### The Subsistence Harvest of Harbor Seal and Sea Lion by Alaska Natives in 1995

Technical Paper No. 238

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Cover, A hunter's hat with sea lion whiskers, Kodiak Island (Alutiiq). The hat is of woven spruce root, with a design painted with blue, green, red, and black pigments. It is embellished with sea lion whiskers, dentalium shells, trade beads, and fabrics. Collected in 1884. Photo courtesy Smithsonian Institution, National Museum of Natural History, Cat. No. 74720.

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#### ABSTRACT

This report describes the subsistence takes of harbor seal (*Phoca vitulina*) and Steller sea lion (Eumetopias jubatus) by Alaska Natives in 1995, 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 takes during 1992-94. 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 1,886 households in 58 coastal communities within the geographic ranges of the two species. Local researchers conducted most of the household interviews as part of a local and regional research network. The project received generous support from leaders of a number of Native governments, regional, and statewide associations.

During 1995, the estimated subsistence take of harbor seal by Alaska Natives was 2,742 seals, with a 95 percent confidence range of between 2,184 to 3,679 seals. Of the take, 8.9 percent (243 seals) were stuck and lost and 91 .1 percent (2,498 seals) were harvested. Harbor seals were taken in 50 of 58 surveyed communities. The 1995 take of harbor seals (2,742 seals) was the second highest take estimate to date of the four survey years - 2,854 seals (1992), 2,736 seals (1993), and 2,621 seals (1994).

During 1995, the estimated subsistence take of sea lions by Alaska Natives was 339 sea lions, with a 95 percent confidence range of between 258 to 465 sea lions. Of the take, 9.5 percent (32 sea lions) were struck and lost and 90.5 percent (307 sea lions) were harvested. Sea lions were taken in 17 of 58 surveyed communities. The 1995 take of sea lions (339 animals) was the lowest recorded of the four survey years -- 549 sea lions (1992), 487 sea lions (1993), and 416 sea lions (1994).

For harbor seals, hunters reported taking males over females by about two to one, and adults (84 percent) over juveniles (15 percent) or pups (1 percent). For sea lions, hunters reported taking males over females by about two to one, and juveniles (67 percent) over adults (33 percent) or pups (0 percent). Regional differences in the ages of harbor seal harvests are discussed as possible indices of population structures. Struck and lost rates were the lowest reported to date for both species. In addition to detailed quantitative harvest breakdowns by community, the report describes contemporary subsistence food products prepared from seals and sea lions.

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The sixty-two 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 fifth year:

Mitchell Simeonoff, Akhiok Ben Darling, Akutan Frank Chythlook, Aleknagik Daniel Chythlook, Aleknagik Alice Green, Anchorage, Nanwalek Harriet Silva, Angoon Ray Golodoff, Atka Moses Dirks, Atka (USF&WS) Mike Eleshańsky, Chenega Bay Polly Aleck, Chignik Bay Rhonda Gregorio, Chignik Lagoon Mitchell Lind, Chignik Lake Thomas Gardiner, Clark's Point Henry Wasilly, Clark's Point Bud Janson, Jr., Cordova Monica Riedel, Cordova Fred Hamilton, Craig Sally Krause, Dillingham Roy White, Égegik Gilda Shellikoff, False Pass Jessie Grant, Haines Phyllis Snively, Hoonah Karen Williams, Hoonah Frank **Alby**, Hydaburg Karen Kalmakoff, Ivanof Bay Carrie Cruise, Juneau Stuart D'Cafango, Juneau Veronica Loges, Kake Alicia Lynn Reft, Karluk Gina Demmert, Ketchikan Gerald Hope, Ketchikan

Simeon Kuzakin, King Cove Floyd Wilson, King Salmon Marvin George, Klawock Donald Hotch Sr., Klukwan Sheila Theriault, Larsen Bay Alex Tallekpalek, Levelock Bessie Toyukak, Manokotak Floyd Wilson, Naknek and King Salmon George Inga Sr., Old Harbor Bert Nelson Sr., Ouzinkie Marie Mork, Pelican Steve Phillips, Perryville Jonas Hallingstad, Petersburg Nikki Shanigan, Pilot Point Mary Malchoff, Port Graham Gerda Christensen, Port Heiden Charlene Kewan, Port Lions Agafangel Lekanof, Saint George Jacob Kochutin, Saint Paul Melissa Merculieff, Saint Paul Christine Mack, Sand Point Lillian Elvsaas, Seldovia and Homer Vincent Komok, Seward Vickie Bartels, Sitka Fred T. Angasan, South Naknek Nena Fuller, South Naknek Loretta Stellwag, Tatitlek Nora Flores, Togiak Larry Dirks Jr., Unalaska Sandra Churchill, Wrangell Raymond Sensmeier, Yakutat

SECTION
INTRODUCTION
METHODOLOGY
THE SUBSISTENCE TAKE OF HARBOR SEAL IN 1995 15
Estimated Size of the Harbor Seal Take, 1995
THE SUBSISTENCE TAKE OF SEA LION IN 1995
Estimated Size of the Sea Lion Take, 1995
HUNTING PARTICIPATION
ALUTIIQ USES OF SEA LION AND HARBOR SEAL
DISCUSSION
REFERENCES
APPENDICES
Appendix A. Survey Instrument

### LIST OF TABLES AND FIGURES

TABLE OR FIGURE	PAGINATION
Table 1. Organizations Contacted During the Project	8
Table 2. Sampling Methodology by Community, Harbor Seal and Sea Lion Surveys, 1995.	10
Table 3. Sampling Methodology for Communities with Two Strata Designs,Harbor Seal and Sea Lion Surveys, 1995	12
Table 4. Estimated Subsistence Takes of Harbor Seal and Sea Lion by Alaska Natives, 1992 - 1995	
Table 5. Regional Distribution of Subsistence Takes of Harbor Sealby Alaska Natives, 1995	17
Table 6. Subsistence Harbor Seal Harvest, Take, and Use by Alaska Natives, 1995, With Confidence Intervals and Statistical Ranges, by Community	18
Table 7. Age and Sex Composition of Harbor Seal Harvests by Alaska Natives, 1995	24
Table 8. Age and Sex Composition of Harbor Seal Harvestsby Alaska Natives by Region, 1995	
Table 9. Regional Distribution of Subsistence Takes of Sea Lion         by Alaska Natives, 1995	28
Table 10. Subsistence Sea Lion Harvest, Take, and Use by Alaska Natives, 1995, With Confidence Intervals and Statistical Ranges, by Community	
Table 11. Age and Sex Composition of Sea Lion Harvests         by Alaska Natives, 1995	32
Table 12. Age and Sex Composition of Sea Lion Harvests by Alaska Natives by Region, 1995	
Table 13. Participation Rates of Alaska Native Householdsin Hunting Harbor Seal or Sea Lion, 1992, 1993, 1994, and 1995	
Table 14. Comparison of Households Interviewed in1992, 1993, 1994, and 1995 (Unweighted Numbers)	
Table 15. Subsistence Harbor Seal and Sea LionTakes by Alaska Natives by Region, 1992, 1993, 1994, and 1995	
Table 16. Subsistence Harbor Seal Takes by Alaska Natives by Community, 1992, 1993, 1994, and 1995	

### LIST OF TABLES AND FIGURES (CONTINUED)

TABLE OR FIGURE	ION
Table 17. Subsistence Sea Lion Takes by Alaska Natives by Community, 1992, 1993, 1994, and 1995	52
Fig. 1. Map of Study Area and Regions	3
Fig. 2. General Distribution of Sea Lion in Alaska	4
Fig. 3. General Distribution of Harbor Seal and Spotted Seal in Alaska	5
Fig. 4. Map of Subsistence Takes of Harbor Seal ( <i>Phoca vitulina</i> ) by Alaska Natives by Community in 1995	14'
Fig. 5. Seasonally Adjusted Takes of Harbor Seal and Sea Lion by Alaska Natives, 1995	22
Fig. 6. Estimated Seasonally Adjusted Takes of Harbor Seal By Alaska Natives, 1992, 1993, 1994, and 1995	23
Fig. 7. Estimated Seasonally Adjusted Takes of Sea Lion By Alaska Natives, 1992, 1993, 1994, and 1995	23
Fig. 8. Map of Subsistence Takes of Sea Lion (Eumetopias jubatus) by Alaska Natives by Community in 1995	26
Fig. 9. Specialization in Harbor Seal Takes: Percentage of Hunters by Percentage of Take, 1995	.35
Fig. 10. Specialization in Sea Lion Takes: Percentage of Hunters by Percentage of Take, 1995	.35
Fig. 11. Estimated Subsistence Takes of Harbor Seal by Alaska Natives, 1992 - 1995	44
Fig. 12. Estimated Subsistence Takes of Sea Lion by Alaska Natives, 1992 - 1995	44
Fig, 13. Harbor Seal Take Trends Reported by Alaska Native Hunters by Major Area, 1992 - 1995	46
Fig. 14. Sea Lion Take Trends Reported by Alaska Native Hunters by Area, 1992 - 1995	.47
Fig. 15. Change in Harbor Seal Harvests, North Pacific Rim Communities	54
Fig. 16. Change in Sea Lion Harvests, North Pacific Rim Communities	55

## LIST OF TABLES AND FIGURES (CONTINUED)

TABLE OR FIGURE PAGINAT	ION
Fig. 17. Change in Harbor Seal Harvests, Kodiak Island Communities	56
Fig. 18. Change in Sea Lion Harvests, Kodiak Island Communities	57
Fig. 19. Sex Ratios (Males: Females) of Harbor Seal and Sea Lion Harvests Reported by Alaska Native Hunters, 1992-1995	. 61
Fig. 20. Age Structure (Pups, Juveniles, Adults) of Harbor Seal and Sea Lion Harvests Reported by Alaska Native Hunters, 1992 - 1995	61
Fig. 21. Percent of Harbor Seal Harvests Reported as Male Seals by Hunters, 1992 - 1995	62
Fig. 22. Percent of Harbor Seal Harvests Reported as Juvenile Seals by Hunters, 1992 - 1995	63
Photograph 1. Don Kompkoff, a hunter from Chenega Bay, demonstrates the method of roasting seal meat over an open fire (called <i>mungyuk</i> ) outside the Tatitlek school.	38
Photograph 2. Jessie Tiedeman, an elder from Tatitlek, demonstrates the technique of braiding seal intestines with a strip of fat ( <i>qiluryat</i> ) at the Tatitlek school	40
Photograph 3. Tanya Totemoff, from Tatitlek, uses the technique of braiding seal intestines without the fat at the Tatitlek school	41

#### INTRODUCTION

This report describes the subsistence takes of harbor seal (*Phoca vitulina*) and Steller sea lion (*Eumetopias* jubatus) by Alaska Natives in 1995. The report is the fourth of a five-year subsistence study of harbor seal and sea lion in Alaska. Findings for the first three study years were reported in Wolfe and Mishler (1993, 1994, 1995). The research 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 study was conducted in. cooperation with the Indigenous People's Council for Marine Mammals and the Rural Alaska Community Action Program, organizations representing Alaska Native marine mammal hunters.

The report provides information on the subsistence takes of harbor seal and sea lion during 1995, 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 58 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.

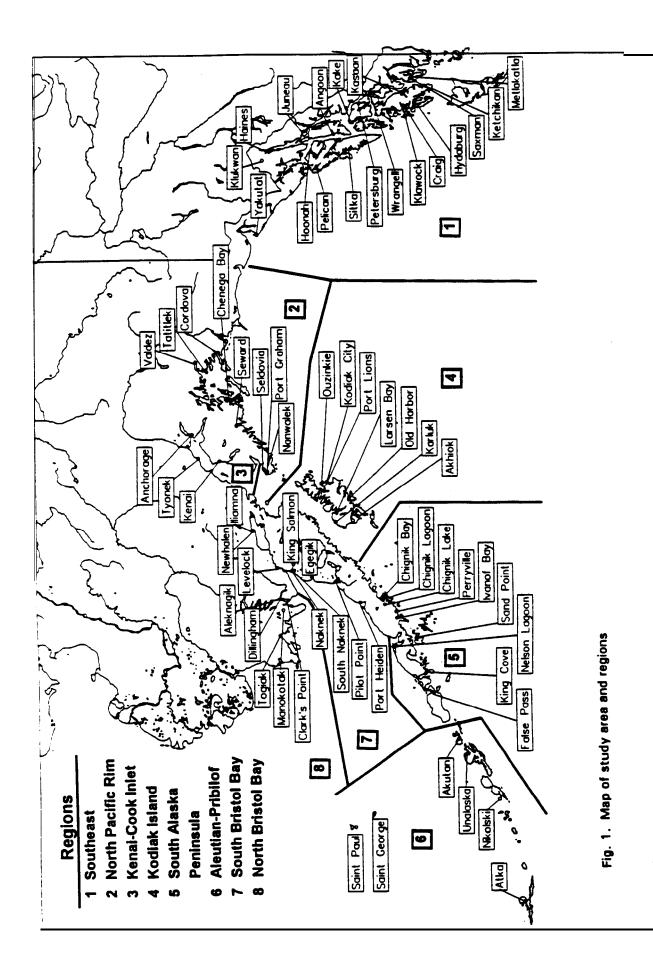
The geographic area covered by this report was defined as the Alaska coastal waters south of Cape Newenham, including the Pribilof Islands, which corresponds with the general distributions of harbor seal and sea lion in Alaska (Figs. 2 and 3, from Bums, Frost, and Lowry 1985). The use of harbor seal and sea lion 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 seal include the Aleut of the Aleutian Islands, the Alutiiq and Eyak of the Pacific Gulf coast, the Dena'ina of Cook Inlet, the Tlingit, **Haida**, and Tsimshian of the southeast archipelago, and the Yup'ik of southwest Alaska. 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 lion. Sea lion **are** used more occasionally by Tlingit, **Haida**, Tsimshian, and Yup'ik groups. Subsistence products derived from harbor seal and sea lion by Alaska Natives include oil, meat, and skins, as described in Wolfe and Mishler (1993).

The report is organized in several sections. The <u>Methodology</u> section describes the methods used to collect information. Two sections (<u>The Subsistence Take of</u> <u>Harbor Seal in 1995</u> and <u>The Subsistence Take of Sea Lion in 1995</u>) present information on the statewide takes of harbor seal and sea lion, summarized by community and region. Some contemporary methods used by Alutiiq families to prepare selected subsistence products from sea lions and harbor seals are described in the section, <u>Alutiia Cookino of Sea Lion and Harbor Sea</u>l. In the <u>Discussion</u> section are interpretations of the 1995 survey year, including comparisons with other years. <u>Appendix A</u> contains a copy of the survey instrument used in household interviews with marine mammal hunters. <u>Appendix B</u> contains regional summaries of the subsistence takes of harbor seal and seal lion. <u>Appendix C</u> contains materials on the subsistence takes of harbor seal and sea lion by community.

#### METHODOLOGY

Information on the subsistence takes of harbor seal and sea lion in 1995 was collected through interviews with persons in 1,886 Alaska Native households in 58 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 1992-1994, first developed in consultation with the Rural Alaska Community Action Program (RurAL CAP) and the Indigenous People's Council for Marine Mammals (IPCoMM) (see



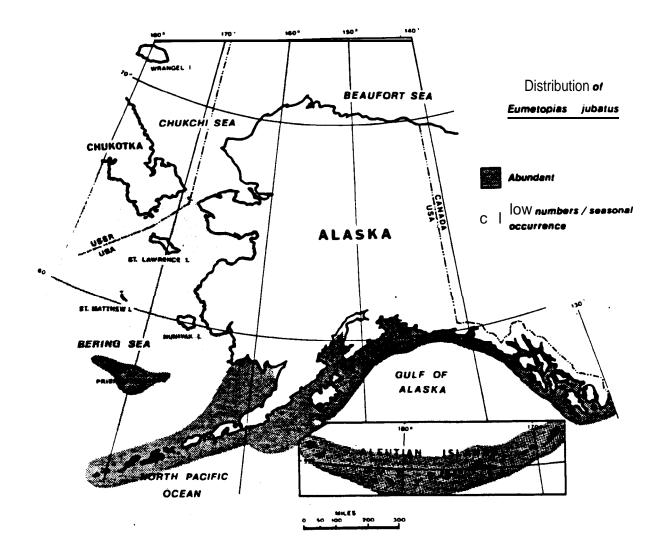


Fig. 2. General distribution of sea lion in Alaska. (Source: Burns, Frost, and Lowry 1985)

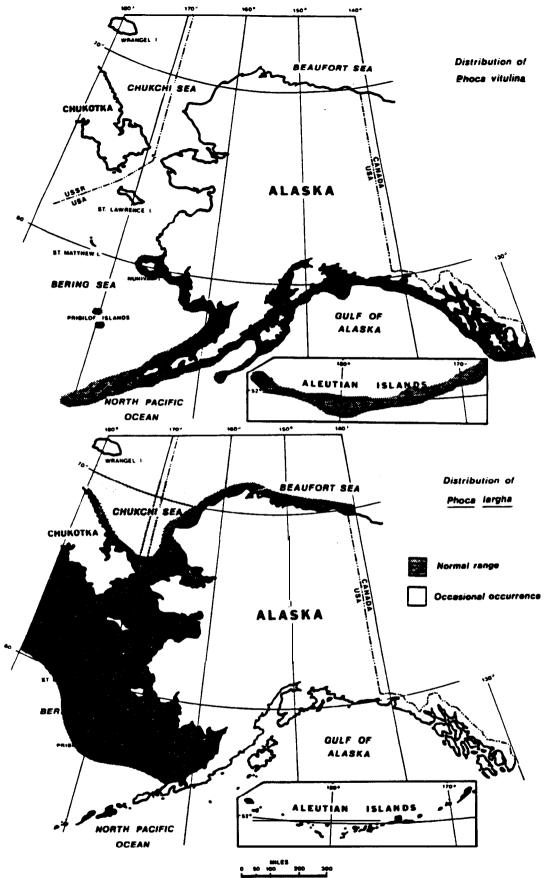


Fig. 3. **[Top]** General distribution of harbor seal (**Phoca vitulina**) in Alaska. **[Bottom]** General distribution of spotted seal (**Phoca largha**) in Alaska. (Source: Burns, **Frost**, and Lowry 1985)

Appendix A). Hunters and household heads were asked to recall the number 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 lion or harbor seal during the last year. Interviews were conducted by local researchers hired and trained as part of the project, augmented by regional Division of Subsistence researchers in select communities. Surveys were conducted in two rounds. The first survey was administered in May 1995 to cover the period from January through April 1995. The second survey was administered in January 1996 to cover the period from May through December 1995.

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 seal and sea lion management were contacted. to obtain suggestions about project design, including the Alaska Federation of Natives; the Aleutians Ea'st 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 project, through a subcontract with the Division of Subsistence. Each year, they review the project, data analysis, and preliminary findings of the study.

Following standard procedures of the Division of Subsistence, support for the project was solicited from local Native governments, or by leaders of local government entities, for each community where surveys were conducted (see Fall 1990). 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 using locally-hired researchers and regional Division of Subsistence researchers was used to collect information on subsistence takes of sea lion and harbor seal during 1995. This type of research organization was developed by the Division of Subsistence during the first study year, and fully implemented by the second study year. In each of the 58 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 twice 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 performed tasks such as obtaining formal support for the project from Native

7

Community	Government/Organization Contacted
Akbiok	Akhiok Tribal Council
	City of Akhiok
Akutan	Akutan Traditional Village Council
	City of Akutan
	Akutan Corporation
Aleknagik	Aleknagik Tribal Council
Anchorage	Cook Inlet Tribel 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	Chignik Lagoon Traditional Village
Lagoon	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 <b>Craig</b>
Dillingham	Dillingham Traditional Council
Egegik	Egegik Traditional Council
Faise Pau	Faise Pass Tribal Council
	Cii of False Pass
Haines	Chilkat Indian Association
Hoonah	Hoonah Traditional Council
Hydaburg	HaidaCorporation
	City of Hydaburg
Iliamna	Iliamna Village Council
lvanof Bay	Ivanof Bay traditional Village Council
Juneau	Tlingit and Heide Central Council
	Sealaska
	Auke Tribe Council
14.1	AlaskaNativeBrotherhood/Sisterhood
Kake	Organized Village of Kake
Korluk	City of Kake
Karluk	Karluk IRA Council
Kenai	Kenaitze Indian Tribe IRA
Katabikan	Cook Inlet Region, Inc. Ketchikan IRA <b>Counci</b> l
Ketchikan	
King Cove	Ketchikan Indian Corporation
King Cove	Agdaagux Tribe of King Cow Belofsky Village Coundl
	City of King Cove
King Salmon	King Salmon Tmdiinal Council
King Salmon Klawock	Kiswock Cooperative Association
NEWUCK	Klawock Haanya copomtion
Klukwan	Chilkat Indian Village
Kodiak City	Kodiak Tribal Council
NOUIAK CITY	Kodiak Area Native Association
L <b>arsen</b> Bay	Larsen Bay Tribal Council
LEIDENIDAY	City of Larsen Bay
Leveloct	Levelock Traditional Council
Levelock	

community	Government/Organization
Manalatal	
Manokotak	Manokotak Tmditional Council
Metjakatia	Council Annette Islands Reserve
N = l == = l =	Methakatia Indiin Community
Naknek Narwelek	Naknek Traditional Council
NEIWEIGK	
Nelson	English Bay Corporation Nelson Lagoon Village Council
Lagoon	
Newhalen	Newhalen Tmditional Council
Nikokski	Nikolski <b>IRA</b> Council
THIKOKOKI	
Old Harbor	Chaluka Corporation
Old Harbor	
	City of Old Harbor
Ouzinkie	Ouzinkie Native Corporation
	Ouzinkie Tribal <b>Council</b>
Daliana	Cii of Ouzinkie
Pelican	Tlingit and <b>Haida</b> Indians of <b>Pelican</b>
	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 Tmdiional Council
Port Lions	Port Lion8 Tribal Council
	City of Port Lion8
Saint George	Saint George Traditional IRA Counci
	Saint George Tanag Corporation
	City of Saint George
Saint Paul	Tribal Government of Saint Paul
	City of Saint Paul
Send Point	Unga Tribel Council
	<b>Qagan Tayagugin Tribe of Sand Poir</b>
	City of Sand Point
Saxman	Saxman IRA Council
	City of Saxman
Seldovia	Seldovia Native Association
Seward	Qutekcek Native Tribe
Sitks	Alaska Native Brotherhood
	Sitka Tribal Council
South Naknek	South Naknek Traditional Council
Tatitlek	Tatitiek IRA Council
Togiak	Togiak Traditional Council
Tyonek	Native Village of Tyonek
the second se	
Unalaska	Quewelengin Tribel Council
Valdez	Veldez Native Association
Wrangeli	Wrangell Cooperative Association
Yakutat	Yakutat Alaska Native
	Brotherhood/Alaska Native Sisterhoo
	Yakutat Native Association Yak-Tat Kwaan

# TABLE 1. ORGANIZATIONS CONTACTED DURING THE PROJECT

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 fieldnotes into a centralized database. Data analysis was performed by Division of Subsistence data management staff.

During the fourth survey year, the number of surveyed communities dropped to 58 places (from 59 in 1994) because of the loss of Nikolski as a sampling unit. In the **1995-96** survey year, a local surveyor could not be secured in Nikolski. The project decided not to send a regional researcher to Nikolski to collect the **information**, given the small harvest of marine mammals documented in previous years relative to the cost of a regional researcher conducting the survey in the distant Aleutian Island community.

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, 85.3 percent of identified households (1,131 of 1,326 households) were successfully contacted and interviewed. For communities with two-strata designs, 90.1 percent of high stratum household were successfully contacted and interviewed (364 of 404 households), while a 19.5 percent random sample of low stratum households were interviewed (391 of 2,001 households) (Tables 2 and 3). These are 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 primarily due to logistical problems in contacting households, rather than refusals to participate.

9

# Table 2Sampling Methodology By CommunityHarbor Seal and Sea Lion Surveys, 1995

	Region and <u>Community</u>	1990 Native <u>Population</u>	Type of <u>Desian</u>	Identified Household <u>Universe</u> '	Surveyed <u>Households</u>	Percentage Households Surveved
<b>A</b> O H H H J K K K K F F <b>S</b> S Y	SOUTHEAST <b>Ingoon</b> Craig Iaines Ioonah Iydaburg uneau Kake Ketchikan Klawock Klukwan Pelican Petersburg <b>Gaxman</b> Sitka Vrangell Yakutat <b>Region Total</b>	525 288 279 534 342 3,462 514 1,614 392 112 65 334 284 1,797 507 294 <b>11,343</b>	Chain Referral Chain Referral	55 31 25 69 14 82 72 19 25 16 18 26 11 <b>600</b> 7 55 <b>1,125</b>	51 25 63 13 65 49 9 20 5 16 23 9 108 4 4 7 532	92.7% 80.6% 100.0% 91.3% 92.9% 79.3% 68.1% 47.4% 80.0% 31.3% 88.9% 88.5% 81.8% <b>18.0%</b> 57.1% 85.5% 47.3%
C C N F S S T V	IORTH PACIFIC Chenega Bay Cordova Janwalek Port Graham Seldovia Seward Fatitlek ( a I d e z Region Total	RIM 65 272 144 150 48 410 103 239 <b>1,431</b>	Census Two Strata Census Census Two Strata Two Strata Census Chain Referral	23 232 40 58 41 159 25 6 584	14 38 39 58 41 40 19 5 254	60.9% 16.4% 97.5% 100.0% 100.0% 25.2% 76.0% 83.3% 43.5%
A H	JPPER KENAI-C Inchorage Iomer Region Total	COOK INLET 14,569 189 <b>14,758</b>	Chain Referral Chain Referral	24 4 28	13 3 16	54.2% 75.0% <b>57.1%</b>
A K L C C F	KODIAKISLAND Khiok Karluk Kodiak City Larsen Bay Did Harbor Duzinkie Port Lions Region Total	72 65 811 124 252 178 150 <b>1,652</b>	Census Census Chain Referral Census Two Strata Census Two Strata	19 18 11 37 88 53 48 274	19 16 10 37 52 51 40 225	100.0% 88.9% 90.9% 100.0% 59.1% 96.2% <b>83.3%</b> <b>82.1%</b>

<sup>1</sup> 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, 1995

Region and <u>Community</u> <u>F</u>	1990 Native Population	Type of <u>Desian</u>	Identified Household <u>Universe</u>	Surveyed <u>Households</u>	Percentage Households <u>Surveyed</u>
5. SOUTH ALASKA F Chignik Bay Chignik Lagoor Chignik Lake False Pass Ivanof Bay King Cove Perryville Sand Point <b>Region Total</b>	85	Census Census Census Census Two Strata Census Two Strata	25 21 33 20 8 118 33 140 398	20 20 31 17 6 22 21 37 174	80.0% 95.2% 93.9% 85.0% 75.0% 18.6% 63.6% 26.4% 43.7%
6. ALEUTIAN ISLANE Akutan Atka Unalaska <b>Region Total</b>	DS 80 91 259 430	Census Census Two Strata	31' 25 105 . 161	31 10 43 84	100.0% , , 40.0%' 41 <b>.0%</b> 52.2%
7. PRIBILOF ISLAND St. George St. Paul <b>Region Total</b>	9S 131 <b>504</b> 635	Census Two Strata	42 159 201	42 76 118	100.0% 47.8% 58.7%
8. SOUTH BRISTOL Egegik King Salmon Levelock Naknek Pilot Point Port Heiden South Naknek <b>Region Total</b>	86 108 87 236 45 86	Census Census Census Two Strata Census Census Census	36 26 32 87 27 33 32 273	26 26 32 41 25 33 31 214	72.2% 100.0% 100.0% 47.1% 92.6% 100.0% 96.9% 78.4%
9. NORTH BRISTOL Aleknagik Clark's Point Dillingham Manokotak Togiak <b>Region Total</b>	154 53 1,125 368 <b>535</b>	Census Census Two Strata Two Strata Two Strata	45 14 443 67 118 687	38 14 60 50 107 269	84.4% 100.0% 13.5% 74.6% 90.7% 39.2%
TOTAL (Excl. Anchorage)	34,274 (19,705)		3,731 (3,707)	1,886 (1,873)	50.5% (50.5%)

#### Table 3 Sampling Methodology for Communities With Two Strata Designs, Harbor Seal and Sea Lion Surveys, 1995

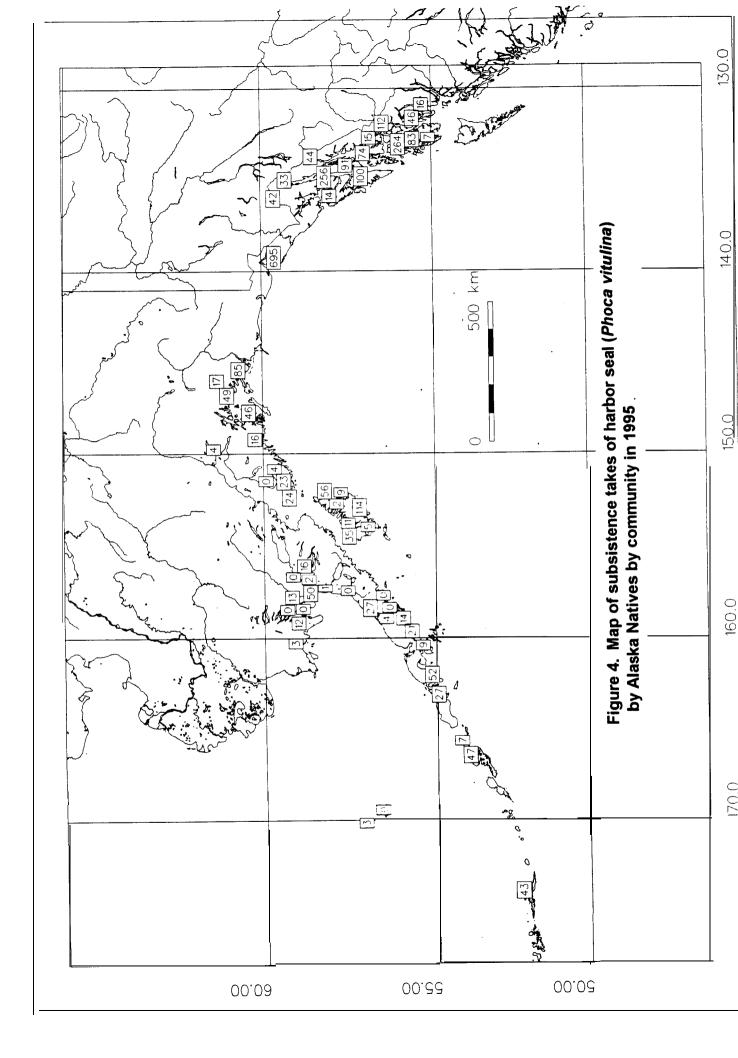
<u>Community</u>	Number High Stratum <u>Households</u>		Percent High <u>Stratum</u>	Number Low Stratum <u>Households</u>	Sampled Low Stratum <u>Households</u>	Percent Low <u>Stratum</u>
Cordova	14	14	100.0%	218	24	11.0%
Dillingham	31	29	93.5%	412	31	7.5%
King Cove	14	14	100.0%	104	8	7.7%
Manokotak	27	27	100.0%	40	23	57.5%
Naknek	15	15	100.0%	72	26	36.1%
Old Harbor	29	24	82.8%	59	28	47.5%
Port Lions	7	7	100.0%	41	33	80.5%
Sand Point	15	13	86.7%	125	24	19.2%
Seldovia	12	12	100.0%	29	29	100.0%
Seward	12	11	91.7%	147	29	19.7%
Sitka	75	72	96.0%	525	36	6.9%
St. Paul	59	47	79.7%	100	29	29.0%
Togiak	62	56	90.3%	56	51	91.1%
<u>Unalaska</u>	<u>32</u>	<u>23</u>	<u>71.9%</u>	<u>73</u>	<u>20</u>	27 4%
Total	404	364	90.1%	2001	391	19.5%

As stated above, there were two survey rounds, covering the hunting periods of January 1995 through April 1995, and May 1995 through December 1995. In data analysis, information collected during the second round was linked with the data set collected during the first round on a household basis, to complete the entire 1995 calendar year. Incomplete household data sets due to the household being missed during one of the survey rounds were treated as unsurveyed households and were given the mean of their respective sample groups.

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 (not hypothetical) kills.

13



#### THE SUBSISTENCE TAKE OF HARBOR SEAL IN 1995

#### Estimated Size of the Harbor Seal Take. 1995

The estimated size of the total take of harbor seals (Phoca *vitulina*) by Alaska Natives in 1995 is presented in Tables 4 and 5. In 1995, there were an estimated 2,742 harbor seals taken by Alaska Natives for subsistence uses (with a 95 percent confidence range of between 2,184 to 3,679 animals) (Table 4). Of the 1995 subsistence take, 8.9 percent (243 harbor seals) were struck and lost, and 91.1 percent (2,498 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 seal (Phoca *vitulina*) and spotted seal (Phoca *largha*) (see Fig. 3). Local indigenous Yup'ik taxonomies categorize adults of the two Linnaean species as a single type (*issurig*) in this area, and categorize pups into two different types. Of the total North Bristol Bay take, we classified 28 seals as Phoca *vitulina* and 197 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*, 17.0 percent (35 animals) were reported struck and lost, and 83.0 percent (164 animals) were harvested (Appendix B, Table 9). In Table 4, we also assumed the entire South Bristol Bay take of 97 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 1995 is 2,742 harbor seals, based on the assumptions above.

#### Table 4

Estimated Subsistence Takes of Harbor Seal (*Phoca vitulina*) and Sea Lion (*Eumetopias jubatus*) By Alaska Natives, 1992 - 1995

		E	stimated Tot Struc		Lower and Upper Confidence Range
	Year	<u>Harvest</u>	and Lost	Take	for Total Take
Harbor Seal	1992	2,501 <b>67.6%</b>	353 12.4%	2,854 1 <b>00.0%</b>	2,293 - 3,692
	1993	2,365 <b>66.4%</b>	371 <b>13.6%</b>	2,736 100.0%	2,334 - 3,471
	1994	2,313 66.2%	308 11.6%	2,621 1 <b>00.0%</b>	2,110 - 3,457
	1995	<b>2,498</b> 91.1%	243 6.9%	2,742 100.0%	2,184 <b>-</b> 3,679
Sea Lion	1992	370 67.4%	179 <b>32.6%</b>	<b>549</b> 100.0%	452 - 712
	1993	348 71.4%	139 <b>26.6%</b>	487 100.0%	390 - 629
	1994	336 60.6%	80 19.2%	416 1 <b>00.0</b> %	330 - 554
	1995	307 90.5%	32 9.5%	<b>339</b> 100.0%	258 <b>- 465</b>

Table 5Regional Distribution of Subsistence Takes ofHarbor Seal (Phoca vitulina) by Alaska Natives, 1995With Confidence Intervals and Statistical Ranges

.

				Т	Total Take				
	ш	Estimated Total		Confidence	Lower	Upper	Percentage		
	Harvaet	Struck and Lost	Take	Interval (+/- %)	Range Estimate	Range Estimate	of Take by Region	Per Capita Harvest	struck and Lost Rate
Kegion				20 B 0C	1547 0	2453.9	68.9%	0.14	9 <sup>.</sup> 0%
Southeast	1/19.1		0.000	E4 400	100.0	300 4	9 G%	0.15	4.4%
North Pacific Rim	252.1	11.1	203.9	0/ <del>1</del> 1 C			0.1%	0.03	%U U
Unner Kenai-Cook Inlet	3.7	0.0	3.7	89.8%	Z.U	D. 2	e		20.0
Vodiat leland	223.0	9.2	232.2	15.8%	207.4	268.8	8.5%	0.26	3.9%
Courde Island	117.0	111	128.0	61.0%	88.0	206.1	4.7%	0.09	8.6%
	0.90	0 7	96.6	%2 65	53.0	154.3	3.5%	0.19	10.1%
	о. <b>и</b>		2.5	88 4%	2.0	4.7	0.1%	00.0	0.0%
Pripilor Islands	5 <b>6</b> 9	283	9.96	30.1%	82.0	125.6	3.5%	0.09	29.3%
South Bristol Bay	0.00 2 2 2 0	<b>P</b> C	28.3	109.6%	14.0	59.2	1.0%	0.01	8.5%
AI ASKA	2498.5	243.3	2741.8	34.2%	2184.4	3679.1	100.0%		8.9%
Percentage of Take	91.1%	8.9%	100.0%						

# Table 6Subsistence Harbor Seal Harvest, Take, and Use by Alaska Natives, 1995With Confidence Intervals and Statistical Ranges, by Community

		Percent of	Percent of						
	Harbor	Native	Native		Harbor	Total	Тс	tal Take	
	Seal	Households	Households	Harbor	Seal	Harbor	Confidence	Lower	Upper
	Harvested	Harvesting	Using	Seal	Struck	Seal	Interval	Range	Range
Community	Per Capita	Harbor Seal	Harbor Seal	Harvested	and Lost	Take	(+l- %)	Estimate	Estimate
SOUTHEAST									
Angoon	.15			80.9	9.7	90.6	19.4%	84.0	108.1
Craig	.24			69.4	13.6	83.1	24.3%	67.0	103.2
Haines	.09			24.0	9.0	33.0	0.0%	33.0	33.0
Hoonah	.44			236.6	19.7	256.3	13.1%	234.0	289.9
Hydaburg	.02			6.5	0.0	6.5	27.6%	6.0	8.2
Juneau	.01			42.9	1.3	44.2	27.2%	35.0	56.2
Kake	.14			72.0	1.5	73.5	32.7%	50.0	97.5
Ketchikan	.03			46.4	0.0	46.4	135.1%	22.0	109.2
Klawock	.67			263.8	0.0	263.8	37.6%	211.0	362.9
Klukwan	.31			35.2	6.4	41.6	105.7%	13.0	85.6
Pelican	.21			13.5	0.0	13.5	24.5%	12.0	16.8
Petersburg	.04			13.6	1.1	14.7	19.3%	13.0	17.5
Saxman	.06			15.9	0.0	15.9	29.1%	13.0	20.5
Sitka	.05	6.3%	84.7%	93.8	6.3	100.0	6.4%	96.0	106.4
Wrangell	.18			89.3	22.8	112.0	78.6%	64.0	200.1
Yakutat	2.09			615.5	79.6	695.1	20.7%	594.0	838.7
NORTH PACIFIC									
Chenega Bay	.53	42.9%	57.1%	44.4	1.6	46.0	40.6%	28.0	64.7
Cordova	.13	9.62	30.9%	83.4	2.0	85.4	80.2%	45.0	154.0
Nanwalek	.15	25.6%	92.3%	23.6	0.0	23.6	9.8%	23.0	25.9
Port Graham	.14	8.6%	87.9%	23.0	0.0	23.0	0.0%	23.0	23.0
Seldovia	.04	4.9%	34.1%	4.0	0.0	4.0	0.0%	4.0	4.0
Seward	.03	0.7%	13.7%	10.9	5.5	16.4	56.6%	15.0	25.6
Tatitlek	.61	21.1%	84.2%	46.1	2.6	48.7	57.5%	37.0	76.7
Valdez	.64			16.8	0.0	16.8	52.2%	14.0	25.6
UPPER KENAI-C									
Anchorage	.04			3.7	0.0	3.7	89.8%	2.0	7.0
Homer	.00			0.0	0.0	0.0	0.0%	0.0	0.0
KODIAK ISLAND									
Akhiok	.08	21.1%	36.8%	5.0	0.0	5.0	0.0%	5.0	5.0
Karluk	.47	43.8%	37.5%	28.1	6.8	34.9	25.7%	31.0	43.8
Kodiak City	.19			8.8	0.0	8.8	43.8%	8.0	12.7
Larsen Bay	12	10.8%	45.9%	11.0	0.0	11.0	0.0%	11.0	11.0
Old Harbor	.38	44.6%	100.0%	112.0	2.4		15.7%	96.4	
Ouzinkie	.35	29.4%	45.1%	56.1	0.0	56.1	10.4%	54.0	62.0
Port Lions	.01	4.2%	8.3%	2.0	0.0	2.0	0.0%	2.0	2.0
SOUTH ALASKA	PENINSULA	l l							
Chignik Bay	.00	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	
Chignik Lake	.02	6.5%	74.2%	3.2	1.1	4.3	37.8%	4.0	
False Pass	.42	41.2%	58.8%	25.9	1.2	27.1	27.2%	23.0	
Ivanof Bay	.56	83.3%	100.0%	18.7	2.7	21.3	42.1%	16.0	
King Cove	:15	20.3%	44.1%	49.0	3.0	52.0	94.2%	28.0	
Perryville	.09	14.3%	90.5%	11.0	3.1	14.1	58.9%	9.0	
Sand Point	.02	4.1%	16.1%	. 9.2	0.0	9.2	31.0%	8.0	12.1

# Table 6 (Continued)Subsistence Harbor Seal Harvest, Take, and Use by Alaska Natives, 1995With Confidence Intervals and Statistical Ranges, by Community

		Percent of	Percent of						
	Harbor	Native	Native		Harbor	Total		otal Take	
	Seal	Households	Households	Harbor	Seal		Confidence	Lower	Upper
	Harvested	Harvesting	Using	Seal	Struck	Seal	Interval	Range	Range
Community	Per Capita	Harbor Seal'	Harbor Seal'	Harvested	and Lost	Take	(+/~ %)	Estimate	Estimate
ALEUTIAN ISLAN									
Akutan	.10	9.7%	100.0%	7.0	0.0	7.0	0.0%	7.0	7.0
Atka	.45	50.0%	90.0%	42.5	0.0	42.5	66.6%	17.0	70.8
Unalaska	.13	8.8%	26.7%	37.4	9.7	47.1	62.2%	29.0	76.5
PRIBILOF ISLAND	DS								
St. George	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
St. Paul	.00	0.8%	3.9%	2.5	0.0	2.5	88.4%	2.0	4.7
SOUTH BRISTOL	BAY								
Egegik	.02	3.8%	7.7%	1.4	0.0	1.4	103.3%	1.0	2.8
King Salmon	.16	15.4%	34.6%	13.0	3.0	16.0	0.0%	16.0	16.0
Levelock	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Naknek	.14	14.4%	56.3%	34.8	15.3	50.2	54.0%	36.0	77.3
Pilot Point	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Port Heiden	.16	33.3%	87.9%	17.0	10.0	27.0	0.0%	27.0	27.0
South Naknek	.02	6.5%	35.5%	2.1	0.0	2.1	24.1%	2.0	2.6
NORTH BRISTOL	BAY								
Aleknagik	.00	13.2%	78. <b>9%</b>	0.0	0.0	0.0	0.0%	0.0	0.0
Clark's Point	.00	50.0%	92.9%	0.0	0.0	0.0	0.0%	0.0	0.0
Dillingham	.01	4.2%	59.6%	13.3	0.0	13.3	188.5%	1.0	38.3
Manokotak	.03	27.5%	81.1%	9.3	2.4	11.7	38.2%	10.0	16.1
Togiak	.01	29.0%	94.4%	3.3	0.0	3.3	44.0%	3.0	4.8
ALASKA TOTAL				2498.5	243.3	2741.8	34.2%	2184.4	3679.1
SPOTTED SEALS	, NORTH E	BRISTOL BA	Y						
Aleknagik	.07	13.2%	78.9%	11.8	13.0	24.9	29.2%	21.0	32.1
Clark's Point	.22	50.0%	92.9%	10.0		15.0	0.0%	15.0	15.0
Dillingham	.01	4.2%	59.6%	7.5		15.0	24.9%	14.0	18.7
Manokotak	.07	27.5%	81.1%	22.9		26.5	35.6%	20.0	35.9
Togiak	.23	29.0%	94.4%	111.5	4.4	115.9	13.5%	105.0	131.5
TOTAL WITH OTH	HER SEAL	S		2662.2	276.8	2939.0	33.1%	2359.4	3912.3

<sup>1</sup> In North Bristol Bay, percentage of households harvesting and using *issuriq*, as was done in last year's report.

#### Geographic Distribution of Harbor Seal Takes

Table **5** shows the regional distribution of harbor seal takes by Alaska Natives in 1995. The largest takes in terms of absolute numbers were taken by the Tlingit and **Haida** of the Southeast region. About 68.9 percent of the statewide take of harbor seals (1,890 animals), were taken by hunters in Southeast Alaska (Table 5). The regions ranked second and third were the North Pacific Rim (263 seals, or 9.6 percent of the statewide take) and Kodiak island (232 seals, or 8.5 percent). The remainder of the statewide harbor seal take (356 animals, or 13.0 percent) was distributed among the other six regions.

The geographic distribution of harbor seal takes by community is shown in Table 6 and Fig. 4. Of the top ten communities (in terms of absolute number of harbor seals taken in **1995**), 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 Yakutat (695 seals), Klawock (264 seals), Hoonah (256 seals), Old Harbor (114 seals), Wrangell (128 seals), Sitka (100 seals), **Angoon** (91 seals), **Cordova** (85 seals), Craig (83 seals), and Kake (44 seals). There were eight surveyed communities with no reported harbor seals taken in 1995 -- Aleknagik, Chignik Bay, Chignik Lagoon, Clark's Point, Homer, Levelock, Pilot Point, and St. George.

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 1994 were Yakutat (2.09 harbor seals harvested per person), Klawock (.67), Valdez (.64), Tatitlek (.61), Ivanof Bay (.56), Chenega Bay (.53), Karluk (.47), Atka (.45), Hoonah (.44), and False Pass (.42). There was greater panty across regions in per capita harvests compared with total community take (Table 6). Among the top ten communities for per capita harvests, three were in the North Pacific Rim region, three were in the Southeast region, two were in the Aleutian Islands region, and one each was in the Kodiak Island and South Alaska Peninsula regions.

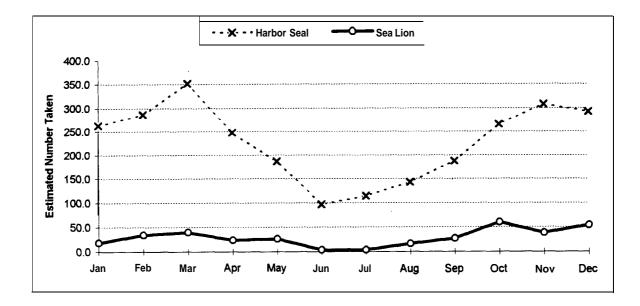
#### Seasonal Distribution of Harbor Seal Takes

The seasonal distribution of the statewide harbor seal take in 1995 is depicted in Figs. 5 and 6, and conforms with the general seasonal patterns for previous years. Harbor seals were reported killed during every month of 1995. In 1995, hunting early in the year (January, February, and March) was the most productive of any year since surveys began in 1992. The drop in hunting productivity during late spring and early summer of 1995 (about May through July) was characteristic of other years. In 1995, hunting productivity was the lowest ever recorded during August and September (see Fig. 6). Productivity increased the last three months of the year (October through December). The statewide total masks differences in seasonal patterns between regions and communities, which are depicted in Appendices B and C.

#### Aae and Sex Composition of Harbor Seal Harvests

The estimated age and sex composition of the 1995 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 to I (1,305 males to 631 females of harvests with reported sex). Hunters also reported harvesting substantially more adult harbor seals than juveniles or pups (5.3 to 1). Overall, adult females comprised about 27 percent of the total known harvest of harbor seals in 1995. Hunters did not report the sex for 23 percent of the harvest or the age for about 7 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 5 Seasonally Adjusted Takes of Harbor Seal and Sea Lion By Alaska Natives, 1995



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Harbor Seal	263.1	267.1	351.2	247.5	166.7	96.0	113.6	142.3	166.9	265.5	306.4	292.7
Percentage	9.6%	10.5%	12.6%	9.0%	6.6%	3.5%	4.1%	5.2%	6.6%	9.7%	11.2%	10.7%
Cum. Percer	nt 9.6%	6 <b>20</b> .1%	32.9%	41.9%	46.7%	52.2%	55.4%	61.6%	66.4%	76.1%	89.3%	100%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sea Lion	17.6	33.6	39.3	23.0	26.0	3.6	3.4	15.7	26.5	59.0	36.3	53.0
Percentage	5.2%	9.9%	11.6%	6.0%	7.7%	1.1%	1. <b>0%</b>	4.6%	7.0%	17.4%	11.3%	15.6%
Cum. Percent	5.2%	15.1%	26.7%	33.5%	41.2%	42.2%	43.3%	47.9%	55.7%	73.1%	64.4%	100%

Figure 6 Estimated Seasonally Adjusted Takes of Harbor Seal by Alaska Natives, 1992, 1993, 1994, and 1995

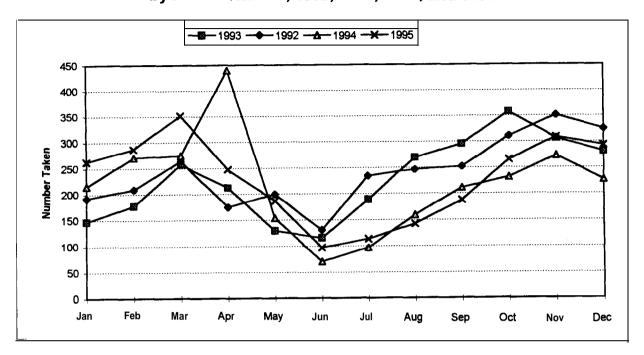
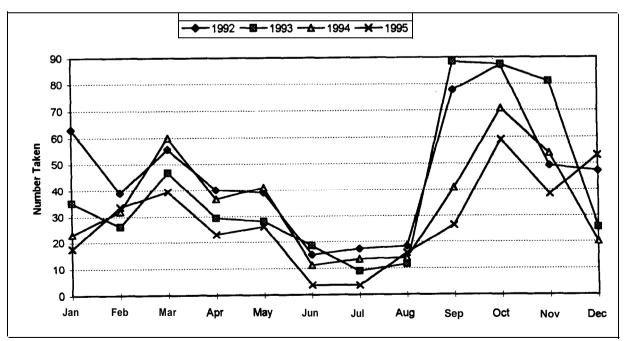


Figure 7 Estimated Seasonally Adjusted Takes of Sea Lion by Alaska Natives, 1992, 1993, 1994, and 1995



Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1996.

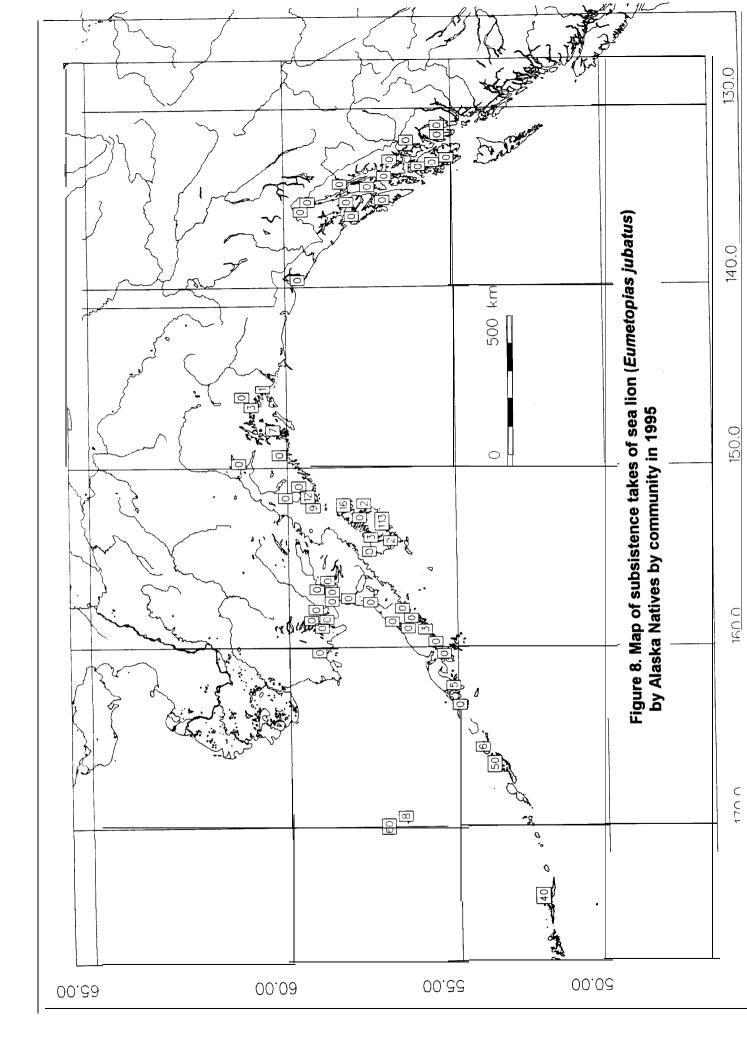
			Unknown	
	Male	Female	Sex	Total
Adult	1056.0	529.4	368.7	1954.1
Row Percent	54.0%	27.1%	18.9%	100.0%
Column Percent	80.9%	83.9%	65.5%	78.2%
Juvenile	209.0	78.0	56.2	343.1
Row Percent	60.9%	22.7%	16.4%	100.0%
Column Percent	16.0%	12.4%	10.0%	13.7%
Pup	14.4	1.1	13.4	28.8
Row Percent	49.8%	3.8%	46.4%	100.0%
Column Percent	1.1%	0.2%	2.4%	1.2%
Unknown Age	26.0	22.5	124.5	173.0
Row Percent	15.0%	13.0%	72.0%	100.0%
Column Percent	2.0%	3.6%	. 22.1%	6.9%
Total	1305.3	631.0	562.7	2499.0
Row Percent	52.2%	25.3%	22.5%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%

# Table 7Age and Sex Composition of Harbor Seal HarvestsBy Alaska Natives, 1995

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# Table 8Age and Sex Composition of Harbor Seal HarvestsBy Alaska Natives by Region, 1995

			Upper							
		North	Kenai-		South			South	North	
		Pacific	Cook	Kodiak	Alaska	Aleutian	Pribilof	Bristol	Bristol	
AGE AND SEX	Southeast	Rim	Inlet	Island	Peninsula	Islands	Islands	Bay	Bay	Alaska
Adult Male	793.6	61.7	1.8	59.8	54.1	54.2	0.0	6.4	4.3	1058.0
Adult Female	426.8	44.6	0.0	40.3	8.0	3.9	0.0	4.0	3.7	529.4
Adult Unknown Sex	279.9	24.8	0.0	6.6	7.0	1.4	0.0	46.8	2.2	368.7
Juvenile Male	77.7	23.8	0.0	87.4	12.7	10.5	2.5	0.0	14.4	209.0
Juvenile Female	20.5	0.0	0.0	39.2	18.5	0.0	0.0	0.0	1.7	78.0
Juvenile Unknown Sex	11.3	12.2	0.0	7.6	16.1	7.0	0.0	2.0	0.0	56.2
Pup Male	0.0	13.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	14.4
Pup Female	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Pup Unknown Sex	8.8	1.3	0.0	0.0	1.3	0.0	0.0	2.0	0.0	13.4
Mate Unknown Age	25.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	26.0
Female Unknown Age	22.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5
Unknown Age and Sex	51.9	50.6	1.8	1.0	2.1	10.0	0.0	7.0	0.0	124.5
TOTAL	1719.1	252.1	3.7	223.0	117.0	88.9	2.5	88.3	28.4	2499.0
AGE ONLY										
Adult	1500.3	151.0	1.8	106.8	67.2	59.5	0.0	57.3	10.2	1954.1
Juvenile	109.6	36.0	0.0	114.2	45.3	17.4	2.5	2.0	16.1	343.1
Pup	9.8	14.5	0.0	0.0	2.5	0.0	0.0	2.0	0.0	28.8
Unknown Age	99.4	50.6	1.8	2.0	2.1	10.0	0.0	7.0	0.0	173.0
TOTAL	1719.1	252.1	3.7	223.0	117.0	86.9	2.5	68.3	26.4	2499.0
SEX ONLY										
Male	896.3	118.7	1.8	128.2	88.0	64.8	2.5	6.4	18.7	1305.3
Female	470.9	44.6	0.0	79.8	22.6	3.9	0.0	4.0	5.5	631 .0
Unknown Sex	351.9	88.9	1.8	15.3	26.4	18.3	0.0	57.9	2.2	562.7
TOTAL	1719.1	252.1	3.7	223.0	117.0	86.9	2.5	68.3	28.4	2499.0



#### THE SUBSISTENCE TAKE OF SEA LION IN 1995

#### Estimated Size of the Sea Lion Take, 1994

The estimated size of the total take of Steller sea lions by Alaska Natives in 1995 is presented in Tables 4 and 9. In 1995, there were an estimated 339 sea lions taken by Alaska Natives for subsistence uses (with a 95 percent confidence range of between 258 to 465 animals) (Table 4). Of the 1995 subsistence take, 9.5 percent (32 sea lions) were struck and lost, and 90.5 percent (307 sea lions) were harvested.

#### Geographic Distribution of Sea Lion Takes

Table 9 shows the regional distribution of sea lion takes in 1995 by Alaska Natives. In 1995, the largest takes were by the Alutiiq of the Kodiak Island region (136 sea lions, or 40.0 percent of the total statewide take of sea lions). The four other regions harvesting sea lions were the Aleutian Islands (96 sea lions, 28.3 percent), the Pribilof Islands (68 sea lions, 20.0 percent), the North Pacific Rim (31 sea lions, 9.3 percent), and the South Alaska Peninsula (8 sea lions, 2.4 percent) (Table 9).

The geographic distribution of sea lion takes by community is shown in Table 10 and Fig. 8. The five top ranking communities were Old Harbor (113 sea lions), St. Paul (60 sea lions), Unalaska (50 sea lions), Atka (40 sea lions), and Ouzinkie (16 sea lions). These five communities accounted for 82.0 percent of the total Alaska take (279 sea lions). In 1995, 41 of 58 surveyed communities reported no sea lions taken. Six more communities reported a take of less than five sea lions. Only eleven communities had harvests of five or more sea lions in **1994**. Table 9Regional Distribution of Subsistence Takes ofSea Lion (*Eumetopias jubatus*) by Alaska Natives, 1995With Confidence Intervals and Statistical Ranges

				<b>Total Take</b>	ake				
		Estimated Total		Confidence	Lower	Upper	Percentage		
_		Struck		Interval	Range	Range	of Take	Per Capita	Struck and
Region	Harvest	and Lost	Take	%(-/+)	Estimate	Estimate	by Region	Harvest	Lost Rate
Southeast	0.0	0.0	0.0	0.0%	0.0	0.0	0.0%	0.00	0.0%
North Pacific Rim	28.4	3.0	31.4	29.9%	28.0	40.8	9.3%	0.02	9.5%
Upper Kenai-Cook Inlet	0.0	0.0	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%
Kodiak Island	127.9	7.7	135.7	15.2%	117.7	156.2	40.0%	0.15	5.7%
South Alaska Peninsula	8.1	0.0	8.1	45.6%	7.0	11.9	2.4%	0.01	0.0%
Aleutian Islands	85.0	11.1	96.1	70.1%	58.0	163.5	28.3%	0.18	11.6%
Pribilof Islands	57.6	10.3	67.9	36.4%	47.0	92.7	20.0%	0.08	15.1%
South Bristol Bay	0.0	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	0.0%	0.00	0.0%
ALASKA	307.1	32.1	339.2	37.1%	257.7	465.0	100.0%		9.5%
Percentage of Take	90.5%	9.5%	100.0%						·

#### Seasonal Distribution of Sea Lion Takes

The seasonal distribution of the sea lion take in **1995** is depicted in Figs. 5 and 7. Sea lions were reported killed during every month of 1995. Seasonal peaks in subsistence productivity occurred during **Febuary-March** and October-December, while summer (June-July) was the period of lowest productivity. Hunting productivity in 1995 was relatively low in comparison with the three previous years (199294): productivity was the lowest ever reported in nine of twelve months (January, March-July, September-November). The statewide total masks differences in seasonal patterns between regions and communities, which are depicted in Appendices B and C.

#### Ane and Sex Composition of Sea Lion Harvests

The reported age and sex compositions of the 1995 sea lion harvests are shown in Tables 11 and 12 by geographic region. Hunters reported harvesting male sea lions over female sea lions by a ratio of about 2 to 1 (169 males to 83 females of animals with sex reported). Hunters also reported harvesting juvenile sea lions over adults by about 2 to 1 (194 adolescents to 97 adults). Adult females comprised about 13 percent of the total known harvest of sea lions in 1995. Hunters did not report the sex for 18 percent of the harvest or the age for about 5 percent of the harvest. The age and sex also are unknown for sea lions which were struck and lost.

### HUNTING PARTICIPATION

Participation in hunting in 1995 was the lowest of the four survey years (1992-95). Based on survey findings, the estimated number of households which reported at least one member hunting harbor seal was 1,014 households in 1992, 854 households in 1993, 971 households in 1994, and 805 households in 1995 (Table 13). The estimated number of households which reported at least one member hunting sea lions

### Table 10

## Subsistence Sea Lion Harvest, Take, and Use by Alaska Natives, 1995 With Confidence Intervals and Statistical Ranges, by Community

		Percent of	Percent of				_		
		Native	Native					otal Take	
	Sea Lion	Households	Households		Sea Lion		Confidence	Lower	Upper
	Harvested	Harvesting	Using	Sea Lion		Sea Lion	Interval	Range	Range
Community	Per Capita	Sea Lion	Sea Lion	Harvested	and Lost	Take	(+/- %)	Estimate	Estimate
SOUTHEAST ALA									
Angoon	.00			0.0	0.0	0.0	0.0%	0.0	0.0
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			0.0	0.0	0.0	0.0%	0.0	0.0
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%	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	.08	• 14.3%	50.0%	6.6	0.0	6.6	83.3%	4.0	12.0
Cordova	.00	0.0%	0.0%	0.0	1.0	1.0	0.0%	1.0	1.0
Nanwalek	.06	12.8%	59.0%	9.2	0.0	9.2	15.2%	9.0	10.6
Port Graham	.06	10.3%	60.3%	10.0	2.0	12.0	0.0%	12.0	12.0
Seldovia	.00	0.0%	14.6%	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	.04	5.3%	36.8%	2.6	0.0	2.6	96.0%	2.0	5.2
Valdez	.00	0.070	00.070	0.0	0.0	0.0	0.0%	0.0	0.0
UPPER KENAI-CO				0.0	0.0	0.0	0.070	0.0	0.0
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
	.00			0.0	0.0	0.0	0.0 %	0.0	0.0
KODIAK ISLAND		F 20/	04 40/	10	4.0	• •	0.00/		• •
Akhiok	.02	5.3%	21.1%	1.0	1.0	2.0	0.0%	2.0	2.0
Karluk Kadiak Citu	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Kodiak City	.05	0 70/	0.70/	2.2	0.0	2.2	59.1%	2.0	3.5
Larsen Bay	.02	2.7%	2.7%	2.0	1.0	3.0	0.0%	3.0	3.0
Old Harbor	.37	47.0%	97.6%	107.1	5.7	112.9	15.2%	95.7	130.1
Ouzinkie	.10	15.7%	21.6%	15.6		15.6	13.2%	15.0	17.6
Port Lions	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
SOUTH ALASKA									
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	
Chignik Lake	.00	0.0%	6.5%	0.0		0.0		0.0	
False Pass	.00	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	
King <b>Cove</b>	.02	1.7%	1.7%	5.0	0.0	5.0	0.0%	5.0	5.0
Perryville	.03	4.0%	52.4%	3.1	0.0	3.1	118.2%	2.0	6.9
Sand Point	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0

# Table 10 (Continued)Subsistence Sea Lion Harvest, Take, and Use by Alaska Natives, 1995With Confidence Intervals and Statistical Ranges, by Community

		Percent of Native	Percent of Native				_		
	Sea Lion	Households	Households	<b>.</b>	Sea Lion	Total		tal Take	
	Harvested	Harvesting	Using	Sea Lion		Sea Lion		Range	Range
Community	Per Capita	Sea Lion	Sea Lion	Harvested	and Lost	Take	(+/- %)	Estimate	Estimate
ALEUTIAN ISLAN		0 70/	400.00/				0.00/		
Akutan	.08	9.7%	100.0%	6.0	0.0	6.0	0.0%	6.0	6.0
Atka	.42	30.0%	90.0%	40.0	0.0	40.0	89.7%	16.0	75.9
Unalaska	.13	6.6%	25.8%	39.0	11.1	50.1	62.9%	36.0	81.6
PRIBILOF ISLAN	DS								
St. George	.03	4.8%	19.0%	4.0	4.0	8.0	0.0%	8.0	8.0
St. Paul	.08	17.8%	62.3%	53.6	6.3	59.9	41.3%	39.0	84.7
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
NORTH 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%	0.5%	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%	0.9%	0.0	0.0	0.0	0.0%	0.0	0.0
. ogian		0.070	0.070	510	0.0	0.0	0.070	0.0	0.0
ALASKA TOTAL				307.1	32.1	339.2	37.1%	257.7	465.0

			Unknown	
	Male	Female	Sex	Total
Adult	47.5	39.7	10.1	97.3
Row Percent	48.8%	40.8%	10.4%	100.0%
Column Percent	28.2%	47.7%	18.3%	31.7%
Juvenile	121.1	43.5	29.1	193.7
Row Percent	62.5%	22.4%	15.0%	100.0%
Column Percent	71.8%	52.3%	52.6%	63.1%
Pup	0.0	0.0	0.0	0.0
Row Percent	0.0%	0.0%	0.0%	0.0%
Column Percent	0.0%	0.0%	0.0%	0.0%
Unknown Age	0.0	0.0 ·	16.1	16.1
Row Percent	0.0%	0.0%	100.0%	100.0% .
Column Percent	0.0%	0.0%	29.0%	5.2%
Total	168.6	83.2	55.4	307.1
Row Percent	54.9%	27 1%	18.0%	100.0%
Column Percent	100.0%	100 0%	100.0%	100.0%

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# Table 11Age and Sex Composition of Sea Lion HarvestsBy Alaska Natives, 1995

# Table 12Age and Sex Composition of Sea Lion HarvestsBy Alaska Natives by Region, 1995

			Upper							
		North	Kenai-		South			South	North	
		Pacific	Cook	Kodiak	Alaska	Aleutian	Pribilof	Bristol	Bristol	
AGE AND SEX	Southeast	Rim	Inlet	Island	Peninsula	Islands	Islands	Bay	Bay	Alaska
Adult Male	0.0	9.4	0.0	8.0	3.6	20.0	6.5	0.0	0.0	47.5
Adult Female	0.0	2.7	0.0	18.5	2.6	15.9	0.0	0.0	0.0	39.7
Adult Unknown Sex	0.0	3.0	0.0	5.7	0.0	1.4	0.0	0.0	0.0	10.1
Juvenile Male	0.0	2.0	0.0	62.1	2.0	29.2	34.8	0.0	0.0	121.1
Juvenile Female	0.0	1.6	0.0	30.1	0.0	9.2	2.5	0.0	0.0	43.5
Juvenile Unknown Sex	0.0	7.0	0.0	3.4	0.0	8.3	10.3	0.0	0.0	29.1
Pup Male	0.0	0.0	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	0.0	0.0
Pup Unknown Sex	0.0	0.0	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	0.0	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	2.6	0.0	0.0	0.0	10.0	3.4	0.0	0.0	16.1
TOTAL	0.0	28.4	0.0	127.9	8.1	85.0	57.6	0.0	0.0	307.1
AGE ONLY										
Adult	0.0	15.1	0.0	32.3	6.1	37.2	8.5	0.0	0.0	97.3
Juvenile	0.0	10.7	0.0	95.6	2.0	37.7	47.7	0.0	0.0	193.7
Pup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown Age	. 0.0	2.6	0.0	0.0	0.0	10.0	3.4	0.0	0.0	16.1
TOTAL	0.0	28.4	0.0	127.9	8.1	85.0	57.6	0.0	0.0	367.1
SEX ONLY										
Male	0.0	11.4	0.0	70.1	5.6	40.2	41.3	0.0	0.0	168.6
Female	0.0	4.3	0.0	48.7	2.6	25.1	2.5	0.0	0.0	83.2
Unknown Sex	0.0	12.7	0.0	9.1	0.0	19.7	13.8	0.0	0.0	55.4
TOTAL	0.0	26.4	0.0	127.9	8.1	85.0	57.6	0.0	0.0	367.1

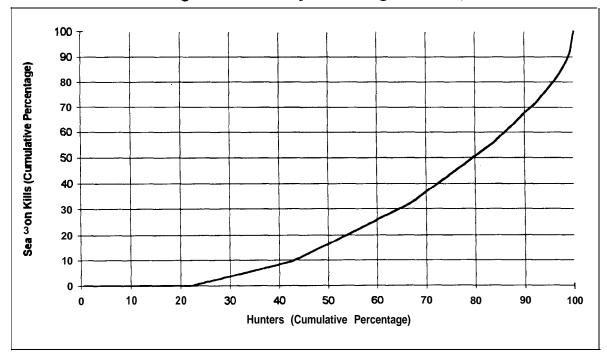
# Table 13Participation Rates of Alaska Native Households inHunting Harbor Seal or Sea Lion, 1992, 1993, 1994, and 1995

	H	ARBOR SEA	L I		SEA LION	
	Household	Percentage of Household	•	Uausahald	Percentage of Household	-
	Universe	Universe	Households	Universe		Households
STUDY YEAR 1992						
Did Not Hunt	2698	73%		3513	95%	
Hunted Unsuccessfully	290	8%	29%	59	2%	30%
Hunted Successfully	724	19%	71%	140	4%	70%
Total Households	3712	100%		3712	100%	
Total Hunting Households	1014	27%	100%	199	5%	100%
STUDY YEAR 1993						
Did Not Hunt	3510	80%		4142	95%	
Hunted Unsuccessfully	216	5%	25% ·	78	2%	35%
Hunted Successfully	638	15%	75%	144	3%	65%
Total Households	4364	100%		4364	100%	-
Total Hunting Households	854	20%	100%	222	5%	100%
STUDY YEAR 1994						
Did Not Hunt	3311	77%		4072	95%	
Hunted Unsuccessfully	362	8%	37%	85	2%	40%
Hunted Successfully	608	14%	63%	125	3%	60%
Total Households	4282	100%	-	4282	100%	
Total Hunting Households	971	23%	100%	210	5%	100%
STUDY YEAR 1995						
Did Not Hunt	2926	78%		3573	96%	
Hunted Unsuccessfully	208	6%	26%	39	1%	24%
Hunted Successfully	597	16%	74%	120	3%	76%
Total Households	3731	100%		3731	100%	
Total Hunting Households	805	22%	100%	158	4%	100%

**Specialization in Harbor Seal Takes:** Percentage of Hunters by Percentage of Take, 1995 100 -90 Seal Kills (Cumulative Percentage) 80 70 60 50 40 30 20 10 0 20 10 30 40 80. 70 80 90 · 100 0 so Hunters (Cumulative Percentage)

Figure 9

Figure 10 Specialization in Sea Lion Takes: Percentage of Hunters by Percentage of Take, 1995



Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1996.

#### Table 14

### Comparison of Households Interviewed in **1992**, **1993**, **1994**, and 1995 (Unweighted Numbers)

#### HARBOR SEAL

COMMUNITIES WITH FOUR YEARS OF DATA

846 Households interviewed in 1992, 1993, 1994, and 1995

277 Households did not hunt in any year

156 Households hunted in 1 of the 4 years

148 Households hunted in 2 of the 4 years

126 Households hunted in 3 of the 4 years

139 Households hunted in 4 of the 4 years

ST. PAUL (3 YEARS OF DATA)

33 Households interviewed in 1992, 1994, and 1995

30 Households did not hunt any year

0 Households hunted in 1 of the 3 years

3 Households hunted in 2 of the 3 years

0 Households hunted in 3 of the 3 years

#### SEA LION

COMMUNITIES WITH FOUR YEARS OF DATA

846 Households interviewed in 1992, 1993, 1994, and 1995

. 706 Households did not hunt in any year

62 Households hunted in 1 of the 4 years

34 Households hunted in 2 of the 4 years

23 Households hunted in 3 of the 4 years

21 Households hunted in 4 of the 4 years

ST. PAUL (3 YEARS OF DATA)

33 Households interviewed in 1992, 1994, and 1995

10 Households did not hunt any year

6 Households hunted in 1 of the 3 years

7 Households hunted in 2 of the 3 years

10 Households hunted in 3 of the 3 years

was 199 households in 1992, 222 households in 1993, 210 households in 1994, and 158 households in 1995. Although fewer people hunted, the percent of hunters who were successful improved in 1995 over the previous year. The percent of hunting households that reported hunting unsuccessfully in 1995 was 26 percent for harbor seal (compared with 29 percent in 1992, 25 percent in 1993, and 37 percent in 1994); the percent of unsuccessful households was 24 percent for sea lion (compared with 30 percent in 1993, and 40 percent in 1994).

Hunting harbor seal or sea lion is a relatively specialized subsistence activity in Alaska communities. For the four survey years, the large majority of Native households in the study's sampling universe did not attempt to hunt harbor seals or sea lions (Table 13). Among hunters, there also was substantial specialization in productivity (see Figs. 9 and 10). A relatively small number of highly-productive hunters reported taking most of the subsistence kills. The harvests from this core group of highly-productive hunters were distributed among a wider range of households. Specialization has implications for co-management systems. The largest management effects in any region are potentially reached through this group of highly productive subsistence hunters.

There appears to be moderate turnover in hunting households across years, as shown by the unweighted composition of the hunters surveyed all four survey years in Table 14. For harbor seal, there were 139 households that hunted all four years, 126 households that hunted in three of the four survey years, 148 households that hunted in two years, 156 that hunted one year, and 277 households that did not hunt in any year. For sea lion, there were 21 households that hunted all four years, 23 households that hunted in three of the four survey years, 34 households that hunted in two years, 62 that hunted one year, and 706 households that did not hunt in any year. Hunter participation is shown separately for St. Paul, where three years' data are available (Table 14).



Photograph 1. Don Kompkoff, a hunter from Chenega Bay, demonstrates the method of roasting seal meat over an open fire (called *mungyuk*) outside the Tatitlek school. A wind screen has been placed behind to control smoke.

#### ALUTIIQ USES OF SEA LION AND HARBOR SEAL

Earlier reports have described food products derived from harbor seal and sea lion (cf., Wolfe and Mishler **1993**:**36-43**, 54-59). This section describes some additional detail on two food products prepared by Alutiiq families -- *qiluryat* (braided intestines) and roasted meat prepared over an open fire. The descriptions are based on key respondent interviews and observations by Craig Mishler.

In the Alutiiq culture area of southcentral Alaska, especially in the Gulf of Alaska, braided harbor seal or sea lion intestine (*qiluryat*) is a favorite delicacy, a unique dish distantly resembling pork or beef sausage. Making *qiluryat* is traditionally a woman's culinary skill. In Kodiak Island communities only the older women still remember how to braid, but in the Prince William Sound community of Tatitlek, young boys as well as young girls have recently acquired the skill from their grandmothers (see Photographs 2 and 3). The tradition of braiding intestines is also carried on in the lower Cook Inlet villages of Nanwalek and Port Graham and in communities along the Alaska Peninsula.

In preparing seal or sea lion intestines for braiding, the intestines are first separated from the membrane which encases them. To clean the intestines of their contents, one-inch slits are made with a sharp knife about every three inches along the entire length of the intestine. The contents of the intestine are squeezed out by pressing the intestine between the thumb and forefinger and pulling along its entire length. The intestine is rinsed in clean water and the process of squeezing and rinsing is repeated two more times. Sometimes it is soaked in water and vinegar overnight.

Seal intestines can be braided in two ways -- with or without a strip of fat. Sea lion intestines are braided plain, without a fat strip, because the texture of the fat in a



Photograph 2. Jessie Tiedeman, an elder from Tatitlek, demonstrates the technique of braiding seal intestines with a strip of fat (*qiluryat*) at the Tatitlek school.



Photograph 3. Tanya Totemoff, from Tatitlek, uses the technique of braiding seal intestines without the fat at the Tatitlek school.

sea lion does not lend itself well to braiding. Before being braided with seal intestines, seal blubber is cut into a long continuous narrow strip resembling the letter "s". The length of the fat should match the length of the intestine to which it is braided. The finished braid nearly conceals the fat except on the very end, where it is tied off.

Braiding is done with the thumb and forefinger of the left hand serving as a pedestal or mount which is actively wrapped or woven by intestines manipulated with the right hand (Photograph 2). The precise technique, like tying sailor's knots, is not easily described on paper but is readily learned through demonstration and close observation. Sometimes a piece of rope and some clean rags are used for practice, with the rope substituting for the intestine and the rags representing the strip of fat. Finished plain gut braiding looks something like the pigtails in a schoolgirl's hair (Photograph 3).

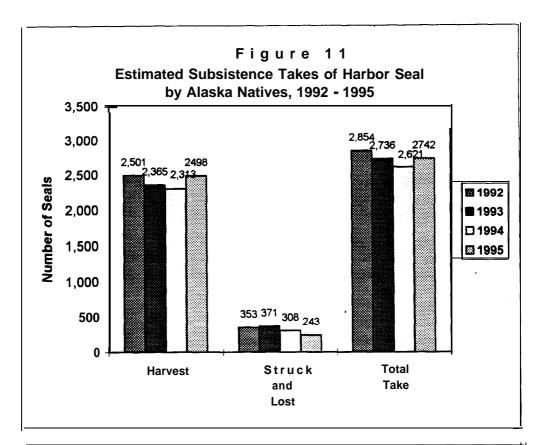
The finished braid, whether with or without fat, is boiled in a pot of water for a couple of hours, then sliced and eaten. Some villagers like to boil the braids with the seal's heart and the kidney, and there are many local variations. In Karluk, people boil *qiluryat* with Worcestershire sauce and onion. In Ivanof Bay, people boil *qiluryat* with salt and serve it with hot mustard. In Akhiok, some families like it sliced cold on sandwiches.

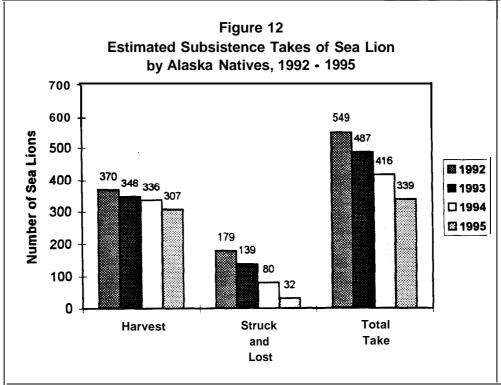
Another favorite food in the Prince William Sound area is roasted harbor seal meat, prepared by *mungyuking* -- an Alutiiq word (*mungyuk*) with an English suffix (- ing). *Mungyuking* is barbecuing freshly killed seal over an open fire, usually by men immediately after they return from hunting. The favorite parts of the seal for roasting are the ribs, but slabs of breast meat are also used. Roasting determines how the seal is butchered. Instead of cutting the seal directly down the middle of the sternum and through the center of the stomach, Alutiiqs in Prince William Sound prefer to make parallel cuts down each side of the seal's rib cage.

To spread the meat open and expose it to the flames, short slender alder branches are poked through the slab in two places and criss-crossed. A much longer and thicker alder branch is then poked through the meat with the base of the branch braced into the ground on an angle, suspending the meat over the fire (Photograph 1). Alder is preferred over other woods because it is green and tends not to bum as fast as other species. To control the direction of the smoke when there is a breeze, a piece of plywood is often propped up on one side of the fire. The fatty side of the ribs or meat is roasted first. When this side is done, the slab is turned over to roast the meaty side. The ribs and meat are considered done after they turn black from the heat and smoke,which takes several hours and imparts a rich charcoal flavor. A good *mungyuk* requires tending the meat constantly to insure that it does not flame up and bum to a crisp.

Besides the breast meat and ribs, the liver and kidney of the seal are also roasted over the fire in a shish kabob style. That is, a piece of liver is skewered onto a stick, followed by a piece of fat, followed by a piece of kidney, another piece of fat, and so on. Yet another variation is to smoke the seal lightly on a stick, then wrap it in tinfoil and set it on top of hot coals. This way it will hold its juices and will not dry out.

*Mungyuking* is a cause for family and community celebration, especially during summer months when people love to gather on the beach in front of a bonfire to eat, drink coffee, tell stories, and socialize long into the evening. It is fair to say that **foodways** such as *mungyuk* and *qiluryat* are important markers of Alutiiq social and ethnic identity, and that they connect the essential nutritional value of marine mammals with the continuity of traditional culture.

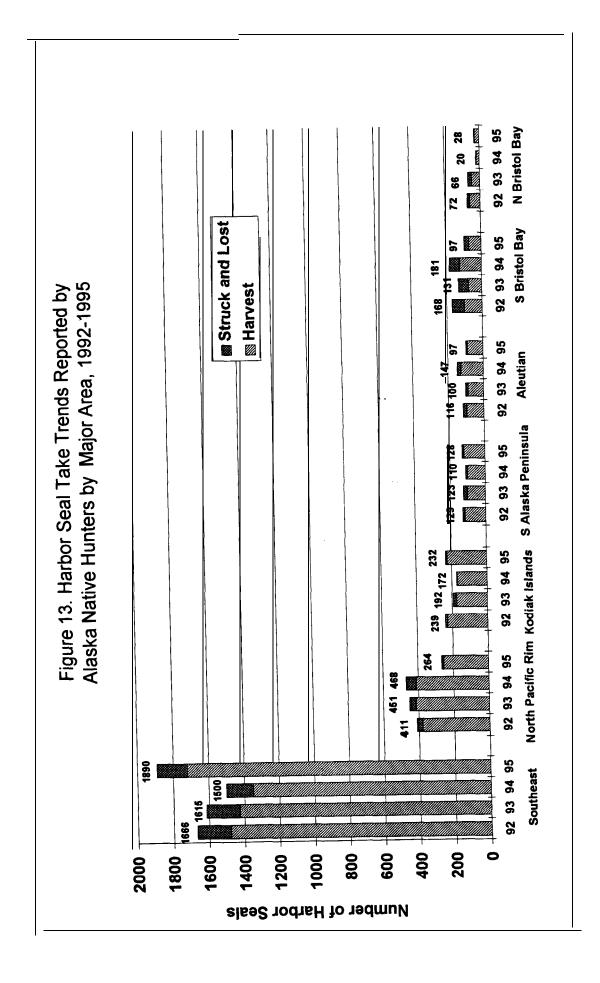


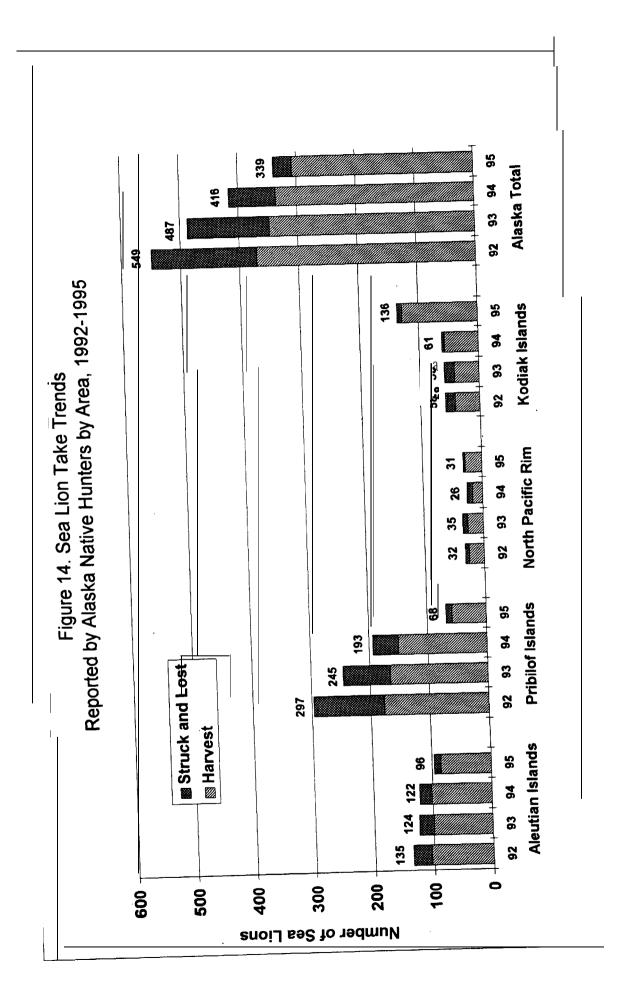


#### DISCUSSION

At the state level, harbor seal takes increased in 1995 after two consecutive years of declines: harbor seal harvests (2,498 seals) and total takes (2,742 seals) in 1995 were the second highest recorded since surveys were started in 1992 (Fig. 11). In addition, hunters reported the lowest number of struck and lost animals (243 seals) in 1995, continuing an apparent declining trend in struck and lost rates for harbor seals -- 12.4 percent (1992), 13.6 percent (1993), 11.8 percent (1994), and 8.9 percent By contrast, sea lion takes continued to decline at the statewide level -- 549 (1995). (1992), 487 (1993), 416 (1994), and 339 (1995), representing a 38.3 percent decline in subsistence takes over a four-year period (see Fig. 12). The subsistence take of sea lions in 1995 was the lowest recorded since surveys started in 1992. A large portion of the decline in total sea lion takes is attributable to declining numbers of struck and lost animals reported by hunters -- 179 (1992), 139 (1993), 80 (1994), and 32 (1995). Similar to harbor seals, struck and lost rates for sea lions have shown marked declines since 1992 -- 32.6 percent (1992), 28.6 percent (1993), 19.2 percent (1994), and 9.5 percent (1995). Not counting struck and lost animals, sea lion harvests have shown a more modest decline of 17.0 percent since 1992 (from 370 to 307 animals) at the statewide level.

As stated in last year's report, the reasons for declining struck and lost rates for harbor seal and sea lion are uncertain. It is possible that hunting conditions generally have been more favorable for retrieving animals since 1992; however, we have not heard this mentioned by hunters. There are few indications that hunters in general have been more reluctant to report struck and lost animals over time to local surveyors, though it is quite possible that this may be the case for some individual hunters. Similarly, there are no indications that local surveyors are not consistently asking the struck and lost questions on the surveys, though this also may be possible in a few





cases. We do know that in general, hunters are increasingly aware of the reports about declining harbor seal and sea lion populations in portions of their ranges in Alaska. It is possible that some hunters are modifying hunting methods in order to ensure better retrieval as a response to the reported population declines, such as taking closer shots, or shooting where water and wind conditions make retrieval more likely. While a few hunters have told surveyors that they are making adjustments like these, we have not gathered any systematic information to know the extent of this generally among hunters. As stated in last years report, hunting guidelines were developed and disseminated on St. Paul and St. George by local hunter organizations,' which may have sensitized hunters there to these matters. The declines in reported struck and lost rates for harbor seal and sea lion statewide may be a result of a combination of factors like these.

With only four years of harvest information, it is difficult to identify "harvest trends" within what may-be a normal pattern of yearly variation in subsistence uses of a region or community. We do not know what might constitute a "high", "low", or "average" year for a community until there is a series of years for comparison. Variation in takes at the regional level are depicted in Figs. 13 and 14 and Table 15. No general statements can be made about harvest changes that would apply to all regions. Some region's harvests were higher in 1995, while others were lower. It is likely that most of these changes represent normal variation in yearly subsistence takes, and represent fluctuations due to seasonal hunting conditions, local food needs, local prey abundance, and personal circumstances of marine mammal hunters.

For instance, harbor seal takes and harvests in southeast Alaska in 1995 were the largest recorded since the project began in 1992. The productive year was due primarily to substantially larger seal takes at Yakutat (695 seals in 1995, compared with 452 seals in 1994) and Klawock (264 seals in 1995, up from 71 seals in 1994). As stated above, high harvesters account for a large portion of the harvest in communities

Table 15	Subsistence Harbor Seal and Sea Lion Takes by Alaska Natives	By Region, 1992, 1993, 1994, and 1995
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		1992	1992		1993	1993		1994	1994		1995	1995
	1992	Harbor	Total	1993	Harbor	Total	1994	Harbor	Total	1995	Harbor	Total
	Harbor	Seal	Harbor	Harbor	Seal	Harbor	Harbor	Seal	Harbor	Harbor	Seal	Harbor
	Seal	Struck	Seal	Seal	Struck	Seal	Seal	Struck	Seal	Seal	Struck	Seal
Region	Harvested	and Lost	Take	Harvested	and Lost	Take	Harvested	and Lost	Take	Harvested	and Lost	Take
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
Upper 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
South Alaska Peninsula	115.5	13.1	128.6	100.0	23.1	123.1	<u> 98.6</u>	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	0.66	68.6	167.6	73.6	57.3	130.9	121.6	59.3	180.9	68.3	28.3	96.6
North Bristol Bav	58.4	13.2	71.6	46.1	20.0	66.1	16.2	3.3	19.5	25.9	2.4	28.3
Alaska Total	2501.0	353.4	2854.4	2365.3	371.1	2736.4	2312.8	308.0	2620.8	2498.5	243.3	2741.8
		1992	1992		1993	1993		1994	1994		1995	1995
	1992	Sea	Total	1993	Sea	Total	1994	Sea	Total	1995	Sea	Total
	Sea	Lion	Sea	Sea	Lion	Sea	Sea	Lion	Sea	Sea	Lion	Sea
	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion
Region	Harvested	and Lost	Take	Harvested	and Lost	Take	Harvested	and Lost	Take	Harvested	and Lost	Take
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
Upper 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
South Alaska 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	0.09	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
Lake Iliamna	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alaska Total	369.8	178.9	548.8	347.8	139.3	487.1	336.0	80.1	416.1	307.1	32.1	339.2

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1996.

## Table 16 Subsistence Harbor Seal Takes by Alaska Natives By Community, **1992**, **1993**, **1994**, and 1995

		1992	1992	I	1993	1993		1994	1994		1995	1995
	1992	Harbor	Total	1993	Harbor	Total	1994		Total	1995	Harbor	Total
	Harbor		Harbor	Harbor		Harbor	Harbor		Harbor	Harbor		Harbor
	Seal	Stuck	Seal	Seal	Struck	Seal	Seal	Struck	Seal	Seal	Struck	Seal
Community	Harvested a	and Lost	Take	iarvested a	and Lost	Take	larvested a	and Lost	Take	larvested	and Lost	Take
SOUTHEAST ALAS	KA											
Angoon	125.1	28.9	154.0	56.6	9.9	66.5	66.9	21.1	88.0	60.9	9.7	90.6
Craig	74.2	0.0	74.2	51.1	9.8	60.9	42.7	6.8	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	108.6	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	5.8	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		100.0
Wrangell	6.0	8.0	14.0	19.5	9.0	28.5	101.0	27.0		89.3	22.8	
Yakutat	248.0	61.3	309.3	568.4	51.4	625.8	417.1	35.0	452.1	615.5	79.6	695.1
NORTH PACIFIC RI									.= -			
Chenega Say	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		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	4.8	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		170.6	110.8	15.5	126.4	145.9	30.9	178.8	46.1	2.6	46.7
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
			47.4	24.4	5.0							
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	22.2		33.3	4.8 20.0	0.0 0.0	4.6 20.0	12.0	0.0	12.0	0.0	0.0	0.0
Kenai	33.3	0.0 0.0	33.3 1.1	20.0	0.0	20.0						
	1.1	0.0	1.1				_	-				
KODIAK ISLAND 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	20.0 16.5	3.0 1.5	23.0 18.0	10.0	1.3	13.3	7.5	0.0	7.5	28.1	6.8	
	36.9	0.0	36.9	6.0	1.0	7.0	7.6	0.0	7.6	8.8	0.0	
Kodiak City Larsen Bay	36.9 6.5	0.0	50.9 6.5	0.0 7.7	5.5	13.2	13.4	2.2	15.7	0.0 11.0	0.0	
Old Harbor	6.5 86.8	5.3	92.1	67.6	2.7	70.3	83.7	1.3	85.0	11.0	2.4	
Ouzinkie	21.8	5.3 1.1	23.0	41.2	8.7	49.8	33.4	0.0	33.4	56.1	0.0	
Port Lions	36.9	2.2	39.1	26.0	1.0	45.0 27.0	8.0	0.0	8.0	2.0	0.0	
	50.9	2.2	55.1	20.0	1.0	21.0		0.0	0.0	2.0	0.0	2.0

# Table 16, (Continued) Subsistence Harbor Seal Takes by Alaska Natives By Community, **1992, 1993, 1994**, and 1995

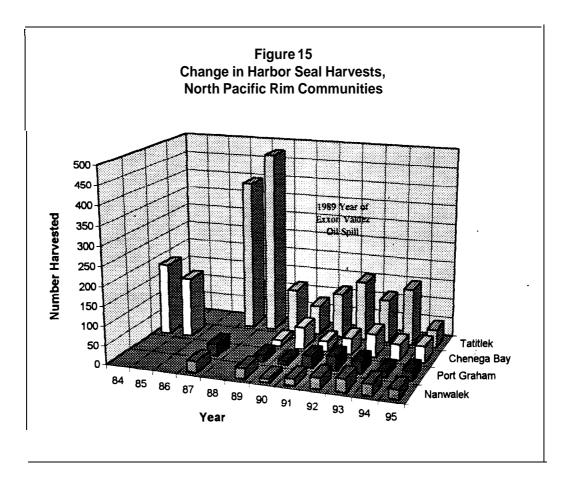
		1992	1992		1993	1993		1994	1994		1995	1995
	1992	Harbor	Total	1993	Harbor	Total	1994	Harbor	Total	1995	Harbor	Total
	Harbor	Seal I	Harbor	Harbor	Seal H	larbor	Harbor	Seal H	Harbor	Harbor	Seal H	larbor
	Seal	Struck	Seal	Seal	Struck	Seal	Seal	Struck	Seal	Seal	Struck	Seal
Community	Harvested	and Lost	Take	larvested	and Lost	Take	larvested	and Lost	Take	iarvested	and Lost	Take
SOUTH ALASKA P	ENINSULA											
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 .o	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	12.6	2.1	15.0	21.1	0.0	21. <b>1</b>	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 ISLAND	S											
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			
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 ISLANDS	S											
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
SOUTH BRISTOL E	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
KingSalmon	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	10.6	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	244	4.4	1.1	5.5	2.1	0.0	2.1
NORTH BRISTOL	ЗАҮ											
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

# Table 17Subsistence Sea Lion Takes by Alaska NativesBy Community, 1992, 1993, 1994, and 1995

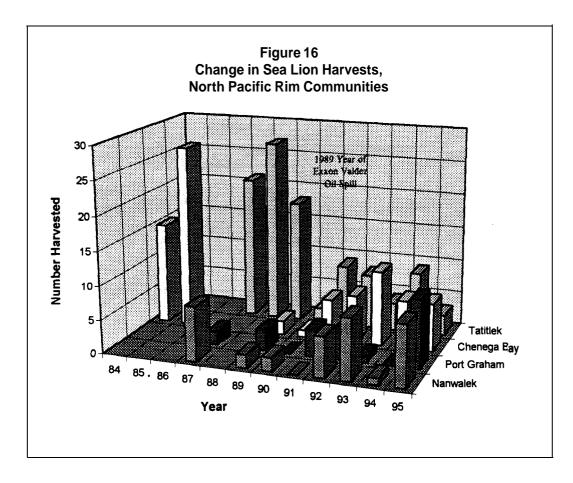
		1992	1992	I	1993	1993		1994	1994		1995	1995
	1992	sea	Total	1993	Sea	Total	1994	Sea	Total	1995	Sea	Total
	Sea	Lion	Sea	Sea	Lion	Sea	Sea	Lion	Sea	Sea	Lion	Sea
	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion
	Harvested a	and Lost	Take	arvested	and Lost	Take	larvested a	nd Lost	Take	larvested a	nd Lost	Take
SOUTHEAST ALASK												
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	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 Metlakatla	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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
	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 PACIFIC RIM		4.0				47.7						
Chenega Bay Cordova	6.9	1.2 0.0	8.1 <b>0.0</b>	11.1	6.6	17.7	6.6	0.0	6.6	6.6	0.0	6.6
Nanwalek	0.0 6.3	0.0	0.0 6.3	1.5 8.5	0.0	1.5 9.5	0.0	0.0	0.0 3.5	0.0	1.0	1.0
Port Graham	0.3 3.5	0.0 1.2	0.3 4.7	0.5 1.1	1.1 <b>0.0</b>	9.5 1.1	1.2 0.0	2.3		9.2 10.0	0.0	9.2
Seldovia	0.0	0.0	4.7 0.0	0.0	0.0	0.0	0.0	0.0	0.0		2.0	12.0
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 0.0	0.0 0.0	0.0 0.0
Tatiilek	8.3	4.2	12.5	4.1	1.0	5.2	8.8	0.0 7.4	0.0 16.2	2.6	0.0	2.6
Valdez	0.0	4.2 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UPPER KENAI-COOF		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.1	010	0.0	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	0.0	0.0	0.0			-
Tyonek	0.0	0.0	0.0								·	
KODIAK ISLAND												
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
Kodiak City	0.0	0.0	0.0	0.0		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
OM Harbor	32.9	13.2	46.1	32.1	1.0	33.2	46.2	1.3	47.5	107.1		112.9
Ouzinkie	3.4	0.0	3.4	5.		7.6	4.4	2.9	7.3	15.6	0.0	15.6
Port Lions	5. <del>4</del> 1.1	2.2	3.3	4.0		5.0		0.0	0.0	0.0	0.0	0.0
	1.1	2.2	5.5	4.0	1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0

# Table 17, (Continued) Subsistence Sea Lion Takes by Alaska Natives By Community, **1992, 1993, 1994,** and 1995

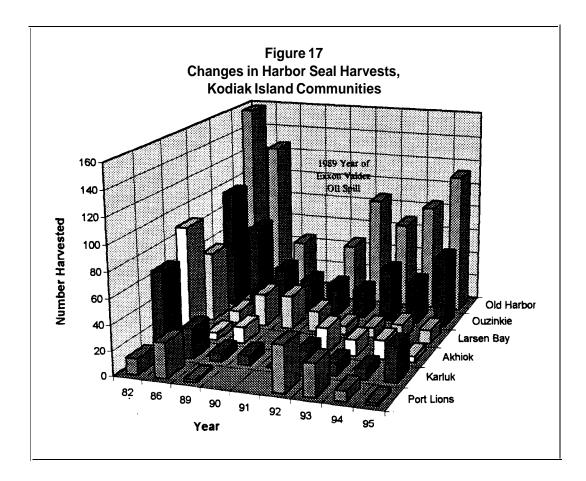
		1992	1992		1993	1993		1994	1994		1995	1995
	1992	Sea	Total	1993	Sea	Total	1994	sea	Total	1995	Sea	Total
	sea	Lion	Sea	Sea	Lion	Sea	sea	Lion	Sea	Sea	Lion	Sea
	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion
Community	Harvested	and Lost	Take	arvested	and Lost	Take	arvested	and Lost	Take	arvested	and Lost	Take
SOUTH ALASKA P	PENINSULA											
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
Fake 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
<b>Ivanof</b> 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 ISLAND	S											
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			
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 ISLANDS	5											
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	228.8	161.7	65.2	226.8	147.0	26.4	173.4	53.6	6.3	59.9
SOUTH BRISTOL E												
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
NORTH BRISTOL I	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
LAKE <b>ILIAMNA</b>												
Iliamna	1.3	0.0	1.3									
Newhalen	0.0	0.0	0.0									



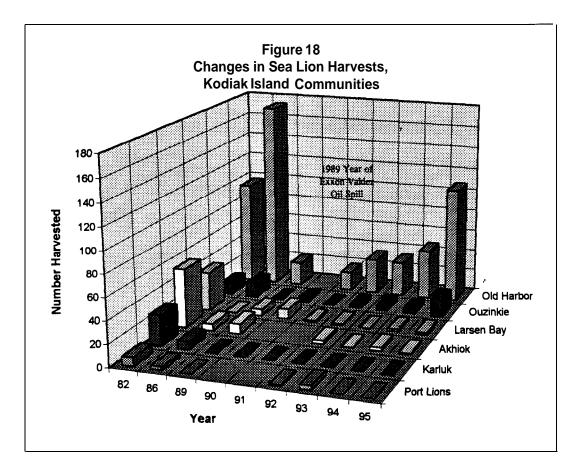
	HAR	BOR SEAL HAI	WESTS	
Year	Nanwal ek	Port Graham	Chenega Bay	Tatitlek
84			186	
85			154	
86				
87	29	32		393
88				473
89	27	17	16	113
90	9	10	57	76
91	18	30	28	114
92	28	36	43	153
93	34	31	61	111
94	29	16	42	146
95	24	23	44	46



SEA LION HARVESTS								
Year	Nanwal ek	Pon Graham (	henega 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				



		HARBO	R SEAL HA	RVESTS		
	Port Lions	Karluk	Akhi ok	Larsen Bay	Ouzi nki e	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



	SEA LION HARVESTS							
	Port Lions	Karluk	Akhi ok	Larsen Bay	Ouzi nki e	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		

like Yakutat and Klawock. Community totals are sensitive to the hunting activities of a small number of hunters. In Klawock there have been two highly productive hunters producing the majority of seals for the community in recent years; they both had larger takes in 1995 compared with previous years. The reasons for increases or decreases in seal takes in communities like Yakutat and Klawock are undoubtedly determined in part by the individual circumstances of the community's highly productive hunters. As stated above, the seal takes documented at Yakutat and Klawock in 1995 may fall within the normal range of variation of subsistence harvests for the communities.

For harvests in two regions – the North Pacific Rim and Kodiak Island -- a longer time series is available, shown as Figures **15-18** (struck and lost numbers are not available prior to 1992). In the North Pacific Rim, subsistence harvests of harbor seal increased between 1992 and 1994, reflecting a rebound of subsistence hunting following the depression of subsistence activities triggered by the *Exxon Valdez* oil spill in Prince William Sound in 1989. Families 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 have shown signs of recovery since the spill, although seal harvests have not returned to prespill levels in Chenega Bay and Tatitlek (Fig. 15). Total seal harvests in the North Pacific Rim fell in 1995, due primarily to a decreased harvest at Tatitlek (Fig. 15). Sea lion harvests have been more stable over the last four years for the area, compared with harbor seal (Fig. 16)

In the Kodiak Island area, seal harvests in 1995 (214 seals) were lower than those recorded a decade before -- 478 seals in 1982 and 262 seals in 1986 (Fig. 17). Sea lion harvests in 1995 (126 sea lions) were also lower than recent historic levels --232 sea lions in 1982 and 202 sea lions in 1986 (Fig. 18). In this case, sea lion and harbor seal harvests appear to have been declining during the **1980s**, but have been increasing again during the 1990s at Old Harbor and Ouzinkie. In four other communities, harvests have remained low and somewhat variable during the 1990s. While the harvests in 1995 at Old Harbor and Ouzinkie were the largest documented since 1992, they have not yet matched harvest levels recorded during the early 1980s.

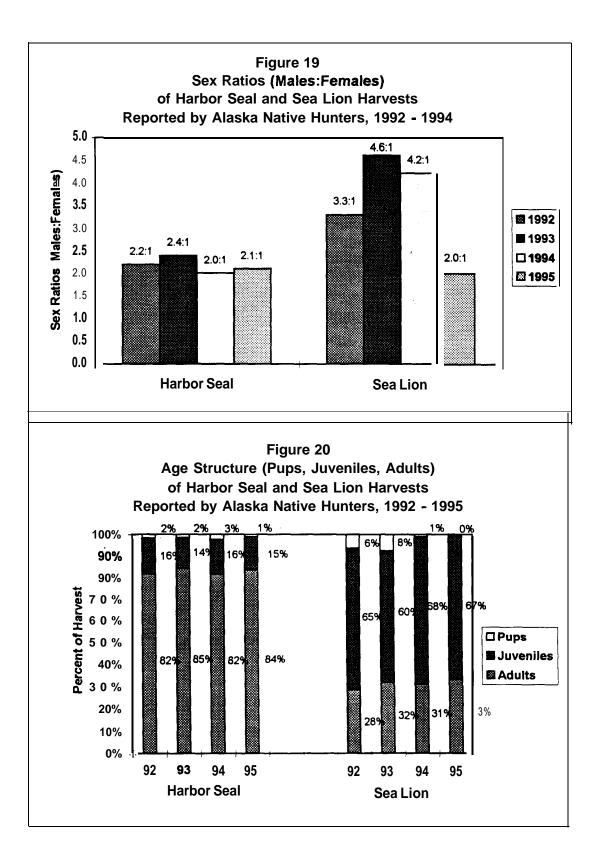
At the regional level, the most notable apparent trends are the declines in sea lion takes on the Pribilof Islands (Fig. 14), where total reported sea lion takes have fallen from 297 to 68 animals between 1992 to 1995 (a 77.1 percent decrease). Reported sea lion harvests on the Pribilof Islands have declined from 177 to 58 animals between 1992 to 1995 (a 67.4 percent decrease) (see Appendix B, Table 7). The largest reduction in harvests occurred in 1995, when harvests fell to 58 animals from 150 in 1994. The percentage of households who reported hunting sea lion during the. survey year also has declined on St. Paul: 57.1 percent of households (1992), 35.3 percent (1994), and 21.7 percent (1995) (there was no survey in 1993).

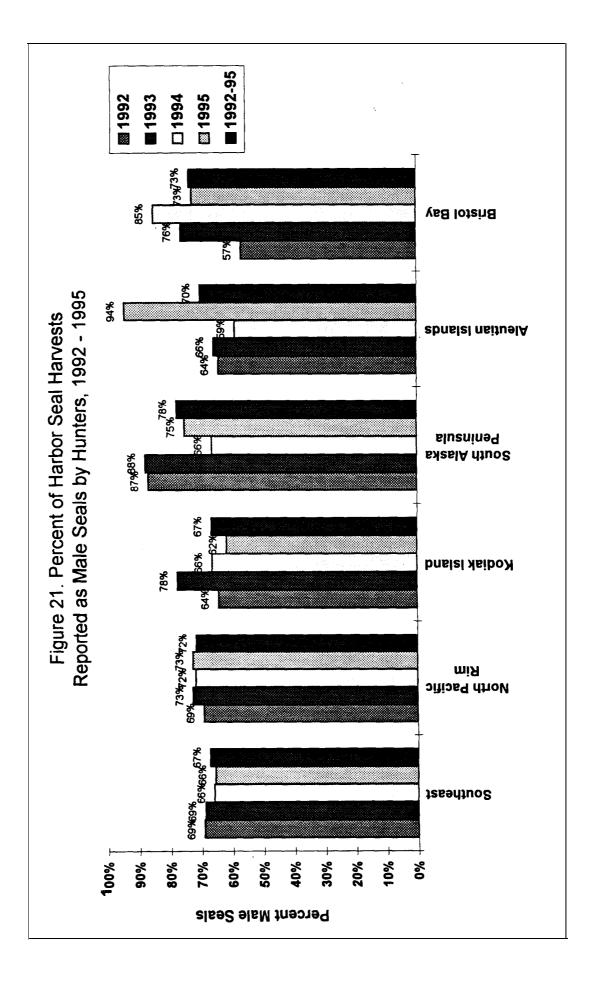
There are probably a number of factors related to the declining subsistence harvests of sea lions on the Pribilof Islands between 1992 and 1995. Hunters attending the Pribilof Islands Joint Management Board in August 1996 stated that ice conditions in the winters of 1994-95 and 1995-96 were responsible in part for the large single-year decline in sea lion harvests during calendar year 1995. In both winters, the Bering Sea ice pack moved more to the south than usual. Pack ice surrounded portions of St. Paul and St. George islands during winter and spring, a relatively atypical event in recent years. Hunters reported that the ice pack pushed sea lion groups away from the islands. There were fewer groups of sea lions passing by the islands because there was less open water. Only a few sea lions were seen among the leads and floes. These ice conditions probably account for the substantial drop in reported harvests during 1995. Increased seasonal employment was a second factor mentioned by the Pribilof Islands Joint Management Board. Some hunters on St. Paul and St. George may have hunted less in 1995 because of relatively more employment on airport construction projects during winter and spring. Some hunters may have

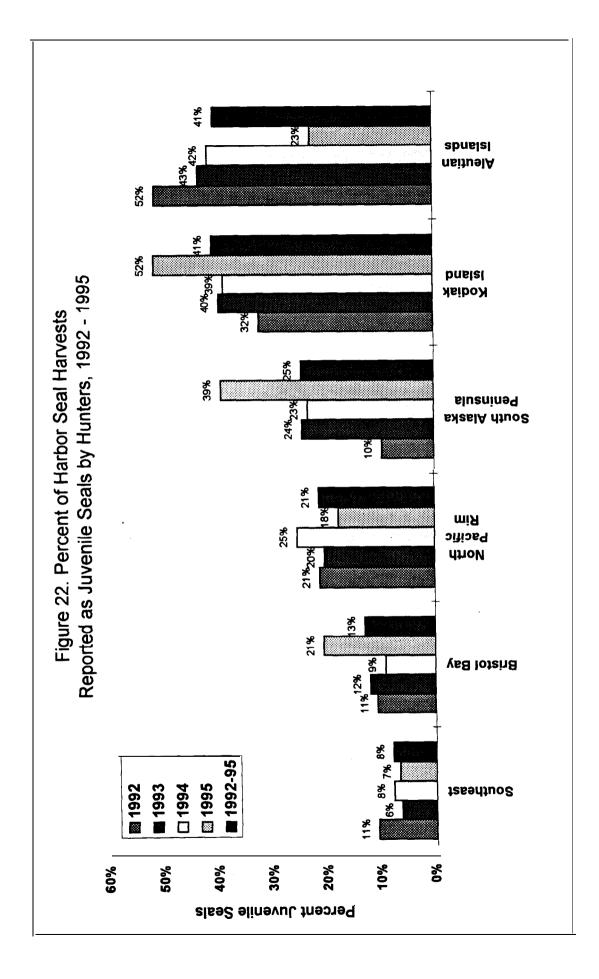
reduced their time hunting sea lions from the bluffs evenings and weekends because of the longer hours of seasonal employment.

Figures 19 and 20 compare statewide patterns in the age and sex composition of the subsistence harvests of harbor seals and sea lions over the four year survey period. At the statewide level, hunters continued to report harvesting more male than female harbor seals in 1995. Considering kills of known sex, male to female sex ratios have been similar between all four survey years for harbor seal (2.2 to 1 in 1992, 2.4 to 1 in 1993, 2.0 to 1 in 1994, and **2.1:1** in 1995) (see Fig. 19). For sea lion, male to female sex ratios in 1995 unaccountably declined from previous years (3.3 to 1 in 1992, 4.6 to 1 in 1993, 4.2 to 1 in 1994, and **2.0:1** in 1995). At the statewide level, age composition is relatively similar between years (Fig. 26): hunters continued to report harvesting primarily adult harbor seals and primarily juvenile sea lions.

Figures 21 and 22 compare composition data for harbor seals at the regional level. There is considerable similarity between regions and years for harbor seal sex composition, shown in Fig. 21. Counting all harvested animals whose sex was reported between 1992-95, the regions all showed more males to females harvested ---Southeast (67 percent males), North Pacific Rim (72 percent males), Kodiak Island (67 percent males), South Alaska Peninsula (78 percent males), Aleutian Islands (70 percent males), and Bristol Bay (73 percent males; this combines north and south Bristol Bay to increase the number of observations). Why substantially more males than females are consistently taken across years and regions is an interesting question, when it is probably the case that slightly more females than males are present in the general harbor seal population (Hoover 1988: 129-130). Some hunters report a selection preference for males over females when hunting during late spring through summer, to avoid taking females carrying large fetuses or nursing pups (Wolfe et al. 1994). The higher number of males harvested also probably reflects the greater proportion of males in the groups of animals available to hunters. In some areas,







hunters report that groups of males segregate from females during the year -- older males are found feeding outside of bays while females and their young are found feeding in shallower inside waters (Wolfe et al. 1994). The greater proportion of harvested males may reflect the sex composition of segregated seal groups which hunters encounter. In addition, in some hunting contexts, hunters select a seal swimming among groups of animals reacting to the presence of the hunter. In these situations, female seals as a whole may be more cautious than male seals when disturbed, presenting comparatively fewer or more difficult targets. More information from expert hunters about local hunting patterns and seal ecology may untangle the relative importance of these factors. Whatever the particular mix of variables influencing sex composition, the predominance of males over females in the subsistence harvest of harbor seals is fairly consistent across regions and years.

By contrast, the age composition of the subsistence harvest of harbor seals varies substantially between regions and present a more complex puzzle (Fig. 22). 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 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 percent of adults and juveniles differed markedly between regions (Fig. 22). Of all the seals harvested between 1992-95 in the Southeast Region, only 8 percent were juvenile seals. This differs substantially from harvests in the Kodiak Islands and the Aleutian Islands -- in each region, 41 percent of harvested seals were reported to be juvenile seals during

**1992-95**. The age composition of harvests for the North Pacific Rim (21 percent juveniles) and the South Alaska Peninsula (25 percent juveniles) fall between the Southeast and Kodiak-Aleutian regions. The age composition from Bristol Bay (13 percent juveniles) is most similar to that from the Southeast Region.

Factors that may affect regional age compositions include preferences by hunters for juveniles or adults, the age composition of seal groups which are hunted, and the age composition of the regional seal population. There is little to suggest that hunter preferences could account for such large differences between regions. Some hunters report preferences for small or medium-sized seals because the meat is more tender, the skins are in better condition, and they are easier to handle in a skiff. Other hunters declare a preference for larger seals for greater yields of oil and meat or larger skins. However, these types of preferences have been mentioned by some hunters in all regions and are not thought to vary substantially between regions. It is possible that there are regional differences in the behavior of juvenile seals that make them more susceptible to being taken by hunters of some regions; however, we do not know what those **behavioral** features might be. While age segregation occurs within seal groups according to hunters, we have no information to suggest that patterns of age segregation differs substantially between regions to account for the regional differences in age composition of the harvest.

The regional differences in age composition of harvested seals most likely reflect differences in the age composition of regional seal populations in Alaska. That is, hunters in the Kodiak Islands and Aleutian Islands are encountering seal groups with a greater proportion of small, young seals than are hunters in Southeast Alaska. Under these circumstances, more small, young seals are being harvested.

Little published information exists on the age composition of North Pacific harbor seal populations, and the few scientific collections are relatively old and were subject to sampling biases at the time they were collected (Hoover **1988**:**130**). Based

on a sample of seals taken in British Columbia in 1964-68 (245 seals), the population was estimated to contain 20.7 percent pups (less than 6 months of age), 18.8 percent yearlings, 10.4 percent 2-year-olds, 8.7 percent 3-year-olds, 8.7 percent **4-year-olds**, and 32.7 percent **5** years or more (Biggs **1969**:**4**, 25-26; the specimens were collected as dispersed and swimming individuals along coastal reefs, small islands, and inlets, and not from **haulout** concentrations at large river mouths and mud flats). In a sample of seals taken in the Gulf of Alaska in 1978 (574 seals), 9.2 percent were pups, 6.8 percent were yearlings, 7.8 percent were 2-year-olds, 6.4 percent were 3-year-olds, 9.2 percent were **4-year-olds**, and 60.5 percent were 5 or more years; however, the authors state that the collection did not accurately represent age structures of the population below about 4 years of age, because young seals were deliberately **under**-sampled in order to obtain specimens of breeding seals (Pitcher and **Caulkins** 1979:38-39; the areas sampled stretched from Yakutat to the Alaska Peninsula). There have not been any more recent large collections in Alaska seal populations with which to compare the age compositions reported by subsistence hunters.

If the age differences in regional subsistence harvests reported by hunters do reflect differences in population structures, and if these differences can be linked to seal population dynamics, then the age composition data from subsistence harvests might be a source of information for developing useful indices of the relative condition of regional seal populations. For instance, recent trend counts suggest that Southeast seal populations are relatively abundant and stable or increasing, while Gulf of Alaska populations are depressed, with declines slowing and possibly stopped or reversed in some areas (Lewis, Pendleton, Pitcher, and Wynne **1996**:**21**). Are the older ages of harvested seals in the Southeast and Bristol Bay regions, as reported by subsistence hunters, characteristic of relatively large and stable seal populations, because of proportionately larger older age classes in the population? Similarly, are the younger ages of seals harvested in the Kodiak and Aleutian regions characteristic of relatively

66

depressed populations responding to changing environmental conditions, because the populations contain proportionately larger young age classes? Do the ages of harvested seals in the North Pacific Rim and South Alaska Peninsula region suggest population compositions intermediate between the Southeast-Bristol Bay and Kodiak-Aleutian seal populations? These relationships are speculative at this point without additional information; however, they appear to be fruitful areas for future inquiry. While short-term changes in the overall size of the subsistence harvest may not be direct indicators of seal population status, the age composition information reported by hunters may provide some useful markers for assessing the health of regional seal populations, if these can be linked with population dynamics of marine mammals.

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## **APPENDIX A**

## SURVEY INSTRUMENT USED IN HOUSEHOLD INTERVIEWS, 1995

The Subsistence Harvest of Harbor Seal and Sea Lion by Alaska Natives in 1995, by Robert J. Wolfe and Craig Mishler, Technical Paper No. 238, Division of Subsistence, Alaska Department of Fish and Game, Juneau, September 1996. Final Report For Year Four, Subsistence Study and Monitor System (No. 50ABNF200055), National Marine Fisheries Service.

oN. Js.	IIATE	·							[		TOTAL		5	TOTAL			T	T							đ		IOIAL		
This survey is only relevant to Native households.	CHECK IF APPROPRIATE Contact Round 1	Round 2				¢					UNKNOWN	iles or adult	January, etc.), how many were male, female, and now many were pups, juvermos, or userio	UNKNOWN													DECEMBER UNKNOWN		Date:
OR YOUR	CHECK IF APPR	No Contact Round 2									DECEMBER		in and 'educ	DECEMBER													DECEMBE		
NK YOU F		<u> </u>	_	÷		· · · · ·				by month.]	NOVEMBER DECEMBER UNKNOWN		lany were l	NOVEMBER DECEMBER UNKNOWN													NOVEMBER		
THA	<u> </u>					••			Υ.	e numbers	OCTOBER		and now n	OCTOBER													OCTOBER		Interviewer:
NO: This									N SURVE	ox.]? [Enter th	SEPTEMBER		<u>le</u> , female,	SEPTEMBER											total		SEPTEMBER		Random Ir
		N 1995?		(IF YES, PLEASE COMPLETE THE FOLLOWING QUESTIONS:) (IF NO, GO TO SEA CION FOCK)	ß				IF NO, COMPLETE SEA LION SURVEY.	How many harbor seals did your household kill and retrieve? [Enter in total box.]	AUGUST S		<del>ly were ma</del>	ALIGUET											Enter num	<ol> <li>How many harbor seal were struck and lost by your illouserious: [Linci number in your compared on the struck and lost? [Enter numbers by month.]</li> </ol>	IST		
		USE HARBOR SEALS IN 1995?		) (:SNOIT	<b>لا</b>		ities?	ities?	COMPLET	eve? [Ente anv in (Jar	JULY		) <del>, how ma</del> r	>==											1	9. How many harbor seal were struck and lost by your househous terrice	E JULY		LIST: Hunter
S?		E HARBO		NG QUES		• • • • • • • • • • • • • • • • • • • •	s or communities?	s or communities?	IF NO,	l and retrie	MAY JUNE		nany, etc.		MAT JUNE	+-					_	-				IEnter nu	JUNE		
A NATIVE	ld in 1995? id you hunt?	_			)?	•	useholds o	iseholds o		usehold kil	APRIL M				APRIL											k and lost and lost?	APRIL		-) HHID: -
LD ALASK	rr household in 19 Where did you	OLD HUN		TE THE F	ides, or oil		earsr	other hou	ro ques-	d your hou	FEBRUARY MARCH		and retries	s by month	FEBRUARY MARCH									_		were struc hev struck	FEBRUARY MARCH		
IOUSEHO	ved in you ONLY:	HOUSEH	on on	COMPLE	ehold: s (meat, hi	lis?	e naroor s seals from	or seals to	VE. GO 1	or seals di	FEBRUAR		eals killed	[Enter the numbers by month.]												irbor seal v	the FEBRUA		
F YOUR H	YES: How many people lived in your household in 1995? FOR ANCHORAGE ONLY: Where did you hunt	JF YOUR		PLEASE	ou or your household: Use harbor seals (meat, hides, or oil)?.	Hunt harbor seals?	Kill and retrieve narbol seals Deceive harbor seals from other household	Give away harbor seals to other household	OR 3 ABC	6. How many harbor seals did your household	ICN MONUNS		Of the harbor seals killed and retrieved in	[Enter th	JANUARY							Z	ш	ш	Z	w many ha	JANUARY	Ļ	
EMBERS O	YES: How man FOR ANC	EMBERS (	YES	. (IF YES,	d you or ) 1 llse h		3. Kill al A Decei		STION 2	6. How r	~			5	L (Detail)	MALE		MALE	FEMALE INKNOWN	MALE	FEMALE	UNKNOWN	MALE	FEMALE	UNKNOWN	9. Ho		ND LOST	it.
ARE ANY MEMBERS OF YOUR HOUSEHOLD ALASKA NATIVES?		HARBOR SEAL DID YOU OR MEMBERS OF YOUR HOUSEHOLD HUNT OR			During 1995, did you or your household: 1 11se harbor seals (meat				IE VES TO DIFSTION 2 OR 3 ABOVE. GO TO QUESTION 6.		HARROR SEAL	TOTAL			HARBOR SEAL (Detail)		_		JUVENILE				UNKNOWN	•		During 1995,		STRIICK AND LOST	Community
AR		HARB DID YC			Durinț						НАРВ				HARE		ADULT		JUVE			5	UNK	AGE		Duri			<b>' </b>   <sup>-</sup>

								ı					T								
			NOL	P			TOTAL										•			RATION.	
(907) 267-2353	ANK YOU.)				DECEMBER UNKNOWN	iles, or adults?	Of the sea lions killed and retrieved in (January, etc.), how many were mare, remarc, and now many more retrieved in (January, etc.), how many were mare, remarc, and now many more retrieved in (January, etc.).											OCTOBER NOVEMBER DECEMBER UNKNOWN		THANK YOU FOR YOUR COOPERATION.	Date:
99518-1599 (9	RVEY. TH			th.]	<u>۳</u>	ups. juveni	MAREN DECE					-			+-			EMBER DECI		JK YOUFC	
a 9951	INS SIH			by mont	2 NOVEN	were D					╞┤	+	-	╞┼				ER NOVE		THAN	Ner:
e, Alask	etes ti		Ŧ	EY. 17 umbers	OCTOBER NOVEMBER	Nam W												OCTOBI			Interviewer:
333 Raspberry Rd., Anchorage, Alaska	995? (IF NO, THAT COMPLETES THIS SURVEY. THANK YOU.)	,		IF NO, THIS COMPLETES THE SUKVEY. THANN TOC retrieve? [Enter total number in box.] How many in (January, etc.)? [Enter the numbers by month.	SEPTEMBER	hore element		SEPTEMBER										ir in total · september ·	H		Random
berry Rd	95? F NO, TI	۶		UESTION 2 OR 3 ABOVE, GO TO QUESTION 6. IF NO, THIS COMPLETES THE UESTION 2 OR 3 ABOVE, GO TO QUESTION 6. If and retrieve? [Enter total number in box.] 6. How many sea lions did your household kill and retrieve? How many in (January, etc.)? [Enter	AUGUST			AUGUST										[Enter number y month.]	н		
33 Rasp	Z	Yes		HIS COI Iter total n (Janua	JULY		any wer	- nur										d? [Ente s by mo	н		LIST: Hunter
	USE SEA LIONS IN 1995? NG QUESTIONS:) (IF N	: : : :	ities? .	IF NO, T eve? [Er v many ii	JUNE		ш мон ,(	JUNE										your household? [Enter nu [Enter numbers by month.]			
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sion of			seholds or c	ESTION oold kill	H APRIL		in (Janı ı.]	H APRIL						+				and lost and los	ICH APR		HH (
le - Divi	ногр н	or oil)?.	r houset	r houset	MARC		etrieved by month	MARCH			_	_		_	$\left  \right $			e struck e	RY MARCH		
Alaska Department of Fish Game - Division of S	SEA LIONS DID YOU OR MEMBERS OF YOUR HOUSEHOLD HUNT OR YES NO ALE THE FOLLOWI	d you or your household: Use sea lions (meat, hides, or oil)?	Hunt sea lions?	IF YES TO QUESTION 2 OR 3 ABOVE, GO TO QUESTION 6. How many sea lions did your household kill a	7. In which months were they wind and the application January FEBRUARY MARCH APRIL		sea lions killed and retrieved in renter the numbers by month.]	FEBRUARY										<ol> <li>How many sea lions were struck and lost by your household?</li> <li>In which months were they struck and lost? [Enter numbers by months were they struck and lost?]</li> </ol>	FEBRUARY		
ient of F	F YOUR H NO ASE COW	During 1995, did you or your household: 1. Use sea lions (meat, hides,	Hunt sea lions? Kill and retrieve sea lions? Receive sea lions from othe Give away sea lions to othe	R 3 ABC sea lion			lions kill ter the n	JANUARY I	-+-			╋			T			iny sea l months	JANUARY		
)epartm	ERS OI	ou or yo sea lio	nt sea li l and rei ceive se re away	ION 2 C w many	which m JAN	H	the sea		MALE	NN NN	MALE	ALE	MALE	ALE	MALE	ALE	NN	How ma In which	'n	120	
laska D	MEMB Yes Aif Yf	, did yo 1. Use	2. Hur 3. Kill 4. Rec 5. Giv	auesti 6. Ho		F	8. Q	(Detail)		UNKNOWN	Ž	E FEMALE	N	PUP FEMALE	ξİ		⇒			AND L	Community:
٩	SEA LIONS DID YOU OR	ıg 1995		ES TO	SEA LIONS	TOTAL		SEA LIONS				JUVENILE FEMALE		PU		<b>A</b> G		During 1995	SEA LIONS	STRUCK AND LOSI	
	SEA DID 1	Durit		Γ	SEA			SE/		AD		5				5		Ő	S	N	-

## **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

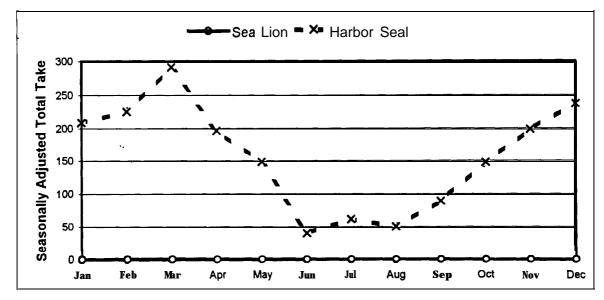
Table 1. Sl	ea lioi	N AN	D HARI	BOR S	SEAL H	IARVE	STS:	SOUT	HEAS	T ALA	<b>SKA</b> , 1	995		
SAMPLING	DESIG	GN:						<u>Active</u>	9	<u> Other</u>		<u>Total</u>		
MIXED			Total N					600		525		1125		
				-	House			496		36		532		
				-	ng Fra			82.7%		<b>6.9</b> %		47.3%		
			ple Ho					1756		108		1864		
	E	Estima	ited Ho	useho	ld Merr	nbers		2121.1		1575.0		3702.1		
HARVESTA	AND US	SE IN	IFORM,	ATION	I									
Percentage	of Nat	tive H	lousehol	ds:		I	Estima	ted Co	mmuni	ty Har	vest			
			See H	arbor		2	and Ta	ke (Ex	bandec	1):		Sea	Harbor	
			Lion	Seal								<u>Lion</u>	<u>Seal</u>	
		Used	N/A	N/A				То	tal Num	ber Har	vested	0.0	1719.1	
	H	unted	N/A	N/A				Total Nu	umber St	ruck an	d Lost	0.0	170.9	
		ested	N/A	N/A					Total I	lumber	Taken	0.0	1090.0	
		eived	N/A	N/A										
	Gave	Awa	y N/A	N/A				Number	r Harves	sted Pe	r Capita	a N/A	N/A	
SEA LION													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAR									0	•				
Harvest	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
Total Take ESTIMATED H		-	0 TAVE DV	-	-	-	-	U	0	U	U	0	0	0
Harvest	0.0	0.0	0.0	0.0	0.0	EXPANL 00	00	0.0	0.0	00	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	00	00	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 S											00	0.0	0.0	0.0
Harvest	0.0	0.0	0.0	00	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	00	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 (%)		_												0.0
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 S	SEAL H	ARVE	ST BY	MON	ТН								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED H	ARVEST	AND .	ΤΑΚΕ ΒΥ	SAMP	LED HO	USEHOL	.DS (UI	NEXPAND	DED)					
Harvest	144	154	154	121	93	29	39	20	63	103	133	162	105	1408
Struck & Lost	7	16	44	20	2	2	3	4	0	5	0	5	23	139
Total Take	151	170	190	141	95	31	42	32	63	108	141	167	200	1547
ESTIMATED H						•	DED)							
Harvest	192.0	196.9	103.1	147.3	110.0	32.7	46.6	34.0	74.6	122.9		4 202.3		1719 1
Struck & Lost	12.2	21.4	52.0	21.9	2.4	2.2	3.5	45	0.0	6.4	9.9	7.5		170.9
Total Take	204.2	217.3	235.1	169.2	112 4	34.9	50.1	38.6	74.6	129.3	170.3	209.9	244	3 1890.0
ESTIMATED S									•	,	107 4	000 -		
Harvest	196.3	203.5	210.3	171.9	145 4	37.5	56.9	44.5	88.8	140.1	107.4	220.5		1719.1
Struck & Lost Total Take	12.2 200.5	21.4 224.9	72.4 <b>290.6</b>	24.3	3.0	2.2	41	5.7 <b>50.2</b>	0.0	7.0 147.1	10.5	0.1		170.9
	200.5 11.0%			196.2 10.4%	140 4 7.9%	39.7 2 1%	61.0 3.2%	2.7%	00.0 4.7%	147.1 7.0%	197.9 10 5%	236.6 12.5%		1090.0
Total Take (%) Cum. Take	200.5	11.9% 433.4	15.4% 724.0	10.4% 920.2	7.9% 1068.6	2.1% 1108.4	3.2% 1169.4	2.7% 1219.6	4.7% 1308.4	7.0% 1455.5	1653.4	12.5%		100.0%
Cum Take (%)	200.5 11.0%	433.4 22.9%	38.3%	920.2 40.7%	56.5%	50.6%	61.9%	64.5%	69.2%	77.0%		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 1. (cont.) SEA LION AND HARBOR SEAL HARVESTS: SOUTHEAST ALASKA, 1995

		Sea	Lion			Ha	rbor Seal	
	Reported	d by	Community	/ Est.	Reporte	d by	Commun	ity Est.
	Samp	ble	(Expand	ied)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0. 0		657	46.7%	793.6	46.2%
Adult Female	0		0. 0		346	24.7%	426.0	24.0%
Adult Unknown Sex	0		0. 0		230	16.9%	279.9	16.3%
Juvenile Male	0		0. 0		63	4.5%	77.7	4.5%
Juvenile Female	0		0. 0		10	1.3%	20.5	1.2%
Juvenile Unknown Sex	0		0. 0	-	8	0.6%	11.3	0.7%
Pup Male	0		0. 0	مين .	0	0.0%	0.0	0.0%
Pup Female	0		0. 0		1	0.1%	1.1	0.1%
Pup Unknown Sex	0		0. 0		5	0.4%	0.0	0.5%
Male Unknown Age	0		0. 0		21	1.5%	25.0	1.5%
Female Unknown Age	0		0. 0		18	1.3%	22.5	1.3%
Unknown Sex and Age	0		0.0		31	2.2%	51. <b>9</b>	3.0%
Total	0		0.0	-	1406	100.0%	1719.1	100.6%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

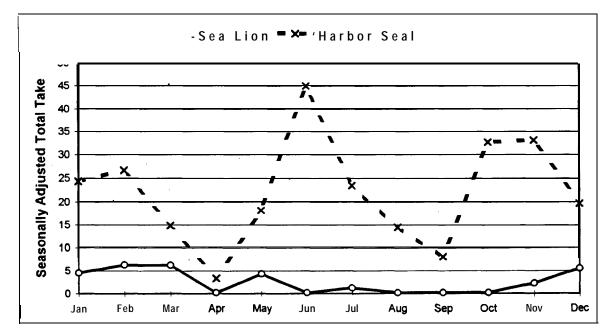
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

SAMPLING	DESI	GN:					A	Active	<u>(</u>	<u>Other</u>		<u>Total</u>		
MIXED			Total N	lative H	louse	holds	_	44		540		584		
			Surv	eyed H	louse	holds		42		212		254		
				Sampliı			••9	5.5%	3	9.3%		43.5%		
				useholo				135		637		772		
		Estimat	ted Ho	usehol	d Mer	nbers		143.2		1522.3		1665.6		
HARVEST	AND L	ISE IN	IFORM.	ATION										
Percentage	of Nat	ive Ha	ousehol	ds:		Ε	Estimate	ed Con	nmunity	<sup>,</sup> Harv	est			
			Sea	Harbor		а	nd Ta	ke (Ex	panded	I):		S e a	Harbor	
			<u>Lion</u>	<u>Seal</u>								Lion	Seal	
		Used 1	4.6% 3	97%					tal Nun			28.4	252.1	
	Н	lunted	4.4% 1	2.6%			•	Total Nu	mber St	ruck an	d Lost	3.0	11.7	
	Har	/ested	2.7%	9.9%					Total I	Vumber	Taken	31.4	263.9	
			13.5%											
	Gave	Away	4 1%	11.2%				Number	Harvest	ed Per	Capita	0 02	0.15	
SEA LION I	HARVE	EST B	Υ ΜΟΝ	TH									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Tota
REPORTED HARV						•	NDED)							
Harvest	3	6	4	0	3	0	1	0	0	0	2	4	2	n
Struck & Lost	0	0	2	0	1	0	0	0	0	0	0	0	<b>. 0</b>	
Total Take	3	6	6	0	4	0	1	0	0	0	2	4	2	2
ESTIMATED H						•								
Harvest Struck & Loot	4.3	6.1	4.0	00	31	00	10	0.0	0.0	0.0	2.0	53	2.6	28
Struck & Lost Total Take	0.0 4.3	0.0 6 1	2.0 6.0	0 0 0 0	10 41	0 0 0 0	00 10	0.0 0.0	0.0 00	0.0 0.0	0 0 2.0	0.0 5.3	0.0 2 6	3. 31
ESTIMATED SI											2.0	5.5	20	31
Harvest	4.5	63	4.2	02	33 33	02	1.2	0.2	0.2	02	2.2	5.5		20
Struck & Lost	0.0	0.0	2.0	00	10	00	0.0	0.0	0.0	0.0	0.0	0.0		3.
Total Take	4.5	6.3	6.2	02	43	02	12	0.2	0.2	0.2	2.2	5.5		31.
Total Take (%)		19.9%		07%	137%	07%	40%	0.7%	07%	0.7%		17.6%		100.09
Cum Take	45	10.8	17.0	17.2	21 5	218	230	23.2	234	237	25 9	31 4		
Cum Take (%)	14.4%	34 4%	54.1%	540% 6			73 2%	73.9%			02 4%	100.0%		
HARBOR S	EAL F	IARVE	ST BY	MON	TH								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckt	Nov	Dec	Month	Tota
REPORTED H	ARVEST	AND T	TAKE BY	SAMPL	ED HO	DUSEHOL	.DS (UN	EXPAND	DED)					
Harvest	22	14	10	2	2	10	11	12	4	18	26	16	32	17
Struck & Lost	1	2	1	0	0	2	0	0	0	4	0	0	0	1
Total Take	23	16	11	2	2	12	11	12	4	22	26	16	32	18
ESTIMATED H				Y COMM			DED)							
Harvest	23.1	24.2	12.7	24	182	30.3	121	14.1	4.3	22.1	28.0	18.4		252
Struck & Lost	11	2.0	16	00	00	26	00	0.0	0.0	44	00	00		11
Total Take	24.1	26.2	14.3	24	182	330	12 1	141	4.3	264	28.0	18.4	42.3	263
ESTIMATED S										-		10 7		250
Harvest	23.2	246	13.2	34	18 2	424	235	14.5	8.1	28 3	33.1	19.7		252
Struck & Lost	1.1 24 2	20	1.6	00	00	2.6	00	0.0	0.0 9 1	4.4	0.0	00		11 242
Total Take	24.3	26.6	14.9	34	182	45.0 v 17.1%	235	14.5 5 5 %		32 7	33.1	19.7 7 FW		263
Total Take (%)	9.2%	10.1%	5.6%	13%	69	% <b>17.1%</b>	8.9%	5.5%	3.1%	12.4%	12.5%	7.5%		100.0
Cum. Take	24.3	50.9	65.8	691	07.3	132.3	155.8	170.3	170 4	211.1	244.1	263.9		

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

		S	ea Lion			На	rbor Seal	
	Reporte	-	Commu		,	rted by		unity Est.
	Samp	le	(Expa	nded)	Sa	mple	(Ex	panded)
	Number	%	Number	%	Number	· %	Numb	er %
Adult Male	83	2.6%	9.4	<b>33</b> 1%	57	31.6%	01	.7 32.4%
Adult Female	2	8.0%	2.7	9.4%	26	14.5%	44	6 17.7%
Adult Unknown Sex	3	12.0%	30	106%	15	84%	24	0 9.8%
Juvenile Male	2	8.0%	20	7.1%	19	10.6%	23	8 94%
Juvenile Female	1	4.0%	16	58%	C	0.0%	0	0 0.0%
Juvenile Unknown Sex	7	28.0%	70	247%	12	2 6.7%	12	2 4.0%
Pup Male	0	0.0%	0 0	00%	ç	5.0%	13	.2 5.2%
Pup Female	0	0.0%	0 0	00%	(	0.0%	0	.0 0.0%
Pup Unknown Sex	0	0.0%	0 0	0.0%	1	0.6%	1	.3 0.5%
Male Unknown Age	0	0.0%	0 0	00%	(	0.0%	0	.0 0.0%
Female Unknown Age	0	0.0%	0.0	00%	(	0.0%	0	.0 00%
Unknown Sex and Age	2	8.0%	26	93%	40	) 22.3%	50	.6 <b>20.1%</b>
Total	25	100.0%	2 6	4 100.0%	179	) 100.0%	. 252	1 1060%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA I	LION		H	IARBO	R SEA	L
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	Take	Year	Harvest	Lost	<u>Take</u>
1992	25.1	6.5	31.5	1992	3776	33.4	411.0
1993	25.2	8.7	34.9	1993	412.3	38.5	450.8
1994	16.6	9.7	26.3	1994	411.2	56.6	468.0
1995	20.4	3.0	31.4	1995	252.1	11.7	263.9

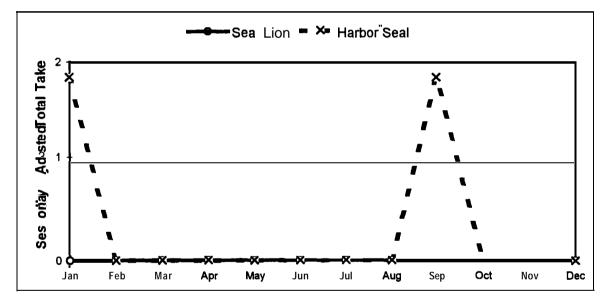
SOURCE. Alaska Department of Fish and Game, Division of Subsistence Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska

Table 3. S	EA LIO	n and	HAR	BOR S	EAL H	IARV	ESTS:	UPPE	R KEN	AI-CC	OK IN	ILET,	1995	
SAMPLING	G DESIC	GN:						<u>Active</u>		Other		<u>Total</u>		
MIXED		-	Fotal N	lative	Housel	nolds		28				28		
			Surv	veyed I	louse	nolds		16				16		
				Samplir	ng Fra	ction		57.1%				57.1%		
		Samp	ole Ho	usehol	d Men	nbers		63′				63		
	E	Estimat	ed Ho	usehol	d Merr	nbers		110.7				110.7		
HARVEST	AND U	SE IN	FORM	ATION										
Percentage	e of Nati	ive Hol	usehol	ds:			Estima	ted Co	ommuni	ity Har	vest			
Ū			Sea Ha	arbor			and Ta	ike (Ex	pandeo	d):		Sea	Ha∨	
		1	Lion	<u>Seal</u>						,		Lion	Seal	
		Used	N/A	N/A				Тс	otal Num	ber Har	vested	0.0	3.7	
	H	unted	N/A	N/A				Total N	umber St	truck ar	nd Lost	0.0	0.0	
	Harv	rested	N/A	N/A					Total I	Number	Taken	0.0	3.7	
	Rec	eived	N/A	N/A										
	Gave	Away	N/A	WA				Numbe	r Harves	sted Pe	er Capit	a N/A	N/A	
SEA LION													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Tota
REPORTED HAI						•	,			•				
Harvest	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	
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	(
ESTIMATED						EXPAN	,							
Harvest	0.0	0.0	0.0	00	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	00	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	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 (
ESTIMATED									-	ANDED)				
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.
Struck & Lost	0.0	0.0	0.0	00	00	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 (%)					-	***		-+-	<b>F</b> aa					
HARBOR	SEAL H	ARVE	ST BY	MONT	ГН								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw	Dec	Month	Tota
REPORTED I	HARVEST	AND T	AKE BY	SAMPL	ED HO	USEHO	LDS (UI	NEXPAN	DED)					
Harvest	1	0	0	0	0	0	0	0	1	0	0	0	0	:
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0		(
Total Take	1	0	0	0	0	0	0	0	1	0	0	0	0	:
ESTIMATED						•								
Harvest	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0		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.
Total Take	1.8	0.0	0.0	0.0	0.0	0 0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	3.
ESTIMATED										-				
Harvest	1.8	0.0	0.0	0.0	0.0	0.0	0 0	0.0	1.8	0.0	0.0			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.
Total Take	1.8	0.0	0.0	0.0	0.0	0.0	00	0.0	1.8	0.0	0.0			3.
Total Take (%)	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	00%		50.0%	0.0%	0.0%			100.0%
Cum Take	1.8	1.8	1.8	1.8	1.0	1.0	1.8	1.8	3.7	3.7	3.7		1	
Cum. Take	(%) 50.0%	50.0% 5	50.0%	50.0%	<b>50.0%</b> 5	0.0%	50.0% 5	0.0% 10	00.0% 1	00.0%	100.0%	100. 0%	b	

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

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		Sea	Lion			Harbo	or Seal	
	Reported	d by	Communit	y Est.	Reporte	ed by	Commur	nity Es!.
	Samp	ole	(Expand	ded)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	-	0.0		1	50.0%	1.8	50.0%
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	***	1	50.0%	1.8	50.0%
Total	0		0.0		2	100.0%	3.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		_	ŀ	IARBO	R SEA	L
		Struck/	Total	-			Struck/	Total
Year	Harvest	Lost	<u>Take</u>		<u>Year</u>	Harvest	Lost	Take
1992	5.7	3.0	9.5		1992	51.6	0.0	51.6
1993	7.6	3.3	11.1		1993	49.2	5.6	54.6
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

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

SAMPLING	DESIG	N:					А	ctive	0	ther		Total		
MIXED	220/0		Total I	Vative I	House	holds		47	<u> </u>	227		274		
				veyed				41		184		225		
				Sampliı			07	7.2%	8	1.1%		82.1%		
		Sami		usehol	•		•	161	•	545		706		
	E	-		ousehol				184.0		677.1		a61 .o		
HARVEST A	AND U	SE IN	FORM	ATION										
Percentage	-	-	-	-		F	stimate	d Cor	nmunitv	Har	vest			
, ereenage			Sea H				nd Tak		-			Sea F	larbor	
			Lion	Seal		-		- (=/P		-		Lion	Seal	
	l		87.7% 5					Tot	al Numl	oer Ha	rvested		223.0	
			20.5% 2				т		nber Str			7.7	9.2	
			19.3%				-		Total N				232.2	
			32 1%											
			<b>y</b> 18.5%				Ν	umber	Harveste	d Per	Capita	0.15	0.26	
SEA LION F	IARVE	ST BY	Y 'MOI	ITH									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HARV	est and	TAKE E	BY SAMP	LED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	1	5	15	11	1	0	2	4	12	23	13	12	0	, 99
Struck & Lost	0	1	0	2	0	0	0	0	1	Ι	0	1	- 0	6
Total Take	1	6	15	13	1	0	2	4	13	24	13	13	0	105
ESTIMATED H	ARVEST		TAKE E	ву сомі	NUNITY	(EXPAN	IDED)							
Harvest	1.0	6.8	18.9	151	10	0 0	22	54	156	30.0	179	141	0.0	127.9
Struck & Lost	0.0	1.2	0 0	33	0 0	0 0	0 0	0 0	12	10	00′	1.0	00	77
Total Take	10	8.0	18.9	184	10	00	22	54	168	310	179	151	00	1357
ESTIMATED SE										-				
Harvest	1.0	68	18.9	151	10	00	22	54	156	300	179	14 1		127.9
Struck & Lost	0.0	12	00	33	00	00	00	00	12	1.0	0.0	10		77
Total Take	1.0	8.0	189	184	10	00	22	54	168	31.0	17.9	15.1		1357
Total Take (%)	07%		139%		08%	00%	16%			22.8%		11 1%		100.0%
Cum Take Cum Take (%)	1.0 0 . 7 %	9.0 6.6%	27.8 20.5%	46.2 34 1%	473 348%	473 348%	495 365%	549 40 49	717 6529%	1027 757%	1206 <i>089%</i>	1357 <i>1000%</i>		
Culli Take (%)	0.17	0.0%	20.3%	34 170	340%	34 070	30 3%	40 49	6 <i>329%</i>	131%	009%	1000%		
HARBOR S	EAL H	ARVE	ST BY	MON	TH								Unknown	
	Jan	Feb	Mat	Apt	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Tota
REPORTED HA							•							
Harvest	7	11	23	14	3	4	5	16	24	36	33	11		188
Struck & Lost	3	2	2	0	0	0	0	0	0	1	0	0		8
Total Take	10	13	25 TAKE D	14 X COMM	3	4 (EVDANE	5	16	24	37	33	11	1	196
ESTIMATED H								01.0	20 F	400		40 -		000
Harvest Struck & Loct	7.6	13.4	27.3	191	42	43	59	21 2	28 5	420	360	12.5		2230
Struck & Lost Total Take	34 110	2.3	2.4 207	0.0 101	00	00	00	00	00 29 E	11 42.2	0.0	0.0		9.2
ESTIMATED S	110 EASONA	157	297 D 1115TE	191 ה האסעו	42 EST AN	43	59 BV CON	21 2	285 V (EVDA	43.2	360	125	10	232.2
Harvest						ID TAKE						10 F		222
Harvest Struck & Lost	7.6 3.4	13.4 2.3	27.3 2 4	191	42	43	59	21 2	28 7	42.3	365	12.5		223.
				00	00	00	00	00	00	11	0.0 24 F	00		9. 222
Total Take	11.0 47%	15.7	29.7	19.1 0.2%	42	43	59 249/	21 2	207	434	36.5 15.7%	12.5		232.
	47%	6.8%	128%	82%	18%	18%	26%	9 1%	12 4%	187%	15.7%	5.4%		100.0%
T <b>ota</b> l Take (%) Cum. Take	11.0	26.7	56.4	75.5	797	039	899	111 1	139.8	183.2	219.7	232.2		

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

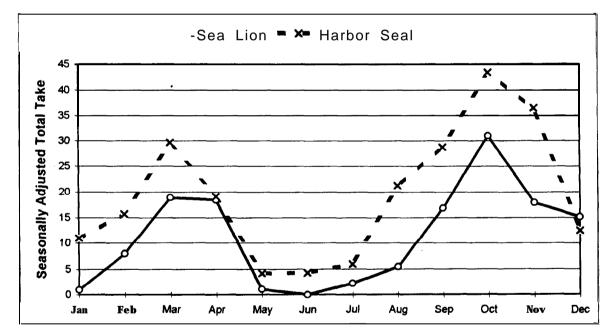
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## Table 4. (cont.) SEA LION AND HARBOR SEAL HARVESTS: KODIAK ISLAND, 1995

HARVEST BY AGE AND SEX

		S	ea Lion			Harbor S	Seal	
	Reporte	ed by	Commun	ity Est.	Reporte	d by	Communi	ity Est
	Sam	ple	(Expar	ded)	Samp	le	(Expan	ded)
	Number	%	Number	%	Number	*	Number	%
Adult Male	7	7.1%	8.0	6.3%	53	28.2%	59.8	26.8%
Adult Female	14	14.1%	18.5	14.5%	31	16.5%	40.3	18.1%
Adult Unknown Sex	4	4.0%	5.7	4.5%	4	2.1%	6.6	3.0%
Juvenile Male	48	48.5%	62.1	48.5%	59	31.4%	67.4	30.2%
Juvenile Female	23	23.2%	301	23.6%	32	17.0%	39.2	17.6%
Juvenile Unknown Sex	3	3.0%	3 4	27%	7	3.7%	7.6	34%
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%	1	0.5%	1.0	04%
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%	1	0.5%	1.0	0.4%
Total	99	100.0%	127.9	100.0%	188	100.0%	223.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

S	ea lion		F	IARBO	R SEA	L
	Struck/	Total			Struck/	Total
<u>Year Har</u>	vest Lost	<u>Take</u>	Year	Harvest	Lost	Take
1992 41	1.5 16.3	57.8	1992	225.5	13.1	238.6
1993 41	1.5 16.9	58.4	1993	171.7	20.1	191.8
1994 5	7.1 4.2	61.3	1994	168.2	3.6	171.7
<b>1995</b> 12	7.9 7.7	135.7	1995	223.0	9.2	232.2

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

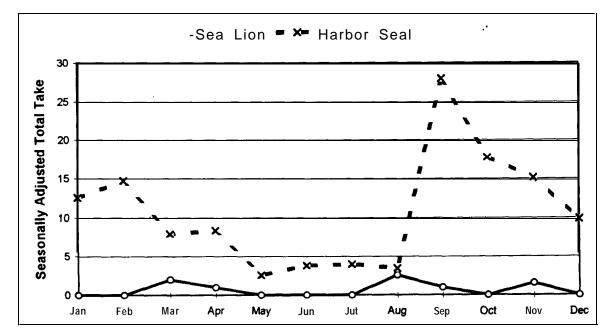
Table 5. SE													1000	
SAMPLING	DESI							<u>Active</u>		<u>Other</u>		<u>Total</u>		
MIXED			Total I					29		369		398		
				veyed				27		147		174		
				Sampli				93.1%		39.8%		43.7%		
			ple Ho					113		511		624		
	I	Estima	ted Ho	ouseho	ld Me	mbers		121.6		1203.6		1325.3		
HARVEST	AND L	ISE IN	IFORM	IATION	/									
Percentage	of Nat	ive Ho	ouseho	lds:			Estima	ted Co	ommur	nitv Ha	rvest			
0			Sea H				and Ta			-		Sea I	Harbor	
			Lion	Seal				(				Lion	Seal	
		used	54%	37.4%				Тс	otal Nun	nber Ha	rvested	8.1	117.0	
	н	unted	2.9%	16.6%				Total N	umber S	truck ar	nd Lost	0.0	11.1	
	Harv	vested	0.9%	12.9%					Total	Number	Taken	8.1	128.0	
		ceived		32.6%										
	Gave	Away	0. 9%	15.0%				Number	<sup>-</sup> Harves	ted Per	Capita	0. 01	0. 09	
SEA LION	HARVE	EST B	Y MON	NTH									Unknown	
	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAR	VEST AND	TAKE	BY SAMP	LED HOU	SEHOLD	S (UNEX	PANDED)							
Harvest	0	0	2	1	0	0	0	2	1	0	1	0	0	7
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	2	1	0	0	0	2	1	0	1	0	0	7
ESTIMATED H	ARVEST	AND	ΤΑΚΕ Β	Y COMN	IUNITY	(EXPAN	IDED)							
Harvest	0 0	0.0	20	10	0 0	0 0	0 0	2.6	1.0	0 0	1.6	0.0	0.0	8 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	2 0	10	00	00	0 0	26	1.0	0 0	1.6	0.0	0.0	8.1
ESTIMATED S	EASONA	LLY A	DJUSTEI	) HARV	EST AN	ID TAK	Е ВУ СС	MMUNI	ΓΥ (ΕΧΡ	ANDED)				
Harvest	0 0	0.0	2 0	10	0 0	0 0	00	2 6	10	00	16	0.0		81
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	2 0	10	0 0	0 0	0 0	26	10	0.0	1.6	0.0		81
Total Take (%)	0.0%	00%	246%	123%	00%	00%	00%	31.6%	12.3%	0.0%	19.3%	0.0%		100.0%
Cum Take	0 0	0 0	2 0	30	30	30	30	56	6.6	66	81	81		
Cum Take (%)	0 0%	0.0%	246%	368%	368%	368%	368% 68	3 4%	80.7%	807%	100.0%	100.0%		
HARBOR S	EAL H	IARVE	ST BY	/ MON	TH								Unknown	
	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Ckt	Nov	Dec	Month	Tota
REPORTED H	ARVEST	AND	TAKE B	Y SAMP	LED H	OUSEHO	DLDS (UN	IEXPAN	DED)					-
Harvest	10	11	6	6	2	3	3	3	12	4	11	7	1	79
Struck & Lost	0	1	1	1	0	0	0	0	0	0	1	1	4	ç
Total Take	10	12	7	7	2	3		3	12	4	12	8	5	88
ESTIMATED H	IARVEST	AND	TAKE B	Y COMM	IUNITY	(EXPA	NDED)							
Harvest	12.3	12.8	64	70	2 5	37	39	3.4	26.6	16.5	13.1	7.9	1.0	117.0
Struck & Lost	0.0	1.3	1.3	11	0 0	0 0	0 0	0 0	0.0	0.0	1.6	1.6	4.2	11.1
Total Take	12.3	141	7.7	81	25	37		34	26.6	16.5	147	9.4	5.2	128.0
ESTIMATED S	EASONA	ALLY A	DJUSTE	D HARV	EST AI	ND TAK	Е ВУ СО	OMMUNI	TY (EXP	ANDED)	)			
Harvest	12.3	12.9	64	7.1	2 5	37	3.9	34	26.9	16.8	13.2	7.9		117.
Struck & Lost	0.3	1.8	15	13	01	01	01	01	1.1	0.9	1.9	1.9		11
Total Take	12.5	14.7	8.0	84	2 6	38	4.0	3.4	28.0	17.7	15.1	9.8		128.
Total Take (%)	9.8%	11.5%	6.2%	66%	20%	3.0%	3 1%	27%	21.9%	13.8%	11.8%	7.7%		100.09
Cum Take	12.5	21.2	35.2	43.6	461	49.9	53.9	51.3	85.3	103_1	118.2	<b>128.</b> 0		
Cum Take (%)	9.8%	21.3%	275%	340%	360%	390%	421%	44.8%	667%	805%	923%	100.0%		

SOURCE, Alaska Department of Fsh 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, 1995

HARVEST DI AGE AND SI	_^							
		Sea	Lion			Harbo	r Seal	
	Reporte	edby	Communi	y Est.	Report	ed by	Communi	ty Est.
	Sam	ple	(Expar	ded)	Sam	ole	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	3	42.9%	36	439%	3	7 46.8%	54.1 4	6.3%
Adult Female	2	266%	2.6	31 <b>6%</b>	4	5.1%	6.0	5.2%
Adult Unknown Sex	0	0.0%	0.0	0.0%	5	63%	7.0	6.0%
Juvenile Male	2	286%	2.0	24.6%	12	15.2%	12.7	10.9%
Juvenile Female	0	0.0%	0.0	0.0%	4	5.1%	16.5	14.1%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	13	16.5%	16.1	13.7%
Pup Male	0	0.0%	0.0	0.0%	1	1.3%	1.2	1.0%
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	1.3%	1.3	1.1%
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	00%	0 0	0.0%	2	2.5%	2.1	1.8%
Total	7	1000%	81	100.0%	79	100.0%	117.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA L/ON AND HARBOR SEAL



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

	SEA	LION		H	HARBO	r sea	L
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harveşt</u>	Lost	Take	Year	Harvest	Lost	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	1231
1994	4.6	1.1	5.7	1994	98.6	11.1	109.8
1995	8.1	0.0	8.1	1995	117.0	11.1	128.0

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

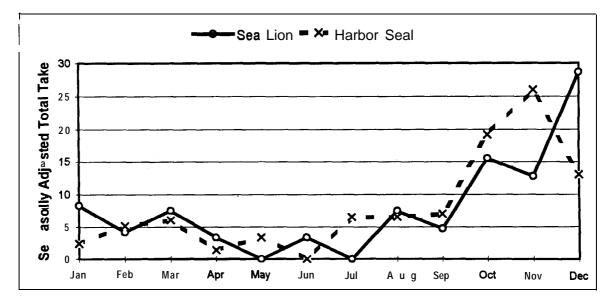
Table 6. SEA LION	AND HAR	BOR S	SEAL I	HARVE	ESTS:	ALEU	TIAN I	SLAN	DS, 19	95		
SAMPLING DESIGN	ŗ					<u>Active</u>		<u>Other</u>		Total		
MIXED	Total I	Native	House	holds		32		129		161		
		veyed				23		61		84		
		Sampli	•			71.9%		47.3%		52.2%		
	ample Ho					75		163		238		
Esti	mated Ho	ousehol	d Men	nbers		104.3		357.8		462.1		
HARVEST AND USE	INFORM	IATION	1									
Percentage of Native	Househo	lds:		l	Estima	ted Co	ommuni	ity Har	vest			
	Sea H	arbor		á	and Ta	ke (Ex	pandeo	d):		Sea I	Harbor	
	Lion	<u>Seal</u>								Lion	<u>Seal</u>	
Us	ed 50.1%	50.6%				Тс	otal Nur	nber Ha	arvested	85.0	86.9	
Hunte	ed 13.9%	16.9%				Total N	umber S	truck ar	d Lost	11.1	9.7	
Harvest	e <b>d</b> 10.8%	15.4%					Total	Number	Taken	<b>96</b> .1	96.6	
Receive	d 48.5%	47.5%										
Gave Awa	ay 10.2%	15.4%				Number	Harves	ted Per	Capita	0.18	0.19	
SEA LION HARVEST			N	<b>.</b>	1.4	Δ	0		ş1	Π.	Unknown	T-1-1
	eb Mar	Apr				Aug	Sep	Ckt	Nov	Dec	Month	Total
REPORTED HARVEST AND TA Harvest 5	KE BY SAMP 3 5	LED HOUS	SEHOLDS 0	UNEXPA 3	ANDED) 0	3	2	6	4	13	4	50
Struck & Lost 1	0 1	2 1	0	0	0	3 1	2	1	4	2	4	8
Total Take 6	3 6	3	0	3	0	4	2	7	5	15	4	。 58
ESTIMATED HARVEST AN		-	-	-	-	4	2	,	5	10	4	50
	1.2 6.2	2.0	0.0	3.4	0.0	5.3	3.9	11.7	8.9	22.5	10.0	85.0
	).0 1.4	2.0 1.4	0.0	0.0	0.0	J.J 1.4	00	11.7	1.4	22.5	0.0	11.1
	1.2 7.6	3.4	0.0	3.4	0.0	6.7	3.9	13.1	10.3	25.3	10.0	96.1
ESTIMATED SEASONALLY									10.5	23.3	10.0	70.1
	4.2 6.2	2.0	0.0	3.4	0.0	6.1	4.7	14.2	11.4	25 9		85.0
	).0 1.4	14	0.0	0.0	0.0	1.4	0.0	1.4	1.4	2.8		11.1
	4.2 7.6	3.4	0.0	3.4	0.0	7.5	4.7	15.6	12.8	28.6		961
	3% 7.9%	3.5%	0.0%	3.5%	0.0%	7.8%	4.9%	16.2%	13.3%	29.8%		100.0%
	2.5 20.1	23.5	23.5	26.9	26.9	34.4	39.1	54.7	67.4	96.1		100.070
<i>Cum.</i> Take (%) 8.7% 13.0		244%	24.4%	28.0%	28.0%	358%	407%	56.9%	70.2%	100.0%		
HARBOR SEAL HAR					1.1		0	0.1			Unknown	<b>T</b> ( )
Jan F REPORTED HARVEST AN	eb Mar	Apr v samdi		Jun	Jul		Sep	Oct	Nov	Dec	Month	Total
Harvest 2	4 2	1 JAIVIFI 1	3	032101	2 2	2	3	9	9	5	4	46
Struck & Lost 0	<b>0</b> 1	0	0	0	0	0	J 1	1	1	3	-	7
Total Take 2	4 3	1	3	0	2	2	4	10	10	8		53
ESTIMATED HARVEST AN				(EXPAN		2	4		10	0	+	
	5.2 3.9	1.4	3.4	0.0	5.0	5.0	4.9	15.5	22.2	8.1	10.0	86.9
-	0.0 1.4	0.0	0.0	0.0	0.0	0.0	1.4	1.4	1.4	4.2		9.7
	5.2 5.3	1.4	3.4	0.0	5.0	5.0	6.3	16.8	23.6	12.2		96.6
ESTIMATED SEASONALLY										12.2	10.0	,0.0
	5.2 4.7	1.4	3.4	0.0	6.5	6.5	5.7	17.8	24.5	8.8		88.9
	0.0 1.4	0.0	0.0	0.0	00	0.0	14	1.4	14	4.2		9.7
	5.2 6.1	1.4	3.4	0.0	6.5	6.5	7.1	19.2	25.9	13.0		96.6
	4% 6.3%	1.4%	3.5%	0.0%	6.8%	6.8%		19.8%	26.8%	13.5%		100.6%
• •	7.6 13.6	15.0	18.4	18.4	24.9	31.5	38.5	57.7	83.6	96.6		
Cum. Take (%) 2.5% 7.	8% 14.1%	15.5%	19.0%	19.0%	25.8%	32.6%	39.9%	59.7%	86.5%	100.0%		

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

#### Table 6. (cont.) SEA LION AND HARBOR SEAL HARVESTS: ALEUTIAN ISLANDS, 1996

		S	Sea Lion			Ha	rbor Seal	
	Reporte	ed by	Commun	ity Est.	Report	ed bv	Commur	ity Est.
	Sam		(Expar	ided)	Sam	ple .	(Expan	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	12	24.9%	20.0	23.5%	27	50.7%	54.2	62.4%
Adult Female	8	16.0%	15.9	10.7%	2	4.3%	3.9	4.5%
Adult Unknown Sex	1	2.0%	1.4	1.6%	1	2.2%	1.4	1.6%
Juvenile Male	14	28.0%	20.2	23.8%	7	15.2%	10.5	12.0%
Juvenile Female	5	10.0%	9.2	10.8%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	6	12.0%	8.3	9.8%	5	10.9%	7.0	8.0%
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	4	0.0%	10.0	11.8%	4	8.7%	10.0	11.5%
Total	50	100.0%	85.0	100.0%	46	100.0%	86.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION			F	IARBOI	R SEA	L
Yea	r <u>Harvest</u>	Struck' Lost	Total <u>Take</u>	_	Year	Harvest	Struck/	Total <u>Iake</u>
199	2 104.3	30.9	135.2		1992	94.3	21.4	115.7
199	3 99.0	24.8	123.8		1993	05.0	15.4	100.4
199	4 101.8	20.5	122.3		1994	124.9	22.6	147.5
199	<b>5</b> 85.0	11.1	96.1		1995	86.9	9.7	96.6

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

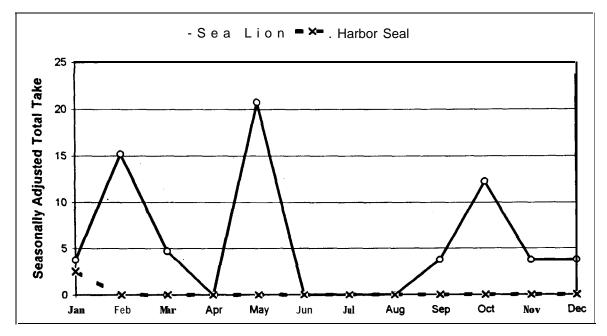
SAMPLING	DESI	GN:						Active	(	Other		Total		
MIXED			Total N	ative H	louseh	olds		59	-	142		201		
			Surv	eyed H	louseh	olds		47		71		118		
			5	Samplin	g Fra	ction		79.7%	Ę	50.0%		58.7%		
			ple Ho					210		239		449		
	I	Estima	ted Ho	usehold	Mem	bers		263.6		503.4		767.0		
HARVEST	AND L	JSE IN	IFORM.	ATION										
Percentage	e of Nat	tive Ho	ousehol	ds:		E	Estima	ted Cor	nmuni	ty Har	vest			
			Sea Ha	rbor		a	nd Ta	ke (Exp	anded	l):		Sea I	Harbor	
			Lion	Seal								Lion	<u>Seal</u>	
		Used 5	53.3%	3.1%				To	tal Nun	nber Ha	arvested	57.6	2.5	
	Н	lunted	19.7%	0.6%				Total Nu	mber St	truck ar	nd Lost	10.3	0.0	
	Harv	rested	15.0%	0.6%					Total	Numbe	r Taken	67.9	2.5	
		eived		2.5%										
	Gave	Away 1	5.2%	0.6%				Number	Harvest	ed Per	Capita	0.08	0.00	
SEA LION										-			Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	To
REPORTED HAR							-	^	-	^	-		-	
larvest	3	8	0	0	10	0	0	0	3	8	3	3	0	:
Struck & Lost	0	1 9	3	0	1	0	0	0 0'	0	0	0	0	4	
otal Take	3		3 TAKE DV	0	11	0	0	0	3	8	3	3	4	
ESTIMATED I Harvest	HARVESI 3.8	AND 11.2	1AKE BY 0.0	0.0	א דואר ( 191	EXPANL 00	00 00	0.0	2.0	10.0	2.0	2.0		
Struck & Lost	0.0	1.2	38	0.0	1.3	0.0	00	0.0	38 0.0	12.2 0.0	3.8 0 0	3.8 0.0	0.0 4.3	57
otal Take	3.8	12.2	3.8	00	20.4	0.0	0.0	0.0	3.8	12.2	3.8	3.8	4.3 4.3	10 67
ESTIMATED										ANDED)		3.0	4.5	07
arvest	3.8	11.2	0.0	00	191	00	0.0	00	3.6	12.2	3.8	38		57
Struck & Lost	0.0	4.0	4.7	00	16	00	0.0	0.0	0.0	0.0	0.0	0.0		1(
Total Take	3.8	15.2	4.7	0 0	20.7	0.0	0.0	0.0	3.0	12.2	3.8	3.8		67
Total Take (%)	5.5%	22.4%	6 9%	00%	30.5%	00%	00%	0.0%		18.0%	5.5%	5.5%		100.0
Cum Take	3.0	19.0	237	237	444	444	444	444	48.2	604	642	67.9		
Cum Take (%)	55%	27.9%	349%	34 9%	65 4%	65 4%	65 4%	65 4%	70 9%	88. <b>9</b> %	94.5%	100.0%		
HARBOR	SEAL F	HARVE	ST BY	MONT	Н								Unknown	
	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	To
REPORTED H	HARVEST	AND	ΤΑΚΕ ΒΥ	SAMPL	ED HO	USEHOL	.DS (UN	IEXPAND	ED)					
arvest	2	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		
Total Take	2	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED									<b>.</b> -			-		
Harvest Struck & Lost	2.5	0.0	0.0	0.0	00	00	00	0.0	0.0	00	0.0	0.0		
	0.0	00	0.0	00	00	0.0	00	00	0.0	0.0	0.0	0.0		
fotal Take	2.5	0.0	0.0	0.0	00 ST AN	00 D TAVE	00 BV C	0.0 דוואוואואר	0.0 V (EVD	0.0	0.0	0 0	0.0	
ESTIMATED Harvest	SEASON 2.5	ALLY A 0.0	0.0	0.0	.SI AN 0.0	D TAKE 0.0	. ВҮ С( 0.0		Y (EXP 0.0	ANDED 0.0		0.0	h	
Struck & Lost	2.5 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
Total Take	2.5	0.0	0.0	0.0	0.0	0.0 <b>0.0</b>	0.0	0.0 <b>0.0</b>	0.0 <b>0.0</b>	0.0 <b>0.0</b>				
								0.0%	<b>U.U</b> 0.0%					100.
Total Take (%) Cum. Take	100.0% 2.5	0.0% 2.5	0.0% 2.5	0.0% 2.5	0.0% 2.5	0.0% 2.5	0.0% 2.5	0.0%	0.0% 2.5	0.0% 2.5				100.
Juille IdKC	<b>∠</b> .J	2.J	<b>2</b> .J	Z.J	Z.J	Z.J	Z.J	Z.J	Z.J	Z.J	Z.J	Ζ.:	J	

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, 1995

		Se	<b>a</b> Lion			Harbor	Seal	
	Reporte	dby	Communi	ty Est	Reporte	ed by	Commun	ity Est.
	Sam	ole	(Expan	ded)	Sam	ple	(Expan	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	6	15.6%	6.5	11.3%	0	0.0%	0.0	0.0%
Adult Female	0	0.0%	0 0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0 0	00%	0	0.0%	0.0	0.0%
Juvenile Male	26	664%	34.8	604%	2	1000%	2.5	100.0%
Juvenile Female	2	5.3%	2 5	44%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	3	7.9%	103	179%	0	0.0%	0.0	0.0%
Pup Male	0	00%	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	00%	0	0.0%	0.0	0.0%
Male Unknown Age	0	00%	0 0	00%	0	0.0%	0.0	0.0%
Female Unknown Age	0	00%	0 0	00%	0	0.0%	0.0	0.0%
Unknown Sex and Age	' 1	2.6%	34	6.0%	0	0.0%	0.0	0.0%
Total	36	1000%	576	100.0%	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		I	HARBO	r sea	L
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	Year	Harvest	Lost	Take
1992	176.6	120. 2	296.8	1992	23	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

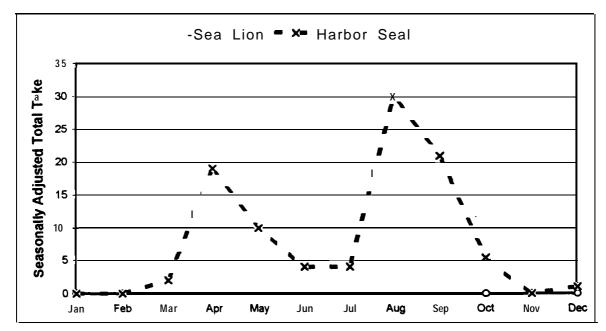
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsatence Study and Monitor System for Sea Lions and Harbor Seals In Alaska

SAMPLING	DESIG	-N						Active	C	Other		Total		
MIXED	DLOIC		Total	Native I	Housek	nolds		15	2	258		273		
				veyed I				15		199		214		
				Samplir				100.0%	7	7.1%		78.4%		
		Sam		ousehol	•			53		578		631		
	E		•	ousehol				53.0		734.3		787.3		
		_	-	-										
HARVEST	AND U	SE IN	IFORN	IATION										
Percentage	of Nati	ve Ho							ommuni	-	vest			
				Harbor		2	ind Ta	ke (E)	cpanded	):			larbor	
			Lion	<u>Seal</u>								Lion	<u>Seal</u>	
		Used	0.0%	37.0%					otal Num				68.3	
		unted	0.0%	16.2%				Total N	umber St			0.0	<b>28</b> 3	
		ested		11.4%					Total N	lumber	faken	0.0	96.6	
		eived		27.5%				Ni	. 11		0			
	Gave	Away	0.0%	15.2%				Number	Harvest	ea Per	Capita	0.00	0.09	
SEA LION				NTH									Unkno	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAR						-		•	•	~	•	-	•	-
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 H						(EXPANI								
Harvest	0.0	00	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	00	00	00	00	00	00	0.0	0.0	00	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	00	00	00 	0.0	00	00	0.0	0.0	0.0	0.0	0 0
ESTIMATED S Harvest	EASUNA 00	LLY AI 00	00						•	ANDED)		0.0		
Struck & Lost	00	00	0.0	00 00	0 0 0 0	0 0 0 0	0.0 0.0	00 0.0	0.0 0.0	0.0 00	0.0 0.0	0 0 0.0		0.0
Total Take	0.0	0.0	0.0	00	0.0	00	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
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 (%)		0.0		0.0			0.0	0.0	0.0	0.0	<u></u>	0.0		
HARBOR S													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep.	Oct	Nov	Dec	Month	Tota
REPORTED H	ARVEST 0						-		-	-	^	~	4	F.
Harvest Struck & Lost	0	<i>0</i> 0	1	14 4	7 3	3 1	2	18 5	8 6	5 0	0 0	0 1	1	59 23
Total Take	0	0	2	4 18	3 10	4	4	5 23	о 14	5	0	1	0 1	8
ESTIMATED F							-	23	14	J	U	I	I	0.
Harvest	0.0	0.0	1.0	140	7.0	(EXFAN 3.0	2.0	233	11.5	54	0 0	0.0	10	68.
Struck & Lost	0.0	0.0	1.0	4.0	30	3.0 10	2.0	6.8	9.5	0.0	0.0	1.0	0.0	28.3
Total Take	0.0	0.0	2.0	16.0	100	40	4.0	30	1 21.		0.0	1.0	1.0	96.0
ESTIMATED S														, , ,
Harvest	0.0	0.0	1.0	15 1	7.0	3.0	2.0	23.3	115	54	0.0	0.0		68.
Struck & Lost	0.0	0.0	10	4.0	30	10	2.0	68	9.5	0.0	0.0	1.0		28.
Total Take	0.0	00	2.0	19 1	10.0	4.0	4.0	30.1	21.1	5.4	0.0	1.0		96.
Total Take (%)	0.0%	0.0%		19.7%		4 1%		31.1%		5.6%	0.0%	1.0%		100.09
Cum Take	0.0	0.0	2.0		31.1	35.1	39.1	59.1	90.2	95.6	95.6	96.6		
Cum Take (%)	0.0%	0.0%	2.1%		32.2%	363%	40.4%	71.6%	93.4%	99.0%	99.0%	100.0%		

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

		Sea	Lion		Harbor Seal				
	Reporte	d by	Communi	ty Est	Reporte	ed by	Community Est. (Expanded)		
	Sam	de	(Expan	ded)	Sam	ple			
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0		0.0		6	10.2%	6.4	9.3%	
Adult Female	0	<b>92</b> -	0.0		4	6.8%	4.0	5.9%	
Adult Unknown Sex	0	***	0.0		38	64.4%	46.8	68.6%	
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		2	3.4%	2.0	2.9%	
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	3.4%	2.0	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	****	7	11.9%	7.0	10.3%	
Total	0		0.0		59	100.0%	68.3	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



EST/MATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		_	HARBOR SEAL					
		Struck/	Total	-			Struck/	Total		
Year	<u>Harvest</u>	Lost	<u>Take</u>		Year	Harvest	Lost	Take		
1992	0.0	0.0	0.0		1992	99.0	66.6	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	66.3	28.3	96.6		

SOURCE: Alaska Department of Fiih and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska

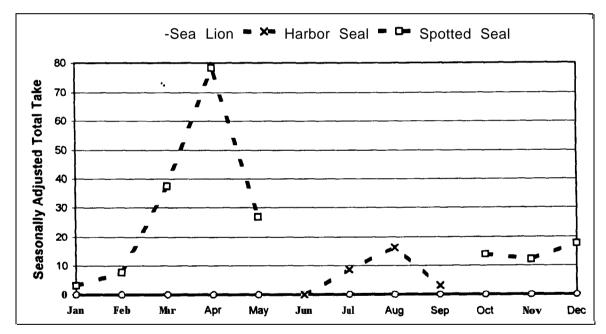
SAMPLING	DESIG	N:					4	<u>Active</u>	<u>(</u>	<u> Other</u>		<u>Total</u>		
MIXED		٦	Fotal N	ative H	louseh	olds		120		567		687		
			Surv	veyed	Hous	ehold	S .	112		157		269		
			S	Samplin	g Frac	ction	, i	93.3%	2	27.7%	:	39.2%		
		Samp	ole Hou	useholo	l Mem	bers		511		599		1110		
	Es		ed Ho					545.7		1964.1		2509.9		
HARVEST	AND US	EINF	ORMA	TION										
Percentage						E	Estimat	ted Cor	nmuni	tv Har	vest			
0			Sea Ha		i and			and Ta				sea H	arbor sp	ootted
			Lion	Spotted S	Seal							Lion	Seal	<u>Seai</u>
		sed		69.6%	1						rvested		25.9	1637
		nted		15.8%				Total Nu				0.0	2.4	33.5
		ested		12.3%						lumber	Taken	0.0	28.3	197.2
	Gave /	ived 0 Away		64.9% 16 1%				Number	Harvest	ed Per	Capita	0.00	0.01	0.07
SEA LION	HARVES	ST BY	/ MON	TH									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Oct	Nov	Dec	Month	Tot
REPORTED HAR	/est and	TAKE B	BY SAMPL	ed hous	EHOLDS	(UNEXPA	NDED)							
larvest	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	
fotal Take	0	0	0	0	0	0	0	0	. 0	0	0	0	0	
ESTIMATED H	ARVEST	AND T	ΑΚΕ ΒΥ	СОММ	JNITY (	EXPAND	)ED)							
larvest	0.0	0.0	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	00	0.0	0.0	0.0	0.0	0.0	0.0	00	(
Total Take	0.0	00	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0
ESTIMATED S	EASONAL	LY AD	JUSTED	HARVE	ST AND	) TAKE	ву со	MMUNIT	Y (EXP	ANDED)				
Harvest	0.0	00	0.0	0.0	00	0.0	0.0	0.0	00	0.0	0.0	0.0		0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	00	0.0	0.0	0.0	00	0.0	0.0		0
Fotal 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
Fotal 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 S	SEAL AN	ID SF	POTTE	D SEA	L HAR	VEST	BY M	ONTH						
ļ	Jan	Spc teb	otted Seal	Apr	May	lup	Harbor		5001	Sp Oct	otted Sea Nov	l Dec	Unknown Month	To
			Mar			Jun		Au9	Sep	001	NOV		WOTUT	10
REPORTED H									,	-		40	~	
larvest	3	7	27	54	18	0	5	3	3	7	11	16	2	1
Struck & Lost	0	0	8	12	5	0	2	0	0	5	0	0	1	
Total Take	3	7	35	66	23	0	7	3	3	12	11	16	3	1
ESTIMATED H					•		•		<b>.</b> -	<b>-</b> -				
larvest	3.3	7.1	29.0	63.3	297	00	57	16.0	3.3	7.9	12.2	177	2.7	18
Struck & Lost	00	0.0	8.4	127	5.9	00	20	0.0	0.0	5.9	0.0	0.0	1.0	3
Fotal Take	3.3	7.7	37.4	76.0	26 6	0.0	7.7	16.0	3.3	138	12.2	17.7	3.7	22
ESTIMATED									•	,				
larvest	3.3	7.7	29.0	649	21 . <b>0</b>	0.0	6.3	16.3	3.3	7.9	12.2	17.7		18
Struck & Lost	0.0	0.0	84	13.3	5.9	0.0	2.4	0.0	0.0	5.9	0.0	0.0		3
Total Take	3.3	7.7	37.4	78.2	26.9	0.0	8.7	16.3	3.3	13.9	12.2	17.7		22
Total Take (%)	1.5%	3.4%	16.6%	34.7%	11. <b>9</b> %	'0.0%	3.8%	7.2%	1.5%	6.2%	5.4%	7.8%		100.
Cum. Take	3.3	11.1	48.4	1266	1535	1535	1622	178.5	181.8	195.6	297.8	225.5		
	1.5%	4.9%	21.5%	56.2%	68.1%	68.1%	71.9%	79.2%	89.6%	869%	92.2%	109.0%		

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

		Lion	Harbor Seal				spotted Seal					
	Reporte	d by	Community Est		Reported by		Community Est.		Reported by		Community Est.	
	Samp	ble	(Expanded)		Sample*		(Expanded)		Sample'		(Expanded)	
	Number	%	Number	%	<u>Number</u>	%	<u>Number</u>	*	Number	%	Number	<u>%</u>
Adult Male	0		0.0		3	27.3%	4.3	16.3%	27	16.9%	299	18.3%
Adult Female	0		0.0		3	27.3%	3.7	14.2%	10	7.0%	11.1	6.6%
Adult Unknown Sex	0	_	0.0		2	18.2%	2.2	8.3%	28	19.6%	31.9	19.6%
Juvenile Male	0		0.0		2	18.2%	14.4	54.6%	12	8.4%	13.9	8.5%
Juvenile Female	0	<del></del>	0.0		1	9.1%	1.7	6.6%	9	6.3%	10.0	6.1%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	00%	28	19.6%	32.0	19.696
Pup Male	0		0.0		0	0.0%	0.0	0.0%	3	2.1%	3.3	2.0%
Pup Female	0		0.0		0	0.0%	0.0	0.0%	2	1.4%	2.2	1.4%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	3	2.1%	3.3	2.0%
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%	2	1.4%	2.1	1.3%
Female Unknown Age	0		00		0	00%	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%	19	13.3%	23.4	14.4%
Total	0	***	0.0	- ,	11	100.0%	26.4	100.0%	143	100.0%	163.2	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		F	HARBOR SEAL				SPOTTED SEAL				
		Struck	Total			Struck/	Total			Struck/	Total		
Year	Harvest	Lost	<u>Take</u>	Year	<u>Harvest</u>	Lost	Take	<u>Year</u>	Harvest	Lost	Take		
1992	7.0	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		
1996	0. 0	0. 0'	0. 0	1995	25. 9	2.4	28.3	1995	163.7	33. 5	197. 2		

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seats in Alaska

## **APPENDIX C**

# SUBSISTENCE TAKES OF HARBOR SEAL AND SEA LION BY COMMUNITY

#### SOUTHEAST ALASKA

- Angoon 1-2
- Craig 3-4 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

#### **KODIAK ISLAND**

53-54	Akhiok
55-56	Karluk
57-58	Kodiak City
59-60	Larsen Bay
61-62	Old Harbor
63-64	Ouzinkie
65-66	Port Lions

#### SOUTH ALASKA PENINSULA

- 67-68 Chignik Bay Chignik Lagoon 69-70
- Chignik Lake 71-72
- False Pass 73-74
- Ivanof Bay 75-76
- King Cove 77-78
- 79-80 Perryville
- 81-82 Sand Point

## **ALEUTIAN ISLANDS**

.

83-84	Akutan
85-86	Atka
87-88	Nikolski
89-90	Unalaska

## **PRIBILOF ISLANDS**

91-92	St. George
93-94	St. Paul

## SOUTH BRISTOL BAY

95-96	Egegik
97-98	King Salmon
99-l 00	Levelock
101-102	Naknek
103-104	Pilot Point
	Port Heiden
107-l 08	South Naknek

#### NORTH BRISTOL BAY

109-i 10	Aleknagik
<b>11</b>  -  12	Clark's Point
113- 14	Dillingham
115-  16	Manokotak
117-118	Togiak

## Table 1. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Angoon, 1995

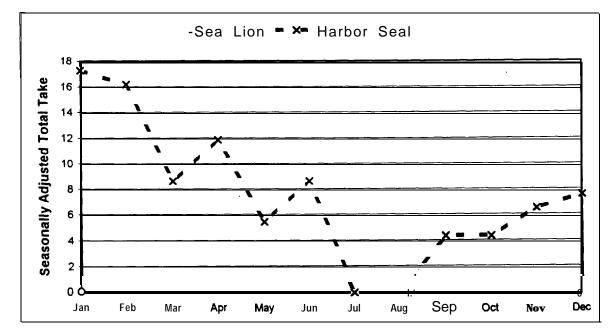
SAMPLING DESIGN: CHAIN REFERRAL	Total	l Refei					55				
			yed H				51				
			mplin	•		92	2.7%				
	Sample Estimated						211 227.5				
	Estimated	u Hous	senoia	mem	bers	2	27.0				
HARVESTAND USE INFOR	MATION										
Percentage of Sample House	holds:		Es	stimate	ed Con	nmunity	y Harv	rest			
Sea	Harbor		ar	nd Tak	e (Exp	anded,	):			Harbor	
Lion	<u>Seal</u>								Lion	<u>Seal</u>	
used 0.0%	74.5%					al Numb			0.0	80.9	
Hunted 0.0%	392%			T	otal Nur				0.0	9.7	
Harvested 0.0%	35.3%					Total N	umber	Taken	0.0	99.6	
Received 0.0%	49.0%							<u> </u>			
Gave Away 0.0%	27.5%			r	lumber	Harvest	ed Per	Capita	a NVA	N/A	
SEA LION HARVEST BY MO Jan Feb Ma		May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Total
REPORTED HARVEST AND TAKE BY SA	· •				Aug	Sep	001	NOV	Dec	WUTT	TOTAL
	) 0	10LD3 (U 0		0	0	0	0	0	0	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 HARVEST AND TAKE	-	-	-	-	<i>.</i> .	U	Ū	Ū	U	0	•
Harvest 0.0 0.0 0.1		00	00	00	0.0	00	0.0	0.0	0 0	0.0	00
Struck & Lost 0.0 0.0 0.0		00	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take 0.0 0.0 0.1		00	00	00	0.0	0.0	00	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUST									0.0	0.0	
Harvest 0.0 0.0 0		00	00	00	0.0	0.0	00	0.0	0.0		0.0
Struck & Lost 00 00 0.	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0		0.0
Total Take 0.0 0.0 0.	0 0 0	00	00	0 0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take (%)					-						<del></del>
Cum. Take 0.0 0.0 0.	0 0 0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)		<b></b>									
		1								11	
HARBOR SEAL HARVEST E Jan Feb Ma		л May	Jun	Jul	Aug	Sep	Ckt	Nov	-	Unknown Month	Total
REPORTED HARVEST AND TAKE	BY SAMPLE	D HOUS	SEHOLD	S (UNI	EXPAND	ED)					
Harvest 15 9	89	5	8	0	0	4	4	6	7	0	75
Struck & Lost 1 6	0 2	0	0	0	0	0	0	0	0	0	9
Total Take 16 15	8 11	5	8	0	0	4	4	6	7	0	84
ESTIMATED HARVEST AND TAKE	BY COMMU	NITY (E	XPAND	ED)							
Harvest 16.2 9.7 8.	697	54	86	0 0	0.0	4.3	4.3	6.5	7.5	0.0	80.9
Struck & Lost 11 6 5 0.	0 22	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	9.7
Total Take 17.3 16.2 8	6 119	54	86	0 0	0 0	4.3	43	65	7.5	0 0	90.6
ESTIMATED SEASONALLY ADJUS	ED HARVES	T AND	TAKE	BY CO	MMUNIT	Y (EXPA	NDED)				
Harvest 16.2 9.7 8	6 97	54	86	0 0	0.0	4.3	43	6.5	7.5		80.9
Struck & Lost 1.1 6.5 0	0 22	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		9.7
Total Take 17.3 16.2 8	6 119	54	86	0.0	0.0	4.3	4.3	6.5	7.5		90.6
( )	% 13 1%	6.0%	9.5%	00%	0.0%	4.8%	4.8%	7.1%	8.3%		100.0%
Cum. Take 17.3 334 42		59.3	67.9	67.9	67.9	72.3	76.6	83.0			
Cum Take <b>(%)</b> 19.0% 36.9% 46 <i>4%</i> 5 SOURCE, Alaska Department of Fish and Ca											

SOURCE. Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Angoon, 1995

## Table 1. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Angoon, 1995

		Sea	Lion			Har	bor Seal	
	Reporte	dby	Communi	ty Est	Reporte	ed by	Communi	ity Est.
	Samp	ole	(Expan	ded)	Sam	ole	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		60	80.0%	64.7	80.0%
Adult Female	0		0.0		9	12.0%	9.7	12.0%
Adult Unknown Sex	0		0.0	-	1	1.3%	1.1	1.3%
Juvenile Male	0		0.0		5	6.7%	5.4	6.7%
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		00		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		75	100.0%	80.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		F	IARBOI	r sea	۱L
		Struck/	Total			Struck/	Total
<u>Year</u>	Harvest	Lost	<u>Take</u>	Year	Harvest	Lost	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	86.9	21 .I	88.0
1995	0.0	0.0	0.0	1995	80.9	9.7	90.6

SOURCE Abska 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, 1995.

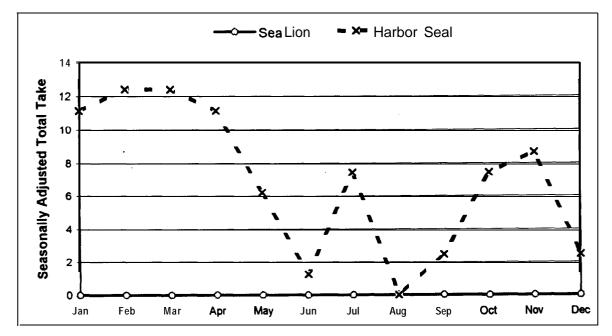
SAMPLING	DESIG	SN:												
CHAIN REP				Tot	al Refe	erred H	louseh	olds		31				
					Surve	eyed H	louseh	nolds		25				
					S	amplin	g Fra	ction	80	0.6%				
				Samp	le Hou	isehold	l Mem	bers		98				
			E	stimat	ed Ho	useho	ld Me	mbers		121.5				
HARVEST	AND U	SE IN	FORMA	TION										
Percentage	of Sarr	nple Ho	ouseho	lds:		E	stimat	ed Cor	nmunit	ty Harv	/est			
C C		•	Sea Ha					ke (Exp		-		Sea I	Harbor	
		Į	Lion	Seal						,		Lion	Seal	
		used 0	.0%	92.0%				Tot	al Num	ber Harv	/ested	0.0	69.4	
	Н	unted	0.0%	64.0%				Total Nu	<b>mber</b> St	ruck and	d Lost	0.0	13.6	
	Harv	ested	0.0%	60.0%					Total N	lumber	Taken	0. 0	63.1	
	Rec	eived	0.0%	48.0%										
	Gave	Away	0.0%	480%			1	Number	Harves	ted Per	Capita	a N/A	N/A	
SEA LION	HARVE Jan	STBY Feb	MONT Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HAR	/est and	TAKE B	Y SAMPLE			(UNEXPA	NDED)	J	•					
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 H	ARVEST	AND T	AKE BY	сомм	JNITY (E	EXPAND	ED)							
Harvest	0.0	0 0	0.0	00	0.0	00	0 0	0 0	00	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0 0	0 0	0 0	00	00	00	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0
Total Take	0.0	0 0	0 0	00	00	00	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
ESTIMATED S	EASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	вү со	ммиліт	Y (EXPA	ANDED)				
Harvest	0 0	0.0	0.0	00	0 0	00	0.0	0 0	0 0	0.0	0.0	0.0		0.0
Struck a <b>Lost</b>	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0		00
Total Take	0.0	0.0	0.0	00	00	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 (%)	~		~~		<b>8</b> 4.0			-		No.				
HARBOR S						L	L.I	0	0	011	New	Dee	Unknown	Tatal
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckl	Nov	Dec	Month	Total
REPORTED H Harvest	ARVESI 7	AND I. 9	AKE BY 9	SAMPL 9	ED HOU 4	1 ISEHUL	DS (UN 5	EXPAND 0	ED) 2	4	4	2	0	54
Struck & Lost	2	1	<b>7</b> 1	9	4	0	5 1	0	2	4	4	2		56 11
Total Take	2	10	10	9	5	1	6	0	2	6	3 7	2		67
ESTIMATED H	IARVEST	AND T	AKE BY	сомм	UNITY (	EXPAND	ED)							
Harvest	8.7	11.2	11.2	112	50	1.2	6.2	0.0	2.5	5.0	5.0	2.5	i 0.0	69.4
Struck & Lost	2 5	1.2	1.2	0 0	12	00	12	0.0	0.0	2.5	37	0.0	0.0	13.6
Total Take	11.2	12 4	124	11.2	62	12	74	0.0	2.5	74	0.7	2.5	5 0.0	03.1
ESTIMATED S	SEASONA	LLY AD	JUSTED	HARVE	ST AND	ΤΑΚΕ	ву сс	OMMUNIT	Y (EXP	ANDED)				
Harvest	8.7	11.2	11.2	11.2	50	12	6 2	0.0	2.5	5.0	5.0	2.5	5	694
Struck & Lost	2.5	1.2	1.2	0.0	1.2	0 0	12	0.0	0.0	2.5	3.7	0.0	)	13.6
Total Take	11.2	12.4	12.4	11.2	6.2	1.2	7.4	0.0	2.5	7.4	8.7	2.5	5	03.1
Total Take (%)	13.4%	14.9%	14.9%	134%	7.5%	1.5%	<b>90</b> %	00%	3.6%	9.0%	10.4%	3.0%	, D	100.09
Cum Take	11.2	23.6	36.0	47.1	533	54.6	62.0	62.0	64.5	71.9	60.6	<b>63</b> .1	l	
Cum. Take(%	) 13.4%	20.4%	43.3%	56.7%	642%	65.7%	74.6%	74.6%	77.6%	66.6%	97.0%	100.0%		

SOURCE: Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seats in Alaski a, with assistance from the City of Craig and Shaan-Seet, Inc., 1995.

### Table 2. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Craig, 1995

		Sea	Lion			Harbo	or Seal		
	Reporte	d by	Communi	ty Esl.	Reporte	ed by	Commun	ity Est.	
	Samp	he	(Expend	led)	Sam	ple	(Expanded)		
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0		0.0		23	41.1%	28.5	41.1%	
Adult Female	0	-	0.0		15	26.8%	18.6	26.8%	
Adult Unknown Sex	0		0.0		7	12.5%	a.7	12.5%	
Juvenile Male	0		0.0		7	12.5%	0.7	12.5%	
Juvenile Female	0		0.0	-	2	3.6%	2.5	3.6%	
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		00		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	3.6%	2.5	3.6%	
Total	0		0.0		56	100.0%	69.4	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION			Н	ARBO	r sea	Ĺ
		Struck/	Total				Struck/	Total
Yea	ar <u>Harvest</u>	Lost	<u>Take</u>	<u>Ye</u>	ar	Harvest	Lost	Take
199	<b>2</b> 0.0	0.0	0.0	19	92	74.2	0.0	74.2
199	<b>33</b> 0.0	0.0	0.0	19	93	51. <b>1</b>	9.6	60.9
199	<b>4</b> 0.0	0.0	0.0	19	94	42.7	6.6	49.3
199	95 0.0	0.0	0.0	19	96	<b>69.4</b>	13.6	83.1

SCURCE: 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., 1995.

SAMPLING CHAIN REI				Tot	al Refe					25				
					Surve	eyed ⊦	louseh	olds		25				
					S	amplin	g Frac	tion	1	00.6%				
				Samp	le Hou	iseholo	d Mem	bers		77				
				Estimat	ed Hou	iseholo	d Mem	bers		77.0				
HARVESTA	AND U	SE IN	IFORM	IATION										
Percentage	of San	nple H	louseh	olds:		E	stimate	ed Cor	nmunit	y Harv	rest			
			Sea	larbor		а	nd Tak	ke (Exp	anded,	):		S e a	Harbor	
			<u>Lion</u>	<u>Seai</u>								Lion	Seal	
		Used	0.0%	80.0%				Tot	al Numb	er Harv	ested	0.0	24.0	
		unted		48.0%			1	Fotal Nu	mber Str	uck and	l Lost	0.0	9.0	
	Harv	/ested	0.0%	32.0%					Total N	umber <sup>-</sup>	Taken	0.0	33. 0	
		ceived		60.0%										
		Away		36.0%			ľ	Number	Harves	ted Per	Capita		N/A	
SEA LION	HARVE Jan	EST B Feb	Y MON Mar	<i>JTH</i> Apr	May	Jun	Jul	Au9	Sep	Oct	Nov		Unknown Month	To
EPORTED HAI			-					7,07	000		Nov		wonth	
arvest	0	0	0	0	0	01127171	0	0	0	0	0	0	0	
truck & Lost	0	0	0	0	0	0	0	0′	0	0	0	0	0	
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	•
STIMATED F		-	-	•	· ·	-	-	Ū	Ū	Ū	Ŭ	Ū	0	
arvest	0.0	0.0	0.0		-		0.0	0 0	0 0	0 0	0.0			_
truck & Lost	0.0 <b>0.0</b>	0.0	0.0	0 0 <b>0.0</b>	0 0 0 0	00	0.0	00	00	00	0.0	0 0 0 0	0.0 <b>0.0</b>	0 (
otal Take	0.0	0.0	0.0	0.0	00	00	00	00	00	00	0.0	0.0	0.0	(
											00	0.0	0.0	l
STIMATED S arvest									-	-				
truck & 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	00 00	0 0 0 0	0 0 0 0	0 0 0 0	00 00	00		(
otal Take	0.0	0.0	0.0	00	00	00	00	00	00			0.0		(
				00		00		00	00	0.0	0 0	0.0		(
otal Take (%) Cum. Take	0.0	0.0	0.0	0. 0										
um Take (%)		0.0	0.0	0.0	00	a0			0.0	0.0	0.0	0.0		
HARBOR	SEAL H Jan	HARVE Feb	EST BY Mar	/ MONT Apr	ГН May	Jun	Jui	Aug	Sep	Oct	Nov		Unknown Month	То
REPORTED H	IARVEST	AND	TAKE B	Y SAMPI	ED HOU	JSEHOL	DS (UN	EXPAND	ED)					
larvest	11	a	1	2	0	0	0	0	0	0	0	2	0	
truck & Lost	1	1	5	2	0	0	0	0	0	0	0	0	0	
otal Take	12	9	6	4	0	0	0	0	0	0	0	2	0	
STIMATED	HARVEST	AND	TAKE B	у сомм	UNITY [	EXPAND	)ED)							
larvest	11.0	8.0	1.0	2.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	2.0	0.0	2
Struck & Lost	1.0	1.0	5.0	2 0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	
otal Take	12.0	9.0	6.0	40	00	0 0	0 0	00	0 0	0.0	0 0	2.0	0.0	3
STIMATED	SEASONA	ALLY A	DJUSTE	D HARVE	EST AND	ΤΑΚΕ	BY CO	MMUNIT	Y (EXPA	NDED)				
larvest	11.0	8.0	1.0	2.0	0.0	0 0	0 0	00	0.0	0.0	0.0	20		2
Struck & Lost	1.0	1.0	5.0	20	0 0	0 0	0 0	0 0	00	0.0	0 0	0.0		
Total Take	12.0	9.0	6.0	40	0.0	0.0	00	0 0	00	0.0	0.0	2.0		3
Total Take (%)			10.2%		0.0%	00%	00%	00%	0.0%	0.0%	0.0%	6.1%		100.
Cum Take	12.0	21.0	27.0	31.0	310	31.0	310	310	310	31.0	31.0	33.0		

## Table 3. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Haines, **1995**

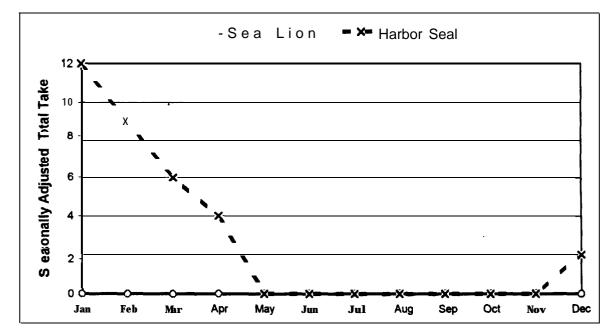
SOURCE: Abska Department of Fish and Came, Division of Substance, Substance Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chilkat Indian Association, 1995

# Table 3. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Haines, 1995

HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	rSeal	
	Reporte	d by	Communi	y Est.	Reporte	ed by	Communi	ty Est.
	Samp	ole	(Expand	led)	Sam	ole	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0. 0	<u> </u>	1	4.2%	1.0	4.2%
Adult Female	0		0.0		2	8.3%	2. 0	8.3%
Adult Unknown Sex	0		0. 0		7	<b>29. 2%</b>	7.0	<b>29. 2%</b>
Juvenile Male	0		00		0	0.0%	0.0	0.0%
Juvenile Female	0		0. 0		4	167%	4. 0	16.7%
Juvenile Unknown Sex	0		0. 0	-	1	4.2%	1.0	4. 2%
Pup Male	0		0. 0		0	0.0%	0.0	0.0%
Pup Female	0	<del>~</del>	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		9	37. 5%	9.0	37.5%
Total	0	-	0.0	•••	24	100.0%	24.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA L/ON AND HARBOR SEAL



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

_		SEA	LION			HARBO	R SEA	L
			Struck/	Total			Struck/	Total
	<u>Year</u>	Harvest	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	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 . <b>5</b>
	1995	0. 0	0. 0	0. 0	1995	24.0	9.0	33.0

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, 1995.

SAMPLING														
CHAIN RE	FERRA	L		То	tal Ref	erred l	Housel	nolds		69				
					Surv	∕eyed ∣	House	nolds		63				
						Sampliı	-		ç	91.3%				
						usehol				242				
			E	Estima	ted Ho	usehol	d Men	nbers		265.0				
HARVEST	AND U	ISE IN	IFORM	ATION	1									
Percentag	e of San	nple H	louseho	olds:		Ε	Estimat	ed Co	mmuni	ty Har	vest			
			Sea	Harbor		e	nd Ta	ke (Exp	bandec	1):		Sea H	larbor	
			<u>Lion</u>	Seal								Lion	<u>Seal</u>	
		used	0.0%	68.3%				To	tal Num	ber Har	vested	0.0	236.6	
	Н	unted	0.0%	57.1%				Total Nu	imber St	ruck an	d Lost	0.0	19.7	
	Har	/ested	0.0%	54.0%					Total I	Number	Taken	0.0	256.3	
	Red	ceived	0.0%	36.5%										
	Gave	Away	0.0%	36.5%				Number	Harves	sted Pe	r Capit	a NVA	N/A	
SEA LION	I HARVE Jan	EST B Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	To
REPORTED HA				-	,			nug	000		NOV			101
larvest	0	0	0	0	0	0	0	0	0	0	0	0	0	
truck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
STIMATED	-	-		-	-	UEXPAND	-	U	U	U	v	U	U	
arvest	0.0	AND 0.0	0.0	0.0	0.0	U.O	0.0	00	00	0.0	0.0	0.0	0.0	(
truck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0 0 0		0.0 0.0	0.0 0.0	
otal Take	0.0	0.0	0.0	0.0	00	0.0 0.0	00	00	0.0		0.0	0.0 0.0	0.0 0.0	( (
											0.0	0.0	0.0	l
STIMATED									•	ANDED)	~ ~	~ ~		
larvest truck <b>8</b> Loct	0.0	0.0	0.0	00	0.0	00	00	00	00	0.0	0.0	0.0		(
itruck & Lost	0.0	0.0	0.0	0.0	0.0	00	0.0	00	0.0	0.0	0.0	0.0		(
otal Take	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		(
otal 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(%)	-	****			-				-7-					
HARBOR	SEAL H	IARVE Feb	EST BY Mar			Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	To
REPORTED				Apr SAMP	May			ž		001	NOV	Dec	wonth	10
larvest	30	29	27	31	16	10	.DJ (01. 4	2	13	15	17	22	0	2
truck & Lost	0	2	0	10	0	2	1	2	0	15	0	<i>ы</i> ы 1	0	2
otal Take	30	31	27	41	16	12	5	4	13	15	17	23	0	2
STIMATED								-			.,	~*	3	-
arvest	32.9	31.8	29.6	34.0	17.5	110	44	2.2	14.2	16.4	18.6	24.1	0.0	23
Struck & Lost	0.0	2.2	0.0	11.0	0.0	22	11	2.2	0.0	0.0	0.0	11	0.0	23
otal Take	32.9	34.0	29.6	44.9	17.5	13.1	55	44	14.2	164	18.6	25.2	0.0	25
ESTIMATED								, , , , , , , , , , , , , , , , , , ,		ANDED)		23.2	0.0	20
Harvest	32.9	ALLY A 31.8	29.6	) наку 340	EST AN 17.5	D TAKE 110	вү сс 44	2.2	Y (EXP 14.2	anded) 16.4	18.6	24 1		23
	0.0	2.2	0.0	11.0	0.0	2.2	11	2.2	0.0	0.0	0.0	11		23
Struck & Lost	0.0		29.6	4.49	17.5	13 1	5.5	44	14.2	16.4	18.6	25.2		25
	32.9	34.0				13 1	J.J		14.4	10.4	10.0	2J.Z		ZJ
Struck & Lost Total Take	32.9	34.0					<b>3</b> 10/	1 70/	F 40/	6 10/	7 2%	0 0 0/		100
	32.9 12.8% 32.9	34.0 13.2% 66.8	27.0 11.5% 96.4	17.5% 141.3	6.8% 156.8	5.1% 172.0	2 1% 1774	1.7% 181.8	5.6% 196.0	6.4% 212.5	7.3% 231.1	9.8% 256.3		100.

# Table 4. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Hoonah, 1995

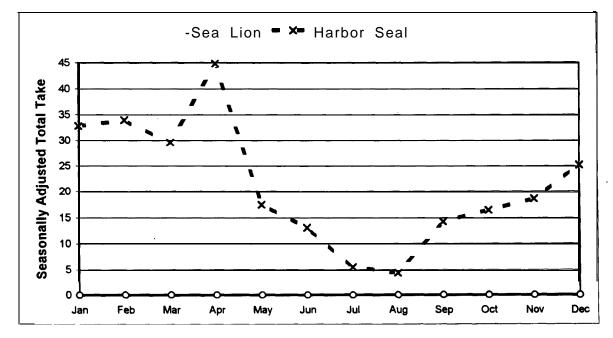
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaski a, with assistance from the Hoonah Traditional Council, 1995

# Table 4. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Hoonah, 1995

HARVEST BY AGE AND SEX

		-						
		Se	<b>a</b> Lion			Har	bor Seal	
	Reporte	dby	Communi	ty Est.	Reporte	ed by	Communit	y Est.
	Samp	le	(Expan	ded)	Sam	ple	(Expand	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		131	60.6%	143.5	60.6%
Adult Female	0		0.0	-	36	16.7%	39.4	16.7%
Adult Unknown Sex	0		0.0		40	16.5%	43.0	16.5%
Juvenile Male	0		0.0		6	2.6%	6. 6	2.0%
Juvenile Female	0		00		1	0.5%	11	0.5%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Pup Male	0		00		0	0.0%	0.0	0.0%
Pup Female	0		00		1	0.5%	1.1	0. 5%
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		00		0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0	-	1	0.5%	1.1	0. 5%
Total	0		0.0	***	216	100.0%	236. 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		ł	HARBO	r sea	L
		Struck/	Total			Struck/	Total
Year	Harvest	Lost	Take	Year	Harvest	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	350.2	24.0	375.0
1993	0.0	0. 0	0.0	1993	324.4	35.6	360.2
1994	0. 0	0. 0	0.0	1994	240.7	15.0	<b>255. 8</b>
1995	0. 0	0.0	0.0	1995	236.6	19.7	256.3

SOURCE: Alaska Department of Fishand Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Hoonah Traditional Council 1995.

SAMPLING CHAIN RE				Tot	al Rof	erred l	امديما	holds		14				
		L		101		veyed l				14				
						Samplir			Q	13 )2.9%				
				Samr		usehol	•		7	46				
			F			usehol				49.5				
HARVEST		SE IN				usener	u men							
Percentag						F	stima	ted Cor	nmunii	tv Han	lest			
loomag	o or our		Sea Ha					ake (Ex		-	1031	Sea	Harbor	
				Seal					panueu	<i>l)</i> .		Lion	Seal	
		used		38.5%				То	tal Num	her Ha	hatzavr		<u>6.5</u>	
		unted		30.8%				Total Nu				0.0	0.0	
		ested		3.8%						lumber		0.0	6.5	
		ceived		3.0 <i>%</i> 15.4%						unnei	IANCII	0.0	0.5	
		Away		15.4% 30.8%				Number	Harves	sted Pe	r Capita	a N/A	N/A	
SEA LION													Unknown	
	Jan	Feb	Mar DV CAMDU					Aug	Sep	Oct	Nov	Dec	Month	Tota
REPORTED HA Harvest	RVEST AND 0	0 TAKE 0	BY SAMPLE 0	D HOUS		(UNEXPA		Δ	Δ	-	-			
itruck & Lost	U 0	U 0	U 0	-	U 0		0	0	0	0	0	0	0	
otal Take	0	0	0	0	0	0	0 0	0 0	0 0	0 0	0 0	0	0	
	-	-	-	Ū	-	· ·	-	U	U	U	U	0	0	
STIMATED						•								•
larvest truck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	00	00	0.0	0.0	0.0	0.0	0.0	0.
otal 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	00	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 larvest	SEASUNA 00	0.0	0.0			00 O			•	ANDED)	0.0			•
Struck & Lost	0.0	0.0	0.0	0 0 0 0	0 0 0 0	00	0 0 0 0	0 0 0 0	0.0 0 0	0 0 0 0	0.0 0 0	0.0 0.0		0.
otal Take	0.0	0.0	0.0	0.0	0.0	0.0	00	00	00	00	00	0.0		0. 0.
otal Take (%)	<u></u>	•	0.0	0.0			••••					0.0		
Cum. Take	0.0	0.0	0.0	0.0	0.0	0 0	0.0	00	0.0	0.0	0.0	0.0		-
Cum Take (%)		0.0		0.0			00		00	00		0.0		
					<b>*</b>	-								
HARBOR	SEAL H Jan	IARVE Feb	EST BY Mar		TH May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tot
REPORTED														
larvest	0	1	0	2	0	0	0	0	0	1	1	1	0	
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
otal Take	0	1	0	2	0	0	0	0	0	1	1	1	0	
ESTIMATED	HARVEST	AND	ΤΑΚΕ ΒΥ	сомм	IUNITY	(EXPANI	DED)							
larvest	0.0	1.1	0.0	2.2	0.0	0.0	00	00	00	11	1.1	1.1	0.0	6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	00	00	00	00	0.0	00	00	0
fotal Take	0.0	1.1	0.0	2.2	0.0	0.0	00	00	00	1.1	11	1.1	0.0	6
STIMATED										ANDED)				
larvest	0.0	1.1	0.0	2.2	_31 AN 00	00	00	0.0	0.0	11	1.1	11		e
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0		(
otal Take	0.0	1.1	0.0	2.2	0.0	0.0	00	00	0.0	1.1	11	1.1		ĺ
otal Take (%)		16.7%	0.0%	333%	00%	0.0%	00%	00%		16.7%		16.7%		100.0
Cum. Take	0.0	10.770	1.1	3.2	3.2	3.2	3.2	3.2	3.2	4.3	5.4	6.5		
Cum. Take <b>(%</b> )		16.7%	16.7%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	 667%	83.3%	100.0%		
			10.7% Sh and t-am										arbor Seak	1-11

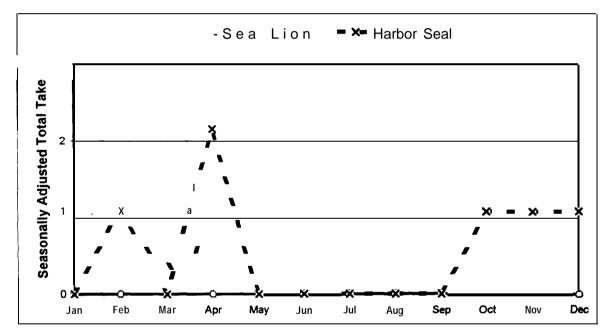
Table 5. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Hydaburg, 1995

with assistance from the City of Hydaburg and Haida Corporation, 1995

# Table 5. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Hydaburg, 1995

		Sea	Lion			Harb	or Seal	
	Reporte	d by	Community	/ Est.	Report	ed by	Commun	ity Est.
	Sam	ble	(Expand	jed)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	-	0.0	***	6	100.0%	6.5	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	<del></del>	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	<del>~.</del>	0. 0		6	100.0%	6.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_	SEA	LION		ł	HARBOI	R SEA	۸L
		Struck/	Total			Struck/	Total
Year	Harvest	Lost	<u>Take</u>	Year	Harvest	Lost	<u>Take</u>
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	0.0	6.5

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 Hydaburg and Haii Corporation, 1995

SAMPLING														
CHAIN RE	FERRA	L		To	tal Refe					82				
						eyed H			_	65				
						ampling	-		7	9.3%				
			_	-	ole Hou					205				
			E	stimat	ed Hou	sehold	Memb	bers	4	258.6				
HARVEST	AND US	SE INI	FORMA	ATION										
Percentage	of San	nple Ho	ouseho	lds:		Es	stimate	d Corr	nmunit	y Harv	est			
-			Sea Ha	rbor				e (Expa		-		Sea	Harbor	
		ļ	lion	Seal								Lion	Seal	
		Used 0	.0%	44.6%				Tota	I Numb	oer Harv	ested	0.0	42.9	
	Н	unted	0.0%	27.7%			Т	otal Nun	nber Sti	ruck and	Lost	0.0	1.3	
		/ested		21.5%					Total N	umber 1	Faken	0.0	44.2	
		ceived		33.8%										
	Gave	Away	0.0%	246%			N	umber l	Harves	ted Per	Capita	a N/A	N/A	
SEA LION	HARVE Jan	EST BY Feb	/ MON Mar	TH Apr	May	Jun	Jul	Aua	Sep	Oct	Nw		Unknown	Tota
REPORTED HAR								AUU	ତଥ	UCI	NW	Dec	Month	1012
Harvest		0 1AKE 0		ED 1100. 0		01127771	0	0	0	0	0	0	0	
Struck & Lost	0	0	0	0	0	0	0	0	0	0	ů 0	0	0	
Total Take	0	0	0	0	0	0	0	0	0	0	0	Ő	ō	
ESTIMATED I	-	-		•	-	-	-	,	Ū	Ŭ	-		•	
Harvest	0.0	0.0	00	0.0	00	00	00	0.0	0.0	0 0	0. O'	0. 0	0. 0	0.
Struck & Lost	0.0	0.0	00	00	00	00	00	0.0	0.0	0.0	0.0	00	0.0	0
Total Take	0.0	0.0	0.0	00	00	00	00	0.0	00	0.0	0.0	0.0	0.0	0.
ESTIMATED S										NDED)				
Harvest	0.0	0.0	00	00	00	00	00	0.0	0.0	00	0. 0	0. 0		0.
Struck & Lost	0.0	0.0	00	00	00	00	00	0.0	0.0	0.0	0.0	0.0		0.
Total Take	0 0	'0.0	0.0	00	00	00	0.0	0.0	0.0	0.0	0. 0	0.0		0.
Total Take (%)														
Cum Take	0.0	0.0	00	00	0 0	00	0.0	0.0	0.0	0.0	0. 0	0.0		
Cum. Take(%)			-			-			•••					
HARBOR	SEAL H		ST BV	MON	тн								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckt	Nw		Month	Tota
REPORTED H	ARVEST	AND T	AKE BY	SAMP	LED HOU	SEHOLD	S (UNE	XPANDE	ED)					
Harvest	3	5	2	2	2	0	2	2	3	1	а	4	0	3
Struck & Lost	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Take	4	5	2	2	2	0	2	2	3	1	а	4	0	3
ESTIMATED					•		ED)							
Harvest	3.0	63	2.5	25	25	0 0	25	2.5	3.8	1.3	10 1	5.0	0.0	42
Struck & Lost	1.3	0.0	0.0	0 0	00	0 0	00	0.0	0 0	0.0	0 0	0.0	0.0	1
Total Take	5.0	6.3	2.5	25	25	0 0	25	2 5	38	1.3	10 1	5.0	0.0	44
ESTIMATED								MUNITY	•	ANDED)				
Harvest	3.8	63	2.5	25	25	0 0	25	25	38	1.3	10 1	5.0		42
Struck & Lost	1.3	00	0.0	00	00	00	00	0.0	0.0	0.0	0.0	0.0		1
Total Take	5.0	6.3	2.5	2 5	2 5	00	25	25	38	1.3	to.1	5.0		44
Total Take (%)	11.4%		5.7%	57%	5.7%	00%	57%	51%	8.6%			11.4%		100.0
Cum Take	5.0	11.4	13.9	164	la9	1a9	21 4	24.0	27.8	29.0	39.1	44.2		
Cum. Take	(%) 11.49	% 257%	31.4%	311%	42 <b>9%</b>	42 <b>9%</b>	48.6%	54.3%	<b>62.9%</b>	65.7%	88.6%	100.0%		

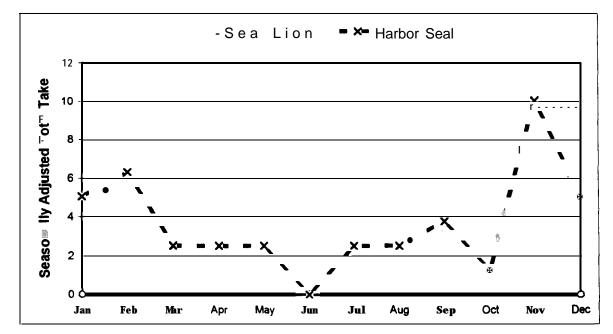
Table 6. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Juneau, 1996

# SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seats in Alaska. with assistance from the Tlingit and Haida Central Council, Sealaska, Auke Tribe Council, and ANB/ANS, 1995.

# Table 6. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Juneau, 1996

	-/ `							
		sea	Lion			Harbo	rSeal	
	Reporte	d by	Communi	ty Est	Reporte	ed by	Commun	ity Est.
	Samp	ble	(Expanded)		Sam	ple	(Expar	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		19	55. <b>9</b> %	24. 0	<b>55. 9%</b>
Adult Female	0		0.0		4	11. <b>0</b> %	5.0	11.8%
Adult Unknown Sex	0	***	0 0		8	23.5%	IO 1	23.5%
Juvenile Male	0		0 0		1	2.9%	1.3	2.9%
Juvenile Female	0		0 0		1	2.9%	1.3	2.9%
Juvenile Unknown Sex	0		0.0	•••	1	2.9%	1.3	<b>2. 9%</b>
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		34	100.0%	42.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SE	a lion		H	HARBO	r sea	AL
	Struck/	Total			Struck	Total</td
<u>Year</u> Harve	<u>st Lost</u>	<u>Take</u>	Year	Harvest	Lost	Take
1992 0.0	0.0	0.0	1992	122.6	7.6	130. 2
1993 0.0	0.0	0. 0	1993	69.0	21.6	60. 6
<b>1994</b> 1.1	0. 0	1.1	1994	70.6	13.5	92.1
1995 0.0	' 0. 0	0.0	1995	42.9	1.3	44. 2

SOURCE: Alaska Department of Fish and Game, Diin 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, 1995.

S <i>AMPLIN</i> CHAIN RE				То	tal Dat	ferred H	امینده	anlds		72				
		L		10		veyed H				49				
						Samplin				49 68.1%				
				Sami		useholo	•			202				
						ouseho			s	296.8				
						ousene			5					
HARVEST Percentag						F	stimat	ted Co	mmun	ity Harv	lost			
roroomag	0 01 001		Sea					ke (Ex		-	/03/	Sea F	Harbor	
			Lion	Seal		u	na ra		oundot	<i>.</i>		Lion	Seal	
		used		65.3%				То	tal Num	ber Harv	vested	0.0	72.0	
	н	unted		36.7%				Total Nu	umber S	truck and	d Lost	0.0	1.5	
		vested		34.1%					Total	Number	Taken	0.0	73.5	
		ceived		44.9%					. o tu					
		Away		34.7%				Numbe	r <b>Harve</b>	sted Per	Capita	N/A	N/A	
SEA LION		-											Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw		Month	Tot
REPORTED HA		) take	BY SAMP	LED HOU	SEHOLDS	(UNEXPA	NDED)							
larvest	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	
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED	HARVEST	AND	TAKE BY	Y COMM	UNITY	(EXPAND	ED)							
Harvest	0 0	0.0	0.0	00	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0.0	C
Struck & Lost	0 0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C
Total Take	0.0	00	0 0	0.0	00	0.0	0 0	00	0.0	0 0	0.0	0.0	0.0	0
ESTIMATED	SEASONA	ALLY A	DJUSTED	) HARVE	EST AN	D TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
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		C
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		C
T <b>ota</b> i 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
Total Take (%)														
Cum Take	0.0	00	0 0	0 0	0.0	0.0	0.0	0.0	00	0 0	0.0	0.0		
Cum Take (%)		***			1940 V		***	1,01	•••					
HARBOR						I	L.I.	<b>A</b>	0	0.1	N	0	Unknown	т.
		Feb		Apr		Jun			Sep	Cd	Nov	Dec	Month	To
REPORTED Harvest	1 1 TARVEST	AND 7	1AKE B						-	-	2	11	2	
	•			1	1	1	3	4	8	5	3	11	2	
Struck & Lost Total Take	<b>0</b> 1	0 7	1 3	<b>0</b> 1	0	<b>0</b> 1	0 3	0	0	0	0 3	0		
				•	1	-	-	4	8	5	3	11	2	
ESTIMATED												44.0		-
Harvest	1.5	10.3	2.9	1.5	1.5	1.5	44	5.9	11.8	7.3	4.4	16.2		72
Struck & Lost	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		-
Total Take	1.5	10.3	4.4	1.5	1.5	1.5 D. TAKE	44	5.9	11.8	7.3	4.4	16.2	2.9	7:
ESTIMATED									•	ANDED)				_
Harvest	1.5	107	3.1	1.5	1.5	1.5	46	61	123	7.7	46	16.9		7.
Struck & Lost	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		-
Total Take	1.5	10.7	4.5	1.5	1.5	1.5	46	6.1	12.3	7.7	4.6	16.9		7
Total Take (%) Cum. Take		14.6%	6.2%	2.1%	2.1%	2 1%	6.3%	8.3%	16.7%			22.9%		100.
	1.5	12.3	16.8	18.3	199	21 4	26.0	321	444	52.0	56.6	73.5		

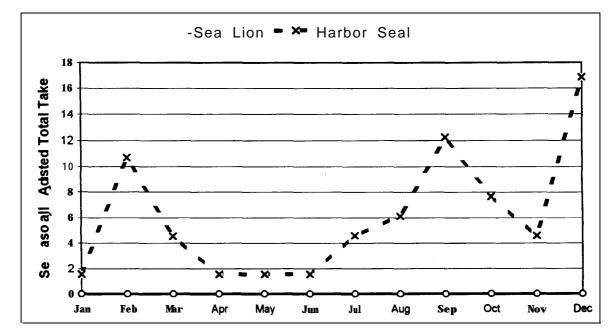
SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for See Liis and Harbor Seals in Alask with assistance from the Organized Village of Kake and City of Kake, 1995

# Table 7. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Kake. 1995

#### HARVEST BY AGE AND SEX

		Sea	Lion			Hart	or Seal	
	Reporte	d by	Communi	ty Est	Reporte	ed by	Communi	ty Est.
	Sam	ble	(Expan	ded)	Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		30	61.2%	44.1	61.2%
Adult Female	0		0.0		7	14.3%	10.3	14.3%
Adult Unknown Sex	0		0.0	-	2	4.1%	2. 9	4.1%
Juvenile Male	0		0.0	-	10	204%	14.7	20.4%
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		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	***	49	1000%	72.0	100.0%

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



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

_		SEA	LION		H	IARBOI	R SEA	L
			Struck/	Total			Struck/	Total
	Year	<u>Harvest</u>	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	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	<b>99.</b> 3	7.4	106.6
	1995	0.0	0. 0	0. 0	1995	72.0	1.5	73.5

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 Organized Village of Kake and City of Kake, 1995

SAMPLING				_										
CHAIN RE	FERRA	L		Tot		erred H				19				
						eyed H				9				
				C		Samplin	•		1	47.4%				
						useholo useholo				21 44.3				
			C	Stillate	ей по	usenon	u men	IDel S		44.0				
HARVEST			• • • • • • • • • • • • • • • • • • • •			_								
Percentag	e of San	nple H						ted Co		-	vest	-		
			Sea Ha			a	nd Tal	ke (Exp	panded	l):			Harbor	
			Lion	<u>Seal</u>				-				Lion	Seal	
		Used (		22.2%					tal Num			0.0	46.4	
		unted		22.2%				Total Nu				0.0	0.0	
		vested eived		22.2%					lotal r	Number	Taken	0.0	46.4	
		Away		0.0% 11 1%				Number		tod Do	r Canit	2 NUA	N/A	
SEA LION									naives	sieu rei	Capit	anva	Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA														
Harvest	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
Total Take	0	0	0	0	0	0	0	0	0	0	0	(	) '0	0
ESTIMATED					•	EXPAND								
Harvest	0.0	00	0.0	00	00	00	00.		00	00	0.0	0.0		0.0
Struck & Lost	0.0	00	00	00	00	00	00	00	00	00	0.0	0.0		00
Total Take	0.0	00	00	00	00	00	00	00	00	00	0 0	0.0	) 0.0	0.0
ESTIMATED								MMUNIT	-	-				
Harvest	0.0	0.0	0.0	0.0	00	00	00	00	00	00	0.0	00		0.0
Struck & Lost	0.0	0.0	0.0	00	00	00	00	00	0.0	00	00	00		0.0
Total Take	0.0	0.0	0.0	0.0	00	00	00	00	00	0 0	0.0	0.0	)	0 0
Total Take (%) Cum. Take	0.0	0.0	0.0	 0 0		0.0							-	
Cum. Take(%)	0.0	00	0.0	0.0	00	00	00	00	00	0.0	0 0	0.0	J	
		-					-						•	
HARBOR	SEAL H Jan	IARVE Feb	EST BY Mar	MON7 Apr	ГН May	Jun	Jul	Aug	Sep	Cct	Nov	De	Unknown cMonth	Total
REPORTED	HARVEST	AND	ΤΑΚΕ ΒΥ	SAMPL	ED HO	USEHOL	DS (UN	IEXPAND	DED)					
Harvest	5	5	4	4	0	0	0	0	0	0	4	(	0 0	22
Struck & Los!	0	0	0	0	0	0	0	0	0	0	0		0 0	0
Total Take	5	5	4	4	0	0	0	0	0	0	4		0 0	22
ESTIMATED	HARVEST	AND	ΤΑΚΕ ΒΥ	СОММ	UNITY (	EXPAND	DED)							
Harvest	10.6	10.6	8.4	84	0 0	0 0	0 0	00	00	0.0	84	0.	0.0	464
Struck & Lost	0.0	0 0	0 0	0 0	0 0	0 0	0 0	00	00	0.0	0 0	0.	0 00	0.0
Total Take	10.6	10.6	8.4	84	0.0	0 0	0 0	00	00	0 0	84	0.	0.0	46.4
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARVE	ST AND	D TAKE	BY CC	OMMUNIT	Y (EXP	ANDED)				
Harvest	10.6	10.6	84	84	0 0	0 0	0 0	00	00	0 0	84	0	0	464
Struck & Lost	0 0	0.0	0 0	0.0	0.0	0 0	0 0	00	0.0	0.0	0.0	0.	0	0.0
Total Take	10.6	10.6	84	84	0 0	0 0	0 0	00	0.0	0.0	84			46.4
Total Take					0.0%	00%	00%	00%	00%	0.0%	18.2%			100.0%
Cum. Take	10.6	21.1	29.6	38.0	38.0	38.0	38 0	38.0	38.0	38.0	46.4			
Cum Take (	%) 22.7%	45.5%	63.6%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	100.0%	100.0	*	

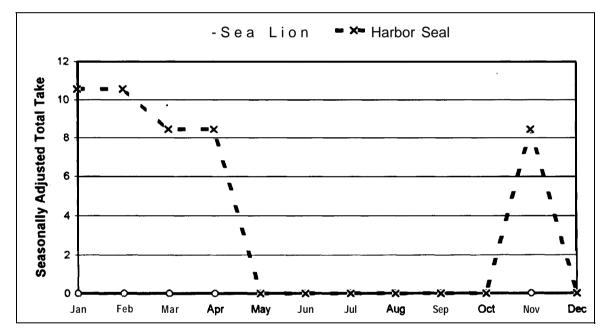
Cum Take (%) 22.7% 45.5% 63.6% 81.8% 81.8% 81.8% 81.8% 81.8% 81.8% 81.8% 81.8% 81.8% 81.8% 100.0% 100.0% SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Ketchikan IRA Council and Ketchikan Indian Corporation, 1995.

# Table 8. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Ketchikan, 1995

# HARVEST BY AGE AND SEX

		<b>C</b>	1.1				na Caal	
		Sea	Lion			Harb	or Seal	
	Reporte	dby	Communit	iy Est.	Reporte	ed by	Commun	i <b>ty</b> Est.
	Samp	le	(Expan	ded)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		12	54.5%	25.3	54.5%
Adult Female	0		0.0		10	45.5%	21.1	45.5%
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	***	22	100.0%	46.4	100.0%

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



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

	SEA	LION		H	IARBO	R SEA	AL
		Struck/	Total			Struck	Total
<u>Year</u>	Harvest	Lost	Take	Year	Harvest	Lost	Take
1992	0.0	0.0	0.0	1992	90.2	6.5	98.8
1993	0.0	0.0	0.0	1993	42.4	2.9	46.3
1994	0.0	0.0	0.0	1994	31.4	0.0	31.4
1995	0.0	0.0	0.0	1995	46.4	0.0	46.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Ketchikan IRA Council and Ketchikan Indian Corporation, 1995

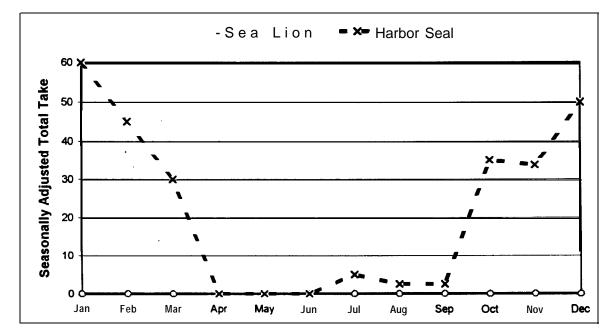
SAMPLING		-												
CHAIN REF	ERRA	L		Tot	al Refe	erred H	louse	holds		25				
					Surv	eyed H	louse	holds		20				
						amplir	-		60	0.0%				
					le Hou					72				
			E	stima	ted Ho	useho	old Mo	embers	i	90.0				
HARVESTA	ND U	SE IN	FORM	ATION										
Percentage	of San	nple Ho	ouseho	lds:		E	stima	ted Col	mmuni	ty Harv	/est			
			Sea H	larbor				ke (Exp		-		Sea	Harbor	
		<u> </u>	Lion	<u>Seal</u>								Lion	<u>Seal</u>	
		Used 0.	.0%	95.0%				To	tal Num	ber <b>Harv</b>	rested	0.0	263.8	
	н	unte	d 0.0%	90.0%				Total Nu	imber St	truck an	d Lost	0.0	0.0	
	Harv	vested (	0.0%	75.0%					Total I	Number	Taken	0.0	263.8	
	Rec	eived	0.0%	35.0%										
	Gave	Away	0.0%	65.0%				Number	Harves	ted Per	Capita	a NVA	N/A	
SEA LION	HARVE Jan	EST BY Feb	/ MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tot
REPORTED HAR				•				Aug	υφ	0.1	NOV	Dec	WOITTI	10
larvest	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	
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED H	ARVEST	AND T	ΑΚΕ ΒΥ	СОММ	JNITY (I	EXPAND	ED)							
larvest	0.0	0.0	00	00	00	00	, 0 0	0.0	0.0	00	0.0	0.0	0.0	(
Struck & Lost	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C
Total Take	0.0	0.0	0.0	00	00	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	(
ESTIMATED S	EASONA	LLY AD.	JUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	γ (ΕΧΡ	ANDED)				
larvest	0.0	00	0.0	00	0 0	0.0	00	0.0	0.0	0.0	0.0	0.0		(
Struck & Lost	0.0	00	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0		(
Fotal 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		(
Fotal Take (%)					***					<b></b> -		-		
Cum Take	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)	***								-			-		
HARBOR S	SEAL H	IARVE	ST BY	MONT	ГН								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	To
REPORTED H							•			00		10	•	
Harvest	48	36	24	0	0	0	4	2	2	20	27	40	0	2
Struck & Lost Total Take	0	0 36	0	0	0	0	0 4	0 2	0 2	0	0 27	0	0	
	40		24	0	0	0	-	2	2	20	21	40	0	2
ESTIMATED H Harvest	1ARVEST 60.0	AND I 45.0	30.0	СОММ 0.0	UNITY ( 00	EXPANL 00	-	2.5	2.5	3E 0	<b>,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	E0 0	0.0	20
							5.0			35.0	33.8	50.0		28
Struck & Lost	0.0	0.0 45.0	0.0	0.0	00	0.0	00	0.0 2 5	0.0 2 5	0.0 25.0	0.0	0.0 50.0		20
Total Take	60.0	45.0	30.0	0.0	0.0	00 	50 DV C	2.5	2.5 V (EVD	35.0	33.8	50.0	0.0	28
ESTIMATED S									•	ANDED)		F0 0		~
Harvest Struck <b>8</b> Loct	60.0	45.0	30.0	00	0.0	00	50	25	2.5	35.0	33.8	50.0		26
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 ס בב	0.0		24
Total Take	60.0	45.0	30.0	0.0	0.0%	0.0	5.0	2.5	2.5	35.0	<b>33.8</b>			26
TotalTake Cum Taka				0.0%	0.0%	0.0%	1.9%	0.9%	0.9% 145.0	13.3%	12.8%	19.0%		100.
Cum Take	60.0	105.0	135.0	135.0	135.0	135.0	140.0	142.5	145.0	180.0	213.8		,	
Cum Take(%)	22.7%	39.8%	51.2%	51.2%	51.2%	51.2%	53.1%	54.0%	55.0%	68.2%	81.0%	100.0%		

Table 9. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Klawock, 1996

SOURCE. Alaska Department of Fish and Game, Division of Subsistence. Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska with assistance from the Klawock Cooperative Association and Klawock Heenya Corporation, 1995.

		•				11	+ 0 1	
		Sea	Lion			Hai	<b>bo</b> rSeal	
	Reporte	dby	Communi	ty Est.	Reporte	ed by	Commun	ity Est.
	Samp	ke	(Expan	ded)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0	_	120	60.7%	160.0	60.7%
Adult Female	0		0.0	-	28	13.3%	35.0	13.3%
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Juvenile Male	0		0.0		5	2.4%	6.3	2.4%
Juvenile Female	0		0.0		6	2.6%	7.5	2.6%
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		15	7.1%	10.0	7.1%
Female Unknown Age	0		00	-	10	8.5%	22.5	8.5%
Unknown Sex and Age	0	•	0.0		11	5.2%	13.6	5.2%
Total	0		0.0		211	100.0%	263.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		F	IARBO	r sea	AL
		Struck/	Total			Struc	k/ Total
Yea	ar <u>Harvest</u>	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
199	<b>92</b> 1.4	0.0	1.4	1992	39.0	1.4	40.3
199	<b>33</b> 0.0	0.0	0.0	1993	39.8	0.0	39.8
199	<b>4</b> 0.0	0.0	0.0	1994	71.1	0.0	71.1
199	<b>95</b> 0.0	0.0	0.0	1995	283.8	0.0	X3.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for See Liins and Harbor Seals in Alaska, with assistance from the Klawock Cooperative Association and Klawock Heenya Corporation, 1995.

Table IO. SEA LION A	AND HARI	BOR SEA	L HARV	'EST A	ND TA	KE ES	STIMA	TES:	Kluk	wan, <b>19</b>	95
SAMPLING DESIGN: CHAIN REFERRAL		Total R	eferred l	Househ	olds		16				
		Su	rveyed l				5				
			Samplir	•		3	1.3%				
		Sample F	lousehol	d Mem	bers		21				
	Es	timated H	lousehol	d Mem	bers		67.2				
HARVEST AND USE I	NFORMA	TION									
Percentage of Sample	Household	ds:	E	Estimate	əd Con	nmunit	y Harv	rest			
	Sea Har	bor	ε	and Tak	(Exp	anded	):		Sea	Harbor	
	Lion S	Seal							Lion	<u>Seal</u>	
Used	0.0% 100	.0%			Tota	al Numb	<b>er</b> Harv	vested	0.0	36.2	
Hunted	0.0% 6	0.0%		T	Fotal Nur	mber St	<b>uck</b> and	d Lost	0.0	6.4	
Harvested	0.0% 6	0.0%				Total N	umber <sup>·</sup>	Taken	0.0	41.6	
Received	0.0% 6	0.0%									
Gave Awa	<b>y0.0%</b> 4	0.0%		ľ	Number	Harvest	ed Per	Capita	a NVA	N/A	
SEA LION HARVEST	BY MONT	Ή								Unknown	
Jan Feb	Mar	Apr May	y Jun	Jut	Aug	Sep	Oct	Nov	De	≎ Month	Tota
REPORTED HARVEST AND TAKE	BY SAMPLE	d hduseholi	)s (UNEXPA	NDED)							
Harvest 0 0	0	0 0	0 0	0	0	0	0	0		D 0	(
Struck & Lost 0 0	0	0 0	0 0	0	0	0	0	0	(	D 0	
Total Take 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	ΤΑΚΕ ΒΥ	COMM	UNITY (E	EXPAND	ED)							
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	00	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	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY CO	ΜΜυΝΙΤΥ	(EXPA	NDED)				
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 (%)							-							

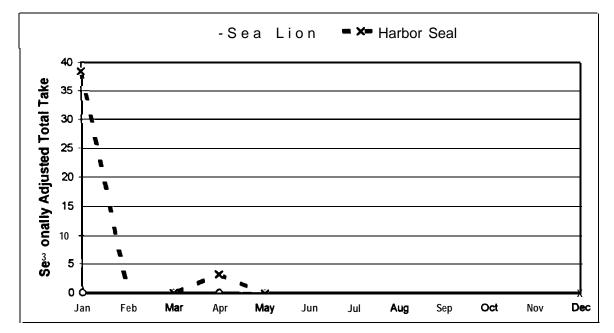
HARBOR	SEAL H	IARVE	ST BY	MON	TH							U	nknown	
	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED	HARVEST	AND 1	ΓΑΚΕ ΒΥ	SAMPI	ED HO	USEHOL	.DS (UNE	XPANDE	D)					
Harvest	10	0	0	1	0	0	0	0	0	0	0	0	0	11
Struck & Lost	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Take	12	0	0	1	0	0	0	0	0	0	0	0	0	13
ESTIMATED	HARVES	T AND	TAKE BY	COMN	IUNITY	(EXPANI	DED)							
Harvest	32.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.2
Struck & Lost	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4
Total Take	364	0 0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.6
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARVI	EST AN	D TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	32.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		36.2
Struck & Lost	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		6.4
Total Take	364	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0		41.6
Total Take (%)	923%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	36.4	38.4	38.4	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6		
Cum. Take	(%) 923%	923%	92.3%	100.0%	100.0%	100.0%	100.0%	160.0%	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 Chilkat Indian Village, 1995

# Table 10. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Klukwan, 1995

		Sea	Lion			Harb	or Seal	
	Reporte	dby	Community	y Est.	Reporte	ed by	Communi	ty Est.
	Samp	le	(Expand	ed)	Sam	ple	(Expan	ded)
	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	9.1%	3.2	9 1%
Juvenile Male	0		0.0		2	18.2%	6.4	18.2%
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		8	72.7%	25.6	72.7%
Total	0		0.0		11	100.0%	35.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA L/ON AND HARBOR SEAL



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

	SEA	LION			HARBO	r se <i>i</i>	AL
		Struck/	Total			Struck	/ Total
Year	<u>Harvest</u>	Lost	Take	<u>Year</u>	Harvest	Lost	<u>Take</u>
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	8.4	41.8

SOURCE- Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor Syslem for Sea Lions and Harbor Seals in Alaska, with assistance from the Chilkal Indian Village, 1995.

Table 11. SEA LION AND	HARBOR SEAL HARVEST AND TAP	KE ESTIMATES: Pelican, 1995	
SAMPLING DESIGN:			
CHAIN REFERRAL	Total Referred Households	18	
	Surveyed Households	16	
	Sampling Fraction	88.9%	
	Sample Household Members	53	
	Estimated Household Members	59.6	

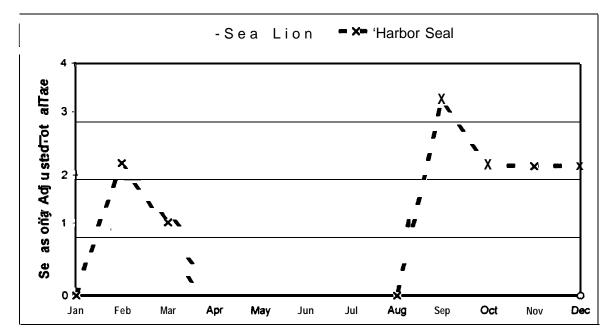
HARVESTA	ND U	SE IN	FORMA	TION										
Percentage	of San	nple H	ouseho	lds:		E	stimat	ed Cor	nmunit	y Harv	rest			
			Sea Ha	rbor		а	nd <b>Ta</b> l	ke (Ex	pandeo	l):		Sea H	arbor	
			Lion	Seal								Lion	<u>Seal</u>	
		used 0	).0%	87.5%				Tot	al Numb	per H <b>arv</b>	ested	0.0	13.5	
	Н	unted	0.0%	438%				Total <b>Nu</b>	<b>mber</b> St	ruck and	l Lost	0.0	0.0	
	Harv	vested	0.0%	43.8%					Total N	iumber	Taken	0.0	13.5	
	Rec	ceived	0.0%	50.0%										
	Gave	Away	0.0%	43.8%				Number	Harves	ted Per	Capita	N/A	N/A	
SEA LION	HARVE Jan	EST BY Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Ckt	Nov		Jnknown Month	Total
REPORTED HAR	VEST AND	TAKE E	BY SAMPLI	ED HOUS	SEHOLDS	(UNEXPA	NDED)		•					
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 I	HARVEST	AND	ΓΑΚΕ ΒΥ	сомм	UNITY (	EXPAND	ED)							
Harvest	0.0	0.0	0 0	00	00	00	, 00	00	00	0.0	00	0.0	0.0	0.0
Struck & Lost	0.0	00	0 0	00	0.0	0.0	00	0.0	00	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0 0	00	0.0	0.0	00	0.0	00	0.0	0.0	0.0	0.0	0 0
ESTIMATED S	EASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Y (EXPA	NDED)				
Harvest	0.0	00	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	00	0.0	0.0	00	00	0.0	0.0	0.0	0.0	0.0	0 0	0.0		0.0
Total Take	0.0	<b>'0.0</b>	0.0	00	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0		0.0
Total Take (%)														
Cum Take	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0		
Cum Take (%)			-							•••		84-		
					TU								Unknown	-
HARBOR S	Jan	Feb	ST BY Mar	Apr	Г <del>П</del> Мау	Jun	Jul	Aug	Sep	Oct	Nov		Unknown M o n t h	Total
REPORTED H	ARVEST	AND T	ΑΚΕ ΒΥ	SAMP	LED HO	USEHOL	DS (UN	EXPAND	ED)					
Harvest	0	2	1	0	0	0	0	0	3	2	2	2	0	12
Struck 8 Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	2	1	0	0	0	0	0	3	2	2	2	0	12
ESTIMATED F	IARVEST	AND 1	ΓΑΚΕ ΒΥ	COMN	IUNITY (	EXPANE	DED)							
Harvest	0.0	2.3	11	0.0	0.0	0.0	0.0	0.0	3.4	2.3	2.3	2.3	0.0	135
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	2.3	1.1	0 0	0.0	0 0	0 0	0 0	34	2.3	2.3	2.3	0.0	13.5
ESTIMATED S	SEASONA	ALLY AD	DJUSTED	HARVI	EST AND	Ο ΤΑΚΕ	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	0.0	2.3	1 1	0.0	0.0	0.0	0.0	0.0	3.4	2.3	23	2.3		13.5
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	2.3	1.1	0.0	0.0	0.0	0 0	0.0	34	2.3	2.3	2.3		13.5
Total Take (%)	0.0%	16.7%	8.3%	0.0%	0.0%	0.0%	00%	0.0%	250%	16.7%	16.7%	16.7%		100.0%
Cum. Take	0.0	2.3	3.4	34	3.4	34	34	34	6.8	9.0	11.3	13.5		
Cum. Take (%)	0.0%	16.7%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	50.0%	66.7%	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 City of Pelican, Tlingit and Haida Indians of Pelican Community Council, 1995.

# Table il. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Pelican, 1995

		Sea	Lion			Har	bor Seal	
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Commur	ity Est.
	Samp	de	(Expan	ded)	Sam	de	(Expa	ndied)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		8 (	56.7%	9.0	66.7%
Adult Female	0		0.0		3	25.0%	3.4	25.0%
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Juvenile Male	0		0.0		1	0.3%	1.1	0.3%
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%	. 13.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

		SEA L	.ION		F	IARBOF	R SEA	L
			Struck/	Total			Struck/	Total
Ye	ar E	arvest	Lost	<u>Take</u>	Year	Harvest	Lost	Take
19	92	0.0	0.0	0.0	1992	6.3	1.4	9.7
19	93	0.0	0.0	0.0	1993	5.3	1.1	6.4
19	94	0.0	0.0	0.0	1994	4.4	1.1	5.6
19	95	0.0	0.0	0.0	1995	13.5	0.0	13.5

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 Mans of Pelican Community Council. 1995

<b>J</b> ,	_
irbor	
<u>Seal</u>	
13.6	
1.1	
14.7	
	otal
0	0
0	0
0	0
0.0 0	0.0
0.0 0	0.0
00 0	00
0	00
0	0.0
0	0.0
	otal
	otui
0	12
0	1
0	13
0.0 13	13.6
0.0	11
0.0 14	14.7
1	13.6
	11
1	14.7
100.0	).0%
	13.6         1.1         14.7         NVA         nknown         10 nth         0         10         10         10         10         10         10         10         10         10         10

# Table 12. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Petersburg, 1995

 Cum Take (%)
 0.0%
 0.0%
 23.1%
 23.1%
 231%
 23.1%
 23.1%
 53.8%
 84.6%
 100.0%

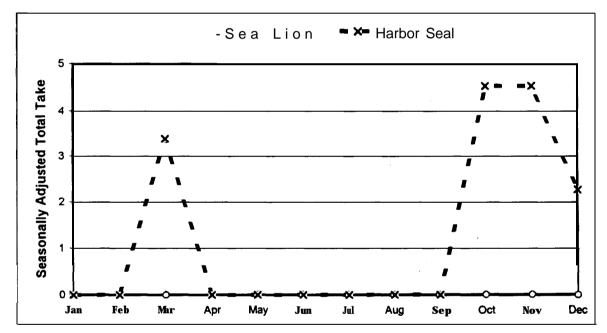
 SOURCE
 Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaskia, with assistance from the Petersburg Indian Association, 1995.
 100.0%

# Table 12. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Petersburg, 1995

HARVEST BY AGE AND SEX

	_//						•	
		Se	ea Lion			Harbo	r Seal	
	Reported	d by	Communit	ty Est	Report	ed by	Commun	ity Est.
	Samp	ke	(Expand	ded)	San	de	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		8	<b>66.</b> 7%	9. 0	<b>66.</b> 7%
Adult Female	0		00		3	25.0%	3.4	25.0%
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Juvenile Male	0	-	0.0		1	8.3%	1.1	8.3%
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%	13.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

		SEA	LION		F	IARBO	r sea	L
			Struck/	Total			Struck/	Total
Ye	ear	<u>Harvest</u>	Lost	Take	Year	<u>Harvest</u>	Lost	<u>Take</u>
19	92	0.0	0.0	0.0	1992	22.4	2.6	25.0
19	93	0.0	0.0	0.0	1993	4.5	4.5	9. 0
19	94	0.0	0.0	0.0	1994	15.2	1.3	16.4
19	95	0.0	0.0	0.0	1995	13.6	1.1	14.7

SOURCE, Alaska Department of Fish and Game, Drvisiin of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Petersburg Indian Association, 1995.

SAMPLING	DESIG	GN:												
CHAIN RE	FERRA	L		То	tal Ref	erred H	lousel	nolds		11				
					Surv	eyed H	lousel	nolds		9				
					S	Samplin	g Fra	ction	8	81.8%				
				Samp	ole Ho	usehold	d Men	nbers		43				
			E	stimat	ted Ho	usehold	d Men	nbers		52.6				
HARVEST	AND U	SE IN	FORMA	ATION										
Percentage	e of San	nple H	ouseho	lds:		E	stimat	ted Col	mmunit	ty Harv	/est			
			Sea Ha	rbor		a	nd Ta	ke (Exp	banded	<i>):</i>		Sea H	larbor	
			Lion	Seal								Lion	Seal	
		used (	0.0%	66.7%				То	tal Num	ber Harv	rested	0.0	15.9	
	Hu	unted 0	.0%	55.6%				Total Nu	mber St	ruck and	d Lost	0.0	0.0	
	Harv	vested	0.0%	55.6%					Total N	lumber	Taken	0.0	15.9	
	Rec	eived	0.0%	55.6%										
	Gave	Away O	.0%	44.4%				Number	Harves	ted Per	Capita	a N/A	N/A	
SEA LION	HARVE Jan	ST BY Feb	MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tota
REPORTED HAR	VEST AND	TAKE E	BY SAMPLI	ED HOUS	SEHOLDS	(UNEXPAN	NDED)							
larvest	0	0	0	0	0	0	0	0	0	0	0	0	0	
itruck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
STIMATED H	ARVEST	AND T	ΑΚΕ ΒΥ	сомм	UNITY (	EXPAND	ED)							
larvest	0.0	0.0	0.0	00	0 0	0 0	00	0 0	0 0	0.0	0.0	0.0	0.0	0
truck & Lost	0.0	0.0	0 0	00	0 0	0 0	00	0 0	0 0	0 0	00	00	0.0	0
otal Take	0 0	00	0 0	0 0	0 0	0 0	00	0.0	0.0	00	0.0	00	0.0	0
STIMATED	SEASONA	LLY AC	JUSTED	HARVE	ST AND	ΤΑΚΕ	ву со	MMUNIT	Y (EXPA	ANDED)				
larvest	0.0	0.0	0.0	0 0	0 0	0 0	00	0.0	0.0	0.0	0.0	0.0		0
struck & Lost	0.0	0.0	0.0	00	0 0	0 0	0.0	0 0	0.0	0 0	0.0	0.0		0
otal 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		0
otal Take (%)				<del></del> .										
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		
UM Take(	%)	-												
HARBOR	SEAL <b>H</b>	ARVE	ST BY	MON	ТН								Unknown	
-	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	To
REPORTED I	HARVEST	AND T	AKE BY	SAMP	LED HO	USEHOLI	DS (UN	IEXPAND	ED)					
larvest	0	0	2	0	0	0	0	0	0	1	3	2	5	
itruck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Take	0	0	2	0	0	0	0	0	0	1	3	2	5	
ESTIMATED					-	(EXPAND	ED)							
larvest	0.0	0.0	24	00	0 0	00	0 0	0.0	0 0	1.2	3.7	2.4	61	1!
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	0.0	0.0	0 0	0.0	0 0	0.0	0.0	(
Total Take	0.0	0.0	24	0 0	0 0	0 0	0 0	0.0	0.0	1.2	3.7	2.4	6.1	1
ESTIMATED								OMMUNIT	•	ANDED)				
Harvest	0.0	0.0	4.0	00	00	00	00	00	00	2.0	6.0	40		1
Struck & Lost	0.0	0.0	0.0	0.0	00	00	00	0.0	00	0.0	0.0	0.0		(
	0.0	0.0	4.0	00	00	0 0	0 0	0.0	0.0	2.0	6.0	4.0		1!
Total Take Total Take (%) Cum. Take	0.0% 0.0	0.0% 0.0	250% 4.0	0.0% 4.0	00% 4.0	00% 4.0	00% 4.0	0.0% 4.0	00% 4.0	12.5% 6.0	37.5% 11.9	25.6% 15.9		100.

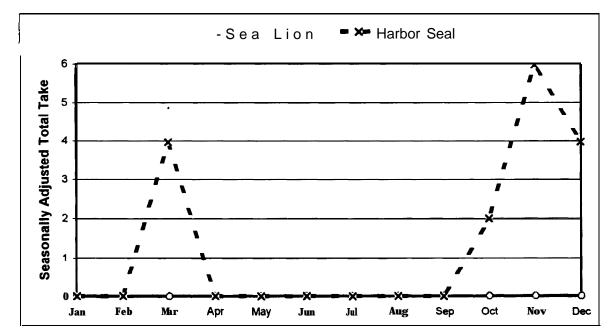
 Cum. Take (%)
 0.0%
 0.0%
 25.0%
 25.0%
 25.0%
 25.0%
 25.0%
 37.5%
 750%
 100.0%

 SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alask a, with assistance from the City of Saxman and Saxman IRA Council, 1995.
 100.0%

# Table 13. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Saxman, 1995

		Sea	Lion			Harbo	rSeal	
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.
	Samp	he	(Expanded	}	Sam	p <del>le</del>	(Expar	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		9	69.2%	11.0	69.2%
Adult Female	0		0.0		3	231%	3.7	23.1%
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Juvenile Male	0		0.0		1	7.7%	1.2	7.7%
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		13	100.0%	15.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_		SEA	LION		F	IARBO	R SEA	L
_			Struck/	Total			Struck/	Total
	Year	<u>Harvest</u>	Lost	Take	Year	Harvest	Lost	<u>Take</u>
	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	0.0	15.9

SOURCE: Al aska 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, 1995.

Table 14.	SEA LI	ON AN	ND HAI	RBOR	SEAL	HAR∖	/EST A	ND TA	AKE ES	STIMA	TES:	Sitka,	1995	
SAMPLING							1	Active	<u>(</u>	<u>)ther</u>		Total		
TWO-STR	ΑΤΑ		Total N					75		525		600		
				eyed				72		36		108		
				Samplii	-		ç	06.0%		<b>6.9</b> %		18.0%		
		Samj	ple Ho	usehol	d Men	nbers		233		108		341		
	E	Estimat	ted Ho	usehol	d Men	nbers		242.7		1575.0		1017.7		
HARVEST	AND U	ISE IN	IFORM,	ATION										
Percentage	e of Nat	ive Ho	usehol	ds:		I	Estimat	ed Co	mmunit	y Harv	est			
-			Sea Ha	arbor			and Ta					Sea H	arbor	
			Lion	Seal								Lion	Seal	
		used (	0.0%	84 7%				To	tal Numl	oer H <b>ar</b>	/ested	0.0	93.0	
	Н	unted	0.0%	22.9%				Total Nu	imber St	ruck an	d Lost	0.0	6.3	
	Harv	vested	0.0%	6.3%					Total N	lumber	Taken	0.0	100.0	
	Rec	eived	0.0%	821%										
	Gave	Away	0.0%	12.0%			l	Number	Harvest	ed Per	Capita	0.00	0.05	
SEA LION					Maria		1.1	10	0	014	Neri		Jnknown	Til
REPORTED HAP	Jan RVEST AND	Feb	Mar Ay sampi	Apr	May SEHOLDS			Au9	Sep	Ckt	Nov	Dec	Month	Tota
REPORTED HAP Harvest	RVEST AND 0		ST SAMPL	ED HOU: 0	0 O		ANDED) O	0	0	0	0	0	0	
Struck & Lost	0	0	0						0					
Fotal Take	0	0	0	0 0	0 0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	I
ESTIMATED	-	-	-	-	-	-		U	U	U	U	Ū	U	
Harvest	0.0	0.0	аке вт 0.0			(EXPANI		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	0.0	0.0	0.0	0.
fotal Take	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.
				00	00	00 5 7 4 4 5	00	00	0.0	0.0	0.0	0.0	0.0	0.
ESTIMATED							BY CO		•	NDED)				
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.
Struck & Lost	0.0	0.0	00	0.0	0.0	0.0	00	00	0.0	0.0	0.0	0.0		0.
Total Take Total Take (%)	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.
						-	_							
Cum Take	0.0 Taka (%)	0.0	0 0	00	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0		
Cum	Take/%\	***		~										
HARBOR	SEAL H Jan	IARVE Feb	ST BY Mar	MON Apr	TH May	Jun	Jul	Au9	Sep	Ckt	Nov	Dec	Unknown <b>Month</b>	Tota
REPORTED I					, , , , , , , , , , , , , , , , , , ,					ont	1101			
Harvest	7	12	14	12	2	1	4	1	5	9	13	10	0	9
Struck & Lost	0	0	1	2	0	0	0	0	0	1	2	0	0	
Total Take	7	12	15	14	2	1	4	1	5	10	15	10	0	g
ESTIMATED	HARVEST	AND	ΓΑΚΕ Β	COMN	IUNITY	(EXPAN	DED)							
Harvest	1.3	12.5	14.6	12.5	2.1	1.0	42	1.0	5.2	94	13.5	10.4	0.0	93
Struck & Lost	0.0	0.0	1.0	2.1	0.0	0.0	0 0	0.0	0.0	1.0	2.1	0 0	0.0	6
Total Take	7.3	12.5	15.6	14.6	21	1.0	4.2	10	5.2	10.4	15.6	104	0.0	loo
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AN	D TAKE	ву со	MMUNIT	Y (EXP	ANDED)				
Harvest	7.3	12.5	14.6	12.5	2.1	1.0	4.2	1.0	5.2	94	13.5	10.4		93
Struck & Lost	0.0	0.0	1.0	2.1	0.0	0.0	0 0	0.0	0.0	1.0	2.1	0.0		6
Total Take	7.3	12.5	15.6	14.6	2.1	1.0	4.2	1.0	5.2	10.4	15.6	10.4		100
Total Take (%)	7.3%	12.5%	15.6%	14.6%	2.1%	1.0%	4.2%	1.0%	52%	10.4%	15.6%	10.4%		100.0
Cum. Take	7.3	19.8	35.4	50.0	52.1	53.1	57.3	58.3	63.5	74.0	896	100.0		
Cum Take (%)	7.3%	19.8%	35.4%	50.0%		531%	57.3%	59.3%	63.5%	74.0%	896%	100.0%		

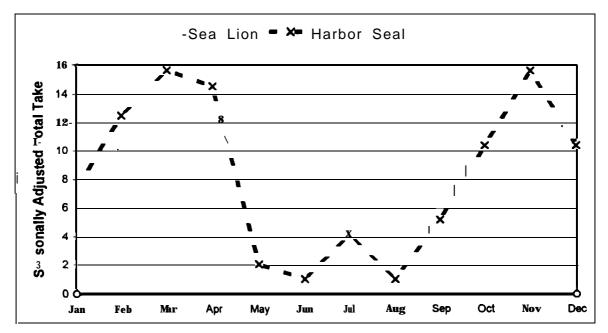
SOURCE Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alask wilh assistance from the ANB and Sitka Tribal Association, 1995

# Table 14. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Sitka, 1995

HARVEST BY AGE AND SEX

		Sea	aLion		Harbor Seal				
	Reporte	d by	Communi	ty Est.	Report	edby	Communi	ity Est.	
	Samp	le	(Expan	ded)	Sam	ple	(Expar	nded)	
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0		0.0		34	31.6%	35.4	37.6%	
Adult Female	0		0.0		16	17.6%	16.7	17.6%	
Adult Unknown Sex	0		0.0		4	44%	4.2	4.4%	
Juvenile Male	0		0.0		24	26.7%	25.0	26.7%	
Juvenile Female	0		00	-	4	4.4%	4.2	4.4%	
Juvenile Unknown Sex	0		0.0	<b>1</b> 22-0	2	2.2%	2.1	2.2%	
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		6	6.7%	6.3	6.7%	
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	•••	90	100.0%	93.6	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					
		Struck/	Total				Struck/	Total		
<u>Year</u>	<u>Harvest</u>	Lost	Take	<u>Y</u>	ear	Harvest	Lost	<u>Take</u>		
1992	3.6	1.3	5.0	19	992	124. 7	21.4	146.1		
1993	0. 0	1.1	1.1	19	993	109.3	20.6	129. 9		
1994	1.1	1.1	2.2	1	994	110.5	20. 1	130.6		
1995	0. 0	0. 0	0. 0	1	996	<b>93.8</b>	6.3	100. 0		

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the ANB and Sitka Tribal Associatii, 1995

# Table 15. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Wrangell, 1995

SAMPLING DESIGN:			
CHAIN REFERRAL	Total Referred Households	7	
	Surveyed Households	4	
	Sampling Fraction	57.1%	
	Sample Household Members	10	
	Estimated Household Members	17.5	

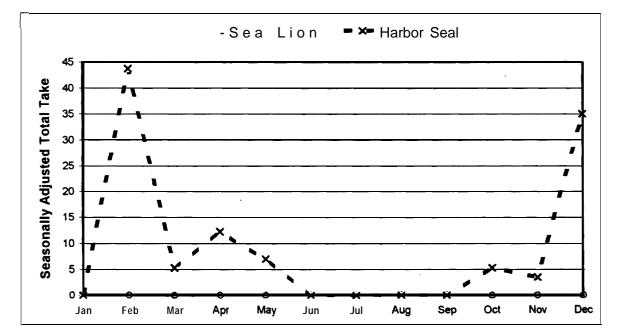
HARVEST	AND U	ISE IN	IFORM	ATION	1									
Percentage	e of San	nple H	louseho	olds:		Ε	Estimat	ed Co	mmuni	ty Har	/est			
			Sea	Harbor		E	and Ta	ke (Exj	banded	d):		Sea H	larbor	
			Lion	<u>Seal</u>								Lion	Seal	
		used (	0.0%	75.0%				То	tal Num	ber Har	vested	0.0	69.3	
	Н	unte	d 0.0%	100.0%				Total Nu	umber S	truck an	d Lost	0.0	22.8	
	Har	n&ed	0.0%	75.0%					Total I	Number	Taken	0.0	112.0	
	Rec	ceived	0.0%	0.0%										
	Gave	Away	00%	25.0%				Numbei	r Harves	sted Pe	r Capita	NVA	N/A	
SEA LION	HARVE Jan	ESTB Feb	Y MON Mar	TH Apr	May	Jun	Jul	Au9	Sep	Oct	Nov	Dec	Jnknown <b>Month</b>	Total
REPORTED HAR								7107			Nov			Total
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	-	-	-	-	-	EXPANE	-	,	•	v	U	U	v	v
Harvest	00	0.0	0.0	00	00	00	00	0.0	0.0	00	0:0	0.0	00	0.0
Struck & Lost	0.0	0.0	0.0	0.0	00	00	00	0.0	0.0	00	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	00	00	00	0.0	0.0	00	0.0	0.0	0.0	0.0
ESTIMATED					EST ANI			0.0 MMUNIT			0.0	0.0	00	0.0
Harvest	SEASUNA 0.0	0.0	0.0						•	ANDED)	0.0	0.0		
Struck & Lost	0.0	0.0	0.0	0 0 0 0	00 00	0 0 0 0	0 0 0 0	00	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	00	00	00	00	00	00	00	0.0	0.0		0.0
Total Take(%)	0.0	0.0	0.0	00	00	00	00	0.0	0.0	0.0	00	0.0		0.0
Cum Take	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. Tak			0.0	00	00	00	0.0	00	0.0	0.0	0.0	0.0		
	c (//)				-			-	900 G		_	<b>484</b>		-
HARBOR										<b>0</b> /			Unknown	Tatal
	Jan	Feb	Mar		Mav	Jun	Jul	Aua	Sep	Oct	Nov	Dec	Month	Total
REPORTED I							-		-			47		
Harvest Struck 8 Lost	0 0	19 6	1	7	4	0	0	0	0	2	1	17	0	51.
	-	-	2	0	0	0	0	0	0	1	1	3	0	13
Total Take	0	25	3	7	4	0	0	0	0	3	2	20	0	64
ESTIMATED						•								
Harvest	0.0	33.3	1.8	12.3	7.0	00	0.0	0.0	0.0	3.5	1.8	29.6	0.0	89.3
Struck & Lost	0.0	105	3.5	0 0	0 0	0 0	00	0 0	0.0	1.6	18	5.3	0.0	226
Total Take	0 0	43.6	5.3	12.3	70	0 0	0 0	0.0	0.0	5.3	3.5	35.0	0.0	112.0)
ESTIMATED						D TAKE		OMMUNI	-	ANDED)				
Harvest	0.0	33.3	1.8	12.3	70	00	0 0	0.0	0.0	3 5	1.8	29.8		a93
Struck & Lost	0.0	10.5	3.5	00	00	0.0	00	0.0	0.0	18	1.0	5.3		22.6
Total Take	0.0	43.8	5.3	123	70	0 0	00	0.0	0 0	5.3	3.5	350		112.0)
Total Take (%)		39.1%		109%	63%	0.0%	00%	00%	0.0%	4.7%		31.3%		100.0%
Cum. Take	0.0	438	49.0	61.3	68.3	68.3	68.3	663	683	73.5	770	112.0		
Cum. Take (%)	0.0%	39.1%	43.8%	54.7%	60.9%	60.9%	60.9%	60.9%	60.9%	65.6%	68.8%	100.0%		-

SOURCE: Alaska Department of Fish and Came, Division of Subsistence, Subsatence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Wrangell Cooperative Association, 1995.

# Table 15. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Wrangell, 1995

		Sea	Lion		Harbor Seal						
	Reporte	d by	Communi	y Est.	Reporte	ed by	Commun	ity Est.			
	Samp	ole	(Expan	ded)	Sam	ple	(Expar	nded)			
	Number	%	Number	%	Number	%	Number	%			
Adult Male	0	***	0.0		20	39.2%	35.0	39.2%			
Adult Female	0	***	0.0		18	35.3%	31.5	35.3%			
Adult Unknown Sex	0		0.0		4	7.8%	7.0	7.8%			
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		4	7.8%	7.0	7.6%			
Pup Male	0	<b>e</b> .,	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		5	9.8%	8.8	9.8%			
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%			
Female Unknown Age	0		00		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		51	100.0%	89.3	100.0%			

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION			H.	R SEA	L	
		Struck/	Total				Struck/	Total
Year	Harvest	Lost	<u>Take</u>	Y	ear	Harvest	Lost	Take
1992	0.0	0.0	0.0	19	992	6.0	8.0	14.0
1993	0.0	0.0	0.0	19	993	19.5	9.0	28.5
1994	0.0	0.0	0.0	19	994	101.0	27.0	128.0
1995	0.0	0.0	0.0	19	995	89.3	22.8	112.0

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Wrangell Cooperative Association, 1995

SAMPLING	G DESIG	GN:												
CHAIN RE	FERRA	L		To	tal Ref	erred I	Housel	nolds		55				
					Surv	eyed I	House	nolds		47				
					5	Samplir	ng Fra	ction	(	)5.5%				
				Samp	ole Ho	usehol	d Mem	nbers		154				
			E	stima	ted Ho	ouseho	old Me	mbers		180.2				
HARVEST	AND U	ISE IN	IFORMA	ATION										
Percentage	e of San	nple H	louseho	lds:		Ε	Estimat	ted Co	mmunii	ty Harv	/est			
-			Sea Ha	rbor				ke (Ex		-		Sea	Harbor	
		-	<u>Lio</u> n	<u>Seal</u>								<u>Lion</u>	<u>Seal</u>	
		Used (	0. <b>0%</b> 109	90%				To	tal Num	ber Harv	/estad	0.0	615.5	
	Н	unted	0.0%	70.2%				Total Nu	i <b>mber</b> St	ruck and	d Lost	0.0	79.6	
	Harv	ested	0.0%	66.0%					Total N	lumber	Taken	0.0	695.1	
			d 0.0%	100.0%										
		Away		91.5%				Number	Harves	sted Per	Capita	n N/A	WA	
SEA LION	HARVE Jan	EST B Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tota
REPORTED HAR	RVEST AND	TAKE	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	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	(
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	(
ESTIMATED	HARVEST	AND	ΤΑΚΕ ΒΥ	СОММ	UNITY (	EXPAND	ED)							
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	SEASONA	LLY A	DJUSTED	HARVE	EST AND	) TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
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
TotalTake	***				•••					-				
Cum Take	0.0	0.0	0.0	0 0	0 0	00	0 0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)					***			****						
HARBOR		IARVE Feb				I	Int	<b>A</b>	C an	Oct	Neur	Dee	Unknown	Tata
REPORTED			Mar TAVE DV	Apr		Jun			Sep	001	Nov	Dec	Month	Tota
Harvest	7	AND 12	56	3AMF 41	59	8	.D3 (01) 17	12 AF ANL	23	27	41	40	178	52
Struck & Lost	, 0	0	34	41	1	0	1	2	25	1	1	40	23	6
Total Take	7	12	90	45	60	8	18	- 19	23	28	42	41	201	59
ESTIMATED														.,
Harvest	8.2	14.0	65.5	480	690	94	199	19.9	269	31.6	48.0	46.8	2063	615.
Struck & Lost	0 0	0.0	398	47	1.2	00	12	2.3	0.0	1.2	1.2	1.2		79.
Total Take	8.2	14.0	105.3	52 7	702	94	21 1	22.2	269	32.8	<b>49</b> 1	48.0	235.2	695. <sup>-</sup>
ESTIMATED														
Harvest	12.4	21.2	99.1	72 5	1044	142	30.1	301	40.7	47.8	72.5	70.8		615.
Struck & Lost	0.0	0.0	60.1	7.1	1.8	0.0	1.8	3.5	0.0	1.8	1.8	1.8		79
Total Take	12.4	21.2	159.2	796	1061	14.2	31 8	33.6	40.7	495	74.3	72.5		695.
Total Take (%)	1.8%	3.1%	22.9%	11.5%	153%	2.9%	4.6%	4.8%	5.9%		10.7%			100.0
Cum. Take	12.4	33.6	192.8	2724	378.5	392.6	424.5	456.1	498.8	548.3	622.6	695.1		

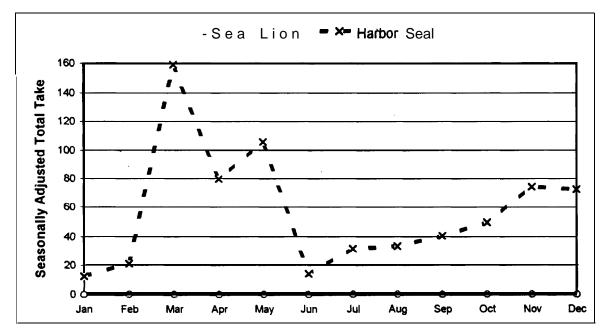
# Table 16. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Yakutat, 1995 AMELING, DESCOND

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alask with assistance from the Yakutat ANB/ANS, Yakutat Native Association, and Yak-Tat Kwaan, Inc.. 1995.

# Table 16. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Yakutat, 1996

							<b>-</b> .	
		Sea	Lion			Ha	<b>rbor</b> Seal	
	Reporte	d by	Communit	y Est	Reporte	ed by	Communi	ity Est.
	Samp	ole	(Expand	jed)	Sam	ole	(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	**	0.0		168	31.9%	196.6	31.9%
Adult Female	0	-	0.0		194	36.9%	227.0	36.9%
Adult Unknown Sex	0		0.0		164	31.2%	191.9	31.2%
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		526	100.0%	615.5	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					
		Struck/	Total			Struck/	Total			
<u>Year</u>	<u>Harvest</u>	Lost	Take	Year	Harvest	Lost	<u>Take</u>			
1992	0.0	0.0	0.0	1992	246.0	61.3	309.3			
1993	0.0	0.0	0.0	1993	666.4	67.4	626.6			
1994	0.0	0.0	0.0	1994	417.1	35.0	462.1			
1995	0.0	0.0	0.0	1996	615.5	79.6	695.1			

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., 1995

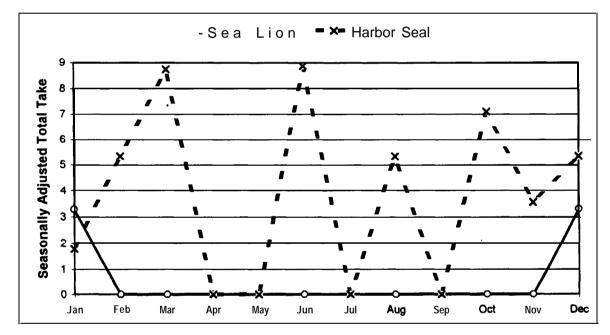
SAMPLING	) DESI	GN:												
CENSUS					Total N	lative	House	holds		23				
					Surv	/eyed	House	holds		14				
					9	Sampli	ng Fra	ction	(	50. <b>9</b> %				
					ple Ho					51				
			E	stima	ted Ho	usehol	d Men	nbers		83.8				
HARVESTA	AND U	SE IN	FORM	ATION										
Percentage	of Nat	ive Ho	useholo	ds:		E	Estima	ted Co	mmuni	ty Har	vest			
			Sea Ha	rbor		ê	and Ta	ke (Exp	banded	1):		Sea H	larbor	
			Lion	Seal								Lion	Seal	
			0.0% 5						tal Num			6.6	444	
	Н	unted	35.7%	429%				Total Nu				0.0	1.6	
			14.3%						Total I	Vumber	Taken	6.6	46.0	
			42.9%								•			
		-	14.3%					Number	Harves	ed Per	Capita	0.08	0.53	
SEA LION	HARVE Jan	EST B' Feb	Y MON Mar	TH Apr	May	Jun	Jul	Au9	Sep	Ckt	Nov		Unknown M o n t h	Total
REPORTED HAR	VEST AND	) TAKE E	BY SAMPL	ed hou	SEHOLDS	(UNEXPA	NDED)							
Harvest	2	0	0	0	0	0	0	0	0	0	0	2	0	4
Struck & Lost	0	0	0	0	0	0	0	ó	0	0	0	0	0	<u>,</u> 0
Total Take	2	0	0	0	0	0	0	0	0	0	0	2	0	4
ESTIMATED H	HARVEST	AND T	AKE BY	COMM	UNITY (	(EXPAND	DED)							
Harvest	3.3	0.0	0.0	0 0	0 0	0 0	00′	0 0	0 0	0 0	0.0	33	0 0	6.6
Struck & Lost	0 0	0.0	00	0 0	00	00	0 0	0 0	00	0 0	0 0	0.0	0.0	0 0
Total Take	3.3	0.0	0.0	0.0	00	00	0 0	0 0	0.0	0 0	0.0	3.3	0.0	6.6
ESTIMATED S	SEASONA	LLY AD	DJUSTED	HARVI	EST ANI	D TAKE	BY CC	OMMUNIT	Y (EXP	ANDED)				
Harvest	3.3	0.0	0.0	0 0	0 0	00	0 0	0 0	0 0	0.0	0 0	3.3		6.6
Struck & Lost	0.0	0.0	0.0	0 0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take	3.3	0.0	0.0	0 0	0 0	00	0 0	0 0	0.0	0 0	0.0	3.3		6.6
Total Take (%)	50.0% 0		0.0%	00%	00%	00%	00%	00%	0.0%	00%		50.0%		100.0%
Cum Take	3.3	3.3	3.3	33	33	33	33	33	33	3.3	33	6.6		
Cum, Take (%)	50.0%	50.0%	50.0%	500%	50.0%	500%	500%	50 0%	500%	50.0%	50.0%	100.0%		
HARBOR	SEAL F Jan	IARVE Feb	ST BY Mar	MON Apr	TH May	Jun	Jul	Au9	Sep	Oct	Nov		Unknown Month	Tota
REPORTED H					,									
Harvest	1	3	4′	0	0	5	0	3	0	4	2	3	2	27
Struck & Lost	0	0	1	0	0	0	0	0	0	0		0	0	-
Total Take	1	3	5	0	0	5	0	3	0	4	2		2	
ESTIMATED	HARVEST	AND	τακε Βγ	COMN	IUNITY	(EXPAN	DED)							
Harvest	1.6	4.9	6.6	00	0 0	82	00	49	0.0	66	3.3	4.9	3.3	44
Struck & Lost	0.0	0.0	1.6	0.0	00	00	00	00	00	0.0			0.0	
Total Take	1.6	4.9	8.2	0 0	0.0	82	0 0	49	0 0	6.6			3.3	
ESTIMATED	SEASON	ALLY A		HARV	EST AN	D TAKF	BY C	оммил	ΤΥ (ΕΧΡ	ANDED	)			
Harvest	1.8	53	7.1	0 0	0 0	89	0 0	53	0 0	71	,	53		44
Struck & Lost	0.0	0.0	16	0 0	00	00	00	00	0.0	0.0				1.
Total Take	1.8	53	8.7	0 0	0.0	89	0 0	53	0.0	71	3.5	53		46.
Total Take (%)	3.9%	11.6%	19.0%.	00%	0.0%	193%	0.0%	11.6%	0.0%	15.4%	7.7%	116%		100.0%
Cum. Take	1.6	7.1	15.8	15.8	15.8	24.7	247	300	30.0	37.1	40.7	46.0		
		15.4%	34.4%	34.4%	34.4%	53.7%	537%	653%	65.3%	80.7%	68.4%	100.0%		

SOURCE, Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lwns and Harbor Seals in Alaska, with assistance from the Chenega Bay IRA Council, 1995

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		Se	a Lion			HarborSeal					
	Reporte	ed by	Comm	unity Est.	Report	led by	Commun	ity Est.			
	Sam	ole	(Exp	anded)	Sam	nple	(Expa	nded)			
	Number	%	Numbe	r %	Number	%	Number	%			
Adult Male	2	50.0%	3.3	50.0%	10	37.0%	16.4	37.0%			
Adult Female	1	25.0%	1.0	25.0%	2	7.4%	3.3	7.4%			
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%	7	<b>25.9%</b>	11.5	25.9%			
Juvenile Female	1	25.0%	1.	5 25.0%	0	0.0%	0.0	0.0%			
Juvenile Unknown Sex	0	0.0%	0.	0.0%	0	0.0%	0.0	0.0%			
Pup Male	0	0.0%	0.	) 00%	6	22.2%	9.9	22.2%			
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.	00%	0	0.0%	0.0	0.0%			
Unknown Sex and Age	0	0.0%	0.	0.0%	2	7.4%	3.3	7.4%			
Total	4	100.0%	6.	6 100.0%	27	100.0%	44.4	100.0%			

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		ł	HARBOR SEAL					
		Struck/	Total			Struck/Total				
Year	Harvest	Lost	Take	<u>Year</u>	Harvest	Lost	<u>Take</u>			
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			

SOURCE. Alaska Department of Fish and Game, Diiisii of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chenega Bay IRA Council, 1995.

<b>SAMPLING</b> TWO-STRA			Total N				4	<u>Active</u> 14	<u> </u>	<u> 218</u>		<u>Total</u> 232		
			Surv	eyed H	lousel	nolds		14		24		36		
				amplin	•			100.0%		11.0%		16.4%		
			ple Hou					37		66		103		
	E	stima	ted Hou	useholo	d Men	nbers		37.0		599.5		636.5		
HARVEST	AND U	SE IN	IFORM	ATION										
Percentage	of Nati	ive Ho	useholo	ds:		I	Estimat	ted Co	mmuni	ty Har	/est			
			Sea Ha	rbor		ć	and Ta	ke (Ex	pandec	1):		Sea	Harbor	
			<u>Lion</u>	<u>Seal</u>								Lion	<u>Seal</u>	
			0.0%	30.9%					tal Num			0.0	83.4	
		unted		9.6%				Total Nu	umber Si			1.0	2.0	
			0.0%	9.6%					Total I	Number	Taken	1.0	65.4	
		eived		22.2%					. n.		014		<b>.</b>	
		Away		10.0%				Numbe	r Harves	led Per (	Japita	0.00	0.13	
SEA LION	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov		<b>Unknown</b> Month	Total
REPORTED HAR						-	ANDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total Take	0	0	0	0	1	0	0	0	0	0	0	0	0	1
ESTIMATED H	ARVEST	AND 1	AKE BY	COMM	JNITY	(EXPANI	DED)							
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	1.0	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	0.0	1.0	00	0.0	00	0 0	0.0	0.0	0.0	0.0	1.0
ESTIMATED S	EASONA	LLY A	DJUSTED	HARVE	ST AN	D TAKE	BY CO	MMUNIT	Ү (ЕХР	ANDED)				
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	00	1.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0		1.0
Total Take	0 0	0.0	0.0	0.0	1.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		1.0
Total Take (%)	0.0%	0.0%	0.0%	0.0% 1		0.0%	00%	0.0%	0.0%	0.0%	00%	0.0%		100.0%
Cum Take	00	0.0	0.0	0.0	1.0	1.0	10	10	10	10	1.0	1.0	,	
Cum Take (%)	0.0%	0.0%	0.0%	0.0%	6 I U (	0.0%	100.0% 1	100.0% 10	10.0% 100	.0% 100.0	r% 100.0*	% 100.07	0	
HARBOR	SEAL H Jan	IARVE Feb	EST BY Mar	MON7 Apr	ГН Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED H	ARVEST	AND T	AKE BY	SAMPL	ED HO	USEHOL	.DS (UN	EXPAN	DED)					
Harvest	6	7	0	0	2	2	0	1	2	5	11	7	0	43
Struck&Lost	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total Take	6	9	0	0	2	2	0	1	2	5	11	7	0	45
ESTIMATED H	HARVEST	AND	τακε Βι	сомм	UNITY	(EXPAN	DED)							
Harvest	6.0	15.1	0.0	0.0	18.2	18.2	0 0	10	2.0	5.0	110	70	0 0	834
Struck & Lost	0 0	2 0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	20
Total Take	6.0	17 1	0.0	0.0	18.2	18.2	0 0	10	2.0	5.0	11.0	7.0	0.0	85.4
ESTIMATED S	SEASONA	LLY A	DJUSTED	HARVE	ST AN	D TAKE	ву со	OMMUNI	ΤΥ (ΕΧΡ	ANDED)				
Harvest	6.0	15.1	0.0	0.0	18.2	182	0 0	1.0	2.0	5.0	11.0	7.0		634
Struck & Lost	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	)	2.0
Total Take	6.0	171	0.0	0.0	18.2	182	0 0	1.0	2.0	5.0	11.0	7.0	)	85.4
Total Take (%)	7.0%	20.0%	0.0%	0.0%	21.3%	21.3%	0.0%	1.2%	2.3%	5.9%	12.9%	8.2%	)	100.0%
Cum. Take	6.0	23.1	23.1	231	41.3	59.4	59.4	60.4	624	674	70 4	65.4	1	
Cum. Take (%)	7.0%	27.0%	27.0%	27.0%	48.3%	69.6%	69.6%	70.7%	73.1%	78.9%	91.8%	100.0%		

SOURCE. Alaska Department of Frsh and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals m Alaska, with assistance from the Traditional Villageof Eyak, 1995

# Table 18. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Cordova, 1995

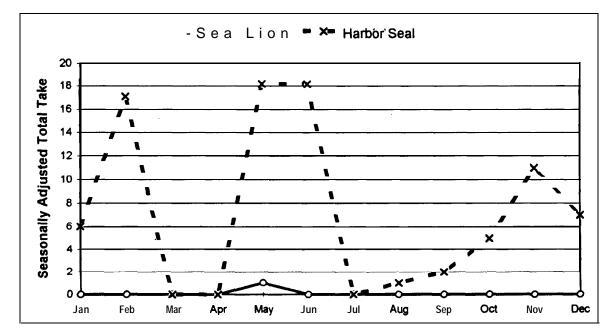
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HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	or Seal	
	Reporte	dby	Communi	ty Est.	Reporte	ed by	Commun	i <b>ty</b> Est.
	Samp	ole	(Expan	ded)	Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	•••	0.0		18	41.9%	34.2	41.0%
Adult Female	0		0.0	-	12	27.9%	28.2	33.8%
Adult Unknown Sex	0		0.0		1	2.3%	9.1	10.9%
Juvenile Male	0		0.0	<del></del>	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		5	11.6%	5.0	6.0%
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		7	16.3%	7.0	8.4%
Total	0	***	00		а	100.0%	83.4	100.0%

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SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_	SEA	LION			HARBO	R SEA	AL
		Struck/	Total			Struck/	Total
<u>Year</u>	Harvest	Lost	Take	<u>Year</u>	Harvest	Lost	Take
1992	0.0	0.0	0.0	1992	103.6	6.8	112.5
1993	1.5	0.0	1.5	1993	147.4	5.5	152.9
1994	0.0	0.0	0.0	1994	135.6	9.1	144.9
1995	0.0	1.0	1.0	1995	03.4	2.0	85.4

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 Traditional Village of Eyak, 1995

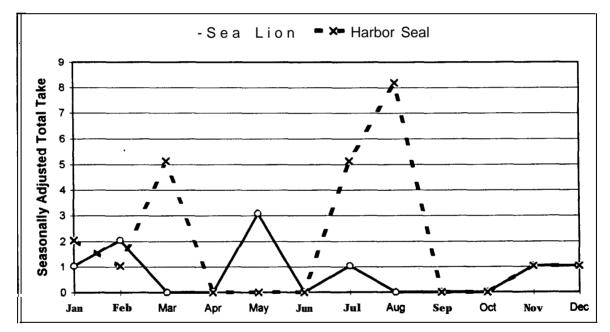
SAMPLING	G DESI	GN:			<b>T</b>									
CENSUS					Total N					40				
						veyed I				39				
				<b>C</b>		Samplir	•		,	97.5%				
					ple Ho ted Ho					157 161.0				
						usenoi	u wen	IDELS		101.0				
HARVEST	-	-	-	-	I	,				(				
Percentage	e or nat	ive Ho						ted Col		-	vest	S	orhor	
			Sea Ha			é	ina ra	ke (Exp	oandec	<i>I):</i>		Sea H		
				<u>Seal</u>				Та	tal Num	har llar	vootod	Lion	<u>Seal</u>	
			59.0% 9: 20.5%									9.2	23.6	
		unted 2 /ested		33.3%				Total Nu				0.0	0.0	
		ceived		25.6% 07.2%					TOTAL	lumber	Taken	9.2	23.6	
		Away		25.6%				Number	Harvest	ed Per	Capita	0.06	0.15	
SEA LION	HARVE Jan	EST B Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		<b>Jnknown</b> Month	Total
REPORTED HAI														
Harvest	1	2	0	0	3	0	, 1	0	0	0	1	1	0	9
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	2	0	0	3	0	1	0	0	0	1	1	0	9
ESTIMATED	HARVEST	AND	ΤΑΚΕ ΒΥ	COMN	IUNITY (	EXPAND	)ED)							
Harvest	1.0	21	0.0	00	31	00	, 10	00	00	00	10	10	00	9.2
Struck & Lost	0.0	0 0	0.0	0 0	00	00	00	00	00	00	00	0.0	0.0	0 0
T <b>ota</b> l Take	1.0	21	0.0	00	31	00	10	00	00	00	10	10	0.0	9.2
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVI	EST AND	) TAKE	ву сс	MMUNIT	Y (EXP	ANDED)				
Harvest	1.0	2.1	0.0	0.0	31	00	10	0.0	00	00	1.0	1.0		9.2
Struck & Lost	0 0	0.0	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0		0.0
Total Take	1.0	2.1	0.0	0 0	3.1	0.0	10	00	0.0	0.0	1.0	1.0		9.2
Total Take (%)	11.1%	22.2%	0.0%	0.0%	33.3%	0.0%	11 1%	0.0%	0.0%	0.0%	11.1%	11.1%		100.0%
Cum Take	1.0	3.1	31	31	6.2	6.2	72	7.2	72	7.2	a.2	9.2		
Cum Take (%)	11.1%	33.3%	33.3%	333%	667%	667%	770%	770%	770%	770%	88.9%	100.0%		
HARBOR										<u> </u>			Jaknown	<b>T</b> + 1
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED							•		,	•			^	~
Harvest	2	1	5	0	0	0	5	8	0	0	1	1	0	23 0
Struck & Lost	0	0	0	0	0	0	0 5	0	0	0	0 1	0 1	0	23
Total Take	2	1	5	0	0	0	-	8	0	U	1	1	U	25
ESTIMATED						•			0.0	0.0	4.0	10	0.0	22.6
Harvest	2.1	1.0	5.1	0.0	0.0	0.0	5.1	8.2	0.0	0.0	1.0	1.0	0.0	23.6 0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0 00	00	00 51	00 02	00	0.0	00	00	00	23.6
Total Take	2.1	1.0	5.1	0.0		00 	51	82	00	00	1.0	10	0 0	£3.0
ESTIMATED									•	ANDED)		1.0		23.6
Harvest	2.1	10	51	00	00	00	51	82	00 0.0	00 0.0	10 0.0	1.0 0.0		23.0 0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	00	00 51	00		0.0	1.0	1.0		23.6
Total Take	2.1 • 7•/	1.0	5.1 21.7%	0.0	0.0	00	51 21.7%	82	00 0.0%	0.0%	4.3%	4.3%		23.0 100.0%
Total Take (%)	8.7% 2.1	4.3%	21.7% 8.2	0.0% 8.2	0.0% 8.2		21.7%	34.8% 21.5	21.5	21.5	4.376 22.6	4.376 23.6		100.0%
Cum. Take	2.1	3.1	8.2	8.2	8.2	8.2 24.9%	13.3				95.7%			
Cum. Take (%)	8.7%	13.0%	34.8%	34.8%	34.8%	34.8%	<b>5</b> 6.5%	91.3%	91.3%	91.3%				

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 Nanwalek Traditional Council and English Bay Corporation, 1995

# Table 19. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Nanwalek, 1995

		S	ea Lion			Hart	bor Seal	
	Reporte	ed by	Commun	ity Es!	Reporte	ed by	Commun	ity Est.
	Sam	ple	(Expar	nded)	Sam	ple	(Expar	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	5	55.6%	5.1	55.6%	5	21.7%	5.1	21.7%
Adult Female	1	11.1%	1.0	11.1%	2	6. 7%	2.1	8.7%
Adult Unknown Sex	1	11.1%	1.0	11.1%	5	21. 7%	5.1	21.7%
Juvenile Male	1	11.1%	1.0	11.1%	4	17.4%	4 1	17.4%
Juvenile Female	0	0.0%	0.0	0.0%	0	00%	0.0	0.0%
Juvenile Unknown Sex	1	11 1%	1.0	11 1%	6	26.1%	6. 2	26.1%
Pup Male	0	0.0%	0.0	0.0%	1	4.3%	1.0	4.3%
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	9	100.0%	9.2	100.0%	23	100.0%	23.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		ł	HARBOI	R SEA	L
		Struck/	Total			Struck/	Total
Year	Harvest	Lost	<u>Take</u>	Year	<u>Harvest</u>	Lost	<u>Take</u>
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

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 Narwalek Traditional Council and English Bay Corporation, 1995.

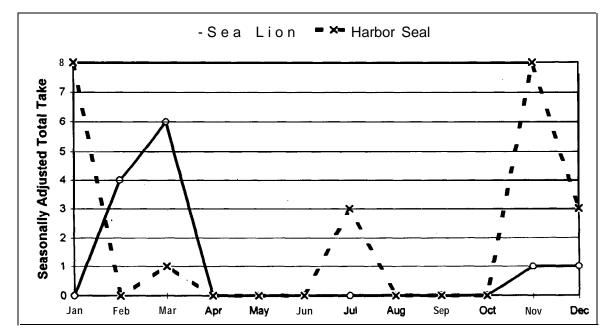
SAMPLING	G DESI	GN:												
CENSUS					Total N	lative	House	holds		58				
						-	House			58				
				2		-	ng Fra			100.0%				
				Samı Estimat			ld Mer			160 160.0				
				EStima	ей по	useno		npers		100.0				
HARVEST	AND L	JSE IN	IFORM	ATION										
Percentage	e of Na	tive Ho	ousehol	ds:			Estima	ted Co	ommuni	ity Har	vest			
			Sea H			i	and <i>Ta</i>	ke (Ex	pandeo	1):			larbor	
			Lion	<u>Seal</u>				_				Lion	<u>Seal</u>	
			60.3%						otal Numl			10.0	23.0	
			12.1%					l otal N	umber St			2.0	0.0	
		vested	10.3% 55.2%	8. 6%					I Otal II	lumber	laken	12.0	23.0	
		Away		<b>845%</b> 138%				Number	r Harvest	ed Per	Capita	0.06	0.14	
SEA LION													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Ckt	Nov	Dec	Month	Total
REPORTED HA								•		•			•	10
Harvest Struck <b>&amp; Lost</b>	0 0	<b>4</b> 0	4 2	0 0	0 0	0 0	0	0 0	0 0	0 0	1 0	1 0	0 0	10 ع
Total Take	0	4	2 6	0	0	0	0	0	0	0	1	1	0	12
ESTIMATED	-	-	-	-	-	•	-		v	v	·		v	-
Harvest	0.0	4.0	1AKE D 40		00	00	0.0	0.0	0.0	0.0	1.0	1.0	0.0	10.0
Struck & Lost	0.0	4.U 00	20	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2. C
Total Take	0.0	40	60	00	00	0 0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	12.0
ESTIMATED	SEASON	ALLY A	DJUSTED	HARVE	ST AN	D TAKE	BY CO		TY (EXPA	ANDED)				
Harvest	0.0	4. 0	4.0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	1.0	1.0		10.0
Struck & Lost	0.0	0.0	2.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0 0		2. (
Total Take	0.0	4.0	60	0 0	0 0	0 0	0.0	0.0	0.0	0.0	1.0	1.0		12.0
Total Take (%)	0.0%	<b>33. 3</b> 9	<b>%</b> 50.0	% 00%	00%	00%	0.0%	0.0%	0.0%	0.0%	<b>8.</b> 3%	<b>8.</b> 3%		100.0%
Cum Take	0.0	4.0	10.0	100	100	100	10.0	10.0	10.0	10.0	11.0	12.0		
Cum Take (%)	0.0%	33.3%	83.3%	833%	833%	833%	833%	83.3%	<b>83. 3</b> %	833%	91.7%	100.0%		
HARBOR	SEAL F	HARVE Feb	EST BY Mar	<i>MON</i> Apr	TH May	Jun	Jul	Au9	Sep	Oct	Nov		Unknown M o n t h	Tota
REPORTED					,						-			
Harvest	8	0	1	0	0	0	3	0	0	0	8	3	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Take	8	0	1	0	0	0	3	0	0	0	8	3	0	2
ESTIMATED	HARVES	T AND	TAKE B	Y COMN	IUNITY	(EXPAN	IDED)							
Harvest	8. 0	0.0	10	0 0	0 0	0 0	3 0	0.0	0.0	0.0	8.0	3.0	0.0	23.
Struck & Lost	00	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	<b>0</b> .
Total Take	8. 0	0.0	1.0	0 0	0 0	0 0	30	0.0	0.0	0.0	8.0	3.0	0.0	23.
ESTIMATED	SEASON	ALLY A	DJUSTEI	) HARV	EST AN	ID TAK	E BY C		•	ANDED)				
Harvest	8. 0	0 0	1.0	0 0	0 0	0 0	30			0.0	8.0			23.
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	0 0			0.0	0.0			0
Total Take	8. 0	0.0	1.0	00	00	00	30			0.0	8.0			23
Total Take (%)	34.6%	0.0%	4. 3%	0.0%	00%		130%			0.0%		5 13.0%		100.0
Cum. Take	8.0	8.0	9.0	90	90	90	12.0			12.0	20.0			
Cum. Take (%)	34.8%	34.8%	39.1%	39.1%	39.1%	39.1%	52.2%	52.2%	52.2%	52.2%	87.0%	100.0%		

Table 20. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Port Graham, 1995

# 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, 1995

	02/1		S	Sea Lion				Ha	arbor Seal	
		Reporte	ed by	Сол	าตามก	ity Esl.	Repor	ted by	Commun	ity Est.
		Sam	ole	(Expa	nded	)	Sar	nple	(Expai	ndeđ)
		Number	%	Num	ber	%	Number	%	Number	%
Adult Male	•	1	10.0%		1.0	10.0%	9	39.1%	9.0	39.1%
Adult Female		0	0.0%		0.0	00%	2	8.7%	2.0	0.7%
Adult Unknown Sex		2	20.0%		2.0	20.0%	4	17.4%	4.0	17.4%
Juvenile Male		1	10.0%		1.0	10.0%	7	30.4%	7.0	30.4%
Juvenile Female		0	0.0%		0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex		6	60.0%		6.0	60.0%	1	4.3%	1.0	4.3%
Pup Male		0	0.0%		0.0	00%	0	0.0%	0.0	0.0%
Pup Female		0	0.0%		00	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex		0	0.0%		00	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age		0	00%		0.0	00%	C	0.0%	0 0	0.0%
Female Unknown Age		0	0.0%		00	0.0%	C	0.0%	0.0	0.0%
Unknown Sex and Age	1	0	0.0%		00	00%	0	0.0%	0.0	0.0%
Total		10	100.0%		10.0	100.0%	23	100.0%	23.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_	SEA	LION		H	HARBO	R SEA	L
		Struck/	Total			Struck/	Total
Year	<u>Harvest</u>	Lost	<u>Take</u>	Year	Harvest	Lost	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

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liins and Harbor Seals in Alaska, with assistance from the Port Graham Village Council and Port Graham Corporation, 1995

	EA LIC	JN AN	D HAR	BOK .			LJIL		TE3. 3	seluov	ia, i	770		
SAMPLING	DESIG						E	Active	<u>0</u>	ther_		Total		
TWO-STRA	ΤΑ	Т		ative H				12		29		41		
			Surve	eyed H	ouseh	olds		12		29		41		
				Samplin				100.0%	1	00.0%		100.0%		
	_			usehold				34		73		107		
	E	stimat	ed Hou	usehold	I Mem	bers		34.0		73.0		107.0		
HARVESTAI	VD US	SE INF	ORM4	ATION										
Percentage	of Nati	ve Hou	isehold	ls:		E	Estimate	ed Com	munity	Harve	st			
Ū			Sea Ha						anded,			Sea	Harbor	
		I	Lion	<u>Seal</u>								Lion	Seal	
	I	used 14	.6%	341%				Tot	al Numb	er Harve	ested	0.0	4.0	
	H	unted	0.0%	12.2%				Total <b>Nur</b>	<b>nber</b> Stru	ick and	Lost	0.0	0.0	
	Harve	ested 0	.0%	4.9%					Total N	umber T	aken	0.0	4.0	
	Rece	eived 1	4.6%	31.7%										
	Gave	Away	2.4%	7.3%			l	Number	Harveste	ed Per C	apita	0.00	0.04	
SEA LION H	IARVE	STBY	MON'	ТН									Unknown	
	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Tota
REPORTED HARVI						•		•		•		•	•	
Harvest 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	U	0	4
ESTIMATED HA					-		-							
Harvest	0.0	00	0.0	00	00	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0
Struck & Lost	0.0	0.0	00	0.0	0.0	0.0	0.0	00	00	0.0	00	0.0	0.0	0.
Total Take	0.0	00	0.0	0.0	00	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.
STIMATED SEA				HARVES				ידואטאא	•					
Harvest	0.0	0.0	0. 0	0.0	00	0. 0	0.0	0.0	00	0.0	00	0.0		0.
Struck & Lost	0.0	0.0	0.0	0.0	00	0.0	0.0	00	0.0	0.0	0.0	00		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.
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 (%)								•••				601		
HARBOR S									0	0.1			Unknown	T . I
REPORTED HA	Jan	Feb	Mar	Apr			Jul		Sep	Oct	Nw	Dec	Month	Tot
Harvest	ARVEST	AND L	аке вү 0	SAMPL 0	ED HO 0		_DS (UN 0	IEXPANL 0	1 (UL	0	1	0	0	
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Take	1	1	0	0	0	0	0	0	1	0	1	0		
ESTIMATED H							-	÷		·		0		
Harvest	1.0	1.0	0.0	0.0	0.0	(EXPAN) 0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	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			4
Total Take	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0			4
ESTIMATED S												0.0	0.0	г
LJINNAIED 3	EASUNA 1.0	LLY AL 1.0	0.0 0.0	0.0	.ST ANI 0.0	0.0	BY CC 00		10 I O	0.0	10	0.0		4
Harvest	1.0	1.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0			4
Harvest Struck & Lost	0.0	0.0	0.0	(111)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		U
Struck & Lost	0.0 1.0	0.0 1.0	0.0 0.0	0.0 0.0			0.0	0.0	10	0 0	10	0.0		Λ
Struck & Lost T <b>otal</b> Take	1.0	1.0	0 0	0.0	0.0	0.0	0.0 0.0%	0.0 0 0%	10 25.0%	0.0 0.0% 2	1.0 25 . 0 %			4 100.0
Struck & Lost		1.0		0.0	0.0		0.0 0.0% 2.0	0.0 <b>0.0%</b> 2.0	10 <b>25.0%</b> 30		1.0 2 5 . 0 % 4.0	0.0%		4 100.0

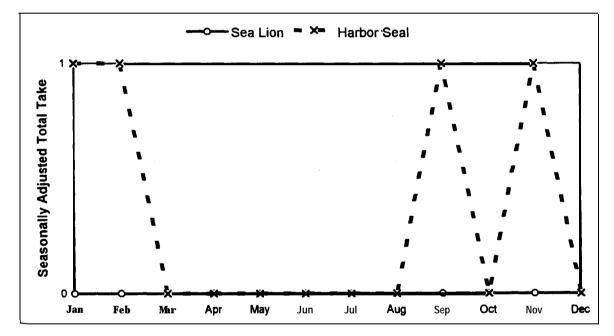
Table 21. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Seldovia, 1995

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alask with assistance from the Seldovia Native Association, 1995.

#### Table 21. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Seldovia, 1995

		Sea	Lion			Harbo	or Seal	
	Reporte	d by	Communi	ty Est	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expend	led)	Sam	ole	(Expar	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		2	50.0%	2. 0	50.0%
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	00%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Pup Male	0	-	0.0	-	1	25.0%	1.0	25.0%
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 I	LION			F	IARBOI	R SEA	L
		Struck/	Total	_			Struck/	Total
<u>Year</u>	Harvest	Lost	Take		<u>Year</u>	Harvest	Lost	<u>Take</u>
1992	0.0	0.0	0.0		1992	12.4	0.0	12.4
1993	0. 0	0. 0	0. 0		1993	7. <del>9</del>	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

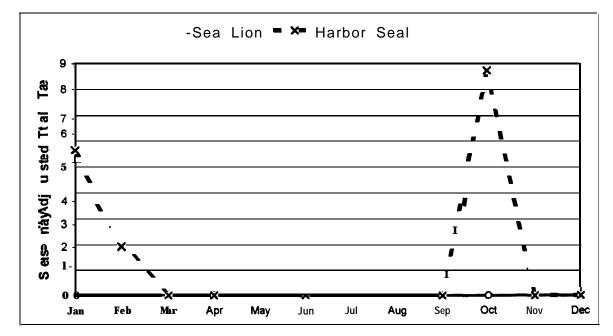
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Seldovia Native Association, 1995

SAMPLING	DESI	GN:						<u>Active</u>	9	<u>Other</u>		<u>Total</u>		
TWO-STRA	TA	1	otal N	ative H	ouseł	nolds		12		147		159		
			Surve	eyed H	ouset	nolds		11		29		40		
			S	ampling	g Fra	ction		91.7%		19.7%		25.2%		
			le Hou					42		73		115		
	E	Estimat	ed Hou	isehold	Mem	bers		45.8		370.0		415.9		
HARVEST	AND U	ISE <b>INF</b>	ORMA	TION										
Percentage	of Nat	ive Hou	usehold	ls:		E	stima	ted Col	nmuni	ty Har	vest			
			Sea Ha			a	nd Ta	ke (Exp	banded	d):			Harbor	
			Lion	<u>Seal</u>								Lion	<u>Seal</u>	
		used 0		13.7%					al Num			0.0	10.9	
		unted		0.7%				Total Nu				0.0	5.5	
		rested		0.7%					Total N	lumber	Taken	0.0	16.4	
		ceived		13.0%							_			
		Away		07%				Number	Harvest	ted Per	Capita	0.00	0.03	
SEA LION I	HARVE Jan	EST BY Feb	MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown. Month	Tot
REPORTED HAR	/est and	) take b	y sampli	ed house	HOLDS	(UNEXPA	NDED)							
larvest	0	0	0	0	0	0	0	0	0	0	0	0	0	
truck & Lost	0	0	0	0	0	0	0	o.	0	0	0	0	0	,
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
STIMATED H	ARVEST	AND T	ΑΚΕ ΒΥ	сомми	NITY	(EXPAND	ED)							
larvest	0.0	0.0	0.0	0 0	0 0	0 0	00′	0 0	0 0	0 0	0.0	0 0	0 0	0
truck & Lost	0.0	0 0	0 0	0 0	00	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0 0	C
otal Take	0.0	00	00	00	00	00	00	00	00	00	00	00	00	0
ESTIMATED S	EASONA	ALLY AD	JUSTED	HARVES	ST ANI	D TAKE	BY CO	OMMUNIT	Y (EXP	ANDED)				
larvest	0.0	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	00	0 0	0 0	0 0	0 0	0 0	0.0	0 0		0
otal 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
otal Take (%)		444			-						***			
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 S	SEAL F Jan	IARVE. Feb	ST BY Mar	MONT Apr	: Мау	Jun	ارر	Aug	Sep	Oct	Nov		Unknown Month	To
REPORTED H								*	•		1101		month	
larvest	4	2	AKE DI 0'	0	0	0311101	03 (01	0	0	4	0	0	0	
Struck & Lost	1	0	0	0	0	0	0	0	0	4	0		0	
fotal Take	5	2	0	0	0	0	0	0	0	. 8	0	-	0	
ESTIMATED F				СОММІ			DED)			-				
larvest	4.4	2.2	00	00	00	00	00	0 0	0 0	4.4	0.0	0.0	0.0	1(
Struck & Lost	1.1	0.0	0.0	0.0	00	00	00	0 0	0.0	4.4	0.0			
Total Take	5.5	2.2	0.0	0.0	00	00	00	00	0.0	0.7				1
ESTIMATED S										ANDED				-
Harvest	44	2.2	0.0	0.0	00	00	00	00	00	44	•	0.0		1
Struck & Lost	1.1	0.0	0.0	0.0	0.0	00	00	00	00	44	00			
Fotal Take	5.5	2.2	0.0	0.0	0.0	00	00	00	00	9.7	00			1
Total Take (%			0.0%	0.0%	0.0%	00%	00%	00%		53.3%				100.0
Cum. Take	5.5	7.6	7.6	76	76	7.6	76	76	7.6	16.4				

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals m Alaska, with assistance from the Qutekcak Native Tribe, 1995 HARVEST BY AGE AND SEX

							- ·	
		Sea	a Lion			Harb	<b>or</b> Seal	
	Reporte	dby	Community	Est.	Reporte	ed by	Communi	ity Est.
	Samp	ole	(Expand	ed)	Samj	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		7'	70.0%	7.6	70.0%
Adult Female	0		0.0		3	300%	3.3	30.0%
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	00%	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		00		0	0.0%	0 0	0.0%
Female Unknown Age	0	_	00		0	0.0%	0.0	0.0%
Unknown Sex and Age	0		00	84,-	0	0.0%	0.0	0.0%
Total	0		0.0		10	100.0%	10.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

		SEA	LION			F	IARBO	R SEA	L
			Struck/	Total	-			Struck/	Total
	Year	<u>Harvest</u>	Lost	<u>Take</u>		Year	Harvest	Lost	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	18.4

SDURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska, with assistance from the Qutekcak Native Tribe, 1995

Table 23.	SEA LI	ON A	ND HA	RBOR	SEAL	HAR∖	/EST E	ESTIM	ATES:	Tatitle	ek. 199	95		
SAMPLING	G DESIG	GN:												
CENSUS					Total I					25				
						veyed				19				
						Sampli	•			76.0%				
			_		ple Ho					57				
				Estima	ited H	ouseh	old M	ember	S	75.0				
HARVEST	AND U	SE IN	IFORM.	A <i>TION</i>	I									
Percentage	e of Nat	ive Ho	busehol	ds:		I	Estima	ted Co	ommun	ity Har	vest			
			Sea Ha	rbor		á	and Ta	ke (Ex	pande	d):		Sea H	larbor	
			<u>Lion</u>	<u>Seal</u>								Lion	<u>Seal</u>	
				84.2%							arvested	2.6	46.1	
		unted		26.3%				Total N	umber S			0.0	2.6	
		/ested		21.1%					Total	Number	Taken	2.6	48.7	
			ed 36.8%											
		Away		31.6%				Number	<sup>-</sup> Harves	ted Par	Capita	0.04	0.61	
SEA LION	HARVE Jan	EST B Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		<b>Unknown</b> Month	Total
REPORTED HAR	RVEST AND	) TAKE	BY SAMPL	ED HOU	SEHOLDS	(UNEXP	ANDED)			_				_
Harvest	0	0	0	0	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
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	2	2
ESTIMATED I	HARVEST	AND	ΤΑΚΕ ΒΥ	СОММ	IUNITY	(EXPANI	DED)							
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	2.6	2.6
Struck & Lost	0.0	0.0	0.0	00	00	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	2.6	2.6
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVI	EST AN	D TAKE	BY CO	OMMUNI	ΓΥ (ΕΧΡ	ANDED)				
Harvest	0.2	0.2	0.2	02	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		2.6
Struck & Lost	0.0	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0		00
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		26
Total Take (%)	8.3%	8.3%	8.3%	83%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%		100.0%
Cum Take	0.2	04	07	09	11	1.3	15	1.8	2.0	2.2	24	2.6		
Cum Take (%)	8.3%	167%	25.0%	333%	417%	500%	58.3%	66.7%	750%	83.3%	91.7%	100.0%		
HARBOR	SEAL F	IARVE	EST BY	MON	TH								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED H							•							
Harvest	0	0	0	0	0	3	3	0	1	1	1	0	26	35
Struck & Lost	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Total Take	0	0	0	0	0	5	3	0	1	1	1	0	26	37
ESTIMATED						•							_	
Harvest	00	0.0	0.0	0.0	0.0	3.9	3.9	0.0	1.3	1.3	1.3	0.0		46.1
Struck & Lost	0.0	0.0	0.0	00	00	26	0.0	00	0.0	0.0	00	0.0		2.6
Total Take ESTIMATED	0.0	0.0		00 HADV	0.0 EST AN	66 D TAKE	39 BV C	0.0 תווות אות	1.3 TV (EVE	1.3 20 NDED	1.3	0.0	34.2	48.7
Harvest	0.0	ALLY A 0.0	0.0	ПАКV 0.0	EST AN 0.0	154 D	ыг со 154	0.0	5.1	5.1	) 5.1	0.0		46.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	2.6	00	0.0	0.0	0.0	0.0	0.0		40.1
Total Take	0.0	0.0	0.0	0.0	00	18.0	15.4	0.0	5.1	5.1	5.1	0.0		48.7
Total Take (%)	0.0%	0.0%	0.0%	0.0%		36.9%		0.0%	10.5%	10.5%		0.0%		100.0%
Cum. Take (%)	0.0% 0.0	0.0%	0.0%	0.0% 0.0	0.0%	30.9% la.0	31.5% 33.3	33.3				48.7		100.070
						36.9%	68.5%	53.5 68.5%	36.5 79.0%	43.0 89.5%	40.7	40.7 100.0%	•	
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%		00.0%		17.0%	03.070	100.0%	100.0%		

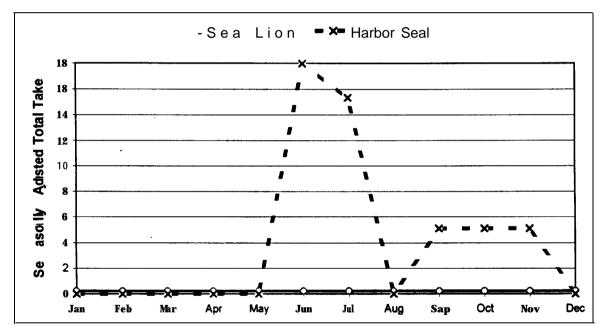
SOURCE. Alaska Department of Fish and Game, Division of Substatence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals m Alaska, with assistance from the Tatitlek IRA Council, 1995

## Table 23. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Tatitlek, 1995

#### HARVEST BY AGE AND SEX

		0				م باب م ا		
		568	Lion			Harbo	or Seal	
	Reporte	ed by	Commun	ity Est.	Reporte	ed by	Commun	ity Est.
	Sam	ple	(Expar	nded)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	1	2.9%	1.3	2.9%
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%	5	14.3%	6.6	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%	1	2.9%	1.3	<b>2. 9%</b>
Pup Female	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	1	2.9%	1.3	2.9%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	2	1000%	2.6	100. 0%	27	77.1%	35. 5	77.1%
Total	2	100.0%	2.6	100.0%	35	100.0%	46.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA I	LION			HARBO	R SEA	L.
		Struck/	Total			struck/	Total
Year	<u>Harvest</u>	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	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

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Tatitlek IRA Council, 1995

SAMPLING CHAIN RE				Tot	al Refe					6				
						eyed H				5				
						amplin	•		6	3.3%				
				-	ole Hou					22				
				Estimat	ed Hou	iseholo	d Mem	bers		26.4				
HARVEST														
Percentage	e of San	-						ed Con	-		est			
			Sea			а	nd Ta	ke (Exp	anded	):		Sea H	larbor	
			<u>Lion</u>	<u>Seal</u>								Lion	<u>Seal</u>	
		used O		40.0%						er Harve		0.0	16.8	
		unted		40.0%				Total <b>Nu</b>				0. 0	0.0	
		ested		40.0%					Total N	umber 1	aken	0.0	16.6	
		eived		0. 0%										
054 1/01			ay 0.0%					Number	Hatves	ted Per	Capita		N/A	
SEA LION	HARVE Jan	Feb	Y MON Mar	IIH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Total
REPORTED HAP	RVEST AND	TAKE B	y sampl	•							-			
Harvest	0	0	0	0	0	0	, O	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 T	AKE BY	сомм	UNITY (E	EXPAND	ED)							
Harvest	0.0	0.0	00	00	0.0	0.0	00	0 0	00	0.0	0.6	0.0	0.0	0.0
Struck & Lost	0.0	00	0 0	0 0	0.0	00	0 0	0 0	0.0	00	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	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	ву со	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	00	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 (%)												•••		
					<b>T</b> 11									
HARBOR	SEAL H	Feb	ST BY Mar	Apr	IH May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Total
REPORTED								-						
Harvest	0	0	0	2	0	0	0	0	, 0	4	2	2	4	14
struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	2	0	0	0	0	0	4	2	2	4	14
ESTIMATED	HARVEST	AND 1	ΓΑΚΕ Β΄	у сомм	UNITY (	EXPAND	ED)							
Harvest	0.0	0.0	0.0	2 4	0.0	0.0	0.0	0.0	0.0	4.0	2.4	2.4	4.0	16.8
Struck a Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	4.8	2.4	2.4		16.8
ESTIMATED	SFASONA	ΙΙΥ ΔΙ		HARVE	ST AND	TAKE	BY CC		Υ (ΕΧΡΑ	NDED)				
Harvest	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	67	3.4	3.4		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	3.4	0.0	0.0	0.0	0.0	0.0	6.7	3.4	3.4		16.6
Total Take (%)	0.0%	0.0%	00%	200%	0.0%	0.0%	00%	0.0%		40.0%		20.0%		100.0%
Cum. Take	0.0	0.0	0.0	34	3 4	3.4	3 4	3 4	3.4	10.1	13.4	16.8		
Cum. lake (%)	0.0%	0.0%					20.0%		20.0%		80.0%	100.0%		
								Study an						

## Table 24. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Valdez, 1995

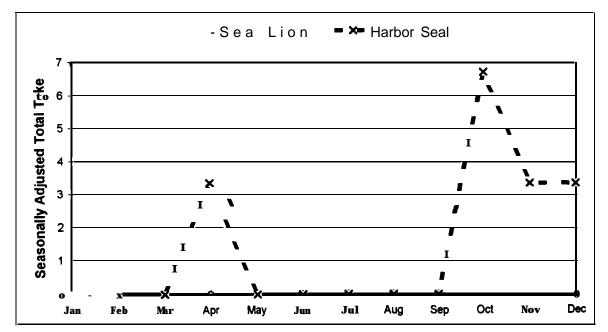
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Valdez Native Association, 1995.

#### Table 24. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Valdez, 1995

HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	or Seal	
	Reporte	dby	Communi	ty Est.	Reporte	ed by	Commun	ity Est
	Samp	he	(Expan	ded)	Sam	ple	(Expar	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0	***	5	35.7%	6.0	35.7%
Adult Female	0		0.0		4	<b>26.6%</b>	4.0	28.6%
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Juvenile Male	0		0.0		1	7.1%	1.2	7.1%
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		4	28.6%	4.0	28.6%
Total	0		0.0		14	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		F	IARBOF	R SEA	AL.
		Struck/	Total			Struck/	Total
Yea	<u>ir Harvest</u>	Lost	<u>Take</u>	Year	Harvest	Lost	Take
199	2 0.0	0.0	0. 0	1992	0. 0	0.0	0. 0
199	3 0.0	0. 0	0. 0	1993	21.0	4.0	25. 0
199	04 0.0	0.0	0. 0	1994	30.0	3.0	33. 0
199	0.0	0.0	0.0	1995	16.6	0.0	16.6

SOURCE- Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska, with assistance from the Valdez Native Association, 1995

SAMPLING	G DESI	GN:												
CHAIN RE	FERRA	L		То	tal Re	ferred	House	holds		24				
					Sur	veyed	House	holds		13				
						Sampli	•			54.2%				
					ple Ho					52				
				Estima	ted Ho	ouseho	ld Mer	nbers		96.0				
HARVEST	AND L	JSE IN	IFORM	ATION	1									
Percentage	e of Sar	nple H	louseho	olds:		I	Estima	ted Co	mmun	ity Har	vest			
			Sea Ha	arbor		ć	and <b>Ta</b>	ke (Exp	banded	:(k		See H	arbor	
			Lion	<u>Seai</u>								<u>Lion</u>	<u>Seal</u>	
		used		46.2%						n <b>ber</b> Har		0.0	3.7	
		unted		30.8%				Total N				0.0	0.0	
		vested		15.4%					Total	Number	Taken	0.0	3.7	
		beviec		46.2%							~ •			
		Away		38.5%				Number	<sup>-</sup> Harve	sted Pe	r Capit	a N/A	N/A	
SEA LION	' HARVI Jan	EST B Feb	Y MON Mar	<i>ITH</i> Apr	May	Jun	Jul	Aug	Sep	Ckt	Nov	U Dac	Inknown : <b>Month</b>	Total
REPORTED HAI	RVEST ANI	d take	by sampi			(UNEXP	ANDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	Θ	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	HARVES	T AND	TAKE B	Y COMM	IUNITY	(EXPAN	DED)							
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	SEASONA	ALLY A	DJUSTED	HARV	EST AN	D TAKE	BY CO	OMMUNIT	Υ (ΕΧΡ	ANDED)				
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 F	HARVE Feb	EST BY Mar	/ MON Abr	TH Mav	Jun	Jul	Aug	Sep	Oct	Nov		Unknown M o n t h	Total
REPORTED	HARVEST	AND	TAKE B'	Y SAMP	LED HO	DUSEHO	LDS (U	NEXPAND	DED)					
Harvest	1	0	0	0	0	0	0	0	1	0	0	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	0	0	0	0	0	0	0	1	0	0	0	0	2
ESTIMATED	HARVEST	r and	TAKE B	ү соми	MUNITY	(EXPAN	DED)							
Harvest	1.8	0.0	0.0	0.0	0.0	0 0	0 0	0 0	18	0.0	0.0	0.0	0.0	3.7
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	00
Total Take	1.8	0.0	0.0	0.0	0 0	0 0	0 0	0 0	1.8	0.0	0.0	0.0	00	3.7
ESTIMATED	SEASON	ALLY A	DJUSTEI	D HARV	EST AN	D TAKE	E BY C	оммиліт	ΓΥ (ΕΧΡ	ANDED)				
Harvest	1.8	0.0	0.0	0.0	0 0	0 0	0 0	0 0	1.8	0 0	0.0	0.0		3.7
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	1.8	0.0	0.0	0 0	0 0	0 0	0.0	0.0	1.8	0.0	0.0	0.0		3.7
Total Take (%)	50.0%	0.0%	0.0%	0.0%	00%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	1.8	1.8	1.0	1.8	1.8	1.8	18		3.7	3.7	3.7			
Cum. Take (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%		

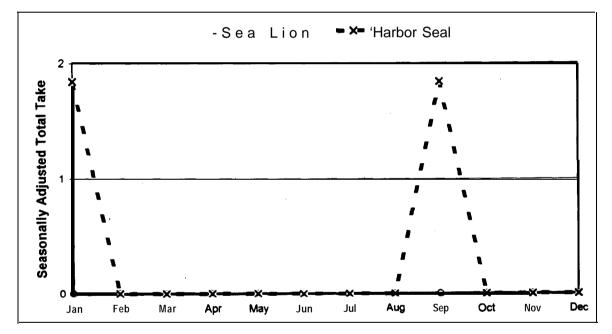
# Table 25. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Anchorage, 1995

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Absk a, with assistance from the Cook Inlet Tribal Council and Alaska Federation of Natives, 1995.

### Table 25. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Anchorage, 1995

		0	Linn			Harbor	Soal	
		Sea	Lion			Haibui	Seal	
	Reporte	d by	Communi	iy Est.	Reporte	edby	Commun	ity Est.
	Samp	ole	(Expand	led)	Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	-	0.0		1	50.0%	1.8	50.0%
Adult Female	0	***	00	-	0	0.0%	0.0	0.0%
Adult Unknown Sex	0		00		0	0.0%	0.0	0.0%
Juvenile Male	0		00		0	0.0%	0.0	0.0%
Juvenile Female	0		00		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0	•••	0	0.0%	0.0	0.0%
Pup Male	0	***	00		0	0.0%	0.0	0.0%
Pup Female	0		00		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		00		0	0.0%	0.0	0.0%
Male Unknown Age	0	•••	00	•	0	0.0%	0.0	0.0%
Female Unknown Age	0		00		0	0.0%	0 0	0.0%
Unknown Sex and Age	. 0	***	00		1	50.0%	1.8	50.0%
Total	0		00		2	1000%	3.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		H	HARBO	r sea	L
		Struck/	Total			Struck/	Total
<u>Year</u>	Harvest	Lost	Take	Year	Harvest	Lost	<u>Take</u>
1992	5.7	3.0	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

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, 1995

SAMPLING	DESIG	GN:												
CHAIN REF	ERRA	L		Tot	al Refe	erred H	louse	holds		4				
					Surve	eyed H	louse	holds		3				
					S	amplin	g Fra	iction	7	5.0%				
				Samp	le Hou	isehold	l Mer	nbers		11				
			E	stima	ted Ho	useho	ld M	embers		14.7				
HARVEST A	AND U	SE INI	FORMA	ATION										
Percentage	of San	nple Ho	ouseho	lds:		E	stimat	ted Com	munity	Harve	st			
0			Sea H					ike (Exp	-			Sea H	larbor	
		1	ion	Seal				· ·	,			Lion	Seal	
		used 6	 6.7% 10	00%				Tota	al Numb	er Harv	ested	0.0	0.0	
	Hu	unted 3	3.3%	66.7%				Total Nur	nber Str	uck and	Lost	0.0	0.0	
	Harv	vested	0.0%	0.0%					Total N	umber T	aken	0.0	0.0	
	Rec	eived (	66.7% 1	00.0%										
	Gave	Away	00%	0.0%				Number	Harves	ted Per	Capita	a NVA	N/A	
SEA LION H	IARVE Jam	ST BY	MON <sup>T</sup> Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Total
REPORTED HARV														
Harvest	0	0	0	0	0	0	, 0	0	0	0	0	0	0	C
Struck & Lost	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	(
ESTIMATED HA	ARVEST	AND TA	ΑΚΕ ΒΥ	сомм	JNITY (I	EXPAND	ED)							
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0 0	00	00	0.0	0.0	0 0	0.0	0.0
Struck & Lost	0.0	00	0.0	00	00	00	00	00	00	00	0.0	0.0	0.0	0.0
Total Take	00	0.0	0.0	00	00	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SE	FASONA		IUSTED	HARVE	ST AND	TAKF	BY CO		(EXPA	NDFD)				
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0 0	00	0.0	0.0	0.0	0.0		0.
Struck & Lost	0.0	0.0	0.0	00	0 0	00	00	0.0	0.0	00	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	00	0.0	00	00	0.0	0.0	0.0	0.0	00		0.0
Total Take (%)						-								
Cum Take	0.0	0.0	0.0	00	0.0	00	00	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)						****								
HARBOR S			OTOV	MON	-14								Unknown	
HARBUR SI	Jan	Feb	Mar	Apr	May	Jun	انال	Aug	Sep	Oct	Nov	Dec	Month	Tota
REPORTED HA	ARVEST	AND T	AKE BY	SAMPL	ED HOL	JSEHOLI	DS (U	NEXPAND	ED)					
Harvest	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	
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED H	ARVEST	AND T	AKE BY	СОММ	UNITY (	EXPAND	ED)							
Harvest	0.0	0.0	0.0	0.0	00	0 0	0 0	0.0	00	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	00	00	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	00	00	0.0	0 0	0.0	0.0	0.
ESTIMATED S	EASONA	ALLY AD	JUSTED	HARVE	ST AND	TAKE	BY C	оммиліт	Υ (ΕΧΡΑ	NDED)				
Harvest	0.0	0.0	0 0	0.0	0 0	0 0	0 0	00	0.0	00	0 0	0 0	1	0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	0 0	00	0.0	00	0.0	0.0	)	0
Total Take	00	0.0	0.0	0.0	0 0	0 0	0 0	00	0.0	0.0	0.0	0.0	I	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	(%)	-		<b>-</b>										

Table 26. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Homer, 1996

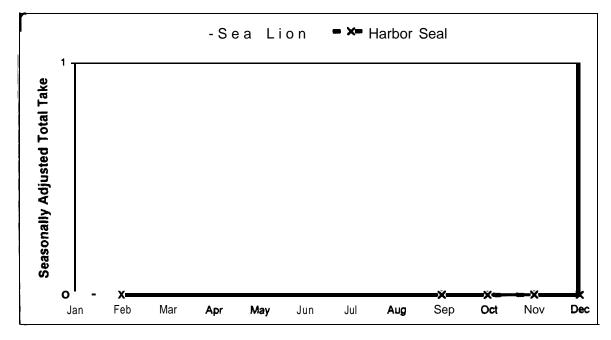
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska i, 1995

## Table 26. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Homer, 1996

HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	r Seal	
	Reporte	dby	Communit	y Est.	Reporte	d by	Communi	ty Est.
	Sam	ole	(Expan	ded)	Samp	le	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		0	4	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			HARBO	R SEA	۹L
		struck/	Total			Struck/	Total
Year	Harvest	Lost	<u>Take</u>	Year	Harvest	Lost	Take
1992				1992	2		
1993	0.0	0.0	0.0	1993	3 4.8	0.0	4.0
1994	0.0	0.0	0.0	199	4 12.0	0.0	12.0
1995	0.0	0.0	0.0	199	5 0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study end Monitor System for Sea Lions and Harbor Seals in Alaska 1995.

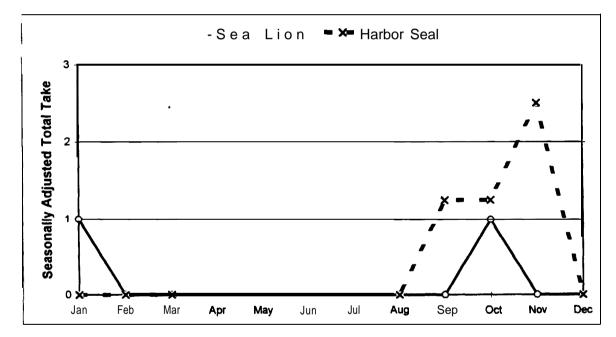
SAMPLING	DESIG	GN:												
CENSUS					Total N	lative	House	holds		19				
					Surv	/eyed	House	holds		19				
					9	Sampli	ng Fra	oction		100.0%				
					ple Ho					62				
			E	stima	ted Ho	usehol	d Mei	nbers		62.0				
HARVEST	AND U	SE <b>INF</b>	ORMA	TION	1									
Percentage	of Nati	ve Ho	useholo	ds:		l	Estima	ted Co	ommuni	ty Har	vest			
				arbor		2	ind Ta	ke <i>(Ex</i>	pandeo	I):		Sea H		
			Lion	<u>Seal</u>								Lion	<u>Seal</u>	
		used 2		36.8%					otal Num			1.0	5.0	
		unted		31.6%				Total N	umber St			1.0	0.0	
		ested		21.1%					Total N	lumber	Taken	2.0	5.0	
			15.6%						om ! -		C!!-	0.00		
		Away		10.5%				Number	Harveste	ea Per	Capita	0.02	0.08	
SEA LION I	HARVE Jan	EST BY Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	L Dec	Jnknown Month	Tota
REPORTED HARV	/est and	TAKE E	BY SAMPL	ed hou	SEHOLDS	(UNEXP	ANDED)							
larvest	1	0	0	0	0	0	0	0	0	0	0	0	0	
Struck & Lost	0	0	0	0	0	0	0	0	0	1	0	0	0	
Fotal Take	1	0	0	0	0	0	0	0	0	1	0	0	0	
ESTIMATED H	ARVEST	AND 1	ΓΑΚΕ ΒΥ	COMN	IUNITY	(EXPANI	DED)							
Harvest	1.0	0.0	0.0	00	0 0	0 0	0 0	0 0	0 0	0 0	0.0	00	0.0	1.
Struck & Lost	00	00	00	00	0 0	00	0.0	0 0	0.0	1.0	0.0	0.0	0.0	1.
Total Take	1.0	0.0	00	00	00	00	0 0	0 0	0.0	1.0	0.0	0.0	0.0	2.
ESTIMATED S									•	ANDED)				
Harvest	1.0	0.0	00	00	00	00	00	00	0.0	0.0	00	0.0		1.
Slruck & Lost	0.0	0.0	00	00	00	0.0	0.0	00	0.0	1.0	0.0	0.0		1.
Total Take	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0		2.
T <b>otal</b> Take (%)	50.0%	0.0%	00%	00%	00%	00%	0.0%	00%	0.0%		0.0%	0.0%		100.0%
Cum. Take Cum Take(%)	1.0 <b>50.0%</b>	1.0 <b>50.0%</b>	1.0 <b>50.0%</b>	10 500%	10 500%	10 500%	1.0 500%	1.0 50.0%	1.0 50.0% 1	2 0 000%	2.0 100.0%	2.0 100.0%		
						50070	50070	00.01	00.070	00070	100.070			
HARBOR S	SEAL H Jan	IARVE Feb	ST <b>BY</b> Mar	MON Apr	TH May	Jun	Jut	Aug	Sep	Ckt	Nov		Unknown Month	Tota
REPORTED H	ARVEST	AND 1	AKE BY	SAMP	LED HC	USEHO	LDS (U	NEXPAN	DED)					
Harvest	0	0	0	0	0	0	0	0	1	1	2	0	1	
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Take	0	0	0	0	0	0	0	0	1	1	2	0	1	
ESTIMATED H	IARVEST	AND	ΓΑΚΕ Β	COM	NUNITY	(EXPAN	DED)							
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	1.0	10	2.0	0.0	10	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
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	1.0	1.0	20	0.0	1.0	5
ESTIMATED S									•					
Harvest	0.0	00	0.0	00	00	00	00			1.3				5
Struck & Lost	0.0	0.0	00	00	0.0	00	00			0.0				0
Total Take	0.0	0.0	0.0	00	0.0	0.0	0.0			1.3	2.5			5 400 C
Total Take <b>(%)</b> Cum. Take	0.0% 0.0	0.0% 0.0	0.0% 0.0	0.0%	00%	0.0%	00%		6 25.0% 1.3	25.0% 2.5				100.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.5	5.0	5.0		

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsatence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the City of Akhiok and Akhiok Tribal Council, 1995

## Table 27. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Akhiok, 1995

		Se	ea Lion			Harbo	r Seal	
	Report	ed by	Commun	ity Est.	Report	ed by	Commur	nity Est
	Sam	ple	(Expanded	)	San	iple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	100.0%	1.0	100.0%	3	60.0%	3.0	50.0%
Adult Female	0	00%	0.0	0.0%	1	20.0%	1.0	20.0%
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	00%	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	00%	0.0	0.0%	. 0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	00%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	1	20.0%	1.0	20.0%
Total	1	100.0%	1.0	100.0%	5	100.0%	5.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_		SEA	LION		F	IARBO	r sea	AL
			Struck/	Total			Struck/	Total
	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	Year	Harvest	Lost	<u>Take</u>
	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

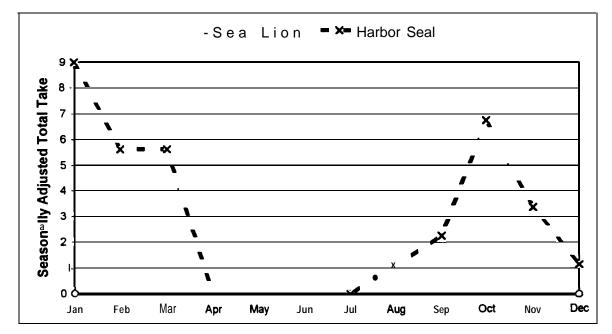
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the City of Akhiok and Akhiok Tribal Council, 1995.

SAMPLING	G DESIC	GN:												
CENSUS				-	Fotal N	lative I	Housel	nolds		18				
					Surv	veyed H	Housel	nolds		16				
					9	Samplir	ng Fra	ction	6	<b>6.9</b> %				
				Sam	ole Ho	usehol	d Men	nbers		53				
				Estimat	ed Ho	usehol	d Men	nbers		59.6				
HARVEST	AND U	ISE IN	IFORM	ATION										
Percentag	e of Nati	ive <i>Ho</i>	usehol	ds:		E	stimat	ed Corr	nmunity	Harv	est			
U U			Sea H						panded			Sea	Harbor	
			Lion	&!a!								Lion	<u>Seal</u>	
		used (	0.0%	37.5%				To	tal Numł	ber Har	vested	0.0	26.1	
	Н	unted	0.0%	43.8%				Total Nu	imber St	ruck an	d Lost	0.0	6.8	
		ested (		430%					Total N	lumber	Taken	0.0	34.9	
		eived (		18.0%							_			
		Away		12.5%				Number	Harvest	ed Per	Capita	0.00	0.47	
SEA LION	HARVE Jan	EST B Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		U <b>nknow</b> n Month	Tota
REPORTED HA	RVEST AND		BY SAMPI					.9	F					
Harvest	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	
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED	HARVEST	AND 1	ΓΑΚΕ ΒΊ	сомм	UNITY	(EXPAND	ED)							
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.
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
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	SEASONA	LLY A	DJUSTED	HARVE	ST ANI	Ο ΤΑΚΕ	ву со	MMUNIT	Υ (ΕΧΡΑ	NDED)				
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.
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 H	IARVE Feb	ST BY Mar	′ MON Apr	TH May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tota
REPORTED	HARVEST	AND 1	TAKE B	/ SAMP	ED HO	USEHOL	DS (UN	IEXPAND	DED)					
Harvest	5	3	5	0	0	0	0	1	2	5	3	1	0	2
Struck & Lost	3	2	0	0	0	0	0	0	0	1	0	0	0	
Total Take	8	5	5	0	0	0	0	1	2	6	3	1	0	3
ESTIMATED				Y COMN		(EXPANI	DED)							
Harvest	5.6	34	5.6	0.0	0.0	0 0	0 0	11	2.3	5.6	3.4	1.1	0.0	26.
Struck & Lost	3.4	23	0.0	0.0	0.0	0.0	0.0	0 0	0 0	1.1	0.0	0.0		6
Total Take	9.0	5.6	5.6	0.0	0.0	0.0	0.0	1.1	2.3	6.8	3.4	1.1	0.0	34
ESTIMATED									•					
Harvest	5.6	34	5.6	0.0	0.0	0.0	0.0	l.1	2.3	5.6	3.4	1.1		28
Struck & Lost	3.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0		6
Total Take	9.0	5.6	5.6	0.0	0.0	0.0	0.0	1.1 2.2%	2.3	6.8	3.4	11		34
Total Take (%) Cum Take	25.6% 1 9.0	6.1% 14.6	16 1% 20.3	0.0% <b>20.3</b>	0.0% <b>20.3</b>	0.0% 20.2	0.0% 20 3	3.2%		194%	97% <b>33.8</b>	3.2%		100.0
						20.3	20.3 58.1%	21.4	236	30.4				
Cum.Take(%)	25.8%	41.9%	581%	58.1%	58.1%	58.1%	30.170	61.3%	67.7%	871%	96.8%	100.0%		

with assistance from the Karluk IRA Council, 1995.

		S	Lion			Цо	rbor Seal	
			Lion					
	Reporte	dby	Communit	y Est	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expand	ied)	Sam	ole	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		19	76.0%	21.4	76.0%
Adult Female	0		00		6	24.0%	6.8	24.0%
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		25	100.0%	28.1	100.0%

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



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

OR SEAL	IARBOI	ŀ			LION	SEA	
Struck/ Total			Total	Total	Struck/		
<u>it Lost Take</u>	Harvest	<u>Year</u>	<u>Take</u>	<u>Take</u>	Lost	Harvest	Year
1.5 18.0	16.5	1992	0.0	0.0	0.0	0.0	1992
1.3 11.3	10.0	1993	0.0	0.0	0.0	0.0	1993
0.0 7.5	7.5	1994	0.0	0.0	0.0	0.0	1994
8.8 34.9	28.1	1995	0.0	0.0	0.0	0.0	1995
t Lost Take 1.5 18.0 1.3 11.3 0.0 7.5	16.5 10.0 7.5	1992 1993 1994	Take           0.0           0.0           0.0	<u>Take</u> 0.0 0.0 0.0	<u>Lost</u> 0.0 0.0 0.0	0.0 0.0 0.0	1992 1993 1994

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska. with assetance from the Karluk IRA Council, 1995

## Table 29. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Kodiak City, 1995

SAMPLING DESIGN:			
CHAIN REFERRAL	Total Referred Households	11	
	Surveyed Households	10	
	Sampling Fraction	90.9%	
	Sample Household Members	42	
	Estimated Household Members	46.2	

Harvest

Struck & Lost

Struck & Lost

Total Take (%)

Cum. Take (%)

Total Take

Cum. Take

Total Take

Harvest

00

0.0

0.0

0.0

0.0

00

0.0

0.0%

0.0%

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0%

0.0%

0.0

0.0

0.0

0.0

0.0

0.0

0.0%

0.0%

0.0

00

00

0.0

00

00

00

0.0%

0.0%

0.0

ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)

00

00

00

00

00

00

00

22

00

22

2.2

00

22

2.2

0.0% 250% 125%

11

00

11

11

00

11

3.3

0.0

00

0.0

00

0.0

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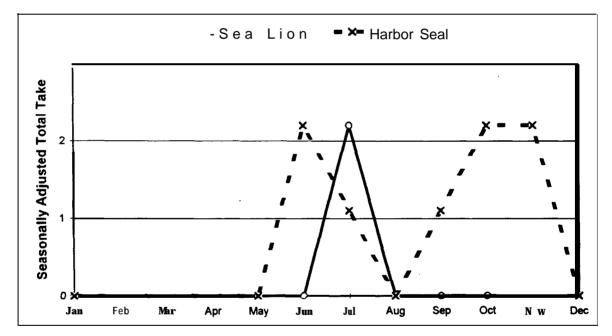
Percentage of Sample Households:	Estimated Community Harvest		
Sea Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u> <u>Seal</u>		<u>Lion</u>	Seal
<b>Used</b> 10.0% 70.0%	Total Number Harvested	2.2	8.8
Hunted 20.0%, 30.0%,	Total Number Struck and Lost	0.0	0.0
Harvested 10.0% 30.0%	Total Number Taken	2.2	8.8
Received 0.0% 50.0%			
Gave Away 10.0% 30.0%	Number Harvested Per Capit	a N/A	N/A

SEA LION	I HARVE	ST B	Y MON'	TΗ									Unknown	
	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aua	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE E	BY SAMPLI	ed hou	SEHOLDS	(UNEXP	ANDED)							
Harvest	0	0	0	0	0	0	2	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	0	0	0	2	0	0	0	0	cl	0	2
ESTIMATED	HARVEST	AND 1	ΓΑΚΕ ΒΥ	COMN	IUNITY	(EXPAN	DED)	•	•					
Harvest	0.0	0 0	0.0	00	0 0	0 0	2 2	0 0	0.0	0 0	ob	00	00	2.2
Struck & Lost	0.0	0 0	0 0	00	0 0	0 0	0 0	0 0	0 0	0.0	0 0	0.0	0.0	00
Total Take	0 0	0 0	0 0	00	0 0	0 0	2 2	0 0	0 0	0.0	0 0	0.0	0.0	2.2
ESTIMATED	SEASONA	LLY AC	DJUSTED	HARV	EST ANI	D TAKE	BY CO	MMUNI	ΓΥ (ΕΧΡ	ANDED)				
Harvest	0.0	0.0	0.0	0.0	0 0	0 0	2.2	0.0	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		00
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	2.2	0.0	0.0	0.0	0.0	0.0		2.2
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	00%	1000%	00%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum Take	0.0	0.0	0.0	0 0	0 0	0 0	2.2	2.2	2.2	2.2	2.2	2.2		
Cum. Take (%)	0.0%	00%	0.0%	00%	00%	00%	1000%	1000%	100.0%	100.0%	100.0%	100.0%		
HARBOR	SEAL H		ST BV	MON	тн								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Month	Total
REPORTED	HARVEST	AND 1	ΓΑΚΕ ΒΥ	SAMP	LED HO	USEHO	LDS (UN	EXPAN	DED)					
Harvest	0	0	0	0	0	2	1	0	1	2	2	0	0	8
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	2	1	0	1	2	2	0	0	8
ESTIMATED	HARVEST	AND	ΤΑΚΕ ΒΥ	COM	NUNITY	(EXPAN	DED)							

SOURCE laslaska 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 Kodak Ares Natile Association, 1995. HARVEST BY AGE AND SEX

		Sea	Lion		Harbor Seal					
	Report	ed by	Commun	ity Est.	Report	Reported by		ity Est.		
	Sam	Sample		ided)	Sam	pie	(Expanded)			
	Number	%	Number	%	Number	%	Number	%		
Adult Male	0	0.0%	0.0	0.0%	1	12.5%	1.1	12.5%		
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%	1	12.5%	1.1	12.5%		
Juvenile Unknown Sex	2	100.0%	2.2	100.0%	6	75.0%	6.6	75.0%		
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	2	100.0%	2.2	1000%	а	100.0%	8.8	100.0%		

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_		SEA	LION			HARBO	r sea	<u> </u>
-	Struck/ Total						Struck/	Total
	<u>Year</u>	<u>Harvest</u>	Lost	Take	Year	Harvest	Lost	<u>Take</u>
	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

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 Kodak Area Native Association, 1995

## Table 30. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Larsen Bay, 1995

SAMPLING DESIGN:			
CENSUS	Total Native Households	37	
	Surveyed Households	37	
	Sampling Fraction	100.0%	
	Sample Household Members	92	
	Estimated Household Members	92.0	
HARVEST AND USE INFO	RMATION		

Percentag	Percentage of Native Households:						Stima	ted Co	mmunit	y Harv	/est			
			Sea Ha	rbor		а	ind Ta	ke (Ex	panded	):		Sea	Harbor	
			<u>Lion</u>	Seal								Lion	<u>Seal</u>	
		Used :	2.7%	45. <b>9</b> %				То	tal Numb	er <b>Har</b>	/ested	2.0	11.0	
	Н	lunted	2.7%	10.8%				Total Nu	imber Stru	uck and	l Lost	1.0	0.0	
	Harv	vested	2.7%	10.8%					Total N	lumber	Taken	3.0	11.0	
	Red	ceived	0. 0%	35.1%										
	Gave	Away	2.7%	21.6%				Number	Harvest	ed Per	Capita	0. 02	0.12	
SEA LION					Mari	l	1.1	A	<b>S</b>	0-1	Neu	Dee	Unknown	Tatal
	Jan	Feb	Mar		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA						•					•			
Harvest	0	0	0	0	0	0	0	0	0	0	•0	2		2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	1	-	1
Total Take	0	0	0	0	0	0	0	0	0	0	0	3	0	3
ESTIMATED					•	EXPAND	)ED)							
Harvest	0.0	0.0	0 0	00	00	00	00	0.0	0.0	0.0	0.0	2.0	0.0	2.0
Struck & Lost	0.0	00	0 0	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0 0	1.0
Total Take	0.0	0.0	0 0	00	0 0	0.0	0 0	0 0	0.0	0.0	0.0	3 0	0.0	3.0
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARV	EST AND	TAKE	BY CO	OMMUNIT	Ύ (ΕΧΡΑ	NDED)				
Harvest	0 0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0 0	0.0	0 0	2.0	1	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	1.0		10
Total Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1	3.0
Total Take (%)	0.0%	0.0%	00%	00%	00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		100.0%
Cum Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	3.0	)	
Cum Take (%)	0.0%	0.0%	0.0%	00%	00%	0.0%	0.0%	00%	00%	0.0%	0.0%	100.0%	1	
HARBOR	SEAL	HARV	EST BY		TH								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	: Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HO	USEHOL	.DS (UI	NEXPANI	DED)					
Harvest	2	0	0	0	0	0	0	0	0	1	7	1	0	11
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	(	) 0	0
Total Take	2	0	0	0	0	0	0	0	0	1	7	1	0	11
ESTIMATED	HARVES	T AND	ΤΑΚΕ ΒΥ	COMN	MUNITY (	(EXPANI	DED)							
Harvest	2.0	0.0	0.0	0 0	0 0	00	0 0	0.0	0.0	1.0	7.0	1.(	0.0	11.0
Struck & Lost	0 0	0.0	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	2.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	1.0	7.0	1.0	0.0	11.0
ESTIMATED	SEASON	ALLY A	DJUSTED	HARV	EST AND	Ο ΤΑΚΕ	BY C	OMMUNI <sup>.</sup>	ΤΥ (ΕΧΡ	ANDED)				
Harvest	20	0.0	0.0	0.0	00	00	00	00	00	1.0	7.0	1.	D	110
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
Total Take	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	7.0			11.0 <sup>+</sup>
Total Take (%)	18.2%	0. 0%	0. 0%	0. 0%	0.0%	0.0%	0. 0%	0.0%	0. 0%	9.1%	63.6%	9.19		100.0%
Cum. Take	2.0	2.0		2.0	2.0	2.0	2.0		2.0	3.0	10.0			
Cum. Take (%	) 18.2%	18.2%		18.2%	18.2%	18.2%	18.2%	18.2%		27.3%	90.9%			
June 1	,		in total Con		en of Cubo									Alsola

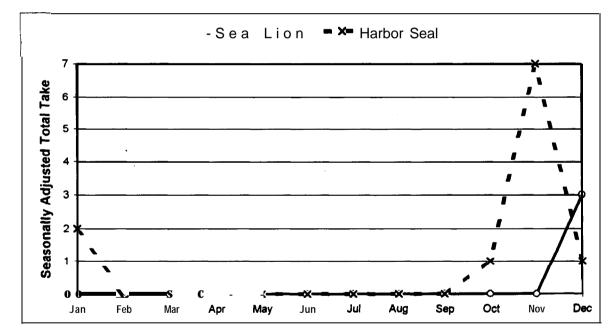
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Larsen Bay and Larsen Bay Tribal Council, 1995.

## Table 30. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Larsen Bay, 1995

HARVEST BY AGE AND SEX

		Sea	Lion			Harbor Seal				
	Reporte	ed by	Communi	ty Est.	Report	ed by	Commun	ity Est.		
	Sam	ple	(Expand	ded)	Sam	ple	(Expanded)			
	Number	%	Number	%	Number	%	Number	%		
Adult Male	1	50.0%	1.0	50.0%	10	90.9%	10.0	90.9%		
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	1	50.0%	1.0	<b>50.0%</b>	1	9.1%	1.0	9.1%		
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	00%	0	0.0%	0.0	0.0%		
Unknown Sex and Age	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%		
Total	2	1000%	2.0	100.0%	11	100.0%	11.0	100.0%		

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_		SEA	LION		ł	HARBOR SEAL					
			Struck/	Total			Struck/	Total			
	Year	Harvest	Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	<u>Take</u>			
	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			

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Abska. with assistance from the City of Larsen Bay and Larsen Bay Tribal Council, 1995.

Table 31. S	SEA LI	ON AN	ND HAP	RBOR	SEAL	HARV	'EST A	ND TA	AKE ES	STIMA	TES: (	Old Ha	arbor,	1995
SAMPLING	DESI	GN:						Active	(	<u> Other</u>		Total		
TWO-STRA	A <i>TA</i>		Total N	lative H	louse	nolds		29	-	59		88		
			Surv	eyed H	louser	nolds		24		28		52		
			5	Samplir	ng Fra	ction		82.8%	4	47.5%		59.1%		
			ple Ho				`	90		87		177		
	E	Estima	ted Ho	useholo	d Mem	bers		108.8		183.3		292.1		
HARVEST	AND U	ISE IN	IFORM.	ATION										
Percentage	of <b>Nat</b>	<b>ive</b> Ho	usehol	ds:		L	Estima	ted Co	mmuni	ty Har	vest			
			Sea	larbor		2	and Tal	ke (Ex	pandec	1):		Sea I	Harbor	
			<u>Lion</u>	Seal								Lion	Seal	
		Used	97.6% <sup>-</sup>	100.0%				Тс	otal Nu	mber H	arveste	107.1	112.0	
	H	luntec	48.3%	48.3%				Total N	umber S	truck ar	id Lost	5.7	2.4	
	Har	veste	d 47.0%	44.6%					Total I	Number	Taken	112.9	114.4	
		ceived		84.2%										
	Gave	Away	44.6%	41.0%				Number	r Harvest	ted Per	Capita	0.37	0.38	
SEA LION	HARVE Jan	EST BY Feb	Y <b>MON</b> Mar		Mou	Jun	hul	A0	Sep	Oct	Nov		Unknown Month	Total
REPORTED HAR				Apr .ED HOUS	May EHOLDS		Jui ANDED)	Au9	ಿರ್ಧ		Nov	000	wonth	iutai
Harvest	0	4	14	11	0	0	0	2	8	20	10	10	0	79
Struck & Lost	0	1	0	2	0	0	0	- 0'	1	0	0	0	0	. 4
Total Take	0	5	14	13	0	0	0	2	9	20	10	10	. 0	83
ESTIMATED F	ARVEST	AND T			UNITY (	FXPANI	DFD)	_	-					
Harvest	0.0	5.7	178	151	00	00	00'	33	115	269	14.6	12.1	0.0	107.1
Struck & Lost	0.0	12	0.0	33	00	00	00	00	12	00	0 0	00	0.0	57
Total Take	0.0	6.9	178	164	00	00	00	33	127	269	14.8	12.1	0.0	1129
ESTIMATED S	SEASONA	LLY AD	DJUSTED	HARVE	ST AND	Ο ΤΑΚΕ	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	0.0	5.7	17.0	151	00	00	00	33	、 115	, 269	14.8	12.1		1071
Struck & Lost	0.0	1.2	0.0	33	00	00	00	00	1.2	00	0.0	00		5.7
Total Take	0.0	6.9	17.8	18.4	0.0	00	00	33	127	26.9	14.8	12.1		112.9
Total Take (%)	0.0%	6.1%	15.8%	16.3%	00%	00%	00%	29%	112%	236%	131%	10.7%		100.0%
Cum. Take	0.0	6.9	240	432	432	43.2	432	465	591	a60	1006	112.9		
Cum. Take (%)	0 0%	6.1%	21.9%	362%	362%	362%	362%	412%	524%	762%	893%	100.0%		
HARBOR	SEAL F	IARVE	ST BY	MONT	ГН								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sap	Oct	Nw	Dec	Month	Total
REPORTED H					ED HO		LDS (UN	IEXPANI	DED)					
Harvest	0	5	12	11	1	0	4	11	9	14	10	6	0	83
Struck & Lost	0	0	2	0	0	0	0	0	0	0	0	0		2
Total Take	0	5	14	11	1	0	4	11	9	14	10	6	0	85
								4/0	407	40 7	40.4		• •	140.0
Harvest	0.0	6.9	15.4	16.0	21	00	48	160	127	10.7	12.1	7.3		112.0
Struck & Lost	00	0.0	24	00	00	00	00	00	00	0.0	0.0	0.0		24
Total Take	0.0	6.9	17.8	16.0	21	00	48	160	127	10.7	12 1	7.3	0.0	114.4
ESTIMATED S									•	,		-		440.0
Harvest	0.0	6.9	154	160	21	00	48	160	127	la7	121	73		112.0
Struck & Lost	0.0	0.0	2.4	0.0	0.0	00	00	00	00	00	0.0	0.0		2.4
Total Take	0.0	6.9	17.0	16.0	21	0.0%	48	160	127	107	12 1	7.3		114.4
Total Take (%)	0.0%		15.6%		1.6%	0.0%	42%	140% 627	11 1%	16.4% 05 1	10.6%	6.3%		100.0%
Cum. Take	0.0	6.9 4 19/	24.8	40.7	42.9 7 50/22	42.9	477 1 70/	637	763	95.1 42.1%	1071 027%	1144		
Cum. Take (%)	0.0%					75% 4			66 7% Monitor S	63.1%	937%	100.0%		

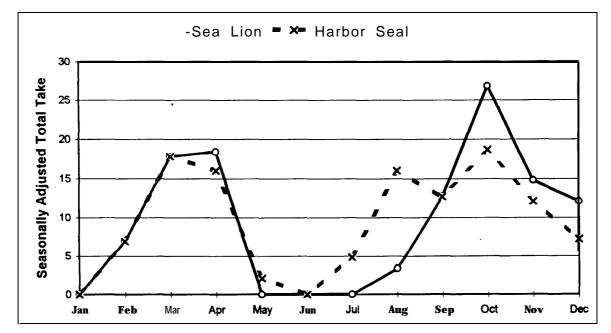
SOURCE: Alaska Department of Fish and Came, Diiision of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Old Harbor and Old Harbor Tribal Council, 1995

## Table 31. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Old Harbor, 1995

HARVEST BY AGE AND SEX

		Sea	Lion		Harbor Seal					
	Reporte	ed by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.		
	Sam	Sample		ded)	Sam	ple	(Expanded)			
	Number	%	Number	%	Number	%	Number	%		
Adult Male	5	6.3%	6.0	5.6%	16	19.3%	20.2	16.1%		
Adult Female	13	16.5%	17.5	16.3%	24	20.9%	32.6	29.1%		
Adult Unknown Sex	4	5.1%	5.7	5.4%	4	4.0%	6.6	5.9%		
Juvenile Male	35	44.3%	46.6	45.3%	20	24.1%	26.9	24.0%		
Juvenile Female	21	26.6%	20.1	26.2%	19	22.9%	257	22.9%		
Juvenile Unknown Sex	1	1.3%	1.2	1.1%	0	0.0%	0.0	0.0%		
Pup Male	0	00%	0.0	00%	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	79	100.0%	107.1	1000%	83	100.0%	112.0	100.0%		

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		F	HARBOR SEA					
		Struck/	Total			Struck/	Total			
<u>Year</u>	Harvest	Lost	Take	<u>Year</u>	Harvest	Lost	<u>Take</u>			
1992	32.9	13.2	46.1	1992	66.6	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			

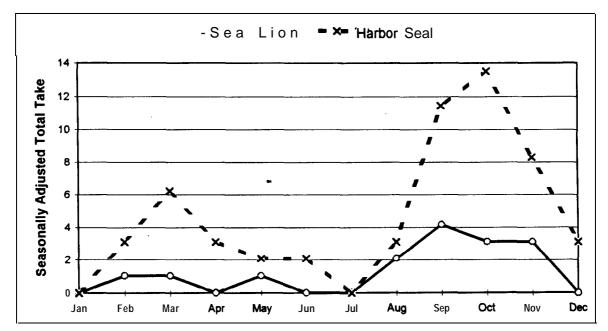
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the City of Old Harbor and Old Harbor Tribal Council, 1995.

SAMPLING	DESIG	GN:												
CENSUS					Total N	lative I	Housel	nolds		53				
					Surv	veyed I	Housel	nolds		51				
					9	Samplir	ng Fra	ction	(	96.2%				
				Sam	ple Ho	usehol	d Men	nbers		156				
			I	Estima	ted Ho	usehol	d Men	nbers		162.1				
HARVESTA	AND US	SE IN	IFORM.	ATION	I									
Percentage	of Nati	ive Ho	usehol	ds:		E	Estimat	ed Con	nmunity	' Harv	rest			
-			Sea Ha	rbor		a	nd Ta	ke (Exp	, canded	d):		Sea	Harbor	
			Lion	Seal								Lion	<u>Seal</u>	
		used	21.6%	451%				То	tal Nun	nber Ha	arvested	15.6	56.1	
	H	unted	15.7%	294%				Total Nu	imber S	truck an	nd Lost	0.0	0.0	
			15.7%	29.4%					Total	Number	Taken	15.6	56.1	
		eived		27.5%										
	Gave	Away	15.7%	255%				Number	Harves	ted Per	Capita	0.10	0.35	
SEA LION	HARVE Jan	EST B Feb	Y MON Mar	'TH Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tota
REPORTED HAR	VEST AND	TAKE E	BY SAMPL	ED HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	1	1	0	1	0	0	2	4	3	3	0	0	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	(
Total Take	0	1	1	0	1	0	0	2	4	3	3	0	0	1
ESTIMATED H	HARVEST	AND T	ΓΑΚΕ ΒΥ	COMN	IUNITY	(EXPAND	)ED)							
Harvest	0.0	1.0	1.0	0.0	10	0.0	0 0	21	42	31	31	0.0	0 0	15.6
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
Total Take	0.0	1.0	1.0	0.0	1.0	0 0	0 0	2.1	4.2	31	31	0.0	0.0	15.0
ESTIMATED S	SEASONA	LLY AD	JUSTED	HARV	EST ANI	D TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	0.0	1.0	1.0	0.0	10	0.0	0 0	21	4.2	3.1	3.1	0.0		15.0
Struck a Lost	0. 0	0.0	0.0	0.0	0. 0	00	00	0.0	0.0	00	0.0	0.0		0.0
Total Take	0.0	1.0	1.0	0.0	1.0	0.0	0 0	21	4.2	3.1	3 1	0.0		15.6
Total Take (%)	0.0%	6.7%	6.7%	0.0%	6.7%	00%	0.0%	133%	26.7%	20.0%	20.0%	0.0%		100.09
Cum Take	0.0	1.0	21	21	31	3.1	31	5.2	94	12.5	15.6	15.6		
Cum Take (%)	0.0%	6.7%	13.3%	13.3%	20.0%	20.0%	20.0%	333%	600%	80.0%	100.0%	100.0%		
HARBOR	SEAL H Jan	IARVE Feb	ST BY Mar	MON Apr	TH May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tota
REPORTED H					,				,			200		
Harvest	0	3	6	3	2	2	0	3	,LD) 11	13	8	3	0	5
Struck a Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	Ū
Total Take	0	3	6	3	2	2	0	3	11	13	8	3	0	5
ESTIMATED	HARVEST	AND	ΤΑΚΕ Β΄	COMN	NUNITY	(EXPANI	DED)							
Harvest	0.0	31	6.2	31	21	2.1	00	31	11.4	13.5	0.3	3.1	0 0	56.
Struck a 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.
Total Take	0.0	3.1	6.2	3.1	2.1	21	0.0	31	11.4	13.5	8.3	31	0.0	56.
ESTIMATED	SEASONA	ALLY A	DJUSTE	HARV	EST AN	D TAKE	BY CO	оммиліт	Y (EXP	ANDED)	)			
Harvest	0.0	31	6.2	31	21	2.1	0 0	31	114	13.5	8.3	31		56
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
Total Take	0.0	31	6.2	3.1	2.1	2.1	0 0	3.1	114	13.5	8.3	3.1		56
Total Take <b>(%)</b>	0.0%	5.6%	11.1%	5.6%	3.7%	3.7%	0.0%	5.6%	26.4%	24.1%	14.6%	5.6%	I	100.0
Cum. Take	0.0	3.1	9.4	12.5	14.5	16.6	166	19.7	31.2	447	53.0	56.1		
Cum Take (%)	0.0%	5.6%	16.7%	22.2%	25.9%	29.6%	29.6%	35.2%	55.6%	79.6%	94.4%	100.6%		

SOURCE Abska Department of Fsh and Came, 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, 1995 HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	rSeal	
	Reporte	ed by	Commun	i <b>ty</b> Est	Reporte	d by	Communi	ty Est.
	Sam	ole	(Expan	ded)	Sam	ble	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	3	5.6%	3.1	5.6%
Adult Female	1	6.7%	1.0	6.7%	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	12	60.0%	12.5	60.0%	38	70.4%	39.5	70.4%
Juvenile Female	2	133%	2.1	13.3%	12	22.2%	12.5	22.2%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	1	1.9%	1.0	1.9%
Pup Male	0	00%	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	00%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	00%	0.0	00%	0	0.0%	0.0	0.0%
Female Unknown Age	0	00%	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	15	100.0%	15.6	100.0%	54	100.0%	56.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		F	IARBO	R SEA	L
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	Take	<u>Year</u>	Harvest	Lost	<u>Take</u>
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

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, 1995

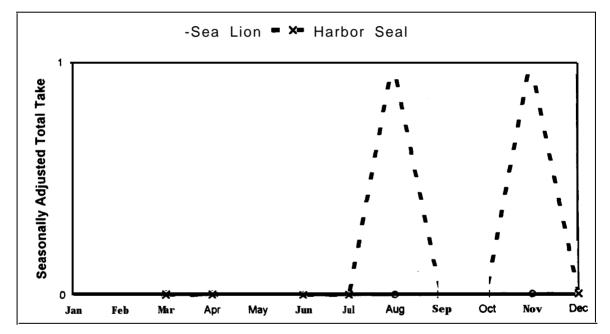
		Total		er	Othe	(	Active						GN:	G DESIC	SAMPLING
		48		41		-	7	•	nolds	Houseł	Native H	Total N		ATA	TWO-STR
		40		33	3		7		nolds	Houseł	veyed H	Sur			
		83.3%		5%	80.5%	8	100.0%			•	Samplir				
		124		95			29				busehol			_	
		147.0		3.0	118.		29.0		bers	d Merr	ousehol	ted Ho	Estima	E	
											IATION	FORM	SE IN	AND U	HARVEST
			/est	Harv	-		ted Cor				lds:	useho	ive Ho	e of Nat	Percentag
		Sea			d):	andec	ke (Exp	nd Ta	а		Harbor	Sea			
al	<u>S</u>	Lion									<u>Seal</u>	<u>Lion</u>			
2.0		0.0				al Num					8.3%		used		
0.0		0.0			-		Total Nur				4.2%		unted		
2.0		0.0	aken	ider i	Numo	Total					4.2%		vested		
01		0.00	Comito	D (		المسيمما	Ni. una la cur				4.2%		eived		
.01		0.00	Сарна	Per	lea P	Harvest	Number				4.2%		Away		
	Unkr M o	Dec	Nov	Oct	0	Sep	Aug	Jul	Jun	May	VTH Apr	Y MON Mar	Feb	I HARVE Jan	SEA LION
								IDED)	(UNEXPA	SEHOLDS	LED HOUS	BY SAMP	TAKE I	RVEST AND	REPORTED HA
0		0	0	0		0	0	0	0	0	0	0	0	0	larvest
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	Total Take
									EXPAND						ESTIMATED
0.0		0.0	0.0	00		00	0.0	0.0	0.0	00	00	0.0	0.0	0.0	larvest
0.0		0.0	00	0.0		00	00	0.0	00	0.0	00	0.0	0.0	0.0	Struck & Lost
0.0		0.0	0.0	0.0		0 0	00	00	00	0.0	0 0	0.0	0.0	00	Fotal Take
				,		•	MMUNIT								ESTIMATED
		00	00	00		0.0	00	00	00	00	0.0	0.0	00	0.0	Harvest
		0.0	0.0	0.0		00	00	00	00	00	00	0.0	0.0	00	Struck & Lost
		0.0	0.0	00	U	0 0	00	0.0	0 0	0 0	0 0	0.0	0.0	0.0	Total Take
										 0 0					T <b>otal Take (%</b> ) Cum Take
		0.0	0.0	0.0	U	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0	Cum Take (%)
											-25	-			
	Unk Mo	Dec	Nov	Oct	c	Sep	Aug	Jul	Jun	TH Μaγ	Y MON' Apr	STB) Mar	IARVE Feb	SEAL H	HARBOR
							Ť			į				HARVEST	REPORTED
0	ļ	0	1	0		0	1	0	0	0	0	0	0	0	Harvest
0	1	0	0	0		0	0	0	0	0	0	0	0	0	Struck & Lost
0	1	0	1	0		0	1	0	0	0	0	0	0	0	Total Take
								ED)	(EXPAND	IUNITY	Y COMN	ΓΑΚΕ Β	AND	HARVEST	ESTIMATED
0.0	)	0.0	1.0	0.0	(	0.0	1.0	00	00	0.0	0.0	0.0	0.0	0.0	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	1.0	0.0	(	0 0	1.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	Total Take
				DED)	AND	Y (EXP	OMMUNIT	ву со	D TAKE	EST AN	D HARV	DJUSTE	ALLY A	SEASONA	ESTIMATED
	)	0 0	10	0.0		00	10	0 0	0 0	0 0	0.0	0.0	0.0	0.0	Harvest
	)	0.0	0.0	00	(	0.0	0.0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	Struck & Lost
	)	0.0	1.0	0.0		0.0	1.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	Total Take
10	, D	0.0%	50.0%	0.0%	0.	0.0%	50.0%	00%	0.0%	0.0%	0.0%	0.0%	0.0%	0 0%	Total Take (%)
	ו	2.0	2.0	10		1.0	1.0	00	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 Port Lions Tribal Council and City of Port Lions, 1995

## Table 33. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Port Lions, 1995

		Sea	Lion			Harb	or Seal	
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Communi	ty Est.
	Samp	ble	(Expan	ded)	Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		1	50.0%	1.0	50.0%
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	50.0%	1.0	50.0%
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		<u> </u>	HARBO	R SEA	L
			Struck/	Total			Struck/	Total
	Year	<u>Harvest</u>	Lost	<u>Take</u>	Year	<u>Harvest</u>	Lost	<u>Take</u>
	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

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, 1995.

## Table 34. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Chignik Bay, 1995

SAMPLING	) DESIG	эN:			N.		•	• • •		<b>0</b> 5				
CENSUS				I	Total Na					25				
						eyed H			4	20				
				Sami	sa ple Hou	ampling	•		00	0.0% 50				
			F	•	ted Hou					<b>50</b> 62.5				
				Stimat		Sellola		Del 2		02.0				
HARVEST	_	-	-	-						-	-			
Percentag	je of Nat								nmunity		est		· · ·	
			Sea Ha			ar	nd Tal	ke (Exp	panded)	15		Sea		
		-		<u>Seal</u>				_	_			Lion	<u>Seal</u>	
		used 0.		0.0%					al Numb			0.0	0.0	
		unted C		0.0%			Т		mber Str			0.0	0.0	
		vested C		0.0%					Total Nu	umber 7	ſaken	0.0	0.0	
		eived C		0.0%										
			ay 0.0%				N	lumber I	Harveste	d Per C	Capita	0.00	0.00	
SEA LION	HARVE Jan	EST BY Feb	MON7 Mar	TH Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov		Unknwm Month	Total
REPORTED HAR	RVEST AND	TAKE B'	Y SAMPLE	ED HOUS	SEHOLDS (	UNEXPAN	IDED)							
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 I	HARVEST	AND T/	AKE BY	сомм	UNITY (E	EXPANDE	ED)							
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	00	0 0	0 0	0 0	0 0	0 0	00	0.0	0 0	0 0	0.0	0.0
Total Take	0.0	0.0	00	00	0 0	0 0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0
ESTIMATED S	SEASONA	LLY AD.	JUSTED	HARVE	ST AND	TAKE	BY CON	νΜυνιτγ	/ (EXPA	NDED)				
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 (%)		•••				~	-	***						<del></del> .
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	ς σεδι Η	ARVE!	ST RY	MON.									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw	Dec	Month	Total
REPORTED H	HARVEST	AND T/	AKE BY	SAMPI	LED HOU	JSEHOLI	DS (UNI	EXPAND	ED)					
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 T	AKE BY	COMM	/UNITY (F	EXPAND	ED)							
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	SEASONA	LLY AD	JUSTED	HARV	EST AND	TAKE	BY CO	ידואטאא	Υ (ΕΧΡΑ	NDED)				
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. Tal	ke(%)				<del></del>						-	. <del>.</del>	,	
							_				_			

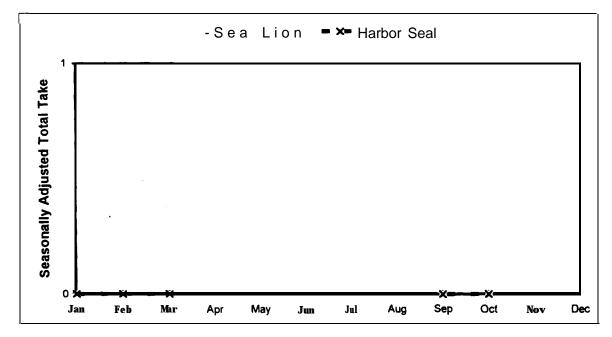
SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Bay Traditional Village Council, 1995.

## Table 34. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Chignik Bay, 1995

HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	rSeal	
	Reporte	•	Communi (Expanded)	,	Reporte	•	Communi (Expan	
	Sam				Samp			<u> </u>
	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		ł	HARBO	r sea	۸L
		Struck/	Total			Struck/	Total
Year	<u>Harvest</u>	Lost	Take	Year	Harvest	Lost	<u>Take</u>
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

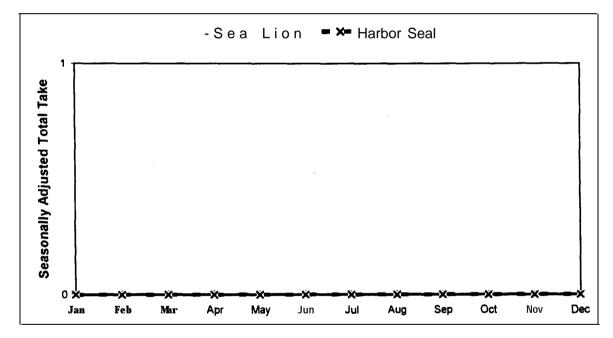
SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Chignik Bay Traditional Village Council, 1995

Table 35.			ND HAI	RBOR	SEAL	HARV	'EST /	TAKE	ESTIN	IATES	S: Chi	gnik La	agoon,	1995
SAMPLING	G DESIC	GN:												
CENSUS				٦		ative H				21				
						eyed H				20				
				-		Samplin	•		9	5.2%				
			-			useholo			_	71 74 6				
			E	stima	tea H	ousend		embers	5	74.6				
HARVEST														
Percentage	e of Nati					E	stima	ted Con	nmunit	y Har	vest			
			Sea Ha	rbor		а	nd Ta	ke (Exp	anded	):		Sea H	larbor	
			Lion	<u>Seal</u>								Lion	<u>Seal</u>	
		used 0	).0%	0.0%					al Numb			0.0	0.0	
	Н	unted	0.0%	0.0%				Total Nur	mber Stu	<b>uck</b> an	d Lost	0.0	0.0	
		/ested		0.0%					Total N	umber	Taken	0.0	0.0	
		eived		0.0%							<b>_</b> -			
		Away		0.0%				Number	Harveste	ed Per	Capita	0.00	0.00	
SEA LION	HARVE Jan	EST BY Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Jnknown Vionth	Tota
REPORTED HAI	RVEST AND	TAKE B	BY SAMPL	ed hous	SEHOLDS	(UNEXPA	NDED)							
larvest	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	
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (	EXPAND	ED)							
Harvest	0.0	0.0	0 0	00	00	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.
Total Take	0.0	0.0	0.0	0 0	00	0 0	0 0	0.0	00	0.0	00	0.0	0 0	0.
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	0 0	0 0	00	0.0	0 0	00	0 0	0 0		0.
Struck & Lost	0.0	0.0	0 0	00	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	00	0 0	0.0	00	0 0	0 0	0.0	0.0	0.0		0.
Total Take (%)	•=-	***			<b></b>									-
Cum Take	0.0	00	0.0	0.0	0.0	0 0	0.0	0 0	0 0	00	0.0	0.0		
Cum Take (%)	•••													
HARBOR	SEAL H	IARVE	ST BY		ГН								Unknown	
	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Tot
REPORTED							-		-	_				
	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	
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED						EXPAND	•							
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
Struck & Lost	0.0	0.0	0.0	00	0.0	0.0	0.0	00	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	00	0.0	0.0	0.0	0 0	0.0	0.0	0
ESTIMATED									•	NDED)				
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	00	0 0			C
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		C
Total Take (%)	00	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		

## Table 35. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Chignik Lagoon, 1995

		Sea	Lion			Harbo	r Seal	
	Reporte	dby	Communit	y Est	Reporte	d by	Communi	ty Est.
	Samp	ble	(Expand	jed)	Samp	ole	(Expan	ded)
	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		00		0		0.0	
Unknown Sex and Age	0		00		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 L	ION		H	HARBO	r sea	L
	5	Struck/ T	otal			Struck/	Total
<u>Year</u> H	larvest	Lost	<u>Take</u>	<u>Year</u>	Harvest	<u>Lost</u>	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

SOURCE Al aska Department of Fish and Game, Division of Subsalence. Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Lagoon Traditional Village Council, 1995.

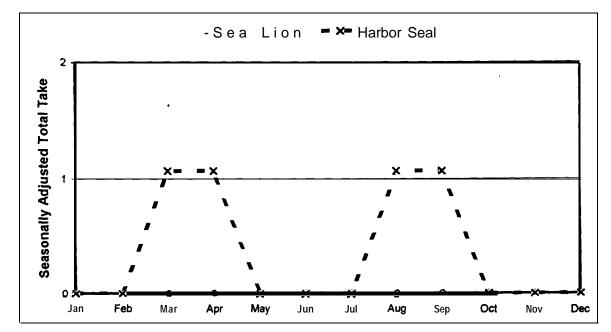
SAMPLING	DESIG	₩.												
CENSUS	DEGIC			-	Fotal N	lative H	louse	nolds		33				
						eyed H				31				
						Samplin			9	3.9%				
				Samp	ole Ho	useholo	d Mem	nbers		128				
			I	Estimat	ed Ho	useholo	d Mem	nbers		136.3				
HARVESTA	ND US	SE IN	FORM	ATION										
Percentage	of Nati	ve Ho	usehol	ds:		E	stimat	ed Co	mmunit	y Har	/est			
			Sea	Harbor		а	nd Ta	ke (Ex	panded	):		Sea H	larbor	
			Lion	Seal								<u>Lion</u>	Seal	
		Used 6		74.2%				To	tal Numb	ber Har	vested	0.0	3.2	
	Hu	unted	0.0%	12.9%				Total Nu	umber St	ruck an	d Lost	0.0	1.1	
	Harv	ested	0.0%	6.5%					Total N	lumber	Taken	0.0	4.3	
		eived		742%							• ••			
		Away		51.6%				Number	Harvest	ed Per	Capita	0.00	0.02	
SEA LION	Jan	ST B Feb	Y MON Mar	ITH Apr	May	Jun	Jul	Aug	Sep	Oct	Nw		Unknown Month	Tota
REPORTED HAP	RVEST AND	TAKE	by samp	LED HOUS	SEHOLDS	(UNEXPA	NDED)							
larvest	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	. (
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED I	HARVEST	AND 1	TAKE BY	г сомм	UNITY (	EXPAND	ED)							
larvest	0.0	0.0	0 0	0 0	00	0 0	00′	00	0 0	0 0	00	00	00	0.
Struck & Lost	0.0	0 0	0 0	0 0	00	0 0	00	00	0 0	0 0	00	0.0	0.0	00
otal Take	0.0	00	0 0	0.0	00	0 0	00	00	0 0	0 0	0.0	0.0	00	00
ESTIMATED S	SEASONA	LLY A	DJUSTED	HARVE	ST AND	Ο ΤΑΚΕ	ву со	MMUNIT	Υ (ΕΧΡΑ	NDED)				
larvest	0 0	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	00	0.0		0.0
Struck & Lost	0.0	0.0	0 0	0 0	00	0 0	0 0	0 0	0 0	0 0	00	0.0		0.0
otal Take	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	00		0.0
fotal Take(%)		•						***						-
Cum Take	0.0	0.0	0.0	0 0	00	0 0	00	0 0	0 0	0.0	00	0.0		
Cum Take (%)		•=-					•••	<b>120</b>						
HARBOR S									-				Unknown	
		Feb	Mar		Mav	Jun			Sep	Ckt	Nov	Dec	Month	Tota
REPORTED H	IARVEST 0	AND I 0	AKE BI		LED HO 0	USEHUL 0	DS (UN 0		JED) 1	٥	0	0	0	
Struck & Lost	0	0	, 0	U 1	0	0	0	0	0	0 0	0	0	0	
Total Take	0	0	1	1	0	0	0	1	1	0	0	0	0	
							-	I	I	U	U	U	U	
ESTIMATED H								11		0.0	00	0.0	0.0	· •
Harvest Struck & Lost	0.0	0.0	11	00	00	00	00	11	1.1	0.0	00	0.0	0.0	3.
Total Take	0.0 0.0	0.0 0.0	0 0 1.1	11 11	0 0 0 0	0 0 0 0	0 0 0 0	0 0 11	0 0 11	0.0 0.0	0 0 0.0	0.0 00	0.0 0.0	1. 4
											0.0	00	0.0	4
ESTIMATED S									•	,	00	0.0		•
Harvest	0 0	0.0	1.1	00	00	00	00	11	11	00				3
Struck & Lost	0.0	0.0	0.0	11	0.0	00	00	00	00	0.0	0.0	0.0		1
Total Take	0.0	0.0	11 25.0%	11 250%	0.0	0.0%	00	11 2509	11 2509	0.0	0.0	0.0		4
Total Take (%) Cum. Take	0.0%		25.0%		0.0% 21	0.0%		250%		0.0%	0.0%	0.0%		100.0
LIND LAKE	0.0	0.0	1.1	2.1	21	21	21	32	4.3	4.3	4.3	43		

'SOURCE: Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alask with assistance from the Chignik Lake Traditional Vilbge Council, 1995

## Table 36. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Chignik Lake, 1995

		Sea	Lion			Har	bor Seal	
	Reporte	d by	Communit	y Est.	Reporte	ed by	Commun	ity Est.
	Samp	le	(Expand	ted)	Sam	ole	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		2	66.7%	2.1	66.7%
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		00		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	42.0	00		1	33.3%	1.1	33.3%
Total	0		0.0		3	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 I	LION		H	IARBOI	r sea	AL.
		Struck/	Total			Struck/	Total
Year	Harvest	Lost	<u>Take</u>	Year	Harveşt	Lost	<u>Take</u>
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

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska, with assistance from the Chignik Lake Traditional Village Council, 1995

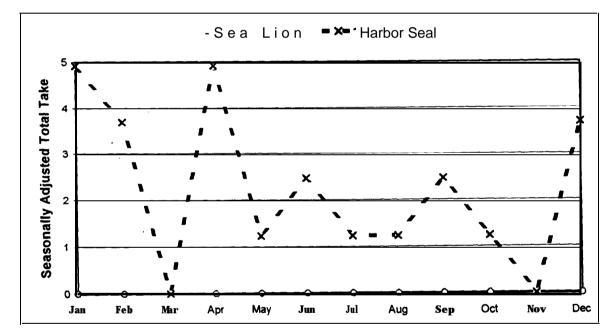
SAMPLING	G DESIC	GN:		-						0.0				
CENSUS				1	otal Na					20				
						eyed H			, ,	17				
				Samn		ampling	•		00	.0% 53				
					le Hou ed Ho					53 62.4				
			E	Stillat	eu nu	usenoi	u we	linners		02.4				
HARVEST			•••••											
Percentage	e of Nati							ed Cor			vest			
				arbor		ar	nd Tal	ke (Exp	anded	):		Sea H		
		-		<u>Seal</u>				Tat	al Numak		أممامما	Lion	Seal	
		U <b>seci</b> 0. unted		<b>58.8%</b> 41.2%				Total Nu	al Number St			0.0	25.9	
		vested (		41.2% 41.2%				I OLAI INU	Total N			0.0	1.2	
		ceived		41.2% 23.5%					i ulai IN	UUUUUUU	IANCII	0.0	27.1	
		Away (		23.3 <i>%</i> 41.2%				Number	Harvest	od Por	Capita	0.00	0.42	
SEA LION		,						Mamber	nai vest		oupitu		Inknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	-	Nonth	Tota
REPORTED HAP				ED HOUSE	EHOLDS (	UNEXPAN	DED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	(
Struck & Los!	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fotal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	(
ESTIMATED					•		ED)							
Harvest	0.0	0.0	0.0	00	00	00	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	00	00	00	00	0.0	0.0	0.0	0.0	0.0	0 0	0.
Total Take	0.0	00	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVES	ST AND	TAKE E	BY CO	MMUNITY	(EXPA	NDED)				
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.
Struck & Lost	00	00	0.0	00	00	00	00	0.0	0.0	0.0	0.0	0.0		0 (
Total Take	0.0	0.0	0.0	00	0.0	00	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								
Cum Take (%)	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
ouni rake (kaj				6.p.s				en,	***					
HARBOR	SEAL H Jan	IARVES Feb	ST BY Mar	MONT Apr	Ή Mav	Jun	Jul	Auo	Sep	Ccl	Nw		Jnknown M o n t h	Tota
REPORTED I										001		0001	<i>n</i> onth	101
Harvest	4	3	0	4	1	2	1	1	2	1	0	3	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	1	-
Total Take	4	3	0	4	1	2	1	1	2	1	0	3	1	2
ESTIMATED	HARVEST	AND T	AKE BY	сомми	JNITY (E	EXPAND	ED)							
Harvest	4.7	3 5	0.0	47	1.2	24	, 1.2	1.2	2.4	1.2	0.0	3.5	0.0	26.
Struck & Lost	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.
Total Take	47	3.5	0.0	4.7	1.2	24	1.2	1.2	24	1.2	0.0	3.5	1.2	27.
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Υ (ΕΧΡΑ	ANDED)				
Harvest	47	3 5	0.0	47	1.2	24	1.2	1.2	24	1.2	0.0	3.5		25.
Struck & Lost	0.2	0.2	0.0	0.2	01	0.1	01	01	01	01	0.0	0.2		1
Total Take	4.9	3.7	0.0	4.9	1.2	2.5	1.2	1.2	2.5	1.2	0.0	3.7		27.
Total Take (%)	10.2%	13.6%	0.0% 1	8.2%	4.5%	9 1%	4.5%	45%	9.1%	4.5%	0.0%	13.6%		100.0
Cum. Take	4.9	8.6	8.6	13.5	14.8	17.2	18.4	19.7	22.1	234	234	27 1		
Cum Take	(%) 18.2	<b>%</b> 31.69	% 31.8%	<b>50.0%</b>	54.5%	636%	68.2%	727%	81.8%	864%	864%	100.0%		

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Ltons and Harbor Seals in Alaska with assistance from the False Pass Tribal Council and City of False Pass, 1995.

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		Sea	Lion			Harl	borSeal	
	Reported	d by	Community	Est.	Reporte	ed by	Communi	ty Est.
	Samp	le	(Expande	d)	Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	****	0.0		10	45.5%	11.8	45.5%
Adult Female	0		0.0		0	0.0%	0.0	0.0%
Adult Unknown Sex	0	***	0.0	<b></b> -	0	0.0%	0.0	0.0%
Juvenile Male	0		0.0		4	18.2%	4.7	18.2%
Juvenile Female	0		0.0		1	4.5%	1.2	4.5%
Juvenile Unknown Sex	0		00		7	31.8%	8.2	31.8%
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		00		0	0.0%	0.0	0.0%
Female Unknown Age	0		00		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		22	100.0%	25.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		ł	HARBOI	L	
		Struck/	Total			Struck/	Total
Year	Harvest	Lost	Take	<u>Year</u>	Harvest	Lost	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	12.8	2.1	14.7
1995	0. 0	0. 0	0.0	1995	25.9	1.2	27.1

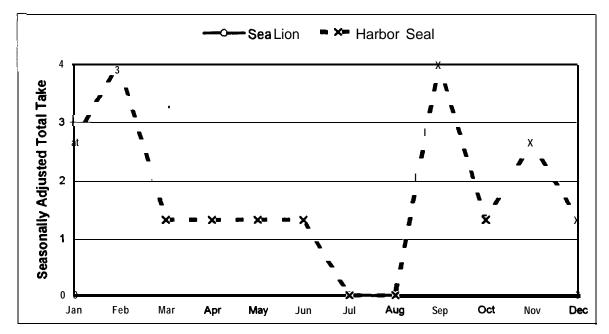
SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the False Pass Tribal Council and City of False Pass, 1995

SAMPLING	DESIG	GN:												
CENSUS				1	fotal N	ative H	lousel	nolds		8				
						eyed H				6				
				-		amplir	•		7	/5.0%				
			_	•	le Hou					25				
			E	stimat	ed Hou	useholo	d Men	nbers		33.3				
HARVEST	AND U	ISE INI	FORM	ATION										
Percentage	of Nati	i <b>ve</b> Ho	useholo	ds:		E	stimat	ed Con	nmunity	Harv	est			
		:	Sea H	arbor		а	nd <b>Ta</b>	ke (Ex	pandec	l):		Sea H		
			lion	Seal								Lion	<u>Seal</u>	
		Used 0							tal Num			0.0	18.7	
		unted		83.3%				Total Nu				0.0	2.1	
		vested		83.3%					Total N	lumber	Taken	0.0	21.3	
		ceive						N 1	I and the		0	0.0-		
		Away		667%				Number	Harvest	ed Per	Capita	0.00	0.56	
SEA LION	HARVE Jan	EST BY Feb	MON Mar	TH Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov		Jnknown Month	Tota
REPORTED HAR\	/est and	TAKE B	y sampl	ed hous	EHOLDS	(UNEXPAI	NDED)							
Harvest	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	(
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	(
ESTIMATED H	ARVEST	AND T	AKE BY	COMM	UNITY (I	EXPAND	ED)							
Harvest	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0 0
Struck & Lost	0.0	0 0	0 0	00	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 S	EASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY CO	MMUNIT	Υ (ΕΧΡΑ	ANDED)				
Harvest	0.0	0.0	0.0	00	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	00	0.0	0.0	0 0	0.0	00	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 S						l	6.0	A	<b>C</b> = =	0	Neu		Unknown Month	Tota
REPORTED H	Jan ARVEST	Feb	Mar AKE BY	Apr SAMPL	May ED HOU	Jun JSEHOL	Jul DS (UN	Aug IEXPAND	Sep DED)	Oct	Nov	Dec	wonth	Tota
Harvest	2	2	0	1	1	1	0	0	3	1	2	1	0	1
Struck & Last	0	1	1	0	0	0	0	0	0	0	0	0	0	
Total Take	2	3	1	1	1	1	0	0	3	1	2	1	0	1
ESTIMATED H	IARVEST	AND T	AKE BY	сомм	UNITY (	EXPAND	)ED)							
Harvest	2.7	2.7	0.0	1.3	1.3	1.3	0.0	0.0	40	1.3	2.7	1.3	0.0	10.
Struck 8 Lost	0.0	1.3	1.3	0 0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	2.
Total Take	2.7	4.0	1.3	13	13	13	0.0	0.0	4.0	1.3	27	1.3	0.0	21
ESTIMATED S	EASONA	ALLY AD	JUSTED	HARVE	EST AND	) TAKE	ву сс	OMMUNIT	Y (EXP	ANDED)				
Harvest	2.7	2.7	0.0	13	13	1.3	0.0	0.0	4.0	1.3	2.7	1.3		18.
Struck & Lost	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		2
Total Take	2.7	4.0	1.3	1.3	1.3	1.3	0.0	0.0	4.0	1.3	2.7	1.3		21
Total Take (%)	12.5%	18.8%	6.3%	6.3%	6.3%	6.3%	0.0%	0.0%	18.8%	6.3%	12.5%	6.3%		100.0
Cum. Take	2.1	6.7	8.6	9.3	10.7	12.0	12.0	12.0	16.0	17.3	20.0	21.3		
Cum. Take(%)	) 12.5%	31.3%	37.5%	43.8%	50.0%	6.3%	56.3%	56.3%	75.8%	81.3%	93.8%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaskia, with assistance from the Ivanof Bay Traditional Village Council, 1995.

		Sea	a Lion			Hai	rbor Seal	
	Reporte	ed by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expan	ded)	Sam	ole	(Expar	ndied)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	-	0.0		4	28.8%	5.3	28.6%
Adult Female	0		0.0		1	7.1%	1.3	7 1%
Adult Unknown Sex	0		0.0		2	14.3%	2.1	143%
Juvenile Male	0	***	00		0	0.0%	0.0	0.0%
Juvenile Female	0		0.0		1	7.1%	1.3	7 1%
Juvenile Unknown Sex	0		0.0		5	35.7%	6.7	35.7%
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	7.1%	1.3	7.1%
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Female Unknown Age	0		00		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	667	14	100.0%	18.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION			Η	ARBOF	R SEA	L
		Struck/	Total				Struck/	Total
Year	Harvest	Losi	Take	<u>Y</u> (	ear	Harvest	Lost	Take
1992	0.0	0.0	0.0	19	992	10.0	1.0	11.0
1993	2.3	1.2	3.5	19	993	16.3	4.7	21 . <b>O</b>
1994	0.0	0.0	0.0	19	994	12.0	1.3	13.3
1995	0.0	0.0	0.0	19	995	18.7	2.7	21.3

SOURCE. Abska Department of Frsh and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, wib assistance from the Ivanof Bay Traditional Village Council, 1995

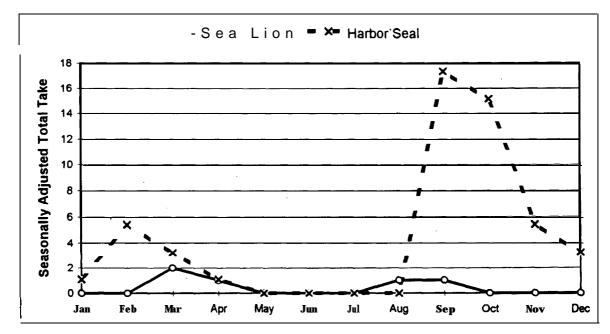
SAMPLING		GM.						Active		Other		Total		
TWO-STR			Total N	ativa	Ηοιιςο	holds	:	14		104		118		
100-3110	-17				House			14		8		22		
					ng Fra			100.0%		7.7%		18.6%		
		Sam	ple Hou					57		21		78		
	E		ted Hou					57.0		273.0		330. 0		
HARVEST	AND U	ISE IN	IFORM	ATION	1									
Percentage	of Nat	ive Ho	ousehold	ds:		l	Estimat	ted Co	mmuni	ity Harv	rest			
Ũ			Sea Ha					ake (Ex		•		Sea	Harbor	
			Lion	Seal								Lion	<u>Seal</u>	
		Used 1		441%				To	tal Num	ber Harv	ested	5.0	43.0	
	Н	unted	1.7%	20.3%				Total Nu	imber S	truck and	l Lost	0.0	3.0	
	Harv	/ested	1.7%	20.3%					Total	Number <sup>-</sup>	Taken	5.0	52.0	
	Red	ceived	0.0%	41.5%										
	Gave	Away 1	E 7%	17.8%				Number	Harves	ted Per (	Capita	0.02	0.15	
SEA LION										-		_	Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAR				ED HOU			-			^	~	-	•	-
Harvest	0	0	2	1	0	0	0	1	1	0	0	0	0	5
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	2	1	0	0	0	1	1	0	0	0	0	5
ESTIMATED H						-								
Harvest	0.0	0.0	2.0	10	0.0	0.0	00	1.0	10	0.0	0.0	0.0	0.0	5.0
Struck & Lost Total Take	0.0 0.0	00 00	0.0 2.0	0.0	0 0 0 0	0.0	0.0	0.0	00	0.0	0.0	0.0		0.0
				1.0		0.0	0.0	1.0	1.0 V (EVD	0.0	0.0	0.0	0.0	5.0
ESTIMATED S									-	-				F 0
Harvest	0.0	0.0	2.0	1.0	00	00	00	10	1.0	0.0	0.0	0.0		5.0
Struck & Lost Total Take	0.0	0.0	0.0	00	00	00	00	00	0.0	0.0	0.0	0.0		0.0 E.0
Total Take (%)	0.0	. 0.0 0.0%	2.0	1.0 <b>20.0%</b>	0 0 00%	0.0	00	1.0	1.0 20.0%	0.0	0.0	0.0		5.0 <b>100.0%</b>
• •	0.0%	0.0%	40.0% 2.0			0.0%		20.0%		0.0%	0.0%	0.0%		100.0%
Cum. Take Cum Take (%)	0.0 0.0%		2.0 400% é	3.0	3.0	3.0	3.0	4.0 • • • • %	5.0	5.0	5.0	5.0 4 100 0%		
						00.0%	00.070	000 /0	100.076	100.0%	100.07	6 100.07		
HARBOR	SEAL F Jan	IARVE Feb	EST BY Mar	MON Apr	TH May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED H	ARVEST	AND	ΤΑΚΕ ΒΥ	SAMP	LED HO	DUSEHO	LDS (UN	IEXPAND						
Harvest	1	5	3	1	0	0	0	0	4	2	5	3	1	25
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Total Take	1	5	3	1	0	0	0	0	4	2	5	3	4	28
ESTIMATED I	HARVEST	AND	τακε Βγ	COMN	NUNITY	(EXPAN	DED)							
Harvest	1.0	5.0	3.0	1.0	0 0	0 0	0 0	0 0	16.0	14.0	5.0	3.0	1.0	49.0
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	3.0	3.0
Total Take	1.0	5.0	3.0	1.0	0.0	0 0	0 0	0 0	16.0	14.0	5 0	3.0	40	52.0
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARV	EST AN	ID TAKE	BY CC	OMMUNIT	Υ (ΕΧΡ	ANDED)				
Harvest	1.0	5.1	31	1.0	0 0	0 0	0 0	0 0	16.3	14.3	5.1	3.1		49.0
Struck & Lost	0.1	0.3	0.2	0.1	0.0	0 0	0.0	0.0	1.0	0.9	0.3	0.2	2	3.0
Total Take	1.1	5.4	3.3	1.1	0.0	0.0	0 0	0.0	17.3	15.2	5.4	3.3	3	52.0
Total Take (%)	2.1%	10.4%	6.3%	2.1%	0.0%	0.0%	0.0%	0.0%	33.3%	29.2%	10.4%	6.3%	)	100.0%
Cum. Take	1.1	6.5	9.8	10.8	10.8	10.8	10.8	10.8	28.2	a.3	48.8	52.0		
Cum, Take (%)	2.1%	12.5%	6 <b>18.8</b> %	20.8%	6 <b>20. 8</b> %	6 <b>20. 8</b> %	6 20.8%	<b>20. 8</b> %	<b>54. 2%</b>	83. 3%	<b>938%</b>	100. O%	6	

SOURCE: Alaska Department of Fish and Came, Division of Subsatence, 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, 1995.

## Table 39. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: King Cove, 1995

		S	ea Lion			На	rbor Sea	al	
	Report	ed by	Commun	ity Est.	Reporte	ed by		Commun	ity Est.
	Sam	ple	(Expan	ded)	Sam	ple		(Expar	ided)
	Number	%	Number	%	Number	%		Number	%
Adult Male	2	40.0%	2. 0	40.0%	14	56.0%		26.0	53.1%
Adult Female	1	20.0%	1.0	20.0%	0	0.0%		0.0	0.0%
Adult Unknown Sex	0	0.0%	00	0.0%	0	0.0%		0.0	0.0%
Juvenile Male	2	400%	20	40.0%	8	32.0%		8. 0	16. 3%
Juvenile Female	0	00%	00	0.0%	2	8.0%		14.0	<b>28. 6</b> %
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%		0.0	0.0%
Pup Male	0	0.0%	00	00%	0	0.0%		0. 0	0.0%
Pup Female	0	0.0%	0.0	00%	0	0.0%		0. 0	0.0%
Pup Unknown Sex	0	0.0%	00	00%	0	00%		0.0	0.0%
Male Unknown Age	0	00%	00	00%	0	0.0%		0.0	0.0%
Female Unknown Age	0	00%	00	00%	0	0.0%		0. 0	0.0%
Unknown Sex and Age	, 0	00%	00	00%	1	4.0%	_	1.0	2.0%
Total	5	1000%	5 0	1000%	25	100.0%	1	49.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA L/ON AND HARBOR SEAL



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

	SEA	LION		H	HARBO	r sea	L
		Struck/	Total			Struck/	Total
Year	<u>Harvest</u>	Lost	Take	Year	Harvest	Lost	Take
1992	1.3	0.0	1.3	1992	26. 0	6.7	32.7
1993	1.2	0.0	1.2	1993	12.6	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

SOURCE. Al aska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for SeaLions and Harbor SeaLs in Al aska, with assistance from the Agdaagux Tribe'of King Cove. Belofski Village Council, and City of King Cove. 1995

SAMPLING	DESI	GN:												
CENSUS					Total N	Native I	Housel	nolds		33				
					Surv	veyed l	House	nolds		21				
						Samplir	ng Fra	ction	6	3.6%				
						usehol				79				
			E	Estima	ted H	ouseh	old M	embers		124.1				
HARVESTA	AND U	ISE IN	FORM,	ATION										
Percentage	of Nat	tive Ho	usehol	ds:		Ε	Estimat	ted Con	nmunit <u></u>	y Har	vest			
			Sea Ha			а	nd Ta	ke <i>(Exp</i>	panded	):			Harbor	
			<u>Lion</u>	<u>Seal</u>				_			_	Lion	<u>Seal</u>	
			2.4%						al Numb			3.1	11.0	
		lunted :		52.4%				Total Nur				0.0	3.1	
		vested ceived		14.3%					Total N	umder	raken	3.1	14.1	
		Away 4		81.0% 14.3%				Number I	Harvoet	d Dor	Canita	0.03	0.00	
054 1/01										ᆔᅖ	Japila		0.09	
SEA LION	HARVI Jan	EST BY Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Ckt	Nw	Dec	Unknown Month	Tot
REPORTED HAR	vest and	d take e	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
larvest	0	0	0	0	0	0	0	1	0	0	1	0	0	
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
otal Take	0	0	0	0	0	0	0	1	0	0	1	0	0	
STIMATED H	IARVEST	AND T	AKE BY	COMM	UNITY	(EXPAND	)ED)							
larvest	0.0	0.0	0.0	00	0.0	0 0	0 0	1.6	0 0	0.0	1.6	0.0	0.0	3
Struck & Lost	0.0	0.0	0.0	00	00	00	00	00	00	00	00	0 0	0.0	0
otal Take	0.0	0.0	0.0	00	00	0 0	00	1.6	0 0	00	16	0.0	0.0	3
ESTIMATED S									•	NDED)				
Harvest	0 0	0.0	0.0	00	00	00	00	16	00	0.0	16	00		3
Struck & Lost Fotal 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	0 0 1.6	0.0 0 0	0 0 0.0	0 0 1.6	0.0 0.0		0
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		1.0 500%	0.0%		1.0 50.0%	0.0%		ہ 100.0
Cum Take (70)	0.0%	0.0%	0.0%	0.0%	0.0% 0.0	0.0%	0.0%	500% 1.6	0.0% 1.6	1.6	30.0%	3.1		100.0
Cum Take (%)	0.0%	0.0%	0.0%	0.0	00%	00%		50.0% 5						
. ,														
HARBOR	SEAL F Jan	HARVE Feb	ST BY Mar	MON Apr	<i>I H</i> May	Jun	Jul	Aug	Sep	Oct	Nw	Dec	Unknown Month	Tot
REPORTED H	IARVEST	AND T	AKE BY	SAMP	LED HO	USEHOL	.DS (UN	IEXPANDI	ED)					
larvest	1	1	0	0	0	0	1	0	2	0	2	0	0	
Struck & Lost	0	0	0	0	0	0	0	0	0	0	1	1	0	
Total Take	1	1	0	0	0	0	1	0	2	0	3	1	0	
ESTIMATED I						•								
larvest	1.6	1.6	0.0	0.0	0 0	0 0	16	0.0	31	0.0	3.1	0.0		11
Struck & Lost	0.0	0.0	0.0	00	00	00	00	00	0.0	0.0	1.6	1.6		3
otal Take	1.6	1.6	0.0	0.0	0 0	0 0	16	00	31	0.0	4.7	1.6	0.0	14
ESTIMATED S										-				
Harvest	1.6	1.6	0.0	00	00	00	16	00	31	0.0	31	0.0		1
o	0.0	0.0	0.0	00	0.0	00	00	00	0.0 21	0.0	1.6	1.6		1
		1.6	0.0	0.0	0 0	00	16	0 0	31	0 0	4.7	1.6		1
Total Take	1.6 11 1%	11 10/	000/	000/	0.00/	000/	1110/	0 0 0/	າງາງ	0.00/	22 20/	11 10/		400.4
Struck & Lost Total Take Total Take <b>(%)</b> Cum. Take	1.6 11.1% 1.6	11.1% 3.1	00% 3.1	00% 3.1	0.0% 31	00% 3.1	111% 47	00% 4.7	<b>22.2%</b> 7.9	0.0% 7.9	33.3% 12.6			100.

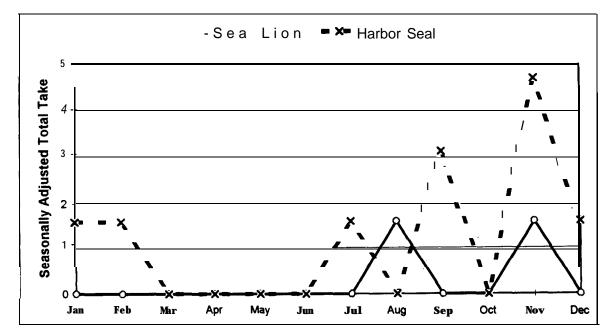
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alask with assistance from the Perryville Traditional Village Council, 1995.

# Table 40. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Perryville, 1995

HARVEST BY AGE AND SEX

		Sea	Lion			Hart	orSeal	
	Reporte	ed by	Communi	ty Est	Reporte		Communi	ty Est.
	Sam	ple	(Expan	ded)	Sam	ple	(Expand	ded)
	Number	%	Number	%	Number	%	Nunber	%
Adult Male	1	50.0%	1.6	50.0%	2	28.6%	3.1	28.6%
Adult Female	1	50.0%	1.6	50.0%	3	42.9%	4.7	42.9%
Adult Unknown Sex	0	0.0%	0.0	0.0%	2	20.6%	3.1	20.6%
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	2	100.0%	3.1	100.0%	7	100.0%	11.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_	SEA I	LION		H	HARBO	R SEA	L			
		Struck/	Total		Struck/Total					
<u>Year</u>	Harvest	Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	<u>Take</u>			
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			

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liins and Harbor Seals in Alaska, with assistance from the Perryville Traditional Village Council, 1995.

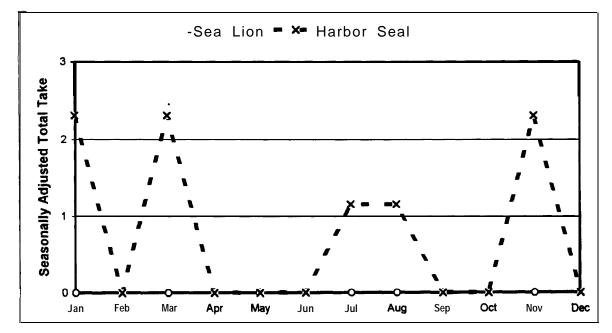
SAMPLING	DESIC	GN:						<u>Active</u>	<u>C</u>	ther_		Total		
TWO-STRA	TA		Total N	ative H	ouseh	olds		15		125		140		
				eyed H				13		24		37		
				Samplin	•			86.7%	1	9.2%		26.4%		
	_		ple Ho					56		84		140		
	E	stima	ted Ho	usehold	Mem	bers		64.6	4	437.5		502.1		
HARVEST	AND U	ISE IN	IFORM,	ATION										
Percentage	of Nati	ive Ho	ousehol	ds:			Estima	ted Col	mmunity	/ Har	vest			
			Sea Ha	rbor		á	and Ta	ke (Exp	banded,	):		Sea H	larbor	
			Lion	<u>Seal</u>								Lion	Seal	
		used		16.1%					tal Numb			0.0	9.2	
		unted		4.1%				Total Nur	nber Stru			0.0	0.0	
		vested		4.1%					Total N	umber	Taken	0.0	9.2	
		eived		12.0%							<b>.</b>			
		Away		2.5%				Number	Harveste	d Per	Capita	0.00	0.02	
SEA LION I	HARVE Jan	EST B Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sap	Oct	Nov		Unknown Month	Total
REPORTED HARV	'EST AND	TAKE	BY SAMPL	ED HOUSE	HOLDS	(UNEXP	ANDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	C
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	(
Fotal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	(
ESTIMATED H	ARVEST	AND	τάκε βγ	сомми	INITY (	EXPAN	DED)							
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 (
Struck & Lost	0.0	0 0	0 0	00	00	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0
Total Take	00	0.0	0 0	0 0	0 0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0 0
ESTIMATED S	EASONA	LLY A	DJUSTED	HARVES	ST AND	) TAKE	BY CC	OMMUNIT	Υ (ΕΧΡΑ	NDED)				
Harvest	0 0	0.0	0.0	0 0	00	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	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	b.p	0.0	0 0	00	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	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0		
Cum Take (%)		***	***	***			-							
HARBOR S										<u> </u>			Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Tota
REPORTED H					ED HO 0		•			0	n	0	0	
Harvest	2	0	2	0		0	1		0	0	2		0	l
Struck & Lost Total Take	0 2	0 0	0 2	0 0	0 0	0 0	<b>0</b> 1	<b>0</b> 1	0 0	0 0	0 2	0	0 0	
								I	U	U	2	0	U	
ESTIMATED H Harvest	2.3				00 00	-		1 0	0.0	0.0		0.0	0.0	0
Struck & Lost	2.3 00	0.0 <b>0.0</b>	2.3 0.0	0 0 <b>0 0</b>	00	00 00	12 00	1.2 00	0 0 <b>0. 0</b>	0.0 <b>00</b>	23 0.0			9. <b>0.</b>
Total Take	2.3	0.0	23	00	00	00	12	1.2	0.0	0.0	2.3			<b>u.</b> 9.
ESTIMATED S												0.0	0.0	7.
Harvest	2.3	0.0	23	00	51 ANI 00	0 1 A K E	. вт со 12	JMMUNTT 1.2	Y (EXPA 00	0 0	2.3	0 0		9.
Struck & Lost	0.0	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0			9. 0.
Total Take	2.3	0.0	2.3	0.0	00	00	1.2	1.2	0.0	0.0	2.3			9.
Total Take (%)	25.0%	0.0	25.0%	0.0	0.0%		12.5%		0.0%		2.5			, 100.09
Cum. Take (%)	23.07	2.3	20.0 <b>m</b> 4.6	4.6	0.0 <i>%</i>	46	58	6.9	6.9	6.9	9.2			100.0
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 City of Sand Pornt, Unga Tribal Council, and Qagan Tayagungi Tribe of Sand Point, 1995

### Table 41. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Sand Point, 1995

		Sea	Lion			Harbo	vr Seal	
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expanded)		Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	***	0.0		5	62.5%	5.8	62.5%
Adult Female	0		0.0		0	0.0%	0.0	0.0%
Adult Unknown Sex	0	~	0.0		1	12.5%	1.2	12.5%
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		1	12.5%	1.2	12.5%
Pup Male	0		0.0		1	12.5%	1.2	12.5%
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		а	100.0%	9.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

		SEA	LION		<u> </u>	IARBO	R SEA	L
-			Struck/	Total			Struck/	Total
	Year	Harvest	Lost	Take	<u>Year</u>	Harvest	Lost	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

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the City of Sand Point, Unga Tribal Council, and Qagan Tayagungi Tribe of Sand Point, 1995.

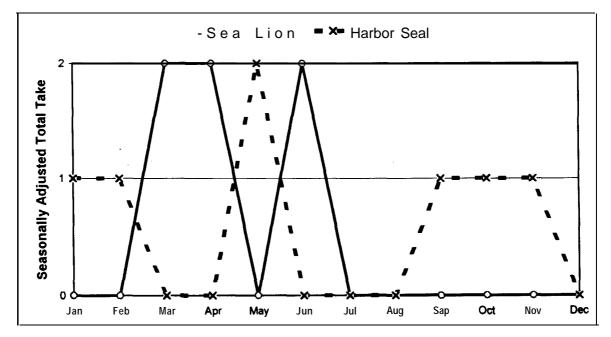
Table 42. S	SEA LI	ON AI	ND HA	RBOR	SEAL	. HARV	EST A	AND TA	AKE E	STIM	ATES:	Akuta	ın, <b>199</b>	5
SAMPLING	DESIC	GN:												
CENSUS					Total	Native H	louse	holds		31				
						veyed H				31				
						Samplin				100.0%				
				Sami		ousehold	•			73				
				-		ousehol				73.0				
				Lotinu		Juschon								
HARVEST					1									
Percentage	of Nati	ive Ho	ouseho	lds:				ted Co		-	vest			
			Sea	Harbor		а	nd Ta	ke (Ex	pande	d):		Sea	Harbor	
			Lion	Seal								Lion	Seal	
		used '	100.0%	1000%						ber Hai		6.0	7.0	
	H	unted	9.7%	12.9%				Total Nu	umber S	truck ar	nd Lost	0.0	0.0	
	Harv	ested	9.7%	97%					Total	Number	Taken	6.0	7.0	
	Rec	eived	100.0%	100.0%										
		-	<b>y</b> 6.5%					Number	Harves	ted Per	Capita	0.08	0.10	
SEA LION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Un known Month	Total
REPORTED HAR	VEST AND	TAKE	BY SAMP	LED HOU	SEHOLDS	5 (UNEXPA	NDED)							
Harvest	0	0	2	2	0	2	0	0	0	0	0	0	0	6
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	2	2	0	2	0	0	0	0	0	0	0	6
ESTIMATED H	IARVEST	AND	τακε β	ү сомм	UNITY	(EXPAND	ED)							
Harvest	0.0	0.0	2.0	2.0	0.0	2.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	6.0
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	2.0	2 0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
ESTIMATED S	EASONA	LLY A	DJUSTEI	D HARVI	EST AN	D TAKE	ву сс	омминіт	Y (EXP	ANDED)				
Harvest	0 0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	00	0.0	0 0	0.0		6.0
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	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0		6.0
Total Take (%)	0.0%	0.0%	33.3%	33.3%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	00%	0.0%		100.0%
Cum Take	0.0	0.0	2.0	4.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		
Cum Take (%)	0.0%	00%	33.3% 6		.7% 10	0.0% 100	0% 1	00 0%	1000%	100.0%	100.0%	1000%		
HARBOR S	SEAL H Jan	IARVE Feb	EST BY Mar	Y MON Apr	TH May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED H	ARVEST	AND	τακε β	Y SAMP	LED HO	DUSEHOL	DS (UI	NEXPAND	DED)					
Harvest	1	1	0	0	2	0	0	0	1	1	1	0	0	7
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	1	0	0	2	0	0	0	1	1	1	0	0	7
ESTIMATED H	ARVEST	AND	ΤΑΚΕ Β	Y COMM	IUNITY	(EXPAND	DED)							
Harvest	1.0	1.0	0.0	0.0	2.0	0.0	0 0	0.0	1.0	1.0	1.0	0.0	0.0	7.0
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	1.0	1.0	0.0	0.0	2.0	0.0	0 0	0.0	1.0	1.0	1.0	0.0	0.0	7.0
ESTIMATED	SEASON	ALLY A	ADJUSTE	ED HARV	EST A	ND TAKE	BY C	OMMUNI	TY (EXF	ANDED	)			
Harvest	1.0	1.0	0.0	0.0	2.0	00	0.0	0.0	10	1.0	, 1.0	0.0		70
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
Total Take	1.0	1.0	0.0	0.0	2.0	0.0	0.0	0.0	1.0	1.0	1.0			7.0
Total Take (%)	14.3%		0.0%	0.0%	28.6%		0.0%	0.0%	14.3%	14.3%	14.3%			100.0%
Cum. Take	14.3%	2.0	2.0	2.0	4.0		4.0	4.0	5.0	6.0				100.070
Cum.Take(%)	) 14.3%	266%	26.6%	26.6%	57.1%	57.1% 5	07.1%	57.1%	11.4%	05/% 1	00.0%	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 Akutan Traditional Village Council, City of Akutan, and Akutan Corporation, 1995.

### Table 42. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Akutan, 1995

				<b>o</b> 1
	Sea	Lion	Harbor	Seal
	Reported by	Community Est	Reported by	Community Est.
	Sample	(Expanded)	Sample	(Expanded)
	Number %	Number %	Number %	Number %
Adult Male	3 50.0%	3.0 <b>50.0%</b>	6 66.7%	6.0 <b>85.7%</b>
Adult Female	2 333%	2.0 333%	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	1 16.7%	1.0 16.7%	1 <b>14.3%</b>	1.0 14.3%
Juvenile Female	0 00%	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	o 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 <b>0.0%</b>	0.0 0.0%
Female Unknown Age	0 0.0%	00 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	6 100.0%	6.0 100.0%	7 100.0%	7.0 100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_	SEA	LION			HAF	RBO	R SEA	L
		Struck/	Total				Struck/	Total
Year	<u>Harvest</u>	Lost	<u>Take</u>	<u>Yea</u>	<u>Ha</u>	rvest	Lost	Take
1992	25.7	4.3	30.0	199	21	2.9	4.3	17.1
1993	14.5	6.9	23.4	199	<b>3</b> 1	5.6	4.5	20.1
1994	12.7	3.5	16.2	199	<b>4</b> 1	3.8	3.5	17.3
1995	6.0	0.0	6.0	199	5	7.0	0.0	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 Akutan Traditional Village Council, City of Akutan, and Akutan Corporation, 1995

SAMPLING	DESIC	GN:												
CENSUS					Total N	ative I	House	holds		25				
					Surv	eyed H	House	holds		10				
					5	Samplir	ng Fra	ction	40	0.0%				
				Sam	ple Ho	usehol	d Mer	nbers		38				
				Estima	ted Ho	usehol	d Men	nbers		95.0				
HARVEST	AND U	ISE II	VFORN	ΙΑΤΙΟΝ	I									
Percentage	e of Nat	ive Ho	ouseho	lds:		E	stimat	ted Cor	nmunity	Harv	vest			
			Sea H	larbor		a	nd Ta	ke (Exp	banded)	:		Sea	Harbor	
			Lion_	<u>Seal</u>								Lion	<u>Seal</u>	
		used	90.0% 9	90.0%				То	tal Numb	er Ha	rvested	40. 0	42.5	
	Н	unted	50.0%	50.0%				Total Nu	umber Str	uck ai	nd Lost	0. 0	0.0	
	Harv	ested	30.0%	50.0%					Total N	umber	Taken	40.0	42.5	
	Rec	eived	80.0%	90.0%										
	Gave	Away	30.0%	50.0%				Number	Harveste	d Per	Capita	0 42	0.45	
SEA LION								_		<b>•</b> •			Unknown	
	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAR														
Harvest	0	0	0	0	0	0	0	1	1	3	3	4	4	16
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	3	3	4	4	16
ESTIMATED H	HARVEST	AND	τακε β	Y COMM	IUNITY (	EXPAND	ED)							
Harvest	0.0	0 0	0.0	0 0	0 0	00	0 0	2.5	2.5	7.5	7.5	10.0	10.0	40.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	0 0	0 0	0 0	0.0	0.0	0.0	00	0.0
Total Take	0.0	0.0	0.0	0 0	0 0	00	00	2 5	2.5	7.5	7.5	10.0	10.0	400
ESTIMATED S	SEASONA	LLY AI	DJUSTE	D HARVE	EST AND	TAKE	ву со	MMUNIT	Υ (ΕΧΡΑ	NDED)	)			
Harvest	0.0	0.0	0.0	0.0	0 0	0 0	0 0	33	33	10.0	10.0	13.3		40.0
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	3.3	3.3	10.0	10.0	13.3		40.0
Total Take (%)	0.0%	0.0%	0.0%	00%	00%	00%	00%	0.3%	6.3%	25.0%	25.0%	33.3%		100.0%
Cum Take	0.0	0.0	0.0	0.0	0 0	0 0	0 0	33	6.7	16.7	26.7	40.0		
Cum Take (%)	0.0%	00%	0.0%	0.0%	00%	00%	00%	03%	16.7% 41	7%	66.7%	100.0%		
HARBOR						l		0	0	014	New	D	Unknown	Tatal
		Feb	Mar TAKE P	Apr V SAMD		Jun			Sep	Ckt	Nov	Dec	Month	Total
REPORTED H	1ARVEST 0	AND 0	TAKE B	Y SAMP		USEHUL 0	.DS (UI 2		1 1	3	3	1	4	17
Harvest Struck & Lost	U 0	-		0	0	0	2	2 0		3 0	3 0			0
		0	0				2	2	0					
Total Take	0	0	1	0	0	0		2	1	3	3	1	4	17
ESTIMATED								-	-	_	_	-		
Harvest	0.0	0.0	2.5	0.0	00	00	5.0	5.0	2.5	7.5				42.5
Struck & Lost	0.0	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0				0.0
Total Take	0.0	0.0	2.5	0 0	0 0	0 0	50	5.0	2.5	7.5		2.5	10.0	42.5
ESTIMATED									•		,			
Harvest	0.0	0.0	3.3	0 0	0 0	0 0	65	6.5	3.3	98				42.5
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
Total Take	0.0	0.0	3.3	0 0	0.0	0 0	65	6.5	3.3	9.8				42.5
Total Take (%)	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	154%	154%	7.7%	23.1%	23.1%	5 7.7%	)	100.0%
Cum.Take	0.0	0.0	3.3	33	3.3	33	9.8	16.3	19.6	294	39.2	2 42.5	5	
Cum. Take (%)	0.0%	0.0%	7.7%	7.7%	77%	77%	23 19	6 38.5%	46.2%	5 <b>9</b> .2%	92.3%	100.0%	)	

Table 43. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Atka, 1995

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seats in Alaska, with assistance from the Atka IRA Council and City of Atka, 1995

## Table 43. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Atka, 1995

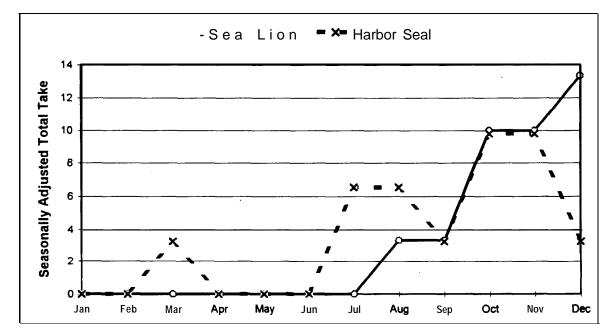
. .

HARVEST BY AGE AND SEX

		S	Sea Lion			_		На	rbor Seal	
	Reporte	ed by	Comr	nunit	y Est	-	Reporte	ed by	Commur	nity Est.
	Sam	ple	(Ex	pano	ied)	_	Sam	ple	(Expa	nded)
	Number	%	Numb	er	%	_	Number	%	Number	%
Adult Male	4	25.0%	10	.0	25.0%	_	11 <sup>.</sup>	64.7%	27.5	64.7%
Adult Female	5	31.3%	12	.5	31.3%		1	5. <b>9</b> %	2.5	5.9%
Adult Unknown Sex	0	0.0%	0	.0	0.0%		0	0.0%	0.0	0.0%
Juvenile Male	1	6.3%	2	.5	6.3%		1	5. <b>9</b> %	2.5	5. <b>9</b> %
Juvenile Female	2	12.5%	5	.0	12.5%		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%	C	.0	0.0%		0	0.0%	0.0	0.0%
Pup Female	0	0.0%	C	.0	0.0%		0	0.0%	0.0	0.0%
Pup Unknown Sex	0	00%	C	.0	0.0%		0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	C	0	0.0%		0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	C	0	0.0%		0	0.0%	0.0	0.0%
Unknown Sex and Age	4	250%	10	.0	25.0%		4	23.5%	10.0	23.5%
Total	16	100.0%	40	0.0	100.0%	•	17	100.0%	42.5	100.0%

.. .

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		H	HARBO	r sea	L
		Struck/	Total			Struck/	Total
Year	<u>Harvest</u>	Lost	Take	<u>Year</u>	Harvest	Lost	<u>Take</u>
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

SOURCE Alaska Department of Fish and Game, Dilision of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska, with assistance from the Atka IRA Council and City of Atka, 1995.

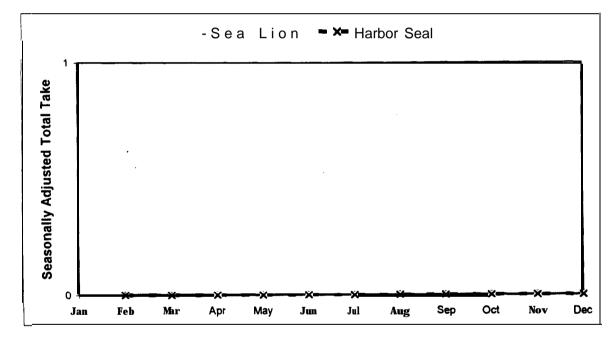
SAMPLING DESIGN:												
CENSUS		Т	otal N	ative H	ouseh	olds	No	Data				
			Surv	eyed H	ouseh	olds						
				Samplin								
		Samp		usehold	-							
		Estimat										
HARVEST AND USE I	NFOR	MATION										
Percentage of Native H	louseh	olds <sup>.</sup>		E	stimate	ed Con	nmunity		est			
r crocinage of Native H		Harbor					panded,			Sea	Harbor	
	Lion	Seal				- ( )				Lion	Seal	
Used						Tot	al Numb	er Harv	vested			
Hunted					Т	otal Nu	mber Str	uck and	Lost			
Harvested		No data					Total N	umber <sup>·</sup>	Taken		No data	
Received												
Gave Away	,				Ν	lumber	Harveste	d Per (	Capita			
SEA LION HARVEST		ONTH									Unknown	<del>.</del> .
Jan Feb			May	Jun	Jul	Aug	Sep	Oct	Nov	De	c Month	Tota
REPORTED HARVEST AND TAKI	e by sa	MPLED HOUS	EHOLDS	(UNEXPAN	IDED)							
Harvest												
Struck & Lost												
Total Take				_					- D-1-			
ESTIMATED HARVEST AND	TAKE	BY COMM	JNITY (	EXPAND	ED)			N	lo Data	1		
Harvest												
Charle O. L. and												
Total Take			CT AND									
Total Take ESTIMATED SEASONALLY	ADJUST	ED HARVE	ST AND	D TAKE	BY COM	MMUNIT	Y (EXPA	NDED)				
ESTIMATED SEASONALLY Harvest	ADJUST	FED HARVE	ST AND	) TAKE	ву соі	MMUNIT	Y (EXPA	NDED)				
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost	ADJUST	FED HARVE	ST ANE	D TAKE	ву сом	MMUNIT	Y (EXPA	NDED)				
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take	ADJUST	FED HARVE	ST ANE	D TAKE	BY COM	MMUNIT	Y (EXPA	NDED)				
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%)	ADJUST	TED HARVE	ST ANE	D TAKE	вү сом	MMUNIT	Y (EXPA	NDED)				
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take	ADJUST	FED HARVE	ST ANE	D TAKE	ву сог	MMUNIT	Y (EXPA	NDED)				
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%)	ADJUST	FED HARVE	ST AND	) TAKE	BY CO	MMUNIT	Y (EXPA	NDED)				
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take	/EST I	BY MONT		) TAKE	BY COM	MMUNIT Aug	Y (EXPA	NDED)	Nov	D	Unknown ec Month	Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) HARBOR SEAL HARV	/EST I	BY MON7 ar Apr	ГН Мау	Jun	Jul	Aug	Sep		Nov	De		Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet	/EST I	BY MON7 ar Apr	ГН Мау	Jun	Jul	Aug	Sep		Nov	De		Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take Cum Take (%) HARBOR SEAL HARV Jan Fet REPORTED HARVEST AND	/EST I	BY MON7 ar Apr	ГН Мау	Jun	Jul	Aug	Sep		Nov	De		Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest	/EST I	BY MON7 ar Apr	ГН Мау	Jun	Jul	Aug	Sep		Nov	De		Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest Struck & Lost	/EST / ma TAKE	BY MON7 ar Apr BY SAMPL	Г <del>Н</del> Мау .ED HO	Jun USEHOL	Jul DS (UN	Aug	Sep	Oct	Nov			Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest Struck & Lost Total Take	/EST / ma TAKE	BY MON7 ar Apr BY SAMPL	Г <del>Н</del> Мау .ED HO	Jun USEHOL	Jul DS (UN	Aug	Sep	Oct				Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) HARBOR SEAL HARV Jan Fet REPORTED HARVEST AND Harvest Struck & Lost Total Take ESTIMATED HARVEST AND	/EST / ma TAKE	BY MON7 ar Apr BY SAMPL	Г <del>Н</del> Мау .ED HO	Jun USEHOL	Jul DS (UN	Aug	Sep	Oct				Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest Struck & Lost Total Take ESTIMATED HARVEST AND Harvest	/EST / ma TAKE	BY MON7 ar Apr BY SAMPL	Г <del>Н</del> Мау .ED HO	Jun USEHOL	Jul DS (UN	Aug	Sep	Oct				Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest Struck & Lost Total Take ESTIMATED HARVEST AND Harvest Struck & Lost	/EST I D TAKE	BY MONT ar Apr BY SAMPL BY COMM	ΓΗ May .ED HO UNITY	Jun USEHOL (EXPANE	Jul DS (UN DED)	Aug EXPANE	Sep DED)	Oct				Tota
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest Struck & Lost Total Take ESTIMATED HARVEST AND Harvest Struck & Lost Total Take	/EST I D TAKE	BY MONT ar Apr BY SAMPL BY COMM	ΓΗ May .ED HO UNITY	Jun USEHOL (EXPANE	Jul DS (UN DED)	Aug EXPANE	Sep DED)	Oct				Tot
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest Struck & Lost Total Take ESTIMATED HARVEST ANE Harvest Struck & Lost Total Take ESTIMATED SEASONALLY	/EST I D TAKE	BY MONT ar Apr BY SAMPL BY COMM	ΓΗ May .ED HO UNITY	Jun USEHOL (EXPANE	Jul DS (UN DED)	Aug EXPANE	Sep DED)	Oct				Tot
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest Struck & Lost Total Take ESTIMATED HARVEST ANE Harvest Struck & Lost Total Take ESTIMATED SEASONALLY Harvest	/EST I D TAKE	BY MONT ar Apr BY SAMPL BY COMM	ΓΗ May .ED HO UNITY	Jun USEHOL (EXPANE	Jul DS (UN DED)	Aug EXPANE	Sep DED)	Oct				Tot
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest Struck & Lost Total Take ESTIMATED HARVEST AND Harvest Struck & Lost Total Take ESTIMATED SEASONALLY Harvest Struck & Lost	/EST I D TAKE	BY MONT ar Apr BY SAMPL BY COMM	ΓΗ May .ED HO UNITY	Jun USEHOL (EXPANE	Jul DS (UN DED)	Aug EXPANE	Sep DED)	Oct				Tot
Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take Total Take (%) Cum Take (%) <i>HARBOR SEAL HARV</i> Jan Fet REPORTED HARVEST AND Harvest Struck & Lost Total Take ESTIMATED HARVEST ANE Harvest Struck & Lost Total Take ESTIMATED SEASONALLY Harvest Struck & Lost Total Take	/EST I D TAKE	BY MONT ar Apr BY SAMPL BY COMM	ΓΗ May .ED HO UNITY	Jun USEHOL (EXPANE	Jul DS (UN DED)	Aug EXPANE	Sep DED)	Oct				Tot

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, 1995.

## Table 44. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Nikolski, 1995

	Sea	lion	Harbo	r Seal
	Reported by	Community Est.	Reported by	Community Est.
	Sample	(Expanded)	Sample	(Expanded)
	Number %	Number %	Number %	Number %
Adult Male Adult Female Adult Unknown Sex Juvenile Male Juvenile Female Juvenile Unknown Sex Pup Male Pup Female Pup Unknown Sex Male Unknown Age Female Unknown Age Unknown Sex and Age Total	No Data		No Data	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		_	F	IARBOI	R SEA	L
		Struck/	Total				struck/	Total
Year	Harvest	Lost	<u>Take</u>		Year	Harvest	Lost	<u>Take</u>
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		No Data	L		1995		No Data	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 Nikolski IRA Council and Chaluka Corporation, 1995.

SAMPLING DES	SIGN:						<u>Active</u>	(	<u>Other</u>		<u>Total</u>		
TWO-STRATA		Total N	ative H	ouseh	olds		32		73		105		
		Surv	eyed H	ouseh	nolds		23		20		43		
		S	Samplin	g Fra	ction		71. <b>9</b> %	2	27.4%		41.0%		
		nple Ho				•	75		52		127		
	Estim	ated Ho	usehold	l Mem	bers		104.3		189.8		294.1		
HARVEST AND	USE I	NFORM	ATION										
Percentage of N	ative H	lousehol	ds:		Ε	Estimat	ed Com	munity	' Harv	rest			
		Sea Ha	arbor		a	nd Ta	ke (Exp	banded	1):		S e a	Harbor	
		Lion	Seal								Lion	<u>Seal</u>	
		25.8% 2	6.7%							rvested	39.0	37.4	
	Hunted		8.8%				Total Nu				11.1	9.7	
	arvested		8.8%					Total	Numbe	r Taken	50.1	47.1	
	eceived		21.9%				Manak	11		0			
	e Away	-	8.8%				Number	Harvest	iea Per	Capita	0.13	0.13	
SEA LION HAR Jai			TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tota
REPORTED HARVEST	ND TAKE	BY SAMPL	ED HOUSI	eholds	(UNEXPA	NDED)							
Harvest 5	3	3	0	0	1	0	2	1	3	1	9	0	28
Struck & Lost	0	1	1	0	0	0	1′	0	1	1	2	0	, <b>8</b>
Total Take	3	4	1	0	1	0	3	1	4	2	11	0	3
ESTIMATED HARVE	ST AND	ΤΑΚΕ ΒΥ	COMMU	UNITY (	EXPAND	ED)							
Harvest 7.0			0 0	00	14	00'		14	4.2	1.4	12.5	0.0	39.0
Struck & Lost 1.4			14	00	00	0 0	14	00	14	1.4	2.8	0.0	11.1
Total Take 8.3			14	00	14	0 0	42	14	56	2.8	15.3	0.0	50.1
ESTIMATED SEASO								•	ANDED)				
Harvest 70			00	00	14	00	26	14	4.2	14	12.5		39.0
Struck & Lost 14			14	00	00	00	14	00	14	1.4	2 8 15.3		11.1 <b>50</b> .1
Total Take 8.3 Total Take (%) 16.7%		5.6 6 11.1%	14 2.8%	0 0 0.0%	14 28%	0 0 00%	4 2 83%	14 2.8%	5.6 11.1%	2.8 5.6%	30.8%		100.0%
Cum. Take (%) 10.7%			2.0 %	19.5	20.9	209	250	2.67	32.0	34.8	50.0 %		100.070
Cum Take 0			389%	389%	417%	417%	50 0%	528%	639%	69 4%	100.0%		
. ,										•••			
HARBOR SEAL			MONT Apr	ТН May	Jun	Jut	Au9	Sep	Oct	Nov		Unknown Month	Tota
REPORTED HARVE													
	3			1	0	0	0	. 1	5	5	4	0	2
Struck & Lost	) (	) 1	0	0	0	0	0	1	1	1	3	0	
Total Take	3	8 2	1	1	0	0	0	2	6	6	7	0	2
ESTIMATED HARVE	ST AND	TAKE B	СОММ	JNITY	(EXPANI	DED)							
Harvest 1	4.2	2 14	14	14	00	00	00	14	7.0	13.7	5.6	0.0	37
Struck & Lost 0.	0 0 0	) 1.4	0.0	00	00	00	00	14	14	14	4.2	0.0	9.
Total Take 1.	4 4.2	2.8	14	14	00	00	00	28	8.3	15.1	9.7	0.0	47.
ESTIMATED SEASC	NALLY	ADJUSTED	HARVE	ST AN	D TAKE	BY CO	OMMUNIT	Y (EXP	ANDED)				
Harvest 1.	4 4.2	2 1.4	14	14	00	00	00	14	7.0	137	5 6		37
Struck & Lost 0.	0.0	) 1.4	0.0	00	00	00	00	14	14	14	4.2		9.
Total Take 1.	4 4.2	2 2.8	14	14	00	00	00	2.8	8.3	15.1	9.7		47
	0.00/	F 00/	200/	2 00/	000/	00%	00%	5. <b>9</b> %	17.7%	32.1%	20.7%		100.0
Total Take (%) 3.0%	68.9% 45.6		30%	<b>3.0%</b> 11 1	00%	<b>UU</b> % 11 1	<b>UU</b> /0	J.770	22.3	JZ.1/0	20.170		

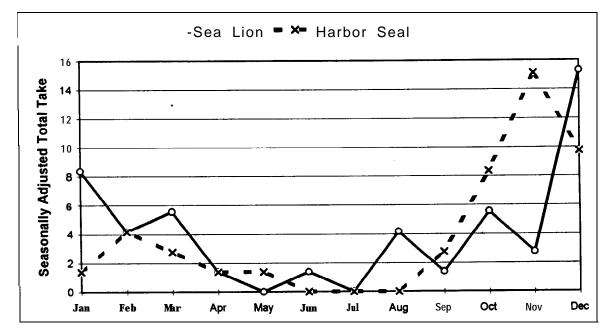
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Qawalangin Tribal Council, 1995.

## Table 45. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Unalaska, 1995

### HARVEST BY AGE AND SEX

HARVEOT DI AGE AND	OLX	•	1.2			11		
		568	a Lion			Harbo	rSeal	
	Reporte	ed by	Commun	ity Est.	Report	ed by	Commun	ity Est.
	Sam	ple	(Expar	nded)	Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	5	17.9%	7.0	17. <b>9</b> %	10	45.5%	<b>20</b> . 7	55. 3%
Adult Female	1	3.6%	1.4	3.6%	1	4. 5%	1.4	3. 7%
Adult Unknown Sex	1	3.6%	1.4	3.6%	1	4. 5%	1.4	3. 7%
Juvenile Male	12	42.9%	16.7	42.9%	5	227%	7.0	18.6%
Juvenile Female	3	10.7%	4. 2	10. 7%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	6	21.4%	0. 3	21.4%	5	22.7%	7.0	10.6%
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%	00	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	28	100.0%	39.0	100.0%	22	100.0%	37.4	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		F	IARBO	r sea	L
		Struck/	Total			Struck/	Total
<u>Year</u>	Harvest	Lost	Take	<u>Year</u>	<u>Harveşt</u>	Lost	<u>Take</u>
1992	41.6	16.7	66.5	1992	47.0	3.7	50.8
1993	53.4	15. 9	69. 3	1993	32.7	9. 9	42.6
1994	43.6	6.4	51.9	1994	31.4	10.5	41.6
1996	39.0	11.1	50.1	1996	37.4	9.7	47.1

SOURCE Alaska Department of Fish ad Game, Division of Subsistence Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska, with assistance from the Qawalangin Tribal Council, 1995.

SAMPLING	DESI	GN:												
CENSUS	DE0.	011.			Total	Native I	House	holds		42				
					Sur	veyed I	House	holds		42				
						Sampli	ng Fra	oction		100.0%				
					•	ousehol				131				
			E	Estima	ted Ho	ousehol	d Men	nbers		131.0				
HARVEST	AND L	JSE IN	VFORM.	ATION	I									
Percentage	of Na	tive Ho	ousehol	ds:		E	Estima	ted Co	mmunit	ty Hai	rvest			
-			Sea H	arbor		a	nd Ta	ke (Ex	pandeo	<i>):</i>		Sea	Harbor	
			<u>Lion</u>	Seal								<u>Lion</u>	<u>Seal</u>	
		used		0.0%				Тс	tal Nun	nber I	Harveste	d 4.0	0.0	
	ŀ	lunted	11.9%	0.0%				Total N	umber St	ruck ar	nd Lost	4.0	0.0	
		vested		0.0%					Total N	lumber	Taken	8.0	0.0	
		ceived		0.0%										
	Gav	e Away	y 2.4%	0.0%				Number	Harvest	ed Per	Capita	0.03	0.00	
SEA LION	HARV Jan	EST B Feb	Y MON Mar	TH Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nw	Dec	Unknown Month	Total
REPORTED HAR	/est an	d take	BY SAMPL	ED HOU	SEHOLDS	6 (UNEXPA	NDED)		•					
Harvest	0	4	0	0	0	. 0	0	0	0	0	0	0	0	4
Struck & Lost	0	1	0	0	0	0	0	0	0	0	0	0	3	4
Total Take	0	5	0	0	0	0	0	0	0	0	0	0	3	8
ESTIMATED H	ARVES	AND	ΤΑΚΕ ΒΥ	сомм	IUNITY	(EXPAND	ED)							
Harvest	0.0	4.0	0.0	0.0	0.0	0.0	00	0.0	0 0	0.0	0 0	0.0	0.0	4.0
Struck & Lost	0.0	1.0	0.0	0.0	0.0	0.0	00	0.0	0.0	00	0.0	0.0	30	4.0
Total Take	0.0	5.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	8.0
ESTIMATED S	EASON	ALLY A	DJUSTED	HARVI	EST AN	ID TAKE	ву сс	MMUNI	Υ (ΕΧΡΑ	NDED)	1			
Harvest	0.0	4.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0		4.0
Struck & Lost	0.0	4.0	0.0	00	0.0	0 0	00	00	0.0	0.0	0.0	0 0		40
Total Take	0.0	8.0	0.0	0.0	0 0	0 0	00	0.0	0.0	0.0	0 0	0.0		8.0
Total Take (%)	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	00%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum Take	0.0	8.0	8.0	8.0	8.0	8.0	80	8.0	8.0	8.0	8.0	8.0		
Cum Take (%)	0.0%	100.0%	190.0%	00.0% 1	00.0%	100.0% 10	000% 1	00.9% 1	00.0% 10	0.0% <sup>·</sup>	100.0%	100.0%		
HARBOR S										•			Unknown	
	Jan	Feb			May	Jun		Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	ARVESI 0	AND 0	TAKE BY	SAMP 0	LED HO	JUSEHOL 0	.DS (UP 0	IEXPANI 0	DED) 0	0	0	0	0	0
Struck & Lost	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
ESTIMATED H							-	U	U	U	U	U	. 0	0
Harvest	0.0	1 AND 0.0	0.0	0.0	0.0	(EXPANL 0.0	,	0.0	0.0	0.0	0.0			
Struck & Lost	0.0	0.0	0.0	0.0 <b>0.0</b>	0.0	0.0	0 0 0 0	0 0 0 0	0.0	0.0		0.0 <b>0.0</b>		0.0 <b>0.0</b>
Total Take	0.0	0.0	0.0	0.0	0.0	00	00	00	00	0.0				0.0
ESTIMATED S												0.0	. 0.0	0.0
Harvest	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
Total Take	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0				0.0
Total Take (%)								•••					•	0.0
Cum Take	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0			0	
				2.0	0.0	5.0	5.5	0.0	2.0	0.0	0.0	0.0	-	

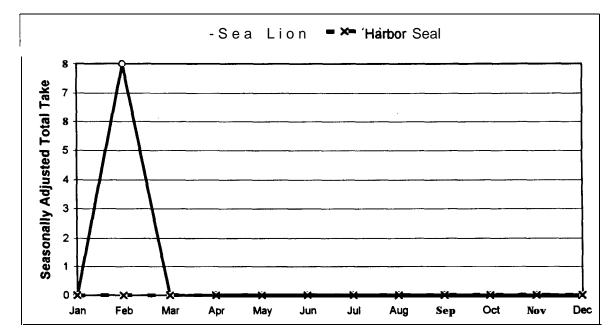
SOURCE. Alaska Department of Fish and Game, Division of Subsistence Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the St. George Traditional IRA Council, City of St. George, and St. George Tanaq Corporatron, 1995

## Table 46. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: St. George, 1995

HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	r Seal	
	Report	ed by	Community	Est.	Reporte	d by	Communi	ty Est
	Sam	ple	(Expan	ded)	Samp	de	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	4	100.0%	4. 0	100.0%	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	<del></del>	0.0	
Pup Unknown Sex	0	0.0%	00	00%	0		0.0	
Male Unknown Age	0	0.0%	0 0	0.0%	0		0.0	
Female Unknown Age	0	00%	0.0	0.0%	0		0.0	
Unknown Sex and Age	0	0.0%	0.0	0.0%	0		0.0	
Total	4	1000%	4.0	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			Η	ARBOI	r sea	L
		struck/	Total				Struck/	Total
<u>Year</u>	Harvest	<u>Lost</u>	Take	Ye	ar	Harvest	Lost	<u>Take</u>
1992	14. 9	55.0	89. 9	19	92	0.0	0. 0	0. 0
1993	3. 7	14.8	<b>18. 8</b>	19	93	0.0	0. 0	0.0
1994	2.8	17.1	19. 9	19	94	0. 0	0. 0	0.0
1995	4.0	4.0	8.0	19	95	0. 0	0. 0	0. 0

SOURCE. Alaska Department of Fish and Game Division of Subsistence Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the St. George Traditional IRA Council, City of St. George, and St. George Tanaq Corporation, 1995.

SAMPLING	DESI	GN:						<u>Active</u>		<u>Other</u>		Total		
TWO-STRA	ATA		Total N	lative	Househ	olds		59		100		159		
			Surv	veyed I	Househ	olds		47		29		76		
			:	Sampliı	ng Frac	tion	-	79.7%		29.0%		47.0%		
					d Mem			210		108		318		
		Estima	ited Ho	usehol	d Mem	bers		263.6		372.4		636.0		
HARVEST	AND (	JSE IN	IFORM	ATION	1									
Percentage	of Na	tive Ho	busehol	ds:			Estimat	ted Co	mmun	ity Hai	rvest			
			Sea	Harbor		á	and Ta	ke (Exp	andeo	1):		Sea H	larbor	
			<u>Lion</u>	<u>Seal</u>								Lion	<u>Seal</u>	
		Used a	523%	3.9%				To	tal Nun	nber Ha	arvested	53.6	2.5	
	ŀ	lunted	21.7%	0.8%				Total Nu	mber S	truck ar	nd Lost	6.3	0.0	
	Har	vested	17.8%	0.8%					Total I	Number	Taken	59.9	2.5	
	Re	ceived	57.8%	3.2%										
	Gave	Away	18.5%	08%				Number	Harvest	ed Per	Capita	0.08	0.00	
SEA LION	HARV Jan	EST B Feb	Y MON Mar	ITH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		U <b>nknown</b> Month	Total
REPORTED HAR	VEST AN	d take	BY SAMPI	ED HOU	SEHOLDS	(UNEXP	ANDED)							
Harvest	3	4	0	0	10	0	0	0	3	8	3	3	0	34
Struck & Lost	0	0	3	0	1	0	0	0	0	0	0	0	1	5
Total Take	3	4	3	0	11	0	0	0	3	8	3	3	1	39
ESTIMATED H	IARVES	AND T	ΤΑΚΕ Β	′ СОММ	UNITY (I	EXPAN	DED)							
Harvest	30	7.2	0.0	0 0	191	0 0	0 0	0 0	3.8	12.2	3.8	3.0	0.0	53.6
Struck & Lost	0 0	0 0	38	0 0	1.3	0 0	0 0	0 0	0 0	0.0	0 0	0.0	1.3	63
Total Take	36	7.2	3.0	0.0	204	0 0	0 0	0 0	38	122	3.8	38	13	599
ESTIMATED S	SEASON	ALLY A	DJUSTED	HARVE	EST AND	TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	3.8	7.2	0.0	0.0	191	0 0	0 0	0 0	36	12.2	3.8	3.8		53.6
Struck & Lost	0.0	0.0	4.7	0.0	1.6	0 0	0 0	0 0	0 0	0.0	0 0	0.0		63
Total Take	3.8	7.2	4.7	0.0	20.7	0 0	0 0	0.0	3.8	12.2	3.8	3.8		59.9
Total Take (%)	6.3%	12.0%	79%	0.0%	34.5%	00%	00%	00%	6.3%	264%	6.3%	6.3%		100.0%
Cum. Take	3.8	11.0	15.7	157	364	364	364	364	48.2	52.4	56.2	59.9		
Cum Take (%)	63%	18.3%	26.2%	26.2%	68.7%	607%	60.7%	607%	678%	07.4%	937%	100.0%		
HARBOR S	SEAL F Jan	HARVE Feb	EST BY Mar	MON Apr	TH May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown M o n t h	Total
REPORTED H				·				Ŭ		001	1101	000	Month	Total
Harvest	2	0	0	0	0	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	2	0	0	0	0	0	0	0	0	0	0	0	0	2
ESTIMATED H								-	-	-	-	-	-	_
Harvest	2.5	0.0	0.0	0.0	0.0	00	00	0.0	0.0	0.0	0 0	0.0	0.0	2.5
Struck 8 Lost	0.0	0.0	0.0	0.0	0.0	00	00	0.0	0.0	0.0	0.0		0.0	0.0
Total Take	2.5	0.0	0.0	0.0	0.0	00	00	0.0	0.0	0.0	0.0		0.0	2.5
ESTIMATED S														
Harvest	2.5	0.0	00	00	0.0	0.0	00	00	00	0.0	0.0	0.0		2.5
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		0.1
Total Take	2.5	0.0	0.0	0.0	0.0	0.0	00	00	00	00	0.0			2 !
Total Take (%)	100 9%	0.0%	0.0%	0.0%	0.0%	0.0%	00%	0.0%	0.0%	0.0%	0.0%			100.0%
Cum. Take (70)	2.5	2.5	2.5	0.0 <i>%</i>	2.5	2.5	25	2.5	2.5	2.5	2.5			100.070
							00% 10							

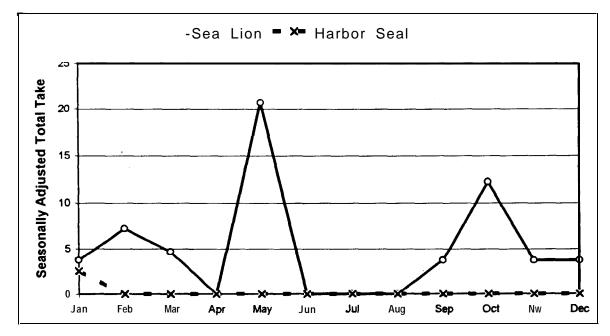
SOURCE Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of St. Paul and Tribal Government of St. Paul, 1995.

## Table 47. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: St. Paul, 1995

HARVEST BY AGE AND SEX

		ç	Sea Lion				На	rbor Seal	
	Report		Commun	ity Est	R	eport	edby	Commun	
	Sam	ple	(Expar	nded)		Sam	ple	(Expar	nded)
	Number	%	Number	9	% Num	ber	%	Number	%
Adult Male	2	5. <b>9</b> %	2.5	4.7%		0	0.0%	0.0	0.0%
Adult Female	0	00%	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	26	76.5%	34.0	64.9%		2	100.0%	2.5	100.0%
Juvenile Female	2	5.9%	2.5	4.7%		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	3	0.0%	10.3	19.3%		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	00%	0 0	0.0%		0	0.0%	0.0	0.0%
Female Unknown <b>Age</b>	0	00%	0.0	0.0%		0	0.0%	0.0	0.0%
Unknown Sex and Age	1	2.9%	3.4	6.4%		0	0.0%	0.0	0.0%
Total	34	100.0%	536	100.0%		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		F	IARBO	R SEA	L
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	Year	Harvest	Lost	<u>Take</u>
1992	161.7	66.2	226.6	1992	2.3	1.2	3.5
1993	161.7	66.2	226.6	1993	2.3	1.2	3.5
1994	147.0	26.4	173.4	1994	7.3	0.0	7.3
1995	63.6	6.3	59.9	1995	2.5	0.0	2.5

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the City of St Paul and Tribal Government of St. Paul, 1995

SAMPLING	DESIG	GN:												
CENSUS				Т	otal N	ative H	louser	olds		36				
					Surv	eyed H	lousel	nolds		26				
						Samplin	•		7	2.2%				
			_	-	le Hou					56				
			E	stimat	ed Hou	iseholo	Mem	ibers		60.3				
HARVEST	AND U	ISE IN	FORM	ATION										
Percentage	e of Nati	ive Ho	useholo	ls:		E	stimat	ed Con	nmunit	y Har	vest			
			Sea H	larbor		а	nd Tal	ke (Exp	anded	):		Sea H	arbor	
			<u>Lion</u>	<u>Seal</u>								<u>Lion</u>	<u>Seal</u>	
		used	0.0%	7.7%				Tot	al Numl	ber Har	vested	0.0	1.4	
	Н	unted	0.0%	3.0%				Total Nu				0.0	0.0	
		ested		3.8%					Total N	lumber	Taken	0.0	1.4	
		eived		3.8%							_			
		Away (		0.0%				Number	Harvest	ed Per	Capita	0.00	0. 02	
SEA LION	HARVE Jan	EST B' Feb	Y MON Mar	TH Apr	May	Jun	Jut	Aug	Sep	Oct	Nov	-	J <b>nknow</b> n. Month	Total
REPORTED HAR	VEST AND	TAKE E	BY SAMPL	ed hous	EHOLDS	(UNEXPAI	NDED)	-						
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 I	HARVEST	AND T	ΑΚΕ ΒΥ	сомм	UNITY (	EXPAND	ED)							
Harvest	0.0	00	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0
Struck & Lost	0.0	00	0 0	00	00	00	00	0.0	0.0	0.0	0.0	00	0.0	0.0
Total Take	0.0	0.0	0 0	00	00	00	00	0.0	0.0	0.0	0 0	0.0	0.0	0.0
ESTIMATED S	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	ву со	ΜΜυνιτι	(EXPA	NDED)				
Harvest	0.0	0.0	0 0	00	00	00	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0 0	0.0	00	00	00	00	00	0 0	0.0	0.0	0.0	00		0.0
Total Take	0.0	0.0	0.0	00	00	00	00	0.0	0.0	0.0	0.0	0.0		0.0
Total lake (%)						-	•••	-						····.
Cum Take	0.0	0.0	0.0	00	00	00	00	0.0	0.0	0.0	0.0	0.0		
Cum. Take (%)									-					
HARBOR	SEAL H	IARVE	ST BY	MONT	ТН								Unknown	
	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED H							•		ED)					
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						EXPAND	,							
Harvest	0.0	0.0	0.0	00	0 0	0 0	0 0	0.0	0.0	1.4	0.0	0.0	0.0	14
Struck & Lost	0.0	0.0	0.0	00	00	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	00	00	0 0	0.0	0.0	1.4	0.0	0.0	0.0	14
ESTIMATED									•	ANDED)				
Harvest	0.0	0.0	0 0	0 0	00	0 0	0 0	0.0	0.0	1.4	0.0	0.0		1.4
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	00	0 0	0 0	0.0	0.0	1.4	0.0	0.0		14
Total Take (%)	0.0%	0.0%	0.0%	00%	00%	00%	00%	0.0%		100.0%		0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0 0	0.0	0 0	0 0	0.0	0.0	1.4	1.4	1.4		
Cum. Take (%)	0.0%	0.0%	0.0%	00%	00%	00%	00%	0.0%	0.0%	100.0%	100.09	6 <b>100.0%</b>		

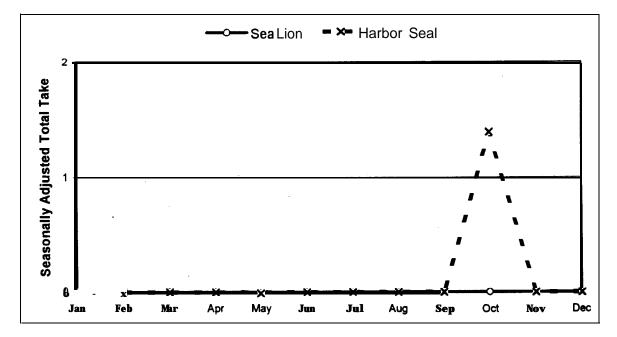
SOURCE: Alaska Department of Fish and Came, Division of Subsistence Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Aksk with assistance from the Egegik Traditional Council, 1995.

# Table 48. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: Egegik, 1995

### HARVEST BY AGE AND SEX

		•					0 1	
		Se	a Lion			Harbo	r Seal	
	Reporte	ed by	Communit	y Est	Report	ed by	Communi	ty Est.
	Sam	ble	(Expanded)		Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	-	0.0		1	100.0%	1.4	100.0%
Adult Female	0		0 0		0	0.0%	0.0	0.0%
Adult Unknown Sex	0	-	0.0	<del></del>	0	0.0%	0.0	0.0%
Juvenile Male	0		0 0	<del></del>	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		1	100.0%	1.4	100.0%

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



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

SE	A LION		H	HARBO	R SEA	L
	Struck/	Total			Struck/	Total
<u>Year</u> <u>Harve</u>	<u>st Lost</u>	<u>Take</u>	Year	Harvest	Lost	<u>Take</u>
1992 0.0	0.0	0.0	1992	3. 3	14. 3	17.7
<b>1993 0.</b> 0	0.0	0.0	1993	7.7	3. 3	11.0
<b>1994 0</b> . 0	0.0	0.0	<b>1994</b>	12.8	0.0	12.8
1995 0.0	0. 0	0.0	1995	1.4	0.0	1.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seak in Alaska, with assistance from the Egegik Traditional Council, 1995.

Table 49.	SEA LI	ON AN	ND HAR	RBOR	SEAL H	IARVE	ST /	TAKE	ESTIN	IATES	: King	g Saln	non, 19	96
SAMPLING	DESIC	GN:		-		e 11								
CENSUS					Fotal Na					26				
						eyed Ho				26				
				Com		ampling			1	1090% 70				
					ole Hou ted Hoι					79 79.0				
				Esuma		ISENDIC		Inners		19.0				
HARVEST	AND U	ISE IN	FORM	ATION										
Percentage	of Nati	ive Ho	useholo	ds:		Es	timate	ed Con	nmunity	∕ Hat-v	est			
-			Sea H	larbor		an	d Tak	e (Exp	anded	):		Sea	Harbor	
			<u>Lion</u>	<u>Seal</u>								Lion	Seal	
		Used	0.0%	34.6%				Tot	al Numb	er Harv	ested	0.0	13.0	
		lunted		19.2%			٦	Fotal Nu				0.0	3.0	
	Harv	ested 0	.0%	15.4%					Total N	umber T	aken	0.0	16.0	
		eived (		23.1%										
	Gave	Away	0.0%	154%			Ν	lumber	Harveste	ed Per (	Capita	0.00	0.16	
SEA LION					Mac		11	A	0	0-4	N		Unknown	Tatal
	Jan VEST AND	Feb	Mar AV SAMDI					Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAR	VEST AND 0	IAKE E	3Y SAMPL 0	ED HOUS	EHOLDS (I 0	UNEXPANL 0	0 (UED	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 H	-	-		-	-	-	-	U	U	U	v	v	v	U
Harvest					•	XPANDE					00	0.0	0.0	0.0
Struck & Lost	0.0 <b>0.0</b>	0.0 <b>0.0</b>	0.0 <b>0.0</b>	0.0 <b>00</b>	0.0 <b>0.0</b>	0.0 <b>0.0</b>	0.0 <b>0.0</b>	0.0 <b>00</b>	0 0 0.0	0.0 <b>0.0</b>	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED S								U.U MMUNITY		NDED)	0.0	00	0.0	0.0
Harvest	0.0	0.0	0.0	00	0.0	0.0	0.0	00	00	0.0	00	00		0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	00	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(%)			<del></del>	_			-							
HARBOR S			עם דסי										Unknown	
HARDUR S	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Month	Total
REPORTED H	IARVEST	AND T	AKE BY	SAMPL	ED HOU	SEHOLD	S (UNI	EXPAND	ED)					
Harvest	0	0	0	7	0	0	1	4	1	0	0	0	0	13
Struck & Lost	0	0	0	0	0	1	2	0	0	0	0	0	0	3
Total Take	0	0	0	7	0	1	3	4	1	0	0	0	0	16
ESTIMATED I	HARVEST	AND 1	TARE BY	сомм	UNITY (E	XPANDE	D)							
Harvest	0.0	0.0	0.0	70	0.0	0.0	1.0	4.0	1.0	0.0	0.0	0.0	0.0	13.0
Struck & Lost	0 0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0	0. 0	0.0	0.0	0.0	3. 0
Total Take	0.0	0.0	0.0	7.0	0.0	1.0	30	40	1.0	0.0	0.0	0.0	0.0	16.0
ESTIMATED S	SEASONA	ALLY AD	DJUSTED	HARVE	ST AND	TAKE E	ву со	MMUNIT	Y (EXPA	ANDED)				
Harvest	0.0	0.0	0.0	7.0	0.0	0.0	1.0	4.0	1.0	0.0	0.0	0.0		13.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0. 0	0.0	0.0	0.0	0.0		3. 0
Total Take	0.0	0.0	0.0	7.0	0.0	10	3.0	4.0	1.0	0.0	0.0	0.0	1	160
Total Take <b>(%)</b>	0.0%	0.0%	0.0%	43.8%	0. 0%	6.3%	18.8%	25.0%	6.3%	0.0%	0.0%	0.0%	Ď	100.0%
Cum. Take	0.0	0.0	0.0	70	7.0	a.0	11.0	15.0	16.0	16.0	16.0			
Cum. Take (%)					<b>6% 50</b> .0								s rbor Seats i	

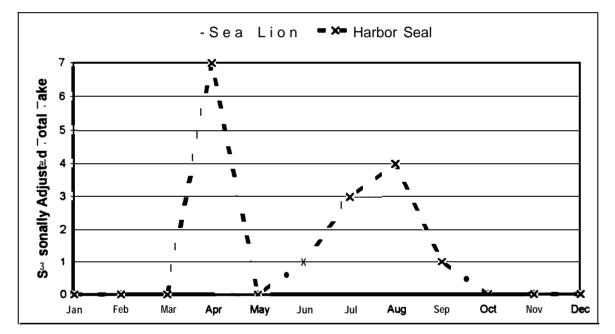
SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seats in Alaska with assistance from the King Salmon Traditional Council, 1996.

### Table 49. (cont.) SEA LION 8 HARBOR SEAL HARVEST ESTIMATES: King Salmon, 1995

### HARVEST BY AGE AND SEX

HARVEOT DI AGE AND O		•					0 1	
		Sea	Lion			Harbo	orSeal	
	Reporte	dby	Communi	ty Est.	Reporte	ed by	Commun	ity Est.
	Sam	bie	(Expan	ded)	Sam	ole	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		2	15.4%	2.0	15.4%
Adult Female	0		0.0		2	15.4%	2.0	15.4%
Adult Unknown Sex	0		0.0	•••	9	69.2%	9.0	69.2%
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		13	100.0%	13.0	) 100.0%

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



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

	SEA	LION			F	IARBOF	R SEA	L
		Struck/	Total	_			Struck/	Total
<u>Year</u>	Harvest	Lost	<u>Take</u>		Year	<u>Harvest</u>	Lost	<u>Take</u>
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	13.0	3.0	16.0
1995	0.0	0.0	0.0		1995	13.0	3.0	16.0

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, 1995.

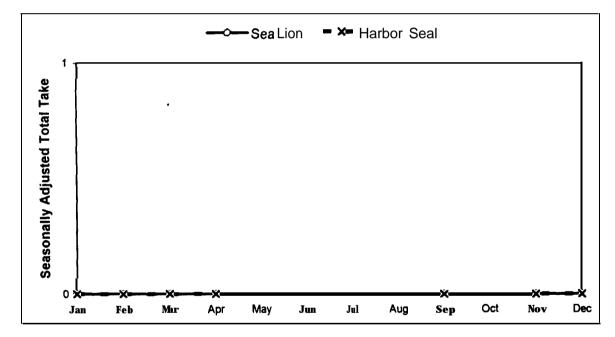
SAMPLING	DESIC	GN:												
CENSUS				1	Fotal N	ative H	ousel	holds		32				
					Surv	eyed H	ousel	holds		32				
					S	amplin	g Fra	ction	1	00.0%				
				Samp	ole Hou	isehold	l Men	nbers		75				
			E	stimat	ed Hou	usehold	l Men	nbers		75.0				
HARVEST	AND U	SE <b>INF</b>	ORMA	TION										
Percentage	of Nati	ive Hou	useholo	ds:		E	stimat	ed Com	munity	Harv	est			
			Sea Ha	rbor		ai	nd Ta	ke (Exp	panded,	):		Sea H	larbor	
		-	Lion	<u>Seal</u>								Lion	Seal	
		used 0		0.0%					al Numb			0.0	0.0	
		unted		0.0%				Total Nu				0.0	0.0	
		vested		0.0%					Total N	umber	Taken	0.0	0.0	
		eived 0		0.0%							<b>.</b> .			
		Away o		0. 0%				Number	Harveste	ed Per	Capita	0.00	0.00	
SEA LION	HARVE Jan	EST BY Feb	/ MON Mar	TH Apr	Мау	Jun	jul	Aug	Sep	Oct	Nov		Un known Month	Tota
Reported har	VEST AND	TAKE B	y sampl	ED HOUS	EHOLDS	(UNEXPAN	ided)							
Harvest	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	, 1
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	' 0	
ESTIMATED H	ARVEST	AND TA	AKE BY	COMM	UNITY (I	EXPAND	ED)							
Harvest	0.0	0.0	0.0	00	0 0	0 0	00	. 00	0 0	0.0	0.0	0.0	0.0	0.
Struck & Lost	0.0	0 0	0.0	00	0 0	0 0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.
Total Take	0.0	0 0	0 0	00	0 0	0 0	00	0 0	0 0	0 0	0.0	0 0	0.0	0.
ESTIMATED S	EASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	ву сс	MMUNIT	Υ (ΕΧΡΑ	NDED)				
Harvest	0.0	0.0	0.0	0 0	0.0	0 0	00	0 0	0 0	0 0	0.0	0.0		0
Struck & Lost	0 0	0.0	0.0	00	0 0	00	00	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.
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 (%)	-										<b></b>	<del></del>		
HARBOR S										• •			Unknown	<b>.</b> .
	Jan	Feb	Mar	Apr			Jut		Sep	Oct	Nov	Dec	Month	Tota
REPORTED H Harvest	ARVEST 0	AND D	AKE BY 0			JSEHULI 0	JS (Ur 0	NEXPAND 0	0 (ED)	0	0	0	0	
Struck & Lost	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	
ESTIMATED H						• EXPAND	-	Ŭ	Ŭ	5	J	v	v	
Harvest	0.0	00	0.0	00	00	00	00	00	00	0.0	00	0.0	0.0	0.
Struck & Lost	0.0	0.0	0.0	00	00	00	00	00	00	0.0	0. (			0.
Total Take	0.0	0.0	0.0	0.0	0.0	00	00	00	00	0.0	00	0.0		0
ESTIMATED S													310	Ū
Harvest	0.0	0.0	0.0	00	00	00	00	00	00	00	0.0	0.0		0
Struck & Lost	0.0	0.0	0.0	00	0.0	00	00	00	00	0.0	0.0	0.0		0
Total Take	0.0	0.0	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0		
Total Take (%)									••••					
Cum. Take	0.0	0.0	0.0	0.0	0.0	0 0	00	0 0	0.0	0.0	0. 0	0.0	)	
	e(%)	0.0	0.0	0.0	0.0				0.0	5.5				

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 Levelock Traditional Council, 1995

## Table 50. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Levelock, 1995

		Sea	Lion			Harb	or Seal	
	Reported	l by	Communi	ty Est.	Reporte	d by	Communi	ty Est.
	Sam	he	(Expan	ded)	Samp	ole	(Expan	ded)
	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	<del></del>	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		00		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		00		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		_	F	IARBOF	R SEA	L
		Struck/	Total	-			Struck/	Total
Year	Harvest	Lost	Take		Year	<u>Harvest</u>	Lost	<u>Take</u>
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	0.0	0.0	0.0
1995	0.0	0.0	0.0		1995	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Levelock Traditional Council, 1995

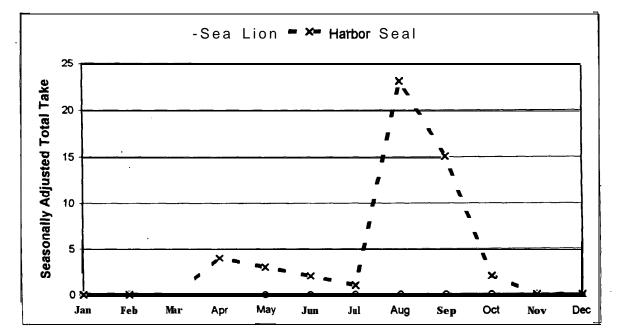
SAMPLING	DESI	GN:					1	Active	1	<u>Other</u>		Total		
TWO-STR	ATA		Total N					15		72		87		
				-	Househ			15		26		41		
					ng Frac			100.0%		36.1%		47.1%		
			ple Hou					53		70		123		
		Estima	ted Hou	usehol	d Mem	bers		53.0		193.8		246.8		
HARVEST	AND L	JSE IN	IFORMA	ATION										
Percentage	e of Nat	tive Ho	useholo	ds:		E	Estimat	ed Co	mmuni	ty Harv	/est			
-			Sea Ha	rbor					pandeo	-		Sea	Harbor	
			Lion	Seal						,		Lion	Seal	
		used (	).0%	56.3%				To	tal Num	ber Harv	/ested	0.0	34.8	
	Н	lunted	0.0%	167%				Total <b>Nu</b>	mber St	<b>uck</b> and	Lost	0. 0	15.3	
	Harv	vested	0.0%	144%					Total N	lumber 7	Faken	0.0	50.2	
	Rec	ceived ()	.0%	431%										
	Gave	e Away	0.0%	29.2%				Numbe	er Harves	sted Per	Capita	0.00	0.14	
SEA LION	HARVI Jan	EST B Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown M o n t h	To
REPORTED HAR	RVEST AND	d take i	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
larvest	0	0	0	0	0	0	0	0	0	0	0	0	0	
truck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
STIMATED I	HARVEST	AND T	ΓΑΚΕ ΒΥ	СОММ	UNITY (	EXPAND	ED)							
larvest	0.0	00	0.0	00	00	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	(
truck & Lost	0.0	0.0	0.0	00	0 0	00	0.0	00	0.0	0.0	0.0	00	00	(
otal Take	0.0	0.0	0.0	00	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	(
ESTIMATED	SEASONA	ALLY AD	JUSTED	HARVE	ST AND	TAKE	BY CO	ммиліт	Y (EXP	ANDED)				
larvest	0.0	00	0.0	00	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0		(
Struck & Last	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0		(
Total Take	0.0	0.0	0.0	00	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0		(
otal Take(%)		***				-			÷					
Cum Take	0.0	0.0	0.0	0.0	00	00	0.0	0.0	00	0.0	0.0	0.0		
Cum Take(%)														
HARBOR	SEAL H	- ARVF	ST BY	MON	ТН								Unknown	
""	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aua	Sep	Oct	Nw	Dec	Month	To
REPORTED I							.DS (UN		•			_		
larvest	0	0	0	2	2	2	1	12	5	2	0		-	2
Struck & Lost	0	0	0	2	1	0	0	4	3	0	0	_		
Fotal Take	0	0	0	4	3	2	1	16	8	2	0	C	0	
ESTIMATED						•	,							~
larvest	0.0	0.0	0.0	20	2.0	2.0	1.0	17.3	8.5	2.0	0.0			3
Struck & Lost	0.0	0.0	0.0	2 0	10	0 0	0 0	5.0	6.5	0 0	0.0			1
Fotal Take	0.0	0 0	0.0	4.0	30	2 0	1.0	23.1	15.1	2.0	0.0	0.0	0.0	5
ESTIMATED					EST AND				ΓΥ (ΕΧΡ					
Harvest	0.0	0.0	0.0	2 0	20	20	1.0	17.3	0.5	2.0	0.0			3
Struck & Lost	0.0	0.0	0.0	2 0	1.0	0.0	0 0	5.8	6.5	0.0	0.0			1
Total Take	0 0	0.0	0.0	40	3.0	20	10	231	15.1	2.0	0.0			5
Total Take (%)	0.0%	0.0%	0.0%	8.0%	6.0%	4.0%		46.0%		4.0%	0.0%			100.
Cum. Take	0.0	0.0	0.0	40	7.0	9.0	10.0	33.1	48.2	50.2	50.2	2 50.2	2,	

SOURCE. Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alask with assistance from the Naknek Traditional Council, 1995

# Table 51. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Naknek, 1995

		Sea	Lion			Harl	bor Seal	
	Reporte	dby	Communi	ty Est	Report	ed by	Commun	ity Est.
	Samp	le	(Expan	ded)	Sam	ple	(Expan	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		3	11.5%	3.0	a.696
Adult Female	0		0.0		1	3.8%	1.0	2.9%
Adult Unknown Sex	0		0.0		18	69.2%	26.0	77.0%
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	3.8%	1.0	2.9%
Pup Male	0		00		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	7.7%	2.0	5.7%
Male Unknown Age	0		00	•••	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		1	3.8%	1.0	2.9%
Total	0		0.0		26	100.0%	34.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

_		SEA	LION		H	IARBO	R SEA	L
-			Struck/	Total			Struck/	Total
	Year	Harvest	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
	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	6.3	29.7
	1995	0.0	0.0	0.0	1995	34.8	15.3	so. 2

SOURCE: Alaska Department of Fish and Game, Division of Subsatence, Subsistence Study and Monitor System for Sea Liins and Harbor Seals in Alaska, with assistance from the Naknek Traditional Council, 1995.

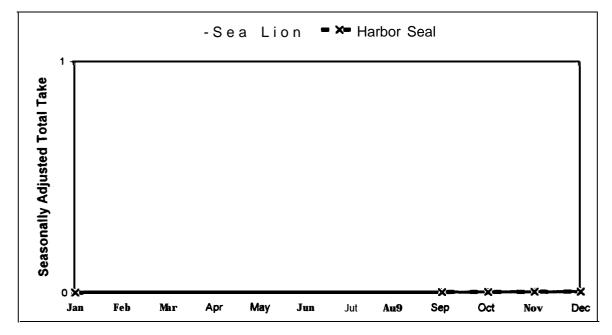
SAMPLING	DESIC	GN:												
CENSUS				٦	Fotal N	ative H	louse	holds		27				
					Surv	eyed H	louse	holds		25				
					S	Samplin	g Fra	ction	92	2.6%				
				-		usehold				85				
			E	stimat	ed Ho	usehold	Men	nbers		91.8				
HARVESTA	AND U	SE IN	FORMA	TION										
Percentage	of Nati	ive Ho	usehold	ls:		E	stima	ted Cor	nmunity	y Har	vest			
			Sea Ha	rbor		ai	nd Ta	ke (Exp	banded)	):		Sea	Harbor	
			Lion	Seal								Lion	Seal	
		used (	).0%	0.0%				To	tal Numb	er Har	vested	0.0	0.0	
	Н	unted	0.0%	0.0%				Total Nu	mber Str	uck an	d Lost	0.0	0.0	
	Harv	vested	0.0%	0.0%					Total N	umber	Taken	0.0	0.0	
	Rec	eived	0.0%	0.0%										
	Gave	Away	0.0%	0.0%				Number	Harveste	ed Per	Capita	0.00	0.00	
SEA LION	HARVE Jan	ESTB Feb	Y MON <sup>®</sup> Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tota
REPORTED HAI	RVEST ANI	D TAKE	BY SAMPL		,			. 3	г					
larvest	0	0	0	0	0	0	0	0	0	0	0	0	0	
truck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
STIMATED H	ARVEST	AND T	ΑΚΕ ΒΥ	сомм	UNITY (	EXPANDI	ED)							
arvest	0.0	0.0	0.0	0.0	00	0.0	00	0 0	0.0	0.0	0.0	0. 0	0.0	0.
truck & Lost	0.0	0.0	0.0	00	00	0.0	0.0	00	0.0	0.0	0.0	00	0.0	0.
otal Take	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
STIMATED S	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE								
larvest	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0		0
Struck & Lost	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0
Fotal Take	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0
Total Take (%)									•		_			-
Cum Take	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. Take (%)										-	_			
HarboR S	EAL H	ArVE	ST <b>BY</b>	MoN	ТН								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aty	Sep	Oct	Nov	Dec	Month	To
REPORTED H							-		-					
larvest	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	-	•	
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED I	HARVEST	AND	ΓΑΚΕ ΒΥ	СОММ	UNITY (	EXPAND	ED)							
larvest	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			(
Fotal 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	(
ESTIMATED S					EST AND		BY CO	OMMUNIT	Ύ (ΕΧΡΑ	NDED)				
larvest	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	)	(
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	)	(
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	)	

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, 1995

# Table 52. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Pilot Point, 1995

		Se	ea Lion			Harbo	or Seal	
	Reporte	d by	Communit	y Est.	Reporte	ed by	Communi	<b>ty</b> Est.
	Samp	le	(Expand	ied)	Sam	ple	(Expand	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		0		0.0	
Adult Female	0		0.0		0	-	0.0	ميدي
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		_	F	IARBO	R SEA	L
		Struck/	Total	_			Struck/	Total
Year	<u>Harvest</u>	Lost	<u>Take</u>		Year	Harvest	Lost	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

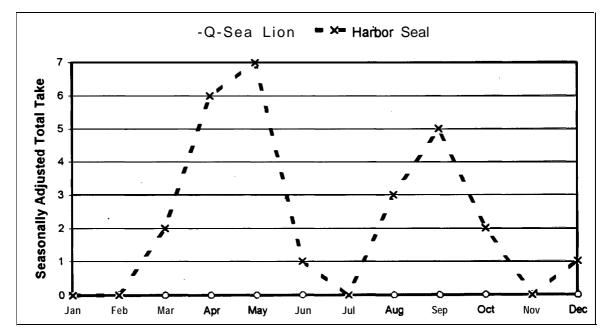
SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Pilot Point Traditional Council. 1995

SAMPLING	G DESIG	GN:												
CENSUS				-	Fotal I	Vative I	House	holds		33				
					Surv	veyed I	House	holds		33				
						Samplir	ng Fra	ction		100.0%				
				Samp	ole Ho	usehol	d Mer	nbers		108				
			E	Estimat	ed Ho	ousehol	d Mer	nbers		108.0				
HARVEST	AND U	SE IN	IFORM,	ATION										
Percentage	of Nati	ive Ho	usehol	ds:		Ε	Estima	ted Co	ommuni	ity Har	vest			
			Sea Ha	rbor		а	nd T	ake (Ex	xpandeo	d):		S e a	Harbor	
			Lion	Seal								Lion	<u>Seal</u>	
		Used (	0.0%	87.9%				Тс	otal <b>Num</b>	<b>ber</b> Har	vested	0.0	17.0	
	Н	unted	0.0%	48.5%				Total Nu	umber Sti	ruck an	d Lost	0.0	10.0	
	Harv	ested	0.0%	33.3%					Total I	Number	Taken	0.0	27.0	
	Rec	eived	0.0%	60.6%										
		Away		30.3%				Number	Harvest	ted Per	Capita	0.00	0.16	
SEA LION	HARVE Jan	EST B` Feb	Y MON Mar	TH Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tota
REPORTED HAR	VEST AND	TAKE E	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	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	
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED H	HARVEST	AND T	AKE BY	СОММ	UNITY	(EXPAND	ED)							
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.
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.
Total Take	0.0	0 0	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0
ESTIMATED S	SEASONA	LLY AC	JUSTED	HARVE	ST AN	D TAKE	BY CC	MMUNIT	TY (EXP	ANDED)				
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.
Struck & Lost	0.0	0.0	0.0	00	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	00	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										•			Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Tota
REPORTED H Harvest	IARVEST 0	AND I 0		SAMPL 4	.ED НО 5		DS (UN 0	IEXPANI 2	DED) 2	n	0	^	0	I
Harvest Struck & Los!	0	0	1	4 2	5 2	0	0	2 1	2	2 0	0	<b>0</b> 1	0 0	1
Total Take	0	0	2	6	2	1	0	3	3 5	2	0	1	0	2
ESTIMATED I							-	J	5	L	0	'	0	2
Harvest	0.0	0.0	1.0	4.0	50	(EXPANL 1.0	0.0	2.0	2.0	2.0	0.0	0.0	0.0	17.
Struck & Lost	0.0	0.0	1.0	4.0 2 0	20	0.0	0.0	1.0	3.0	0.0	0.0	1.0	0.0	10
Total Take	0.0	0.0	2.0	60	7.0	1.0	00	3.0	5.0	2.0	0.0	1.0	0.0	27
ESTIMATED											5.5	1.0	00	21
Harvest	0.0	0.0	1.0	4.0	5.0	10	00	2 0	2.0	2.0	00	0.0		17
Struck & Lost	0.0	0.0	1.0	2.0	2.0	0.0	0.0	1.0	3.0	0.0	0.0	1.0		10
Total Take	0.0	0.0	2.0	6.0	7.0	1.0	0.0	3.0	5.0	2.0	0.0	1.0		27
Total Take (%)	0.0%	0.0%		<b>2.2%</b> 2 5		3.7%		11.1%		7.4%	0.0%	3.7%		100.0
Cum. Take	0.0	0.0	2.0	8.0	15.0	16.0	160	19.0	24.0	26.0	26.0			
Cum. Take (%)	0.0%	0.0%	7.4%	29.6%	55.6%	59.3%	593%	70.4%	88.9%	96.3%	96.3%	100.0%		

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaski a, with assistance from the Port Heiden Traditiinal Council, 1995.

		Sea	Lion			Harb	or Seal	
	Reported	d by	Communi	ty Est	Reporte	ed by	Communi	ty Est
	Samo	de	(Expan	ded)	Sam	ple	(Expan	deđ)
	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		00		11	64.7%	11.0	647%
Juvenile Male	0	***	00	-	0	0.0%	0.0	0.0%
Juvenile Female	0		00		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	***	0.0	—	1	5.9%	1.0	5.9%
Pup Male	0		00		0	0.0%	0.0	0.0%
Pup Female	0		00		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		00		0	0.0%	0.0	0.0%
Male Unknown Age	0		00		0	0.0%	0.0	0.0%
Female Unknown Age	0		00		0	0.0%	0.0	0.0%
Unknown Sex and Age	, 0		00		5	294%	5.0	29.4%
Total	0		00		17	100.0%	170	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION		F	IARBO	r sea	L
		Struck/	Total			Struck/	Total
<u>Year</u>	Harvest	Lost	Take	Year	<u>Harvest</u>	Lost	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	60.6
1994	0.0	0.0	0.0	1994	63.0	46.3	106.3
1995	0.0	0.0	0.0	1995	17.0	10.0	27.0

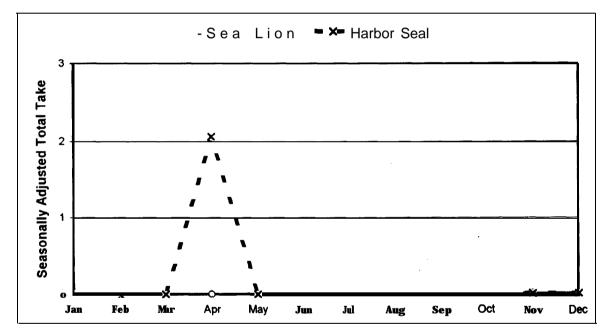
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Port Heiden Traditional Council, 1995.

SAMPLING	DESIG	GN:												
CENSUS				Т	otal N	ative H	louser	olds		32				
					Surv	eyed H	louser	olds		31				
					5	Samplin	g Fra	ction	9	6. <b>9</b> %				
				Samp	ole Ho	useholo	d Mem	bers		103				
			I	Estimat	ted Ho	ouseho	ld Me	mbers		106.3				
HARVEST	AND U	SE IN	FORM.	ATION										
Percentage	of Nati	ive Hol	usehol	ds:		E	stimat	ed Cor	nmunit	y Har	vest			
Ũ			Seal					ke (Exp	-			Sea	Harbor	
			Lion_	<u>Seal</u>					,			Lion	<u>Seal</u>	
		used	0.0%	35.5%				Tot	al Numb	er Har	vested	0.0	2.1	
	H	unted	0.0%	22.6%				Total Nu	mber Str	uck an	d Lost	0.0	0.0	
	Harv	vested o	. 0%	6.5%					Total N	umber	Taken	0.0	2.1	
	Rec	eived	0.0%	32.3%										
	Gave	Away	0.0%	65%				Number	Harveste	ed Per	Capita	0.00	0. 02	
SEA LION	HARVE Jan	EST BY Feb	Y MON Mar	ITH Apr	May	Jun	Jut	Aug	Sep	Oct	Nw		Unknown Month	Tota
REF'ORTED HAR	VEST AND	) TAKE E	-	•	· · ·			J						
larvest	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	
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED H		ΔΝΟ Τ	AKE BY	СОММ		EXPAND	FD)							
Harvest	0.0	0.0	0.0	00	00	00	00	0.0	00	0.0	0.0	0.0	0.0	0.
Struck & Lost	0.0	0.0	0.0	00	00	00	00	0.0	00	0.0	0.0	0.0	0.0	0.
Total Take	0.0	0.0	0.0	0.0	00	00	00	00	0.0	0.0	0.0	0.0	0.0	0.
ESTIMATED S										NDED)		0.0		-
Harvest	0.0		0.0	00	00	00	00	00	00	0.0	0 0	0.0		0.
Struck & Lost	0.0	0.0	0.0	00	00	00	00	00	00	0.0	0.0	0.0		0.
Total Take	0.0	0.0	00	00	00	00	00	0.0	00	0.0	0.0	0.0		0.
Total Take (%)														0.
Cum Take	0 0	0.0	0.0	00	0.0	00	00	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)							_		•					
			07 D)		_, ,									
HARBOR S	SEAL H Jan	IARVE Feb	ST BY Mar	MON I Apr	l H May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Tot
REPORTED H	IARVEST	AND T	AKE B	<b>Y</b> SAMPL	ED HO	USEHOL	DS (UN	IEXPAND	ED)					
Harvest	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	
Total Take	0	0	0	1	0	0	0	0	0	0	0	0	1	
ESTIMATED H	HARVEST	AND T	TAKE B	ү сомм	UNITY	(EXPAND	)ED)							
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	1.0	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
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	1.0	2
ESTIMATED S	SEASONA	ALLY AD	JUSTEE	) HARVE	EST AN	Ο ΤΑΚΕ	ву сс	MMUNIT	Y (EXPA	ANDED)				
Harvest	0.0	0 0	0.0	21	0.0	00	00	00	00	0.0	0.0	0.0		2
Struck & Lest	0.0	0.0	0.0	0.0	00	00	00	00	0 0	0.0	0.0			(
Total Take	0.0	0.0	0.0	2.1	00	0.0	0 0	0 0	0.0	0.0	0.0	0.0	1	2
Total Take (%)	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	2.1	21	21	21	2.1	21	2.1	2.1			
Cum. Take (%)	0.0%		6 0.0%					0.0% 100.0						

SOURCE Alaska Department of Fish and Came, Division of Subsatence. Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the South Naknek Traditional Council. 1995

		Sea	Lion			Harl	oor Seal	
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Communi	ity Est.
	Samp	ole	(Expand	ded)	Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	•	0.0		0	0.0%	0.0	0.0%
Adult Female	0		0.0		1	500%	1.0	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		00		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		1	50.0%	1.0	50.0%
Total	0		0.0		2	100.0%	2.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

	SEA	LION			HARBO	R SEA	L
Year	Harvest	Struck/ Lost	Total <u>T<b>ake</b></u>	Year	<u>Harvest</u>	Struck/	Total <u>T<b>ake</b></u>
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

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the South Naknek Traditional Council, 1995

SAMPLING	DESIG	SN:								Total				
CENSUS				Т	otal N	ative H	louseh	olds		45				
					Surv	eyed H	louser	olds		38				
						amplin	•		8	4.4%				
				•		isehold				149				
				Estimate	ed Hou	useholo	d Mem	bers		176.4				
HARVEST A	AND U	SE IN	IFORM	IATION										
Percentage	of Nati	ve H	louseho	lds:		E	stimat	ed Cor	nmunit	y Harv	/est			
				Harbor Sea			a	nd Tak	ie (Exp	andeo	l):		<b>arbor</b> sp	
			Lion	Spotted S	eal			Tat	al Niumak		اممامما	Lion	<u>Seai</u>	<u>Seal</u>
		used Inted	0.0% 0.0%	78.9% 36.8%				Total Nu	al Number St			0.0 0.0	0.0 0.0	11.8
	Harve		0.0%	30.8% 132%						lumber		0.0	0.0	13.0 <b>24.9</b>
		eived		73 7%						umber	Taken	0.0	0.0	64. J
	Gave			15.8%			I	Number	Harveste	ed Per (	Capita	0.00	0.00	0.07
SEA LION F	<i></i>			• • • •	N. 4-11	1	k.1	A0	C	0.4	Neur		Unknown	Tel
	Jan	Feb	Mar		May	Jun		Au9	Sep	Oct	Nov	Dec	Month	Tot
EPORTED HARV arvest	EST AND 0	TAKE 0	BY SAMP	LED HOUSI		UNEXPAI 0	NDED) 0	0	0	0	0	0	^	
truck & Lost	0	0	-	-	-	-	-	-	-		-	0	0	
truck & Lost otal 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	U	U	U	0	0	
STIMATED HA arvest	0.0	AND 0.0	1AKE B		-	EXPAND		0.0/	00	0.0	0.0			
ruck & 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′ 00	00 00	0.0 0.0	0.0 0.0	0.0	0.0	0
otal Take	0.0	0.0	0.0	00	00	00	00	0.0	00	0.0	0.0	0.0 0.0	0.0 0.0	0 0
											0.0	0.0	0.0	0
STIMATED SE Iarvest									•	,				
truck & Lost	0.0 <b>0. 0</b>	00 0. 0	0 0 <b>0.0</b>	0 0 00	0 0 00	0 0 00	0 0 00	00 0. 0	00 00	0.0 <b>0. 0</b>	0.0 <b>0. 0</b>	0.0 00		0
otal Take	0.0	.00	0.0	00	00	00	00	0.0	00	0.0	0.0			0
	0.0					00	00		00		0.0	0.0		0
otal Take(%)		0.0												
um Take	0.0	0.0	00	00	00	0.0	00	0.0	0.0	0.0	0.0	0.0		
um Take (%)		***	R.g.a					***						
HARBOR <u>S</u>	EAL AI		POTTE otted Seal		<u>HAR</u>	VEST	<u>BY M</u> Harbor		I	Spo	tted Sea	1	Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	To
EPORTED HA						JSEHOL	DS (UN	EXPAND	ED)					
arvest	0	0	0	2	5	0	0	0	0	3	0	0	0	
truck & Lost	0	0	0	1	5	0	0	0	0	5	0	0	0	
otal Take	0	0	0	3	10	0	0	0	0	a	0	0	0	
STIMATED H						EXPAND	,							
arvest	0.0	0.0	0.0	24	59	00	0.0	0.0	0.0	3.6	00	0.0	0.0	1
truck & Lost	0.0	00	0.0	12	59	00	0 0	0 0	0.0	5.9	00	0.0	0.0	1
otal Take	0.0	0.0	0 0	36	11.8	00	00	0.0	0.0	9.5	0 0	0.0	0.0	24
STIMATED S	EASONA	LLY A						MMUNIT	•	ANDED)	-			
larvest	0.0	0.0	0.0	24	59	0 0	0 0	0.0	0.0	3.6	0.0	0.0		1
Struck & Lost	0.0	0.0	0 0	12	59	0 0	0 0	0.0	0.0	5.9	0.0	0.0		1
otal Take	0.0	0.0	0 0	36	11.8	00	00	0.0	0.0	9.5	0.0	0.0		2
	0.00/	0 00/	0 00/	1 4 9 0/		000/	0.00/	0.00/	0 00/	<b>AA</b> 4 67	0 00/	0 00/		100.
otal Take (%) Cum. Take	0.0% 0.0	0.0% 0.0	0.0%	14.3%	476% 154	00%	0.0%	0.0%	0.0%	38 1% 24.9	0.0%	0.0%		100.

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, 1995.

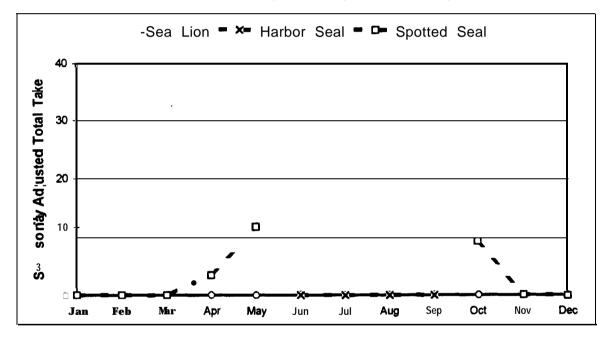
### Table 55. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Aleknagik, 1995

HARVEST DI AGE AL	DOLA											
		Sea	Lion			Harbo	rSeal			Spotte	d Seal	
	Reporte	d by	Commun	ity Est	Report	ed by	Commun	ity Est.	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expar	nded)	Sam	ole'	(Expar	ided)	Samp	ole'	(Expar	nded) ,
	Number	<u>%</u>	Number	1%	Number	<u>%</u>	<u>Number</u>	*	Number	<u>%</u>	Number	<u>%</u>
Adult Male	0		0.0		0		0.0		1	10.0%	1.2	10.0%
Adult Female	0		0.0		0	***	0.0		0	0.0%	0.0	0.0%
Adult Unknown Sex	0		0.0		0	_	0.0		2	20.0%	2.4	20. 0%
Juvenile Male	0		0.0		0		0.0		0	0.0%	0. 0	0.0%
Juvenile Female	0		0. 0		0		0. 0		1	10.0%	1.2	10.0%
Juvenile Unknown Sex	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%
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	<b></b>	0.0		0	-	0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0		0		0.0		6	60.0%	7.1	60.0%
Total	0		0.0	-	0		0.0		10	100.0%	11.8	100.0%

#### HARVEST BY AGE AN DSEX

· 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			HARBO	R SEA	L	<u> </u>	POTTE	D SE/	AL
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/	Total <u>Take</u>	Year	Harvest	Struck/	Total T <b>ake</b>
<u>1992</u>	0.0	0.0	0.0	1992	0.0	3.6	<u>3.</u> 6	<u>1992</u>	26.6	5. 5	<u>34.1</u>
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

SOURCE, Alaska Department of Fish and Game, Diiisii of Subsistence, Subsistence Study **and** Monitor System for Sea Liis and **Harbor** Seals in **Alaska**, with assistance from the Aleknagik Tribal Council, **1995**.

SAMPLING	G DESIG	SN:								Total				
CENSUS				Т	otal N	ative H	lousel	nolds		14				
					Surv	eyed H	louse	holds		14				
					S	Samplin	ng Fra	ction	1	100.0%				
				-		useholo				46				
			E	Estimate	d Ho	useholo	d Men	nbers		46.0				
HARVEST	AND U	SE IN	FORM	ATION										
Percentag	e of Nati	ive Ho	usehol	ds:		E	stima	ted Col	mmunit	y Har	/est			
0			Sea Har	bor Seal					ke (Exp			sea H	l <b>arbor</b> sp	ootted
				Spotted S	<u>eal</u>			_				Lion	Seal	<u>Seal</u>
		Used 0		929%					tal Numb			0.0	0.0	10.0
		unted vested		64.3% 60.0%				lotal Nu	mber Str Total N			0.0 <b>0.0</b>	0.0 0.0	5.0 15.0
		eived		78.6%						unnei	IANCII	0.0	0.0	13.0
		Away		42.9%				Number	Harveste	ed Per	Capita	0.00	0.00	0. 22
SEA LION	HARVE	STB	Y MON	TH								1	Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Tota
REPORTED HA							-							
Harvest	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	(
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED	HARVEST	AND T	AKE BY	COMMU	NITY (	EXPAND	ED)							
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.
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	00	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	SEASONA			HARVES	T AND	TAKE	BY CO	MMUNIT	Υ (ΕΧΡΑ	NDED)				
Harvest	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.
Struck & Lost	00	0.0	0.0	00	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0		0.
Total Take Total Take(%)	0.0	00	0.0 	00	0.0	0.0	0.0	0.0 	0.0 	0.0	0.0	0.0 		0.0
Cum. Take	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)							•••			•••	-			
HARBOR	SEAL A	ND SF	POTTE	D SEAL	. HAR	VEST	BY M	IONTH						
	Jan	Spo I-eb	<mark>tted Seal</mark> Mar	Apr	May	Jun	<b>Harbor</b> Jul	Seal Aug	Sep	Spo Oct	<mark>otted Sea</mark> Nw	l Dec	Unknown Month	Tota
REPORTED					_ /			v		001			montai	101
Harvest	0	0	а	2	0	0	0	0	, 0	0	0	0	0	1
Struck & Lost	0	0	4	1	0	0	0	0	0	0	0	0	0	
Total Take	0	0	12	3	0	0	0	0	0	0	0	0	0	1
ESTIMATED	HARVEST	AND 1	ΓΑΚΕ Β	сомми	NITY (	EXPAND	ED)							
Harvest	0.0	0.0	a. 0	2.0	0.0	0.0	0.0	0.0	0.0	0. 0	0.0	0.0	0.0	10
Struck & Lost	0.0	0.0	4.0	1.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	5
Total Take	0.0	0.0	12.0	3.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	15
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVES	ST ANI	) TAKE	BY CO	OMMUNIT	Υ (ΕΧΡΑ	ANDED)				
Harvest	0.0	0.0	a. 0	2.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0		10
Struck & Lost	0.0	0.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		5
Total Take	0.0	0.0	12.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		15
Total Take (%)	0.0%	0.0%	80.0%	200%	0.0%	0.0%	0.0%	0.0%	0. 0%	0.0%	0.0%	0.0%		100.0
Cum. Take	0.0	0.0	12.0	15.0	15.0	15.0	150	15.0	15.0	15.0	15.0	15.0		
Cum. Take (%)	0.0%	0 0%	80.0% 1	<b>00.0%</b> 100	) 0% <sup>.</sup>	100 0%	100 0	% 100 09	6 100 0	% 100.0	% 100.09	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 with assistance from the Clark's Point Traditional Council, 1995.

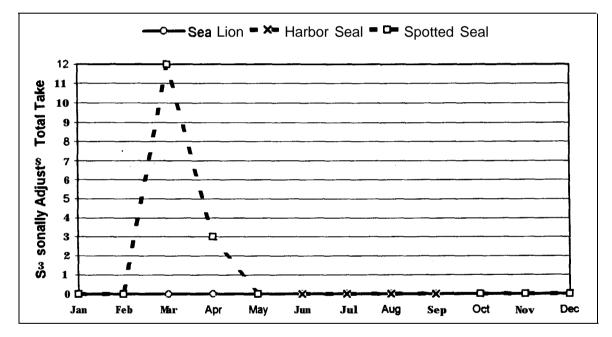
## Table 56. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Clark's Point, 199

		Sea	Lion			Harbo	r Seal			spotte	edSeal	
	Reporte	d by	Comuni t	y Est	Reporte	ed by	Comuni t	y Est	Reporte	ed by	Comuni ty	Est.
	Samp	le	(Expan	ded)	Samp	жe <sup>*</sup>	(Expan	ded)	Samp	le'	(Expan	ded)
	Number	*	Number	24	Number	<u>%</u>	Number	1%	Number	×	Number	*
Adult Male	0		0.0		0		0.0		3	30.0%	3. 0	30.0%
Adult Female	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%
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		0	0. 0%	0.0	0.0%
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		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%
Unknown Sex and Age	0		0.0	-	0		0.0		7	70.0%	7.0	70.0%
Total	0	-	0.0		0		0.0		IO	100.0%	10.0	100.0%

HARVEST BY AGE AND SEX

. 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			HARBO	R SEA	L		SPOTTE	D SE/	۹L
			Struck/	⁄ Total			Struck/	Total			Struck/	′ Total
	<u>Year</u>	Harvest	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	<u>Take</u>
	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	<b>199</b> 4	21.5	0.0	21.5
	1995	0. 0	0.0	0. 0	1995	0. 0	0. 0	0.0	1995	10.0	5.0	15.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assatance from the Clark's Point Traditional Council, 19%

U se di         0.5%         Total Number         Haurested         0.0         13.3         7.5           Harvested         0.0%         5.7%         Total Number Struck and Lost         0.0         0.0         7.5           Received         0.0%         4.2%         Total Number Takvested Per Capita         0.00         0.01         13.3         15.0           SEA         LION         HARVEST         BY         MONTH         Total Number Harvested Per Capita         0.00         0.01         0.01         0.01           SEA         LION         HARVEST         BY         MANT AR         May         Jun         Jul         Aug         Sep         Oct         Nov         Dec         Unknown           Tareat         0	SAMPLING	DESIG	SN:					Ac	tive	C	ther		<u>Total</u>			
Sampling Fraction         93.5%         7.5%         13.5%           Sample Household Members         117         101         213.           Household Simulated Households:         Estimated Community Harvest and Take (Expanded):         See Harbor spotter           Lion         See Harbor spotter           Harvested         Off         See Harbor spotter           Total Number Harvested Per Capita         0.00         0.00         Off           See Harvested Nork         Number Harvested Per Capita         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00           See Harvested <th colspa<="" td=""><td>TWO-S TRA</td><td>A TA</td><td></td><td>Total Na</td><td>ative H</td><td>louseh</td><td>olds</td><td></td><td>31</td><td></td><td>412</td><td></td><td>443</td><td></td><td></td></th>	<td>TWO-S TRA</td> <td>A TA</td> <td></td> <td>Total Na</td> <td>ative H</td> <td>louseh</td> <td>olds</td> <td></td> <td>31</td> <td></td> <td>412</td> <td></td> <td>443</td> <td></td> <td></td>	TWO-S TRA	A TA		Total Na	ative H	louseh	olds		31		412		443		
Sample         Household         Members         117         101         218           HARVESTAND         USE         INFORMATION         Estimated         Household         Interverse         and Take (Expanded):         See Native See Nating Nating See Native See Native See Native See Native See Nating				Surve	e <b>yed</b> H	louseh	olds		29		31		60			
Estimated         Household         Members         125.1         134.2         1467.4           HARVESTAND USE INFORMATION           Sea intrive Seal and used 0.5%         Soft for Seal Seal Total Number Harvested Per Capita         000         000         000         000         000         Used Mome Marvested Per Capita         000         Used Mome Marvested Nov           Colspan="4">Unit Marvest Metro Interventee         Unit colspan="4">Unit colspan="4">Unit colspan="4">Soft for Nov           Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Link colspan="4">Colspan="4"           Colspan="4">Colspan="4">Unit colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4"           Colspan="4"Colspan="4"         Colspan="4"Cols				S	amplin	g Frac	ction	93	.5%		7.5%		13.5%			
HARVESTAND USE INFORMATION           Percentage of Native Households:         Estimated Community Harveste           Sea Harbor Seal and         and Take (Expanded):         Sea Harbor Spotte           Lion         Spotter Seal           Used 05%         5%           Total Number Harvested         0.0         13.3         7.5           Harvested 00%         Spotter Seal         Total Number Harvested Per Capita         0.00 <td></td> <td></td> <td>Sam</td> <td>ple Hou</td> <td>sehold</td> <td>l Mem</td> <td>bers</td> <td>•</td> <td>117</td> <td></td> <td>101</td> <td></td> <td>218</td> <td></td> <td></td>			Sam	ple Hou	sehold	l Mem	bers	•	117		101		218			
Percentage of Native Households:         Estimated Community Harvests         sea Harbor Seal and         sea Harbor Seal and         and Take (Expanded):         sea Harbor Seal           Ligin SpottedSeal         colspan="2">sea Harbor Sols         Sea         Sea         Harvested         of 0.0         0.0         Sea         Harvested         OC         Nor         Total Number Harvested         OL         Nor         Sea         Harvested         OL         Nor         OL         Nor         Dunknown           Total Number Harvested Per Capita         0.0		E	stima	ted Hou	sehold	l Mem	bers	1	25.1		1342.3		1467.4			
Sea Harber Seal and Lion         Society Society Society Market Lost         and Take (Expanded):         Seal Xee Society Society         Society Society Society         Society Society Society Society         Society Society         Society Society         Society Society         Society Society Society         Society Society         Society Society         Society Society         Society Society         Society Society         Society Society         Society Society         Society Society         Society Society         Society Society         Society Society         Society Society         Society Society Society         Society Society         Society Society Society         Society Society         Society	HARVESTA	ND US	SE IN	FORMA	TION											
Sea Harbor Seal and Us ed 05%         and Take (Expanded):         Sea Harbor spotte Seal           Us ed 05%         57%         Total Number Harvested         0.0         0.3         7.5           Hunted 00%         57%         Total Number Harvested         0.0	Percentage	of Nati	ve Ho	usehola	s:		E	stimate	d Con	nmunit	y Harv	est				
U.s.ed         0.5%         59.6%         Total Number Harvested         0.0         13.3         7.5           Harvested         0.0%         5.7%         Total Number Struck and Lost         0.0         0.0         7.5           Received         0.5%         5.6%         Total Number Struck and Lost         0.0         0.0         7.5           Received         0.5%         56.6%         Number Harvested Per Capita         0.00         0.01 <t< td=""><td>Ū</td><td></td><td></td><td>Sea Harb</td><td>or Seal</td><td>and</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Sea Ha</td><td><b>ntor</b> sp</td><td>oottee</td></t<>	Ū			Sea Harb	or Seal	and							Sea Ha	<b>ntor</b> sp	oottee	
Hunded         0.0%         5.7%         Total Number Struck and Lost         0.0         0.0         7.5           Harvested         0.0%         4.2%         Total Number Taken         0.0         0.0         13.0         15.0           Received         0.5%         56.6%         See         Carne         0.00         0.01         0.01         0.01         0.01         0.01           SEAL LION HARVEST AND TAKE BY SAMELED HURSENDIS (UNEXPANDED)         Mar         Apr         Jul         Jul         Aug         Sep         Oct         Nov         Dec         Month         Total Number Harvested Per Capita         0.00         0.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td><u>Seal</u></td></th<>															<u>Seal</u>	
Harvested         0.0%         4.2%         Total Number Taken         0.0         13.3         15.0           Gave Away         0.0%         10.4%         Number Harvested Per Capita         0.00         0.01         0.01           SEA         LION HARVEST BY MONTH         Mar         Apr         May         Jun         Jul         Aug         Sep         Oct         Nov         Dec         Month         Total           Kerkt Last         0								т								
Received 0.5%         58.6%         Number Harvested Per Capita         0.00         0.01         0.01           SEA LION HARVEST BY MONTH Mar         Apr         Mar         Mar         Mar         Number Harvested Per Capita         0.00         0.00         0.00         0.01								10	Dial Nur							
Gave         Away         0.0%         10.4%         Number Harvested Per Capita         0.00         0.01         0.01           SEA         LION         HARVEST BY         MART         Apr         May         Jun         Jul         Aug         Sep         Cct         Nov         Dec         Month         Tot           EPORTED         HARVEST AND TAKE         BY SAMPLED         HDISERBUSS         (INEXPANDED)         Unknown         Dec         Month         Tot           track & Last         0         <												ancii	0.0	13.3	15.0	
Jan         Feb         Mar         Apr         May         Jun         Jul         Aug         Sep         Oct         Nov         Dec         Month         Tot           EFORTED         HARVEST         AND         TAKE         BY SAMPLED         HUKERPANDED         HUKERPANDED           Airest         0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>N</td> <td>umber H</td> <td>larveste</td> <td>ed Per C</td> <td>apita</td> <td>0.00</td> <td>0.01</td> <td>0.01</td>								N	umber H	larveste	ed Per C	apita	0.00	0.01	0.01	
EPORTED         HAVEST         AND         TAKE         BY         SAMPLED         HOLSEIBLIS         (UNEXPANDED)           invest         0 <td< td=""><td>SEA LION</td><td></td><td>-</td><td>-</td><td></td><td>May</td><td>lun</td><td>.iul</td><td>Aur</td><td>Seo</td><td>Oct</td><td>Nov</td><td></td><td></td><td>Tot</td></td<>	SEA LION		-	-		May	lun	.iul	Aur	Seo	Oct	Nov			Tot	
harvest         0 </td <td>EPORTED HARV</td> <td></td> <td></td> <td>-</td> <td>-</td> <td>,</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	EPORTED HARV			-	-	,										
Truck & Last         0 <t< td=""><td>arvest</td><td></td><td></td><td></td><td></td><td></td><td>•</td><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td></td></t<>	arvest						•		0	0	0	0	0	0		
STIMATED         HARVEST         AND         TAKE         BY         COMMUNITY         (EXPANDED)           sarvest         0.0<	truck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0		
Barvest         0.0	otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0		
Barvest         0.0	STIMATED	HARVES	T AND	ΤΑΚΕ ΒΥ	сомм	UNITY	(EXPAND	ED)								
Truck & Lost         0.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td>,</td><td>• do</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0</td></t<>							•	,	• do	0.0	0.0	0.0	0.0	0.0	0	
Solid Take         0.0																
STIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)         Jarvest       0.0																
Harvest         0.0												0.0	0.0	0.0	Ū	
truck & Lost       0.0										•	,	0.0	0.0		0	
Otal Take         0.0         0																
Sector         Sector<																
Take         0.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Ū</td>						_									Ū	
Sum. 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			
Spotted Seal         Harbor Seal         Spotted Seal         Unknown           Jan         Feb         Mar         Apr         May         Jun         Jul         Aug         Sep         Oct         Nov         Dec         Month         To           REPORTED         HARVEST         AND         TAKE         BY         SAMPLED         HOUSEHOLDS         (UNEXPANDED)           Harvest         0         0         0         5         2         0         0         1         0 <td></td>																
Jan         Feb         Mar         Apr         May         Jun         Jul         Aug         Sep         Oct         Nov         Dec         Month         To           REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)         Image: Sep         0	HARBOR S	SEAL A	ND SI	POTTEL	D SEA	L HAF	RVEST	BY MO	NTH							
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)           Harvest         0         0         5         2         0         1         0		Jan			Apr	May	Jun			Sep					To	
Atrack & Lost         0         0         0         7         0         <	REPORTED H	ARVEST	AND 1	ΓΑΚΕ ΒΥ		ED HO	USEHOL	DS (UNE	XPAND	ED)						
Total Take         0         0         12         2         0         0         1         0 <th< td=""><td>larvest</td><td>0</td><td>0</td><td>0</td><td>5</td><td>2</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td></td></th<>	larvest	0	0	0	5	2	0	0	1	0	0	0	0	0		
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)         Harvest       0.0       0.0       0.0       53       21       00       00       13.3       0.0 </td <td>truck &amp; Lost</td> <td>0</td> <td>0</td> <td>0</td> <td>7</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	truck & Lost	0	0	0	7	0	0	0	0	0	0	0	0	0		
Harvest       0.0       0.0       0.0       53       21       00       00       13.3       0.0	Total Take	0	0	0	12	2	0	0	1	0	0	0	0	0		
Struck & Lost       0.0       0.0       0.0       7.5       0.0	STIMATED H	ARVEST	AND	ΤΑΚΕ ΒΥ	COMM	UNITY	(EXPAND	ED)								
Total Take       0.0       0.0       12.8       2.1       0.0       0.0       13.3       0.0       0.0       0.0       0.0       24         ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)       tarvest       0.0       0.0       5.3       2.1       0.0       0.0       13.3       0.0       0.0       0.0       0.0       24         Struck & Lost       0.0       0.0       0.0       7.5       0.0 <td>larvest</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>53</td> <td>21</td> <td>0 0</td> <td>0 0</td> <td>13.3</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>20</td>	larvest	0.0	0.0	0.0	53	21	0 0	0 0	13.3	0.0	0.0	0.0	0.0	0.0	20	
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)         Harvest       0.0       0.0       0.0       53       21       00       0.0       13.3       0.0       0.0       0.0       0.0       24         Struck & Lost       0.0       0.0       0.0       7.5       0.0 <td>Struck &amp; Lost</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>7.5</td> <td>0 0</td> <td>0 0</td> <td>0 0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>7</td>	Struck & Lost	0.0	0.0	0.0	7.5	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	7	
Harvest         0.0         0.0         0.0         53         21         00         0.0         13.3         0.0         0.0         0.0         0.0         24           Struck & Lost         0.0         0.0         0.0         7.5         0.0 <t< td=""><td>Total Take</td><td>0.0</td><td>0.0</td><td>0.0</td><td>12.8</td><td>2 1</td><td>0 0</td><td>0.0</td><td>13.3</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>28</td></t<>	Total Take	0.0	0.0	0.0	12.8	2 1	0 0	0.0	13.3	0.0	0.0	0.0	0.0	0.0	28	
Harvest         0.0         0.0         0.0         53         21         00         0.0         13.3         0.0         0.0         0.0         0.0         24           Struck & Lost         0.0         0.0         0.0         7.5         0.0 <t< td=""><td>ESTIMATED S</td><td>SEASONA</td><td>LLY A</td><td>DJUSTED</td><td>HARVE</td><td>ST ANI</td><td>Ο ΤΑΚΕ</td><td>BY CON</td><td>MUNIT</td><td>Y (EXPA</td><td>ANDED)</td><td></td><td></td><td></td><td></td></t<>	ESTIMATED S	SEASONA	LLY A	DJUSTED	HARVE	ST ANI	Ο ΤΑΚΕ	BY CON	MUNIT	Y (EXPA	ANDED)					
Fotal Take 0.0 0.0 0.0 12.8 2.1 0.0 0.0 13.3 0.0 0.0 0.0 0.0 2 Fotal Take <b>(%)</b> 0.0% 0.0% 0.0% 454% <b>7.6%</b> 00% 0.0% <b>47.0%</b> 0.0% 0.0% 0.0% 0.0% <b>100</b> .										•		0.0	0.0		20	
Total Take <b>(%)</b> 0.0% 0.0% 0.0% 454% <b>7.6%</b> 00% 0.0% <b>47.0%</b> 0.0% 0.0% 0.0% 0.0% <b>100</b> .	Struck & Lost	0.0	0.0	0.0	7.5	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0			
	fotal Take	0.0	0.0	0.0	12.8	2.1	0.0	0.0	13.3	0.0	0.0	0.0	0.0		28	
	Fotal Take <b>(%)</b>	0.0%	0.0%	0.0%	454%	7.6%	00%	0.0%	47.0%	0.0%	0.0%	0.0%	0.0%		100.	
	. ,			0.0	12.8	15.0	15.0	15.0	28.3	28.3	28.3	20.3				

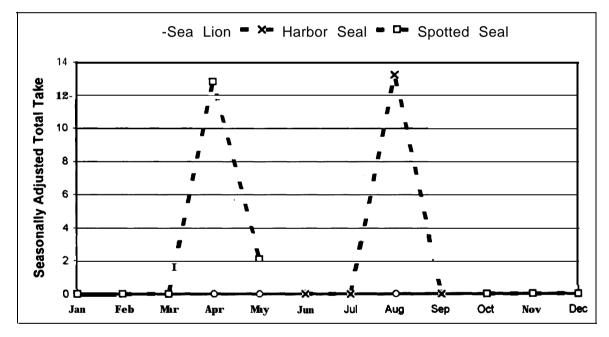
SOURCE, Alaska Department of Fish and Same, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seats in Alaska, with assistance from the Dillingham Traditional Council, 1995

HARVEST BY	AGE	AND	SEX
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		Sea	Lion			Harbo	r Seal			spotte	d Seal	
	Reporte	dby	Commun	ity Est.	Report	ed by	Commun	ity Est.	Report	ed by	Commun	ity Est.
	Samp	le	(Expar	ided)	Sam	ole'	(Expar	nded)	Sam	ole'	(Expan	ded)
	<u>Number</u>	<u>%</u>	Number	<u>%</u>	Number	%	Number	<u>%</u>	Number	<u>%</u>	<u>Number</u>	<u>%</u>
Adult Male	0		0.0		0	0 0%	0.0	0.0%	1	14.3%	1.1	14.3%
Adult Female	0		0.0		0	0.096	0.0	0.0%	0	0.0%	0.0	0.096
Adult Unknown Sex	0	***	0.0		0	0.0%	0.0	0.0%	2	28.6%	2.1	28.6%
Juvenile Male	0		0.0	-	1	100.0%	13.3	100.0%	0	0.0%	0.0	0.0%
Juvenile Female	0		00		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%	2	<b>28.6</b> %	2.1	28.6%
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%	2	28.6%	2.1	28.6%
Female Unknown Age	0		0.0	-	0	0.096	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%	13. 3	100.0%	7	100.0%	7.5	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		F	IARBO	R SEA	AL	S	POTTE	D SE/	۹L
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/	Total Take	Year	Harvest	Struck/ Lost	Total T <b>ake</b>
1992	0.0	0.0	0.0	1992	29.2	3.0	32.9	1992	49.6	3.6	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

SOURCE: Abska 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, 1995.

SAMPLING	DESIC	ЭN·						Active	C	)ther		Total		
TWO-STRA			Total N	ative H	ouseh	olds		27	2	40		67		
				eyed H				27		23		50		
				Sampling				100.0%	5	7.5%		74.6%		
		Sam		usehold	-			145		104		249		
	E	stima	ted Ho	usehold	Mem	bers		145.0		180. 9		325. 9		
HARVEST	AND U	ISE IN	IFORM,	ATION										
Percentage	of Nati	ive Ho	useholo	ds:		E	Estima	ted Cor	nmunit	<b>y</b> Harv	/est			
				rbor Seal				and Tal	ke (Exp	andec	1):		arbor sp	
				Spotted s	eal			т				Lion	<u>Seal</u>	<u>Seal</u>
				81.1% 305%					tal Numt Imber Sti			0.0	9.3	22.9
		ested	0.0% 0.0%	305% 27.5%				TOTAL INC	Total N			<b>0.0</b> 0.0	2.4 11.7	3.6 26.5
		eived		72.5%						umber	Taken	0.0	11.7	20.5
		Away		24.2%				Number	Harveste	ed Per	Capita	0. 00	0. 03	0.07
SEA LION	HARVE Jan	EST B Feb	Y MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Tota
REPORTED HAR			-	•	,			3	r					
Harvest	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	
fotal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESTIMATED H	-	-		-	-	-	-	Ū.	Ū	Ū	Ū	Ū	Ū	
larvest	0.0	00	0.0	0 0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.
Struck & Lost	0.0	0.0	0.0	00	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.
fotal Take	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
ESTIMATED S											0.0	0.0	0.0	0.
larvest	0.0	0.0	0.0	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.
Struck & Lost	0.0	0.0	0.0	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.
Total Take	0.0	0.0	0.0	00	00	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.
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 (%)					0.0		0.0 		<del></del>	0.0	0.0 			
HARBOR S	SEAL A			D SEAL	. HAR	VEST	BY N	10NTH						
	Jan	Spo ⊢eb	<b>otted Seal</b> Mar	Apr	May	Jun	Harbo Jul	r Seal Aug	Sep	Spo Oct	otted Sea Nov	l Llec	Unknown Month	Tot
REPORTED H	ARVEST	AND 1	TAKE BY	SAMPL	ED HOU	JSEHOL	DS (U	NEXPAND	ED)					
larvest	0	0	0	12	2	0	5	2	0	1	0	0	2	2
Struck & Lost	0	0	0	3	0	0	2	0	0	0	0	0	1	
Fotal Take	0	0	0	15	2	0	7	2	0	1	0	0	3	:
ESTIMATED H	IARVEST	AND	τακε Βι	сомми	UNITY (	EXPAN	DED)							
Harvest	0.0	0.0	0.0	17.2	2.7	0 0	57	2.7	0.0	1.0	00	0.0	2.7	32
Struck & Lost	0.0	0.0	0.0	3.0	00	0.0	2 0	0 0	0.0	0.0	0.0	0.0	1.0	6
Fotal Take	0.0	0.0	0.0	26.2	27	0 0	77	2.7	0.0	1.0	0.0	0.0	3.7	36
ESTIMATED S	SEASONA	LLY A	DJUSTED	HARVES	ST AND	TAKE	BY C	оммиліт	Y (EXP	NDED)				
larvest	0.0	0.0	0.0	18.8	30	00	6.3	30	0.0	11	0.0	0.0		32
Struck & Lost	0.0	0.0	0.0	3.6	00	0.0	24	0 0	0.0	0.0	0.0	0.0		(
Total Take	0.0	0.0	0.0	224	3.0	0.0	87	3.0	0.0	1.1	0.0	0.0		36
Total Take (%)	0.0%	0.0%		58.7%	7.9%		22.7%		0.0%	2.9%	0.0%			100.0
Cum. Take	0.0%	0.0	0.0%	22.4	<b>25.4</b>	25.4	34.0	37.0	37.0	<b>36.1</b>	38.1			100.0

Cum. take (%) 0.0% 0.0% 0.0% 58.7% 66.5% 66.5% 69.3% 97.1% 97.1% 100.0% 100.0% 100.0% 100.0% 58.7% 66.5% 69.3% 97.1% 100.0\% 100.0\% 100.0\% 100.0\% 100.0\% 100.0\% 100.0\% 100.0\% 100.0\% 100.0\% 100.

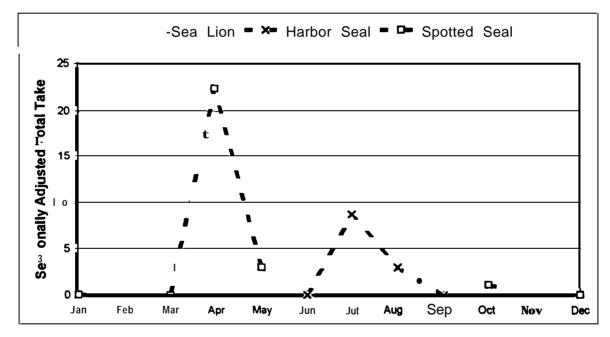
with assistance from the Manokotak Traditional Council, 1995

### HARVEST BY AGE AI DSEX

		Sea	Lion			Harbo	rSeal			spotted	d Seal	
	Reporte	dby	Commur	nity Est.	Reporte	ed by	Commu	nity Est.	Reporte	ed by	Commun	ity Est.
	Samp	łe	(Expan	ded)	Sam	ole"	(Expar	nded)	Sam	ple"	(Expar	ded)
	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>
Adult Male	0	-	0.0		3	42.9%	4.3	44.0%	1	6.7%	1.4	6.4%
Adult Female			0.0		3	42.9%	3.7	30.2%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	5	33.3%	6.5	290%
Juvenile Male	0		0.0		0	0.0%	0.0	0.0%	1	6.7%	1.7	7.8%
Juvenile Female	0		0.0	-	1	14.3%	1.7	17.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	3	20.0%	4.5	20.0%
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%	5	33.3%	8.2	36.8%
Total	0		0.0		7	100.0%	9.8	100.0%		100.0%	22.3	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 I	lon		ŀ	IARBOI	R SEA	AL .	S	POTTE	D SEA	۹L
_			struck/	Total			Struck/	Total			Struck/	Total
	<u>Year</u>	Harvest	Lost	Take	Year	Harvest	Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	Take
	1992	3.9	0.0	3.9	1992	4.9	3.0	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

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, 1995.

SAMPLING	DESIG	GN:					4	<u>Active</u>	0	ther_		Total		
TWO-STRA	TA		Total N	ative H	louseho	olds		62	-	56		118		
			Surv	eyed ⊦	louseho	olds		56		51		107		
			5	Samplin	ig Fract	tion	Ģ	90.3%	9	1.1%	(	90.7%		
	_		•		l Memb		•	249	-	199		448		
	E	stima	ted Ho	useholo	d Memb	ers		275.7	2	18.5		494.2		
HARVESTA	ND US	SE IN	IFORM.	ATION										
Percentage	of Nati	ve Ho	ousehol	ds:		Es	stimat	ed Cor	nmunity	/ Har	vest			
				arbor Sea			é	and Tak	ke (Exp	andeo	d):	Sea	Harbor	Spotted
				Spotted S				-				Lion	Seal	<u>Seal</u>
		u s e d Inted	0.9% 0.0%	94 4%					tal Numl <b>mber</b> Str			0.0 0.0	3.3	111.5
	Harve		0.0%	31.8% 290%				TOLATING	Total Nu			0.0 0.0	0.0 3.3	4.4 115.9
		eived	0.9%	79.4%								0.0	5.5	115.7
	Gave	Away	0.0%	29.9%	)			Number	Harveste	d Per	Capita	0.00	0.01	0.23
SEA LION F		ST BY Feb	Y MON Mar	TH Apr	May	lun	Jul	Aug	Sep	Oct	Nov	Dee	Unknown Month	Total
REPORTED HAR								nuy	υαμ		NUV	Dec	wonth	Tota
Harvest			0	0	0	0	0	0	0	0	0	0	0	C
Struck & Lost	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		
ESTIMATED H	ARVEST	AND 1	ΤΑΚΕ ΒΥ	СОММІ	JNITY (E	XPANDE	D)							
Harvest	0.0	0.0	0.0	00	00	00	00	00	00	0. 0	0. 0	0.0	0.0	0. (
Struck & Lost	0.0	0.0	0.0	0.0	00	0.0	0.0	00	00	0.0	0.0	0.0		
Total Take	0.0	0.0	0.0	00	00	00	00	00	00	00	0.0	0.0		
ESTIMATED S	EASONA	LLY AD	DJUSTED	HARVE	ST AND	TAKE E	зу со	MMUNITY	Y (EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	00	00	00	00	00	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	00	0.0	00	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0 0	0.0	0 0	00	00	00	00	0.0	0.0	0.0		0.0
Total Take (%)				-	-	<u> </u>								
Cum. Take	0.0	0.0	0.0	0 0	0 0	0 0	00	00	0.0	0.0	0.0	0.0		
Cum. Take(%)		~	<b></b> .			<b>~</b>								
HARBOR S	SEAL AI	ND SI	POTTE	D SEA	L HAR	/EST I	BY M	ONTH					_	
F	Jan	Sp teb	otted Seal Mar	Apr	May	Jun	Harbor Jul	Seal Aug	Sepl	Sp Oct	otted Sea Nov	l Dec	Unknowr Month	
REPORTED H				•				-			1101		1	
Harvest	3	7	19		9	0	0	0	3	3	11	16	0	10
Struck & Lost	0	0	4	0	0	0	0	0	0	0	0	(		
Total Take	3	7	23	33	9	0	0	0	3	3	11	16	6 0	10
ESTIMATED H	IARVEST	AND	TAKE BY	COMM	UNITY (E	XPAND	ED)							
Harvest	3.3	7.7	21.0	364	9.9	0 0	00	0 0	3.3	3.3	12.2	11.7	0.0	) 114.8
struck & Lost	0.0	0.0	4.4	0.0	00	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	) 4.
Total Take	3.3	7.7	25.4	364	9.9	0 0	00	0 0	33	3.3	12.2	17.7	0.0	) 119.
ESTIMATED S	EASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	ву сс	MMUNIT	Υ (ΕΧΡΑ	NDED)				
Harvest	3.3	7.7	21.0	364	99	0 0	0 0	0 0	33	3.3	12.2	17.	1	114.
Struck & Lost	0.0	0.0	4.4	0 0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	)	4
Total Take	3.3	7.7	254	364	9.9	0.0	0 0	0 0	3.3	3.3	12.2	173	1	119.
Total Take <b>(%)</b>	2.8%	6.5%	21.3%		83%	0.0%	00%	0.0%	2.8%	2.8%	102%	14.8%	, D	100.0%
Cum. Take	3.3	11.1	364	72.9	82.8	·82.8	628	828	86.1	89.4	101.5	119.3		
Cum. Take (%)	2.8%	9. 3%	% 30.6%	61.1%	<b>69.4%</b>	694%	69.4%	694%	72.2%	75.0%	85.2%	100.09	6	

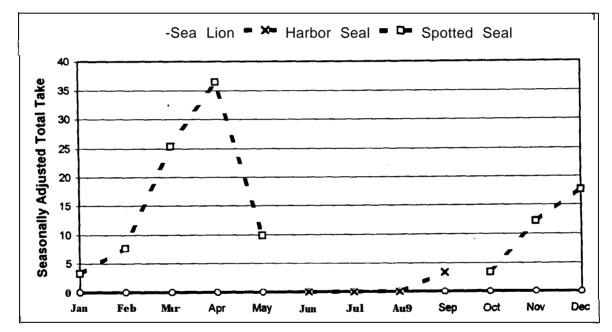
SOURCE: Ahska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seats in Alaska with assistance from the Togiak Traditional Council, 1995

#### HARVESTBYAGEANDSEX

	Sea Lion					Harbo	r Seal		Spotted seal			
	Reported	d by	Community Est.		Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample'		(Expanded)		Sample'		(Expanded)	
	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	*	Number	*
Adult Male	-		0.0		0	0.0%	0.0	0.0%	21	20.9%	23. 2	20.8%
Adult Female	-		0.0		0	0.0%	0.0	0.0%	10	9.9%	11.1	9.9%
Adult Unknown Sex	0		0.0		2	<b>66.</b> 7%	2. 2	66. 5%	19	18.9%	20.9	18.8%
Juvenile Male	0		0.0	-	1	33.3%	1.1	33.5%	11	10.9%	12.1	10.9%
Juvenile Female	0		0.0		0	0.0%	0.0	0.0%	8	7.9%	8.8	7.9%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0. 0%	23	22.8%	25.4	22.8%
Pup Male	0		0.0	_	0	0.0%	0.0	0. 0%	3	3.0%	3.3	3.0%
Pup Female	0		0.0		0	0. 0%	0.0	0.0%	2	2. 096	2. 2	2.0%
Pup Unknown Sex	0		0.0		0	0. 0%	0.0	0. 0%	3	3. 0%	3. 3	3. 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%	00	0.0%	0	0.0%	0.0	0. 0%
Unknown Sex and Age	0		0.0	-	0	0. 0%	0.0	0.0%	1	1.0%	1.1	1.0%
Total	0		0.0		3	100.0%	3. 3	100.0%	101	100.0%	111.5	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		H	IARBO	L	SPOTTED SEAL					
		Struck/	Total			Struck/	Total	Struck/Total				
Year	<u>Harvest</u>	Lost	Take	Year	Harvest	Lost	Take	Year	<u>Harvest</u>	Lost	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	15.0	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	

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, 1995.