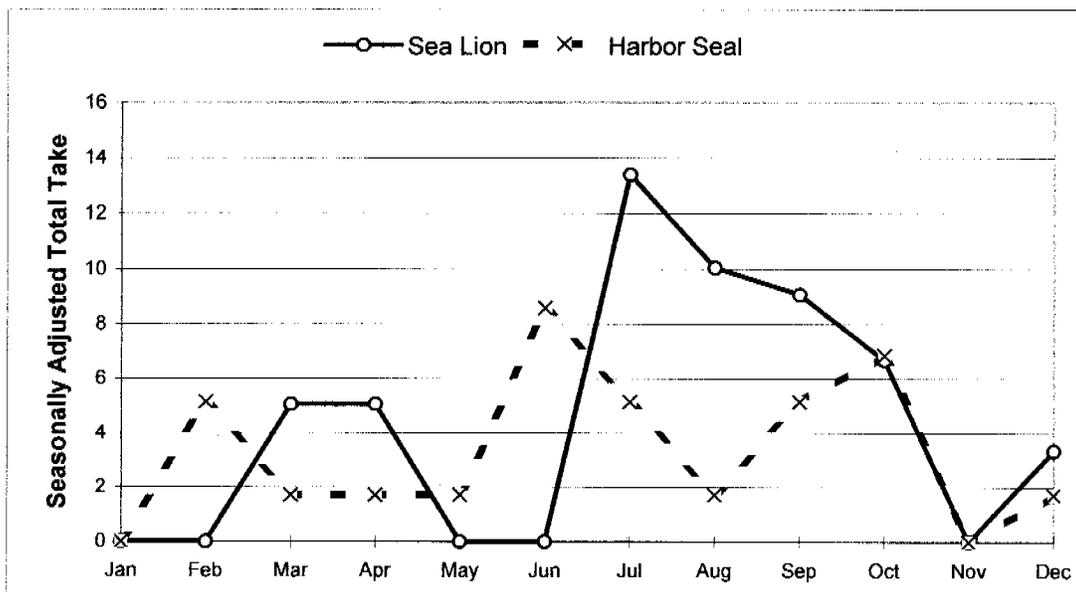
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Qawalangin Tribal Council, 2000.

Table 47. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Unalaska, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	4	14.3%	6.9	13.9%	6	30.0%	10.3	30.0%
Adult Female	2	7.1%	3.4	7.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	5	17.9%	8.6	17.4%	7	35.0%	12.0	35.0%
Juvenile Female	3	10.7%	6.4	12.9%	1	5.0%	1.7	5.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	4	20.0%	6.9	20.0%
Pup Male	0	0.0%	0.0	0.0%	1	5.0%	1.7	5.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	1	5.0%	1.7	5.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	14	50.0%	24.0	48.8%	0	0.0%	0.0	0.0%
Total	28	100.0%	49.2	100.0%	20	100.0%	34.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	41.8	16.7	58.5	1992	47.0	3.7	50.8
1993	53.4	15.9	69.3	1993	32.7	9.9	42.6
1994	43.6	8.4	51.9	1994	31.4	10.5	41.8
1995	39.0	11.1	50.1	1995	37.4	9.7	47.1
1996	15.2	6.3	21.6	1996	20.3	5.1	25.4
1997	29.1	1.3	30.3	1997	26.5	0.0	26.5
1998	7.3	5.5	12.7	1998	12.7	0.0	12.7
2000	49.2	3.4	52.6	2000	34.3	5.1	39.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Qawalangin Tribal Council, 2000.

Table 48. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: St. George, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	47
Surveyed Households	44
Sampling Fraction	93.6%
Sample Household Members	138
Estimated Household Members	147.4
Estimated Native Population	147.4

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	59.1%	0.0%
Hunted	22.7%	0.0%
Harvested	15.9%	0.0%
Received	59.1%	0.0%
Gave Away	31.8%	0.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	11.8	0.0
Total Number Struck and Lost	8.5	0.0
Total Number Taken	20.3	0.0
Number Harvested Per Capita	0.08	0.00

SEA LION HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	4	5	2	0	0	0	0	0	0	0	0	0	11
Struck & Lost	1	1	6	0	0	0	0	0	0	0	0	0	0	8
Total Take	1	5	11	2	0	0	0	0	0	0	0	0	0	19
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	4.3	5.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.8
Struck & Lost	1.1	1.1	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Total Take	1.1	5.3	11.8	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	4.3	5.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.8
Struck & Lost	1.1	1.1	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Total Take	1.1	5.3	11.8	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3
Total Take (%)	5.3%	26.3%	57.9%	10.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	1.1	6.4	18.2	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	
Cum. Take (%)	5.3%	31.6%	89.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	

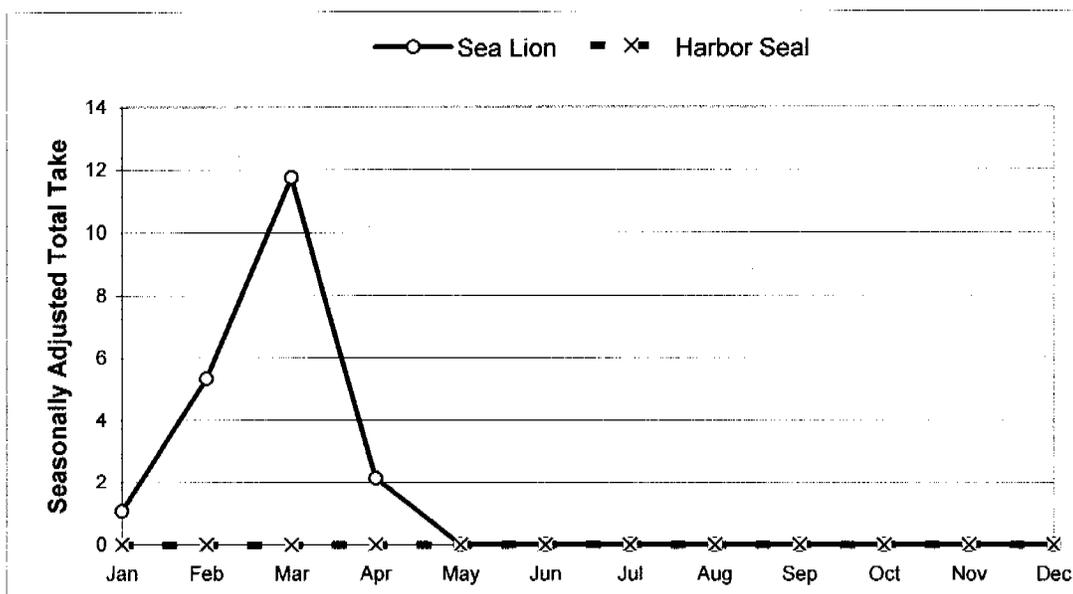
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the St. George Traditional IRA Council, City of St. George, & St. George Tanaq Corporation. (Numbers based on 1998 survey estimates).

Table 48. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: St. George, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	3	27.3%	3.2	27.3%	0	—	0.0	—
Adult Female	0	0.0%	0.0	0.0%	0	—	0.0	—
Adult Unknown Sex	1	9.1%	1.1	9.1%	0	—	0.0	—
Juvenile Male	4	36.4%	4.3	36.4%	0	—	0.0	—
Juvenile Female	2	18.2%	2.1	18.2%	0	—	0.0	—
Juvenile Unknown Sex	1	9.1%	1.1	9.1%	0	—	0.0	—
Pup Male	0	0.0%	0.0	0.0%	0	—	0.0	—
Pup Female	0	0.0%	0.0	0.0%	0	—	0.0	—
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	—	0.0	—
Male Unknown Age	0	0.0%	0.0	0.0%	0	—	0.0	—
Female Unknown Age	0	0.0%	0.0	0.0%	0	—	0.0	—
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	—	0.0	—
Total	11	100.0%	11.8	100.0%	0	—	0.0	—

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	14.9	55.0	69.9	1992	0.0	0.0	0.0
1993	3.7	14.8	18.6	1993	0.0	0.0	0.0
1994	2.8	17.1	19.9	1994	0.0	0.0	0.0
1995	4.0	4.0	8.0	1995	0.0	0.0	0.0
1996	4.0	4.0	8.0	1996	0.0	0.0	0.0
1997	19.6	8.1	27.7	1997	0.0	0.0	0.0
1998	11.8	8.5	20.3	1998	0.0	0.0	0.0
2000	11.8	8.5	20.3	2000	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the St. George Traditional IRA Council, City of St. George, & St. George Tanaq Corporation. (Numbers based on 1998 survey estimates).

Table 49. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: St. Paul, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>TWO-STRATA</i>				
	Total Native Households	45	106	151
	Surveyed Households	39	35	74
	Sampling Fraction	86.7%	33.0%	49.0%
	Sample Household Members	146	98	244
	Estimated Household Members	168.5	296.8	465.3
	Estimated Native Population	---	---	465.3

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>	
	<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Sea Lion</u>	<u>Harbor Seal</u>
Used	63.5%	3.1%	Total Number Harvested	41.0 4.6
Hunted	23.3%	1.5%	Total Number Struck and Lost	16.9 0.0
Harvested	13.7%	1.5%	Total Number Taken	57.8 4.6
Received	60.5%	1.5%		
Gave Away	10.9%	2.3%	Number Harvested Per Capita	0.09 0.01

<i>SEA LION HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	1	0	0	13	2	0	0	0	9	3	1	0	29
Struck & Lost	0	0	2	1	4	0	0	0	0	2	3	1	0	13
Total Take	0	1	2	1	17	2	0	0	0	11	6	2	0	42
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.0	0.0	0.0	18.7	4.2	0.0	0.0	0.0	10.4	3.5	1.2	0.0	41.0
Struck & Lost	0.0	0.0	2.3	1.2	6.5	0.0	0.0	0.0	0.0	2.3	3.5	1.2	0.0	16.9
Total Take	0.0	3.0	2.3	1.2	25.2	4.2	0.0	0.0	0.0	12.7	6.9	2.3	0.0	57.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	3.0	0.0	0.0	18.7	4.2	0.0	0.0	0.0	10.4	3.5	1.2		41.0
Struck & Lost	0.0	0.0	2.3	1.2	6.5	0.0	0.0	0.0	0.0	2.3	3.5	1.2		16.9
Total Take	0.0	3.0	2.3	1.2	25.2	4.2	0.0	0.0	0.0	12.7	6.9	2.3		57.8
Total Take (%)	0.0%	5.2%	4.0%	2.0%	43.6%	7.2%	0.0%	0.0%	0.0%	21.9%	12.0%	4.0%		100.0%
Cum. Take	0.0	3.0	5.3	6.5	31.7	35.9	35.9	35.9	35.9	48.6	55.5	57.8		
Cum. Take (%)	0.0%	5.2%	9.2%	11.2%	54.9%	62.1%	62.1%	62.1%	62.1%	84.0%	96.0%	100.0%		

<i>HARBOR SEAL HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	2	0	0	0	0	2	0	0	0	4
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	2	0	0	0	0	2	0	0	0	4
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	4.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	4.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	2.3	0.0	0.0		4.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	2.3	0.0	0.0		4.6
Total Take (%)	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	4.6	4.6	4.6		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%		

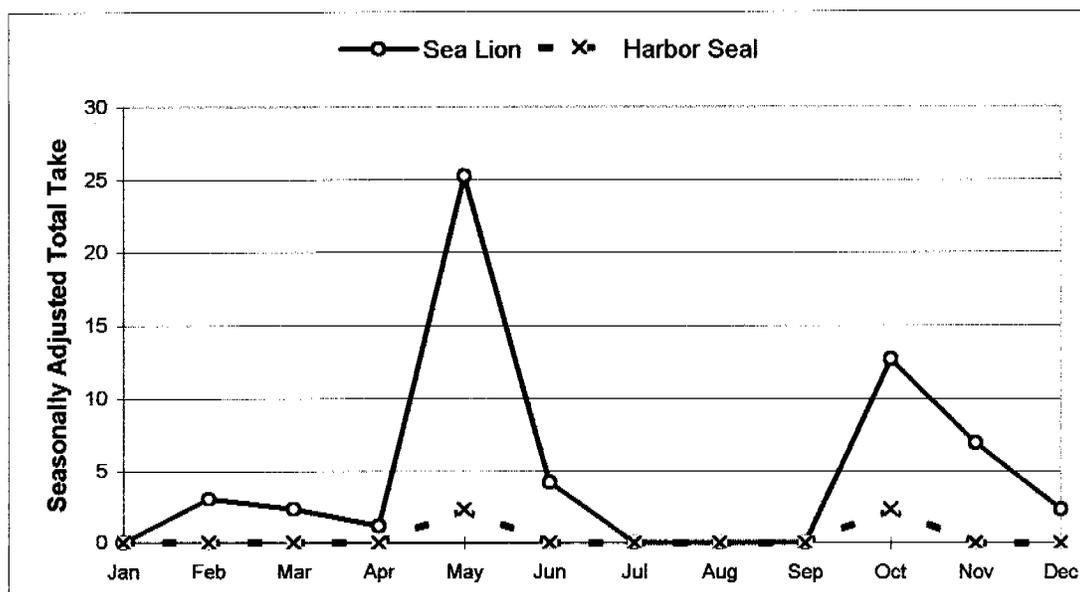
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of St. Paul and Tribal Government of St. Paul. (Numbers based on 1998 survey estimates).

Table 49. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: St. Paul, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	2	6.9%	2.3	5.6%	3	75.0%	3.5	75.0%
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	17	58.6%	21.5	52.5%	1	25.0%	1.2	25.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	9	31.0%	14.1	34.5%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	1	3.4%	3.0	7.4%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	29	100.0%	41.0	100.0%	4	100.0%	4.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	161.7	65.2	226.8	1992	2.3	1.2	3.5
1993	161.7	65.2	226.8	1993	2.3	1.2	3.5
1994	147.0	26.4	173.4	1994	7.3	0.0	7.3
1995	53.6	6.3	59.9	1995	2.5	0.0	2.5
1996	28.2	10.2	38.4	1996	0.0	0.0	0.0
1997	25.9	2.3	28.2	1997	0.0	0.0	0.0
1998	41.0	16.9	57.8	1998	4.6	0.0	4.6
2000	41.0	16.9	57.8	2000	4.6	0.0	4.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of St. Paul and Tribal Government of St. Paul. (Numbers based on 1998 survey estimates).

Table 50. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Egegik, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	24
Surveyed Households	24
Sampling Fraction	100.0%
Sample Household Members	51
Estimated Household Members	51.0
Estimated Native Population	89.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	0.0%	12.5%
Hunted	0.0%	12.5%
Harvested	0.0%	8.3%
Received	0.0%	4.2%
Gave Away	0.0%	4.2%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	4.0
Total Number Struck and Lost	0.0	3.0
Total Number Taken	0.0	7.0
Number Harvested Per Capita	0.00	0.08

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	3	0	0	1	0	0	0	0	4
Struck & Lost	0	0	0	0	0	2	1	0	0	0	0	0	0	3
Total Take	0	0	0	0	0	5	1	0	1	0	0	0	0	7
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	4.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
Total Take	0.0	0.0	0.0	0.0	0.0	5.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	7.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	4.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
Total Take	0.0	0.0	0.0	0.0	0.0	5.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	7.0
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	71.4%	14.3%	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	5.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	71.4%	85.7%	85.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

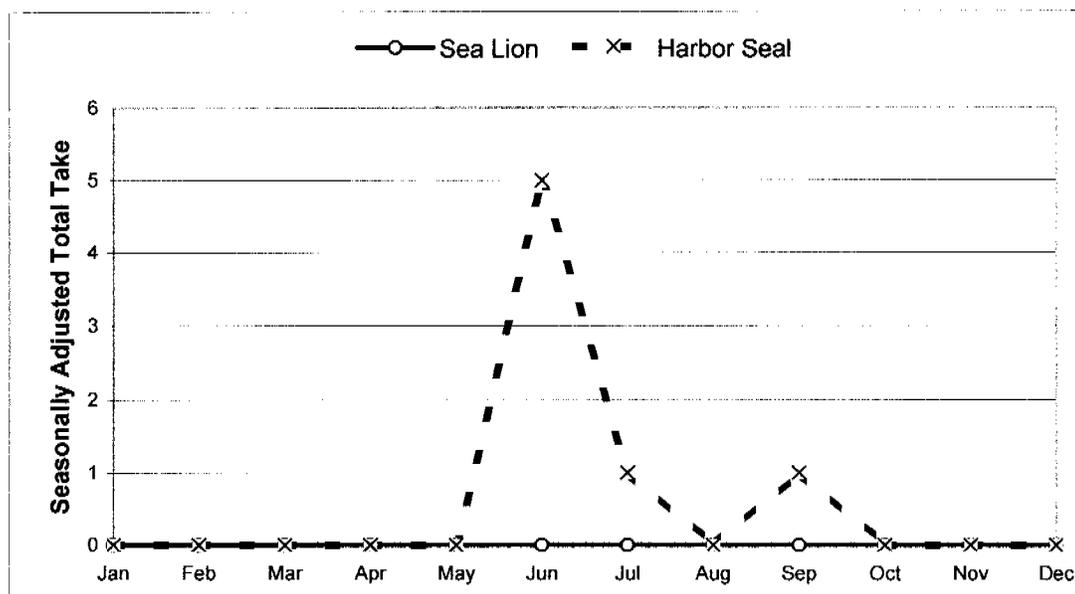
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Egegik Traditional Council, 2000.

Table 50. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Egegik, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	3	75.0%	3.0	75.0%
Adult Female	0	--	0.0	--	1	25.0%	1.0	25.0%
Adult Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Male Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Female Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Total	0	--	0.0	--	4	100.0%	4.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	3.3	14.3	17.7
1993	0.0	0.0	0.0	1993	7.7	3.3	11.0
1994	0.0	0.0	0.0	1994	12.8	0.0	12.8
1995	0.0	0.0	0.0	1995	1.4	0.0	1.4
1996	0.0	0.0	0.0	1996	2.8	0.0	2.8
1997	0.0	0.0	0.0	1997	1.6	0.0	1.6
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	4.0	3.0	7.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Egegik Traditional Council, 2000.

Table 51. SEA LION AND HARBOR SEAL HARVEST / TAKE ESTIMATES: King Salmon, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	26
Surveyed Households	16
Sampling Fraction	61.5%
Sample Household Members	43
Estimated Household Members	69.9
Estimated Native Population	133.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	0.0%	31.3%
Hunted	0.0%	12.5%
Harvested	0.0%	12.5%
Received	0.0%	31.3%
Gave Away	0.0%	18.8%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	3.3
Total Number Struck and Lost	0.0	9.8
Total Number Taken	0.0	13.0
Number Harvested Per Capita	0.00	0.05

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Struck & Lost	0	0	0	0	0	3	3	0	0	0	0	0	0	6
Total Take	0	0	0	0	2	3	3	0	0	0	0	0	0	8
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	9.8
Total Take	0.0	0.0	0.0	0.0	3.3	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	13.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	9.8
Total Take	0.0	0.0	0.0	0.0	3.3	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	13.0
Total Take (%)	0.0%	0.0%	0.0%	0.0%	25.0%	37.5%	37.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	3.3	8.1	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	25.0%	62.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

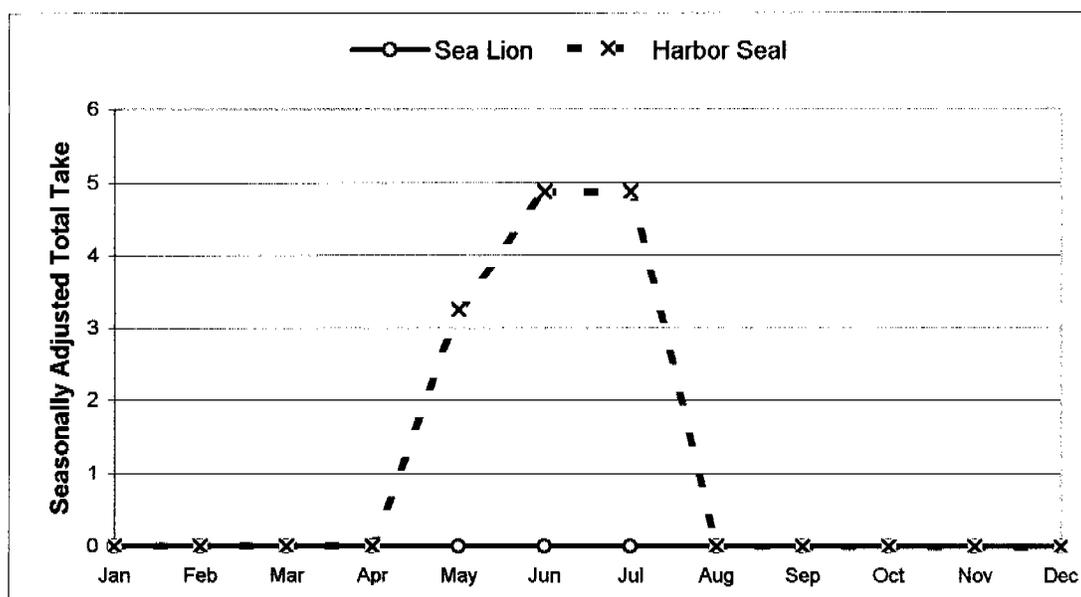
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the King Salmon Traditional Council, 2000.

Table 51. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: King Salmon, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	1	50.0%	1.6	50.0%
Adult Female	0	---	0.0	---	1	50.0%	1.6	50.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	2	100.0%	3.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	10.2	0.0	10.2
1993	0.0	0.0	0.0	1993	21.3	10.7	32.0
1994	0.0	0.0	0.0	1994	3.3	9.8	13.0
1995	0.0	0.0	0.0	1995	13.0	3.0	16.0
1996	0.0	0.0	0.0	1996	9.5	2.4	11.9
1997	0.0	0.0	0.0	1997	9.7	0.0	9.7
1998	0.0	0.0	0.0	1998	5.2	0.0	5.2
2000	0.0	0.0	0.0	2000	3.3	9.8	13.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the King Salmon Traditional Council, 2000.

Table 52. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Levelock, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	34
Surveyed Households	24
Sampling Fraction	70.6%
Sample Household Members	92
Estimated Household Members	130.3
Estimated Native Population	116.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	0.0%	70.8%
Hunted	0.0%	29.2%
Harvested	0.0%	8.3%
Received	0.0%	70.8%
Gave Away	0.0%	29.2%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	2.8
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	2.8
Number Harvested Per Capita	0.00	0.02

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	2	0	0	0	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	2.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	2.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	2.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	2.8
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

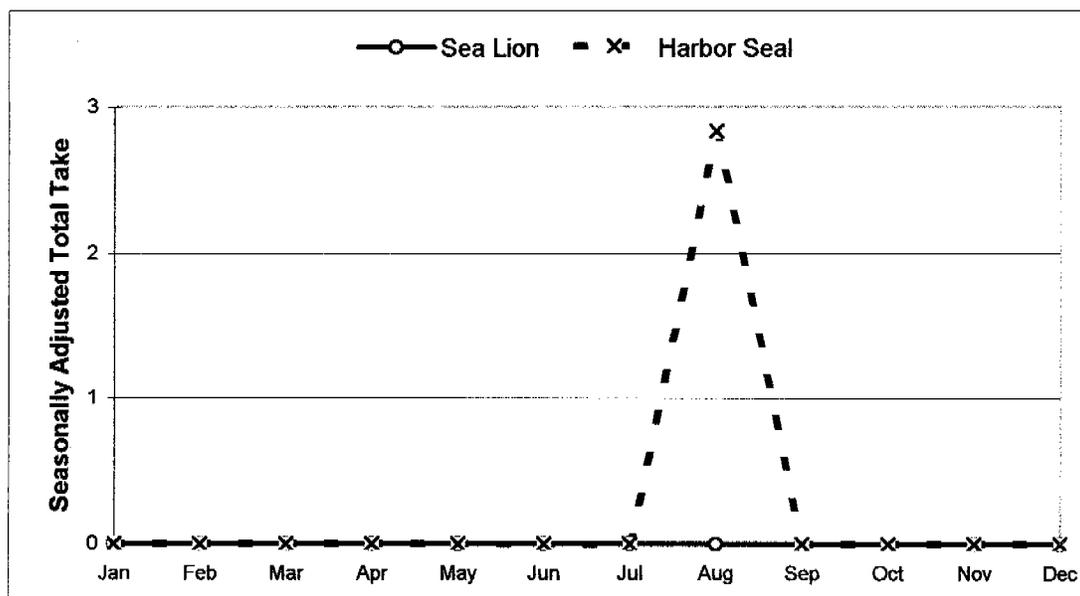
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Levelock Traditional Council, 2000.

Table 52. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Levelock, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	2	100.0%	2.8	100.0%
Total	0	---	0.0	---	2	100.0%	2.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	10.8	0.0	10.8
1993	0.0	0.0	0.0	1993	2.7	5.4	8.1
1994	0.0	0.0	0.0	1994	2.8	0.0	2.8
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	2.8	0.0	2.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Levelock Traditional Council, 2000.

Table 53. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Naknek, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>TWO-STRATA</i>				
	Total Native Households	14	45	59
	Surveyed Households	12	26	38
	Sampling Fraction	85.7%	57.8%	64.4%
	Sample Household Members	31	74	105
	Estimated Household Members	36.2	128.1	164.2
	Estimated Native Population	---	---	319.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>	
	<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Sea Lion</u>	<u>Harbor Seal</u>
Used	0.0%	13.8%	Total Number Harvested	0.0 16.3
Hunted	0.0%	9.9%	Total Number Struck and Lost	0.0 0.0
Harvested	0.0%	7.9%	Total Number Taken	0.0 16.3
Received	0.0%	5.9%		
Gave Away	0.0%	5.9%	Number Harvested Per Capita	0.00 0.10

<i>SEA LION HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

<i>HARBOR SEAL HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	2	4	4	4	0	0	0	0	0	0	14
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	2	4	4	4	0	0	0	0	0	0	14
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	2.3	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	16.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	2.3	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	16.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	2.3	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	16.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	2.3	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	16.3
Total Take (%)	0.0%	0.0%	0.0%	14.3%	28.6%	28.6%	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	2.3	7.0	11.7	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
Cum. Take (%)	0.0%	0.0%	0.0%	14.3%	42.9%	71.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

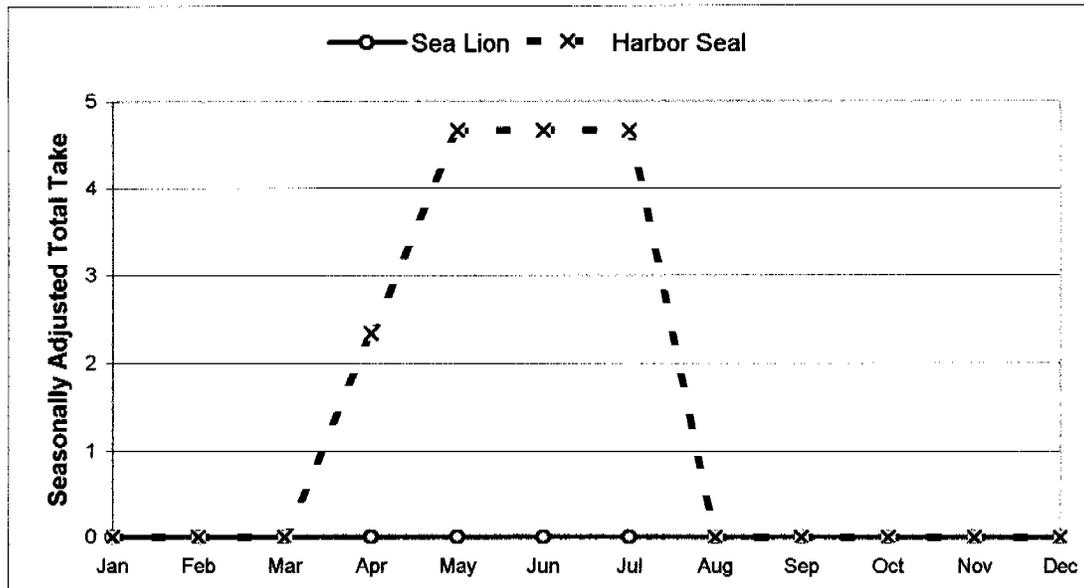
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Naknek Traditional Council, 2000.

Table 53. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Naknek, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	4	28.6%	4.7	28.6%
Adult Female	0	---	0.0	---	5	35.7%	5.8	35.7%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	2	14.3%	2.3	14.3%
Juvenile Female	0	---	0.0	---	1	7.1%	1.2	7.1%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	2	14.3%	2.3	14.3%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	14	100.0%	16.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	26.6	7.0	33.6
1993	0.0	0.0	0.0	1993	2.7	0.0	2.7
1994	0.0	0.0	0.0	1994	21.4	8.3	29.7
1995	0.0	0.0	0.0	1995	34.8	15.3	50.2
1996	0.0	0.0	0.0	1996	16.2	7.5	23.7
1997	0.0	0.0	0.0	1997	24.8	6.5	31.2
1998	0.0	0.0	0.0	1998	15.7	7.8	23.5
2000	0.0	0.0	0.0	2000	16.3	0.0	16.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Naknek Traditional Council, 2000.

Table 54. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Pilot Point, 2000

SAMPLING DESIGN:

CENSUS	Total Native Households	17
	Surveyed Households	16
	Sampling Fraction	94.1%
	Sample Household Members	51
	Estimated Household Members	54.2
	Estimated Native Population	86.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	0.0%	25.0%	Total Number Harvested	0.0	5.3
Hunted	0.0%	18.8%	Total Number Struck and Lost	0.0	2.1
Harvested	0.0%	18.8%	Total Number Taken	0.0	7.4
Received	0.0%	6.3%			
Gave Away	0.0%	12.5%	Number Harvested Per Capita	0.00	0.10

SEA LION HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	3	0	2	0	0	0	0	0	5
Struck & Lost	0	0	0	0	0	1	1	0	0	0	0	0	0	2
Total Take	0	0	0	0	0	4	1	2	0	0	0	0	0	7
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	3.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	5.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Total Take	0.0	0.0	0.0	0.0	0.0	4.3	1.1	2.1	0.0	0.0	0.0	0.0	0.0	7.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	3.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	5.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Total Take	0.0	0.0	0.0	0.0	0.0	4.3	1.1	2.1	0.0	0.0	0.0	0.0	0.0	7.4
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	57.1%	14.3%	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	4.3	5.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	57.1%	71.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

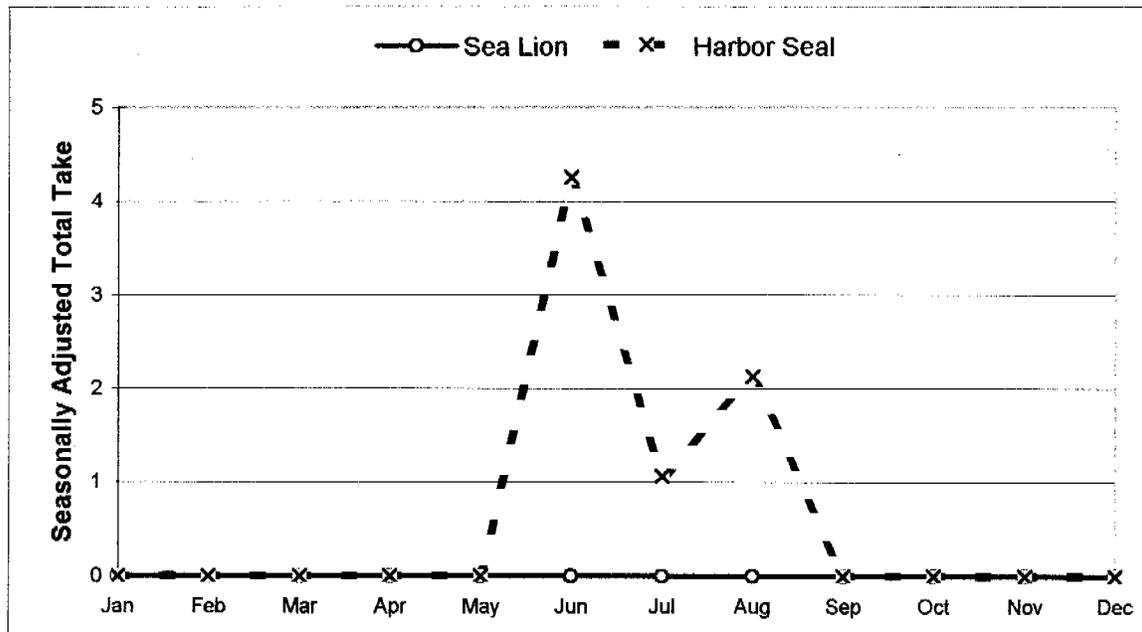
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Pilot Point Traditional Council, 2000.

Table 54. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Pilot Point, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	4	80.0%	4.3	80.0%
Adult Female	0	---	0.0	---	1	20.0%	1.1	20.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	5	100.0%	5.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	5.4	4.3	9.7
1993	0.0	0.0	0.0	1993	2.2	0.0	2.2
1994	0.0	0.0	0.0	1994	3.1	0.0	3.1
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	5.3	2.1	7.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Pilot Point Traditional Council, 2000.

Table 55. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Port Heiden, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	24
Surveyed Households	22
Sampling Fraction	91.7%
Sample Household Members	77
Estimated Household Members	84.0
Estimated Native Population	93.0

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal		Sea Lion	Harbor Seal
Used	0.0%	31.8%	Total Number Harvested	0.0	19.6
Hunted	0.0%	18.2%	Total Number Struck and Lost	0.0	0.0
Harvested	0.0%	18.2%	Total Number Taken	0.0	19.6
Received	0.0%	22.7%			
Gave Away	0.0%	18.2%	Number Harvested Per Capita	0.00	0.23

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	3	4	0	0	3	8	0	0	0	0	18
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	3	4	0	0	3	8	0	0	0	0	18
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	3.3	4.4	0.0	0.0	3.3	8.7	0.0	0.0	0.0	0.0	19.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	3.3	4.4	0.0	0.0	3.3	8.7	0.0	0.0	0.0	0.0	19.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	3.3	4.4	0.0	0.0	3.3	8.7	0.0	0.0	0.0	0.0	19.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	3.3	4.4	0.0	0.0	3.3	8.7	0.0	0.0	0.0	0.0	19.6
Total Take (%)	0.0%	0.0%	0.0%	16.7%	22.2%	0.0%	0.0%	16.7%	44.4%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	3.3	7.6	7.6	7.6	10.9	19.6	19.6	19.6	19.6	19.6	19.6
Cum. Take (%)	0.0%	0.0%	0.0%	16.7%	38.9%	38.9%	38.9%	55.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

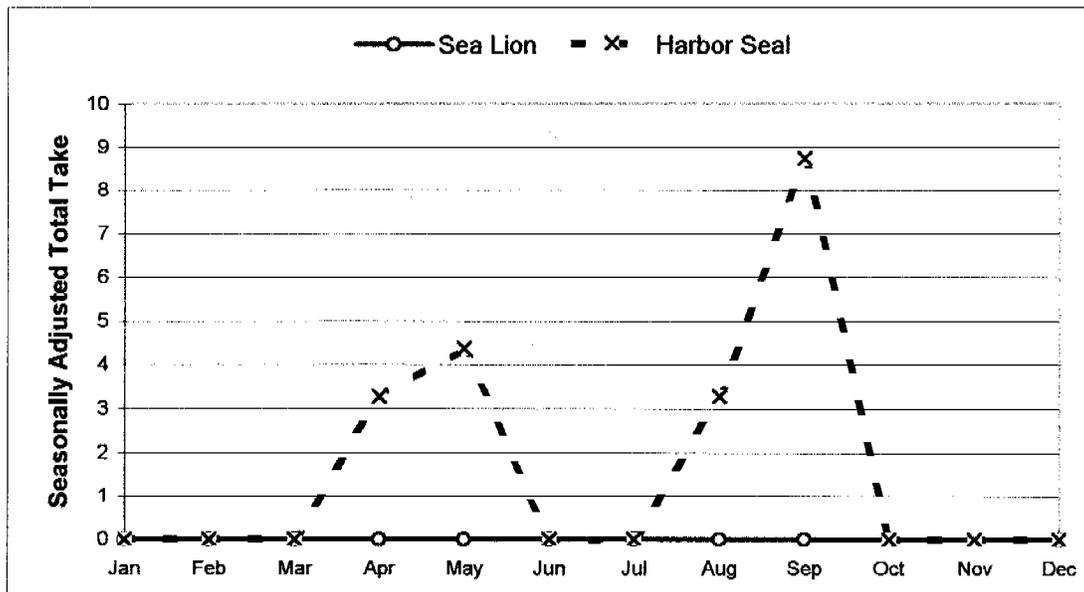
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Port Heiden Traditional Council, 2000.

Table 55. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Port Heiden, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	8	44.4%	8.7	44.4%
Adult Female	0	--	0.0	--	8	44.4%	8.7	44.4%
Adult Unknown Sex	0	--	0.0	--	2	11.1%	2.2	11.1%
Juvenile Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Male	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Female	0	--	0.0	--	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%
Male Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Female Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	--	0.0	--	0	0.0%	0.0	0.0%
Total	0	--	0.0	--	18	100.0%	19.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	40.5	36.0	76.5
1993	0.0	0.0	0.0	1993	30.7	19.9	50.6
1994	0.0	0.0	0.0	1994	63.0	45.3	108.3
1995	0.0	0.0	0.0	1995	17.0	10.0	27.0
1996	0.0	0.0	0.0	1996	34.3	34.3	68.6
1997	0.0	0.0	0.0	1997	69.2	50.0	119.2
1998	0.0	0.0	0.0	1998	36.1	18.6	54.7
2000	0.0	0.0	0.0	2000	19.6	0.0	19.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Port Heiden Traditional Council, 2000.

Table 56. SEA LION AND HARBOR SEAL HARVEST / TAKE ESTIMATES: South Naknek, 2000

**SAMPLING DESIGN:
CENSUS**

Total Native Households	27
Surveyed Households	20
Sampling Fraction	74.1%
Sample Household Members	63
Estimated Household Members	85.1
Estimated Native Population	115.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	0.0%	20.0%
Hunted	0.0%	15.0%
Harvested	0.0%	10.0%
Received	0.0%	10.0%
Gave Away	0.0%	10.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	4.1
Total Number Struck and Lost	0.0	2.7
Total Number Taken	0.0	6.8
Number Harvested Per Capita	0.00	0.05

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	2	0	1	0	0	0	3
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total Take	0	0	0	0	0	0	0	2	0	1	0	0	2	5
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	1.4	0.0	0.0	0.0	4.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	1.4	0.0	0.0	2.7	6.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	1.4	0.0	0.0	0.0	4.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.9	0.0	0.0	0.0	2.7
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	2.3	0.0	0.0	0.0	6.8
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	66.7%	0.0%	33.3%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	4.5	6.8	6.8	6.8	6.8	6.8
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	66.7%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%

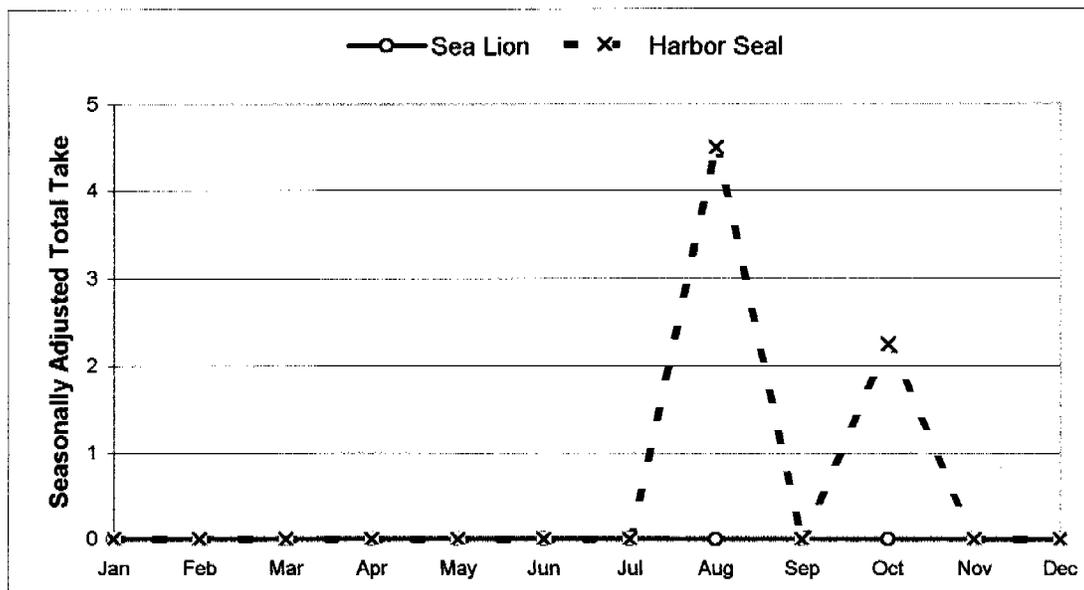
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the South Naknek Traditional Council, 2000.

Table 56. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: South Naknek, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	3	100.0%	4.1	100.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	3	100.0%	4.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	2.3	6.9	9.2
1993	0.0	0.0	0.0	1993	6.4	18.0	24.4
1994	0.0	0.0	0.0	1994	4.4	1.1	5.5
1995	0.0	0.0	0.0	1995	2.1	0.0	2.1
1996	0.0	0.0	0.0	1996	1.0	0.0	1.0
1997	0.0	0.0	0.0	1997	2.5	9.8	12.3
1998	0.0	0.0	0.0	1998	5.2	7.9	13.1
2000	0.0	0.0	0.0	2000	4.1	2.7	6.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the South Naknek Traditional Council, 2000.

Table 57. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Aleknagik, 2000

<i>SAMPLING DESIGN:</i>		Total
<i>CENSUS</i>	Total Native Households	43
	Surveyed Households	35
	Sampling Fraction	81.4%
	Sample Household Members	130
	Estimated Household Members	159.7
	Estimated Native Population	187.0

<i>HARVEST AND USE INFORMATION</i>			<i>Estimated Community Harvest and Take (Expanded):</i>			
<i>Percentage of Native Households:</i>			<i>Sea Harbor Spotted</i>			
	<u>Sea Lion</u>	<u>Harbor Seal and Spotted Seal</u>	<u>Lion</u>	<u>Seal</u>	<u>Seal</u>	
Used	0.0%	77.1%	0.0	2.5	6.1	
Hunted	0.0%	20.0%	0.0	0.0	2.5	
Harvested	0.0%	11.4%	0.0	2.5	8.6	
Received	0.0%	77.1%				
Gave Away	0.0%	17.1%	Number Harvested Per Capita	0.00	0.02	0.04

<i>SEA LION HARVEST BY MONTH</i>													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

<i>HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH</i>														Unknown Month	Total
	<u>Spotted Seal</u>				<u>Harbor Seal</u>				<u>Spotted Seal</u>						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
<i>REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)</i>															
Harvest	0	0	0	4	1	0	0	0	2	0	0	0	0	0	7
Struck & Lost	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Take	0	0	0	6	1	0	0	0	2	0	0	0	0	0	9
<i>ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>															
Harvest	0.0	0.0	0.0	4.9	1.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	8.6
Struck & Lost	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
Total Take	0.0	0.0	0.0	7.4	1.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	11.1
<i>ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)</i>															
Harvest	0.0	0.0	0.0	4.9	1.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	8.6
Struck & Lost	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
Total Take	0.0	0.0	0.0	7.4	1.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	11.1
Total Take (%)	0.0%	0.0%	0.0%	66.7%	11.1%	0.0%	0.0%	0.0%	22.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	7.4	8.6	8.6	8.6	8.6	11.1	11.1	11.1	11.1	11.1	11.1	
Cum. Take (%)	0.0%	0.0%	0.0%	66.7%	77.8%	77.8%	77.8%	77.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Aleknagik Tribal Council, 2000.

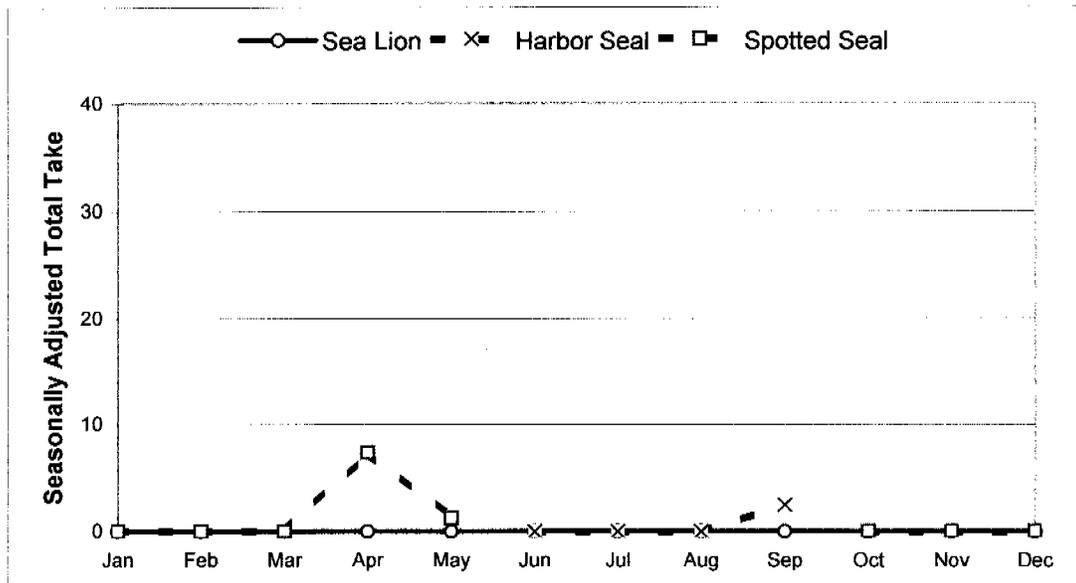
Table 57. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Aleknagik, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	2	100.0%	2.5	100.0%	3	60.0%	3.7	60.0%
Adult Female	0	—	0.0	—	0	0.0%	0.0	0.0%	1	20.0%	1.2	20.0%
Adult Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%	1	20.0%	1.2	20.0%
Juvenile Male	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	0	—	0.0	—	2	100.0%	2.5	100.0%	5	100.0%	6.1	100.0%

* Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column.

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	0.0	3.6	3.6	1992	28.6	5.5	34.1
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0	1993	4.8	0.0	4.8
1994	0.0	0.0	0.0	1994	0.0	3.3	3.3	1994	21.5	0.0	21.5
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0	1995	11.8	13.0	24.9
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0	1996	7.1	0.0	7.1
1997	0.0	0.0	0.0	1997	1.2	0.0	1.2	1997	10.8	0.0	10.8
1998	0.0	0.0	0.0	1998	3.1	0.0	3.1	1998	5.2	0.0	5.2
2000	0.0	0.0	0.0	2000	2.5	0.0	2.5	2000	6.1	2.5	8.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Aleknagik Tribal Council, 2000.

Table 58. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Clark's Point, 2000

SAMPLING DESIGN:		<u>Total</u>
CENSUS	Total Native Households	21
	Surveyed Households	15
	Sampling Fraction	71.4%
	Sample Household Members	46
	Estimated Household Members	64.4
	Estimated Native Population	69.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>			
	Sea Lion	Harbor Seal and Spotted Seal		Sea Lion	Harbor Seal	Spotted Seal
Used	0.0%	100.0%	Total Number Harvested	0.0	0.0	22.4
Hunted	0.0%	66.7%	Total Number Struck and Lost	0.0	0.0	1.4
Harvested	0.0%	40.0%	Total Number Taken	0.0	0.0	23.8
Received	0.0%	60.0%				
Gave Away	0.0%	100.0%	Number Harvested Per Capita	0.00	0.00	0.35

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH														Unknown Month	Total
	Spotted Seal					Harbor Seal					Spotted Seal				
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)															
Harvest	0	3	5	8	0	0	0	0	0	0	0	0	0	0	16
Struck & Lost	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Take	0	3	5	9	0	0	0	0	0	0	0	0	0	0	17
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	4.2	7.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4
Struck & Lost	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Total Take	0.0	4.2	7.0	12.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	4.2	7.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4
Struck & Lost	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Total Take	0.0	4.2	7.0	12.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.8
Total Take (%)	0.0%	17.6%	29.4%	52.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	4.2	11.2	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Cum. Take (%)	0.0%	17.6%	47.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Clark's Point Traditional Council, 2000.

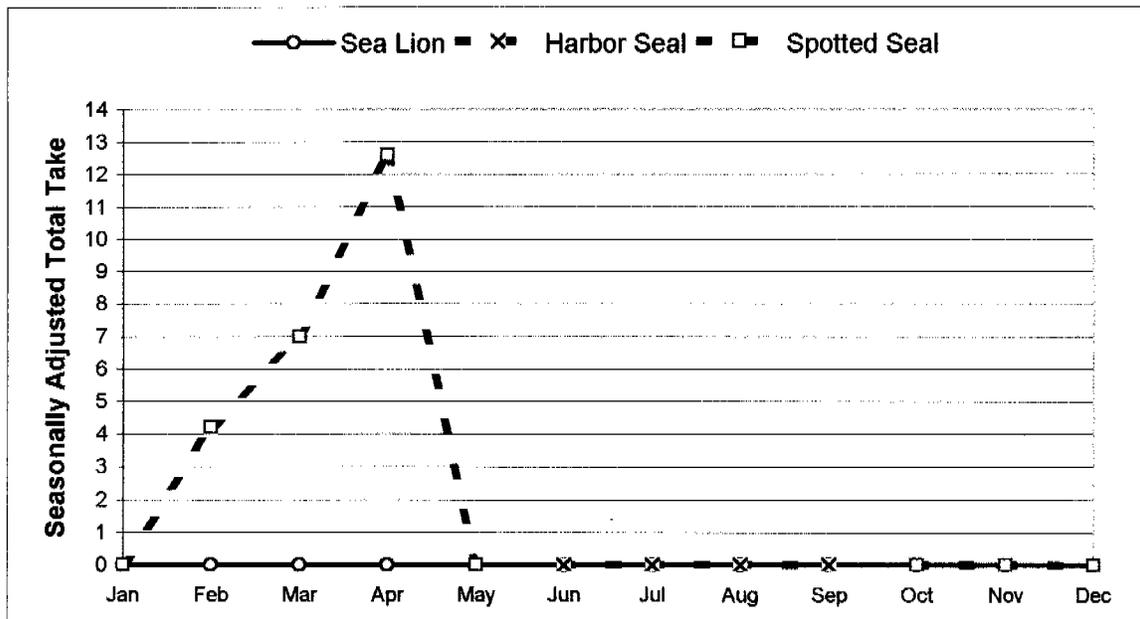
Table 58. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Clark's Point, 200

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	0	—	0.0	—	3	18.8%	4.2	18.8%
Adult Female	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	—	0.0	—	0	—	0.0	—	5	31.3%	7.0	31.3%
Juvenile Male	0	—	0.0	—	0	—	0.0	—	3	18.8%	4.2	18.8%
Juvenile Female	0	—	0.0	—	0	—	0.0	—	2	12.5%	2.8	12.5%
Juvenile Unknown Sex	0	—	0.0	—	0	—	0.0	—	3	18.8%	4.2	18.8%
Pup Male	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Male Unknown Age	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Total	0	—	0.0	—	0	—	0.0	—	16	100.0%	22.4	100.0%

* Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column.

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	0.0	0.0	0.0	1992	10.6	8.5	19.1
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0	1993	2.0	0.0	2.0
1994	0.0	0.0	0.0	1994	0.0	0.0	0.0	1994	2.0	0.0	2.0
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0	1995	10.0	5.0	15.0
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0	1996	17.1	3.8	20.9
1997	0.0	0.0	0.0	1997	1.3	0.0	1.3	1997	3.8	1.3	5.0
1998	0.0	0.0	0.0	1998	1.3	0.0	1.3	1998	3.8	1.3	5.0
2000	0.0	0.0	0.0	2000	0.0	0.0	0.0	2000	22.4	1.4	23.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Clark's Point Traditional Council, 2000.

Table 59. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Dillingham, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>TWO-STRATA</i>				
	Total Native Households	25	344	369
	Surveyed Households	21	11	32
	Sampling Fraction	84.0%	3.2%	8.7%
	Sample Household Members	95	34	129
	Estimated Household Members	113.1	1063.3	1176.4
	Estimated Native Population	---	---	1503.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>			
	<u>Sea Lion</u>	<u>Harbor Seal and Spotted Seal</u>		<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Spotted Seal</u>
Used	0.0%	63.5%	Total Number Harvested	0.0	0.0	11.9
Hunted	0.0%	2.6%	Total Number Struck and Lost	0.0	0.0	3.6
Harvested	0.0%	1.6%	Total Number Taken	0.0	0.0	15.5
Received	0.0%	63.2%				
Gave Away	0.0%	2.9%	Number Harvested Per Capita	0.00	0.00	0.01

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH

	<u>Spotted Seal</u>					<u>Harbor Seal</u>			<u>Spotted Seal</u>			Unknown Month	Total	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov			Dec
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	2	2	0	0	0	0	6	0	0	0	10
Struck & Lost	0	0	0	0	1	0	0	0	0	2	0	0	0	3
Total Take	0	0	0	2	3	0	0	0	0	8	0	0	0	13
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	2.4	2.4	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	11.9
Struck & Lost	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	3.6
Total Take	0.0	0.0	0.0	2.4	3.6	0.0	0.0	0.0	0.0	9.5	0.0	0.0	0.0	15.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	2.4	2.4	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	11.9
Struck & Lost	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	3.6
Total Take	0.0	0.0	0.0	2.4	3.6	0.0	0.0	0.0	0.0	9.5	0.0	0.0	0.0	15.5
Total Take (%)	0.0%	0.0%	0.0%	15.4%	23.1%	0.0%	0.0%	0.0%	0.0%	61.5%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	2.4	6.0	6.0	6.0	6.0	6.0	15.5	15.5	15.5	15.5	15.5
Cum. Take (%)	0.0%	0.0%	0.0%	15.4%	38.5%	38.5%	38.5%	38.5%	38.5%	100.0%	100.0%	100.0%	100.0%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Dillingham Traditional Council, 2000.

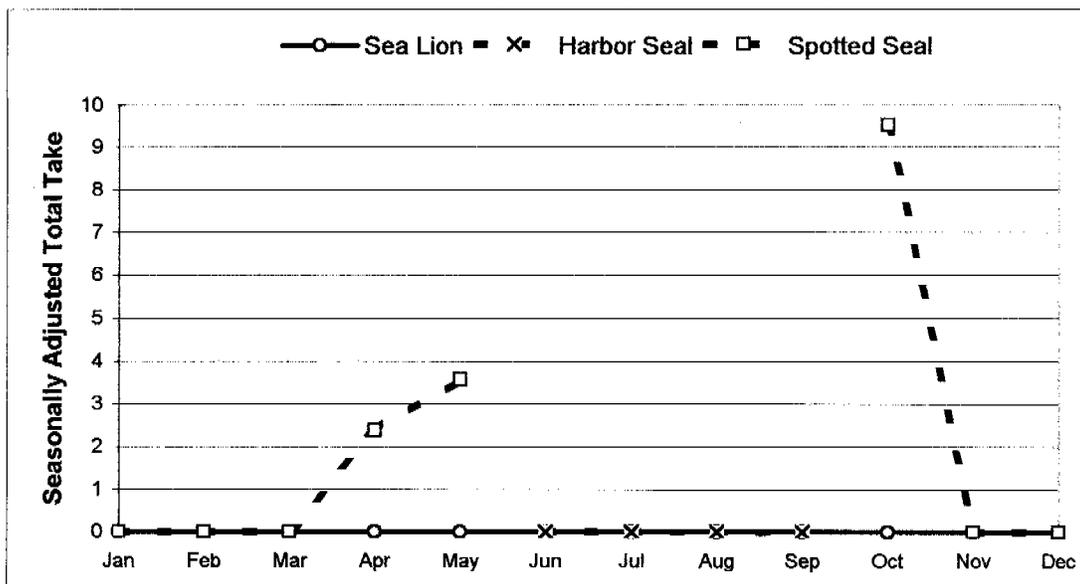
Table 59. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Dillingham, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	0	—	0.0	—	1	10.0%	1.2	10.0%
Adult Female	0	—	0.0	—	0	—	0.0	—	1	10.0%	1.2	10.0%
Adult Unknown Sex	0	—	0.0	—	0	—	0.0	—	1	10.0%	1.2	10.0%
Juvenile Male	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Female	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	—	0.0	—	0	—	0.0	—	6	60.0%	7.1	60.0%
Pup Male	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	—	0.0	—	0	—	0.0	—	1	10.0%	1.2	10.0%
Male Unknown Age	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Female Unknown Age	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	—	0.0	—	0	0.0%	0.0	0.0%
Total	0	—	0.0	—	0	—	0.0	—	10	100.0%	11.9	100.0%

* Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column.

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	29.2	3.8	32.9	1992	49.6	3.8	53.3
1993	0.0	0.0	0.0	1993	18.0	4.2	22.2	1993	26.1	0.0	26.1
1994	0.0	0.0	0.0	1994	16.2	0.0	16.2	1994	35.2	3.0	38.2
1995	0.0	0.0	0.0	1995	13.3	0.0	13.3	1995	7.5	7.5	15.0
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0	1996	40.6	1.0	41.6
1997	0.0	0.0	0.0	1997	1.2	0.0	1.2	1997	18.0	0.0	18.0
1998	0.0	0.0	0.0	1998	8.5	0.0	8.5	1998	12.2	1.2	13.4
2000	0.0	0.0	0.0	2000	0.0	0.0	0.0	2000	11.9	3.6	15.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Dillingham Traditional Council, 2000.

Table 60. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Manokotak, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>TWO-STRATA</i>	Total Native Households	34	45	79
	Surveyed Households	29	33	62
	Sampling Fraction	85.3%	73.3%	78.5%
	Sample Household Members	144	129	273
	Estimated Household Members	168.8	175.9	344.7
	Estimated Native Population	---	---	378.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>			
	<u>Sea Lion</u>	<u>Harbor Seal and Spotted Seal</u>		<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Spotted Seal</u>
Used	0.0%	73.8%	Total Number Harvested	0.0	1.2	23.0
Hunted	0.0%	25.0%	Total Number Struck and Lost	0.0	0.0	4.7
Harvested	0.0%	13.6%	Total Number Taken	0.0	1.2	27.7
Received	0.0%	70.9%				
Gave Away	0.0%	51.4%	Number Harvested Per Capita	0.00	0.00	0.07

SEA LION HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH														Unknown	Total
	<u>Spotted Seal</u>				<u>Harbor Seal</u>				<u>Spotted Seal</u>				Unknown		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)															
Harvest	0	2	3	7	7	1	0	0	0	0	0	0	0	20	
Struck & Lost	0	0	1	1	2	0	0	0	0	0	0	0	0	4	
Total Take	0	2	4	8	9	1	0	0	0	0	0	0	0	24	
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	2.3	3.5	8.2	9.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2	
Struck & Lost	0.0	0.0	1.2	1.2	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	
Total Take	0.0	2.3	4.7	9.4	11.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.9	
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	2.3	3.5	8.2	9.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2	
Struck & Lost	0.0	0.0	1.2	1.2	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	
Total Take	0.0	2.3	4.7	9.4	11.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.9	
Total Take (%)	0.0%	8.1%	16.2%	32.5%	39.2%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
Cum. Take	0.0	2.3	7.0	16.4	27.7	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	
Cum. Take (%)	0.0%	8.1%	24.3%	56.8%	95.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Manokotak Traditional Council, 2000.

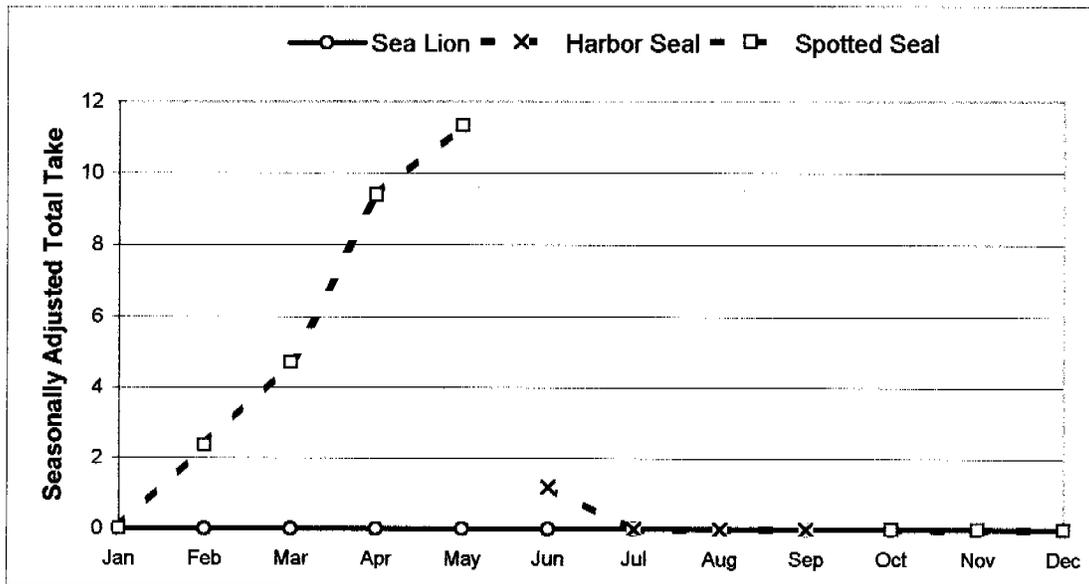
Table 60. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Manokotak, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	--	0.0	--	1	100.0%	1.2	100.0%	6	31.6%	7.4	32.2%
Adult Female	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%	3	15.8%	3.5	15.3%
Juvenile Male	0	--	0.0	--	0	0.0%	0.0	0.0%	2	10.5%	2.7	11.8%
Juvenile Female	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%	8	42.1%	9.4	40.7%
Pup Male	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	--	0.0	--	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	0	--	0.0	--	1	100.0%	1.2	100.0%	19	100.0%	23.0	100.0%

* Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column.

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	3.9	0.0	3.9	1992	4.9	3.8	8.7	1992	25.1	1.0	26.1
1993	0.0	0.0	0.0	1993	3.2	0.0	3.2	1993	7.4	0.0	7.4
1994	0.0	0.0	0.0	1994	0.0	0.0	0.0	1994	13.7	0.0	13.7
1995	0.0	0.0	0.0	1995	9.3	2.4	11.7	1995	22.9	3.6	26.5
1996	0.0	0.0	0.0	1996	2.4	3.6	6.0	1996	31.5	8.4	39.9
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0	1997	19.7	7.2	26.9
1998	0.0	0.0	0.0	1998	4.0	0.0	4.0	1998	4.2	1.0	5.2
2000	0.0	0.0	0.0	2000	1.2	0.0	1.2	2000	23.0	4.7	27.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Manokotak Traditional Council, 2000.

Table 61. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Togiak, 2000

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>TWO-STRATA</i>				
	Total Native Households	75	57	132
	Surveyed Households	66	56	122
	Sampling Fraction	88.0%	98.2%	92.4%
	Sample Household Members	311	219	530
	Estimated Household Members	353.4	222.9	576.3
	Estimated Native Population	---	---	750.0

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>			
	<u>Sea Lion</u>	<u>Harbor Seal and Spotted Seal</u>		<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Spotted Seal</u>
Used	0.0%	68.9%	Total Number Harvested	0.0	5.1	147.0
Hunted	0.0%	44.0%	Total Number Struck and Lost	0.0	1.1	26.7
Harvested	0.0%	38.4%	Total Number Taken	0.0	6.3	173.6
Received	0.0%	54.3%				
Gave Away	0.0%	36.7%	Number Harvested Per Capita	0.00	0.01	0.26

<i>SEA LION HARVEST BY MONTH</i>													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

<i>HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH</i>														Unknown	Total
	<u>Spotted Seal</u>				<u>Harbor Seal</u>				<u>Spotted Seal</u>				Unknown		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)															
Harvest	9	4	16	32	31	0	0	1	3	5	2	16	16	135	
Struck & Lost	3	0	2	6	7	0	0	1	0	0	1	2	3	25	
Total Take	12	4	18	38	38	0	0	2	3	5	3	18	19	160	
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	10.2	4.5	18.1	36.4	35.0	0.0	0.0	1.1	3.4	5.6	2.2	18.2	17.5	152.1	
Struck & Lost	3.4	0.0	2.3	6.7	8.0	0.0	0.0	1.0	0.0	0.0	1.1	2.2	3.2	27.8	
Total Take	13.6	4.5	20.3	43.1	42.9	0.0	0.0	2.2	3.4	5.6	3.3	20.3	20.6	179.9	
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	11.6	5.1	20.4	41.1	39.5	0.0	0.0	1.3	3.9	6.3	2.4	20.5		152.1	
Struck & Lost	3.8	0.0	2.6	7.6	9.0	0.0	0.0	1.1	0.0	0.0	1.3	2.4		27.8	
Total Take	15.4	5.1	23.0	48.6	48.5	0.0	0.0	2.4	3.9	6.3	3.7	23.0		179.9	
Total Take (%)	8.6%	2.9%	12.8%	27.0%	27.0%	0.0%	0.0%	1.4%	2.1%	3.5%	2.1%	12.8%		100.0%	
Cum. Take	15.4	20.5	43.5	92.2	140.7	140.7	140.7	143.1	146.9	153.2	156.9	179.9			
Cum. Take (%)	8.6%	11.4%	24.2%	51.2%	78.2%	78.2%	78.2%	79.5%	81.7%	85.2%	87.2%	100.0%			

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Togiak Traditional Council, 2000.

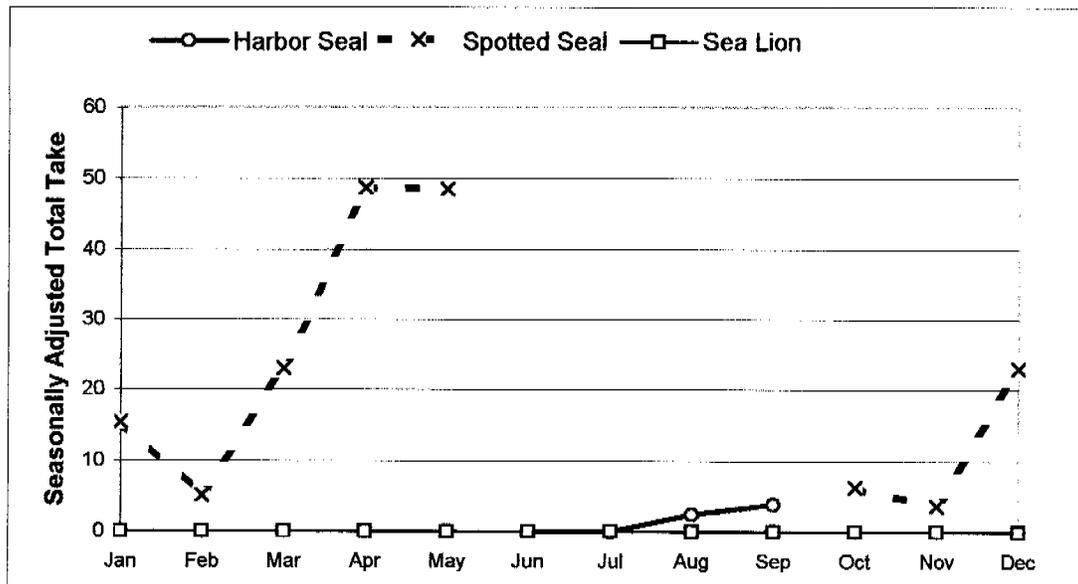
Table 61. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Togiak, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	—	0.0	—	0	0.0%	0.0	0.0%	13	11.3%	17.7	12.1%
Adult Female	0	—	0.0	—	0	0.0%	0.0	0.0%	11	9.6%	13.5	9.2%
Adult Unknown Sex	0	—	0.0	—	3	75.0%	4.6	80.4%	8	7.0%	12.4	8.5%
Juvenile Male	0	—	0.0	—	0	0.0%	0.0	0.0%	10	8.7%	11.4	7.8%
Juvenile Female	0	—	0.0	—	1	25.0%	1.1	19.6%	4	3.5%	4.5	3.1%
Juvenile Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%	38	33.0%	48.4	33.1%
Pup Male	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	—	0.0	—	0	0.0%	0.0	0.0%	1	0.9%	1.1	0.8%
Pup Unknown Sex	0	—	0.0	—	0	0.0%	0.0	0.0%	6	5.2%	8.9	6.1%
Male Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%	2	1.7%	2.3	1.6%
Female Unknown Age	0	—	0.0	—	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	—	0.0	—	0	0.0%	0.0	0.0%	22	19.1%	26.1	17.9%
Total	0	—	0.0	—	4	100.0%	5.8	100.0%	115	100.0%	146.3	100.0%

*Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column.

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	3.9	0.0	3.9	1992	24.3	2.0	26.3	1992	250.2	53.8	304.0
1993	3.3	3.3	6.5	1993	24.9	15.8	40.7	1993	174.7	49.1	223.8
1994	1.2	0.0	1.2	1994	0.0	0.0	0.0	1994	154.2	39.9	194.1
1995	0.0	0.0	0.0	1995	3.3	0.0	3.3	1995	111.5	4.4	115.9
1996	0.0	0.0	0.0	1996	3.9	0.0	3.9	1996	101.9	7.8	109.7
1997	3.6	0.0	3.6	1997	6.7	0.0	6.7	1997	79.2	7.1	86.4
1998	0.0	0.0	0.0	1998	14.1	1.4	15.5	1998	105.0	15.3	120.4
2000	0.0	0.0	0.0	2000	5.1	1.1	6.3	2000	147.0	26.7	173.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Togiak Traditional Council, 2000.

Table 62. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Twin Hills, 2000

SAMPLING DESIGN:		Total
CHAIN REFERRAL	Total Referred Households	28
	Surveyed Households	17
	Sampling Fraction	60.7%
	Sample Household Members	49
	Estimated Household Members	80.7
	Estimated Native Population	65.0

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):			
	Sea Lion	Harbor Seal and Spotted Seal		Sea Lion	Harbor Seal	Spotted Seal
Used	0.0%	100.0%	Total Number Harvested	0.0	1.6	6.6
Hunted	0.0%	41.2%	Total Number Struck and Lost	0.0	0.0	1.6
Harvested	0.0%	17.6%	Total Number Taken	0.0	1.6	8.2
Received	0.0%	94.1%				
Gave Away	0.0%	70.6%	Number Harvested Per Capita	0.00	0.03	0.10

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH														Total
	Spotted Seal				Harbor Seal				Spotted Seal			Unknown Month		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	1	1	0	0	0	1	2	0	0	0	5
Struck & Lost	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Total Take	0	0	0	2	1	0	0	0	1	2	0	0	0	6
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0	1.6	3.3	0.0	0.0	0.0	8.2
Struck & Lost	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Total Take	0.0	0.0	0.0	3.3	1.6	0.0	0.0	0.0	1.6	3.3	0.0	0.0	0.0	9.9
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0	1.6	3.3	0.0	0.0	0.0	8.2
Struck & Lost	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Total Take	0.0	0.0	0.0	3.3	1.6	0.0	0.0	0.0	1.6	3.3	0.0	0.0	0.0	9.9
Total Take (%)	0.0%	0.0%	0.0%	33.3%	16.7%	0.0%	0.0%	0.0%	16.7%	33.3%	0.0%	0.0%	0.0%	100.0%
Cum. Take	0.0	0.0	0.0	3.3	4.9	4.9	4.9	4.9	6.6	9.9	9.9	9.9	9.9	9.9
Cum. Take (%)	0.0%	0.0%	0.0%	33.3%	50.0%	50.0%	50.0%	50.0%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Twin Hills Native Corporation, 2000.

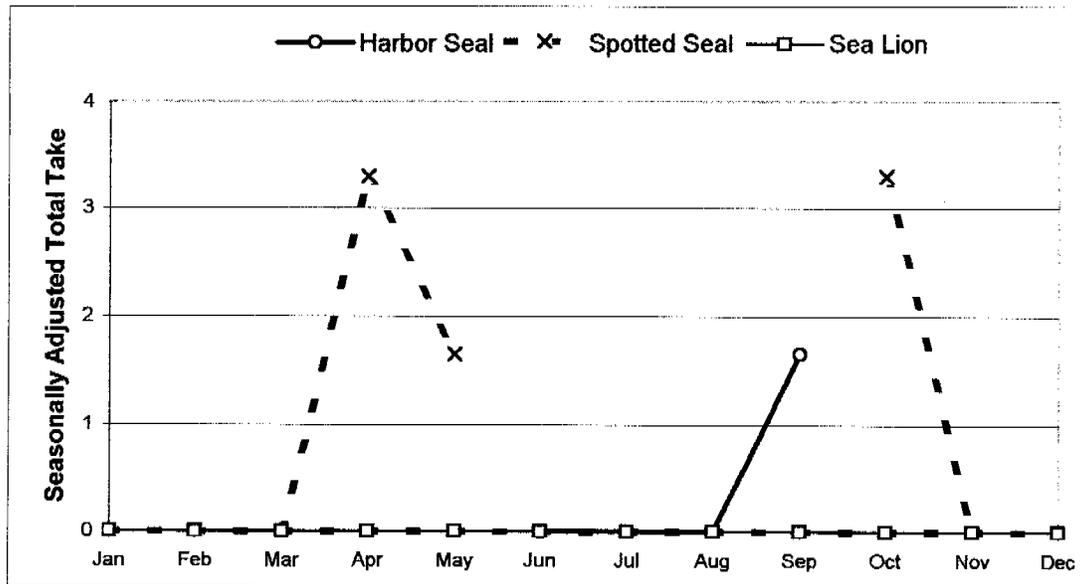
Table 62. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Twin Hills, 2000

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	0.0%	0.0	0.0%	3	75.0%	4.9	75.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	1	100.0%	1.6	100.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	1	25.0%	1.6	25.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	1	100.0%	1.6	100.0%	4	100.0%	6.6	100.0%

* Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column.

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	---	---	---	1992	---	---	---	1992	---	---	---
1993	---	---	---	1993	---	---	---	1993	---	---	---
1994	---	---	---	1994	---	---	---	1994	---	---	---
1995	---	---	---	1995	---	---	---	1995	---	---	---
1996	0.0	0.0	0.0	1996	23.3	6.5	29.8	1996	3.9	3.9	7.8
1997	0.0	0.0	0.0	1997	8.4	2.1	10.5	1997	2.1	1.1	3.2
1998	0.0	0.0	0.0	1998	2.2	2.2	4.4	1998	15.5	6.6	22.1
2000	0.0	0.0	0.0	2000	1.6	0.0	1.6	2000	6.6	1.6	8.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Twin Hills Native Corporation, 2000.