

Technical Paper No. 347

The Subsistence Harvest of Harbor Seals and Sea Lions by Alaska Natives in 2008

**Alaska Department of Fish and Game, Division of Subsistence
and
Alaska Native Harbor Seal Commission**

**Alaska Department of Fish and Game
Division of Subsistence**

October 2009

**Alaska Native Harbor Seal
Commission**



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		General		Measures (fisheries)	
Weights and measures (metric)		<i>all commonly-accepted abbreviations; e.g., Mr., Mrs., AM, PM, etc.</i>		fork length	FL
centimeter	cm	<i>all commonly-accepted professional titles; e.g., Dr., Ph.D., R.N., etc.</i>		mideye-to-fork	MEF
deciliter	dL	Alaska Administrative Code	AAC	mideye-to-tail-fork	METF
gram	g	Alaska Department of		standard length	SL
hectare	ha	Fish and Game	ADF&G	total length	TL
kilogram	kg	at	@	Mathematics, statistics	
kilometer	km	compass directions:		<i>all standard mathematical signs, symbols and abbreviations</i>	
liter	L	east	E	alternate hypothesis	H _A
meter	m	north	N	approximately	~
milliliter	mL	south	S	base of natural logarithm	e
millimeter	mm	west	W	catch per unit effort	CPUE
Weights and measures (English)		copyright	©	coefficient of variation	CV
cubic feet per second	ft ³ /s	corporate suffixes:		common test statistics (F, t, χ^2 , etc.)	
foot	ft	Company	Co.	confidence interval	CI
gallon	gal	Corporation	Corp.	correlation coefficient (multiple)	R
inch	in	Incorporated	Inc.	correlation coefficient (simple)	r
mile	mi	Limited	Ltd.	covariance	cov
nautical mile	nmi	District of Columbia	D.C.	degree (angular)	°
ounce	oz	<i>et alii</i> (and others)	et al.	degrees of freedom	df
pound	lb	<i>et cetera</i> (and so forth)	etc.	expected value	E
quart	qt	<i>exempli gratia</i> (for example)	e.g.	greater than	>
yard	yd	Federal Information Code	FIC	greater than or equal to	≥
Time and temperature		<i>id est</i> (that is)	i.e.	harvest per unit effort	HPUE
day	d	latitude or longitude	lat. or long.	less than	<
degrees Celsius	°C	monetary symbols (U.S.)	\$, ¢	less than or equal to	≤
degrees Fahrenheit	°F	months (tables and figures):	first three letters (Jan.,...,Dec)	logarithm (natural)	ln
degrees kelvin	K	registered trademark	®	logarithm (base 10)	log
hour	h	trademark	™	logarithm (specify base)	log ₂ , etc.
minute	min	United States (adjective)	U.S.	mean	\bar{x}
second	s	United States of America (noun)	USA	minute (angular)	'
Physics and chemistry		U.S.C.	United States Code	not significant	NS
<i>all atomic symbols</i>		U.S. state	use two-letter abbreviations (e.g., AK, WA)	null hypothesis	H ₀
alternating current	AC			percent	%
ampere	A			plus or minus	±
calorie	cal			population size	N
direct current	DC			probability	P
hertz	Hz			sample size	n
horsepower	hp			second (angular)	"
hydrogen ion activity (negative log of) pH				standard deviation	σ or s
parts per million	ppm			standard error (of the mean)	s \bar{x}
parts per thousand	ppt, ‰			type I error probability	P _a
volts	V			type II error probability	P _b
watts	W			variance	σ^2 or s ²

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Final Report for Year Sixteen
The Subsistence Harvest of Sea Lions and Harbor Seals by Alaska Natives,
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Prepared for the National Marine Fisheries Service by the Alaska Native Harbor Seal Commission and
the Alaska Department of Fish and Game, Division of Subsistence

**Alaska Department of Fish and Game
Division of Subsistence
Anchorage, Alaska
October 2009**

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ABSTRACT

This report describes the subsistence takes of harbor seals *Phoca vitulina* and Steller sea lions *Eumetopias jubatus* by Alaska Natives in 2008, including quantity, seasons, geographic distribution, and age and sex of the harvest. Information is summarized at the state, region, and community levels and is compared with annual takes since 1992. The research was conducted by the Alaska Native Harbor Seal Commission and the Alaska Department of Fish and Game Division of Subsistence in cooperation with the Aleut Marine Mammal Commission, Bristol Bay Native Association, and Southeast Alaska Intertribal Fish and Wildlife Commission, under contract with the National Marine Fisheries Service. Information is presented for 63 coastal communities, based on interviews with 1,360 households in 62 communities in this study, and a separate in-season monitoring program for sea lions by the Aleut Community of St. Paul Island. Local researchers conducted most of the household interviews as part of regional research networks. The project received generous support from leaders of a number of Native governments and associations.

During 2008, the estimated subsistence take of harbor seals by Alaska Natives was 1,462 seals, with a 95% confidence range of between 1,196 to 1,980 seals. Of the take, 13.8% (202 seals) were struck and lost and 86.2% (1,260 seals) were harvested. The 2008 take of harbor seals came from the following stocks: Southeast Alaska stock (594 seals), Gulf of Alaska stock (680 seals), and Bering Sea stock (188 seals). Harbor seals were taken in 51 of 63 surveyed communities. Hunters reported taking males over females by 3.0 to 1 and adults (73.7%) over juveniles (20.4%) or pups (5.8%). The 2008 take of harbor seals was the second lowest recorded since 1992—2,854 (1992), 2,736 (1993), 2,621 (1994), 2,742 (1995), 2,741 (1996), 2,546 (1997), 2,597 (1998), 2,224 (2000), 2,031 (2001), 1,834 (2002), 2,030 (2003), 1,822 (2004), 1,696 (2005), 1,644 (2006), and 1,428 (2007). Declining takes of harbor seals are associated with fewer seal hunters, particularly in the Southeast Region.

During 2008, the estimated subsistence take of sea lions by Alaska Natives was 146 sea lions, with a 95% confidence range of between 106 to 224 sea lions. Of the take, 20.3% (30 sea lions) were struck and lost and 79.7% (116 sea lions) were harvested. Sea lions were taken in 18 of 63 surveyed communities. Hunters reported taking males over females by about 2.9 to 1 and juveniles (57.6%) over adults (42.4%) or pups (0.0%). Sea lion takes sharply declined from 1992 to 1995 with takes leveling off between 1996 and 2007—549 (1992), 487 (1993), 416 (1994), 339 (1995), 186 (1996), 164 (1997), 178 (1998), 171 (2000), 198 (2001), 185 (2002), 212 (2003), 216 (2004), 218 (2005), 186 (2006), and 217 (2007). The sea lion take in 2008 was the lowest recorded since 1992. Declines in sea lion takes are associated with fewer hunters of sea lions, which is probably linked to local sea lion scarcities.

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The 52 local researchers who conducted household interviews deserve to be recognized individually for their high level of interest and work.

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INTRODUCTION

This report describes the subsistence takes of harbor seals *Phoca vitulina* and Steller sea lions *Eumetopias jubatus* by Alaska Natives during calendar year 2008. The report covers the sixteenth year documenting subsistence takes of harbor seals and sea lions in Alaska. Subsistence takes have been documented from 1992 through 2008, with no surveys in 1999 (Wolfe and Mishler 1993, 1994, 1995, 1996, 1997, 1998, Wolfe and Hutchinson-Scarborough 1999, Wolfe 2001, Wolfe et al. 2002, 2003, 2004, 2005, 2006, Wolfe et al. 2008, 2009). The research for calendar year 2008 was a collaborative effort between the Alaska Native Harbor Seal Commission (ANHSC) and the Alaska Department of Fish and Game (ADF&G) Division of Subsistence, in cooperation with the Aleut Marine Mammal Commission (AMMC), the Bristol Bay Native Association (BBNA), and the Southeast Alaska Intertribal Fish and Wildlife Commission (SAIFWC), under contract with the National Marine Fisheries Service (NMFS) of the National Oceanic and Atmospheric Administration (NOAA). The research was conducted in cooperation with tribal governments in the study communities (Table 1).

This report provides information on the subsistence takes of harbor seals and sea lions during 2008, including size, seasons, geographic distributions, and age and sex of harvested animals. Information on subsistence uses derives from systematic interviews with marine mammal hunters in 62 communities (Figure 1, Table 2). Information was collected principally by local researchers in each community working within regional research networks. The information for 2008 from an additional community, St. Paul, derives from an in-season harvest monitoring program conducted by the Aleut Community of St. Paul, as reported in Jones (2009).

Table 1.—Community organizations contacted during the project, 1992–2008.

Community	Government/Organization	Community	Government/Organization
Adak	Aleut Marine Mammal Commission Aleut Corporation	Larsen Bay	Larsen Bay Tribal Council City of Larsen Bay
Akhiok	Akhiok Tribal Council City of Akhiok	Levelock	Levelock Village Council
Akutan	Akutan Traditional Village Council City of Akutan Akutan Corporation	Manokotak	Manokotak Village Council
Aleknagik	Aleknagik Traditional Council	Metlakatla	Council Annette Islands Reserve Metlakatla Indian Community
Anchorage	Cook Inlet Tribal Council Alaska Federation of Natives	Naknek	Naknek Native Village Council
Angoon	City of Angoon Angoon Community Association	Nanwalek	Nanwalek Traditional Council English Bay Corporation
Atka	Atka IRA Council City of Atka	Nelson Lagoon	Nelson Lagoon Village Council
Chenega Bay	Chenega IRA Council	Newhalen	Newhalen Traditional Council
Chignik Bay	Chignik Bay Traditional Village Council	Nikolski	Nikolski IRA Council Chaluka Corporation
Chignik Lagoon	Chignik Lagoon Traditional Village Council	Old Harbor	Old Harbor Tribal Council City of Old Harbor
Chignik Lake	Chignik Lake Traditional Village Council	Ouzinkie	Ouzinkie Native Corporation Ouzinkie Tribal Council City of Ouzinkie
Clark's Point	Clark's Point Village Council	Pelican	Tlingit and Haida Indians of Pelican Pelican Community Council City of Pelican
Cordova	Traditional Village of Eyak	Perryville	Perryville Traditional Village Council
Craig	Shaan-Seet, Inc. City of Craig Craig Community Association	Petersburg	Petersburg Indian Association
Dillingham	Curyung Tribal Council	Pilot Point	Pilot Point Traditional Council
Egegik	Egegik Traditional Council	Port Graham	Port Graham Village Council Port Graham Corporation
False Pass	False Pass Tribal Council City of False Pass	Port Heiden	Port Heiden Native Council
Haines	Chilkat Indian Association	Port Lions	Port Lions Tribal Council City of Port Lions
Hoonah	Hoonah Indian Association Hoonah Traditional Council	Saint George	Saint George Traditional IRA Council Saint George Tanaq Corporation City of Saint George
Hydaburg	Haida Corporation Hydaburg Cooperative Association City of Hydaburg	Saint Paul	Tribal Government of Saint Paul City of Saint Paul
Iliamna	Iliamna Village Council	Sand Point	Unga Tribal Council Qagan Tayagugin Tribe of Sand Point City of Sand Point
Ivanof Bay	Ivanof Bay Traditional Village Council	Saxman	Organized Village of Saxman City of Saxman
Juneau	Tlingit and Haida Central Council Sealaska Auke Tribe Council Alaska Native Brotherhood/Sisterhood Douglas Indian Association	Seldovia	Seldovia Village Tribe
Kake	Organized Village of Kake City of Kake	Seward	Qutekcak Native Tribe
Karluk	Karluk IRA Council	Sitka	Sitka Tribe of Alaska Alaska Native Brotherhood
Kenai	Kenaitze Indian Tribe IRA Cook Inlet Region, Inc.	South Naknek	South Naknek Village Council
Ketchikan	Ketchikan Indian Community	Tatitlek	Tatitlek IRA Council
King Cove	Agdaagux Tribe of King Cove Belkofsky Village Council City of King Cove	Togiak	Togiak Traditional Council
King Salmon	King Salmon Village Council	Twin Hills	Twin Hills Village Council
Klawock	Klawock Cooperative Association Klawock Heenya Corporation	Tyonek	Native Village of Tyonek
Klukwan	Chilkat Indian Village	Unalaska	Qawalangin Tribal Council
Kodiak City	Kodiak Tribal Council Kodiak Area Native Association	Valdez	Valdez Native Association
		Wrangell	Wrangell Cooperative Association
		Yakutat	Yakutat Tlingit Tribe Yak-Tat Kwaan Alaska Native Brotherhood/ Alaska Native Sisterhood

The geographic area covered by this report was defined as the Alaska coastal waters south of Cape Newenham, including the Pribilof Islands. This area corresponds with the general distributions of harbor seals and sea lions in Alaska (Figures 2 and 3, from Burns et al. (1985). The use of harbor seals and sea lions by Alaska Natives for food and raw materials has a long tradition in this part of Alaska. The Alaska Native groups using harbor seals include the Aleut of the Aleutian Islands; the Alutiiq and Eyak of the Pacific Gulf coast; the Tlingit, Haida, and Tsimshian of the Southeast archipelago; and the Yup'ik of Southwest Alaska. The Dena'ina of Cook Inlet occasionally use harbor seals. The primary users of sea lions are the Aleut of the Aleutian and Pribilof islands and the Alutiiq of certain communities of Kodiak Island and the Gulf of Alaska. Sea lions are used occasionally by Tlingit, Haida, Tsimshian, and Yup'ik groups. Subsistence products derived from harbor seals and sea lions include oil, meat, and skins (Wolfe and Mishler 1993).

This report is organized in several sections. The "Methodology" section describes the methods used to collect information. Two sections ("The Subsistence Take of Harbor Seals in 2008" and "The Subsistence Take of Sea Lions in 2008") present information on the statewide takes of harbor seals and sea lions, summarized by community and region. In the "Discussion" section are interpretations of the 2008 survey year, including summaries of harvest patterns since 1992, derived from previous survey years. Appendix A contains a copy of the survey instrument used in household interviews with marine mammal hunters. Appendix B contains regional summaries of the subsistence takes of harbor seals and sea lions. Appendix C contains materials on the subsistence takes of harbor seals and sea lions by community.

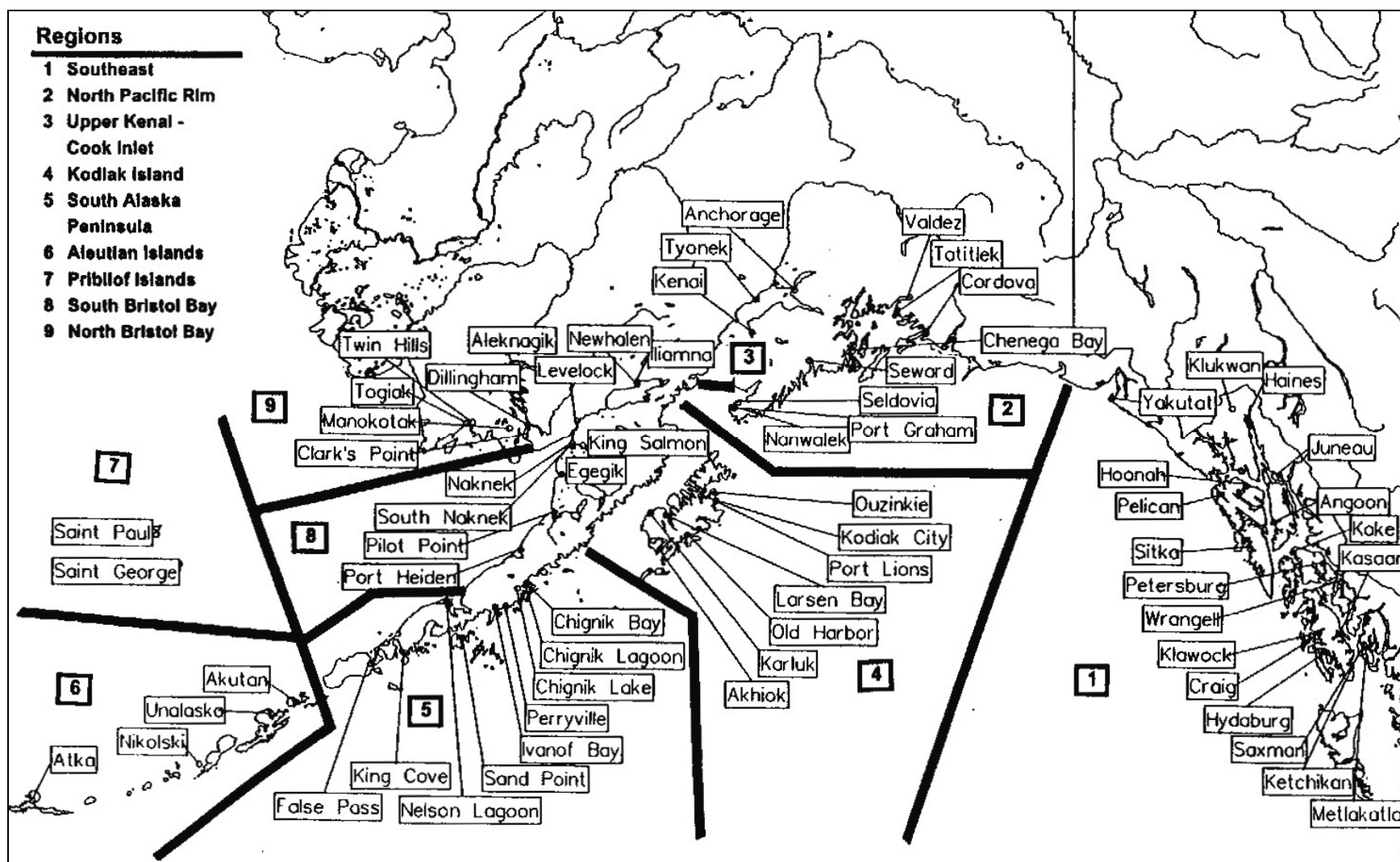


Figure 1.—Map of study area and regions.

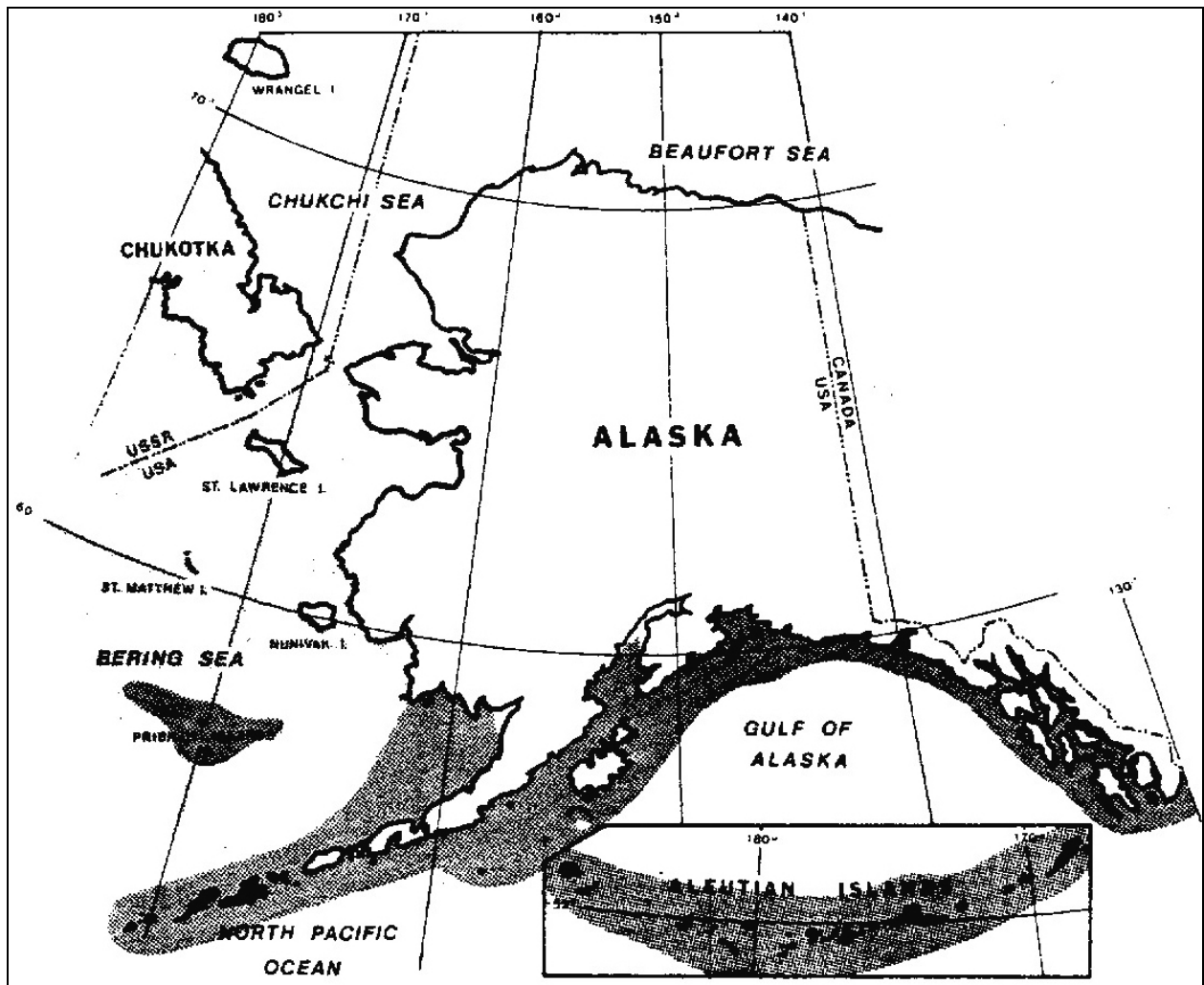


Figure 2.—General distribution of Stellar sea lions *Eumetopias jubatus* in Alaska.
 Source (Burns et al. 1985).

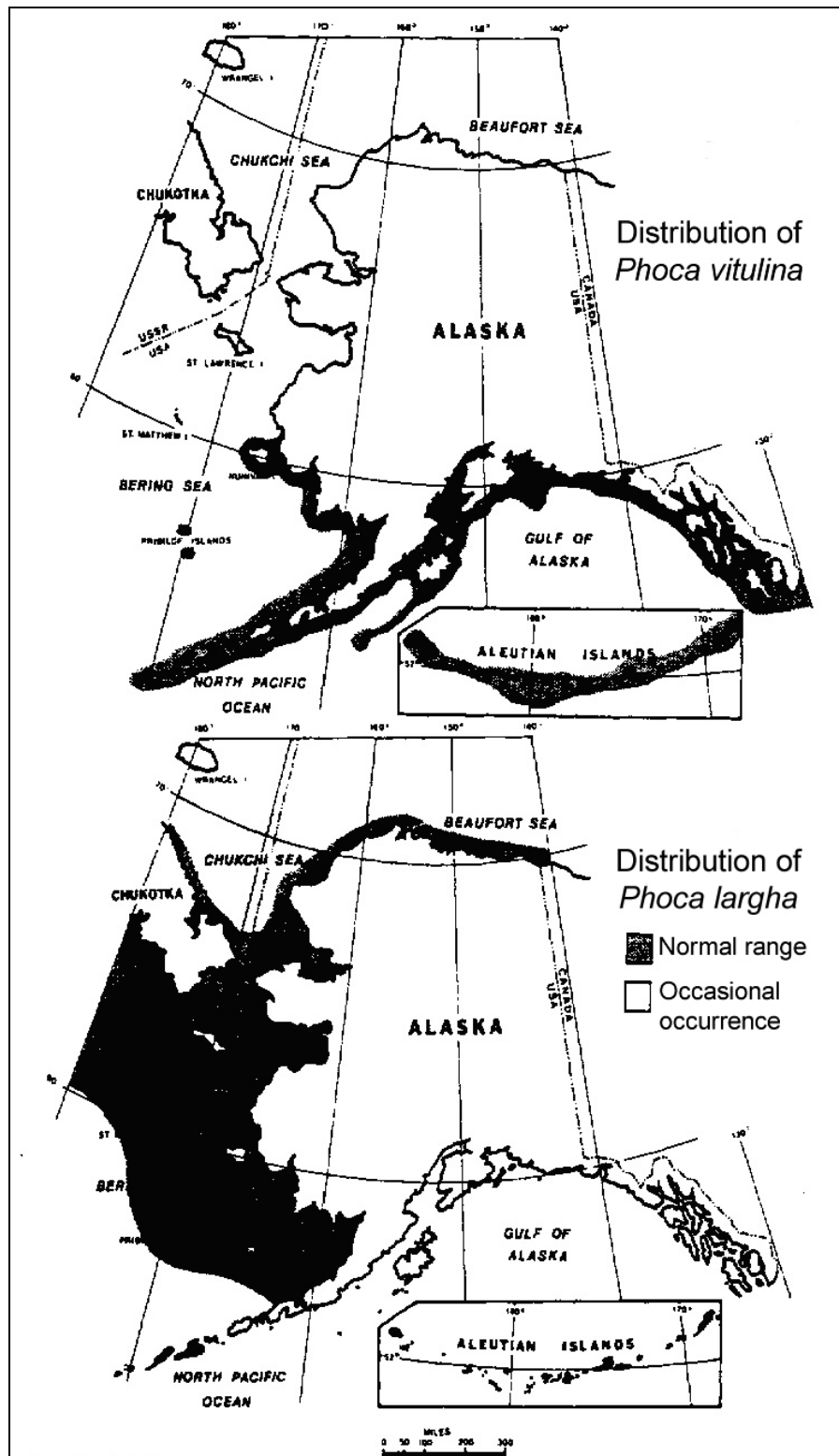


Figure 3.—General distribution of harbor seals *Phoca vitulina* and spotted seals *Phoca largha* in Alaska.

Source (Burns et al. 1985)

METHODOLOGY

This report includes information on the subsistence takes of harbor seals and sea lions in 63 coastal communities (Table 2). Information for 62 communities was collected in this project through interviews with persons in 1,360 Alaska Native households. In addition, the report includes information about subsistence takes of sea lions by hunters at St. Paul collected in-season through separate projects run by the Ecosystem Conservation Office of the Aleut Community of St. Paul Island, as reported in Jones (2009) (for 2008), Lestenkof et al. (2008) (for 2007), Lestenkof et al. (2007) (for 2006), Lestenkof and Zavadil (2006) (for 2005), and Zavadil et al. (*Unpublished* [2006]) (for 2000 through 2004). See also Lestenkof and Zavadil (2001); Lestenkof et al. (2003); and Zavadil et al. (*Unpublished* [2003], *Unpublished* [2004]).

In this Division of Subsistence study, respondents were asked to recall information about their household's uses of harbor seals and sea lions during the previous year. The survey instrument administered in household interviews was similar to one used since 1992, developed in consultation with the Rural Alaska Community Action Program (RurAL CAP) and the Indigenous People's Council for Marine Mammals (IPCoMM) (see Appendix A). Hunters and household heads were asked to recall the numbers of harbor seals and sea lions 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 harbor seals or sea lions during the last year. Interviews were conducted by 52 local researchers hired and trained as part of the project. Surveys were administered in January–March 2009 to cover the period from January through December 2008.

Table 2.—Sampling methodology by community, harbor seal and sea lion surveys, 2008.

Region and Community	2000 U.S. Census Estimated Native Population	Type of Design	Identified Household Universe ¹	Surveyed Households	Percentage Households Surveyed
1. SOUTHEAST					
Angeon	494	Chain Referral	40	40	100.0%
** Craig	432	Chain Referral	21	10	47.6%
Haines	335	Chain Referral	13	10	76.9%
Hoonah	597	Chain Referral	40	38	95.0%
** Hydaburg	342	Chain Referral	16	10	62.5%
Juneau	5,084	Chain Referral	16	12	75.0%
Kake	530	Chain Referral	25	25	100.0%
Ketchikan	1,802	Chain Referral	10	6	60.0%
Klawock	496	Chain Referral	29	23	79.3%
** Klukwan	123	Chain Referral	8	3	37.5%
Pelican	42	Chain Referral	5	4	80.0%
Petersburg	388	Chain Referral	30	27	90.0%
Saxman	302	Chain Referral	8	5	62.5%
Sitka	2,178	Chain Referral	55	54	98.2%
** Wrangell	550	Chain Referral	10	6	60.0%
Yakutat	375	Chain Referral	47	40	85.1%
Region Total	14,070		373	313	83.9%
2. NORTH PACIFIC RIM					
Chenega Bay	67	Census	15	7	46.7%
Cordova	368	Chain Referral	8	8	100.0%
Nanwalek	165	Census	47	46	97.9%
Port Graham	151	Census	44	32	72.7%
Seldovia	66	Chain Referral	4	3	75.0%
Seward	592	Chain Referral	7	2	28.6%
Tatitlek	91	Census	22	20	90.9%
Valdez	410	Chain Referral	6	1	16.7%
Region Total	1,910		153	119	77.8%
3. UPPER KENAI-COOK INLET					
Anchorage	26,995	Chain Referral	34	19	55.9%
Homer	371	Chain Referral	14	8	57.1%
Kenai	2,120	Chain Referral	5	1	20.0%
Tyonek	184	Chain Referral	3	2	66.7%
Region Total	29,670		56	30	53.6%
4. KODIAK ISLAND					
Akhiok	75	Census	23	22	95.7%
** Karluk	26	Census	14	14	100.0%
Kodiak City	829	Chain Referral	54	25	46.3%
Larsen Bay	91	Census	28	27	96.4%
** Old Harbor	203	Census	75	64	85.3%
Ouzinkie	197	Chain Referral	29	28	96.6%
Port Lions	163	Chain Referral	15	15	100.0%
Region Total	1,584		238	195	81.9%

-continued-

Table 2, continued.

Region and Community	2000 U.S. Census Estimated Native Population	Type of Design	Identified Household Universe ¹	Surveyed Households	Percentage Households Surveyed
5. SOUTH ALASKA PENINSULA					
Chignik Bay	48	Census	16	14	87.5%
Chignik Lagoon	85	Census	25	17	68.0%
Chignik Lake	127	Census	19	15	78.9%
False Pass	42	Census	11	8	72.7%
** Ivanof Bay	21	Census	0	0	100.0%
King Cove	379	Chain Referral	14	11	78.6%
Perryville	105	Census	34	13	38.2%
Sand Point	421	Chain Referral	28	17	60.7%
Region Total	1,228		147	95	64.6%
6. ALEUTIAN ISLANDS					
Adak	118	Chain Referral	2	2	100.0%
Akutan	117	Census	35	33	94.3%
Atka	84	Census	25	10	40.0%
Nikolski	27	Census	7	7	100.0%
Unalaska	397	Chain Referral	18	7	38.9%
Region Total	743		87	59	67.8%
7. ALEUTIAN ISLANDS					
** St. George	140	Chain Referral	7	3	42.9%
* St. Paul	460	n/a	n/a	n/a	n/a
Region Total	600		7	3	42.9%
8. PRIBILOF ISLANDS					
Egegik	89	Census	28	25	89.3%
King Salmon	133	Census	19	11	57.9%
Levelock	116	Census	29	20	69.0%
Naknek	319	Two Strata	68	42	61.8%
Pilot Point	86	Census	21	8	38.1%
Port Heiden	93	Census	23	21	91.3%
South Naknek	115	Census	21	9	42.9%
Region Total	951		209	136	65.1%
9. SOUTH BRISTOL BAY					
Aleknagik	187	Census	45	27	60.0%
Clark's Point	69	Census	18	11	61.1%
Dillingham	1,503	Two Strata	175	158	90.3%
Manokotak	378	Two Strata	97	75	77.3%
Togiak	750	Two Strata	168	139	82.7%
Twin Hills	65	Census	22	20	90.9%
Region Total	2,952		503	410	81.5%
TOTAL	53,708		1,773	1,360	76.7%
(Excl. Anchorage)	(26,713)		(1,739)	(1,341)	(77.1%)

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

* St. Paul estimates for sea lions derived from Jones (2009).

** Data not available for 2008. Information reported for the most recent year for which data are available.

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 (AFN); the Aleutians East Borough; the Aleutian-Pribilof Islands Association; BBNA; the Central Council of Tlingit and Haida Indian Tribes of Alaska; Cook Inlet Region, Inc.; IPCoMM (meeting through RurAL CAP); the Kodiak Area Native Association; and the North Pacific Rim (now named Chugachmiut). RurAL CAP and IPCoMM served as the formal technical oversight organizations for the first 5 years of the project through a subcontract with the Division of Subsistence. Since 1997, formal technical oversight for the project has been provided by ANHSC.

During 2008–2009, ANHSC received funding directly from NMFS and entered into a cooperative agreement with the Division of Subsistence to jointly conduct the harvest assessment project. ANHSC provided a project coordinator and an analyst for writing the final report. ANHSC coordinated research activities in Prince William Sound, Cook Inlet, and Kodiak Island. Research activities in other areas were coordinated by regional Native organizations: the Aleut Marine Mammal Commission (AMMC) for the Aleutian Islands and western Alaska Peninsula areas; BBNA for the Bristol Bay and eastern Alaska Peninsula areas; and SAIFWC for the Southeast region. The Division of Subsistence was responsible for data analysis. Copies of this final report were provided to the Alaska Sea Otter and Steller Sea Lion Commission (TASSC) by the Division of Subsistence.

As noted previously, St. Paul sea lion take information was collected by the Aleut Community of St. Paul's Ecosystem Conservation Office through a contract between the tribe and NMFS. The methodology and findings of that project for 2008 are described in Jones (2009). Data from the program in St. Paul for other years are included in this report based upon published papers and other reports (Lestenkof et al. 2007, 2008, Lestenkof and Zavadil 2006, Zavadil et al. *Unpublished* [2006]).

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

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

As stated above, a network of locally-hired researchers supervised by the staff of ANHSC, AMMC, BBNA, and SAIFWC was used to collect information on subsistence takes of sea lions and harbor seals during 2008. Newly-hired local researchers received in-person training from regional organization staff. Local researchers who successfully conducted surveys on previous rounds usually worked with regional researchers through telephone, e-mail, fax, and the mail. Local researchers performed tasks such as updating community lists of households and hunters, implementing household sampling regimes, administering household surveys during the yearly cycle, data proofing of surveys and survey tracking forms, and mailing surveys and tracking sheets for data entry and analysis. Regional researchers performed tasks such as obtaining formal support for the project from Native organizations, recruiting and selecting local hires, developing household sampling regimes, training and supervising local researchers, proofing survey data, and consulting local researchers to resolve data questions in

preparation for data entry and analysis. Entering data into a centralized database was done by ADF&G staff.

During the 2008 data year, 52 local researchers collected information in 54 communities. New harvest information was not collected in 8 communities (Table 2) because effective local surveyors were not secured and funding constraints did not allow for additional work by regional researchers. In this report, data from the most recent survey cycle in each community were used for estimates in the unsurveyed communities, as noted in Appendix C. Ivanof Bay had no year-round households in 2003–2005 and 2008 (during these times, its hunters were included on the Perryville household lists). As mentioned previously, in recent years harvest information at St. Paul has been collected under a program of the Aleut Community of St. Paul Island. Harvest information for 2008 at St. Paul was taken from Jones (2009).

Households were selected using census sampling, chain referral sampling, or two-strata random sampling, depending upon the community. The sampling method 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). Census sampling means all households with Alaska Natives were identified for contact. For chain referral communities, the sampling universe comprised all households with marine mammal hunters (based on past or potential activities), as identified by key respondents and other surveyed hunters in the community. In the two-strata design, the high stratum comprised hunting households as identified by key respondents, and the low stratum comprised a random draw of households from the remaining Alaska Native households in the community.

For communities with census or chain referral sampling, 74.8% of identified households (946 of 1,265 households) were successfully contacted and interviewed. For communities with two-strata designs, 81.9% of high stratum households were successfully contacted and interviewed (77 of 94 households), while 81.4% of low stratum households were interviewed (337 of 414 households) (Tables 2 and 3). These are relatively high sampling fractions for studies using survey methodologies that rely upon voluntary participation by surveyed

households. Overall, the level of cooperation by households in the harvest survey was high in communities. The nonresponse rate was due in large part to logistical problems in contacting households, rather than refusals to participate.

In the appendices (Appendix B, Appendix C), the statistical analysis presents harvest data in 3 different tables for each community. In the first table, the unexpanded reported take is presented for each community, representing actual animals reported harvested or struck and lost by surveyed hunters, with no fractions of animals.

Table 3.—Sampling methodology for communities with two-strata designs, harbor seal and sea lion surveys, 2008.

Community	Number High Stratum Households	Sampled High Stratum Households	Percent High Stratum	Number Low Stratum Households	Sampled Low Stratum Households	Percent Low Stratum
Dillingham	19	15	78.9%	156	143	91.7%
Manokotak	26	25	96.2%	71	50	70.4%
Naknek	21	16	76.2%	47	26	55.3%
Togiak	28	21	75.0%	140	118	84.3%
Total	94	77	81.9%	414	337	81.4%

The second table presents the combined estimated expanded take for each stratum in the communities. 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 narrative. In addition, details of the expansion for two-strata communities are shown for harbor seal takes in Table 25 and for sea lion takes in Table 26.

The calculation of the confidence range around the estimate follows the method for stratified samples in Cochran (1977:5.13, 5.15). In this process, the unexpanded reported take (that is, the known take) is used as the lower range for a community if it is higher than the statistically-calculated lower take estimate.

THE SUBSISTENCE TAKE OF HARBOR SEALS IN 2008

Estimated Size of the Harbor Seal Take, 2008

The estimated size of the total take of harbor seals by Alaska Natives in 2008 is presented in Tables 4 and 5. In 2008, an estimated 1,462 harbor seals were taken by Alaska Natives for subsistence uses (with a 95% confidence range of between 1,196 to 1,980 animals) (Table 4). Of the 2008 subsistence take, 13.8% (202 harbor seals) were struck and lost, and 86.2% (1,260 harbor seals) were harvested.

The total state estimate for harbor seals is necessarily somewhat indeterminate because of species identification problems in the Bristol Bay area. As discussed in Wolfe and Mishler (1993:61–69), in Bristol Bay there are areas with a seasonal geographic overlap of harbor seals and spotted seals *P. largha* (Figure 3). Local indigenous Yup'ik taxonomies categorize adults of the 2 Linnaean species as a single type (*issuriq*) in this area, and categorize pups into 2 different types. Of the total North Bristol Bay take, we classified 83 seals as *P. vitulina* and 272 seals as *P. largha*, based on the ecological features of each take (degree of association with seasonal ice) (Table 9 in Appendix B). Of the animals classified as *P. largha*, 21.5% (58 animals) were reported struck and lost, and 78.5% (213 animals) were harvested (Table 9 in Appendix B). In Table 4, we also assumed the entire South Bristol Bay take of 105 animals was *P. vitulina* (Table 5). Changing these assumptions will change the total statewide take estimate. As stated above, we believe the best estimate of the subsistence take in 2008 is 1,462 harbor seals, based on the assumptions above.

Table 4.—Estimated subsistence takes of harbor seals (*Phoca vitulina*) by Alaska Natives, 1992–2008.

Year	Estimated Total		Total Take	Lower and Upper Confidence Range for Total Take
	Harvest	Struck and Lost		
1992	2,501 87.6%	353 12.4%	2,854 100.0%	2,293 - 3,692
1993	2,365 86.4%	371 13.6%	2,736 100.0%	2,334 - 3,471
1994	2,313 88.2%	308 11.8%	2,621 100.0%	2,110 - 3,457
1995	2,498 91.1%	243 8.9%	2,742 100.0%	2,184 - 3,679
1996	2,415 88.1%	327 11.9%	2,741 100.0%	2,378 - 3,479
1997	2,195 86.2%	351 13.8%	2,546 100.0%	2,069 - 3,309
1998	2,286 88.1%	310 11.9%	2,597 100.0%	2,235 - 3,212
2000	1,975 88.8%	250 11.2%	2,224 100.0%	1,727 - 3,007
2001	1,797 88.5%	234 11.5%	2,031 100.0%	1,621 - 2,647
2002	1,585 86.4%	249 13.6%	1,834 100.0%	1,479 - 2,431
2003	1,812 89.2%	219 10.8%	2,030 100.0%	1,577 - 2,837
2004	1,566 86.0%	256 14.0%	1,822 100.0%	1,420 - 2,469
2005	1,470 86.7%	226 13.3%	1,696 100.0%	1,354 - 2,306
2006	1,423 86.5%	221 13.5%	1,644 100.0%	1,250 - 2,348
2007	1,267 88.7%	161 11.3%	1,428 100.0%	1,082 - 2,008
2008	1,260 86.2%	202 13.8%	1,462 100.0%	1,196 - 1,980

Table 5.—Regional distribution of subsistence takes of harbor seals (*Phoca vitulina*) by Alaska Natives, 2008, with confidence intervals and statistical ranges.

Region	Estimated Total			Total Take			Percentage of Take by Region	Per Capita Harvest	Struck and Lost Rate
	Harvest	Struck and Lost	Take	Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate			
Southeast	533.9	60.1	593.9	38.3%	501.2	821.5	40.6%	0.04	10.1%
North Pacific Rim	243.7	33.1	276.7	24.7%	251.0	345.2	18.9%	0.12	12.0%
Upper Kenai—Cook Inlet	33.1	3.5	36.7	66.1%	21.0	60.9	2.5%	0.00	9.7%
Kodiak Island	165.5	26.5	192.0	20.8%	162.9	232.0	13.1%	0.10	13.8%
South Alaska Peninsula	107.5	17.3	124.8	46.7%	76.8	183.1	8.5%	0.09	13.9%
Aleutian Islands	43.5	6.0	49.5	42.4%	35.0	70.4	3.4%	0.06	12.1%
Pribilof Islands	0.0	0.0	0.0	0.0%	0.0	0.0	0.0%	0.00	0.0%
South Bristol Bay	66.9	38.2	105.1	43.7%	83.0	151.0	7.2%	0.07	36.3%
North Bristol Bay	65.6	17.2	82.8	40.4%	65.0	116.2	5.7%	0.02	20.7%
ALASKA	1,259.7	201.8	1,461.5	35.5%	1,196.0	1,980.3	100.0%		13.8%
Percentage of Take	86.2%	13.8%	100.0%						

Geographic Distribution of Harbor Seal Takes

Table 5 shows the regional distribution of harbor seal takes by Alaska Natives in 2008. The largest takes in absolute numbers were by the Tlingit and Haida of the Southeast region: about 40.6% (594 animals) of the statewide take of harbor seals were taken by hunters in Southeast Alaska (Table 5). The regions ranked second and third were the North Pacific Rim (277 seals, or 18.9% of the statewide take) and Kodiak Island (192 seals, or 13.1%). The remainder of the statewide harbor seal take (399 animals, or 27.3%) was distributed among the other 6 regions.

The geographic distribution of harbor seal takes by community is shown in Table 6. Of the top 10 communities (in absolute numbers of harbor seals taken in 2008), 4 were in the Southeast region, 2 in the North Pacific Rim, and one each in the Kodiak Islands, South Alaska Peninsula, South Bristol Bay, and North Bristol Bay. The 10 top ranking communities were Sitka (142 seals), Tatitlek (141 seals), Yakutat (135 seals), Kodiak City (71 seals), Ketchikan (67 seals), Perryville (63 seals), Togiak (60 seals), Port Heiden (53 seals), Angoon (46 seals), and Nanwalek (42 seals). There were 12 communities with no reported harbor seals taken in 2008:

Chignik Lagoon, Clark's Point, Karluk, Kenai, King Salmon, Klukwan, Seward, South Naknek, St. George, St. Paul, Twin Hills, and Unalaska (spotted seals were reported taken at Clark's Point and Twin Hills, and the harvest program at St. Paul did not collect harbor seal data).

Per capita harvests are the numbers 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 10 communities in terms of per capita harvests in 2008 were Tatitlek (1.38 seals harvested per person), Perryville (0.45), Port Heiden (0.39), Yakutat (0.31), Nikolski (0.26), Pelican (0.24), Atka (0.21), Nanwalek (0.20), Old Harbor (0.17), and Ouzinkie (0.16). There was greater parity across regions in per capita harvests compared with total community take (Table 6). Among the top 10 communities for per capita harvests, 2 were in the Kodiak Islands, North Pacific Rim, Aleutian Islands, and Southeast Alaska, and one each in South Bristol Bay and South Alaska Peninsula.

Table 6.—Subsistence harbor seal harvest, take, and use by Alaska Natives, 2008, with confidence intervals and statistical ranges, by community.

	Harbor Seal Harvests Per Capita	Native Households Harvesting Harbor Seals	Native Households Using Harbor Seals	Harvest	Struck and Lost	Total Take	Total Take		
							Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
SOUTHEAST ALASKA									
Angoon	.08	50.0%	100.0%	41.0	5.0	46.0	0.0%	46.0	46.0
Craig	.00	10.0%	10.0%	2.1	0.0	2.1	141.9%	1.0	5.1
Haines	.05	10.0%	30.0%	15.6	2.6	18.2	94.2%	14.0	35.3
Hoonah	.04	18.4%	52.6%	25.3	6.3	31.6	23.4%	30.0	39.0
Hydaburg	.04	40.0%	40.0%	14.4	0.0	14.4	54.3%	9.0	22.2
Juneau	.00	33.3%	41.7%	8.0	1.3	9.3	43.7%	7.0	13.4
Kake	.04	36.0%	96.0%	23.0	2.0	25.0	0.0%	25.0	25.0
Ketchikan	.04	16.7%	16.7%	66.7	0.0	66.7	124.0%	40.0	149.3
Klawock	.04	34.8%	47.8%	21.4	1.3	22.7	32.0%	18.0	30.0
Klukwan	.00	0.0%	100.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Pelican	.24	100.0%	100.0%	10.0	0.0	10.0	17.9%	8.2	11.8
Petersburg	.02	14.8%	96.3%	7.8	12.2	20.0	21.6%	18.0	24.3
Saxman	.03	40.0%	60.0%	9.6	0.0	9.6	97.0%	6.0	18.9
Sitka	.06	57.4%	77.8%	140.6	1.0	141.6	8.9%	139.0	154.1
Wrangell	.06	33.3%	33.3%	33.3	8.3	41.7	82.9%	25.0	76.2
Yakutat	.31	57.5%	100.0%	115.2	20.0	135.1	26.4%	115.0	170.8

-continued-

Table 6, continued.

							Total Take		
	Harbor Seal Harvests Per Capita	Native Households Harvesting Harbor Seals	Native Households Using Harbor Seals	Harvest	Struck and Lost	Total Take	Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
NORTH PACIFIC RIM									
Chenega Bay	.16	28.6%	85.7%	10.7	0.0	10.7	113.3%	5.0	22.9
Cordova	.09	87.5%	87.5%	32.0	4.0	36.0	0.0%	36.0	36.0
Nanwalek	.20	15.2%	89.1%	33.7	8.2	41.9	15.6%	41.0	48.4
Port Graham	.11	15.6%	71.9%	16.5	5.5	22.0	56.7%	16.0	34.5
Seldovia	.02	33.3%	66.7%	1.3	0.0	1.3	98.0%	1.0	2.6
Seward	.00	0.0%	100.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Tatitlek	1.38	30.0%	90.0%	125.4	15.4	140.8	25.6%	128.0	176.8
Valdez	.06	100.0%	100.0%	24.0	0.0	24.0	0.0%	24.0	24.0
UPPER KENAI-COOK INLET									
Anchorage	.00	31.6%	68.4%	28.6	1.8	30.4	55.5%	17.0	47.3
Homer	.00	0.0%	37.5%	0.0	1.8	1.8	128.3%	1.0	4.0
Kenai	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Tyonek	.02	50.0%	50.0%	4.5	0.0	4.5	113.2%	3.0	9.6
KODIAK ISLAND									
Akhiok	.14	36.4%	81.8%	10.5	5.2	15.7	14.4%	15.0	17.9
Karluk	.00	0.0%	n/a	0.0	0.0	0.0	0.0%	0.0	0.0
Kodiak City	.08	64.0%	100.0%	62.6	8.6	71.3	29.9%	49.9	92.6
Larsen Bay	.06	18.5%	44.4%	5.2	0.0	5.2	15.2%	5.0	6.0
Old Harbor	.17	20.3%	79.7%	35.2	3.5	38.7	33.5%	33.0	51.6
Ouzinkie	.16	57.1%	100.0%	32.1	3.1	35.2	7.3%	34.0	37.8
Port Lions	.12	33.3%	40.0%	20.0	6.0	26.0	0.0%	26.0	26.0
SOUTH ALASKA PENINSULA									
Chignik Bay	.05	7.1%	14.3%	2.3	0.0	2.3	69.3%	2.0	3.9
Chignik Lagoon	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Chignik Lake	.16	40.0%	40.0%	20.3	0.0	20.3	39.0%	16.0	28.2
False Pass	.07	12.5%	75.0%	2.8	0.0	2.8	102.4%	2.0	5.6
Ivanof Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
King Cove	.01	18.2%	27.3%	3.8	0.0	3.8	64.9%	3.0	6.3
Perryville	.45	69.2%	100.0%	47.1	15.7	62.8	46.1%	33.8	91.7
Sand Point	.07	41.2%	64.7%	31.3	1.6	32.9	44.1%	20.0	47.5
PRIBILOF ISLANDS									
St. George	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
St. Paul*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ALEUTIAN ISLANDS									
Adak	.00	100.0%	100.0%	2.0	0.0	2.0	0.0%	2.0	2.0
Akutan	.15	24.2%	54.5%	17.0	0.0	17.0	15.8%	16.0	19.7
Atka	.21	30.0%	70.0%	17.5	5.0	22.5	81.3%	9.0	40.8
Nikolski	.26	42.9%	42.9%	7.0	1.0	8.0	0.0%	8.0	8.0
Unalaska	.00	0.0%	14.3%	0.0	0.0	0.0	0.0%	0.0	0.0

-continued-

Table 6, continued.

							Total Take		
	Harbor Seal Harvests Per Capita	Native Households Harvesting Harbor Seals	Native Households Using Harbor Seals	Harvest	Struck and Lost	Total Take	Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
SOUTH BRISTOL BAY									
Egegik	.00	0.0%	0.0%	0.0	1.1	1.1	64.2%	1.0	1.8
King Salmon	.00	0.0%	9.1%	0.0	0.0	0.0	0.0%	0.0	0.0
Levelock	.11	30.0%	65.0%	13.1	13.1	26.1	34.0%	18.0	35.0
Naknek	.05	6.5%	17.2%	15.1	7.6	22.7	76.8%	15.0	40.1
Pilot Point	.03	12.5%	12.5%	2.6	0.0	2.6	154.2%	1.0	6.7
Port Heiden	.39	28.6%	38.1%	36.1	16.4	52.6	28.4%	48.0	67.5
South Naknek	.00	0.0%	33.3%	0.0	0.0	0.0	0.0%	0.0	0.0
NORTH BRISTOL BAY									
Aleknagik	.03	14.8%	48.1%	5.0	1.7	6.7	96.9%	4.0	13.1
Clark's Point	.00	27.3%	45.5%	0.0	0.0	0.0	0.0%	0.0	0.0
Dillingham	.00	1.2%	65.3%	5.5	0.0	5.5	46.6%	5.0	8.0
Manokotak	.02	13.1%	58.8%	9.2	1.4	10.6	60.4%	8.0	17.0
Togiak	.06	33.7%	70.1%	46.0	14.1	60.0	30.0%	48.0	78.1
Twin Hills	.00	15.0%	60.0%	0.0	0.0	0.0	0.0%	0.0	0.0
ALASKA TOTAL				1,259.7	201.8	1,461.5	35.5%	1,196.0	1,980.3
SPOTTED SEALS, NORTH BRISTOL BAY**									
Aleknagik	.04	14.8%	48.1%	6.7	0.0	6.7	86.0%	4.0	12.4
Clark's Point	.21	27.3%	45.5%	14.7	3.3	18.0	75.5%	11.0	31.6
Dillingham	.00	1.2%	65.3%	1.1	1.1	2.2	56.6%	2.0	3.4
Manokotak	.04	13.1%	58.8%	16.6	7.4	24.0	35.1%	19.3	32.4
Togiak	.22	33.7%	70.1%	167.7	42.2	209.9	16.7%	175.0	244.9
Twin Hills	.10	15.0%	60.0%	6.6	4.4	11.0	42.4%	10.0	15.7
TOTAL WITH OTHER SEALS				1,473.0	260.2	1,733.3	33.9%	1,417.2	2,320.6

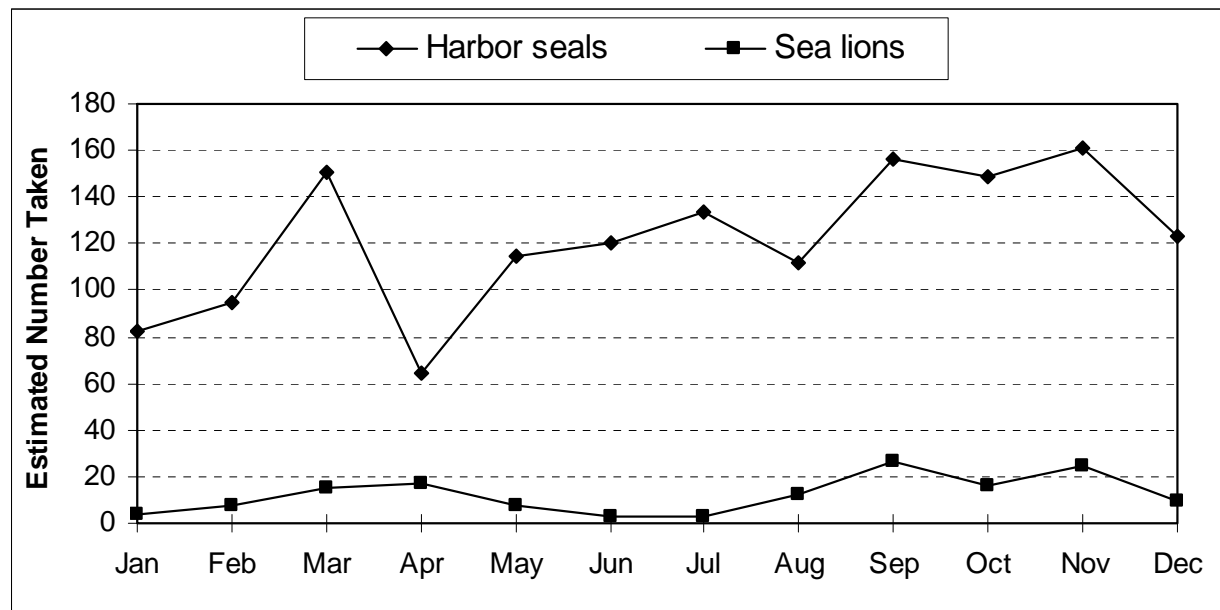
* St. Paul data from Jones (2009).

** In North Bristol Bay, percentage of households harvesting and using *issuriq*.

Seasonal Distribution of Harbor Seal Takes

The seasonally-adjusted distribution of the statewide harbor seal take in 2008 is depicted in Figures 4 and 5. Seals were taken during all months in 2008. Since 1992, the seasonal patterning of harbor seal takes commonly has shown 2 distinct hunting peaks: the first during spring, and a second during fall–early winter, with a low point in June (Figure 5). That pattern was hardly perceptible in 2008, although a spring peak occurred in March and a fall–early winter peak occurred in September through November (Figure 4). The decline of the spring and fall hunting peaks over time is depicted in Figure 5. Overall, harbor seal hunting

during 2008 trended toward the low range for each month compared with other years. Harbor seal takes in April, October, and December were the lowest recorded for those months since surveys began in 1992. Seasonal hunting patterns of each region and community are shown in appendices B and C.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Harbor seals	82.5	95.0	150.2	64.7	114.3	120.7	133.1	111.9	155.9	149.1	160.6	123.4
Percentage	5.6%	6.5%	10.3%	4.4%	7.8%	8.3%	9.1%	7.7%	10.7%	10.2%	11.0%	8.4%
Cum. Percent	5.6%	12.1%	22.4%	26.8%	34.7%	42.9%	52.0%	59.7%	70.4%	80.6%	91.6%	100%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sea lions	3.4	7.1	14.9	17.4	7.6	2.5	3.1	12.7	26.7	16.2	24.6	9.7
Percentage	2.4%	4.9%	10.2%	11.9%	5.2%	1.7%	2.2%	8.7%	18.3%	11.1%	16.9%	6.6%
Cum. Percent	2.4%	7.2%	17.5%	29.3%	34.6%	36.3%	38.4%	47.1%	65.4%	76.5%	93.4%	100%

Figure 4.—Seasonally adjusted takes of harbor seals and sea lions by Alaska Natives, 2008.

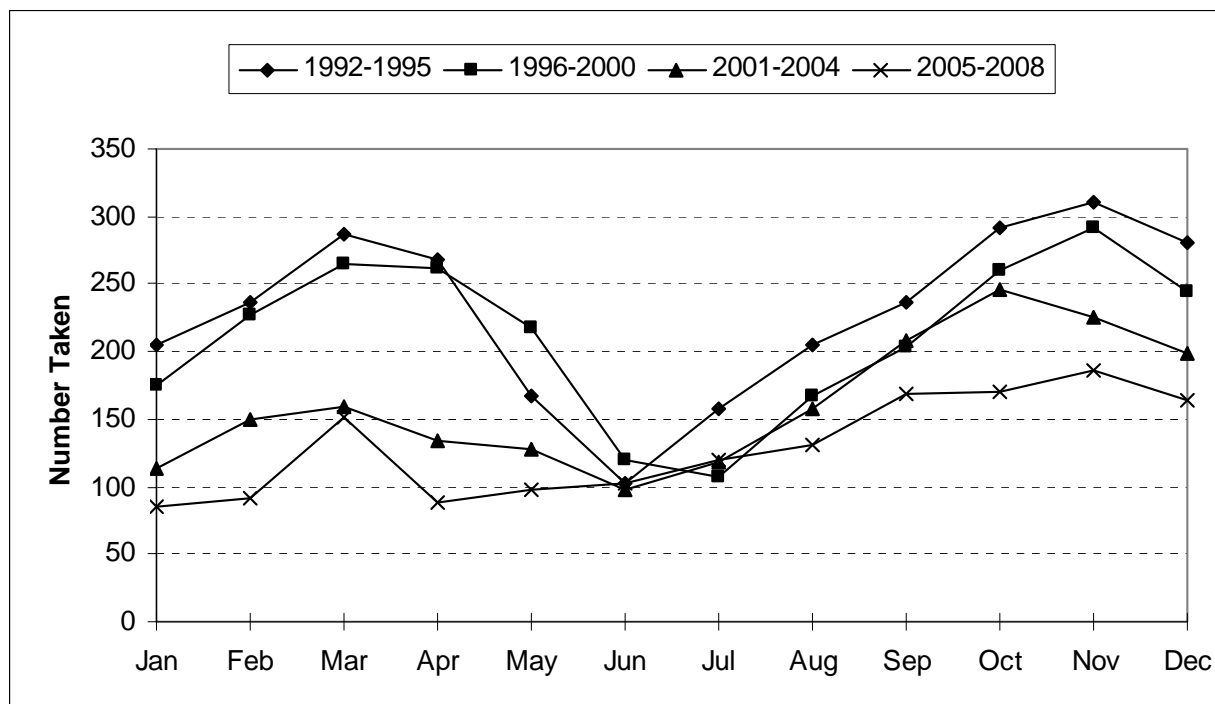


Figure 5.—Mean seasonally adjusted takes of harbor seals by Alaska Natives, 1992–1995, 1996–2000, 2001–2004, and 2005–2008.

Age and Sex Composition of Harbor Seal Harvests

The estimated age and sex compositions of the 2008 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 3.0 to 1 (649 males to 216 females, of harvests with reported sex). Hunters also reported harvesting substantially more adult harbor seals (73.7%) than juveniles (20.4%) or pups (5.8%). Overall, adult females (152 animals) comprised about 18.0% of the total harbor seal harvest whose age and sex was reported in 2008. Hunters did not report the sex for 31.4% of the harvest or the age for about 11.8% of the harvest. The age and sex are also unknown for animals that were struck and lost. A further analysis of age and sex composition is found in the “Discussion” section.

Table 7.—Age and sex composition of harbor seal harvests by Alaska Natives, 2008.

	Unknown			
	Male	Female	Sex	Total
Adult	487.2	151.6	179.9	818.7
<i>Row Percent</i>	59.5%	18.5%	22.0%	100.0%
<i>Column Percent</i>	75.1%	70.1%	45.5%	65.0%
Juvenile	120.2	48.6	58.3	227.0
<i>Row Percent</i>	52.9%	21.4%	25.7%	100.0%
<i>Column Percent</i>	18.5%	22.5%	14.8%	18.0%
Pup	23.5	11.3	30.2	64.9
<i>Row Percent</i>	36.2%	17.3%	46.4%	100.0%
<i>Column Percent</i>	3.6%	5.2%	7.6%	5.2%
Unknown Age	17.7	4.7	126.7	149.0
<i>Row Percent</i>	11.9%	3.1%	85.0%	100.0%
<i>Column Percent</i>	2.7%	2.2%	32.1%	11.8%
Total	648.5	216.1	395.0	1,259.7
<i>Row Percent</i>	51.5%	17.2%	31.4%	100.0%
<i>Column Percent</i>	100.0%	100.0%	100.0%	100.0%

Table 8.—Age and sex composition of harbor seal harvests by Alaska Natives, by region, 2008.

AGE AND SEX	Southeast	Upper			South Alaska Peninsula	Aleutian Islands	Pribilof Islands	South North		Alaska
		Pacific Rim	Kenai— Cook Inlet	Kodiak Island				Bristol Bay	Bristol Bay	
Adult Male	177.2	65.7	9.9	129.1	51.6	12.9	0.0	29.4	11.5	487.2
Adult Female	69.2	22.5	3.6	13.6	13.4	11.4	0.0	15.8	2.2	151.6
Adult Unknown Sex	106.9	20.2	5.4	6.1	8.5	3.0	0.0	14.2	15.6	179.9
Juvenile Male	77.4	7.2	10.7	9.4	5.2	5.0	0.0	0.0	5.3	120.2
Juvenile Female	36.7	3.1	0.0	1.0	1.4	5.0	0.0	1.3	0.0	48.6
Juvenile Unknown Sex	20.3	15.6	1.8	1.0	7.6	0.0	0.0	1.3	10.7	58.3
Pup Male	9.2	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5
Pup Female	2.0	6.6	0.0	0.0	0.0	0.0	0.0	2.6	0.0	11.3
Pup Unknown Sex	1.0	24.7	1.8	1.0	1.6	0.0	0.0	0.0	0.0	30.2
Male Unknown Age	5.1	0.0	0.0	0.0	9.0	0.0	0.0	0.0	3.6	17.7
Female Unknown Age	1.0	0.0	0.0	1.0	2.6	0.0	0.0	0.0	0.0	4.7
Unknown Age and Sex	27.8	63.8	0.0	3.2	6.6	6.2	0.0	2.2	16.8	126.7
TOTAL	533.9	243.7	33.1	165.5	107.5	43.5	0.0	66.9	65.6	1,259.7

-continued-

Table 8, continued.

AGE AND SEX	Southeast	North Pacific Rim	Upper Kenai–Cook Inlet	Kodiak Island	South Alaska Peninsula	Aleutian Islands	Pribilof Islands	South Bristol Bay	North Bristol Bay	Alaska
AGE ONLY										
Adult	353.3	108.3	18.8	148.8	73.4	27.2	0.0	59.5	29.3	818.7
Juvenile	134.4	25.9	12.5	11.5	14.2	10.0	0.0	2.6	15.9	227.0
Pup	12.2	45.6	1.8	1.0	1.6	0.0	0.0	2.6	0.0	64.9
Unknown Age	34.0	63.8	0.0	4.3	18.2	6.2	0.0	2.2	20.3	149.0
TOTAL	533.9	243.7	33.1	165.5	107.5	43.5	0.0	66.9	65.6	1,259.7
SEX ONLY										
Male	268.9	87.2	20.6	138.4	65.8	17.9	0.0	29.4	20.4	648.5
Female	109.0	32.2	3.6	15.7	17.4	16.4	0.0	19.8	2.2	216.1
Unknown Sex	156.0	124.3	8.9	11.4	24.3	9.2	0.0	17.7	43.0	395.0
TOTAL	533.9	243.7	33.1	165.5	107.5	43.5	0.0	66.9	65.6	1,259.7

Hunter Assessments of Harbor Seal Population Trends

During 2000, 2004, and 2008, surveyed households were asked to make subjective assessments of harbor seal population trends in their hunting areas. In 2000 and 2004, households were asked “Compared to 5 years ago, has the harbor seal population where members of your household have hunted ‘increased,’ ‘remained stable,’ ‘declined,’ ‘do not know,’ or ‘not applicable (do not hunt)’?” It is useful to display these subjective assessments of local population trends, comparing 2000 with 1995, comparing 2004 with 1999, and comparing 2008 with previous assessments (Table 9). Responses of “do not know” or “not applicable (do not hunt)” are removed in this analysis.

In almost all regions, a portion of households reported that local harbor seal populations had “increased,” “remained stable,” or “declined.” In 2008, “increased” and “stable” were the most common responses for all regions (Table 9). Comparing 2004 with 1999, a majority of hunters reported “increased” seal populations in Kodiak Island (52.9%), South Bristol Bay (54.2%), and Upper Kenai–Cook Inlet (57.1%). In 2004, “stable” seal populations was the most common assessment in all other regions, except for the Aleutian Islands, where one-half of the hunters reported that populations “declined.” Notable shifts in hunter assessments of trends comparing 2008 with 2000 are apparent for the North Pacific Rim (from 60.0% “declined” to

51.9% "increased"), Kodiak Island (from 18.7% "increased" to 39.0% "increased"), Southeast (from 10.1% "declined" to 21.5% "declined"), and South Alaska Peninsula (from 55.8% "declined" to 62.5% "stable"). Overall, based on hunter assessments of recent trends, harbor seal populations in most regions were primarily judged to be "stable" or "increased" in 2008.

Table 9.—Local harbor seal population changes compared to previous years, hunters' assessments.

Comparing 2000 with 1995			
Region	Increased	Remained	
		Stable	Declined
Southeast	43.6%	46.3%	10.1%
North Pacific Rim	5.7%	34.3%	60.0%
Kodiak Island	18.7%	48.0%	33.3%
South Alaska Peninsula	19.5%	24.7%	55.8%
Aleutian Islands	23.1%	38.5%	38.5%
South Bristol Bay	60.0%	37.5%	2.5%
North Bristol Bay*	2.6%	38.9%	58.5%

Comparing 2004 with 1999			
Region	Increased	Remained	
		Stable	Declined
Southeast	29.9%	41.6%	28.5%
North Pacific Rim	17.9%	60.7%	21.4%
Upper Kenai - Cook Inlet	57.1%	42.9%	0.0%
Kodiak Island	52.9%	37.3%	9.8%
South Alaska Peninsula	15.4%	69.2%	15.4%
Aleutian Islands	0.0%	50.0%	50.0%
South Bristol Bay	54.2%	41.7%	4.2%
North Bristol Bay*	12.5%	59.4%	28.1%

Current Assessment (2008)			
Region (Hunters Reporting)	Increased	Remained	
		Stable	Declined
Southeast (93)	46.2%	32.3%	21.5%
North Pacific Rim (27)	51.9%	33.3%	14.8%
Upper Kenai-Cook Inlet (7)	28.6%	71.4%	0.0%
Kodiak Island (59)	39.0%	39.0%	22.0%
South Alaska Peninsula (16)	31.3%	62.5%	6.3%
Aleutian Islands (14)	14.3%	64.3%	21.4%
South Bristol Bay (23)	52.2%	47.8%	0.0%
North Bristol Bay* (52)	19.2%	63.5%	17.3%
All Regions (291)	38.1%	44.7%	17.2%

* May refer primarily to spotted seals in a mixed seal population.

THE SUBSISTENCE TAKE OF SEA LIONS IN 2008

Estimated Size of the Sea Lion Take, 2008

The estimated size of the total take of Steller sea lions by Alaska Natives in 2008 is presented in Tables 10 and 11. In 2008, an estimated 146 sea lions were taken by Alaska Natives for subsistence uses (with a 95% confidence range of between 106 to 224 animals) (Table 10). Of the 2008 subsistence take, 20.3% (30 sea lions) were struck and lost, and 79.7% (116 sea lions) were harvested.

Geographic Distribution of Sea Lion Takes

Table 11 shows the regional distribution of sea lion takes in 2008 by Alaska Natives. In 2008, the takes were split among 4 main regions: the Aleutian Islands (48 sea lions, or 33.1% of the total statewide take of sea lions), the Pribilof Islands (36 sea lions, or 24.7%), the North Pacific Rim (25 sea lions, or 16.8%), and Kodiak Island (19 sea lions, or 12.9%). Other regions taking sea lions were the Southeast region (10 sea lions, or 6.6%) and the South Alaska Peninsula (9 sea lions, or 5.9%) (Table 11).

The geographic distribution of sea lion takes by community is shown in Table 12. In 2008, 18 of 63 surveyed communities reported taking sea lions. Eight communities had takes of 5 or more sea lions in 2008. Ten more communities reported a take of fewer than 5 sea lions each. The 5 top ranking communities were Atka (35 sea lions), St. Paul (22 sea lions), Tatitlek (20 sea lions), St. George (14 sea lions), and Old Harbor (11 sea lions). These 5 communities accounted for 101 sea lions, or 69.4% of the total Alaska take.

Table 10.—Estimated subsistence takes of sea lions (*Eumetopias jubatus*) by Alaska Natives, 1992–2008.

Year	Estimated Total			Lower and Upper Confidence Range for Total Take
	Harvest	Struck and Lost	Total Take	
1992	370 67.4%	179 32.6%	549 100.0%	452 - 712
1993	348 71.4%	139 28.6%	487 100.0%	390 - 629
1994	336 80.8%	80 19.2%	416 100.0%	330 - 554
1995	307 90.5%	32 9.5%	339 100.0%	258 - 465
1996	152 81.7%	34 18.3%	186 100.0%	165 - 226
1997	146 89.1%	18 10.9%	164 100.0%	132 - 227
1998	131 73.6%	47 26.4%	178 100.0%	137 - 257
2000	146 85.5%	24 13.9%	171 99.4%	121 - 244
2001	156 78.7%	42 21.3%	198 100.0%	162 - 282
2002	144 77.9%	41 22.1%	185 100.0%	145 - 248
2003	165 78.0%	47 22.0%	212 100.0%	149 - 303
2004	154 71.6%	61 28.4%	216 100.0%	147 - 335
2005	162 74.5%	56 25.5%	218 100.0%	169 - 301
2006	137 73.5%	49 26.5%	186 100.0%	125 - 289
2007	166 76.4%	51 23.6%	217 100.0%	147 - 324
2008	116 79.7%	30 20.3%	146 100.0%	106 - 224

Table 11.—Regional distribution of subsistence takes of sea lions (*Eumetopias jubatus*) by Alaska Natives, 2008, with confidence intervals and statistical ranges.

Region	Estimated Total			Total Take			Percentage of Take by Region	Per Capita Harvest	Struck and Lost Rate
	Harvest	Struck and Lost	Take	Confidence Interval (+/-)%	Lower Range Estimate	Upper Range Estimate			
Southeast	1.7	8.0	9.6	71.5%	8.0	16.5	6.6%	0.00	82.7%
North Pacific Rim	20.3	4.3	24.6	38.3%	22.0	34.0	16.8%	0.01	17.6%
Upper Kenai–Cook Inlet	0.0	0.0	0.0	0.0%	0.0	0.0	0.0%	0.00	0.0%
Kodiak Island	12.1	6.7	18.8	26.8%	17.0	23.8	12.9%	0.01	35.4%
South Alaska Peninsula	7.2	1.4	8.6	124.3%	5.0	19.2	5.9%	0.01	16.1%
Aleutian Islands	45.8	2.6	48.4	83.3%	24.0	88.7	33.1%	0.06	5.3%
Pribilof Islands	29.3	6.7	36.0	0.0%	30.0	42.0	24.7%	0.05	18.5%
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	116.4	29.6	146.0	53.6%	106.0	224.3	100.0%	0.0022	20.3%
Percentage of Take	79.7%	20.3%	100.0%						

Table 12.—Subsistence sea lion harvest, take, and use by Alaska Natives, 2008, with confidence intervals and statistical ranges, by community.

							Total Take		
	Sea Lion Harvests Per Capita	Native Households Harvesting Sea Lions	Native Households Using Sea Lions	Harvest	Struck and Lost	Total Take	Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
SOUTHEAST ALASKA									
Angoon	.00	0.0%	0.0%	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%	0.0	0.0
Haines	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Hoonah	.00	0.0%	0.0%	0.0	6.3	6.3	43.8%	6.0	9.1
Hydaburg	.00	0.0%	0.0%	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%	0.0	0.0
Kake	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Ketchikan	.00	16.7%	16.7%	1.7	1.7	3.3	124.0%	2.0	7.5
Klawock	.00	0.0%	0.0%	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%	0.0	0.0
Pelican	.00	0.0%	0.0%	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%	0.0	0.0
Saxman	.00	0.0%	0.0%	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%	0.0	0.0
Yakutat	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0

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Table 12, continued.

							Total Take		
	Sea Lion Harvests Per Capita	Native Households Harvesting Sea Lions	Native Households Using Sea Lions	Harvest	Struck and Lost	Total Take	Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
NORTH PACIFIC RIM									
Chenega Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Cordova	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Nanwalek	.01	2.2%	23.9%	1.0	1.0	2.0	28.6%	2.0	2.6
Port Graham	.02	3.1%	18.8%	2.8	0.0	2.8	102.4%	2.0	5.6
Seldovia	.00	0.0%	0.0%	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	.18	20.0%	55.0%	16.5	3.3	19.8	30.5%	18.0	25.8
Valdez	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
UPPER KENAI-COOK INLET									
Anchorage	.00	0.0%	0.0%	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%	0.0	0.0
Kenai	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Tyonek	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
KODIAK ISLAND									
Akhiok	.03	9.1%	13.6%	2.1	3.1	5.2	28.8%	5.0	6.7
Karluk	.00	0.0%	n/a	0.0	0.0	0.0	0.0%	0.0	0.0
Kodiak City	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Larsen Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Old Harbor	.03	7.8%	56.3%	7.0	3.5	10.5	33.3%	9.0	14.1
Ouzinkie	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Port Lions	.02	13.3%	13.3%	3.0	0.0	3.0	0.0%	3.0	3.0
SOUTH ALASKA PENINSULA									
Chignik Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Chignik Lagoon	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Chignik Lake	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
False Pass	.00	0.0%	0.0%	0.0	1.4	1.4	102.4%	1.0	2.8
Ivanof Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
King Cove	.00	9.1%	9.1%	1.3	0.0	1.3	90.7%	1.0	2.4
Perryville	.02	7.7%	7.7%	2.6	0.0	2.6	154.0%	1.0	6.6
Sand Point	.01	5.9%	11.8%	3.3	0.0	3.3	122.8%	2.0	7.3
ALEUTIAN ISLANDS									
Adak	.00	100.0%	100.0%	4.0	0.0	4.0	0.0%	4.0	4.0
Akutan	.04	9.1%	54.5%	4.2	0.0	4.2	27.9%	4.0	5.4
Atka	.42	40.0%	90.0%	35.0	0.0	35.0	97.3%	14.0	69.0
Nikolski	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Unalaska	.01	14.3%	28.6%	2.6	2.6	5.1	98.9%	2.0	10.2
PRIBILOF ISLANDS									
St. George	.07	100.0%	100.0%	9.3	4.7	14.0	42.8%	8.0	20.0
St. Paul*	n/a	n/a	n/a	20.0	2.0	22.0	0.0%	22.0	22.0

-continued-

Table 12, continued.

							Total Take		
	Sea Lion Harvests Per Capita	Native Households Harvesting Sea Lions	Native Households Using Sea Lions	Harvest	Struck and Lost	Total Take	Confidence Interval (+/- %)	Lower Range Estimate	Upper Range Estimate
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%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Manokotak	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Togiak	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Twin Hills	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
ALASKA TOTAL				116.4	29.6	146.0	53.6%	106.0	224.3

* St. Paul's 2008 data from Jones (2009).

Seasonal Distribution of Sea Lion Takes

The seasonal distribution of the sea lion take in 2008 is depicted in Figures 4 and 6. Sea lions were reported taken during every month in 2008. Productivity was greatest in March through April and September through November, and was lowest in June through July. The monthly productivity of sea lion hunting in 2008 showed a mid range of productivity compared with recent years. Overall, productivity was substantially poorer compared with the period 1992 through 1996. The declines of productivity during both the spring and fall periods are particularly notable in Figure 6. Seasonal hunting patterns of regions and communities are depicted in appendices B and C.

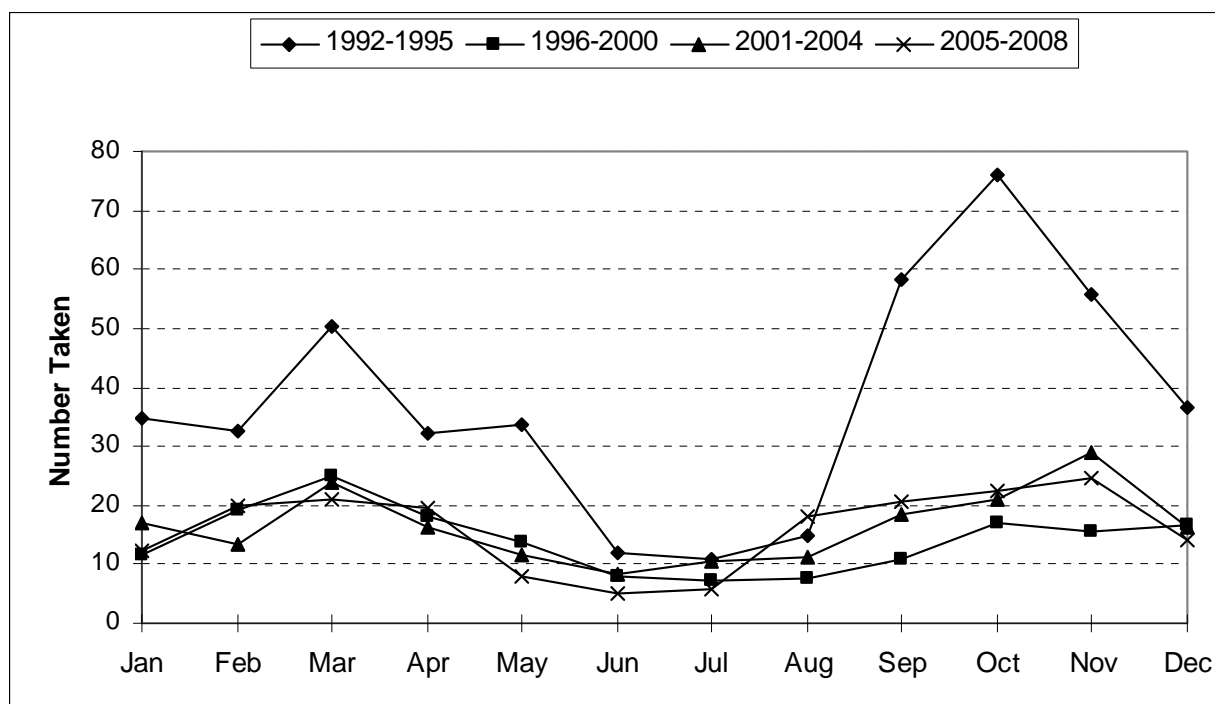


Figure 6.—Mean seasonally adjusted takes of sea lions by Alaska Natives, 1992–1995, 1996–2000, 2001–2004, and 2005–2008.

Age and Sex Composition of Sea Lion Harvests

The reported age and sex compositions of the 2008 sea lion harvests are shown in Tables 13 and 14. Hunters reported harvesting male over female sea lions by a ratio of about 2.9 to 1 (70 males to 24 females of animals with sex reported) (Figure 26). In 2008, hunters reported taking juvenile over adult sea lions by a ratio of 1.3 to 1. No sea lion pups were taken. From 1992 to 1995, juvenile harvests outnumbered adult harvests by at least 2 to 1: 2.3 juveniles to 1 adult (1992), 1.9 (1993), 2.2 (1994), and 2.0 (1995). Since 1996, the ratio of juveniles to adults decreased substantially: 1.0 juveniles to 1 adult (1996), 1.4 (1997), 0.7 (1998), 1.0 (2000), 0.9 (2001). Juvenile sea lion harvests were substantially less than adult harvests for the first time in 2002 (0.5 to 1), followed by ratios of 0.5 (2003), 0.7 (2004), 0.5 (2005), 0.6 (2006) and 1.0 (2007). Adult females (15 animals) comprised about 16.5% of the total harvest of sea lions of known age and sex in 2008. Hunters did not report the sex for

19.4% of the harvest or the age for about 13.2% of the harvest. The age and sex also are unknown for sea lions that were struck and lost by surveyed hunters.

Table 13.—Age and sex composition of sea lion harvests by Alaska Natives, 2008.

	Unknown			
	Male	Female	Sex	Total
Adult	27.5	15.4	0.0	42.9
<i>Row Percent</i>	64.2%	35.8%	0.0%	100.0%
<i>Column Percent</i>	39.4%	64.2%	0.0%	36.8%
Juvenile	42.4	7.5	8.3	58.2
<i>Row Percent</i>	72.9%	12.9%	14.2%	100.0%
<i>Column Percent</i>	60.6%	31.4%	36.7%	50.0%
Pup	0.0	0.0	0.0	0.0
<i>Row Percent</i>	0.0%	0.0%	0.0%	0.0%
<i>Column Percent</i>	0.0%	0.0%	0.0%	0.0%
Unknown Age	0.0	1.0	14.3	15.3
<i>Row Percent</i>	0.0%	6.8%	93.2%	100.0%
<i>Column Percent</i>	0.0%	4.4%	63.3%	13.2%
Total	70.0	23.9	22.5	116.4
<i>Row Percent</i>	60.1%	20.5%	19.4%	100.0%
<i>Column Percent</i>	100.0%	100.0%	100.0%	100.0%

Table 14.–Age and sex composition of sea lion harvests by Alaska Natives by region, 2008.

AGE AND SEX	Southeast	Upper		Kodiak Island	South Alaska Peninsula	Aleutian Islands	Pribilof Islands	South		North Alaska
		North Pacific Rim	Kenai–Cook Inlet					Bristol Bay	Bristol Bay	
Adult Male	0.0	1.1	0.0	7.0	3.9	13.2	2.3	0.0	0.0	27.5
Adult Female	0.0	3.5	0.0	0.0	3.3	8.6	0.0	0.0	0.0	15.4
Adult Unknown Sex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Juvenile Male	0.0	1.4	0.0	4.0	0.0	10.0	27.0	0.0	0.0	42.4
Juvenile Female	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	7.5
Juvenile Unknown Sex	1.7	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3
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	1.0	0.0	0.0	0.0	0.0	0.0	1.0
Unknown Age and Sex	0.0	7.7	0.0	0.0	0.0	6.6	0.0	0.0	0.0	14.3
TOTAL	1.7	20.3	0.0	12.1	7.2	45.8	29.3	0.0	0.0	116.4
AGE ONLY										
Adult	0.0	4.6	0.0	7.0	7.2	21.7	2.3	0.0	0.0	42.9
Juvenile	1.7	8.0	0.0	4.0	0.0	17.5	27.0	0.0	0.0	58.2
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	7.7	0.0	1.0	0.0	6.6	0.0	0.0	0.0	15.3
TOTAL	1.7	20.3	0.0	12.1	7.2	45.8	29.3	0.0	0.0	116.4
SEX ONLY										
Male	0.0	2.5	0.0	11.1	3.9	23.2	29.3	0.0	0.0	70.0
Female	0.0	3.5	0.0	1.0	3.3	16.1	0.0	0.0	0.0	23.9
Unknown Sex	1.7	14.3	0.0	0.0	0.0	6.6	0.0	0.0	0.0	22.5
TOTAL	1.7	20.3	0.0	12.1	7.2	45.8	29.3	0.0	0.0	116.4

Hunter Assessments of Sea Lion Population Trends

During 2000, 2004, and 2008, surveyed households were asked to make subjective assessments of sea lion population trends in their hunting areas. In 2000 and 2004, households were asked “Compared to 5 years ago, has the sea lion population where members of your household have hunted ‘increased,’ ‘remained stable,’ ‘declined,’ ‘do not know,’ or ‘not applicable (do not hunt)’?” It is useful to show these subjective assessments of population trends, comparing 2000 with 1995, comparing 2004 with 1999, and comparing 2008 with previous assessments (Table 15). Responses of “do not know” or “not applicable (do not hunt)” are removed in this analysis.

Comparing 2000 with 1995, a majority of households in all regions reported that local sea lion populations had “declined” in household hunting areas. These subjective assessments of population trends had substantially changed by 2004 in 3 regions. Comparing 2004 with 1999, a majority of hunters judged sea lions populations to be "increased" or "stable" in the Southeast, North Pacific Rim, and Kodiak Island regions. In these 3 regions, 16.7% or less of hunters reported sea lion populations had "declined" comparing 2004 with 1999. By contrast, in the South Alaska Peninsula, 66.7% of hunters reported sea lion populations had "declined" comparing 2004 with 1999, similar to the assessment comparing 2000 with 1995 (63.6% of hunters reported "declined"). In the Aleutian Islands, one-half of surveyed hunters assessed that sea lion populations had "declined" comparing 2004 with 1999, while the other half assessed populations as "stable." By 2008, "increased" or "stable" sea lion populations were the most common assessments of hunters in all regions (Table 15). No hunters reported that their local sea lion populations were in decline. However, these assessments were based on relatively small numbers of respondents for this question in 2008.

Table 15.–Local sea lion population changes compared to previous years, hunters’ assessments.

Comparing 2000 with 1995			
Region	Increased	Remained	
		Stable	Declined
Southeast	41.8%	5.5%	52.7%
North Pacific Rim	9.1%	24.2%	66.7%
Kodiak Island	17.9%	3.6%	78.6%
South Alaska Peninsula	24.2%	12.1%	63.6%
Aleutian Islands	15.7%	31.4%	52.9%
Bristol Bay	33.3%	11.1%	55.6%

Comparing 2004 with 1999			
Region	Increased	Remained	
		Stable	Declined
Southeast	66.7%	16.7%	16.7%
North Pacific Rim	45.5%	45.5%	9.1%
Kodiak Island	41.7%	41.7%	16.7%
South Alaska Peninsula	0.0%	33.3%	66.7%
Aleutian Islands	0.0%	50.0%	50.0%

-continued-

Table 15, continued.

Current Assessment (2008)			
Region (Hunters Reporting)	Increased	Remained	
		Stable	Declined
Southeast (1)	100.0%	0.0%	0.0%
North Pacific Rim (4)	50.0%	50.0%	0.0%
Kodiak Island (3)	0.0%	100.0%	0.0%
South Alaska Peninsula (3)	66.7%	33.3%	0.0%
Aleutian Islands (5)	60.0%	40.0%	0.0%
All Regions (16)	50.0%	50.0%	0.0%

HUNTING PARTICIPATION AND EFFORT

In calendar year 2008, about 546 households hunted harbor seals and 57 households hunted sea lions (Table 16). Since 1992, there has been a substantial decline in the numbers of hunters for harbor seals and for sea lions (Figure 7). Based on survey findings, the estimated numbers of households that reported a member hunting harbor seals were 1,014 (1992), 854 (1993), 971 (1994), 805 (1995), 859 (1996), 738 (1997), 707 (1998), 745 (2000), 575 (2001), 600 (2002), 564 (2003), 535 (2004), 517 (2005), 540 (2006), and 497 (2007). The estimated numbers of households that reported a member hunting sea lions were 135 (1992), 147 (1993), 154 (1994), 123 (1995), 95 (1996), 75 (1997), 76 (1998), 86 (2000), 98 (2001), 90 (2002), 97 (2003), 98 (2004), 68 (2005), 57 (2006), and 75 (2007) (these exclude St. Paul because the number of hunters is not available for years after 1998).

Table 16.—Alaska Native households hunting or harvesting harbor seals or sea lions, 1992–2008.

Year	HARBOR SEALS			SEA LIONS*		
	Households Hunting	Households Harvesting	Success Rate	Households Hunting	Households Harvesting	Success Rate
1992	1,014	724	71.4%	135	91	67.2%
1993	854	638	74.7%	147	86	58.7%
1994	971	608	62.6%	154	84	54.5%
1995	805	597	74.2%	123	92	74.3%
1996	859	619	72.1%	95	68	71.6%
1997	738	588	79.7%	75	62	82.2%
1998	707	607	85.9%	76	54	71.7%
2000	745	620	83.2%	86	70	81.4%
2001	575	491	85.4%	98	78	79.6%
2002	600	495	82.5%	90	70	77.8%
2003	564	453	80.3%	97	76	78.4%
2004	535	457	85.4%	98	76	77.6%
2005	517	454	87.8%	68	56	82.4%
2006	540	464	85.9%	57	51	89.5%
2007	497	416	83.7%	75	67	89.3%
2008	546	452	82.8%	57	50	87.7%

* Excludes St. Paul.

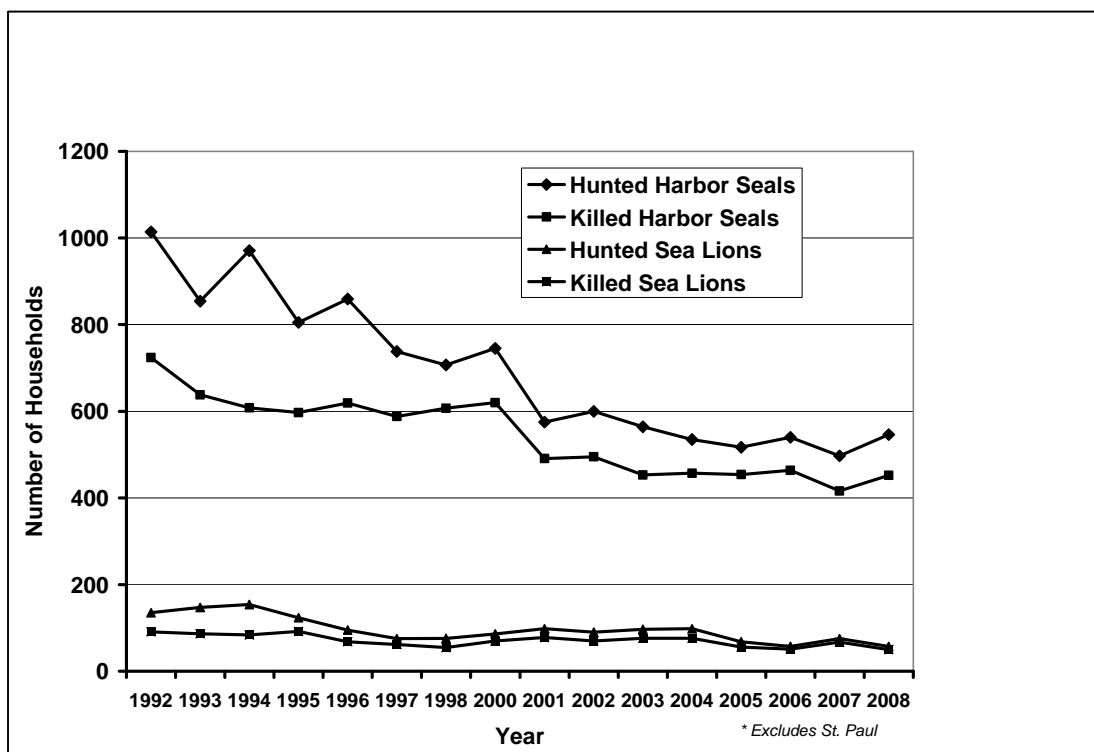


Figure 7.—Trends in the numbers of households hunting harbor seals and sea lions, 1992–2008.

Note: Excludes St. Paul.

The percentage of hunting households that reported hunting unsuccessfully for harbor seals in 2008 was 17.2%, compared with 28.6% (1992), 25.3% (1993), 37.4% (1994), 25.8% (1995), 27.9% (1996), 20.3% (1997), 14.1% (1998), 16.8% (2000), 14.6% (2001), 17.5% (2002), 19.7% (2003), 14.6% (2004), 12.2% (2005), 14.1% (2006), and 16.3% (2007). Seal hunter success rates have improved while the number of hunters has fallen. The percentage of unsuccessful hunting households for sea lions was 12.3% in 2008, compared with 32.8% (1992), 41.3% (1993), 45.4% (1994), 25.7% (1995), 28.4% (1996), 17.8% (1997), 28.3% (1998), 18.6% (2000), 20.4% (2001), 22.2% (2002), 21.6% (2003), 22.4% (2004), 17.6% (2005), 10.5% (2006) and 10.7% (2007) (these exclude St. Paul, because the number of hunters is not available for years after 1998).

In the 2000 survey cycle, surveyed households were asked to make a subjective assessment of their hunting effort in 2000 compared with 5 years before. Households were asked “Compared to 5 years ago, does harbor seal hunting now take your household ‘more time and effort,’ ‘about the same time and effort,’ ‘less time and effort,’ ‘hunted then but now stopped,’ or ‘not applicable (no hunting last 5 years)’?” A similar question was asked for sea lion hunting. This information is useful to display here, although it pertains to the year 2000 compared with 1995 through 1999. The subjective assessments for hunting households are shown in tables 17 and 18 (responses of households not hunting during the previous 5 years are removed in this analysis).

In all regions, a portion of hunting households reported “more,” the “same,” or “less” time and effort in hunting harbor seals in 2000 (Table 17). In the Southeast region, where most harbor seals are taken, about 54.7% reported taking the “same time and effort” for hunting seals, while 30.2% reported taking “less time and effort.” Only 8.7% of households reported taking “more time and effort” compared with the prior 5 years. By contrast, larger percentages of households reported taking “more time and effort” in seal hunting in the Aleutian Islands (42.6%), North Pacific Rim (33.7%), and Kodiak Island (29.5%). In the North Pacific Rim and Kodiak Island regions, a substantial percentage of households reported that they had stopped

hunting harbor seals sometime during the prior 5 years: 17.4% (North Pacific Rim) and 20.0% (Kodiak Island).

Table 18 shows the subjective assessments of sea lion hunting time and effort by region. As with harbor seals, in all regions some households reported “more,” the “same,” or “less” time and effort in hunting sea lions in 2000 compared with 1995 through 1999. More than one-half of the households reported taking “more time and effort” in hunting sea lions in the Aleutian Islands (67.3%) and the Kodiak Islands (55.3%). In the North Pacific Rim, 44.7% reported taking the “same time and effort” and 28.9% reported “less time and effort.” A relatively large percentage of households reported that they had stopped hunting sea lions during the prior 5 years in the South Alaska Peninsula (37.5%) and Kodiak Island (21.1%).

Table 17.—Time and effort spent hunting harbor seals in 2000 compared with five years ago, hunters’ assessments.

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

* May refer primarily to spotted seals in North Bristol Bay’s mixed harbor seal–spotted seal population.

Table 18.—Time and effort spent hunting sea lions in 2000 compared with five years ago, hunters’ assessments.

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

Hunting harbor seals or sea lions is a relatively specialized subsistence activity in Alaska communities. The large majority of Native households in the study’s sampling universe did not

attempt to hunt harbor seals or sea lions. In 2008, 69.6% of surveyed households did not hunt harbor seals and 96.8% did not hunt sea lions. Among hunters, there also was substantial specialization in productivity (Figure 8). A relatively small core of highly productive hunters reported most of the subsistence takes during 2008, similar to previous years. About 30% of the hunters reported taking about 70% of all harbor seals and sea lions (Figure 8). Highly productive hunters commonly distributed marine mammal products to other households through noncommercial networks of sharing and trade.

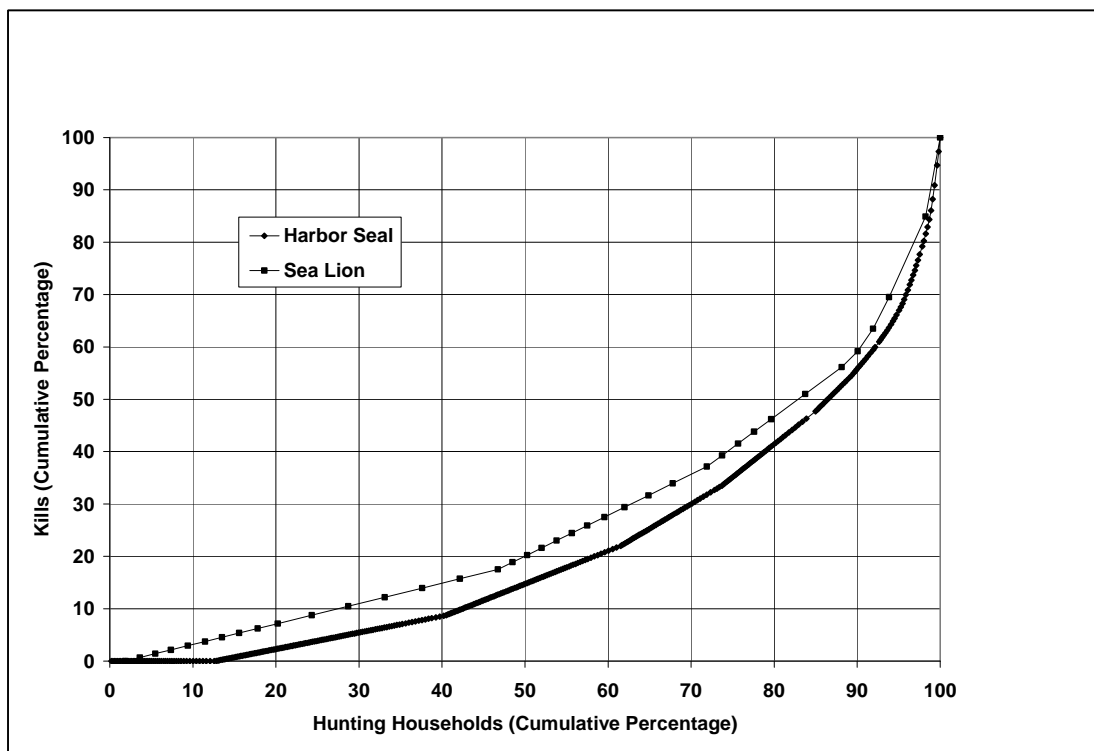


Figure 8.—Specialization in harbor seal and sea lion takes: percentage of hunting households by percentage of take, 2008.

DISCUSSION

Somewhat different trends characterize the subsistence takes of harbor seals and sea lions since 1992. At the statewide level, subsistence takes of harbor seals have been declining since about 1995, while subsistence takes of sea lions have leveled off after declining substantially during the early 1990s. The following section discusses trends in more detail for each species, examining total take, age of harvest, and sex of harvest broken out by region.

Harbor Seal Subsistence Trends, 1992–2008

At the state level, subsistence takes of harbor seals have been declining since about 1995 (when 2,742 seals were taken) to a low in 2007 (1,428 seals), the lowest take since surveys began in 1992 (Table 4; Figure 9). Comparing consecutive paired survey years since 1992, harbor seal takes have declined in 10 of the years, increased in 4 of the years, and remained unchanged in 1 year (Figure 24). This indicates a declining trend in the annual subsistence takes of harbor seals in Alaska. The total take of harbor seals in 2008 (1,462 seals) was 51.2% lower than takes in 1992 (2,854 seals) and 2.4% higher than takes in 2007 (1,428 seals) (Figure 24). In terms of seasons, the decreasing takes of harbor seals have been occurring across all the major hunting periods (spring and fall–early winter) (Figure 5).

Harbor seal populations in Alaska are divided into 3 stocks for biological assessment: the Southeast Alaska stock, the Gulf of Alaska stock, and the Bering Sea stock. Harbor seal takes from the 3 stocks are shown in Figure 11. Total annual takes from the Southeast Alaska stock showed an overall decline of 64.3% from 1992 to 2008 (from 1,666 to 594 seals). Takes from the Gulf of Alaska stock in 2008 (680 seals) were about 28.1% lower than the takes in 1992 (946 seals), which was similar to a low of 688 seals taken in 2002. Takes from the Bering Sea stock have declined from 243 seals in 1992 to 188 seals in 2008, a decrease of about 22.6%. Regional takes are shown in Figure 12. Annual harbor seal takes show the clearest downward trend in Southeast Alaska. While harbor seal takes in the other regions also appear to be in downward directions, the trends are less clear than for the Southeast region.

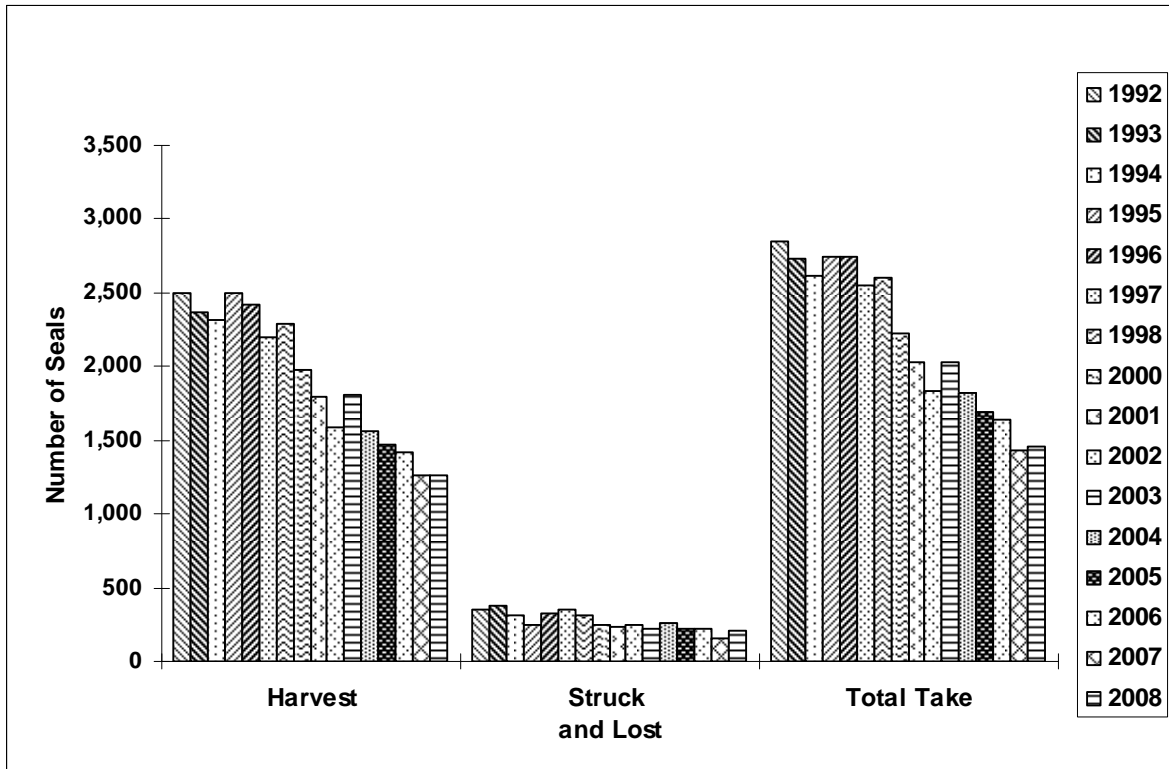


Figure 9.—Estimated subsistence takes of harbor seals by Alaska Natives, 1992–2008.

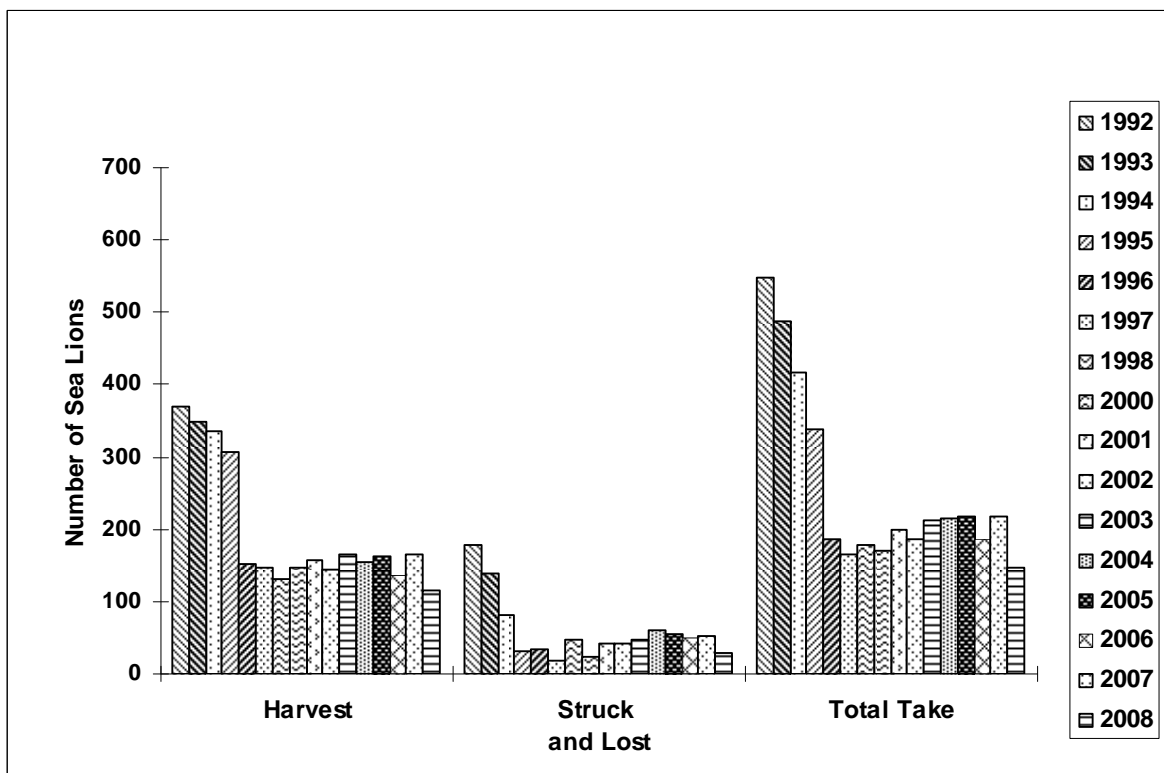
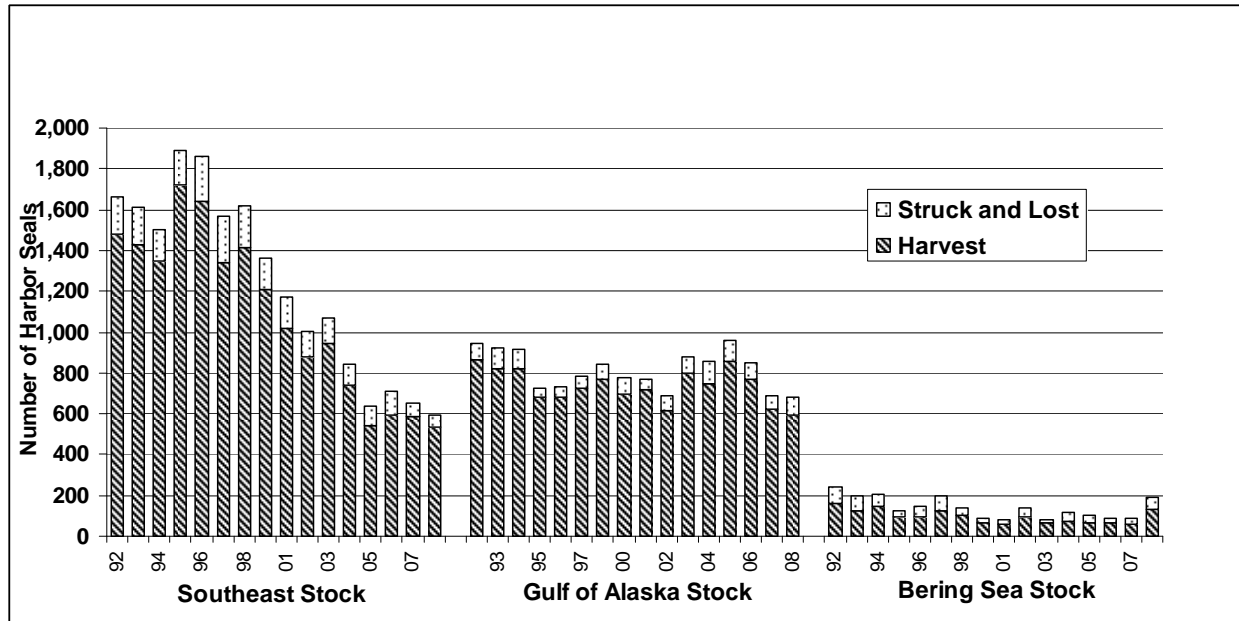


Figure 10.—Estimated subsistence takes of sea lions by Alaska Natives, 1992–2008.

The reasons for declining harbor seal takes are uncertain. Overall, it appears that the decline in harbor seal harvests is associated with fewer seal hunters on a statewide basis (Figure 7, Table 16). Between-year fluctuations in harvests at the community level are influenced in part by such local conditions as food needs, prey availability, and personal circumstances of hunters. A closer examination of trends in 6 selected communities (Hoonah, Nanwalek, Old Harbor, Sitka, Tatitlek, and Yakutat) allows us to see the interplay of factors, such as the numbers of hunters, hunting success, and harvest rates in particular locations (Figures 14–19). For example, at Hoonah and Yakutat, major harbor seal hunting communities (Figure 14 and Figure 15), there have been fewer hunters and lower harvest rates per successful hunter in recent years, resulting in declining numbers of seals harvested. At Sitka (Figure 16) there were fewer harbor seal hunters but relatively stable harvest rates per successful hunter in recent years, except for success rates in 2005. As shown in Figure 17, seal hunting at Tatitlek rebounded after 2002, which saw the lowest numbers of hunters, harvest rates, and seal harvests since the start of surveys in 1992. At Old Harbor, harvests and hunters in 2006 were near their lowest points since 1992 (Figure 19). No clear trends are evident in the harvests, hunters, and harvest rates at Nanwalek (Figure 18). These case communities suggest that a complex of local factors are influencing harvest patterns at the local level.



	Southeast Alaska Stock			Gulf of Alaska Stock			Bering Sea Stock		
	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take
1992	1,477	189	1,666	865	81	946	160	83	243
1993	1,425	190	1,615	818	103	921	122	78	200
1994	1,348	151	1,500	819	94	913	145	63	208
1995	1,719	171	1,890	683	42	724	97	31	127
1996	1,642	216	1,858	680	56	736	93	54	148
1997	1,343	224	1,567	725	58	784	127	68	195
1998	1,414	202	1,616	772	70	842	100	38	138
2000	1,210	151	1,361	699	80	779	66	19	85
2001	1,020	156	1,176	716	56	772	62	22	84
2002	877	130	1,007	613	75	688	95	44	140
2003	945	124	1,069	801	78	879	65	17	82
2004	743	102	845	747	110	858	76	43	119
2005	546	89	634	861	97	958	64	40	104
2006	593	115	708	766	82	848	65	24	88
2007	586	68	654	620	66	686	61	27	88
2008	534	60	594	593	86	680	133	55	188

Figure 11.—Harbor seal take trends by harbor seal stock, 1992–2008.

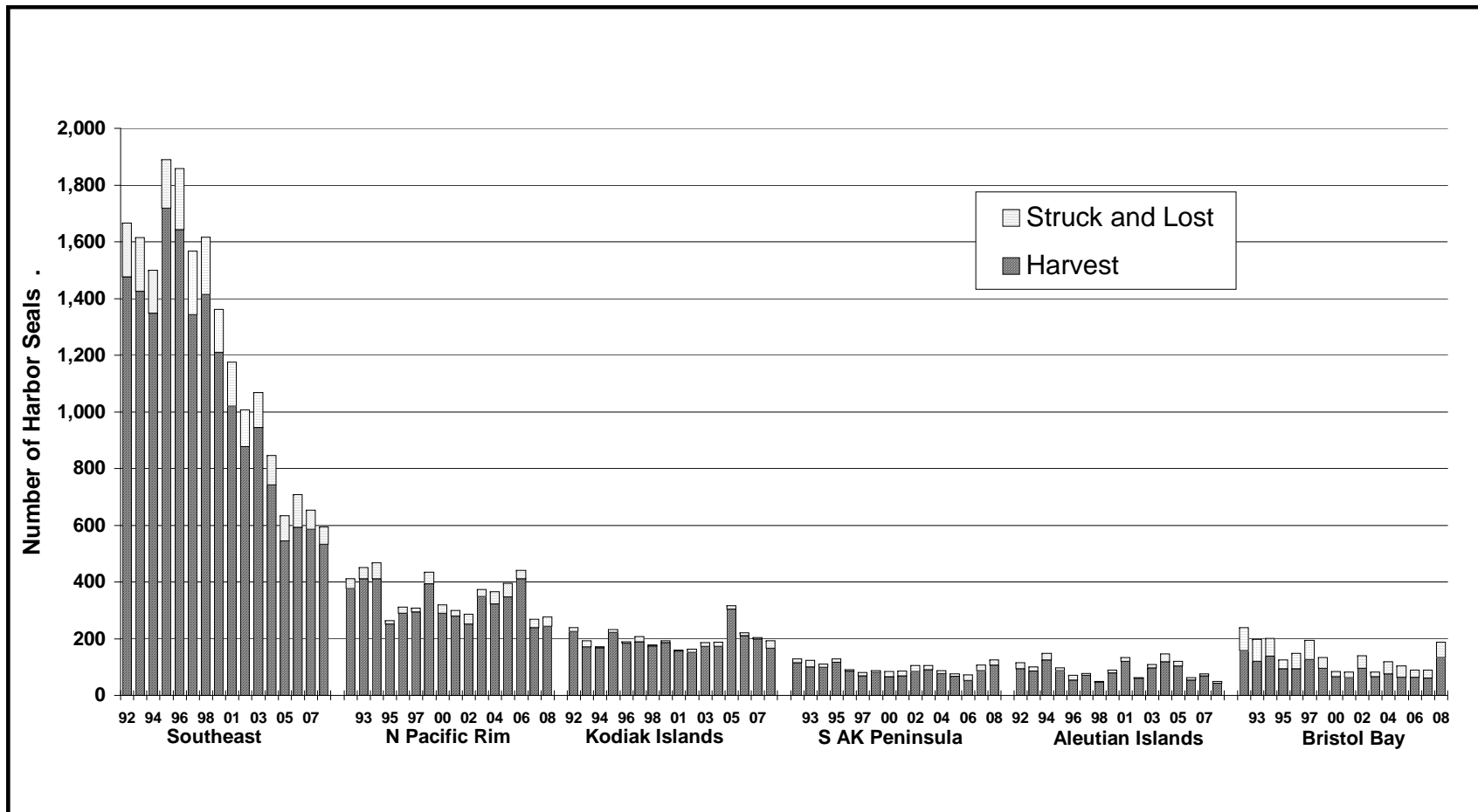


Figure 12.—Harbor seal take trends reported by Alaska Native hunters by major area, 1992–2008.

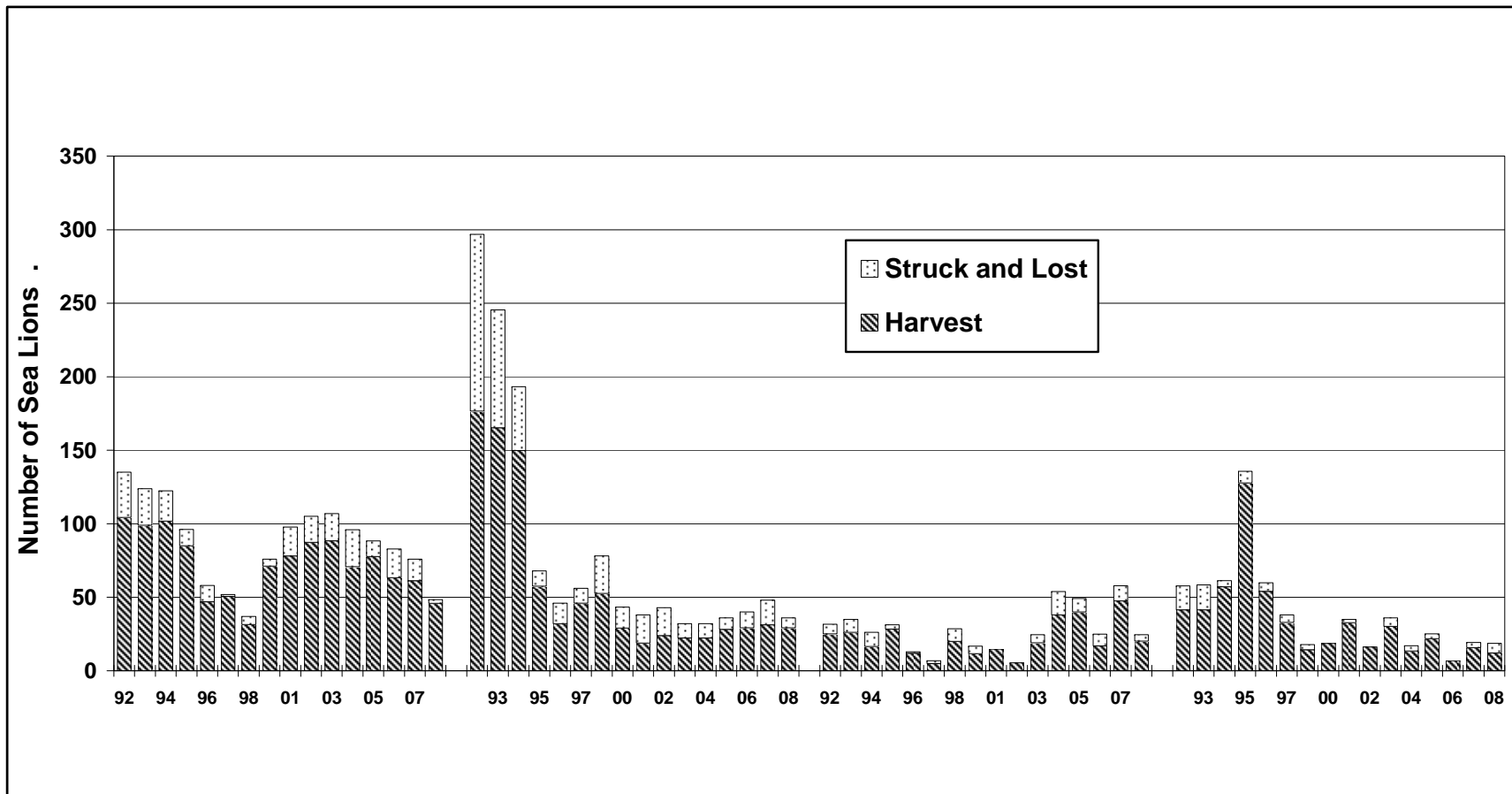


Figure 13.—Sea lion take trends reported by Alaska Native hunters by area, 1992–2008.

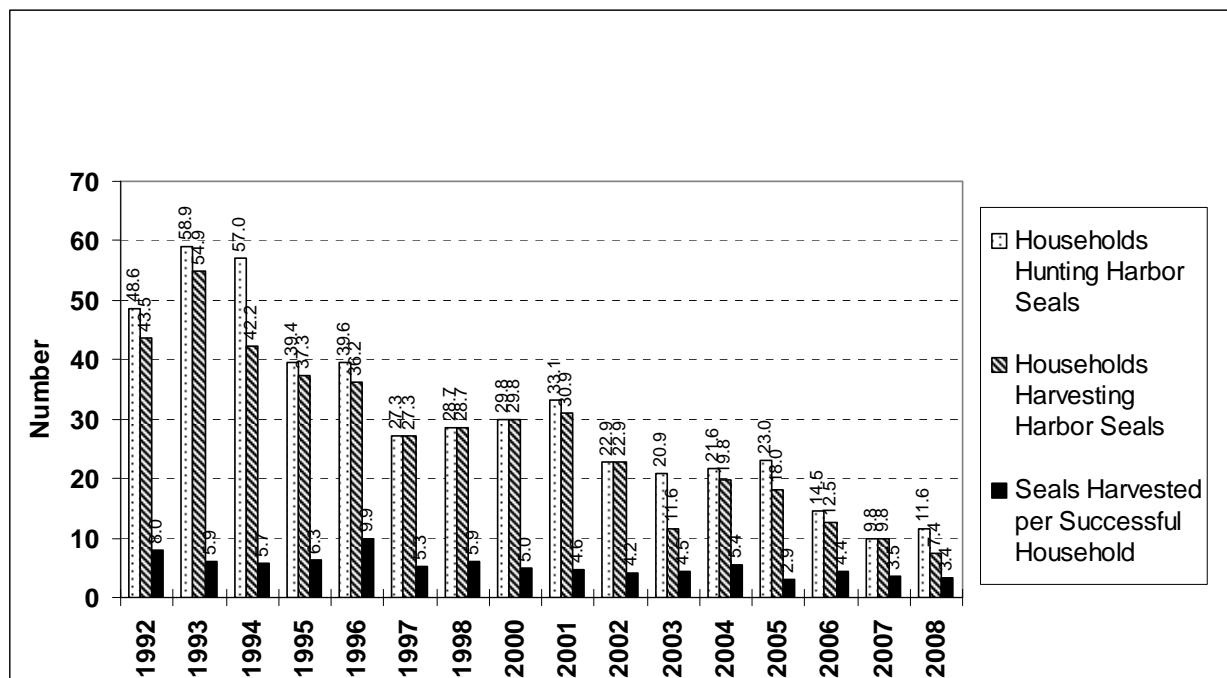


Figure 14.–Harbor seal hunters and success rates, Hoonah, 1992–2008.

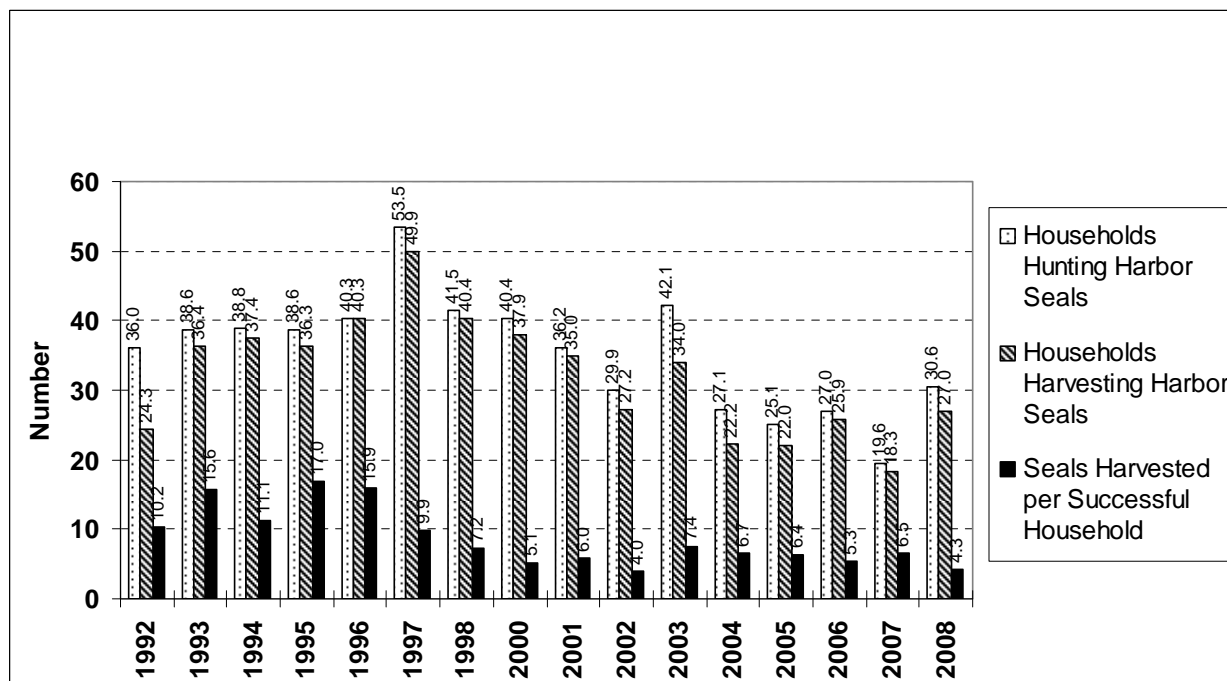


Figure 15.–Harbor seal hunters and success rates, Yakutat, 1992–2008.

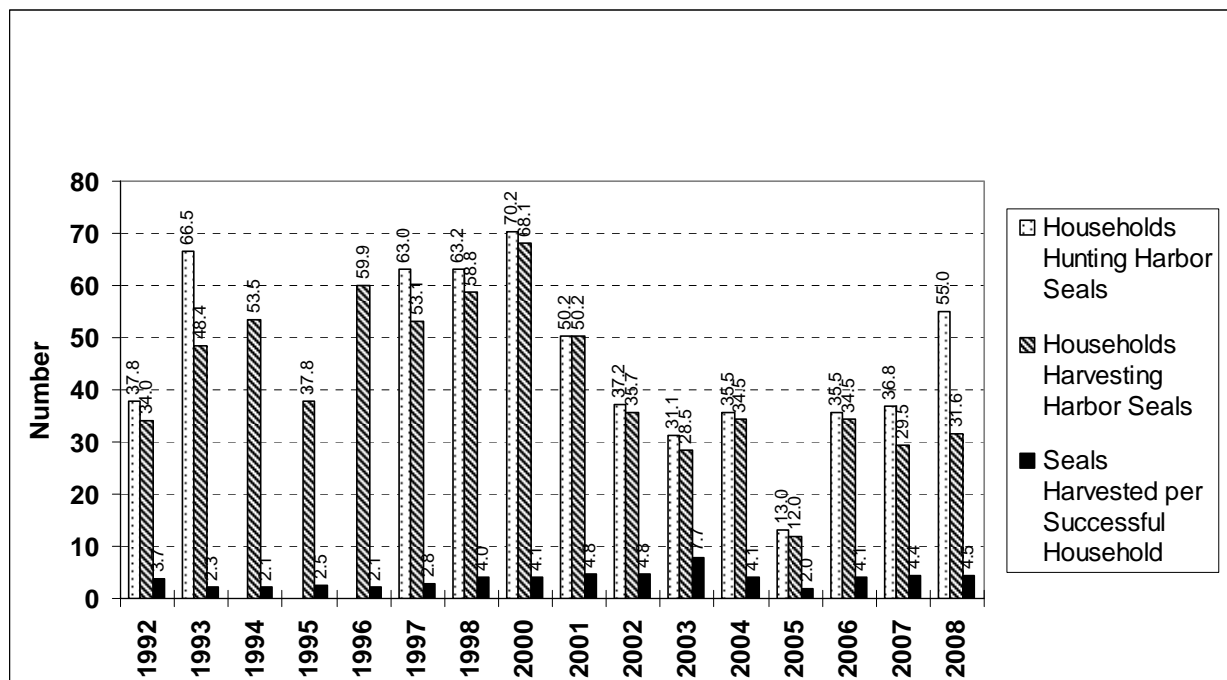


Figure 16.–Harbor seal hunters and success rates, Sitka, 1992–2008.

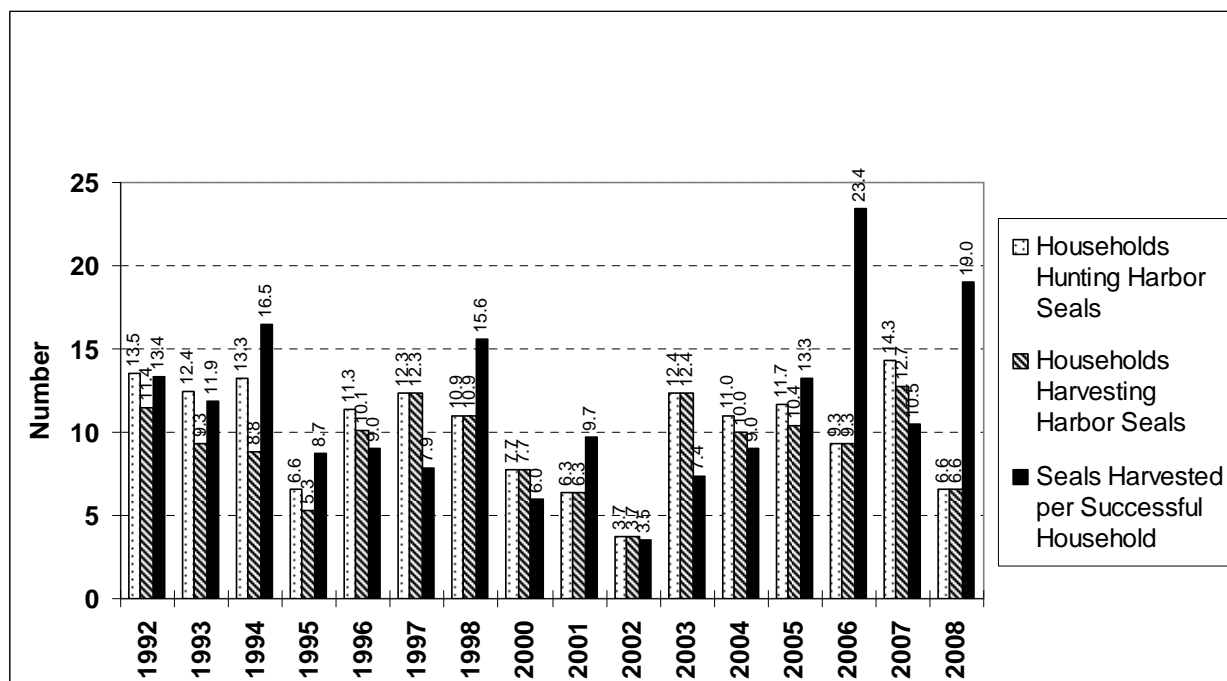


Figure 17.–Harbor seal hunters and success rates, Tatitlek, 1992–2008.

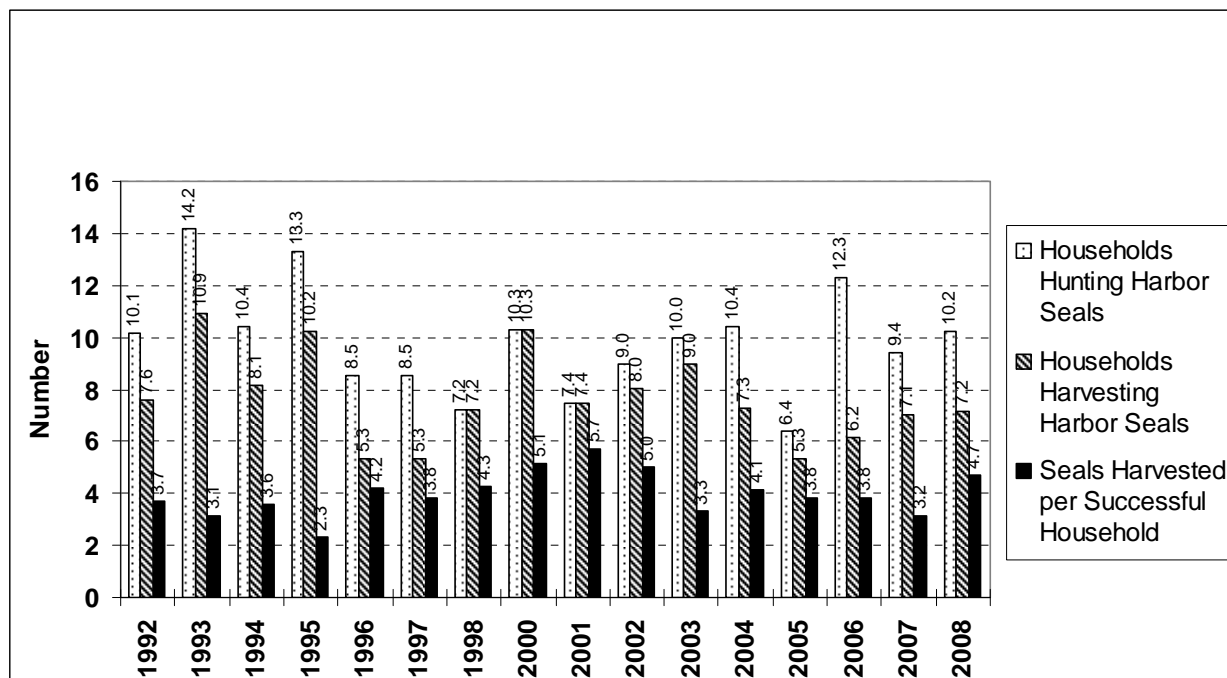


Figure 18.—Harbor seal hunters and success rates, Nanwalek, 1992–2008.

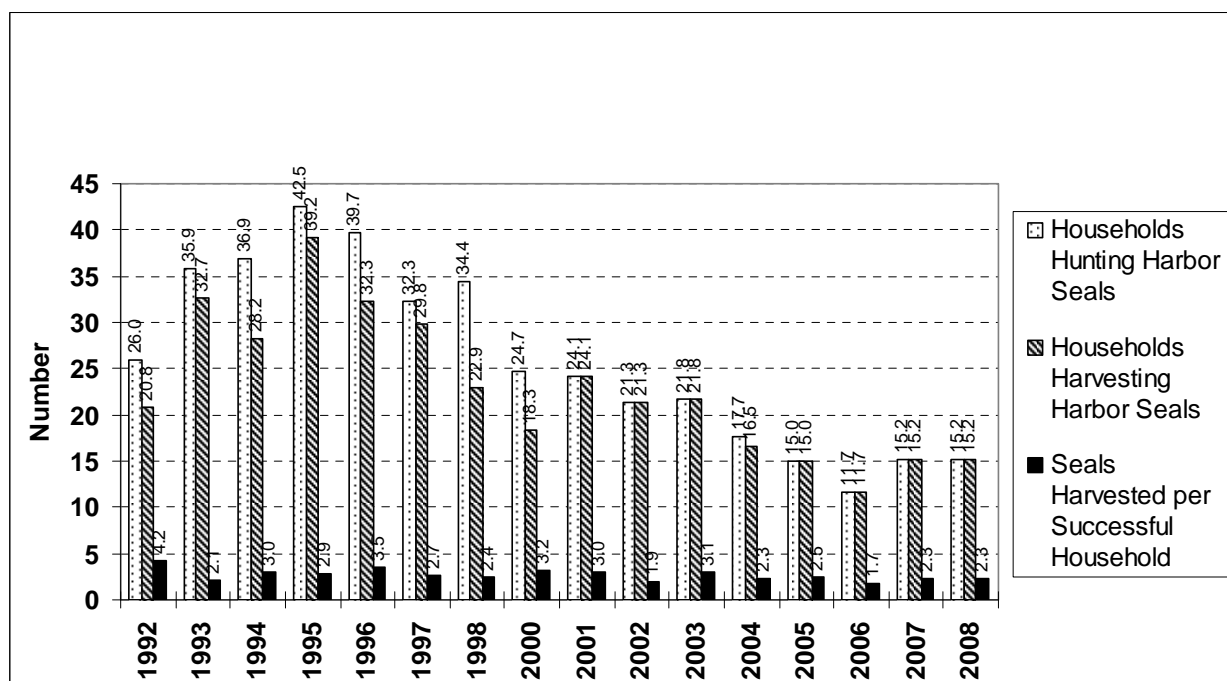
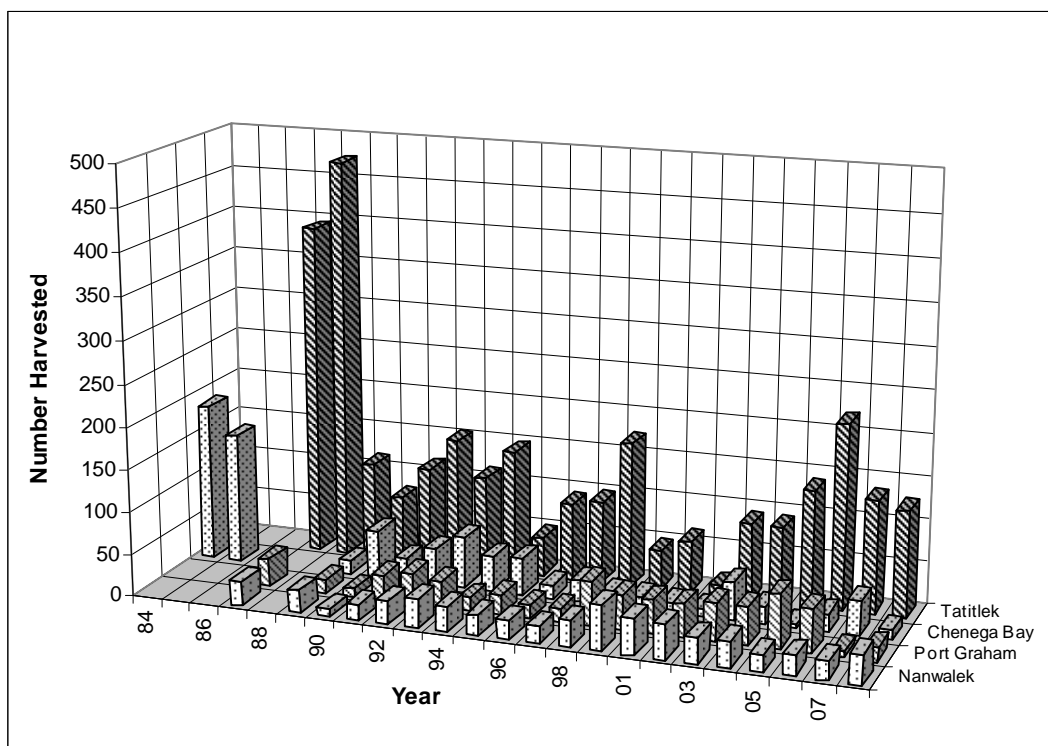


Figure 19.—Harbor seal hunters and success rates, Old Harbor, 1992–2008.

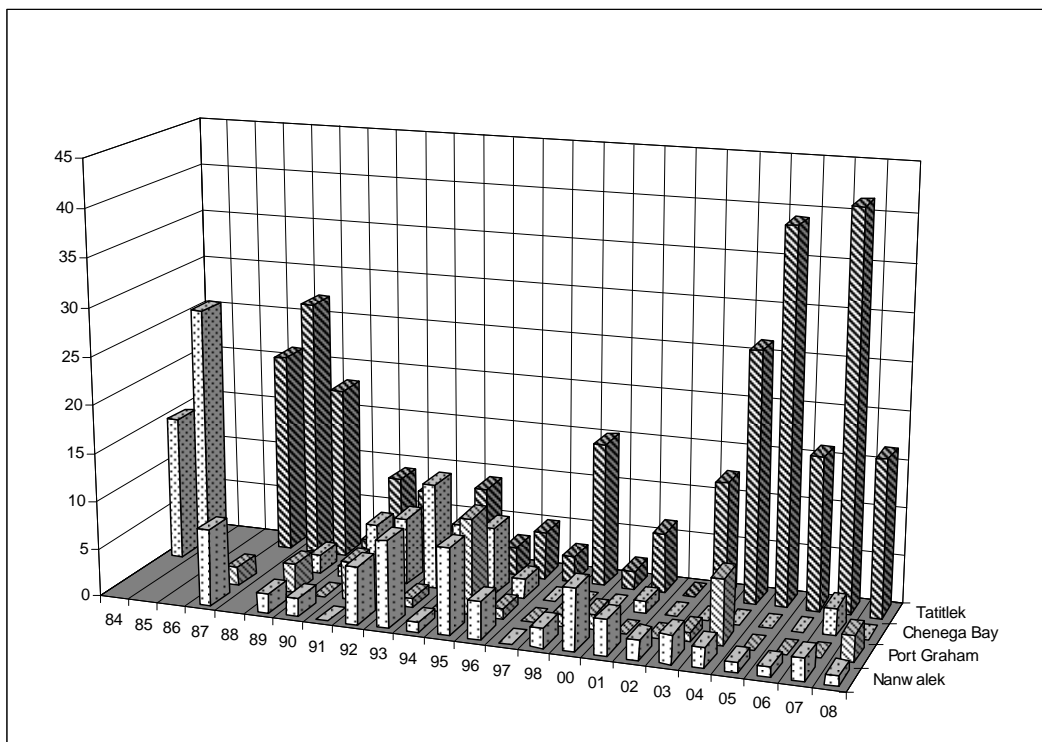
For harvests in 2 regions, the North Pacific Rim and Kodiak Island, a longer time series is available, shown as figures 20 and 22 (struck and lost numbers are not available prior to 1992, so these figures compare only harvest numbers). In the North Pacific Rim, subsistence harvests of harbor seals have been substantially lower during the most recent 10-year survey period compared with harvests recorded prior to 1989, the year of the *Exxon Valdez* oil spill (Figure 20). Families in Prince William Sound reduced their subsistence activities the year of the spill because of the uncertainties of the health safety of consuming wild foods harvested from oiled areas. Subsistence harvest levels showed signs of some recovery since the spill, particularly in Nanwalek and Port Graham along Lower Cook Inlet. The 2008 survey at Tatitlek (125 seals) in Prince William Sound recorded a rebound from 2002, the poorest seal harvest on record in this community (13 seals). The other 3 communities had mid range seals harvests in 2008. For Kodiak Island villages, the 103 seals harvested in 2008 were substantially fewer than those recorded 2 decades before (478 seals in 1982) (Figure 22). In this area, harbor seal harvests appear to have been in decline during the 1980s, followed by increases again during the 1990s at Old Harbor and Ouzinkie. In other Kodiak Island communities, harvests have remained low and variable since the 1990s.

The longer time series represented by the North Pacific Rim and Kodiak Island areas provide a cautionary note about interpreting trends in subsistence patterns described since 1992, the start of the most recent survey series. Reported harbor seal harvests were substantially higher a decade earlier in the North Pacific Rim and Kodiak Island areas. The pattern of use documented for 1992–2008 in those areas may represent observations at relatively lower points within longer term harvest cycles. The longer time series above may better represent the potential ranges of subsistence takes in these areas. Should conditions return to those during the 1980s, subsistence harvests of harbor seals might increase as well.



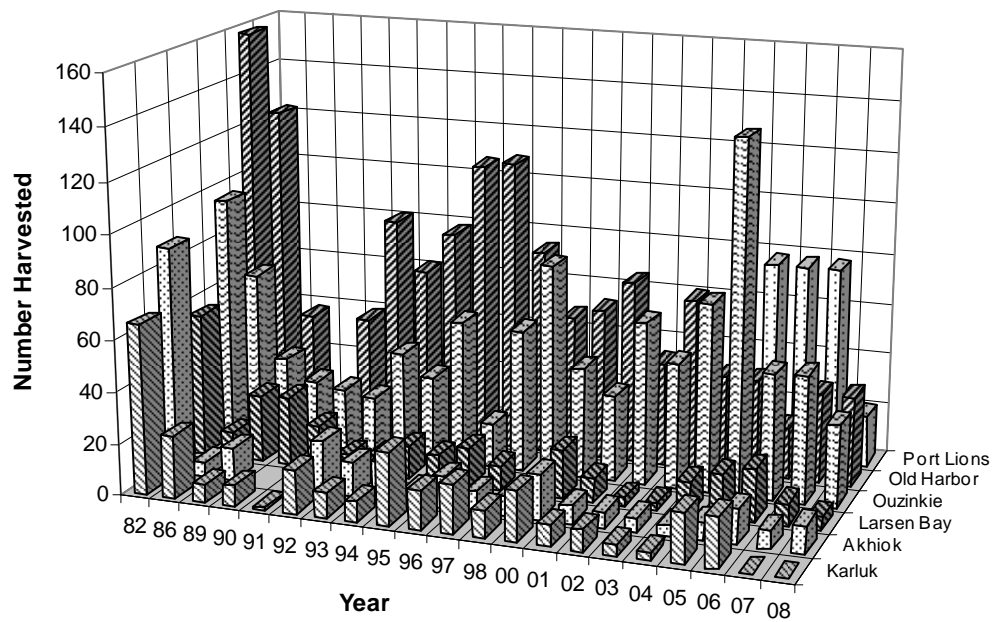
HARBOR SEAL HARVESTS				
Year	Nanwalek	Port Graham	Chenega Bay	Tatitlek
1984			186	
1985			154	
1986				
1987	29	32		393
1988				473
1989	27	17	16	113
1990	9	10	57	76
1991	18	30	28	114
1992	28	36	43	153
1993	34	31	61	111
1994	29	16	42	146
1995	24	23	44	46
1996	22	16	16	91
1997	20	16	26	97
1998	31	52	16	171
2000	53	40	15	46
2001	42	39	13	62
2002	40	39	9	13
2003	30	45	45	91
2004	30	44	21	90
2005	20	63	5	138
2006	24	51	21	219
2007	22	8	40	133
2008	34	17	11	125

Figure 20.—Change in harbor seal harvests, North Pacific Rim communities.



SEA LION HARVESTS				
Year	Nanwalek	Port Graham	Chenega Bay	Tatitlek
1984			15	
1985			27	
1986				
1987	8	2		21
1988				27
1989	2	3	2	18
1990	2	0	1	2
1991	0	4	6	9
1992	6	4	7	8
1993	9	1	11	4
1994	1	0	7	9
1995	9	10	7	3
1996	4	1	2	5
1997	0	0	0	3
1998	2	1	0	15
2000	6	2	0	2
2001	4	0	1	6
2002	2	0	0	0
2003	3	1	0	12
2004	2	7	0	26
2005	1	0	0	39
2006	1	0	0	16
2007	2	0	3	41
2008	1	3	0	17

Figure 21.—Change in sea lion harvests, North Pacific Rim Communities.

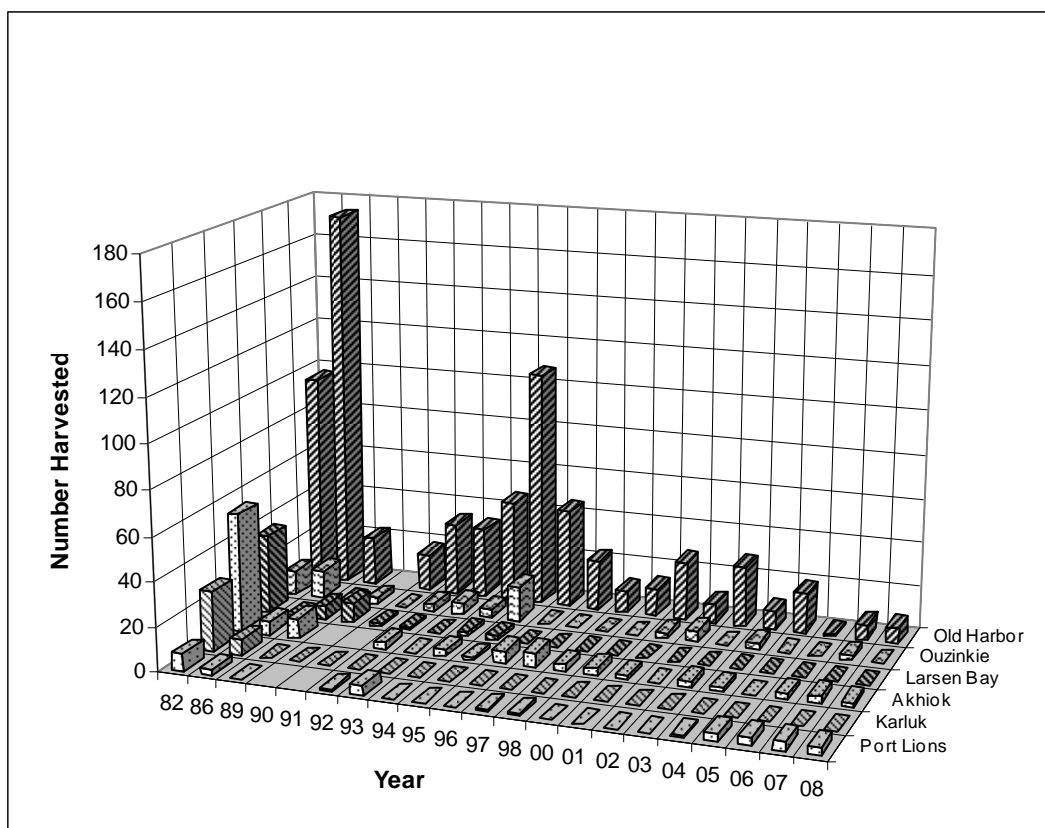


HARBOR SEAL HARVESTS						
Year	Port Lions	Karluk	Akhiok	Larsen Bay	Ouzinkie	Old Harbor
1982	13	66	89	56	96	158
1986	28	24	6	10	67	127
1989	2	7	13	26	34	45
1990		8		27	26	
1991		1		17	24	46
1992	37	17	20	7	22	87
1993	26	10	13	8	41	68
1994	8	8	15	13	33	84
1995	2	28	5	11	56	112
1996	4	15	12	15	17	114
1997	5	19	8	10	55	80
1998	6	11	7	2	82	55
2000	6	20	18	19	43	59
2001	9	8	7	9	33	71
2002	13	8	6	3	63	40
2003	13	4	5	3	49	67
2004	21	3	4	13	73	38
2005	77	19	7	17	137	38
2006	77	19	14	20	49	20
2007	77	0	7	9	50	35
2008	20	0	10	5	32	35

Figure 22.—Change in harbor seal harvests, Kodiak Island communities.

In contrast with the declining takes of harbor seals from 1992–2008, there has been greater consistency in the age and sex composition of the statewide harbor seal harvest. Figures 26 and 27 compare statewide patterns in the age and sex composition of the subsistence harvests of harbor seals since 1992. At the statewide level, hunters consistently have reported harvesting more male than female harbor seals each year. Considering harvests of known sex for harbor seals, male to female sex ratios have ranged between 2.0 to 3.3 males to 1 female (Figure 26). At the statewide level, age composition has been fairly similar between years (Figure 27): hunters report harvesting primarily adult harbor seals (from 73.4% to 87.6% of the annual harvest), with smaller proportions of juvenile seals (9.6% to 21.6%) and pups (0.2% to 6.0%).

Figures 28 and 29 compare age and sex compositions of harbor seal harvests at the regional level. There is considerable similarity between regions and years for harbor seal sex composition (Figure 28). Counting harvested animals whose sex was reported from 1992–2008, all regions showed more male seals to female seals harvested: Southeast (68.1% males), North Pacific Rim (70.4% males), Kodiak Island (76.0% males), South Alaska Peninsula (77.9% males), Aleutian Islands (70.7% males), and North and South Bristol Bay (70.6% males). A number of factors probably contribute to the predominance of males over females in the subsistence harvest of harbor seals across regions and years, as discussed in Wolfe and Mishler (1998). The higher number of males harvested likely reflects the greater availability of males in the groups of animals hunted due to sex segregation in seal groups, and due to female seals being more elusive than male seals when disturbed in a group presenting comparatively fewer or more difficult targets (see Wolfe and Mishler 1998:60–61, Wolfe et al. 1999).



SEA LION HARVESTS						
Year	Port Lions	Karluk	Akhiok	Larsen Bay	Ouzinkie	Old Harbor
1982	8	27	54	36	11	96
1986	3	7	6	0	13	173
1989	0	0	9	6	0	22
1990		0		9	3	
1991		0		1	0	17
1992	1	0	3	1	3	33
1993	4	0	0	0	5	32
1994	0	0	3	2	4	46
1995	0	0	1	2	16	107
1996	0	0	6	0	0	45
1997	1	0	7	0	0	23
1998	1	0	3	0	0	10
2000	0	0	3	0	0	13
2001	0	0	1	0	3	26
2002	0	0	0	0	5	9
2003	0	0	3	0	0	28
2004	1	0	1	0	3	8
2005	4	0	0	0	0	18
2006	4	0	2	0	0	1
2007	4	0	3	0	2	7
2008	3	0	2	0	0	7

Figure 23.—Change in sea lion harvests, Kodiak Island communities.

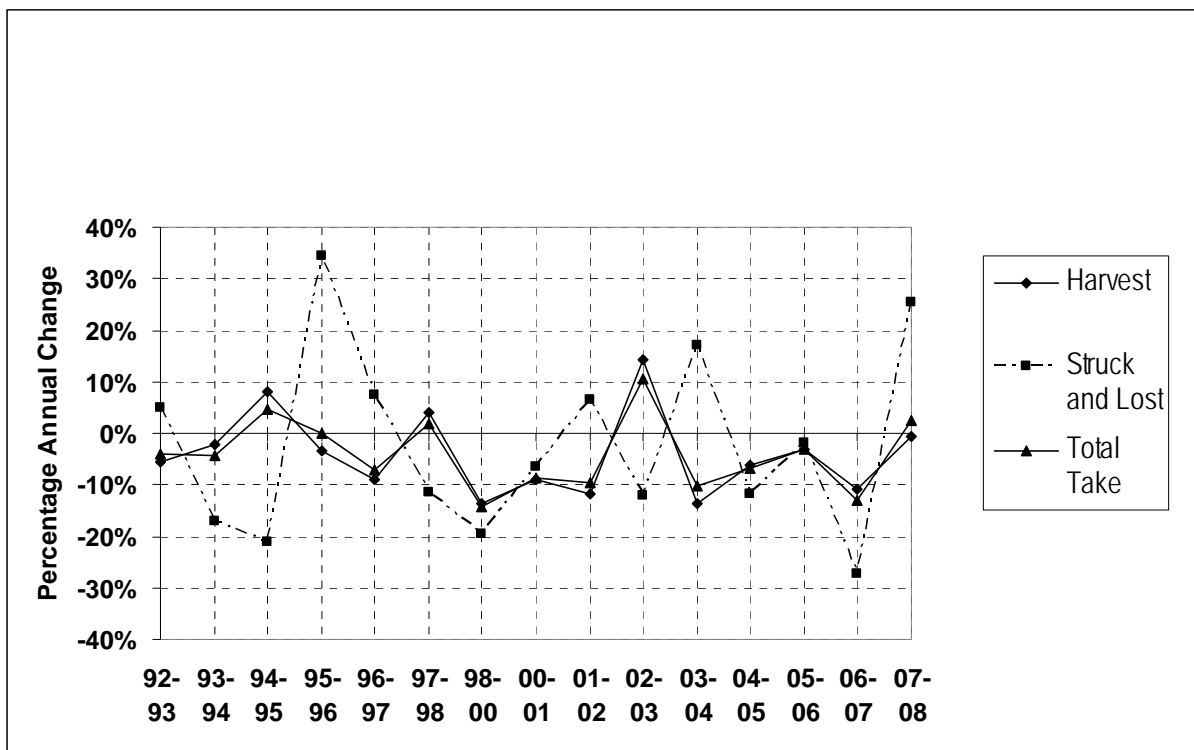


Figure 24.—Percentage annual changes in harvest, struck and lost, and total take, harbor seals, 1992–2008.

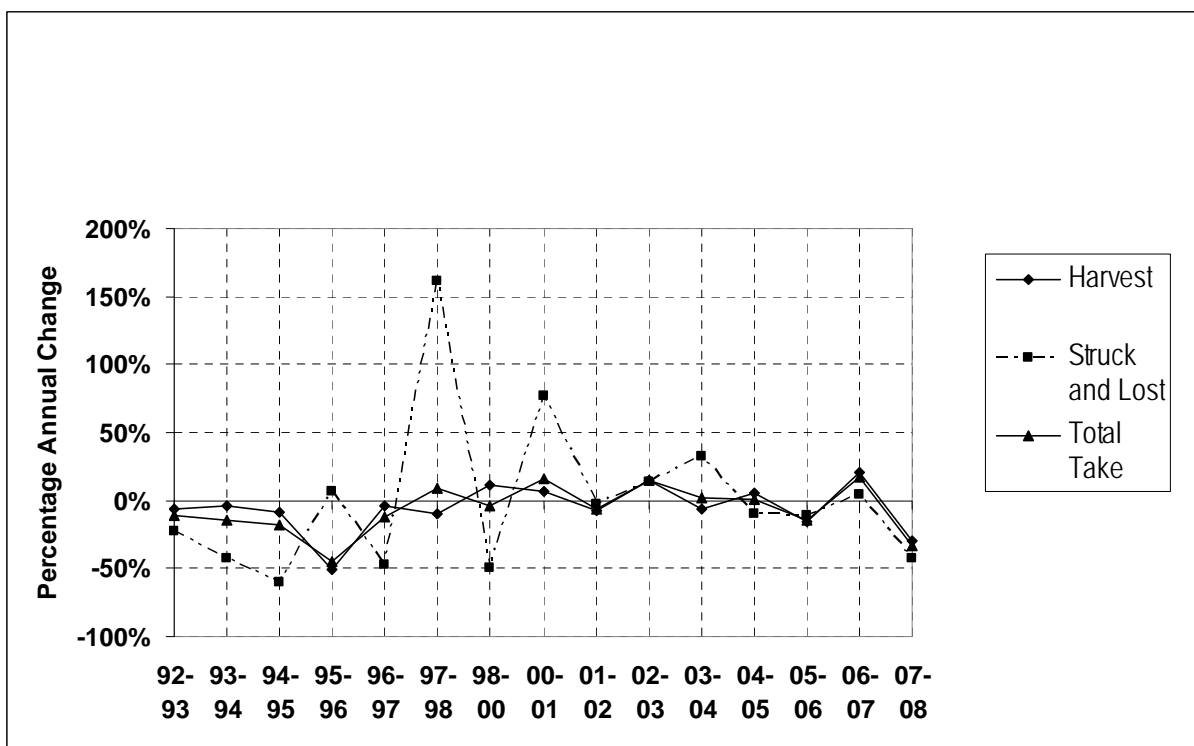


Figure 25.—Percentage annual changes in harvest, struck and lost, and total take, sea lions, 1992–2008.

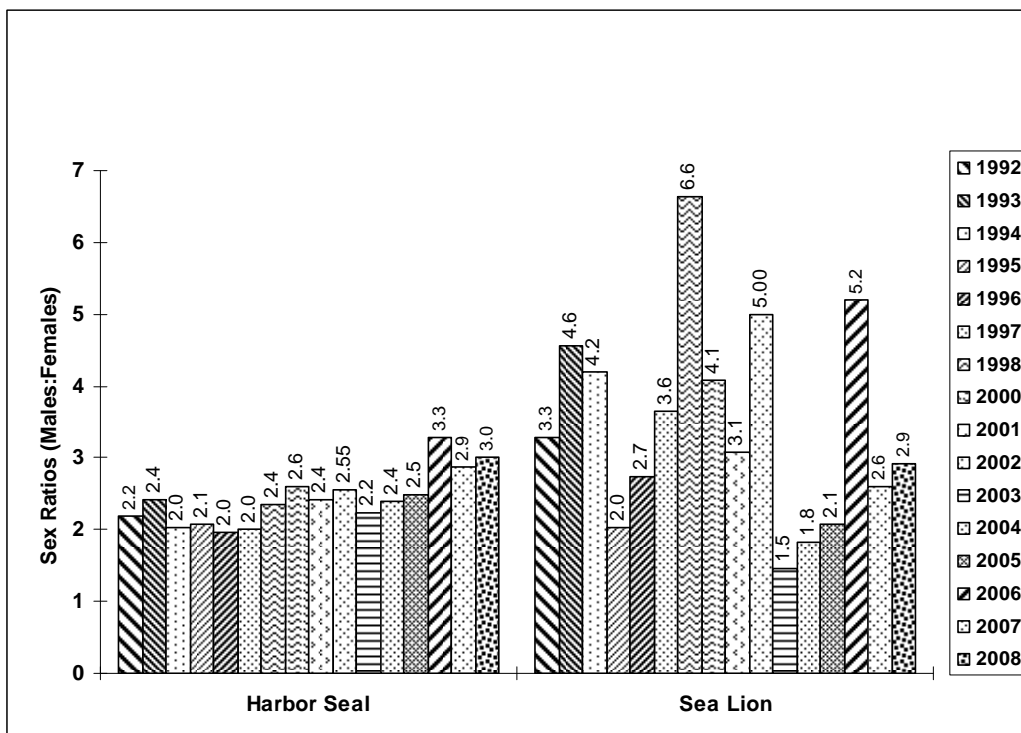


Figure 26.—Sex ratios (males:females) of harbor seal and sea lion harvests reported by Alaska Native hunters, 1992–2008.

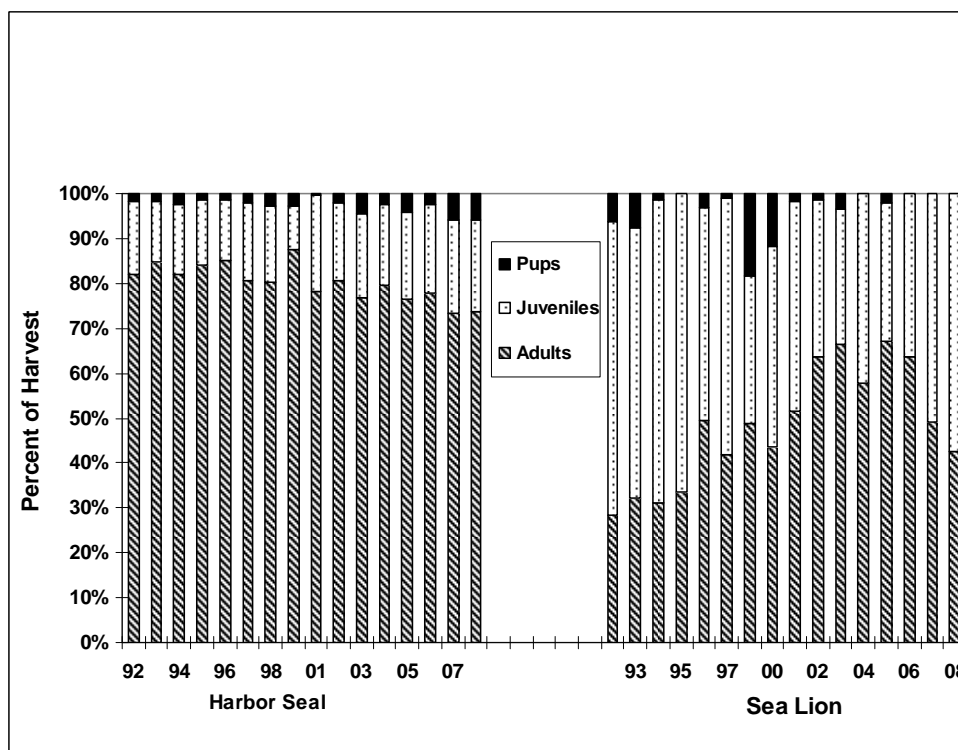


Figure 27.—Age structure (pups, juveniles, adults) of harbor seal and sea lion harvests reported by Alaska Native Hunters, 1992–2008.

The age composition of the subsistence harvest of harbor seals varies substantially between regions and presents a more complex picture than sex ratios (Figure 29). Since 1992, hunters have been asked to classify the seal harvest into “pups,” “juveniles,” and “adults.” Probably most hunters answer this question using size and behavior as main indicators, so that the smallest seals with their mothers are classified as “pups,” small-sized seals are classified as “juveniles,” and medium-to-large seals are classified as “adults.” The hunters’ category of “juveniles” probably primarily includes yearlings (6–17.9 months), which are about 30% 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% of adult weight (Bigg 1969:21, Pitcher and Calkins 1979:30).

Based on hunter reports, the percentages of juveniles in the harvest differed substantially between regions during 1992–2008 (Figure 29). Of all the seals harvested during 1992–2008 in the Southeast Region, only 10.5% were reported to be juvenile seals. Bristol Bay seal harvests also had a relatively low juvenile composition of 16.4% juvenile seals. Other regions had greater proportions of juvenile seals in their annual harvests, including South Alaska Peninsula (21.2%), Kodiak Islands (22.2%), North Pacific Rim (28.0%), and the Aleutian Islands (38.4%). These age patterns possibly reflect differences in the age compositions of seal populations accessible to hunters, perhaps due to different population structures in each region. The older ages of harvested seals in the Southeast region may reflect relatively larger and more stable seal populations with proportionately larger older age classes in the population, while the younger ages of seals harvested in other regions may reflect populations which are rebuilding, with proportionately larger young age classes.

As shown in Figure 29, the reported age compositions of the seal harvests have seen substantial between-year changes for some regions. In recent years, the proportions of juvenile seals have fallen substantially in the Kodiak Islands. In the Southeast region, the proportion of juvenile harvests has been increasing, from 7.4% (2002) to 26.9% (2008). In the Aleutian Islands, the juvenile proportions fell markedly in 2006 and 2007 but rose again in 2008.

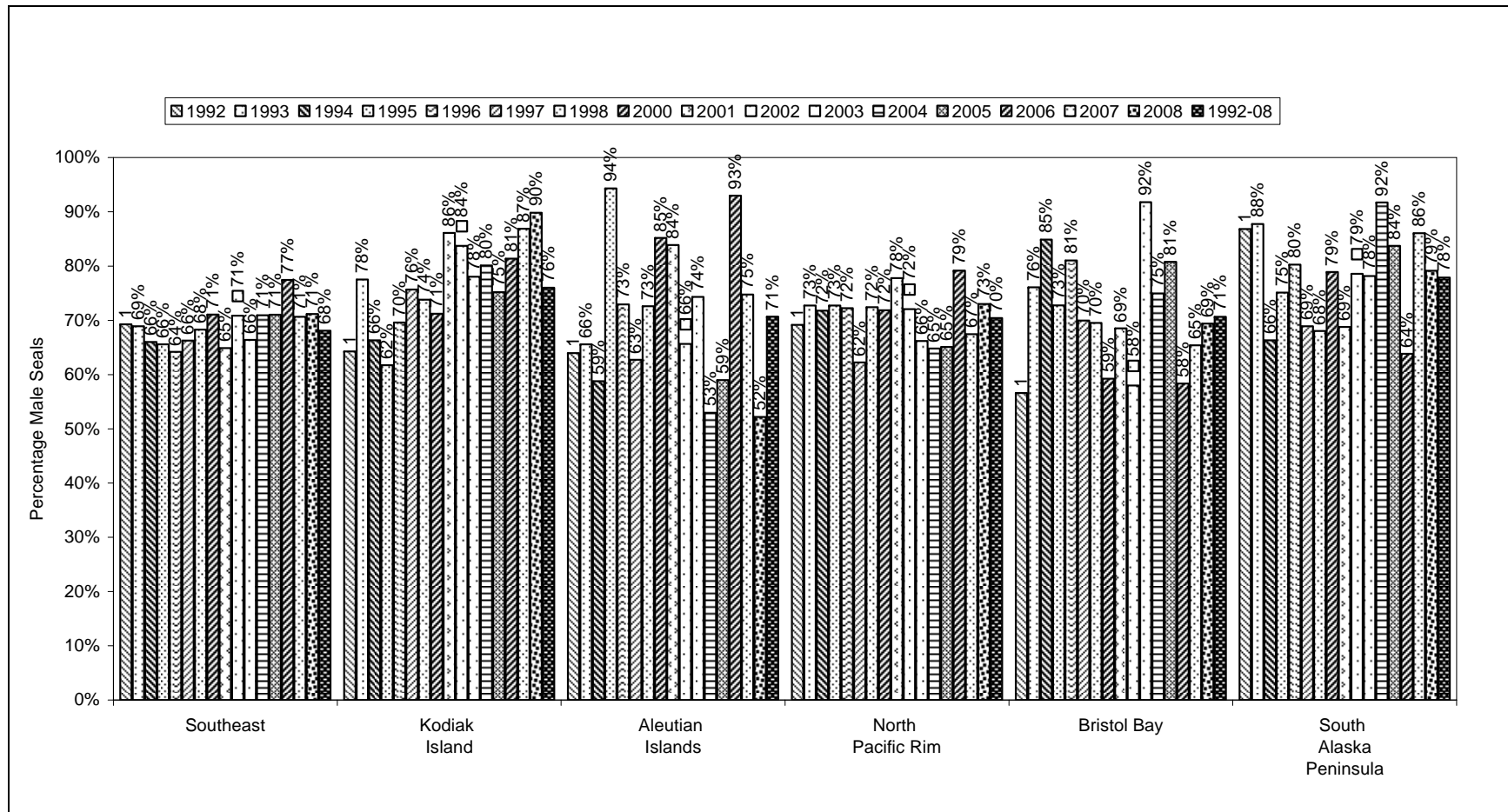


Figure 28.—Percentage of harbor seal harvests reported as male seals by hunters, 1992–2008.

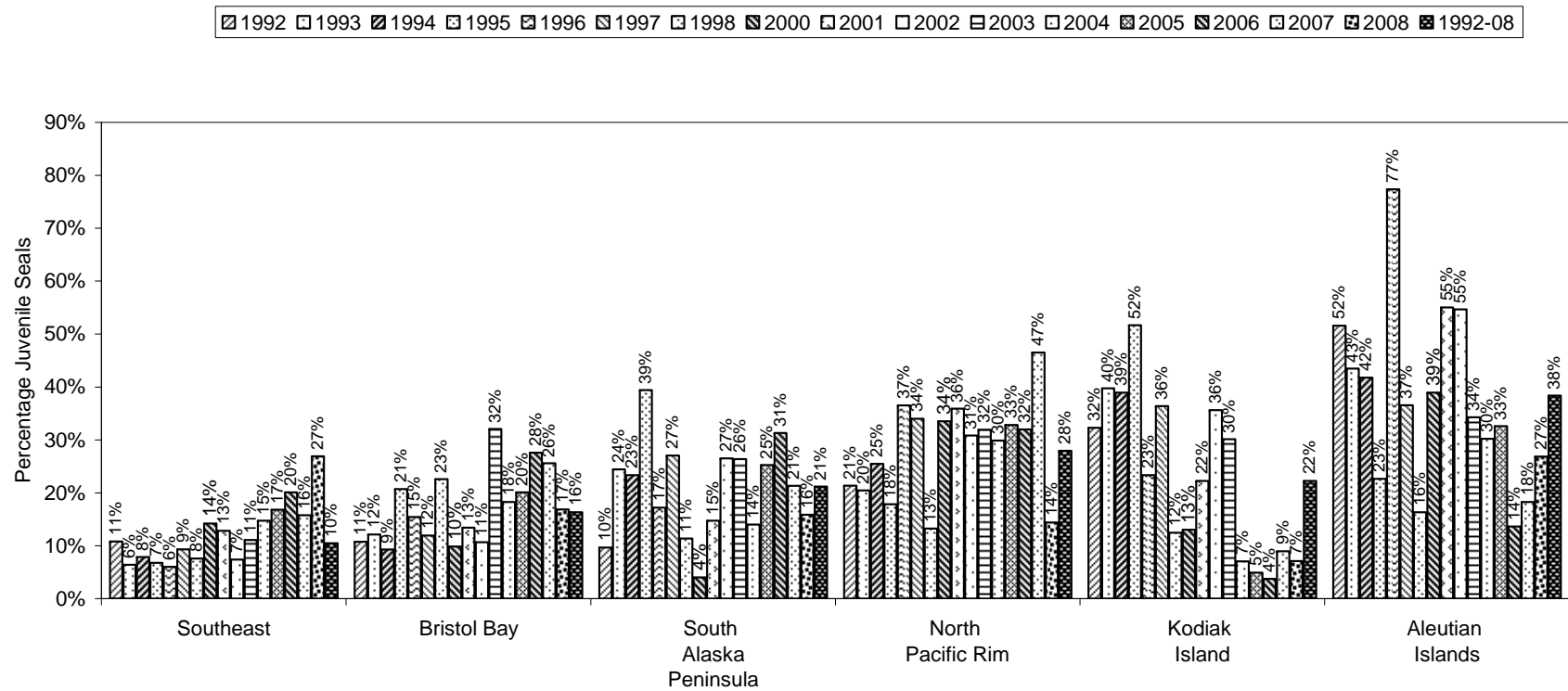


Figure 29.—Percentage of harbor seal harvests reported as juvenile seals by hunters, 1992–2008.

The reasons for changes in age composition are not known. If the age composition of the harvest reflects the age structures of local seal populations, which is speculation at this time, then at least 2 potential explanations present themselves. One interpretation might be that low juvenile harvests on particular years may reflect a relatively low production of young seals in a region during spring and summer. If this is the case, the juvenile proportion in the annual harvest may be an index of annual biological productivity of a local population. However, a second interpretation of the age composition data may relate the juvenile proportion to aging cohorts. A relatively high production of young seals during a particular year may create a relatively large cohort of young seals on a particular year. In another year or two, harvested seals from this aging cohort will likely be classified primarily as “adults” by hunters. Under this second interpretation, a decrease of juveniles on a particular year may be due to a greater number of available new adults in a local population rather than due to a change in the production of young seals.

It is beyond the scope of this research to test for the likelihood of these or other potential explanations. However, the changes in age composition over time in 3 regions are illustrated in Figures 30–32, which present adult and juvenile harbor seal harvests by month from January 1992 through December 2008 for the Southeast, Kodiak Island, and North Pacific Rim regions (no data are available for 1999). This time series does not arbitrarily divide years between December 31 and January 1, as in Figure 29, but allows for a combination of the calendar years to better visualize trends. A comparison of the Southeast harvest (Figure 30) with the Kodiak harvest (Figure 31) clearly illustrates the difference in the proportion of juveniles in the harvests: in Southeast Alaska, juveniles show more consistency as a low part of the harvest, compared with Kodiak Island, where as many juveniles are taken as adults in some years. The Kodiak Island harvest time series (Figure 31) shows relatively low juvenile harvests relative to adults for certain time periods: July 1996–June 1997, November 1997–December 1998, January 2000–December 2000, and July 2004–December 2008. In the neighboring North Pacific Rim (Figure 31), juvenile harvests were high relative to adults in July 1996–1997, low from January 1998

through December, and high from January through October 2000. In the Southeast series, the proportion of juveniles, while low, has been increasing since about 2000 (Figure 29). Such complex patterning of the age composition of harbor seal harvests may be related to annual changes in seal productivity and age class structures in local seal populations.

Sea Lion Subsistence Trends, 1992-2008

Total subsistence takes of sea lions by Alaska Natives sharply declined from 1992 to 1995, with takes leveling off between 1996 and 2008 (Tables 20, 23, 24; Figures 10, 25). The lowest recorded sea lion takes (146 animals) occurred in 2008, representing 26.6% of the subsistence take in 1992 (549 animals).

At the regional level, the 36 sea lions reported taken by hunters on the Pribilof Islands was similar to the average take since 2000 (39 sea lions), though substantially fewer than reported in 1992 (297 animals) (Figure 13). The sea lion take in the Aleutian Islands area (48 animals) was the lowest since 1998 (37 animals), considerably below the 135 animals taken in 1992. In Kodiak Island areas, the sea lion take in 2008 (19 animals) was similar to the average take since 2000 (21 sea lions) (Figure 13).

In the North Pacific Rim and Kodiak Island regions, longer time series are available (Figures 21 and 23). Documented sea lion harvests in Tatitlek and Chenega Bay ranged as high as 27 animals in each place during the 1980s. In 2008, no sea lions were reported harvested in Chenega Bay, while 17 were harvested at Tatitlek (Figure 21). Harvests at Nanwalek and Port Graham show yearly variation between 1 and 19 animals. The 2 communities harvested 4 sea lions in 2008. On Kodiak Island, sea lion harvests declined substantially during the 1980s—232 (1982), 202 (1986) and 37 (1989)—but rebounded again to 126 in 1995 because of increased harvests at Old Harbor and Ouzinkie. Kodiak Island harvested 12 sea lions in 2008, with none reported for 3 of 6 villages (Figure 23). The longer time series indicate that sea lion harvests have been declining in the North Pacific Rim and Kodiak Island areas, with the declines commencing during the 1980s for Kodiak Island communities.

Table 19.—Subsistence harbor seal takes by Alaska Natives by region, 1992–2008.

Region	Struck and 1992			Struck and 1993			Struck and 1994			Struck and 1995		
	Harvest	Lost	Take	Harvest	Lost	Take	Harvest	Lost	Take	Harvest	Lost	Take
Southeast Alaska	1,475.4	189.5	1,664.9	1,425.0	190.0	1,615.0	1,348.5	151.4	1,499.9	1,719.1	170.9	1,890.0
North Pacific Rim	377.6	33.4	411.0	412.3	38.5	450.8	411.2	56.8	468.0	252.1	11.7	263.9
U. Kenai–Cook Inlet	51.6	0.0	51.6	49.2	5.6	54.8	16.2	0.0	16.2	3.7	0.0	3.7
Kodiak Island	225.5	13.1	238.6	171.7	20.1	191.8	168.2	3.6	171.7	223.0	9.2	232.2
S. AK Peninsula	115.5	13.1	128.6	100.0	23.1	123.1	98.6	11.1	109.8	117.0	11.1	128.0
Aleutian Islands	94.3	21.4	115.7	85.0	15.4	100.4	124.9	22.6	147.5	86.9	9.7	96.6
Pribilof Islands	2.3	1.2	3.5	2.3	1.2	3.5	7.3	0.0	7.3	2.5	0.0	2.5
South Bristol Bay	99.0	68.6	167.6	73.6	57.3	130.9	121.6	59.3	180.9	68.3	28.3	96.6
North Bristol Bay	58.4	13.2	71.6	46.1	20.0	66.1	16.2	3.3	19.5	25.9	2.4	28.3
Alaska Total	2,499.7	353.4	2,853.1	2,365.3	371.1	2,736.4	2,312.8	308.0	2,620.8	2,498.5	243.3	2,741.8

Region	Struck and 1996			Struck and 1997			Struck and 1998			Struck and 2000		
	Harvest	Lost	Take	Harvest	Lost	Take	Harvest	Lost	Take	Harvest	Lost	Take
Southeast Alaska	818.0	128.0	946.0	1,343.4	224.1	1,567.4	1,414.0	202.4	1,616.4	1,209.7	151.4	1,361.1
North Pacific Rim	189.7	10.9	200.6	295.0	12.8	307.7	393.5	41.4	434.9	289.9	29.8	319.7
U. Kenai–Cook Inlet	0.0	0.0	0.0	101.7	8.8	110.5	79.2	13.5	92.7	79.2	13.5	92.7
Kodiak Island	1,998.4	1.2	7.6	189.8	18.3	208.2	174.0	3.7	177.7	185.9	7.3	193.2
S. AK Peninsula	97.2	32.6	129.8	68.3	12.1	80.4	79.9	7.5	87.4	65.4	18.4	83.8
Aleutian Islands	48.2	47.2	95.5	70.5	6.3	76.9	45.8	3.8	49.6	79.0	10.5	89.5
Pribilof Islands	29.2	3.8	32.9	0.0	0.0	0.0	4.6	0.0	4.6	0.0	0.0	0.0
South Bristol Bay	24.3	2.0	26.3	107.8	66.3	174.1	62.2	34.3	96.5	55.4	17.6	73.0
North Bristol Bay	0.0	0.0	0.0	18.8	2.1	20.9	33.2	3.6	36.8	10.4	1.1	11.6
Alaska Total	3,205.1	225.7	1,438.7	2,195.3	350.8	2,546.2	2,286.4	310.3	2,596.7	1,974.8	249.6	2,224.4

-continued-

Table 19, continued.

Region	Struck and Lost 2001			Struck and Lost 2002			Struck and Lost 2003			Struck and Lost 2004		
	Harvest	Take	Take	Harvest	Take	Take	Harvest	Take	Take	Harvest	Take	Take
Southeast Alaska	1,019.9	155.9	1,175.7	877.0	129.8	1,006.8	945.1	123.7	1,068.8	743.0	102.3	845.3
North Pacific Rim	279.9	20.1	300.0	251.9	35.2	287.1	348.8	25.3	374.1	322.7	43.2	365.9
U. Kenai–Cook Inlet	91.2	2.7	93.9	75.2	8.0	83.2	90.8	15.0	105.8	56.6	13.4	69.9
Kodiak Island	155.6	4.8	160.4	152.1	10.2	162.3	172.7	13.0	185.6	172.2	15.7	188.0
S. AK Peninsula	68.7	16.3	85.1	70.0	19.4	89.4	91.1	13.5	104.5	77.9	10.1	88.0
Aleutian Islands	120.1	12.5	132.6	63.4	2.4	65.9	97.7	11.4	109.1	118.0	28.0	146.0
Pribilof Islands	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Bristol Bay	52.9	19.8	72.7	79.7	36.8	116.6	35.6	15.3	50.9	58.5	31.2	89.6
North Bristol Bay	8.8	1.2	10.0	15.5	7.4	23.0	29.8	1.4	31.2	17.6	11.7	29.3
Alaska Total	1,797.1	234.3	2,031.4	1,585.0	249.2	1,834.2	1,811.6	218.5	2,030.1	1,566.4	255.6	1,822.0

Region	Struck and Lost 2005			Struck and Lost 2006			Struck and Lost 2007			Struck and Lost 2008		
	Harvest	Take	Take	Harvest	Take	Take	Harvest	Take	Take	Harvest	Take	Take
Southeast Alaska	545.5	88.7	634.2	592.7	114.8	707.6	585.7	68.2	653.8	533.9	60.1	593.9
North Pacific Rim	347.4	47.8	395.2	411.1	29.7	440.8	238.0	30.5	268.4	243.7	33.1	276.7
U. Kenai–Cook Inlet	37.6	13.3	50.9	37.6	13.3	50.9	27.0	4.0	31.0	33.1	3.5	36.7
Kodiak Island	305.1	10.6	315.7	210.3	10.2	220.5	198.6	5.8	204.4	165.5	26.5	192.0
S. AK Peninsula	66.8	8.5	75.3	52.5	20.6	73.0	88.0	18.4	106.4	107.5	17.3	124.8
Aleutian Islands	103.7	17.1	120.8	54.4	8.6	63.0	68.5	6.9	75.3	43.5	6.0	49.5
Pribilof Islands	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 Bristol Bay	40.3	30.8	71.1	45.4	14.0	59.4	52.3	22.0	74.3	66.9	38.2	105.1
North Bristol Bay	23.9	8.9	32.7	19.1	9.9	29.0	8.8	5.2	14.0	65.6	17.2	82.8
Alaska Total	1,470.3	225.6	1,695.9	1,423.1	221.2	1,644.2	1,266.9	160.9	1,427.7	1,259.7	201.8	1,461.5

Note: Surveys not completed for study year 1999.

Table 20.—Subsistence sea lion takes by Alaska Natives by Region, 1992–2008.

Region	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	1992			1993			1994			1995		
Southeast Alaska	5.2	1.3	6.4	0.0	1.1	1.1	3.5	1.1	4.6	0.0	0.0	0.0
North Pacific Rim	25.1	6.5	31.5	26.2	8.7	34.9	16.6	9.7	26.3	28.4	3.0	31.4
U. Kenai–Cook Inlet	5.7	3.8	9.5	7.8	3.3	11.1	1.4	0.0	1.4	0.0	0.0	0.0
Kodiak Island	41.5	16.3	57.8	41.5	16.9	58.4	57.1	4.2	61.3	127.9	7.7	135.7
S. AK Peninsula	2.4	0.0	2.4	4.6	1.2	5.7	4.6	1.1	5.7	8.1	0.0	8.1
Aleutian Islands	104.3	30.9	135.2	99.0	24.8	123.8	101.8	20.5	122.3	85.0	11.1	96.1
Pribilof Islands*	176.6	120.2	296.8	165.4	80.0	245.4	149.8	43.5	193.3	57.6	10.3	67.9
South Bristol Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Bristol Bay	7.8	0.0	7.8	3.3	3.3	6.5	1.2	0.0	1.2	0.0	0.0	0.0
Alaska Total	368.5	178.9	547.4	347.8	139.3	487.1	336.0	80.1	416.1	307.1	32.1	339.2

Region	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	1996			1997			1998			2000		
Southeast Alaska	0.0	0.0	0.0	0.0	0.0	0.0	3.3	4.4	7.6	2.3	0.0	2.3
North Pacific Rim	12.4	1.1	13.5	4.5	1.4	5.8	20.0	8.5	28.5	11.7	5.0	16.7
U. Kenai–Cook Inlet	3.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak Island	53.9	6.3	60.2	33.3	4.9	38.2	14.5	3.3	17.8	18.5	0.0	18.5
S. AK Peninsula	3.7	1.3	5.0	8.3	0.0	8.3	9.2	0.0	9.2	13.8	0.0	13.8
Aleutian Islands	46.5	11.3	57.9	50.7	1.3	51.9	31.6	5.5	37.0	71.2	4.8	76.0
Pribilof Islands*	32.2	14.2	46.4	45.5	10.4	55.9	52.7	25.4	78.1	29.1	14.2	43.3
South Bristol Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Bristol Bay	0.0	0.0	0.0	3.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0
Alaska Total	152.1	34.1	186.2	145.7	17.9	163.7	131.2	47.0	178.2	146.6	24.0	170.6

Region	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	2001			2002			2003			2004		
Southeast Alaska	0.0	0.0	0.0	7.0	0.0	7.0	2.3	4.6	6.9	4.6	7.2	11.8
North Pacific Rim	14.7	0.0	14.7	5.5	0.0	5.5	19.1	5.6	24.7	38.0	15.8	53.9
U. Kenai–Cook Inlet	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak Island	32.8	2.2	35.0	16.1	0.0	16.1	30.3	5.7	36.0	13.5	3.5	17.0
S. AK Peninsula	10.2	1.4	11.6	3.9	4.2	8.1	2.5	2.4	5.0	3.9	0.0	3.9
Aleutian Islands	78.1	19.6	97.7	87.4	17.7	105.1	88.5	18.5	107.0	70.9	25.1	96.0
Pribilof Islands*	19.0	19.0	38.0	24.0	19.0	43.0	22.3	9.7	32.0	18.3	13.7	32.0
South Bristol Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Bristol Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2
Alaska Total	156.2	42.2	198.4	143.9	40.9	184.7	165.0	46.5	211.5	150.4	65.4	215.7

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Table 20, continued.

Region	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take
	2005			2006			2007			2008		
Southeast Alaska	0.0	19.0	19.0	2.5	10.1	12.6	0.0	6.1	6.1	1.7	8.0	9.6
North Pacific Rim	40.1	9.1	49.2	17.0	8.0	25.0	47.5	10.3	57.8	20.3	4.3	24.6
U. Kenai–Cook Inlet	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak Island	21.9	3.2	25.1	7.0	0.0	7.0	15.8	3.5	19.3	12.1	6.7	18.8
S. AK Peninsula	4.2	0.0	4.2	17.5	1.1	18.5	9.7	0.0	9.7	7.2	1.4	8.6
Aleutian Islands	77.7	10.6	88.3	63.4	19.4	82.8	61.3	14.7	76.0	45.8	2.6	48.4
Pribilof Islands*	18.3	13.7	32.0	29.3	10.7	40.0	31.3	16.7	48.0	29.3	6.7	36.0
South Bristol Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Bristol Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alaska Total	162.2	55.6	217.8	136.8	49.2	186.0	165.7	51.3	217.0	116.4	29.6	146.0

Note: Surveys not completed for study year 1999.

* St. Paul's 2000–2008 data from Zavadil et al. (2006), Lestenkof and Zavadil (2006), Lestenkof et al. (2007, 2008), and Jones (2009).

Table 21.—Subsistence harbor seal takes by Alaska Natives by Eastern Gulf of Alaska communities, 1992–2008.

Community	Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take		
	1992			1993			1994			1995			1996		
Southeast Alaska															
Angoon	125.1	28.9	154.0	56.6	9.9	66.5	66.9	21.1	88.0	80.9	9.7	90.6	71.0	2.0	73.0
Craig	74.2	0.0	74.2	51.1	9.8	60.9	42.7	6.6	49.3	69.4	13.6	83.1	48.2	8.0	56.3
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	41.1	3.4	44.6
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	359.7	48.6	408.3
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	15.0	0.0	15.0
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	32.8	1.3	34.1
Kake	173.9	12.3	186.2	100.8	15.2	115.9	99.3	7.4	106.6	72.0	1.5	73.5	86.4	0.0	86.4
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	25.0	0.0	25.0
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	69.8	0.0	69.8
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	6.3	0.0	6.3
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	15.4	0.0	15.4
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	19.5	2.4	21.9
Saxman	22.2	1.2	23.5	5.6	0.0	5.6	16.5	0.0	16.5	15.9	0.0	15.9	4.9	0.0	4.9
Sitka	124.7	21.4	146.1	109.3	20.6	129.9	110.5	20.1	130.6	93.8	6.3	100.0	126.8	4.1	130.9
Wrangell	6.0	8.0	14.0	19.5	9.0	28.5	101.0	27.0	128.0	89.3	22.8	112.0	79.3	22.2	101.5
Yakutat	248.0	61.3	309.3	568.4	57.4	625.8	417.1	35.0	452.1	615.5	79.6	695.1	640.3	124.1	764.5
North Pacific Rim															
Chenega Bay	42.6	2.3	44.9	60.8	2.2	63.0	42.0	3.9	45.9	44.4	1.6	46.0	16.0	3.0	19.0
Cordova	103.8	8.8	112.5	147.4	5.5	152.9	135.8	9.1	144.9	83.4	2.0	85.4	122.2	8.6	130.8
Nanwalek	27.9	0.0	27.9	33.9	3.2	37.1	29.0	4.6	33.7	23.6	0.0	23.6	22.4	0.0	22.4
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	15.5	2.2	17.7
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	3.0	0.0	3.0
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	5.6	0.0	5.6
Tatitlek	152.9	17.7	170.6	110.8	15.5	126.4	145.9	30.9	176.8	46.1	2.6	48.7	90.8	3.8	94.6
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	13.5	4.5	18.0

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Table 21, continued.

Community	Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take		
	1992			1993			1994			1995			1996		
Upper Kenai–Cook Inlet															
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	28.9	6.2	35.1
Homer	--	--	--	4.8	0.0	4.8	12.0	0.0	12.0	0.0	0.0	0.0	10.5	1.5	12.0
Kenai	33.3	0.0	33.3	20.0	0.0	20.0	--	--	--	--	--	--	22.9	1.1	24.0
Tyonek	1.1	0.0	1.1	--	--	--	--	--	--	--	--	--	2.0	0.0	2.0
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	12.0	1.0	13.0
Karluk	16.5	1.5	18.0	10.0	1.3	11.3	7.5	0.0	7.5	28.1	6.8	34.9	15.1	0.0	15.1
Kodiak City	36.9	0.0	36.9	6.0	1.0	7.0	7.6	0.0	7.6	8.8	0.0	8.8	9.0	0.0	9.0
Larsen Bay	6.5	0.0	6.5	7.7	5.5	13.2	13.4	2.2	15.7	11.0	0.0	11.0	15.0	0.0	15.0
Old Harbor	86.8	5.3	92.1	67.6	2.7	70.3	83.7	1.3	85.0	112.0	2.4	114.4	113.5	1.3	114.8
Ouzinkie	21.8	1.1	23.0	41.2	8.7	49.8	33.4	0.0	33.4	56.1	0.0	56.1	16.7	2.6	19.3
Port Lions	36.9	2.2	39.1	26.0	1.0	27.0	8.0	0.0	8.0	2.0	0.0	2.0	4.0	0.0	4.0

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	Struck			Struck			Struck			Struck			Struck		
	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take
Community	1997			1998			2000			2001			2002		
Southeast Alaska															
Angoon	51.0	7.1	58.1	53.0	2.0	55.0	64.3	6.1	70.4	85.0	5.2	90.2	72.7	2.2	74.9
Craig	62.0	7.5	69.5	52.7	5.2	57.9	35.0	3.0	38.0	54.0	4.0	58.0	38.9	5.7	44.6
Haines	36.8	10.5	47.3	30.7	10.6	41.3	17.5	0.0	17.5	19.3	1.1	20.4	19.6	26.2	45.8
Hoonah	143.8	9.9	153.8	169.7	19.8	189.6	147.9	16.0	163.9	143.4	13.2	156.7	96.4	6.0	102.4
Hydaburg	11.5	0.0	11.5	14.4	0.0	14.4	14.4	0.0	14.4	14.4	0.0	14.4	14.4	0.0	14.4
Juneau	99.0	0.0	99.0	90.4	15.3	105.7	59.9	3.5	63.4	29.9	1.6	31.5	17.2	1.4	18.7
Kake	68.4	7.6	76.0	123.0	6.1	129.1	101.7	3.6	105.3	85.6	10.7	96.4	98.2	10.6	108.7
Ketchikan	27.4	4.3	31.8	26.7	0.0	26.7	111.7	0.0	111.7	12.7	0.0	12.7	123.5	1.2	124.6
Klawock	94.0	0.0	94.0	83.0	0.0	83.0	67.1	0.0	67.1	71.5	0.0	71.5	24.0	0.0	24.0
Klukwan	1.1	0.0	1.1	10.5	0.0	10.5	18.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
Pelican	14.5	0.0	14.5	15.8	2.4	18.2	7.5	0.0	7.5	9.0	0.0	9.0	1.8	0.0	1.8
Petersburg	11.8	4.3	16.2	23.9	9.3	33.2	20.7	7.2	27.9	16.0	22.0	38.0	45.0	18.0	63.0
Saxman	11.0	0.0	11.0	19.6	0.0	19.6	45.6	1.9	47.5	12.9	0.0	12.9	25.5	3.0	28.5

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Table 21, continued.

Community	Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take		
	1997			1998			2000			2001			2002		
Southeast Alaska, continued.															
Sitka	150.6	3.7	154.3	237.6	29.4	267.0	276.8	41.1	317.8	241.3	32.8	274.1	169.7	19.3	189.0
Wrangell	68.8	29.2	98.0	174.0	30.0	204.0	28.5	12.0	40.5	16.0	29.0	45.0	20.0	9.0	29.0
Yakutat	491.5	139.9	631.5	289.0	72.3	361.3	193.3	56.8	250.1	208.8	36.2	245.0	110.3	27.2	137.5
North Pacific Rim															
Chenega Bay	25.7	0.0	25.7	15.6	0.0	15.6	15.0	0.0	15.0	13.0	0.0	13.0	9.3	1.2	10.5
Cordova	120.8	0.0	120.8	79.1	9.3	88.3	87.8	14.0	101.8	102.7	5.8	108.5	102.7	5.8	108.5
Nanwalek	20.2	0.0	20.2	30.9	1.0	31.9	52.9	3.9	56.8	42.3	1.2	43.5	40.0	12.0	52.0
Port Graham	15.8	3.2	19.0	52.3	3.6	55.9	40.2	1.7	41.9	39.4	8.3	47.6	39.4	8.3	47.6
Seldovia	2.8	2.8	5.5	3.0	0.0	3.0	2.0	0.0	2.0	3.0	0.0	3.0	0.0	0.0	0.0
Seward	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.0	0.0	0.0	0.0	3.5	0.0	3.5
Tatitlek	97.2	6.8	104.0	171.1	19.2	190.2	46.3	1.9	48.2	61.6	4.7	66.3	13.1	1.9	14.9
Valdez	12.5	0.0	12.5	41.7	8.3	50.0	41.7	8.3	50.0	18.0	0.0	18.0	44.0	6.0	50.0
Upper Kenai–Cook Inlet															
Anchorage	23.6	1.2	24.8	43.8	7.5	51.3	43.8	7.5	51.3	45.3	2.7	48.0	39.8	8.0	47.7
Homer	41.1	2.6	43.7	22.8	6.0	28.8	22.8	6.0	28.8	21.0	0.0	21.0	23.5	0.0	23.5
Kenai	35.0	5.0	40.0	12.6	0.0	12.6	12.6	0.0	12.6	24.9	0.0	24.9	9.0	0.0	9.0
Tyonek	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	3.0
Kodiak Island															
Akhiok	7.9	0.0	7.9	7.3	0.0	7.3	17.6	0.0	17.6	7.2	0.0	7.2	6.3	0.0	6.3
Karluk	19.0	0.0	19.0	11.0	0.0	11.0	19.5	1.5	21.0	8.3	0.0	8.3	8.3	0.0	8.3
Kodiak City	13.0	0.0	13.0	11.0	0.0	11.0	21.6	4.8	26.4	17.5	0.0	17.5	17.5	0.0	17.5
Larsen Bay	9.8	4.2	13.9	1.7	0.0	1.7	18.6	0.0	18.6	9.0	1.1	10.2	3.3	0.0	3.3
Old Harbor	80.0	4.8	84.8	55.1	1.1	56.2	59.1	0.0	59.1	71.3	0.0	71.3	40.5	0.0	40.5
Ouzinkie	55.2	9.4	64.6	82.0	2.5	84.5	43.0	1.0	44.0	33.4	2.6	36.0	63.4	10.2	73.6
Port Lions	5.0	0.0	5.0	6.0	0.0	6.0	6.4	0.0	6.4	8.8	1.1	9.9	13.0	0.0	13.0

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Table 21, continued.

	Struck and Lost Take			Struck and Lost Take			Struck and Lost Take			Struck and Lost Take			Struck and Lost Take			Struck and Lost Take		
	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take
Community	2003			2004			2005			2006			2007			2008		
Southeast Alaska																		
Angoon	54.9	0.0	54.9	47.4	3.2	50.5	57.5	6.2	63.7	46.0	8.0	54.0	42.6	0.0	42.6	41.0	5.0	46.0
Craig	28.0	6.0	34.0	29.7	5.5	35.2	26.0	3.0	29.0	1.3	0.0	1.3	2.1	0.0	2.1	2.1	0.0	2.1
Haines	12.0	0.0	12.0	7.0	0.0	7.0	2.0	0.0	2.0	4.7	0.0	4.7	19.5	0.0	19.5	15.6	2.6	18.2
Hoonah	52.2	10.4	62.6	106.2	9.0	115.2	53.0	11.0	64.0	55.6	7.6	63.2	34.4	6.1	40.5	25.3	6.3	31.6
Hydaburg	14.4	0.0	14.4	14.4	0.0	14.4	14.4	0.0	14.4	14.4	0.0	14.4	14.4	0.0	14.4	14.4	0.0	14.4
Juneau	30.3	24.8	55.0	13.6	9.1	22.7	8.0	1.0	9.0	26.1	23.4	49.5	16.0	10.0	26.0	8.0	1.3	9.3
Kake	52.1	0.0	52.1	96.2	0.0	96.2	47.6	4.6	52.3	40.5	0.0	40.5	24.5	1.1	25.7	23.0	2.0	25.0
Ketchikan	78.0	0.0	78.0	60.0	5.0	65.0	73.1	0.0	73.1	37.6	0.0	37.6	78.0	2.4	80.4	66.7	0.0	66.7
Klawock	59.8	0.0	59.8	29.2	7.6	36.8	20.0	2.0	22.0	16.2	3.5	19.7	43.9	5.2	49.1	21.4	1.3	22.7
Klukwan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pelican	1.8	0.0	1.8	1.8	0.0	1.8	10.5	0.0	10.5	8.4	0.0	8.4	8.4	0.0	8.4	10.0	0.0	10.0
Petersburg	9.6	7.2	16.8	10.3	8.3	18.6	30.0	22.0	52.0	10.0	11.0	21.0	9.0	17.0	26.0	7.8	12.2	20.0
Saxman	12.0	0.0	12.0	5.0	0.0	5.0	6.8	5.5	12.3	20.2	0.0	20.2	12.5	0.0	12.5	9.6	0.0	9.6
Sitka	220.4	5.2	225.6	141.2	19.3	160.5	23.0	1.0	24.0	141.2	19.3	160.5	128.4	2.1	130.5	140.6	1.0	141.6
Wrangell	68.0	18.7	86.7	33.3	8.3	41.7	33.3	8.3	41.7	33.3	8.3	41.7	33.3	8.3	41.7	33.3	8.3	41.7
Yakutat	251.7	51.5	303.2	147.7	27.1	174.8	140.2	24.1	164.3	137.3	33.8	171.0	118.6	15.9	134.4	115.2	20.0	135.1
North Pacific Rim																		
Chenega Bay	44.9	14.6	59.5	21.1	1.1	22.2	4.9	0.0	4.9	21.3	0.0	21.3	40.4	0.0	40.4	10.7	0.0	10.7
Cordova	77.7	2.7	80.5	77.7	2.7	80.5	57.0	9.0	66.0	30.9	2.6	33.4	32.0	4.0	36.0	32.0	4.0	36.0
Nanwalek	30.0	3.0	33.0	30.2	12.5	42.7	20.3	6.4	26.7	23.6	5.1	28.7	22.3	5.9	28.2	33.7	8.2	41.9
Port Graham	45.0	0.0	45.0	44.4	2.8	47.2	63.5	8.5	71.9	51.0	0.0	51.0	7.8	1.6	9.3	16.5	5.5	22.0
Seldovia	0.0	0.0	0.0	1.0	1.0	2.0	1.0	1.0	2.0	2.7	0.0	2.7	2.0	0.0	2.0	1.3	0.0	1.3
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	0.0
Tatitlek	91.1	0.0	91.1	90.2	23.1	113.3	137.8	16.9	154.7	218.7	16.0	234.7	133.4	19.1	152.5	125.4	15.4	140.8
Valdez	60.0	5.0	65.0	58.0	0.0	58.0	63.0	6.0	69.0	63.0	6.0	69.0	0.0	0.0	0.0	24.0	0.0	24.0

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Table 21, continued.

	Struck and Lost Take			Struck and Lost Take			Struck and Lost Take			Struck and Lost Take			Struck and Lost Take			Struck and Lost Take		
	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take	Harvest	Struck and Lost	Take
Community	2003			2004			2005			2006			2007			2008		
Upper Kenai–Cook Inlet																		
Anchorage	55.0	15.0	70.0	46.8	13.4	60.2	25.0	13.3	38.3	25.0	13.3	38.3	27.0	4.0	31.0	28.6	1.8	30.4
Homer	10.8	0.0	10.8	3.7	0.0	3.7	5.6	0.0	5.6	5.6	0.0	5.6	0.0	0.0	0.0	0.0	1.8	1.8
Kenai	20.0	0.0	20.0	6.0	0.0	6.0	6.0	0.0	6.0	6.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
Tyonek	5.0	0.0	5.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	4.5	0.0	4.5
Kodiak Island																		
Akhiok	5.5	0.0	5.5	4.2	1.4	5.6	6.9	0.0	6.9	13.6	1.1	14.7	7.0	0.0	7.0	10.5	5.2	15.7
Karluk	4.3	0.0	4.3	3.1	0.0	3.1	19.4	0.0	19.4	19.4	0.0	19.4	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak City	32.0	6.0	38.0	21.0	4.5	25.5	10.8	0.0	10.8	10.8	0.0	10.8	21.3	2.2	23.6	62.6	8.6	71.3
Larsen Bay	2.5	0.0	2.5	12.5	0.0	12.5	17.0	0.0	17.0	20.3	0.0	20.3	8.6	0.0	8.6	5.2	0.0	5.2
Old Harbor	66.7	2.9	69.6	37.8	5.9	43.7	37.5	1.1	38.6	20.2	0.0	20.2	35.2	3.5	38.7	35.2	3.5	38.7
Ouzinkie	48.8	4.1	52.8	73.0	3.9	76.9	136.6	9.5	146.1	49.0	9.1	58.1	49.5	0.0	49.5	32.1	3.1	35.2
Port Lions	12.9	0.0	12.9	20.6	0.0	20.6	77.0	0.0	77.0	77.0	0.0	77.0	77.0	0.0	77.0	20.0	6.0	26.0

Note: Surveys not completed for study year 1999.

Table 22.—Subsistence harbor seal takes by Alaska Natives by Western Gulf–Bering Sea communities, 1992–2008.

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	1992			1993			1994			1995			1996		
South Alaska Peninsula															
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	1.0	0.0	1.0
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	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	3.5	0.0	3.5
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	13.9	0.0	13.9
Ivanof Bay	10.0	1.0	11.0	16.3	4.7	21.0	12.0	1.3	13.3	18.7	2.7	21.3	13.2	0.0	13.2
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	14.0	5.0	19.0
Nelson Lagoon	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--	--
Perryville	8.9	2.2	11.1	12.8	2.1	15.0	21.1	0.0	21.1	11.0	3.1	14.1	20.5	0.0	20.5
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	20.2	0.0	20.2
Aleutian Islands															
Adak	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	8.0	7.0	15.0
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	22.7	2.2	24.8
Nikolski	5.8	3.5	9.3	4.0	1.0	5.0	6.0	0.0	6.0	0.0	0.0	0.0	4.0	1.0	5.0
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	20.3	5.1	25.4
Pribilof Islands															
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	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	0.0	0.0	0.0
South Bristol Bay															
Egegik	3.3	14.3	17.7	7.7	3.3	11.0	12.8	0.0	12.8	1.4	0.0	1.4	2.8	0.0	2.8
King Salmon	10.2	0.0	10.2	21.3	10.7	32.0	17.0	4.5	21.5	13.0	3.0	16.0	9.5	2.4	11.9
Levelock	10.8	0.0	10.8	2.7	5.4	8.1	0.0	0.0	0.0	0.0	0.0	0.0	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	16.2	7.5	23.7
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	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	34.3	34.3	68.6
South Naknek	2.3	6.9	9.2	6.4	18.0	24.4	4.4	1.1	5.5	2.1	0.0	2.1	1.0	0.0	1.0

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Table 22, continued.

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	1992			1993			1994			1995			1996		
North Bristol Bay															
Aleknagik	0.0	3.6	3.6	0.0	0.0	0.0	0.0	3.3	3.3	0.0	0.0	0.0	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	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	0.0	0.0	0.0
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	2.4	3.6	6.0
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	3.9	0.0	3.9
Twin Hills	--	--	--	--	--	--	--	--	--	--	--	--	23.3	6.5	29.8

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	1997			1998			2000			2001			2002		
South Alaska 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	1.3	0.0	1.3
Chignik Lagoon	1.3	1.3	2.7	0.0	0.0	0.0	1.2	0.0	1.2	1.1	0.0	1.1	0.0	0.0	0.0
Chignik Lake	2.2	1.1	3.3	1.9	0.0	1.9	3.3	0.0	3.3	1.3	1.3	2.6	2.9	0.0	2.9
False Pass	8.0	0.0	8.0	17.8	1.3	19.1	2.5	1.2	3.7	2.5	1.2	3.7	2.5	0.0	2.5
Ivanof Bay	9.0	1.8	10.8	9.0	1.8	10.8	3.2	0.0	3.2	7.0	1.4	8.4	7.0	1.4	8.4
King Cove	16.9	2.1	19.1	18.2	0.0	18.2	19.3	2.1	21.4	22.0	4.0	26.0	7.5	3.0	10.5
Nelson Lagoon	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perryville	21.7	5.7	27.4	21.0	4.4	25.4	21.0	15.0	36.0	24.0	6.9	30.9	33.8	15.0	48.8
Sand Point	9.1	0.0	9.1	12.0	0.0	12.0	15.0	0.0	15.0	10.9	1.6	12.4	15.0	0.0	15.0
Aleutian Islands															
Adak	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Akutan	14.0	3.8	17.8	14.0	3.8	17.8	25.7	5.4	31.1	13.6	2.7	16.4	10.2	0.0	10.2
Atka	26.0	1.5	27.5	16.8	0.0	16.8	16.8	0.0	16.8	63.3	6.7	70.0	36.0	0.0	36.0
Nikolski	4.0	1.0	5.0	2.2	0.0	2.2	2.2	0.0	2.2	5.3	0.0	5.3	3.0	1.0	4.0
Unalaska	26.5	0.0	26.5	12.7	0.0	12.7	34.3	5.1	39.4	37.8	3.2	41.0	14.3	1.4	15.7
Pribilof Islands															
St. George	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0
St. Paul	0.0	0.0	0.0	4.6	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Table 22, continued.

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	1997			1998			2000			2001			2002		
South Bristol Bay															
Egegik	1.6	0.0	1.6	0.0	0.0	0.0	4.0	3.0	7.0	6.3	1.0	7.3	2.2	1.1	3.2
King Salmon	9.7	0.0	9.7	5.2	0.0	5.2	3.3	9.8	13.0	8.5	6.1	14.6	2.9	0.0	2.9
Levelock	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
Naknek	24.8	6.5	31.2	15.7	7.8	23.5	16.3	0.0	16.3	15.1	4.3	19.4	26.2	12.5	38.7
Pilot Point	0.0	0.0	0.0	0.0	0.0	0.0	5.3	2.1	7.4	2.0	2.0	4.0	2.0	2.0	4.0
Port Heiden	69.2	50.0	119.2	36.1	18.6	54.7	19.6	0.0	19.6	10.1	3.4	13.4	30.4	18.3	48.7
South Naknek	2.5	9.8	12.3	5.2	7.9	13.1	4.1	2.7	6.8	11.0	3.0	14.0	16.0	3.0	19.0
North Bristol Bay															
Aleknagik	1.2	0.0	1.2	3.1	0.0	3.1	2.5	0.0	2.5	0.0	1.2	1.2	0.0	2.2	2.2
Clark's Point	1.3	0.0	1.3	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dillingham	1.2	0.0	1.2	8.5	0.0	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manokotak	0.0	0.0	0.0	4.0	0.0	4.0	1.2	0.0	1.2	3.5	0.0	3.5	0.0	0.0	0.0
Togiak	6.7	0.0	6.7	14.1	1.4	15.5	5.1	1.1	6.3	5.3	0.0	5.3	13.9	3.6	17.4
Twin Hills	8.4	2.1	10.5	2.2	2.2	4.4	1.6	0.0	1.6	0.0	0.0	0.0	1.7	1.7	3.3

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	2003			2004			2005			2006			2007			2008		
South Alaska Peninsula																		
Chignik Bay	2.8	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	4.3	1.4	5.8	4.3	0.0	4.3	2.3	0.0	2.3
Chignik Lagoon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chignik Lake	8.9	3.0	11.8	1.1	0.0	1.1	3.6	1.2	4.8	0.0	2.9	2.9	8.1	0.0	8.1	20.3	0.0	20.3
False Pass	2.8	0.0	2.8	6.7	3.3	10.0	5.7	0.0	5.7	0.0	0.0	0.0	1.0	0.0	1.0	2.8	0.0	2.8
Ivanof Bay	--	--	--	2.8	0.0	2.8	--	--	--	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0
King Cove	11.0	4.4	15.4	32.3	0.0	32.3	21.5	0.0	21.5	14.0	0.0	14.0	3.9	1.3	5.1	3.8	0.0	3.8
Nelson Lagoon	--	--	--	20.0	5.6	25.6	--	--	--	--	--	--	--	--	--	--	--	--
Perryville	51.3	6.1	57.4	15.0	1.3	16.3	21.0	6.0	27.0	27.4	14.3	41.7	18.9	12.1	31.0	47.1	15.7	62.8
Sand Point	14.3	0.0	14.3	0.0	0.0	0.0	15.0	1.3	16.3	3.8	1.9	5.6	48.8	5.1	53.9	31.3	1.6	32.9

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Table 22, continued.

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	2003			2004			2005			2006			2007			2008		
Aleutian Islands																		
Adak	4.0	1.0	5.0	0.0	0.0	0.0	12.0	0.0	12.0	0.0	0.0	0.0	4.0	0.0	4.0	2.0	0.0	2.0
Akutan	10.8	4.3	15.2	9.5	1.6	11.1	8.5	2.4	10.9	2.4	0.0	2.4	11.5	1.3	12.7	17.0	0.0	17.0
Atka	57.6	1.6	59.2	73.9	16.9	90.8	47.2	9.1	56.4	26.0	4.0	30.0	38.0	2.0	40.0	17.5	5.0	22.5
Nikolski	11.0	3.0	14.0	6.0	1.0	7.0	6.0	1.0	7.0	17.0	1.0	18.0	6.0	0.0	6.0	7.0	1.0	8.0
Unalaska	14.3	1.4	15.7	28.6	8.6	37.1	30.0	4.5	34.5	9.0	3.6	12.6	9.0	3.6	12.6	0.0	0.0	0.0
Pribilof Islands																		
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	0.0	0.0	0.0	0.0	0.0	0.0
St. Paul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
South Bristol Bay																		
Egegik	4.0	1.0	5.0	1.0	1.0	2.1	1.1	2.1	3.2	3.0	0.0	3.0	3.0	0.0	3.0	0.0	1.1	1.1
King Salmon	7.3	6.1	13.4	5.0	3.3	8.3	0.0	0.0	0.0	7.0	0.0	7.0	1.3	0.0	1.3	0.0	0.0	0.0
Levelock	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	13.1	13.1	26.1
Naknek	10.5	0.0	10.5	15.2	3.8	19.0	6.2	0.0	6.2	15.1	7.5	22.6	20.1	0.0	20.1	15.1	7.6	22.7
Pilot Point	2.7	2.7	5.3	1.9	5.6	7.4	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	2.6	0.0	2.6
Port Heiden	10.0	5.6	15.6	20.0	13.0	33.0	13.0	19.5	32.5	17.3	6.5	23.8	24.0	22.0	46.0	36.1	16.4	52.6
South Naknek	1.1	0.0	1.1	15.4	4.4	19.8	17.3	9.2	26.5	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0
North Bristol Bay																		
Aleknagik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	1.7	6.7
Clark's Point	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.8	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	1.3	0.0	1.3	0.0	1.0	1.0	0.0	1.0	1.0	5.5	0.0	5.5
Manokotak	2.2	0.0	2.2	4.0	0.0	4.0	6.6	8.9	15.5	6.6	8.9	15.5	0.0	0.0	0.0	9.2	1.4	10.6
Togiak	22.0	0.0	22.0	6.9	9.7	16.6	10.8	0.0	10.8	11.5	0.0	11.5	7.8	2.2	10.0	46.0	14.1	60.0
Twin Hills	5.6	1.4	7.0	6.8	1.9	8.8	2.5	0.0	2.5	1.0	0.0	1.0	1.0	2.0	3.0	0.0	0.0	0.0

Note: Surveys not completed for study year 1999.

Table 23.—Subsistence sea lion takes by Alaska Natives by Eastern Gulf of Alaska communities, 1992–2008.

	Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take		
	1992			1993			1994			1995			1996		
Community															
Southeast Alaska															
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	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	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	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	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	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	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	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	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	0.0	0.0	0.0
Klukwan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
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	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	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	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
Yakutat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Pacific Rim															
Chenega Bay	6.9	1.2	8.1	11.1	6.6	17.7	6.6	0.0	6.6	6.6	0.0	6.6	2.0	0.0	2.0
Cordova	0.0	0.0	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0
Nanwalek	6.3	0.0	6.3	8.5	1.1	9.5	1.2	2.3	3.5	9.2	0.0	9.2	4.3	1.1	5.3
Port Graham	3.5	1.2	4.7	1.1	0.0	1.1	0.0	0.0	0.0	10.0	2.0	12.0	1.1	0.0	1.1
Seldovia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Seward	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tatitlek	8.3	4.2	12.5	4.1	1.0	5.2	8.8	7.4	16.2	2.6	0.0	2.6	5.0	0.0	5.0
Valdez	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kenai–Cook Inlet															
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	1.0	0.0	1.0
Homer	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kenai	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--	--	--	2.3	0.0	2.3
Tyonek	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	0.0	0.0	0.0

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Table 23, continued.

	Struck			Struck			Struck			Struck			Struck		
	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take
Community	1992			1993			1994			1995			1996		
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	6.0	1.0	7.0
Karluk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak City	0.0	0.0	0.0	0.0	12.7	12.7	1.1	0.0	1.1	2.2	0.0	2.2	3.0	0.0	3.0
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	0.0	0.0	0.0
Old Harbor	32.9	13.2	46.1	32.1	1.0	33.2	46.2	1.3	47.5	107.1	5.7	112.9	44.9	5.3	50.2
Ouzinkie	3.4	0.0	3.4	5.4	2.2	7.6	4.4	2.9	7.3	15.6	0.0	15.6	0.0	0.0	0.0
Port Lions	1.1	2.2	3.3	4.0	1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	Struck			Struck			Struck			Struck			Struck		
	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take
Community	1997			1998			2000			2001			2002		
Southeast Alaska															
Angoon	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	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	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	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	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	0.0	0.0	0.0
Juneau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kake	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0
Klawock	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.3	0.0	0.0	0.0	1.0	0.0	1.0
Klukwan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
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	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	0.0	0.0	0.0
Sitka	0.0	0.0	0.0	3.3	4.4	7.6	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	6.0
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
Yakutat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Table 23, continued.

Community	Struck and Lost Take			Struck and Lost Take			Struck and Lost Take			Struck and Lost Take			Struck and Lost Take		
	1997			1998			2000			2001			2002		
North Pacific Rim															
Chenega Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
Cordova	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	3.5	3.5	0.0	3.5
Nanwalek	0.0	0.0	0.0	2.1	0.0	2.1	6.5	0.0	6.5	3.7	0.0	3.7	2.0	0.0	2.0
Port Graham	0.0	0.0	0.0	1.2	0.0	1.2	1.7	3.4	5.0	0.0	0.0	0.0	0.0	0.0	0.0
Seldovia	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Tatitlek	2.7	1.4	4.1	15.1	6.8	21.9	1.9	0.0	1.9	6.3	0.0	6.3	0.0	0.0	0.0
Valdez	0.0	0.0	0.0	1.7	1.7	3.3	1.7	1.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kenai–Cook Inlet															
Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.3	0.0	0.0	0.0
Homer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0
Tyonek	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak Island															
Akhiok	6.6	1.3	7.9	3.1	0.0	3.1	3.2	0.0	3.2	1.4	0.0	1.4	0.0	0.0	0.0
Karluk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak City	3.0	0.0	3.0	0.0	1.0	1.0	2.4	0.0	2.4	2.5	0.0	2.5	2.5	0.0	2.5
Larsen Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Harbor	22.7	3.6	26.3	10.3	2.3	12.6	12.9	0.0	12.9	26.3	2.2	28.5	8.5	0.0	8.5
Ouzinkie	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	2.6	5.1	0.0	5.1
Port Lions	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Table 23, continued.

	Struck			Struck			Struck			Struck			Struck			Struck		
	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take	Harvest	and Lost	Take
Community	2003			2004			2005			2006			2007			2008		
Southeast Alaska																		
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	0.0	0.0	0.0	0.0	0.0	0.0
Craig	0.0	0.0	0.0	3.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0
Hoonah	0.0	4.6	4.6	0.0	7.2	7.2	0.0	9.0	9.0	0.0	10.1	10.1	0.0	6.1	6.1	0.0	6.3	6.3
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	0.0	0.0	0.0	0.0	0.0	0.0
Juneau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Kake	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	1.7	1.7	3.3
Klawock	2.3	0.0	2.3	1.3	0.0	1.3	0.0	10.0	10.0	1.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Klukwan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
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	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	0.0	0.0	0.0	0.0	0.0	0.0
Sitka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Yakutat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Pacific Rim																		
Chenega Bay	0.0	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	2.9	0.0	0.0	0.0
Cordova	2.7	0.0	2.7	2.7	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0
Nanwalek	3.0	2.0	5.0	2.1	0.0	2.1	1.1	0.0	1.1	1.0	0.0	1.0	2.4	2.4	4.7	1.0	1.0	2.0
Port Graham	1.0	0.0	1.0	6.9	5.6	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.8
Seldovia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Seward	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tatitlek	12.4	1.1	13.5	26.3	10.3	36.6	39.0	9.1	48.1	16.0	8.0	24.0	41.3	7.9	49.2	16.5	3.3	19.8
Valdez	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Table 23, continued.

Table 10, continued.

Community	Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take			Struck Harvest and Lost Take		
	2003			2004			2005			2006			2007			2008		
Upper Kenai–Cook Inlet																		
Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Homer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tyonek	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak Island																		
Akhiok	2.7	1.4	4.1	1.4	0.0	1.4	0.0	0.0	0.0	2.3	0.0	2.3	3.0	0.0	3.0	2.1	3.1	5.2
Karluk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak City	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Larsen Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Harbor	27.6	4.4	31.9	8.3	3.5	11.8	18.2	3.2	21.4	1.1	0.0	1.1	7.0	3.5	10.5	7.0	3.5	10.5
Ouzinkie	0.0	0.0	0.0	2.6	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	2.1	0.0	0.0	0.0
Port Lions	0.0	0.0	0.0	1.2	0.0	1.2	3.7	0.0	3.7	3.7	0.0	3.7	3.7	0.0	3.7	3.0	0.0	3.0

Note: Surveys not completed for study year 1999.

Table 24.—Subsistence sea lion takes by Alaska Natives by Western Gulf–Bering Sea communities, 1992–2008.

	Struck and			Struck and			Struck and			Struck and			Struck and		
	Harvest	Lost	Take	Harvest	Lost	Take	Harvest	Lost	Take	Harvest	Lost	Take	Harvest	Lost	Take
Community	1992			1993			1994			1995			1996		
South Alaska 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	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	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	0.0	0.0	0.0
False Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ivanof Bay	0.0	0.0	0.0	2.3	1.2	3.5	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	2.4
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	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	1.3	1.3	2.6
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	0.0	0.0	0.0

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Table 24, continued.

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	1992			1993			1994			1995			1996		
Aleutian Islands															
Adak	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	11.0	5.0	16.0
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	17.3	0.0	17.3
Nikolski	8.2	0.0	8.2	6.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	3.0
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	15.2	6.3	21.6
Pribilof Islands															
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	4.0	4.0	8.0
St. Paul*	161.7	65.2	226.8	161.7	65.2	226.8	147.0	26.4	173.4	53.6	6.3	59.9	28.2	10.2	38.4
South Bristol Bay															
Egegik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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	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	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	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	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	0.0	0.0	0.0
North Bristol Bay															
Aleknagik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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	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	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	0.0	0.0	0.0
Twin Hills	--	--	--	--	--	--	--	--	--	--	--	--	0.0	0.0	0.0

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Table 24, continued.

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	1997			1998			2000			2001			2002		
South Alaska 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	0.0	0.0	0.0
Chignik Lagoon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0
False Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ivanof Bay	1.8	0.0	1.8	1.8	0.0	1.8	0.0	0.0	0.0	1.4	1.4	2.8	1.4	1.4	2.8
King Cove	4.2	0.0	4.2	4.3	0.0	4.3	4.3	0.0	4.3	3.0	0.0	3.0	0.0	1.5	1.5
Perryville	2.3	0.0	2.3	1.1	0.0	1.1	4.5	0.0	4.5	1.1	0.0	1.1	2.5	1.3	3.8
Sand Point	0.0	0.0	0.0	2.0	0.0	2.0	5.0	0.0	5.0	4.7	0.0	4.7	0.0	0.0	0.0
Aleutian Islands															
Adak	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Akutan	6.4	0.0	6.4	6.4	0.0	6.4	4.1	1.4	5.4	15.0	2.7	17.7	2.9	0.0	2.9
Atka	12.2	0.0	12.2	16.8	0.0	16.8	16.8	0.0	16.8	33.3	11.7	45.0	73.5	12.0	85.5
Nikolski	3.0	0.0	3.0	1.1	0.0	1.1	1.1	0.0	1.1	6.7	0.0	6.7	1.0	0.0	1.0
Unalaska	29.1	1.3	30.3	7.3	5.5	12.7	49.2	3.4	52.6	23.1	5.3	28.4	10.0	5.7	15.7
Pribilof Islands															
St. George	19.6	8.1	27.7	11.8	8.5	20.3	11.8	8.5	20.3	7.0	7.0	14.0	6.0	1.0	7.0
St. Paul*	25.9	2.3	28.2	41.0	16.9	57.8	17.3	5.7	23.0	12.0	12.0	24.0	18.0	18.0	36.0
South Bristol Bay															
Egegik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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	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	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	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	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	0.0	0.0	0.0
North Bristol Bay															
Aleknagik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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	0.0	0.0	0.0
Manokotak	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Togiak	3.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Twin Hills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Table 24, continued.

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	2003			2004			2005			2006			2007			2008		
South Alaska 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	0.0	0.0	0.0	0.0	0.0	0.0
Chignik Lagoon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0
False Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
Ivanof Bay	--	--	--	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
King Cove	0.0	0.0	0.0	1.7	0.0	1.7	3.2	0.0	3.2	11.8	1.1	12.9	1.3	0.0	1.3	1.3	0.0	1.3
Perryville	1.2	2.4	3.7	2.2	0.0	2.2	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	2.6
Sand Point	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	5.6	8.4	0.0	8.4	3.3	0.0	3.3
Aleutian Islands																		
Adak	1.0	0.0	1.0	2.0	1.0	3.0	4.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.0
Akutan	8.7	0.0	8.7	4.8	0.0	4.8	4.8	0.0	4.8	2.4	0.0	2.4	5.1	1.3	6.4	4.2	0.0	4.2
Atka	68.8	12.8	81.6	50.7	12.7	63.3	54.9	6.1	61.0	52.0	14.0	66.0	46.0	8.0	54.0	35.0	0.0	35.0
Nikolski	0.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
Unalaska	10.0	5.7	15.7	11.4	11.4	22.9	12.0	4.5	16.5	9.0	5.4	14.4	9.0	5.4	14.4	2.6	2.6	5.1
Pribilof Islands																		
St. George	9.3	4.7	14.0	9.3	4.7	14.0	9.3	4.7	14.0	9.3	4.7	14.0	9.3	4.7	14.0	9.3	4.7	14.0
St. Paul*	13.0	5.0	18.0	9.0	9.0	18.0	19.0	3.0	22.0	20.0	6.0	26.0	22.0	12.0	34.0	20.0	2.0	22.0
South Bristol Bay																		
Egegik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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	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	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	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	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	0.0	0.0	0.0	0.0	0.0	0.0

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Table 24, continued.

Community	Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take			Struck and Harvest Lost Take		
	2003			2004			2005			2006			2007			2008		
North Bristol Bay																		
Aleknagik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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	0.0	0.0	0.0	0.0	0.0	0.0
Manokotak	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Togiak	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Twin Hills	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Surveys not completed for study year 1999.

* St. Paul's 2000–2008 data from Zavadil et al. (2006), Lestenkof and Zavadil (2006), Lestenkof et al. (2007, 2008), and Jones (2009).

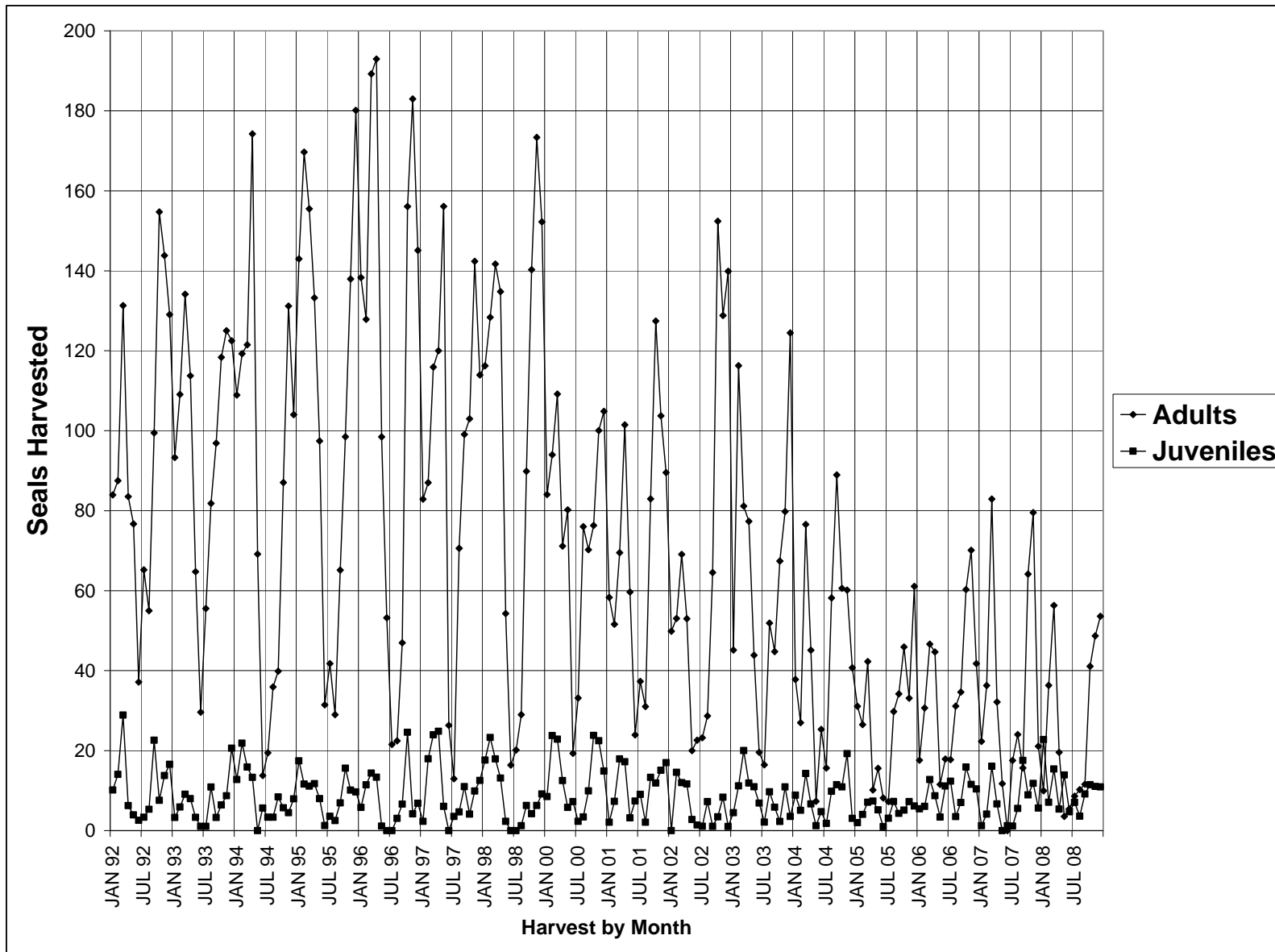


Figure 30.—Adult and juvenile harbor seal harvests by month, January 1992–December 2008, Southeast Alaska.

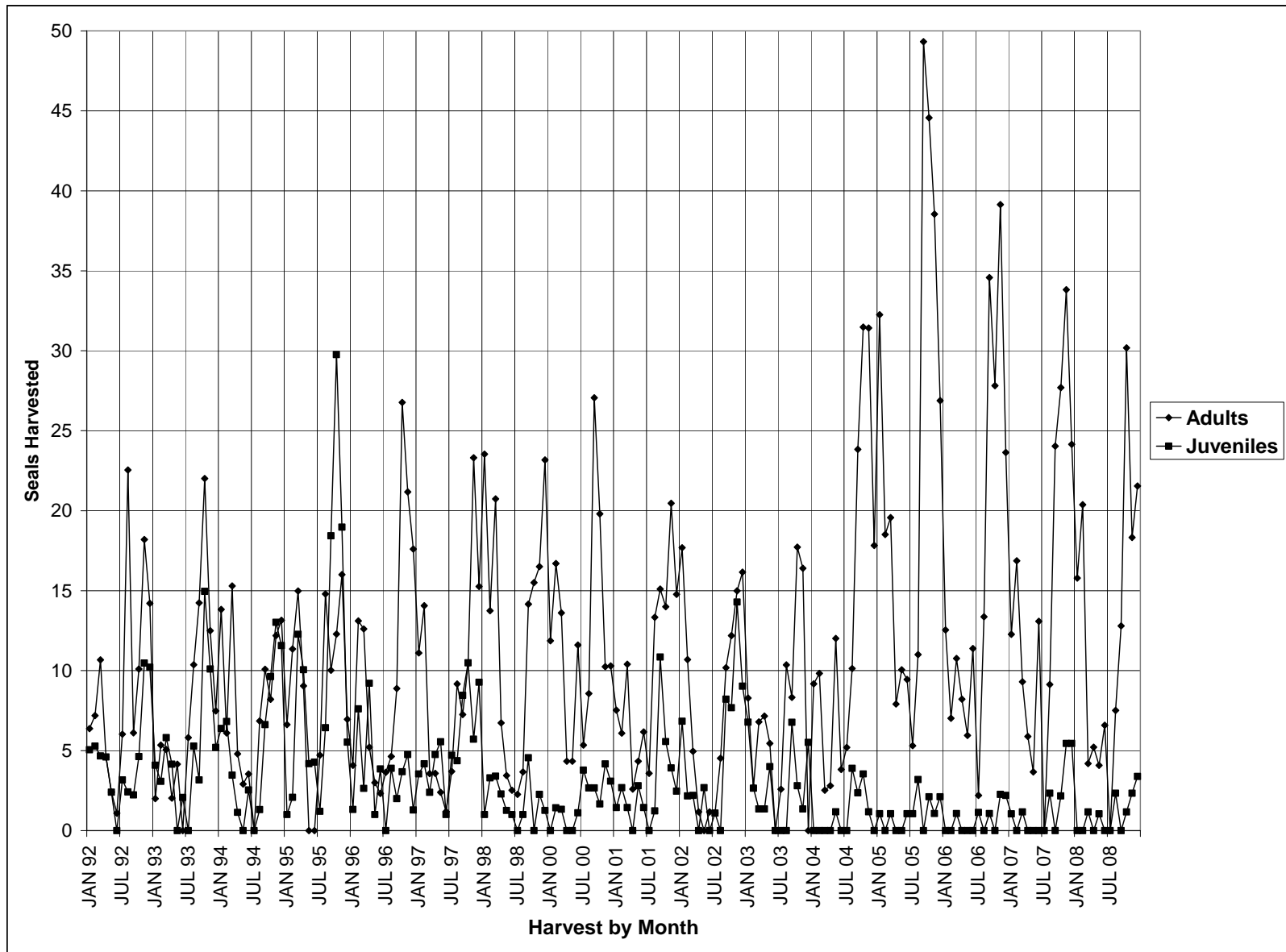


Figure 31.—Adult and juvenile harbor seal harvests by month, January 1992–December 2008, Kodiak Island region.

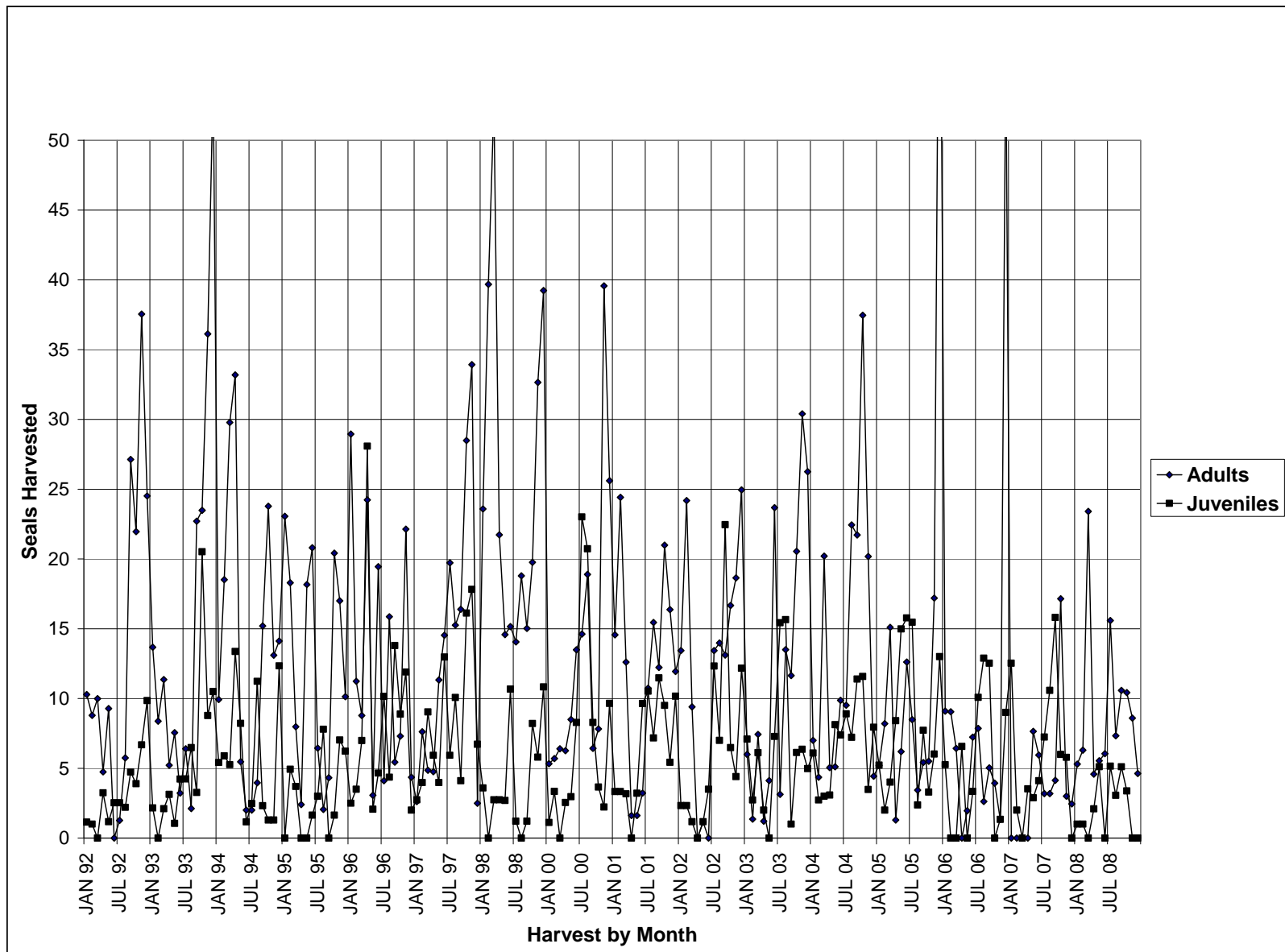


Figure 32.—Adult and juvenile harbor seal harvests by month, January 1992–December 2008, North Pacific Rim region.

Declines in sea lion takes appear to be associated with drops in hunter numbers (Figure 8, Table 16). Sea lion hunters (excluding St. Paul, because the number of hunters is not available for years after 1998) fell from a 5-year average of 131 hunters (1992–1996) to 57 hunters (2008). Successful sea lion hunters fell from a 5-year average of 84 hunters (1992–1996) to 50 hunters (2008). However, the success rate of those hunters (87.7%) was near an all time high (Table 16). As with seal hunting, there are probably a variety of local factors related to the year-to-year changes in the number of households hunting sea lions in particular communities, including seasonal hunting conditions, local food needs, and personal circumstances of hunters.

Figure 33 illustrates trends at Atka, one of the few communities in the state reporting increased sea lion harvests in recent years. As shown in Figure 33, the numbers of households hunting sea lions at Atka increased from 8 to 19 households from 1992 to 2003, and the numbers of households successfully harvesting sea lions increased from 6 to 18 households. Hunting households then fell to 10 households in 2008. Success rates for households show no clear trends: since 1992, annual mean harvests per household have ranged from 2.0 to 7.1 sea lions per successful hunter at Atka. The sea lion harvests of 35 animals in 2008 was lower than the recent 5-year average of 48 animals (2004–2008).

Hunting patterns at Old Harbor display somewhat different trends (Figure 34). At Old Harbor, there were increasing numbers of households hunting sea lions from 1992 to 1995 (from 21 households to 43 households), followed by a decrease to 12 households by 1997. In 2007, there were 6 successful sea lion hunters at Old Harbor, who harvested 7 animals. Harvest rates per successful hunter have ranged from 1.0 to 2.6 animals since 1992. No surveys were conducted in 2008.

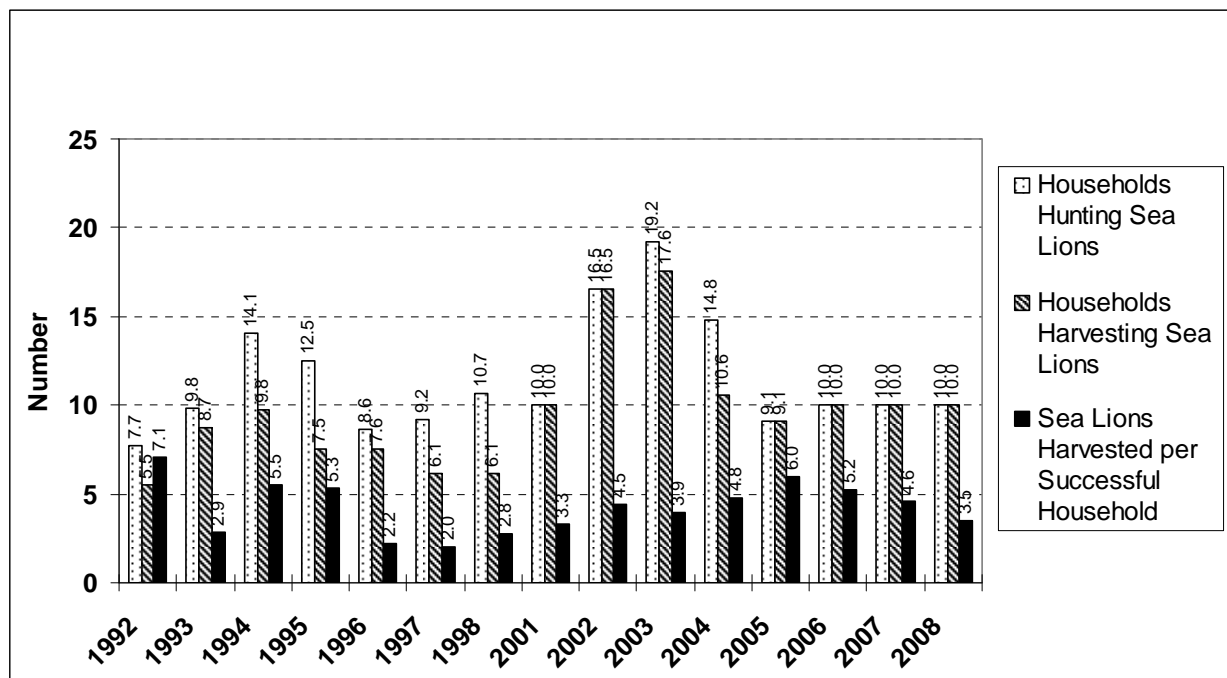


Figure 33.—Sea lion hunters and success rates, Atka, 1992–2008.

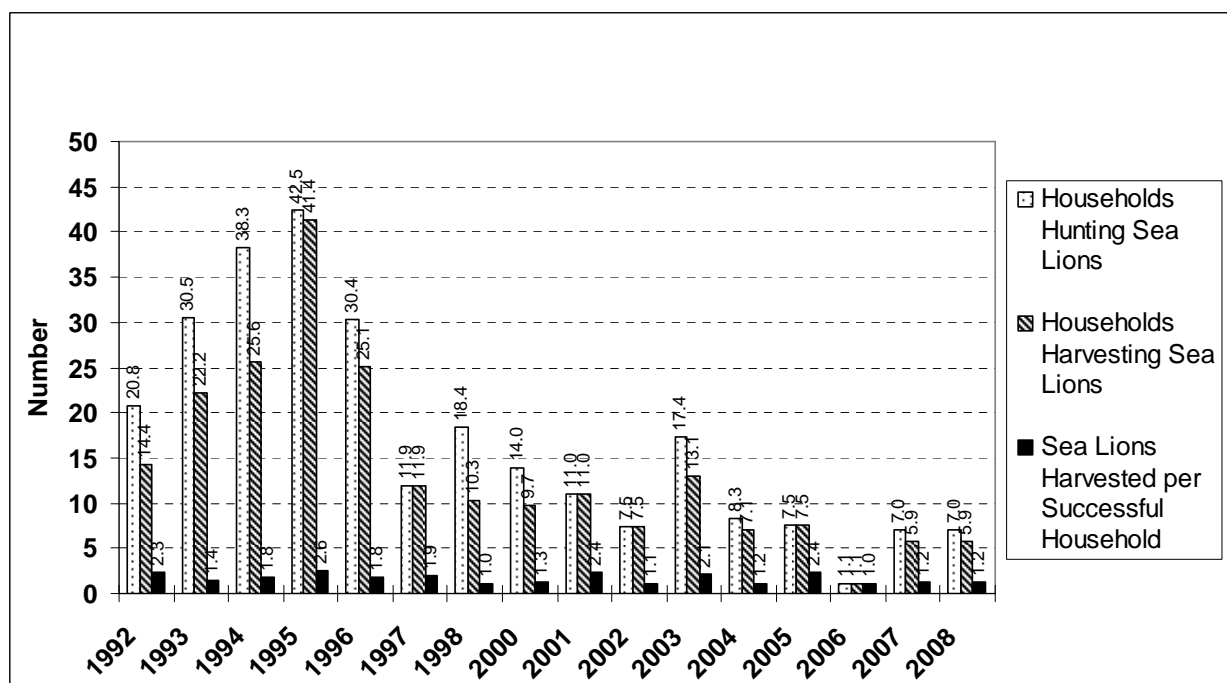


Figure 34.—Sea lion hunters and success rates, Old Harbor, 1992–2008.

At Akutan, the numbers of households successfully harvesting sea lions have ranged between 2 and 9 since 1992 (Figure 35). Mean harvests per successful hunter have ranged

from 0.6 to 5.5 sea lions. In 2008, 3 hunters harvested 4 animals, somewhat below the means since 2000 (3.8 hunters, 5.8 animals). At Nanwalek, the numbers of households successfully harvesting sea lions has ranged between 1 and 5 since 1992 (Figure 36). Mean harvests per successful hunter have ranged from 1.0 to 2.5 sea lions. The 2008 harvest was at the low end of that range.

Declines in the numbers of sea lion hunters occurred at a time when sea lions became increasingly harder to find in local hunting areas and consequently more difficult and expensive to hunt. As shown in Table 18, 67.3% of the Aleutian Island hunters and 55.3% of Kodiak Island hunters reported taking “more time and effort” in hunting sea lions in 2000 compared with 1995–1999. As sea lions became scarcer in a community’s hunting area, a number of hunters in the community chose to stop hunting them. The hunters that continued to hunt appear to maintain annual harvest rates similar to past years, but the hunters have invested more time and effort.

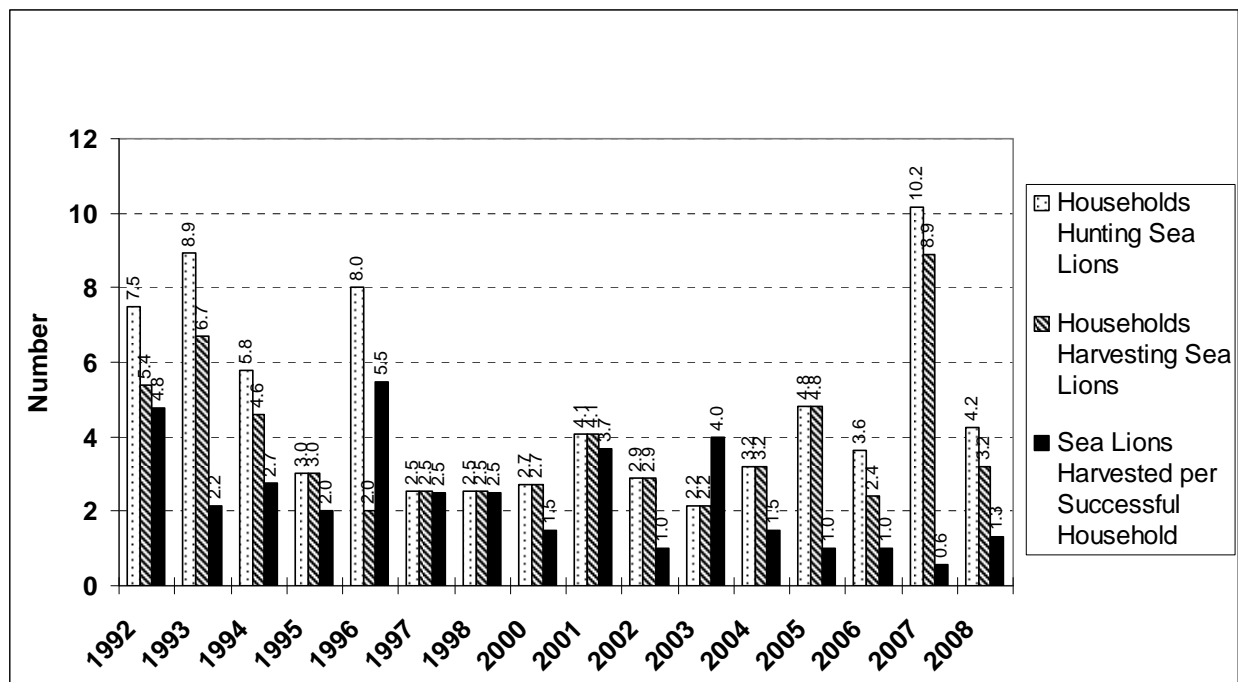


Figure 35.—Sea lion hunters and success rates, Akutan, 1992–2008.

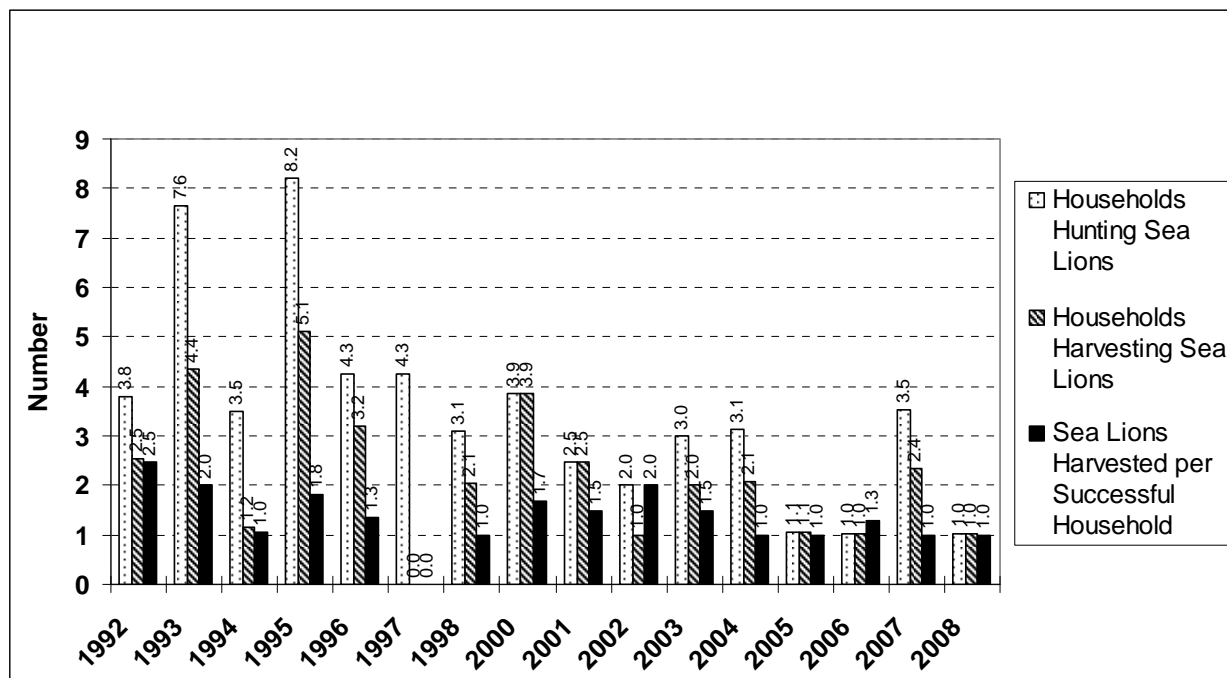


Figure 36.—Sea lion hunters and success rates, Nanwalek, 1992–2008.

In addition to these factors, it is quite likely that some sea lion hunters chose to reduce their hunting activity because of perceived problems with sea lion populations. Hunters commonly are astute observers of the condition and health of local sea lion stocks. Some portion of the decline in hunting effort during the early to mid 1990s probably reflected hunters choosing not to hunt in order to help conserve sea lion populations. The conservative effects of these factors on sea lion harvests appear to have run their course. After 1997, the numbers of sea lion hunters and sea lion takes leveled off. Although the most recent take of 146 animals in 2008 was the lowest yet recorded, trends indicate a stabilization in the takes of sea lions over the last several years for the state as a whole.

Table 25.—Harbor seal harvests by strata for communities with two-strata designs, 2008.

Community		Reported by Sample			Expanded		
		Struck			Struck		
		Harvest	and Lost	Take	Harvest	and Lost	Take
Dillingham	High stratum	0	0	0	0.0	0.0	0.0
	Low stratum	6	1	7	6.5	1.1	7.6
Manokotak	High stratum	7	4	11	7.3	4.2	11.4
	Low stratum	13	3	16	18.5	4.8	23.3
Naknek	High stratum	6	3	9	7.9	3.9	11.8
	Low stratum	4	2	6	7.2	3.6	10.8
Togiak	High stratum	49	21	70	65.3	27.9	93.3
	Low stratum	125	26	151	148.3	30.8	179.1

Table 26.—Sea lion harvests by strata for communities with two-strata designs, 2008.

Community		Reported by Sample			Expanded		
		Struck			Struck		
		Harvest	and Lost	Take	Harvest	and Lost	Take
Dillingham	High stratum	0	0	0	0.0	0.0	0.0
	Low stratum	0	0	0	0.0	0.0	0.0
Manokotak	High stratum	0	0	0	0.0	0.0	0.0
	Low stratum	0	0	0	0.0	0.0	0.0
Naknek	High stratum	0	0	0	0.0	0.0	0.0
	Low stratum	0	0	0	0.0	0.0	0.0
Togiak	High stratum	0	0	0	0.0	0.0	0.0
	Low stratum	0	0	0	0.0	0.0	0.0

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APPENDIX A
SURVEY INSTRUMENT USED
IN HOUSEHOLD INTERVIEWS, 2008

HARBOR SEAL

2008 MARINE MAMMAL SURVEY

Are any members of your household Alaska Natives? Yes () No () If No, thank you for your cooperation. This survey is relevant to Native households.

If yes, how many people lived in your household in 2008? ()

CHECK IF APPROPRIATE No Contact ()

DID YOU OR MEMBERS OF YOUR HOUSEHOLD HUNT OR USE HARBOR SEALS IN 2008? Yes ____ No ____

(IF YES TO HARBOR SEALS, COMPLETE THE FOLLOWING QUESTIONS:)

13. DID YOUR HOUSEHOLD HUNT/USE SEA LIONS IN 2008?
No ____, Thank you | Yes ____, Go to Sea lion form

During 2008, did you or your household:

Yes No

1. Use harbor seals (meat, hides, or oil)?
2. Hunt harbor seals? .If yes, go to 2a and 2b.
3. Kill and retrieve harbor seals?
4. Receive harbor seals from other households or communities?
5. Give away harbor seals to other households or communities?

2a. How many seal hunters in your household? ()

2b. If you hunted outside your region,
where did you hunt? _____

IF YES TO QUESTION 2 OR 3 ABOVE, GO TO QUESTION 6. IF NO, GO TO QUESTION 11, THEN COMPLETE SEA LION SURVEY QUESTION 13.

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

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

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

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

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

During 2008, 9. How many harbor seal were struck and lost by your household? [Enter number in total box.] _____

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

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

Supplemental Questions:

11. During 2008, did you observe any changes to harbor seal numbers in your area? Increase ____ Decrease ____ No Change ____ Didn't Observe ____

12. During 2008, what was the condition of the seals you harvested? _____

Community: _____ () HHID: () List: Hunter Random Interviewer: _____ Date: _____

SEA LION

2008 MARINE MAMMAL SURVEY

DID YOU OR MEMBERS OF YOUR HOUSEHOLD HUNT OR USE SEA LIONS IN 2008? YES ____ NO ____

(IF YES, PLEASE COMPLETE THE FOLLOWING QUESTIONS:)

(IF NO, THAT COMPLETES THIS SURVEY. THANK YOU.)

During 2008, did you or your household:

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

Yes No

2a. How many sea lion hunters in your household? (____)

2b. If you hunted outside your region, where did you hunt? _____

IF YES TO QUESTION 2 OR 3 ABOVE, GO TO QUESTION 6. IF NO, GO TO QUESTION 11.

6. How many sea lions did your household kill and retrieve? [Enter total number in box.] _____

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

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

TOTAL															
-------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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

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

ADULT	MALE														
	FEMALE														
	UNKNOWN														
JUVENILE	MALE														
	FEMALE														
	UNKNOWN														
PUP	MALE														
	FEMALE														
	UNKNOWN														
UNKNOWN	MALE														
	FEMALE														
	UNKNOWN														

During 2008,

9. How many sea lions were struck and lost by your household? [Enter number in total box.] _____

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

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

STRUCK AND LOST															
-----------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Supplemental Question:

THANK YOU FOR YOUR COOPERATION

11. During 2008, did you observe any changes to sea lion numbers in your area? Increase ____ Decrease ____ No Change ____ Didn't Observe ____

12. During 2008, what was the condition of the sea lions you harvested? _____

Community: _____ (____) HHID: (____) List: Hunter Random Interviewer: _____ Date: _____

APPENDIX B

SUBSISTENCE TAKES OF HARBOR SEAL AND SEA LIONS BY REGION

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

Table 1. SEA LION AND HARBOR SEAL HARVESTS: SOUTHEAST ALASKA, 2008

<i>SAMPLING DESIGN:</i>		<u>Total</u>
<i>CHAIN REFERRAL</i>	Total Referred Households	373
	Surveyed Households	313
	Sampling Fraction	83.9%
	Sample Household Members	907
	Estimated Household Members	1067.4
	2000 U.S. Census Estimated Native Population	14070

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>		
	Sea	Harbor		Sea	Harbor
	<u>Lion</u>	<u>Seal</u>		<u>Lion</u>	<u>Seal</u>
Used	N/A	N/A	Total Number Harvested	1.7	533.9
Hunted	N/A	N/A	Total Number Struck and Lost	8.0	60.1
Harvested	N/A	N/A	Total Number Taken	9.6	593.9
Received	N/A	N/A			
Gave Away	N/A	N/A	Number Harvested Per Capita	0.00	0.04

<i>SEA LION HARVEST BY MONTH</i>													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Struck & Lost	0	0	0	2	0	0	0	1	1	1	1	0	1	7
Total Take	0	0	0	3	0	0	0	1	1	1	1	0	1	8
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Struck & Lost	0.0	0.0	0.0	2.7	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	1.1	8.0
Total Take	0.0	0.0	0.0	4.4	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	1.1	9.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.7
Struck & Lost	0.0	0.0	0.0	2.9	0.0	0.0	0.0	1.3	1.3	1.3	1.3	0.0		8.0
Total Take	0.0	0.0	0.0	4.6	0.0	0.0	0.0	1.3	1.3	1.3	1.3	0.0		9.6
Total Take (%)	0.0%	0.0%	0.0%	47.6%	0.0%	0.0%	0.0%	13.1%	13.1%	13.1%	13.1%	0.0%		100%
Cum. Take	0.0	0.0	0.0	4.6	4.6	4.6	4.6	5.9	7.1	8.4	9.6	9.6		
Cum. Take (%)	0.0%	0.0%	0.0%	47.6%	47.6%	47.6%	47.6%	60.7%	73.8%	86.9%	100.0%	100.0%		

<i>HARBOR SEAL HARVEST BY MONTH</i>													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	27	41	70	25	15	9	14	13	19	49	57	58	53	450
Struck & Lost	0	5	8	4	3	3	4	2	7	5	1	3	6	51
Total Take	27	46	78	29	18	12	18	15	26	54	58	61	59	501
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	34.8	45.5	82.1	30.0	17.5	10.2	15.7	13.9	20.8	57.6	72.2	71.6	62.2	533.9
Struck & Lost	0.0	5.8	11.6	4.1	3.5	3.5	4.5	2.1	7.6	5.4	1.1	3.7	7.1	60.1
Total Take	34.8	51.3	93.7	34.1	21.0	13.7	20.2	15.9	28.4	63.0	73.3	75.3	69.2	593.9
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	34.8	45.9	83.9	32.3	33.9	17.2	25.1	14.3	27.9	61.7	81.0	76.0		533.9
Struck & Lost	0.0	5.8	11.6	4.1	5.4	5.4	6.4	2.1	8.9	5.4	1.1	3.7		60.1
Total Take	34.8	51.7	95.5	36.4	39.3	22.7	31.5	16.3	36.8	67.1	82.1	79.7		593.9
Total Take (%)	5.9%	8.7%	16.1%	6.1%	6.6%	3.8%	5.3%	2.7%	6.2%	11.3%	13.8%	13.4%		100%
Cum. Take	34.8	86.5	182.1	218.4	257.8	280.4	311.9	328.3	365.1	432.2	514.3	593.9		
Cum. Take (%)	5.9%	14.6%	30.7%	36.8%	43.4%	47.2%	52.5%	55.3%	61.5%	72.8%	86.6%	100.0%		

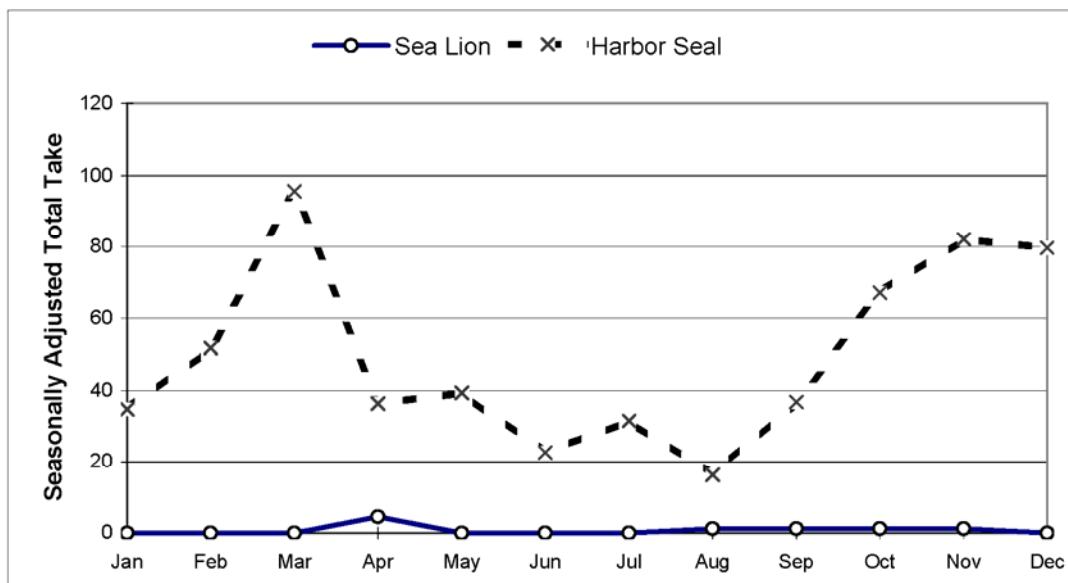
SOURCE: SAIFWC Household Surveys, 2009.

Table 1. (cont.) SEA LION AND HARBOR SEAL HARVESTS: SOUTHEAST ALASKA, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	159	35.3%	177.2	33.2%
Adult Female	0	0.0%	0.0	0.0%	63	14.0%	69.2	13.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	77	17.1%	106.9	20.0%
Juvenile Male	0	0.0%	0.0	0.0%	70	15.6%	77.4	14.5%
Juvenile Female	0	0.0%	0.0	0.0%	33	7.3%	36.7	6.9%
Juvenile Unknown Sex	1	100.0%	1.7	100.0%	13	2.9%	20.3	3.8%
Pup Male	0	0.0%	0.0	0.0%	9	2.0%	9.2	1.7%
Pup Female	0	0.0%	0.0	0.0%	2	0.4%	2.0	0.4%
Pup Unknown Sex	0	0.0%	0.0	0.0%	1	0.2%	1.0	0.2%
Male Unknown Age	0	0.0%	0.0	0.0%	5	1.1%	5.1	1.0%
Female Unknown Age	0	0.0%	0.0	0.0%	1	0.2%	1.0	0.2%
Unknown Sex and Age	0	0.0%	0.0	0.0%	17	3.8%	27.8	5.2%
Total	1	100.0%	1.7	100.0%	450	100.0%	533.9	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	5.2	1.3	6.4	1992	1476.8	189.5	1666.2
1993	0.0	1.1	1.1	1993	1425.0	190.0	1615.0
1994	3.5	1.1	4.6	1994	1348.5	151.4	1499.9
1995	0.0	0.0	0.0	1995	1719.1	170.9	1890.0
1996	0.0	0.0	0.0	1996	1641.6	216.3	1857.8
1997	0.0	0.0	0.0	1997	1343.4	224.1	1567.4
1998	3.3	4.4	7.6	1998	1414.0	202.4	1616.4
2000	2.3	0.0	2.3	2000	1209.7	151.4	1361.1
2001	0.0	0.0	0.0	2001	1019.9	155.9	1175.7
2002	7.0	0.0	7.0	2002	877.0	129.8	1006.8
2003	2.3	4.6	6.9	2003	945.1	123.7	1068.8
2004	4.6	7.2	11.8	2004	743.0	102.3	845.3
2005	0.0	19.0	19.0	2005	545.5	88.7	634.2
2006	2.5	10.1	12.6	2006	592.7	114.8	707.6
2007	0.0	6.1	6.1	2007	585.7	68.2	653.8
2008	1.7	8.0	9.6	2008	533.9	60.1	593.9

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
SAIFWC Household Surveys, 2000-2009.

Table 2. SEA LION AND HARBOR SEAL HARVESTS: NORTH PACIFIC RIM, 2008

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	25	128	153
	Surveyed Households	14	105	119
	Sampling Fraction	56.0%	82.0%	77.8%
	Sample Household Members	33	333	366
	Estimated Household Members	72.2	389.9	462.1
	2000 U.S. Census Estimated Native Population	---	---	2094

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>		Sea	Harbor
	<u>Sea</u>	<u>Harbor</u>			<u>Lion</u>	<u>Seal</u>
	<u>Lion</u>	<u>Seal</u>				
Used	N/A	N/A	Total Number Harvested		20.3	243.7
Hunted	N/A	N/A	Total Number Struck and Lost		4.3	33.1
Harvested	N/A	N/A	Total Number Taken		24.6	276.7
Received	N/A	N/A				
Gave Away	N/A	N/A	Number Harvested Per Capita		0.01	0.12

<i>SEA LION HARVEST BY MONTH</i>													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	2	2	2	1	1	0	0	0	0	3	0	7	18
Struck & Lost	0	0	0	2	1	0	0	0	0	0	1	0	0	4
Total Take	0	2	2	4	2	1	0	0	0	0	4	0	7	22
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.2	2.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0	3.8	0.0	7.7	20.3
Struck & Lost	0.0	0.0	0.0	2.2	1.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	4.3
Total Take	0.0	2.2	2.2	4.4	2.2	1.1	0.0	0.0	0.0	0.0	4.8	0.0	7.7	24.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	4.1	4.1	4.1	2.1	2.1	0.0	0.0	0.0	0.0	3.8	0.0		20.3
Struck & Lost	0.0	0.0	0.0	2.2	1.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0		4.3
Total Take	0.0	4.1	4.1	6.3	3.2	2.1	0.0	0.0	0.0	0.0	4.8	0.0		24.6
Total Take (%)	0.0%	16.8%	16.8%	25.7%	12.9%	8.4%	0.0%	0.0%	0.0%	0.0%	19.5%	0.0%		100%
Cum. Take	0.0	4.1	8.3	14.6	17.7	19.8	19.8	19.8	19.8	19.8	24.6	24.6		
Cum. Take (%)	0.0%	16.8%	33.5%	59.3%	72.1%	80.5%	80.5%	80.5%	80.5%	80.5%	100.0%	100.0%		

<i>HARBOR SEAL HARVEST BY MONTH</i>													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	8	9	18	11	20	17	24	22	23	19	12	8	10	201
Struck & Lost	0	0	1	0	3	4	4	5	5	0	0	0	8	30
Total Take	8	9	19	11	23	21	28	27	28	19	12	8	18	231
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	8.5	9.5	28.7	12.1	23.7	19.3	37.3	24.2	26.8	20.4	13.0	9.0	11.0	243.7
Struck & Lost	0.0	0.0	1.0	0.0	3.2	4.4	4.4	5.1	5.0	0.0	0.0	0.0	9.9	33.1
Total Take	8.5	9.5	29.7	12.1	27.0	23.7	41.7	29.3	31.9	20.4	13.0	9.0	20.9	276.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	9.0	10.0	29.5	12.8	24.7	20.8	38.8	25.1	27.6	21.5	14.1	9.8		243.7
Struck & Lost	0.0	0.0	1.0	0.5	4.6	7.1	8.5	5.1	6.0	0.5	0.0	0.0		33.1
Total Take	9.0	10.0	30.5	13.3	29.2	27.9	47.3	30.2	33.5	21.9	14.1	9.8		276.7
Total Take (%)	3.3%	3.6%	11.0%	4.8%	10.6%	10.1%	17.1%	10.9%	12.1%	7.9%	5.1%	3.5%		100%
Cum. Take	9.0	19.1	49.5	62.8	92.1	120.0	167.3	197.4	231.0	252.9	267.0	276.7		
Cum. Take (%)	3.3%	6.9%	17.9%	22.7%	33.3%	43.4%	60.4%	71.3%	83.5%	91.4%	96.5%	100.0%		

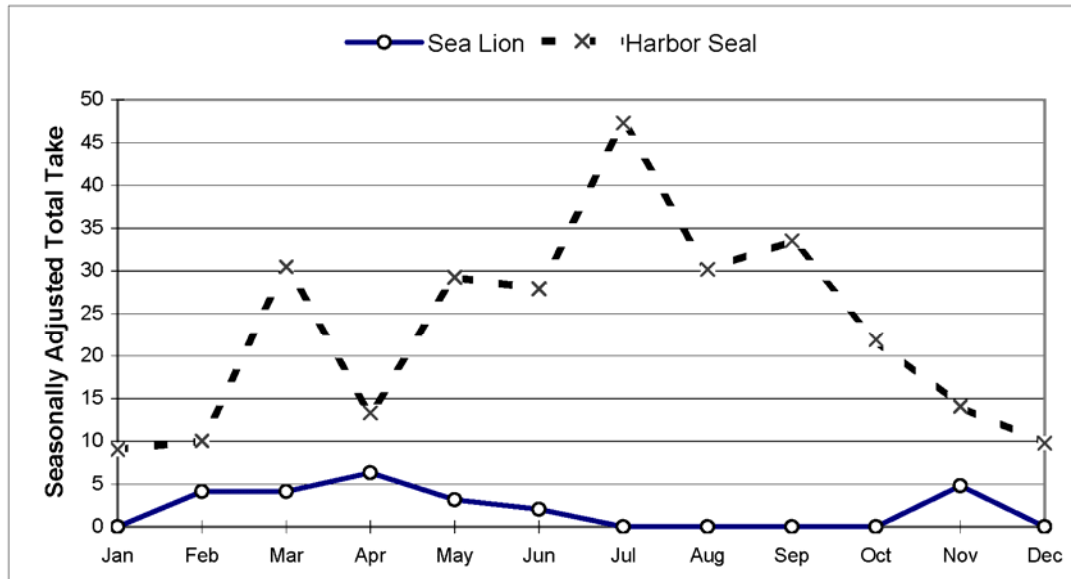
SOURCE: ANHSC Household Surveys, 2009.

Table 2. (cont.) SEA LION AND HARBOR SEAL HARVESTS: NORTH PACIFIC RIM, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	5.6%	1.1	5.4%	41	20.4%	65.7	26.9%
Adult Female	3	16.7%	3.5	17.2%	21	10.4%	22.5	9.2%
Adult Unknown Sex	0	0.0%	0.0	0.0%	19	9.5%	20.2	8.3%
Juvenile Male	1	5.6%	1.4	6.8%	6	3.0%	7.2	2.9%
Juvenile Female	0	0.0%	0.0	0.0%	3	1.5%	3.1	1.3%
Juvenile Unknown Sex	6	33.3%	6.6	32.6%	15	7.5%	15.6	6.4%
Pup Male	0	0.0%	0.0	0.0%	13	6.5%	14.3	5.9%
Pup Female	0	0.0%	0.0	0.0%	6	3.0%	6.6	2.7%
Pup Unknown Sex	0	0.0%	0.0	0.0%	23	11.4%	24.7	10.1%
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	7	38.9%	7.7	38.0%	54	26.9%	63.8	26.2%
Total	18	100.0%	20.3	100.0%	201	100.0%	243.7	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	25.1	6.5	31.5	1992	377.6	33.4	411.0
1993	26.2	8.7	34.9	1993	412.3	38.5	450.8
1994	16.6	9.7	26.3	1994	411.2	56.8	468.0
1995	28.4	3.0	31.4	1995	252.1	11.7	263.9
1996	12.4	1.1	13.5	1996	289.0	22.1	311.1
1997	4.5	1.4	5.8	1997	295.0	12.8	307.7
1998	20.0	8.5	28.5	1998	393.5	41.4	434.9
2000	11.7	5.0	16.7	2000	289.9	29.8	319.7
2001	14.7	0.0	14.7	2001	279.9	20.1	300.0
2002	5.5	0.0	5.5	2002	251.9	35.2	287.1
2003	19.1	5.6	24.7	2003	348.8	25.3	374.1
2004	38.0	15.8	53.9	2004	322.7	43.2	365.9
2005	40.1	9.1	49.2	2005	347.4	47.8	395.2
2006	17.0	8.0	25.0	2006	411.1	29.7	440.8
2007	47.5	10.3	57.8	2007	238.0	30.5	268.4
2008	20.3	4.3	24.6	2008	243.7	33.1	276.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
ANHSC Household Surveys, 2000-2009.

Table 3. SEA LION AND HARBOR SEAL HARVESTS: UPPER KENAI-COOK INLET, 2008

<i>SAMPLING DESIGN:</i>		<u>Total</u>
<i>CHAIN REFERRAL</i>	Total Referred Households	56
	Surveyed Households	30
	Sampling Fraction	53.6%
	Sample Household Members	118
	Estimated Household Members	214.2
	2000 U.S. Census Estimated Native Population	29,486

HARVEST AND USE INFORMATION*Percentage of Native Households:**Estimated Community Harvest
and Take (Expanded):*

	Sea	Harbor		Sea	Harbor
	<u>Lion</u>	<u>Seal</u>		<u>Lion</u>	<u>Seal</u>
Used	N/A	N/A	Total Number Harvested	0.0	33.1
Hunted	N/A	N/A	Total Number Struck and Lost	0.0	3.5
Harvested	N/A	N/A	Total Number Taken	0.0	36.7
Received	N/A	N/A			
Gave Away	N/A	N/A	Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	2	4	1	4	3	0	2	2	1	0	0	19
Struck & Lost	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Total Take	0	0	2	4	1	4	3	1	3	2	1	0	0	21
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.6	7.2	1.8	6.3	5.4	0.0	3.6	3.6	1.8	0.0	0.0	33.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	0.0	0.0	0.0	0.0	3.5
Total Take	0.0	0.0	3.6	7.2	1.8	6.3	5.4	1.8	5.4	3.6	1.8	0.0	0.0	36.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.6	7.2	1.8	6.3	5.4	0.0	3.6	3.6	1.8	0.0		33.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	0.0	0.0	0.0		3.5
Total Take	0.0	0.0	3.6	7.2	1.8	6.3	5.4	1.8	5.4	3.6	1.8	0.0		36.7
Total Take (%)	0.0%	0.0%	9.8%	19.5%	4.9%	17.2%	14.6%	4.8%	14.6%	9.8%	4.9%	0.0%		100%
Cum. Take	0.0	0.0	3.6	10.7	12.5	18.8	24.2	25.9	31.3	34.9	36.7	36.7		
Cum. Take (%)	0.0%	0.0%	9.8%	29.3%	34.2%	51.3%	65.9%	70.7%	85.4%	95.1%	100.0%	100.0%		

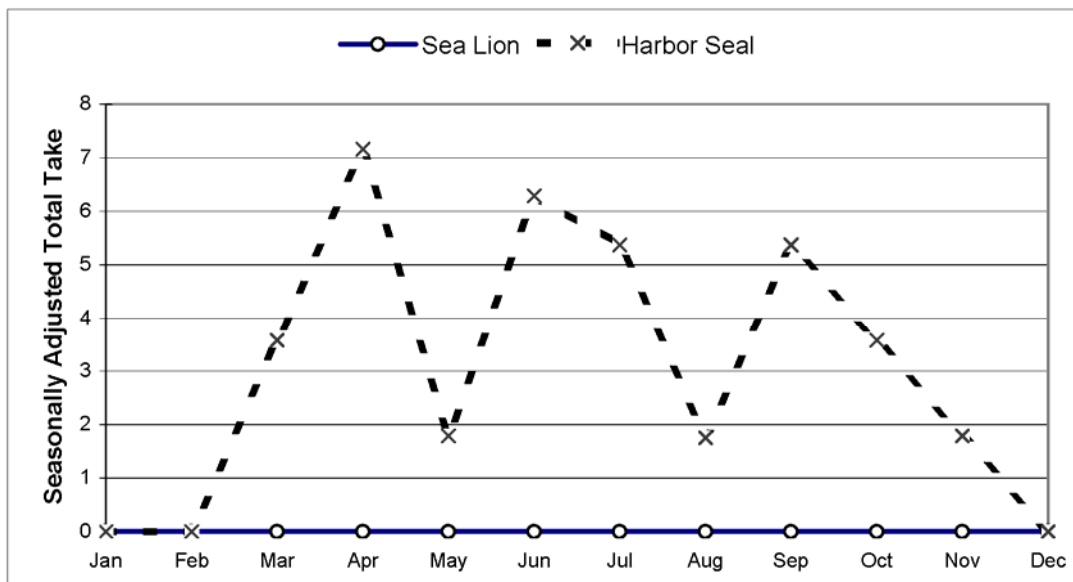
SOURCE: ANHSC Household Surveys, 2009.

Table 3. (cont.) SEA LION AND HARBOR SEAL HARVESTS: UPPER KENAI-COOK INLET, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	6	31.6%	9.9	29.8%
Adult Female	0	---	0.0	---	2	10.5%	3.6	10.8%
Adult Unknown Sex	0	---	0.0	---	3	15.8%	5.4	16.2%
Juvenile Male	0	---	0.0	---	6	31.6%	10.7	32.4%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	1	5.3%	1.8	5.4%
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	5.3%	1.8	5.4%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	19	100.0%	33.1	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	5.7	3.8	9.5	1992	51.6	0.0	51.6
1993	7.8	3.3	11.1	1993	49.2	5.6	54.8
1994	1.4	0.0	1.4	1994	16.2	0.0	16.2
1995	0.0	0.0	0.0	1995	3.7	0.0	3.7
1996	3.3	0.0	3.3	1996	64.3	8.8	73.1
1997	0.0	0.0	0.0	1997	101.7	8.8	110.5
1998	0.0	0.0	0.0	1998	79.2	13.5	92.7
2000	0.0	0.0	0.0	2000	79.2	13.5	92.7
2001	1.3	0.0	1.3	2001	91.2	2.7	93.9
2002	0.0	0.0	0.0	2002	75.2	8.0	83.2
2003	0.0	0.0	0.0	2003	90.8	15.0	105.8
2004	0.0	0.0	0.0	2004	56.6	13.4	69.9
2005	0.0	0.0	0.0	2005	37.6	13.3	50.9
2006	0.0	0.0	0.0	2006	37.6	13.3	50.9
2007	0.0	0.0	0.0	2007	27.0	4.0	31.0
2008	0.0	0.0	0.0	2008	33.1	3.5	36.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
ANHSC Household Surveys, 2000-2009.

Table 4. SEA LION AND HARBOR SEAL HARVESTS: KODIAK ISLAND, 2008

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	98	140	238
	Surveyed Households	68	127	195
	Sampling Fraction	69.4%	90.7%	81.9%
	Sample Household Members	215	362	577
	Estimated Household Members	314.1	398.1	712.2
	2000 U.S. Census Estimated Native Population	---	---	1584

HARVEST AND USE INFORMATION*Percentage of Native Households:*

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	N/A	N/A
Hunted	N/A	N/A
Harvested	N/A	N/A
Received	N/A	N/A
Gave Away	N/A	N/A

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	12.1	165.5
Total Number Struck and Lost	6.7	26.5
Total Number Taken	18.8	192.0
Number Harvested Per Capita	0.01	0.10

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	0	1	1	0	0	0	1	0	3	1	3	0	11
Struck & Lost	0	0	0	0	0	0	0	1	0	1	2	2	0	6
Total Take	1	0	1	1	0	0	0	2	0	4	3	5	0	17
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	0.0	1.0	1.0	0.0	0.0	0.0	1.2	0.0	3.5	1.0	3.4	0.0	12.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2	2.1	2.2	0.0	6.7
Total Take	1.0	0.0	1.0	1.0	0.0	0.0	0.0	2.3	0.0	4.7	3.1	5.6	0.0	18.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	0.0	1.0	1.0	0.0	0.0	0.0	1.2	0.0	3.5	1.0	3.4		12.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2	2.1	2.2		6.7
Total Take	1.0	0.0	1.0	1.0	0.0	0.0	0.0	2.3	0.0	4.7	3.1	5.6		18.8
Total Take (%)	5.3%	0.0%	5.3%	5.3%	0.0%	0.0%	0.0%	12.5%	0.0%	25.0%	16.7%	29.9%		100%
Cum. Take	1.0	1.0	2.0	3.0	3.0	3.0	3.0	5.3	5.3	10.0	13.2	18.8		
Cum. Take (%)	5.3%	5.3%	10.7%	16.0%	16.0%	16.0%	16.0%	28.5%	28.5%	53.4%	70.1%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	13	13	4	6	5	6	0	6	9	23	20	19	1	125
Struck & Lost	2	2	2	0	1	2	0	0	0	3	6	3	0	21
Total Take	15	15	6	6	6	8	0	6	9	26	26	22	1	146
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	15.8	20.4	5.4	6.3	5.1	6.6	0.0	9.9	12.8	32.4	23.9	24.9	2.2	165.5
Struck & Lost	3.2	2.0	2.0	0.0	1.0	2.2	0.0	0.0	0.0	5.3	6.4	4.3	0.0	26.5
Total Take	18.9	22.4	7.4	6.3	6.2	8.8	0.0	9.9	12.8	37.7	30.2	29.3	2.2	192.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	15.9	20.8	5.4	6.3	5.1	6.6	0.0	10.1	13.0	33.0	24.0	25.2		165.5
Struck & Lost	3.2	2.0	2.0	0.0	1.0	2.2	0.0	0.0	0.0	5.3	6.4	4.3		26.5
Total Take	19.1	22.9	7.5	6.3	6.2	8.8	0.0	10.1	13.0	38.3	30.4	29.6		192.0
Total Take (%)	9.9%	11.9%	3.9%	3.3%	3.2%	4.6%	0.0%	5.3%	6.8%	19.9%	15.8%	15.4%		100%
Cum. Take	19.1	42.0	49.5	55.7	61.9	70.7	70.7	80.8	93.8	132.1	162.5	192.0		
Cum. Take (%)	9.9%	21.9%	25.8%	29.0%	32.2%	36.8%	36.8%	42.1%	48.8%	68.8%	84.6%	100.0%		

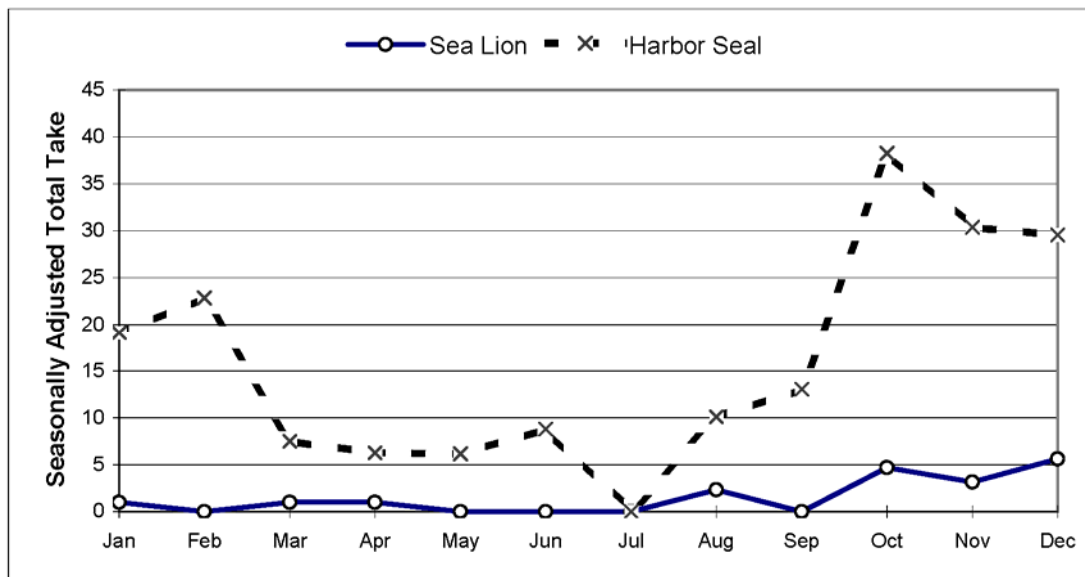
SOURCE: ANHSC Household Surveys, 2009.

Table 4. (cont.) SEA LION AND HARBOR SEAL HARVESTS: KODIAK ISLAND, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	6	54.5%	7.0	58.0%	94	75.2%	129.1	78.0%
Adult Female	0	0.0%	0.0	0.0%	11	8.8%	13.6	8.2%
Adult Unknown Sex	0	0.0%	0.0	0.0%	6	4.8%	6.1	3.7%
Juvenile Male	4	36.4%	4.0	33.4%	8	6.4%	9.4	5.7%
Juvenile Female	0	0.0%	0.0	0.0%	1	0.8%	1.0	0.6%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	1	0.8%	1.0	0.6%
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%	0.0	0.0%	1	0.8%	1.0	0.6%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	1	9.1%	1.0	8.6%	1	0.8%	1.0	0.6%
Unknown Sex and Age	0	0.0%	0.0	0.0%	2	1.6%	3.2	1.9%
Total	11	100.0%	12.1	100.0%	125	100.0%	165.5	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	41.5	16.3	57.8	1992	225.5	13.1	238.6
1993	41.5	16.9	58.4	1993	171.7	20.1	191.8
1994	57.1	4.2	61.3	1994	168.2	3.6	171.7
1995	127.9	7.7	135.7	1995	223.0	9.2	232.2
1996	53.9	6.3	60.2	1996	185.2	4.9	190.1
1997	33.3	4.9	38.2	1997	189.8	18.3	208.2
1998	14.5	3.3	17.8	1998	174.0	3.7	177.7
2000	18.5	0.0	18.5	2000	185.9	7.3	193.2
2001	32.8	2.2	35.0	2001	155.6	4.8	160.4
2002	16.1	0.0	16.1	2002	152.1	10.2	162.3
2003	30.3	5.7	36.0	2003	172.7	13.0	185.6
2004	13.5	3.5	17.0	2004	172.2	15.7	188.0
2005	21.9	3.2	25.1	2005	305.1	10.6	315.7
2006	7.0	0.0	7.0	2006	210.3	10.2	220.5
2007	15.8	3.5	19.3	2007	198.6	5.8	204.4
2008	12.1	6.7	18.8	2008	165.5	26.5	192.0

Table 5. SEA LION AND HARBOR SEAL HARVESTS: SOUTH ALASKA PENINSULA, 2008

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	42	105	147
	Surveyed Households	28	67	95
	Sampling Fraction	66.7%	63.8%	64.6%
	Sample Household Members	92	206	298
	Estimated Household Members	137.7	341.4	479.1
	2000 U.S. Census Estimated Native Population	---	---	1228

HARVEST AND USE INFORMATION*Percentage of Native Households:*

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	N/A	N/A
Hunted	N/A	N/A
Harvested	N/A	N/A
Received	N/A	N/A
Gave Away	N/A	N/A

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	7.2	107.5
Total Number Struck and Lost	1.4	17.3
Total Number Taken	8.6	124.8
Number Harvested Per Capita	0.01	0.09

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	1	0	1	0	0	1	1	4
Struck & Lost	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total Take	0	0	0	0	0	0	1	0	1	0	1	1	1	5
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	2.6	0.0	0.0	1.6	1.3	7.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	2.6	0.0	1.4	1.6	1.3	8.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.1	0.1	0.1	0.1	0.1	0.1	1.8	0.1	2.7	0.1	0.1	1.8		7.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0		1.4
Total Take	0.1	0.1	0.1	0.1	0.1	0.1	1.8	0.1	2.7	0.1	1.5	1.8		8.6
Total Take (%)	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	20.5%	1.2%	31.8%	1.2%	17.3%	20.5%		100%
Cum. Take	0.1	0.2	0.3	0.4	0.5	0.6	2.4	2.5	5.2	5.3	6.8	8.6		
Cum. Take (%)	1.2%	2.5%	3.7%	5.0%	6.2%	7.4%	27.9%	29.2%	61.0%	62.2%	79.5%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	6	2	4	0	4	4	7	6	11	5	8	1	2	60
Struck & Lost	2	0	0	0	0	1	0	0	1	1	1	1	0	7
Total Take	8	2	4	0	4	5	7	6	12	6	9	2	2	67
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	12.1	3.8	9.5	0.0	8.5	6.6	12.1	8.4	15.5	10.5	16.3	1.6	2.5	107.5
Struck & Lost	5.2	0.0	0.0	0.0	0.0	1.6	0.0	0.0	2.6	2.6	2.6	2.6	0.0	17.3
Total Take	17.4	3.8	9.5	0.0	8.5	8.2	12.1	8.4	18.2	13.1	18.9	4.3	2.5	124.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	12.1	3.8	9.5	0.0	8.5	6.6	12.1	8.4	15.5	10.5	18.8	1.6		107.5
Struck & Lost	5.2	0.0	0.0	0.0	0.0	1.6	0.0	0.0	2.6	2.6	2.6	2.6		17.3
Total Take	17.4	3.8	9.5	0.0	8.5	8.2	12.1	8.4	18.2	13.1	21.5	4.3		124.8
Total Take (%)	13.9%	3.0%	7.6%	0.0%	6.8%	6.6%	9.7%	6.7%	14.5%	10.5%	17.2%	3.4%		100%
Cum. Take	17.4	21.1	30.6	30.6	39.1	47.4	59.5	67.9	86.0	99.1	120.6	124.8		
Cum. Take (%)	13.9%	16.9%	24.5%	24.5%	31.4%	38.0%	47.7%	54.4%	68.9%	79.4%	96.6%	100.0%		

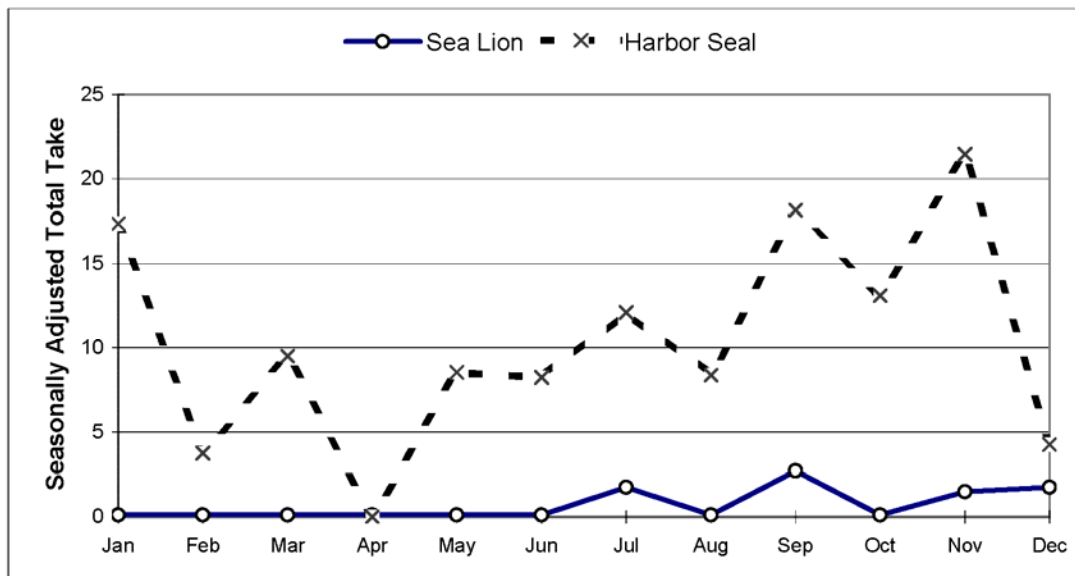
SOURCE: AMMC Household Surveys 2009; BBNA Household Surveys, 2009.

Table 5. (cont.) SEA LION AND HARBOR SEAL HARVESTS: SOUTH ALASKA PENINSULA, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	2	50.0%	3.9	54.1%	30	50.0%	51.6	48.0%
Adult Female	2	50.0%	3.3	45.9%	6	10.0%	13.4	12.4%
Adult Unknown Sex	0	0.0%	0.0	0.0%	6	10.0%	8.5	7.9%
Juvenile Male	0	0.0%	0.0	0.0%	2	3.3%	5.2	4.9%
Juvenile Female	0	0.0%	0.0	0.0%	1	1.7%	1.4	1.3%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	4	6.7%	7.6	7.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	1	1.7%	1.6	1.5%
Male Unknown Age	0	0.0%	0.0	0.0%	5	8.3%	9.0	8.4%
Female Unknown Age	0	0.0%	0.0	0.0%	1	1.7%	2.6	2.4%
Unknown Sex and Age	0	0.0%	0.0	0.0%	4	6.7%	6.6	6.1%
Total	4	100.0%	7.2	100.0%	60	100.0%	107.5	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	2.4	0.0	2.4	1992	115.5	13.1	128.6
1993	4.6	1.2	5.7	1993	100.0	23.1	123.1
1994	4.6	1.1	5.7	1994	98.6	11.1	109.8
1995	0.0	8.1	8.1	1995	117.0	11.1	128.0
1996	3.7	1.3	5.0	1996	86.3	5.0	91.3
1997	8.3	0.0	8.3	1997	68.3	12.1	80.4
1998	9.2	0.0	9.2	1998	79.9	7.5	87.4
2000	13.8	0.0	13.8	2000	65.4	18.4	83.8
2001	10.2	1.4	11.6	2001	68.7	16.3	85.1
2002	3.9	4.2	8.1	2002	70.0	19.4	89.4
2003	2.5	2.4	5.0	2003	91.1	13.5	104.5
2004	3.9	0.0	3.9	2004	77.9	10.1	88.0
2005	4.2	0.0	4.2	2005	66.8	8.5	75.3
2006	17.5	1.1	18.5	2006	52.5	20.6	73.0
2007	9.7	0.0	9.7	2007	88.0	18.4	106.4
2008	7.2	1.4	8.6	2008	107.5	17.3	124.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
AMMC Household Surveys; BBNA Household Surveys, 2000-2009.

Table 6. SEA LION AND HARBOR SEAL HARVESTS: ALEUTIAN ISLANDS, 2008

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	20	67	87
	Surveyed Households	9	50	59
	Sampling Fraction	45.0%	74.6%	67.8%
	Sample Household Members	20	113	134
	Estimated Household Members	51.9	161.9	213.9
	2000 U.S. Census Estimated Native Population	---	---	861

HARVEST AND USE INFORMATION*Percentage of Native Households:*

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	N/A	N/A
Hunted	N/A	N/A
Harvested	N/A	N/A
Received	N/A	N/A
Gave Away	N/A	N/A

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	45.8	43.5
Total Number Struck and Lost	2.6	6.0
Total Number Taken	48.4	49.5
Number Harvested Per Capita	0.05	0.05

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	1	4	8	1	5	0	4	23
Struck & Lost	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total Take	0	1	0	0	0	0	1	4	8	1	5	0	4	24
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	1.1	8.6	20.0	2.5	9.6	0.0	4.0	45.8
Struck & Lost	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Total Take	0.0	2.6	0.0	0.0	0.0	0.0	1.1	8.6	20.0	2.5	9.6	0.0	4.0	48.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.3	0.3	0.3	0.3	0.3	0.3	1.4	9.0	20.3	2.8	10.0	0.3		45.8
Struck & Lost	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		2.6
Total Take	0.3	2.9	0.3	0.3	0.3	0.3	1.4	9.0	20.3	2.8	10.0	0.3		48.4
Total Take (%)	0.7%	6.0%	0.7%	0.7%	0.7%	0.7%	2.9%	18.5%	42.0%	5.9%	20.6%	0.7%		100%
Cum. Take	0.3	3.2	3.6	3.9	4.2	4.6	6.0	14.9	35.3	38.1	48.1	48.4		
Cum. Take (%)	0.7%	6.7%	7.4%	8.1%	8.8%	9.4%	12.3%	30.9%	72.9%	78.7%	99.3%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	2	3	1	0	3	3	1	3	2	2	6	0	6	32
Struck & Lost	0	0	1	0	0	0	0	0	2	0	0	0	0	3
Total Take	2	3	2	0	3	3	1	3	4	2	6	0	6	35
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.0	6.1	1.0	0.0	3.2	4.6	1.1	3.1	2.0	5.0	9.2	0.0	6.2	43.5
Struck & Lost	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	6.0
Total Take	2.0	6.1	3.5	0.0	3.2	4.6	1.1	3.1	5.5	5.0	9.2	0.0	6.2	49.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.2	6.6	1.2	0.2	4.4	5.5	1.6	3.6	2.2	5.2	10.8	0.2		43.5
Struck & Lost	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0		6.0
Total Take	2.2	6.6	3.7	0.2	4.4	5.5	1.6	3.6	5.7	5.2	10.8	0.2		49.5
Total Take (%)	4.4%	13.3%	7.4%	0.3%	8.9%	11.1%	3.2%	7.2%	11.5%	10.4%	21.9%	0.3%		100%
Cum. Take	2.2	8.7	12.4	12.6	17.0	22.5	24.1	27.6	33.3	38.5	49.3	49.5		
Cum. Take (%)	4.4%	17.7%	25.1%	25.4%	34.3%	45.5%	48.6%	55.9%	67.3%	77.8%	99.7%	100.0%		

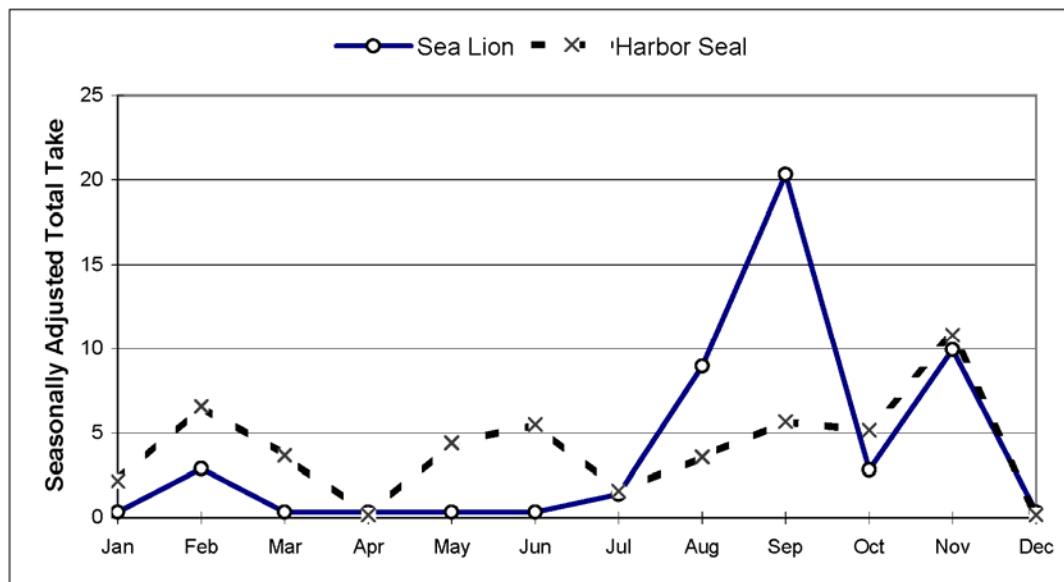
SOURCE: AMMC Household Surveys, 2009.

Table 6. (cont.) SEA LION AND HARBOR SEAL HARVESTS: ALEUTIAN ISLANDS, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	7	30.4%	13.2	28.8%	11	34.4%	12.9	29.6%
Adult Female	4	17.4%	8.6	18.7%	8	25.0%	11.4	26.1%
Adult Unknown Sex	0	0.0%	0.0	0.0%	3	9.4%	3.0	6.9%
Juvenile Male	4	17.4%	10.0	21.8%	2	6.3%	5.0	11.5%
Juvenile Female	3	13.0%	7.5	16.4%	2	6.3%	5.0	11.5%
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	5	21.7%	6.6	14.3%	6	18.8%	6.2	14.4%
Total	23	100.0%	45.8	100.0%	32	100.0%	43.5	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	104.3	30.9	135.2	1992	94.3	21.4	115.7
1993	99.0	24.8	123.8	1993	85.0	15.4	100.4
1994	101.8	20.5	122.3	1994	124.9	22.6	147.5
1995	85.0	11.1	96.1	1995	86.9	9.7	96.6
1996	46.5	11.3	57.9	1996	55.0	15.2	70.2
1997	50.7	1.3	51.9	1997	70.5	6.3	76.9
1998	31.6	5.5	37.0	1998	45.8	3.8	49.6
2000	71.2	4.8	76.0	2000	79.0	10.5	89.5
2001	78.1	19.6	97.7	2001	120.1	12.5	132.6
2002	87.4	17.7	105.1	2002	63.4	2.4	65.9
2003	88.5	18.5	107.0	2003	97.7	11.4	109.1
2004	70.9	25.1	96.0	2004	118.0	28.0	146.0
2005	77.7	10.6	88.3	2005	103.7	17.1	120.8
2006	63.4	19.4	82.8	2006	54.4	8.6	63.0
2007	61.3	14.7	76.0	2007	68.5	6.9	75.3
2008	45.8	2.6	48.4	2008	43.5	6.0	49.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; AMMC Household Surveys, 2000-2009.

Table 7. SEA LION AND HARBOR SEAL HARVESTS: PRIBILOF ISLANDS, 2008

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	N/A	N/A	N/A
	Surveyed Households	N/A	N/A	N/A
	Sampling Fraction	N/A	N/A	N/A
	Sample Household Members	N/A	N/A	N/A
	Estimated Household Members	N/A	N/A	N/A
	2000 U.S. Census Estimated Native Population	---	---	600

HARVEST AND USE INFORMATION*Percentage of Native Households:*

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	N/A	N/A
Hunted	N/A	N/A
Harvested	N/A	N/A
Received	N/A	N/A
Gave Away	N/A	N/A

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	29.3	N/A
Total Number Struck and Lost	6.7	N/A
Total Number Taken	36.0	N/A
Number Harvested Per Capita	0.05	N/A

SEA LION HARVEST BY MONTH													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	2	0	3	5	4	0	0	0	1	5	2	2	0	24
Struck & Lost	0	0	1	0	0	0	0	0	0	1	2	0	0	4
Total Take	2	0	4	5	4	0	0	0	1	6	4	2	0	28
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.0	0.0	7.0	5.0	4.0	0.0	0.0	0.0	2.3	5.0	2.0	2.0	0.0	29.3
Struck & Lost	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.0	0.0	0.0	6.7
Total Take	2.0	0.0	9.3	5.0	4.0	0.0	0.0	0.0	2.3	7.3	4.0	2.0	0.0	36.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.0	0.0	7.0	5.0	4.0	0.0	0.0	0.0	2.3	5.0	2.0	2.0		29.3
Struck & Lost	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.0	0.0		6.7
Total Take	2.0	0.0	9.3	5.0	4.0	0.0	0.0	0.0	2.3	7.3	4.0	2.0		36.0
Total Take (%)	5.6%	0.0%	25.9%	13.9%	11.1%	0.0%	0.0%	0.0%	6.5%	20.4%	11.1%	5.6%		100%
Cum. Take	2.0	2.0	11.3	16.3	20.3	20.3	20.3	20.3	22.7	30.0	34.0	36.0		
Cum. Take (%)	5.6%	5.6%	31.5%	45.4%	56.5%	56.5%	56.5%	56.5%	63.0%	83.3%	94.4%	100.0%		

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

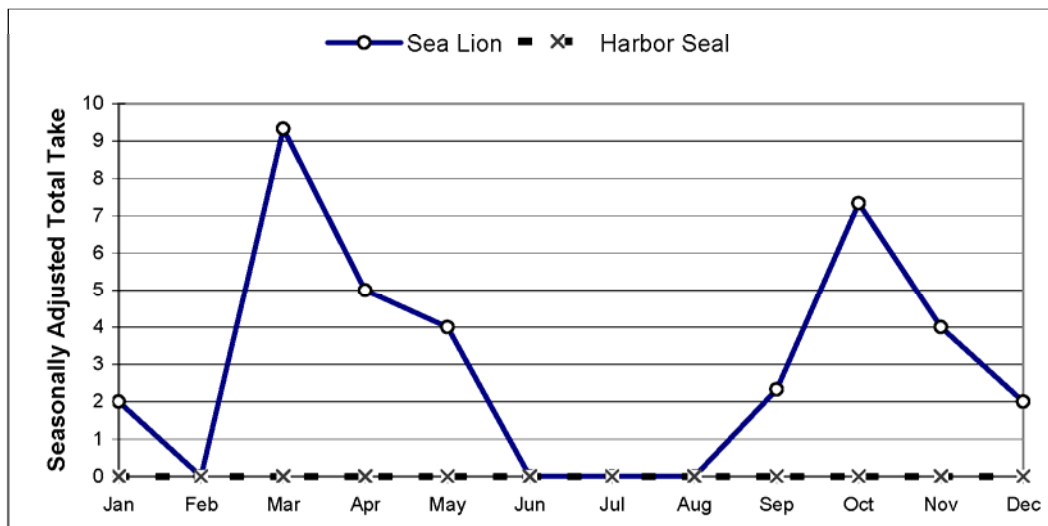
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, with assistance from the St. George Traditional IRA Council, City of St. George, and St. George Tanaq Corporation, (Numbers based on 2003 Survey Estimates).
Jones, 2009.

Table 7. (cont.) SEA LION AND HARBOR SEAL HARVESTS: PRIBILOF ISLANDS, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	4.2%	2.3	8.0%	N/A	---	N/A	---
Adult Female	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Adult Unknown Sex	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Juvenile Male	23	95.8%	27.0	92.0%	N/A	---	N/A	---
Juvenile Female	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Pup Male	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Pup Female	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Pup Unknown Sex	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Male Unknown Age	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Female Unknown Age	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Unknown Sex and Age	0	0.0%	0.0	0.0%	N/A	---	N/A	---
Total	24	100.0%	29.3	100.0%	N/A	---	N/A	---

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total	Year	Harvest	Struck/Lost	Total
1992	176.6	120.2	296.8	1992	2.3	1.2	3.5
1993	165.4	80.0	245.4	1993	2.3	1.2	3.5
1994	149.8	43.5	193.3	1994	7.3	0.0	7.3
1995	57.6	10.3	67.9	1995	2.5	0.0	2.5
1996	32.2	14.2	46.4	1996	0.0	0.0	0.0
1997	45.5	10.4	55.9	1997	0.0	0.0	0.0
1998	52.7	25.4	78.1	1998	4.6	0.0	4.6
2000	29.1	14.2	43.3	2000	N/A	N/A	N/A
2001	19.0	19.0	38.0	2001	N/A	N/A	N/A
2002	24.0	19.0	43.0	2002	N/A	N/A	N/A
2003	22.3	9.7	32.0	2003	N/A	N/A	N/A
2004	22.3	9.7	32.0	2004	N/A	N/A	N/A
2005	28.3	7.7	35.0	2005	N/A	N/A	N/A
2006	29.3	10.7	39.9	2006	N/A	N/A	N/A
2007	31.3	16.7	48.0	2007	N/A	N/A	N/A
2008	29.3	6.7	36.0	2008	N/A	N/A	N/A

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; St George Traditional IRA Council and St. George Tanaq Corporation 2000-2008 (Numbers based on 2003 harvest estimates). 2000-2004 Zavadiil et al. (2006); 2005 Lestenkof and Zavadiil (2005); 2006 Lestenkof et al. (2007); 2007 Lestenkof et al. (2008); 2008 Jones (2009).

Table 8. SEA LION AND HARBOR SEAL HARVESTS: SOUTH BRISTOL BAY, 2008

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	21	188	209
	Surveyed Households	16	120	136
	Sampling Fraction	76.2%	63.8%	65.1%
	Sample Household Members	40	343	383
	Estimated Household Members	52.5	534.2	586.7
	2000 U.S. Census Estimated Native Population	---	---	951

HARVEST AND USE INFORMATION*Percentage of Native Households:**Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>		Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	N/A	N/A	Total Number Harvested	0.0	66.9
Hunted	N/A	N/A	Total Number Struck and Lost	0.0	38.2
Harvested	N/A	N/A	Total Number Taken	0.0	105.1
Received	N/A	N/A			
Gave Away	N/A	N/A	Number Harvested Per Capita	0.00	0.07

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

<i>HARBOR SEAL HARVEST BY MONTH</i>													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	11	16	17	8	1	0	0	0	0	53
Struck & Lost	0	0	0	1	10	10	5	4	0	0	0	0	0	30
Total Take	0	0	0	1	21	26	22	12	1	0	0	0	0	83
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	13.3	18.0	23.3	10.9	1.5	0.0	0.0	0.0	0.0	66.9
Struck & Lost	0.0	0.0	0.0	1.5	11.5	11.8	6.9	6.5	0.0	0.0	0.0	0.0	0.0	38.2
Total Take	0.0	0.0	0.0	1.5	24.8	29.7	30.2	17.4	1.5	0.0	0.0	0.0	0.0	105.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	13.3	18.0	23.3	10.9	1.5	0.0	0.0	0.0		66.9
Struck & Lost	0.0	0.0	0.0	1.5	11.5	11.8	6.9	6.5	0.0	0.0	0.0	0.0		38.2
Total Take	0.0	0.0	0.0	1.5	24.8	29.7	30.2	17.4	1.5	0.0	0.0	0.0		105.1
Total Take (%)	0.0%	0.0%	0.0%	1.4%	23.6%	28.3%	28.8%	16.6%	1.4%	0.0%	0.0%	0.0%		100%
Cum. Take	0.0	0.0	0.0	1.5	26.2	56.0	86.2	103.6	105.1	105.1	105.1	105.1		
Cum. Take (%)	0.0%	0.0%	0.0%	1.4%	25.0%	53.3%	82.0%	98.6%	100.0%	100.0%	100.0%	100.0%		

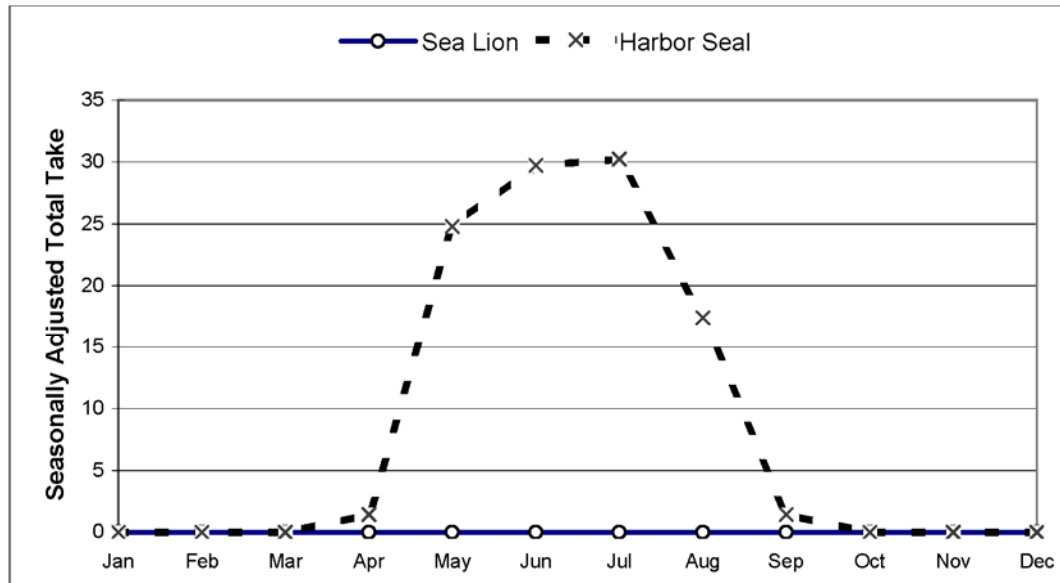
SOURCE: BBNA Household Surveys, 2009.

Table 8. (cont.) SEA LION AND HARBOR SEAL HARVESTS: SOUTH BRISTOL BAY, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	23	43.4%	29.4	43.9%
Adult Female	0	---	0.0	---	12	22.6%	15.8	23.7%
Adult Unknown Sex	0	---	0.0	---	13	24.5%	14.2	21.3%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	1	1.9%	1.3	2.0%
Juvenile Unknown Sex	0	---	0.0	---	1	1.9%	1.3	2.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	1	1.9%	2.6	3.9%
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	3.8%	2.2	3.3%
Total	0	---	0.0	---	53	100.0%	66.9	100%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	99.0	68.6	167.6
1993	0.0	0.0	0.0	1993	73.6	57.3	130.9
1994	0.0	0.0	0.0	1994	121.6	59.3	180.9
1995	0.0	0.0	0.0	1995	68.3	28.3	96.6
1996	0.0	0.0	0.0	1996	63.8	44.2	108.0
1997	0.0	0.0	0.0	1997	107.8	66.3	174.1
1998	0.0	0.0	0.0	1998	62.2	34.3	96.5
2000	0.0	0.0	0.0	2000	55.4	17.6	73.0
2001	0.0	0.0	0.0	2001	52.9	19.8	72.7
2002	0.0	0.0	0.0	2002	79.7	36.8	116.6
2003	0.0	0.0	0.0	2003	35.6	15.3	50.9
2004	0.0	0.0	0.0	2004	58.5	31.2	89.6
2005	0.0	0.0	0.0	2005	40.3	30.8	71.1
2006	0.0	0.0	0.0	2006	45.4	14.0	59.4
2007	0.0	0.0	0.0	2007	52.3	22.0	74.3
2008	0.0	0.0	0.0	2008	66.9	38.2	105.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
BBNA Household Surveys, 2000-2009.

Table 9. SEA LION AND HARBOR SEAL HARVESTS: NORTH BRISTOL BAY, 2008

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>MIXED</i>	Total Household Universe	95	430	525
	Surveyed Households	81	349	430
	Sampling Fraction	85.3%	81.2%	81.9%
	Sample Household Members	319	1245	1564
	Estimated Household Members	375.4	1547.1	1922.5
	2000 U.S. Census Estimated Native Population	---	---	2952

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>		
	<u>Sea Lion</u>	<u>Harbor Seal and Spotted Seal</u>		<u>Sea Lion</u>	<u>Harbor Seal</u> <u>Spotted Seal</u>
Used	N/A	N/A	Total Number Harvested	0.0	65.6 213.3
Hunted	N/A	N/A	Total Number Struck and Lost	0.0	17.2 58.4
Harvested	N/A	N/A	Total Number Taken	0.0	82.8 271.8
Received	N/A	N/A			
Gave Away	N/A	N/A	Number Harvested Per Capita	0.00	0.02 0.07

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

HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH														
	Spotted Seal					Harbor Seal				Spotted Seal			Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	2	5	12	37	30	5	3	17	27	45	39	0	0	222
Struck & Lost	0	2	1	15	10	3	1	2	7	12	7	0	0	63
Total Take	2	7	13	52	40	8	4	19	34	57	46	0	0	285
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.4	5.8	14.8	49.7	38.1	7.2	3.7	21.5	33.2	55.3	47.2	0.0	0.0	278.9
Struck & Lost	0.0	2.4	1.3	19.2	12.4	4.4	1.3	2.7	8.7	14.5	8.6	0.0	0.0	78.5
Total Take	2.4	8.2	16.2	68.9	50.4	11.6	5.0	24.2	41.9	69.8	55.9	0.0	0.0	357.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.4	5.8	14.8	49.7	38.1	7.2	3.7	21.5	33.2	55.3	47.2	0.0		278.9
Struck & Lost	0.0	2.4	1.3	19.2	12.4	4.4	1.3	2.7	8.7	14.5	8.6	0.0		75.6
Total Take	2.4	8.2	16.2	68.9	50.4	11.6	5.0	24.2	41.9	69.8	55.9	0.0		354.5
Total Take (%)	0.7%	2.3%	4.6%	19.4%	14.2%	3.3%	1.4%	6.8%	11.8%	19.7%	15.8%	0.0%		100.0%
Cum. Take	2.4	10.5	26.7	95.6	146.0	157.6	162.7	186.9	228.8	298.6	354.5	354.5		
Cum. Take (%)	0.7%	3.0%	7.5%	27.0%	41.2%	44.5%	45.9%	52.7%	64.5%	84.2%	100.0%	100.0%		

SOURCE: BBNA Household Surveys, 2009.

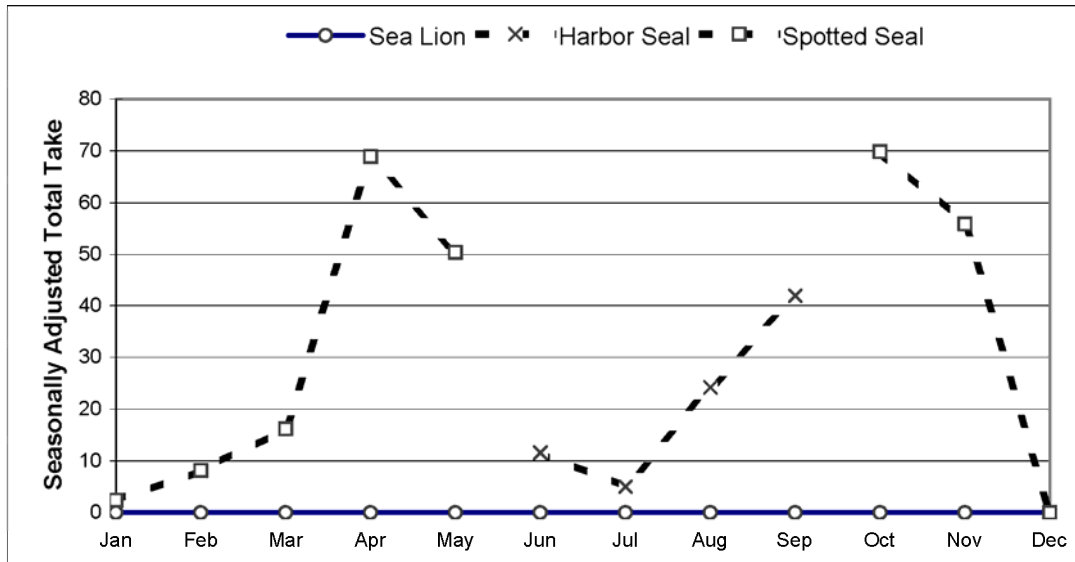
Table 9. (cont.) SEA LION AND HARBOR SEAL HARVESTS: NORTH BRISTOL BAY, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	10	19.2%	11.5	17.6%	51	30.0%	63.6	29.8%
Adult Female	0	---	0.0	---	2	3.8%	2.2	3.3%	19	11.2%	23.5	11.0%
Adult Unknown Sex	0	---	0.0	---	12	23.1%	15.6	23.8%	27	15.9%	33.4	15.7%
Juvenile Male	0	---	0.0	---	4	7.7%	5.3	8.0%	10	5.9%	11.8	5.5%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%	3	1.8%	3.7	1.7%
Juvenile Unknown Sex	0	---	0.0	---	8	15.4%	10.7	16.3%	30	17.6%	39.6	18.6%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%	2	1.2%	2.4	1.1%
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%	4	2.4%	5.3	2.5%
Male Unknown Age	0	---	0.0	---	3	5.8%	3.6	5.4%	3	1.8%	3.4	1.6%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	13	25.0%	16.8	25.6%	21	12.4%	26.5	12.4%
Total	0	---	0.0	---	52	100.0%	65.6	100.0%	170	100.0%	213.3	100%

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

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



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

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	7.8	0.0	7.8	1992	58.4	13.2	71.6	1992	364.1	72.5	436.6
1993	3.3	3.3	6.5	1993	46.1	20.0	66.1	1993	215.1	49.1	264.1
1994	1.2	0.0	1.2	1994	16.2	3.3	19.5	1994	226.5	42.9	269.5
1995	0.0	0.0	0.0	1995	25.9	2.4	28.3	1995	163.7	33.5	197.2
1996	0.0	0.0	0.0	1996	29.6	10.0	39.6	1996	202.1	25.0	227.1
1997	3.6	0.0	3.6	1997	18.8	2.1	20.9	1997	133.6	16.6	150.2
1998	0.0	0.0	0.0	1998	33.2	3.6	36.8	1998	145.9	25.4	171.3
2000	0.0	0.0	0.0	2000	10.4	1.1	11.6	2000	217.0	40.4	257.5
2001	0.0	0.0	0.0	2001	8.8	1.2	10.0	2001	105.9	20.8	126.6
2002	0.0	0.0	0.0	2002	15.5	7.4	23.0	2002	184.5	44.6	229.1
2003	0.0	0.0	0.0	2003	29.8	1.4	31.2	2003	52.3	10.0	62.3
2004	1.2	0.0	1.2	2004	17.6	11.7	29.3	2004	123.8	46.5	170.4
2005	0.0	0.0	0.0	2005	23.9	8.9	32.7	2005	170.5	30.7	201.2
2006	0.0	0.0	0.0	2006	19.1	9.9	29.0	2006	139.8	30.1	169.8
2007	0.0	0.0	0.0	2007	8.8	5.2	14.0	2007	137.2	16.3	153.5
2008	0.0	0.0	0.0	2008	65.6	17.2	82.8	2008	213.3	58.4	271.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.

APPENDIX C

**SUBSISTENCE TAKES OF
HARBOR SEALS AND SEA LIONS
BY COMMUNITY**

SOUTHEAST ALASKA

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

NORTH PACIFIC RIM

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

UPPER KENAI-COOK INLET

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

KODIAK ISLAND

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

SOUTH ALASKA PENINSULA

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

ALEUTIAN ISLANDS

87-88	Adak
89-90	Akutan
91-92	Atka
93-94	Nikolski
95-96	Unalaska

PRIBILOF ISLANDS

97-98	St. George
99-100	St. Paul

SOUTH BRISTOL BAY

101-102	Egegik
103-104	King Salmon
105-106	Levelock
107-108	Naknek
109-110	Pilot Point
111-112	Port Heiden
113-114	South Naknek

NORTH BRISTOL BAY

115-116	Aleknagik
117-118	Clark's Point
119-120	Dillingham
121-122	Manokotak
123-124	Togiak
125-126	Twin Hills

Table 1. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Angoon, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	40
Surveyed Households	40
Sampling Fraction	100.0%
Sample Household Members	157
Estimated Household Members	157.0
2000 U.S. Census Estimated Native Population	494

HARVEST AND USE INFORMATION**Percentage of Sample Households:**

	Sea Lion	Harbor Seal
Used	0.0%	100.0%
Hunted	0.0%	55.0%
Harvested	0.0%	50.0%
Received	0.0%	100.0%
Gave Away	0.0%	52.5%

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

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	41.0
Total Number Struck and Lost	0.0	5.0
Total Number Taken	0.0	46.0
Number Harvested Per Capita	0.00	0.08

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	3	9	0	0	0	5	1	7	5	8	3	41
Struck & Lost	0	0	0	3	0	0	0	1	1	0	0	0	0	5
Total Take	0	0	3	12	0	0	0	6	2	7	5	8	3	46
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.0	9.0	0.0	0.0	0.0	5.0	1.0	7.0	5.0	8.0	3.0	41.0
Struck & Lost	0.0	0.0	0.0	3.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	5.0
Total Take	0.0	0.0	3.0	12.0	0.0	0.0	0.0	6.0	2.0	7.0	5.0	8.0	3.0	46.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.2	9.7	0.0	0.0	0.0	5.4	1.1	7.6	5.4	8.6		41.0
Struck & Lost	0.0	0.0	0.0	3.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0		5.0
Total Take	0.0	0.0	3.2	12.7	0.0	0.0	0.0	6.4	2.1	7.6	5.4	8.6		46.0
Total Take (%)	0.0%	0.0%	7.0%	27.6%	0.0%	0.0%	0.0%	13.9%	4.5%	16.4%	11.7%	18.8%		100.0%
Cum. Take	0.0	0.0	3.2	15.9	15.9	15.9	15.9	22.3	24.4	32.0	37.4	46.0		
Cum. Take (%)	0.0%	0.0%	7.0%	34.7%	34.7%	34.7%	34.7%	48.6%	53.1%	69.5%	81.2%	100.0%		

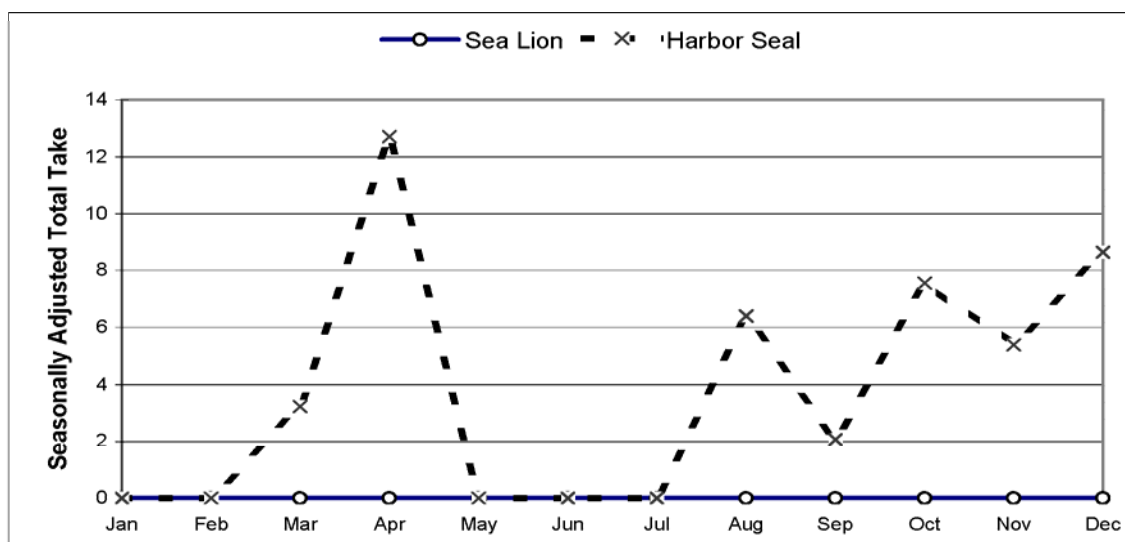
SOURCE: SAIFWC Household Surveys, 2009.

Table 1. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Angoon, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	28	68.3%	28.0	68.3%
Adult Female	0	---	0.0	---	5	12.2%	5.0	12.2%
Adult Unknown Sex	0	---	0.0	---	3	7.3%	3.0	7.3%
Juvenile Male	0	---	0.0	---	4	9.8%	4.0	9.8%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	1	2.4%	1.0	2.4%
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	---	41	100.0%	41.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	125.1	28.9	154.0
1993	0.0	0.0	0.0	1993	56.6	9.9	66.5
1994	0.0	0.0	0.0	1994	66.9	21.1	88.0
1995	0.0	0.0	0.0	1995	80.9	9.7	90.6
1996	0.0	0.0	0.0	1996	71.0	2.0	73.0
1997	0.0	0.0	0.0	1997	51.0	7.1	58.1
1998	0.0	0.0	0.0	1998	53.0	2.0	55.0
2000	1.0	0.0	1.0	2000	64.3	6.1	70.4
2001	0.0	0.0	0.0	2001	85.0	5.2	90.2
2002	0.0	0.0	0.0	2002	72.7	2.2	74.9
2003	0.0	0.0	0.0	2003	54.9	0.0	54.9
2004	0.0	0.0	0.0	2004	47.4	3.2	50.5
2005	0.0	0.0	0.0	2005	57.5	6.2	63.7
2006	0.0	0.0	0.0	2006	46.0	8.0	54.0
2007	0.0	0.0	0.0	2007	42.6	0.0	42.6
2008	0.0	0.0	0.0	2008	41.0	5.0	46.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
SAIFWC Household Surveys, 2000-2009.

Table 2. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Craig, 2008

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	21
Surveyed Households	10
Sampling Fraction	47.6%
Sample Household Members	24
Estimated Household Members	50.4
2000 U.S. Census Estimated Native Population	432

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	0.0%	10.0%
Hunted	0.0%	10.0%
Harvested	0.0%	10.0%
Received	0.0%	0.0%
Gave Away	0.0%	10.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	2.1
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	2.1
Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	1	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	0	1	0	0	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0		2.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0		2.1
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	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	0.0	2.1	2.1		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%		

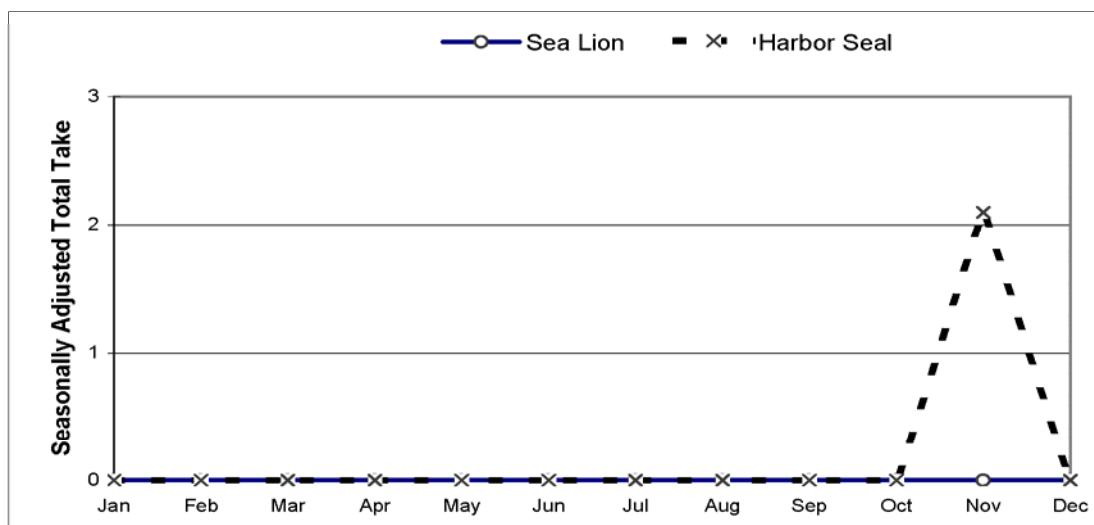
SOURCE: SAIFWC Household Surveys, 2009.

Table 2. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Craig, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	1	100.0%	2.1	100.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	1	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				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	74.2	0.0	74.2
1993	0.0	0.0	0.0	1993	51.1	9.8	60.9
1994	0.0	0.0	0.0	1994	42.7	6.6	49.3
1995	0.0	0.0	0.0	1995	69.4	13.6	83.1
1996	0.0	0.0	0.0	1996	48.2	8.0	56.3
1997	0.0	0.0	0.0	1997	62.0	7.5	69.5
1998	0.0	0.0	0.0	1998	52.7	5.2	57.9
2000	0.0	0.0	0.0	2000	35.0	3.0	38.0
2001	0.0	0.0	0.0	2001	54.0	4.0	58.0
2002	0.0	0.0	0.0	2002	38.9	5.7	44.6
2003	0.0	0.0	0.0	2003	28.0	6.0	34.0
2004	3.3	0.0	3.3	2004	29.7	5.5	35.2
2005	0.0	0.0	0.0	2005	26.0	3.0	29.0
2006	0.0	0.0	0.0	2006	1.3	0.0	1.3
2007	0.0	0.0	0.0	2007	2.1	0.0	2.1
2008	0.0	0.0	0.0	2008	2.1	0.0	2.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
SAIFWC Household Surveys, 2000-2009.

Table 3. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Haines, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	13
Surveyed Households	10
Sampling Fraction	76.9%
Sample Household Members	24
Estimated Household Members	31.2
2000 U.S. Census Estimated Native Population	335

HARVEST AND USE INFORMATION**Percentage of Sample Households:**

	Sea Lion	Harbor Seal
Used	0.0%	30.0%
Hunted	0.0%	10.0%
Harvested	0.0%	10.0%
Received	0.0%	20.0%
Gave Away	0.0%	10.0%

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

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	15.6
Total Number Struck and Lost	0.0	2.6
Total Number Taken	0.0	18.2
Number Harvested Per Capita	0.00	0.05

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

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	3	9	0	0	0	0	0	0	0	0	0	0	0	12
Struck & Lost	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total Take	3	11	0	0	0	0	0	0	0	0	0	0	0	14
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.9	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6
Struck & Lost	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Total Take	3.9	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.9	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		15.6
Struck & Lost	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		2.6
Total Take	3.9	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		18.2
Total Take (%)	21.4%	78.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	3.9	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2		
Cum. Take (%)	21.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH													Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	3	9	0	0	0	0	0	0	0	0	0	0	0	12
Struck & Lost	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total Take	3	11	0	0	0	0	0	0	0	0	0	0	0	14
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.9	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6
Struck & Lost	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Total Take	3.9	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.9	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		15.6
Struck & Lost	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		2.6
Total Take	3.9	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		18.2
Total Take (%)	21.4%	78.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	3.9	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2		
Cum. Take (%)	21.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

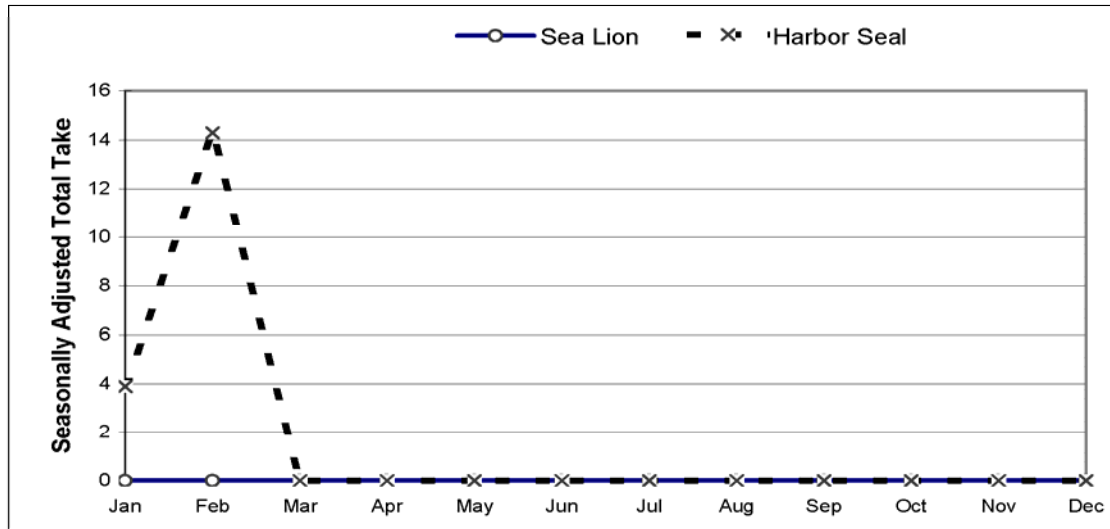
SOURCE: SAIFWC Household Surveys, 2009.

Table 3. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Haines, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	9	75.0%	11.7	75.0%
Adult Female	0	---	0.0	---	3	25.0%	3.9	25.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	12	100.0%	15.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	30.5	7.9	38.4
1993	0.0	0.0	0.0	1993	23.0	2.3	25.3
1994	0.0	0.0	0.0	1994	39.3	2.2	41.5
1995	0.0	0.0	0.0	1995	24.0	9.0	33.0
1996	0.0	0.0	0.0	1996	41.1	3.4	44.6
1997	0.0	0.0	0.0	1997	36.8	10.5	47.3
1998	0.0	0.0	0.0	1998	30.7	10.6	41.3
2000	0.0	0.0	0.0	2000	17.5	0.0	17.5
2001	0.0	0.0	0.0	2001	19.3	1.1	20.4
2002	0.0	0.0	0.0	2002	19.6	26.2	45.8
2003	0.0	0.0	0.0	2003	12.0	0.0	12.0
2004	0.0	0.0	0.0	2004	7.0	0.0	7.0
2005	0.0	0.0	0.0	2005	2.0	0.0	2.0
2006	0.0	0.0	0.0	2006	4.7	0.0	4.7
2007	0.0	0.0	0.0	2007	19.5	0.0	19.5
2008	0.0	0.0	0.0	2008	15.6	2.6	18.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
SAIFWC Household Surveys, 2000-2009.

Table 4. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Hoonah, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	40
Surveyed Households	38
Sampling Fraction	95.0%
Sample Household Members	92
Estimated Household Members	96.8
2000 U.S. Census Estimated Native Population	597

HARVEST AND USE INFORMATION**Percentage of Sample Households:**

	Sea Lion	Harbor Seal
Used	0.0%	52.6%
Hunted	2.6%	28.9%
Harvested	0.0%	18.4%
Received	0.0%	52.6%
Gave Away	0.0%	15.8%

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

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	25.3
Total Number Struck and Lost	6.3	6.3
Total Number Taken	6.3	31.6
Number Harvested Per Capita	0.00	0.04

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	1	0	0	0	1	1	1	1	0	1	6
Total Take	0	0	0	1	0	0	0	1	1	1	1	0	1	6
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	1.1	6.3
Total Take	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	1.1	6.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.3	1.3	1.3	1.3	0.0		6.3
Total Take	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.3	1.3	1.3	1.3	0.0		6.3
Total Take (%)	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	1.3	1.3	1.3	1.3	2.5	3.8	5.1	6.3	6.3		
Cum. Take (%)	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	40.0%	60.0%	80.0%	100.0%	100.0%		

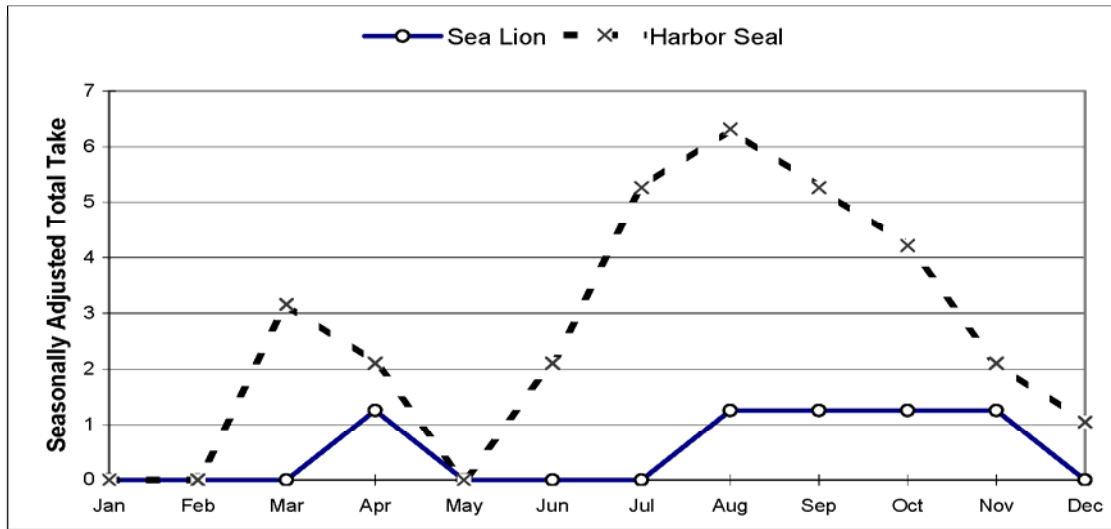
HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	2	2	0	2	5	5	4	1	2	1	0	24
Struck & Lost	0	0	1	0	0	0	0	1	1	3	0	0	0	6
Total Take	0	0	3	2	0	2	5	6	5	4	2	1	0	30
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	2.1	2.1	0.0	2.1	5.3	5.3	4.2	1.1	2.1	1.1	0.0	25.3
Struck & Lost	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.1	1.1	3.2	0.0	0.0	0.0	6.3
Total Take	0.0	0.0	3.2	2.1	0.0	2.1	5.3	6.3	5.3	4.2	2.1	1.1	0.0	31.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	2.1	2.1	0.0	2.1	5.3	5.3	4.2	1.1	2.1	1.1		25.3
Struck & Lost	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.1	1.1	3.2	0.0	0.0		6.3
Total Take	0.0	0.0	3.2	2.1	0.0	2.1	5.3	6.3	5.3	4.2	2.1	1.1		31.6
Total Take (%)	0.0%	0.0%	10.0%	6.7%	0.0%	6.7%	16.7%	20.0%	16.7%	13.3%	6.7%	3.3%		100.0%
Cum. Take	0.0	0.0	3.2	5.3	5.3	7.4	12.6	18.9	24.2	28.4	30.5	31.6		
Cum. Take (%)	0.0%	0.0%	10.0%	16.7%	16.7%	23.3%	40.0%	60.0%	76.7%	90.0%	96.7%	100.0%		

SOURCE: SAIFWC Household Surveys, 2009.

Table 4. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Hoonah, 2008*HARVEST BY AGE AND SEX*

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	15	62.5%	15.8	62.5%
Adult Female	0	---	0.0	---	5	20.8%	5.3	20.8%
Adult Unknown Sex	0	---	0.0	---	2	8.3%	2.1	8.3%
Juvenile Male	0	---	0.0	---	2	8.3%	2.1	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	---	24	100.0%	25.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL*ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR*

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	350.2	24.8	375.0
1993	0.0	0.0	0.0	1993	324.4	35.8	360.2
1994	0.0	0.0	0.0	1994	240.7	15.0	255.8
1995	0.0	0.0	0.0	1995	236.6	19.7	256.3
1996	0.0	0.0	0.0	1996	359.7	48.6	408.3
1997	0.0	0.0	0.0	1997	143.8	9.9	153.8
1998	0.0	0.0	0.0	1998	169.7	19.8	189.6
2000	0.0	0.0	0.0	2000	147.9	16.0	163.9
2001	0.0	0.0	0.0	2001	143.4	13.2	156.7
2002	0.0	0.0	0.0	2002	96.4	6.0	102.4
2003	0.0	4.6	4.6	2003	52.2	10.4	62.6
2004	0.0	7.2	7.2	2004	106.2	9.0	115.2
2005	0.0	9.0	9.0	2005	53.0	11.0	64.0
2006	0.0	10.1	10.1	2006	55.6	7.6	63.2
2007	0.0	6.1	6.1	2007	34.4	6.1	40.5
2008	0.0	6.3	6.3	2008	25.3	6.3	31.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
SAIFWC Household Surveys, 2000-2009.

Table 5. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Hydaburg, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	16
Surveyed Households	10
Sampling Fraction	62.5%
Sample Household Members	27
Estimated Household Members	43.2
2000 U.S. Census Estimated Native Population	342

HARVEST AND USE INFORMATION**Percentage of Sample Households:**

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	40.0%
Hunted	0.0%	40.0%
Harvested	0.0%	40.0%
Received	0.0%	0.0%
Gave Away	0.0%	20.0%

Estimated Community Harvest and Take (Expanded):

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

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

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

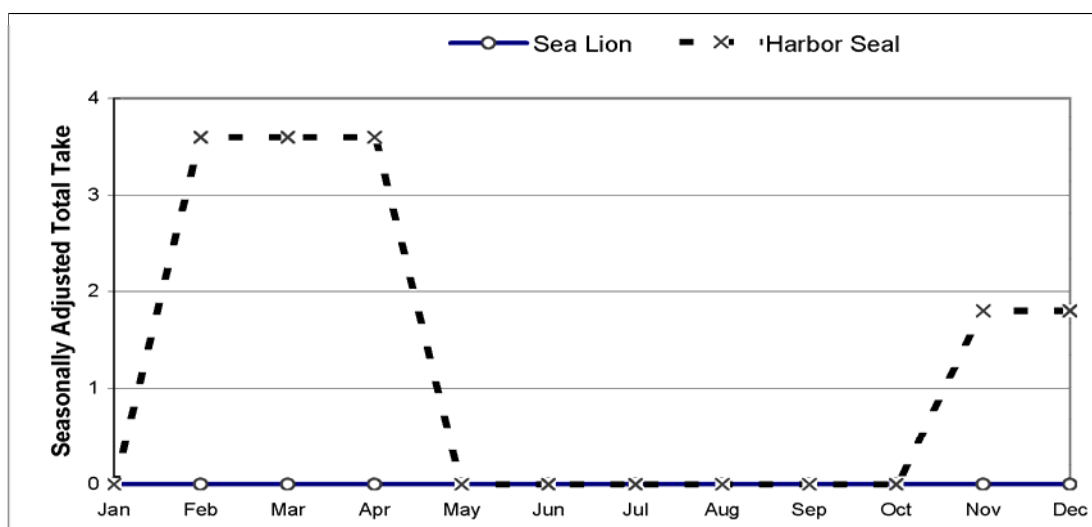
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, (Numbers based on 1998 survey estimates).

Table 5. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Hydaburg, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	30.0	2.1	32.1
1993	0.0	0.0	0.0	1993	14.0	0.0	14.0
1994	0.0	0.0	0.0	1994	10.0	0.0	10.0
1995	0.0	0.0	0.0	1995	6.5	0.0	6.5
1996	0.0	0.0	0.0	1996	15.0	0.0	15.0
1997	0.0	0.0	0.0	1997	11.5	0.0	11.5
1998	0.0	0.0	0.0	1998	14.4	0.0	14.4
2000	0.0	0.0	0.0	2000	14.4	0.0	14.4
2001	0.0	0.0	0.0	2001	14.4	0.0	14.4
2002	0.0	0.0	0.0	2002	14.4	0.0	14.4
2003	0.0	0.0	0.0	2003	14.4	0.0	14.4
2004	0.0	0.0	0.0	2004	14.4	0.0	14.4
2005	0.0	0.0	0.0	2005	14.4	0.0	14.4
2006	0.0	0.0	0.0	2006	14.4	0.0	14.4
2007	0.0	0.0	0.0	2007	14.4	0.0	14.4
2008	0.0	0.0	0.0	2008	14.4	0.0	14.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998 (Numbers based on 1998 harvest estimates).

Table 6. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Juneau, 2008

SAMPLING DESIGN:
CHAIN REFERRAL

Total Referred Households	16
Surveyed Households	12
Sampling Fraction	75.0%
Sample Household Members	37
Estimated Household Members	49.3
2000 U.S. Census Estimated Native Population	5084

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	41.7%
Hunted	0.0%	33.3%
Harvested	0.0%	33.3%
Received	0.0%	16.7%
Gave Away	0.0%	33.3%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	8.0
Total Number Struck and Lost	0.0	1.3
Total Number Taken	0.0	9.3
Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH

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

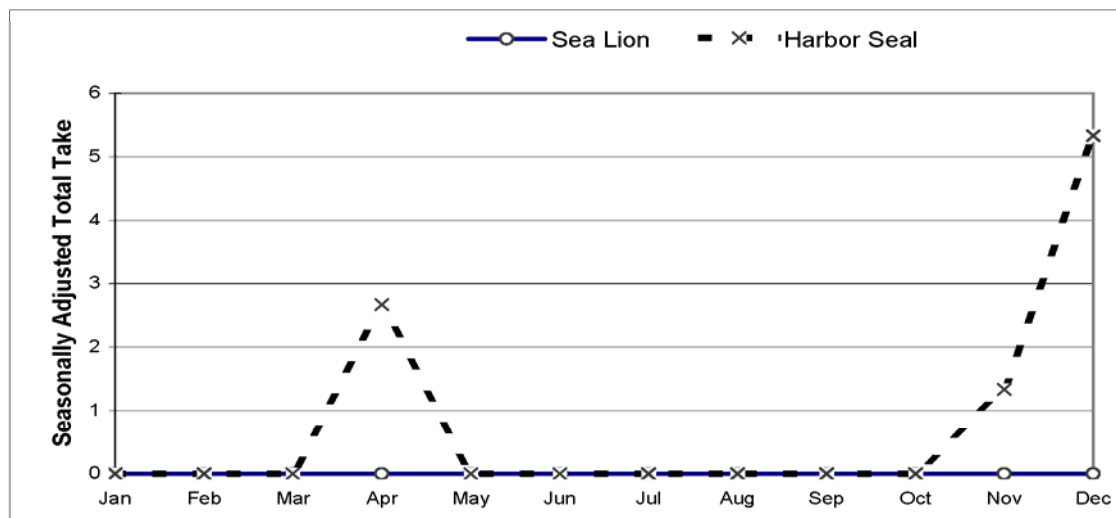
HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	2	0	0	0	0	0	0	1	3	0	6
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Take	0	0	0	2	0	0	0	0	0	0	1	4	0	7
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	1.3	4.0	0.0	8.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.3
Total Take	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.3	0.0	9.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	1.3	4.0		8.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3		1.3
Total Take	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.3		9.3
Total Take (%)	0.0%	0.0%	0.0%	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	57.1%		100.0%
Cum. Take	0.0	0.0	0.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.0	9.3		
Cum. Take (%)	0.0%	0.0%	0.0%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	42.9%	100.0%		

SOURCE: SAIFWC Household Surveys, 2009.

Table 6. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Juneau, 2008**HARVEST BY AGE AND SEX**

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	4	66.7%	5.3	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	---	0.0	---	2	33.3%	2.7	33.3%
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	---	6	100.0%	8.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL**ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR**

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	122.6	7.6	130.2
1993	0.0	0.0	0.0	1993	59.0	21.6	80.6
1994	1.1	0.0	1.1	1994	78.6	13.5	92.1
1995	0.0	0.0	0.0	1995	42.9	1.3	44.2
1996	0.0	0.0	0.0	1996	32.8	1.3	34.1
1997	0.0	0.0	0.0	1997	99.0	0.0	99.0
1998	0.0	0.0	0.0	1998	90.4	15.3	105.7
2000	0.0	0.0	0.0	2000	59.9	3.5	63.4
2001	0.0	0.0	0.0	2001	29.9	1.6	31.5
2002	0.0	0.0	0.0	2002	17.2	1.4	18.7
2003	0.0	0.0	0.0	2003	30.3	24.8	55.0
2004	0.0	0.0	0.0	2004	13.6	9.1	22.7
2005	0.0	0.0	0.0	2005	8.0	1.0	9.0
2006	1.4	0.0	1.4	2006	26.1	23.4	49.5
2007	0.0	0.0	0.0	2007	16.0	10.0	26.0
2008	0.0	0.0	0.0	2008	8.0	1.3	9.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
SAIFWC Household Surveys, 2000-2009.

Table 7. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Kake, 2008

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	25
Surveyed Households	25
Sampling Fraction	100.0%
Sample Household Members	67
Estimated Household Members	67.0
2000 U.S. Census Estimated Native Population	530

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	96.0%
Hunted	0.0%	44.0%
Harvested	0.0%	36.0%
Received	0.0%	76.0%
Gave Away	0.0%	44.0%

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	23.0
Total Number Struck and Lost	0.0	2.0
Total Number Taken	0.0	25.0
Number Harvested Per Capita	0.00	0.04

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	4	6	0	1	1	1	1	3	0	2	3	0	23
Struck & Lost	0	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Take	1	4	6	0	1	1	2	1	4	0	2	3	0	25
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	4.0	6.0	0.0	1.0	1.0	1.0	1.0	3.0	0.0	2.0	3.0	0.0	23.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0
Total Take	1.0	4.0	6.0	0.0	1.0	1.0	2.0	1.0	4.0	0.0	2.0	3.0	0.0	25.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	4.0	6.0	0.0	1.0	1.0	1.0	1.0	3.0	0.0	2.0	3.0		23.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0		2.0
Total Take	1.0	4.0	6.0	0.0	1.0	1.0	2.0	1.0	4.0	0.0	2.0	3.0		25.0
Total Take (%)	4.0%	16.0%	24.0%	0.0%	4.0%	4.0%	8.0%	4.0%	16.0%	0.0%	8.0%	12.0%		100.0%
Cum. Take	1.0	5.0	11.0	11.0	12.0	13.0	15.0	16.0	20.0	20.0	22.0	25.0		
Cum. Take (%)	4.0%	20.0%	44.0%	44.0%	48.0%	52.0%	60.0%	64.0%	80.0%	80.0%	88.0%	100.0%		

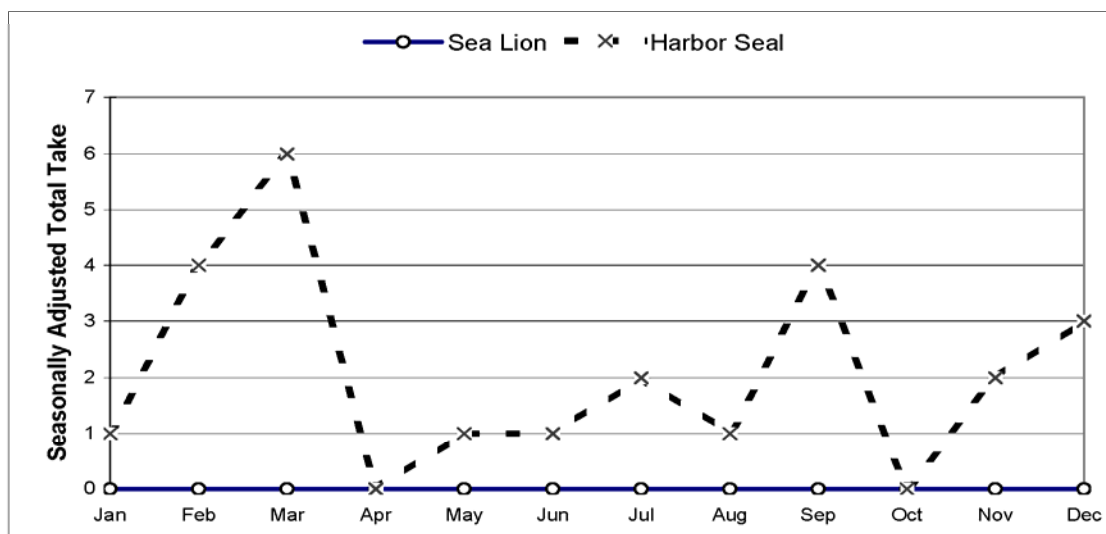
SOURCE: SAIFWC Household Surveys, 2009.

Table 7. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Kake, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	17	73.9%	17.0	73.9%
Adult Female	0	---	0.0	---	3	13.0%	3.0	13.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	2	8.7%	2.0	8.7%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	1	4.3%	1.0	4.3%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	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				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	173.9	12.3	186.2
1993	0.0	0.0	0.0	1993	100.8	15.2	115.9
1994	1.2	0.0	1.2	1994	99.3	7.4	106.6
1995	0.0	0.0	0.0	1995	72.0	1.5	73.5
1996	0.0	0.0	0.0	1996	86.4	0.0	86.4
1997	0.0	0.0	0.0	1997	68.4	7.6	76.0
1998	0.0	0.0	0.0	1998	123.0	6.1	129.1
2000	0.0	0.0	0.0	2000	101.7	3.6	105.3
2001	0.0	0.0	0.0	2001	85.6	10.7	96.4
2002	0.0	0.0	0.0	2002	98.2	10.6	108.7
2003	0.0	0.0	0.0	2003	52.1	0.0	52.1
2004	0.0	0.0	0.0	2004	96.2	0.0	96.2
2005	0.0	0.0	0.0	2005	47.6	4.6	52.3
2006	0.0	0.0	0.0	2006	40.5	0.0	40.5
2007	0.0	0.0	0.0	2007	24.5	1.1	25.7
2008	0.0	0.0	0.0	2008	23.0	2.0	25.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
SAIFWC Household Surveys, 2000-2009.

Table 8. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Ketchikan, 2008

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	10
Surveyed Households	6
Sampling Fraction	60.0%
Sample Household Members	13
Estimated Household Members	21.7
2000 U.S. Census Estimated Native Population	1802

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	16.7%	16.7%
Hunted	16.7%	16.7%
Harvested	16.7%	16.7%
Received	0.0%	0.0%
Gave Away	0.0%	16.7%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	1.7	66.7
Total Number Struck and Lost	1.7	0.0
Total Number Taken	3.3	66.7
Number Harvested Per Capita	0.00	0.04

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	10	0	0	0	0	0	0	0	0	10	10	10	0	40
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	10	0	0	0	0	0	0	0	0	10	10	10	0	40
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7	16.7	0.0	66.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7	16.7	0.0	66.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7	16.7		66.7
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	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7	16.7		66.7
Total Take (%)	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%	25.0%		100.0%
Cum. Take	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	33.3	50.0	66.7		
Cum. Take (%)	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	50.0%	75.0%	100.0%		

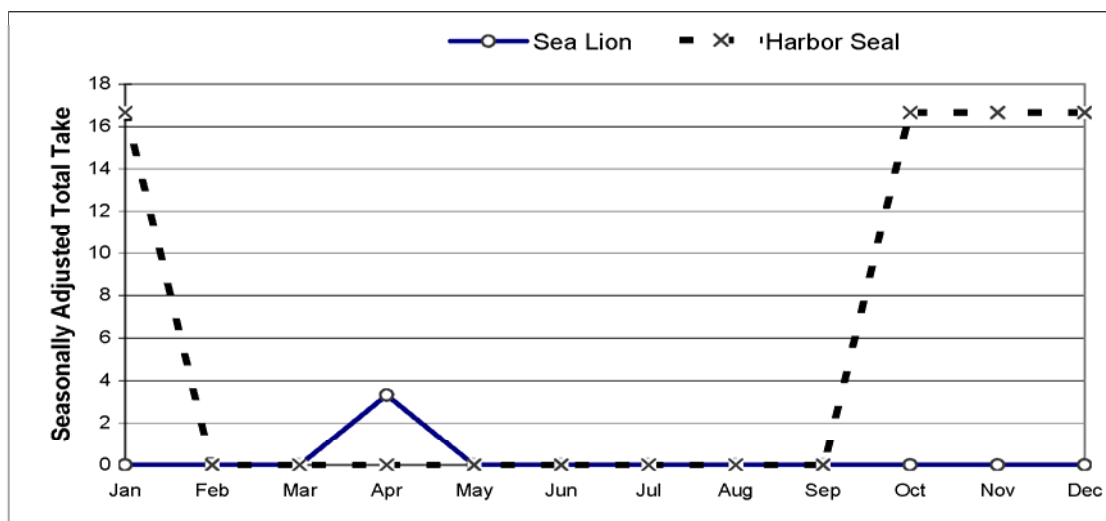
SOURCE: SAIFWC Household Surveys, 2009.

Table 8. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Ketchikan, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	0	0.0%	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	0.0%	30	75.0%	50.0	75.0%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	1	100.0%	1.7	100.0%	10	25.0%	16.7	25.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	1	100.0%	1.7	100.0%	40	100.0%	66.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	90.2	6.5	96.8
1993	0.0	0.0	0.0	1993	42.4	2.9	45.3
1994	0.0	0.0	0.0	1994	31.4	0.0	31.4
1995	0.0	0.0	0.0	1995	46.4	0.0	46.4
1996	0.0	0.0	0.0	1996	25.0	0.0	25.0
1997	0.0	0.0	0.0	1997	27.4	4.3	31.8
1998	0.0	0.0	0.0	1998	26.7	0.0	26.7
2000	0.0	0.0	0.0	2000	111.7	0.0	111.7
2001	0.0	0.0	0.0	2001	12.7	0.0	12.7
2002	0.0	0.0	0.0	2002	123.5	1.2	124.6
2003	0.0	0.0	0.0	2003	78.0	0.0	78.0
2004	0.0	0.0	0.0	2004	60.0	5.0	65.0
2005	0.0	0.0	0.0	2005	73.1	0.0	73.1
2006	0.0	0.0	0.0	2006	37.6	0.0	37.6
2007	0.0	0.0	0.0	2007	78.0	2.4	80.4
2008	1.7	1.7	3.3	2008	66.7	0.0	66.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; SAIFWC Household Surveys, 2000-2009.

Table 9. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Klawock, 2008

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	29
Surveyed Households	23
Sampling Fraction	79.3%
Sample Household Members	69
Estimated Household Members	87.0
2000 U.S. Census Estimated Native Population	496

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	47.8%
Hunted	0.0%	34.8%
Harvested	0.0%	34.8%
Received	0.0%	13.0%
Gave Away	0.0%	34.8%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	21.4
Total Number Struck and Lost	0.0	1.3
Total Number Taken	0.0	22.7
Number Harvested Per Capita	0.00	0.04

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	3	2	0	0	0	0	0	0	3	9	0	17
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Take	0	0	3	2	0	0	0	0	0	0	3	10	0	18
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	3.8	11.3	0.0	21.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.3
Total Take	0.0	0.0	3.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	3.8	12.6	0.0	22.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	3.8	11.3		21.4
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3		1.3
Total Take	0.0	0.0	3.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	3.8	12.6		22.7
Total Take (%)	0.0%	0.0%	16.7%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	55.6%		100.0%
Cum. Take	0.0	0.0	3.8	6.3	6.3	6.3	6.3	6.3	6.3	6.3	10.1	22.7		
Cum. Take (%)	0.0%	0.0%	16.7%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	44.4%	100.0%		

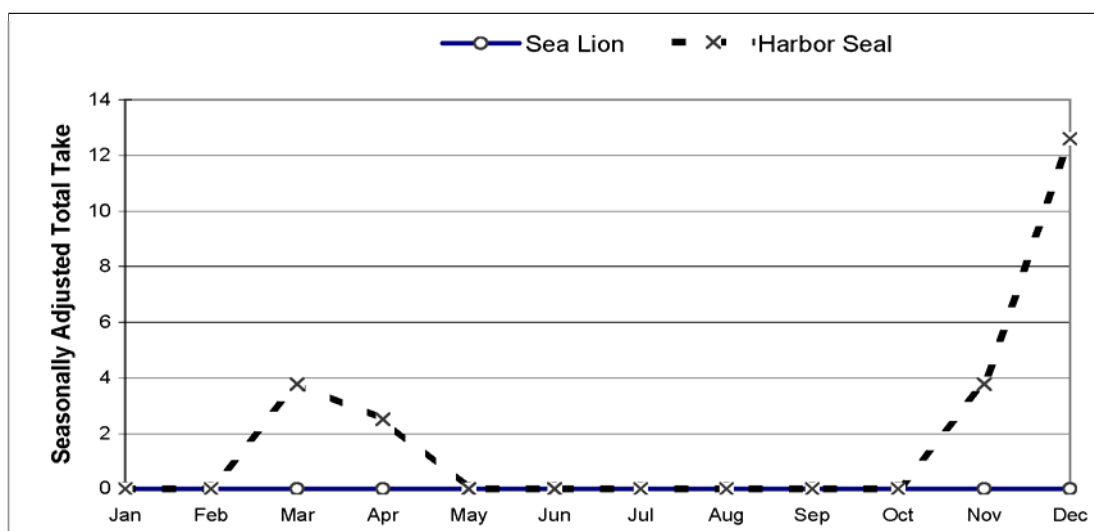
SOURCE: SAIFWC Household Surveys, 2009.

Table 9. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Klawock, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	15	88.2%	18.9	88.2%
Adult Female	0	---	0.0	---	2	11.8%	2.5	11.8%
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	---	17	100.0%	21.4	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	1.4	0.0	1.4	1992	39.0	1.4	40.3
1993	0.0	0.0	0.0	1993	39.8	0.0	39.8
1994	0.0	0.0	0.0	1994	71.1	0.0	71.1
1995	0.0	0.0	0.0	1995	263.8	0.0	263.8
1996	0.0	0.0	0.0	1996	69.8	0.0	69.8
1997	0.0	0.0	0.0	1997	94.0	0.0	94.0
1998	0.0	0.0	0.0	1998	83.0	0.0	83.0
2000	1.3	0.0	1.3	2000	67.1	0.0	67.1
2001	0.0	0.0	0.0	2001	71.5	0.0	71.5
2002	1.0	0.0	1.0	2002	24.0	0.0	24.0
2003	2.3	0.0	2.3	2003	59.8	0.0	59.8
2004	1.3	0.0	1.3	2004	29.2	7.6	36.8
2005	0.0	10.0	10.0	2005	20.0	2.0	22.0
2006	1.2	0.0	1.2	2006	16.2	3.5	19.7
2007	0.0	0.0	0.0	2007	43.9	5.2	49.1
2008	0.0	0.0	0.0	2008	21.4	1.3	22.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
SAIFWC Household Surveys, 2000-2009.

Table 10. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Klukwan, 2008

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	8
Surveyed Households	3
Sampling Fraction	37.5%
Sample Household Members	9
Estimated Household Members	24.0
2000 U.S. Census Estimated Native Population	123

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	100.0%
Hunted	0.0%	0.0%
Harvested	0.0%	0.0%
Received	0.0%	100.0%
Gave Away	0.0%	0.0%

*Estimated Community Harvest
and Take (Expanded):*

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

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

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

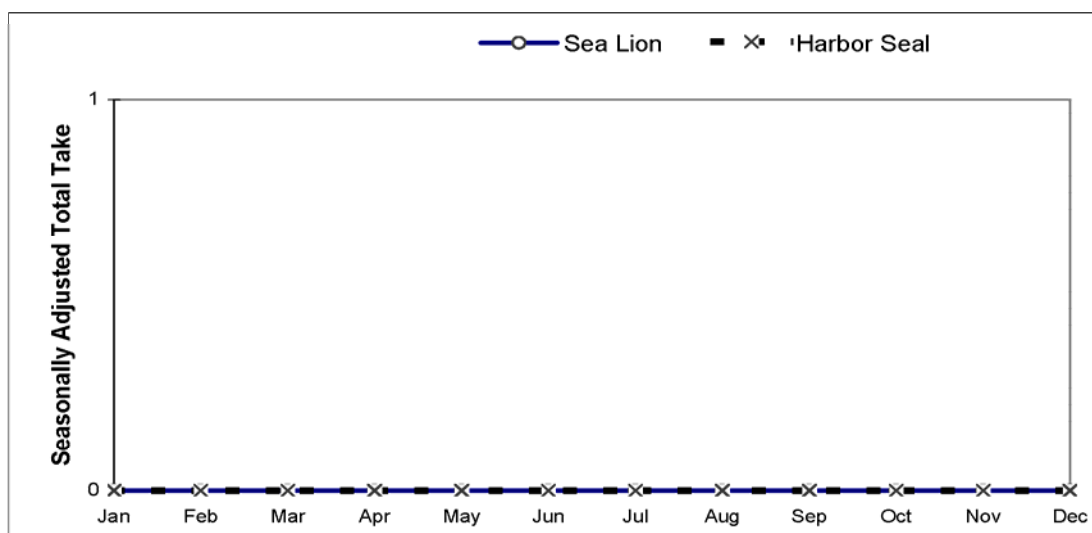
SOURCE: SAIFWC Household Surveys, (Numbers based on 2001 harvest estimates).

Table 10. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Klukwan, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	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	6.4	41.6
1996	0.0	0.0	0.0	1996	6.3	0.0	6.3
1997	0.0	0.0	0.0	1997	1.1	0.0	1.1
1998	0.0	0.0	0.0	1998	10.5	0.0	10.5
2000	0.0	0.0	0.0	2000	18.0	0.0	18.0
2001	0.0	0.0	0.0	2001	0.0	0.0	0.0
2002	0.0	0.0	0.0	2002	0.0	0.0	0.0
2003	0.0	0.0	0.0	2003	0.0	0.0	0.0
2004	0.0	0.0	0.0	2004	0.0	0.0	0.0
2005	0.0	0.0	0.0	2005	0.0	0.0	0.0
2006	0.0	0.0	0.0	2006	0.0	0.0	0.0
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0
2008	0.0	0.0	0.0	2008	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;

SAIFWC Household Surveys, 2000-2009. (Numbers based on 2001 harvest estimates).

Table 11. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Pelican, 2008

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	5
Surveyed Households	4
Sampling Fraction	80.0%
Sample Household Members	7
Estimated Household Members	8.8
2000 U.S. Census Estimated Native Population	42

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	100.0%
Hunted	0.0%	100.0%
Harvested	0.0%	100.0%
Received	0.0%	0.0%
Gave Away	0.0%	25.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	10.0
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	10.0
Number Harvested Per Capita	0.00	0.24

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	3	1	0	0	0	0	1	1	2	0	0	8
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	3	1	0	0	0	0	1	1	2	0	0	8
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.8	1.3	0.0	0.0	0.0	0.0	1.3	1.3	2.5	0.0	0.0	10.0
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	3.8	1.3	0.0	0.0	0.0	0.0	1.3	1.3	2.5	0.0	0.0	10.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.8	1.3	0.0	0.0	0.0	0.0	1.3	1.3	2.5	0.0		10.0
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	3.8	1.3	0.0	0.0	0.0	0.0	1.3	1.3	2.5	0.0		10.0
Total Take (%)	0.0%	0.0%	37.5%	12.5%	0.0%	0.0%	0.0%	0.0%	12.5%	12.5%	25.0%	0.0%		100.0%
Cum. Take	0.0	0.0	3.8	5.0	5.0	5.0	5.0	5.0	6.3	7.5	10.0	10.0		
Cum. Take (%)	0.0%	0.0%	37.5%	50.0%	50.0%	50.0%	50.0%	50.0%	62.5%	75.0%	100.0%	100.0%		

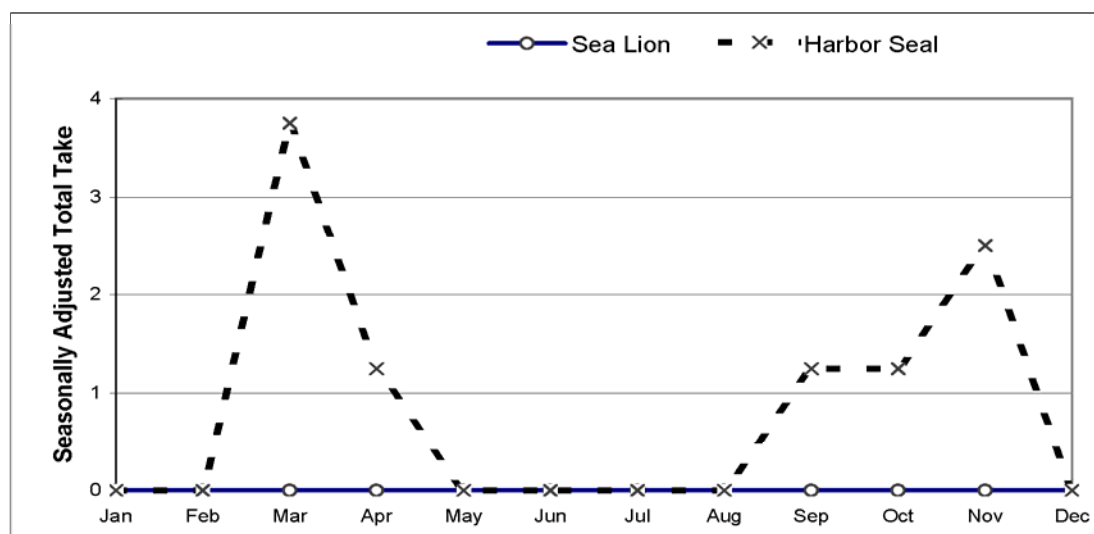
SOURCE: SAIFWC Household Surveys, 2009.

Table 11. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Pelican, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	6	75.0%	7.5	75.0%
Adult Female	0	---	0.0	---	2	25.0%	2.5	25.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	8	100.0%	10.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	8.3	1.4	9.7
1993	0.0	0.0	0.0	1993	5.3	1.1	6.4
1994	0.0	0.0	0.0	1994	4.4	1.1	5.6
1995	0.0	0.0	0.0	1995	13.5	0.0	13.5
1996	0.0	0.0	0.0	1996	15.4	0.0	15.4
1997	0.0	0.0	0.0	1997	14.5	0.0	14.5
1998	0.0	0.0	0.0	1998	15.8	2.4	18.2
2000	0.0	0.0	0.0	2000	7.5	0.0	7.5
2001	0.0	0.0	0.0	2001	9.0	0.0	9.0
2002	0.0	0.0	0.0	2002	1.8	0.0	1.8
2003	0.0	0.0	0.0	2003	1.8	0.0	1.8
2004	0.0	0.0	0.0	2004	1.8	0.0	1.8
2005	0.0	0.0	0.0	2005	10.5	0.0	10.5
2006	0.0	0.0	0.0	2006	8.4	0.0	8.4
2007	0.0	0.0	0.0	2007	8.4	0.0	8.4
2008	0.0	0.0	0.0	2008	10.0	0.0	10.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; SAIFWC Household Surveys, 2000-2009.

Table 12. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Petersburg, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	30
Surveyed Households	27
Sampling Fraction	90.0%
Sample Household Members	83
Estimated Household Members	92.2
2000 U.S. Census Estimated Native Population	388

HARVEST AND USE INFORMATION**Percentage of Sample Households:**

	Sea Lion	Harbor Seal
Used	0.0%	96.3%
Hunted	0.0%	33.3%
Harvested	0.0%	14.8%
Received	0.0%	85.2%
Gave Away	0.0%	59.3%

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

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	7.8
Total Number Struck and Lost	0.0	12.2
Total Number Taken	0.0	20.0
Number Harvested Per Capita	0.00	0.02

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	1	1	0	0	0	0	0	2	0	2	1	0	7
Struck & Lost	0	2	2	1	0	0	0	0	2	2	1	1	0	11
Total Take	0	3	3	1	0	0	0	0	4	2	3	2	0	18
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.1	1.1	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.2	1.1	0.0	7.8
Struck & Lost	0.0	2.2	2.2	1.1	0.0	0.0	0.0	0.0	2.2	2.2	1.1	1.1	0.0	12.2
Total Take	0.0	3.3	3.3	1.1	0.0	0.0	0.0	0.0	4.4	2.2	3.3	2.2	0.0	20.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.1	1.1	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.2	1.1		7.8
Struck & Lost	0.0	2.2	2.2	1.1	0.0	0.0	0.0	0.0	2.2	2.2	1.1	1.1		12.2
Total Take	0.0	3.3	3.3	1.1	0.0	0.0	0.0	0.0	4.4	2.2	3.3	2.2		20.0
Total Take (%)	0.0%	16.7%	16.7%	5.6%	0.0%	0.0%	0.0%	0.0%	22.2%	11.1%	16.7%	11.1%		100.0%
Cum. Take	0.0	3.3	6.7	7.8	7.8	7.8	7.8	7.8	12.2	14.4	17.8	20.0		
Cum. Take (%)	0.0%	16.7%	33.3%	38.9%	38.9%	38.9%	38.9%	38.9%	61.1%	72.2%	88.9%	100.0%		

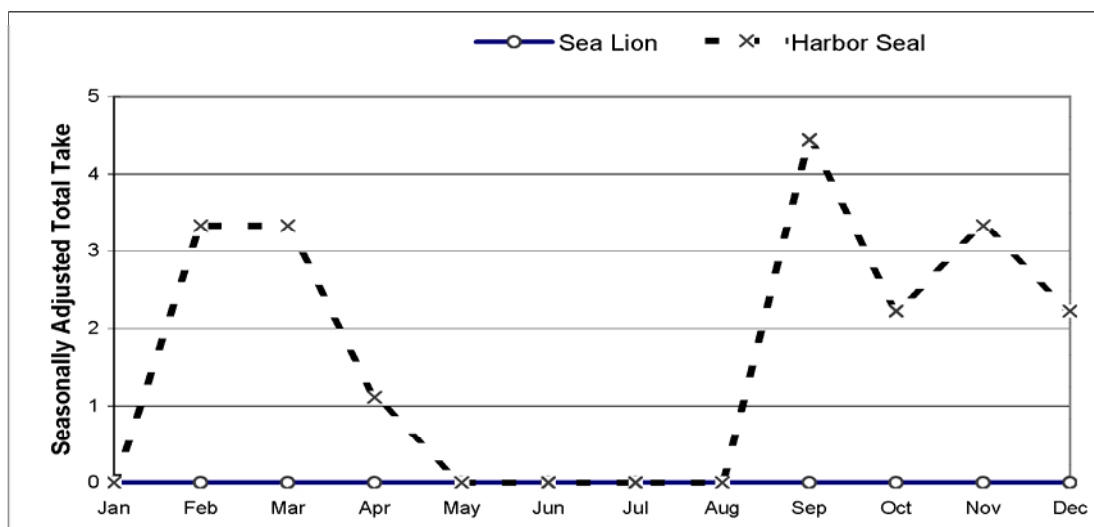
SOURCE: SAIFWC Household Surveys, 2009.

Table 12. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Petersburg, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	2	28.6%	2.2	28.6%
Adult Female	0	---	0.0	---	2	28.6%	2.2	28.6%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	3	42.9%	3.3	42.9%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	7	100.0%	7.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	22.4	2.6	25.0
1993	0.0	0.0	0.0	1993	4.5	4.5	9.0
1994	0.0	0.0	0.0	1994	15.2	1.3	16.4
1995	0.0	0.0	0.0	1995	13.6	1.1	14.7
1996	0.0	0.0	0.0	1996	19.5	2.4	21.9
1997	0.0	0.0	0.0	1997	11.8	4.3	16.2
1998	0.0	0.0	0.0	1998	23.9	9.3	33.2
2000	0.0	0.0	0.0	2000	20.7	7.2	27.9
2001	0.0	0.0	0.0	2001	16.0	22.0	38.0
2002	0.0	0.0	0.0	2002	45.0	18.0	63.0
2003	0.0	0.0	0.0	2003	9.6	7.2	16.8
2004	0.0	0.0	0.0	2004	10.3	8.3	18.6
2005	0.0	0.0	0.0	2005	30.0	22.0	52.0
2006	0.0	0.0	0.0	2006	10.0	11.0	21.0
2007	0.0	0.0	0.0	2007	9.0	17.0	26.0
2008	0.0	0.0	0.0	2008	7.8	12.2	20.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; SAIFWC Household Surveys, 2000-2009.

Table 13. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Saxman, 2008

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	8
Surveyed Households	5
Sampling Fraction	62.5%
Sample Household Members	17
Estimated Household Members	27.2
2000 U.S. Census Estimated Native Population	302

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	60.0%
Hunted	0.0%	40.0%
Harvested	0.0%	40.0%
Received	0.0%	40.0%
Gave Away	0.0%	20.0%

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	9.6
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	9.6
Number Harvested Per Capita	0.00	0.03

SEA LION HARVEST BY MONTH

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

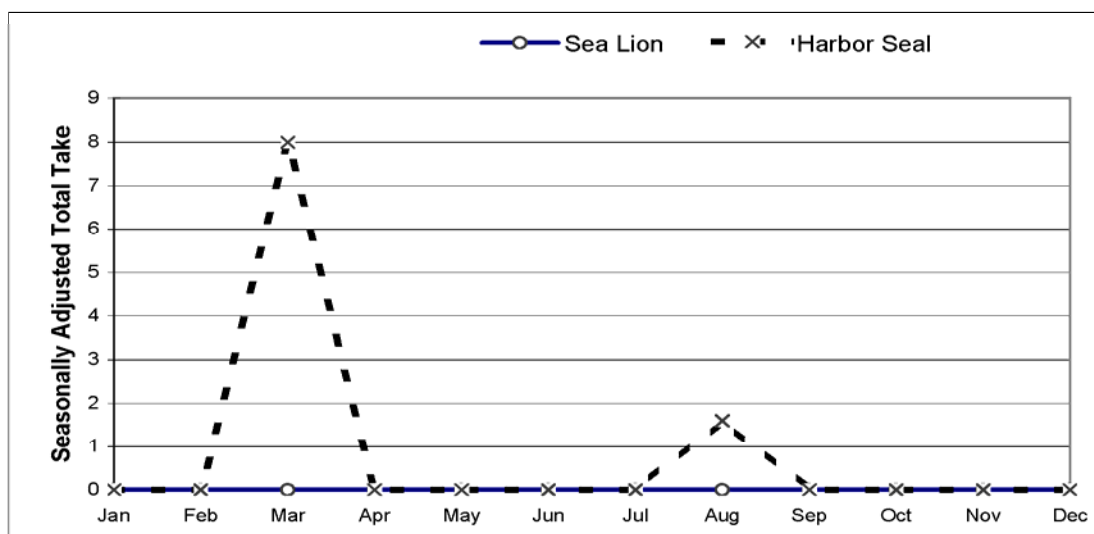
HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	5	0	0	0	0	1	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	5	0	0	0	0	1	0	0	0	0	0	6
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	8.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	9.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	8.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	9.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	8.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0		9.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	8.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0		9.6
Total Take (%)	0.0%	0.0%	83.3%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	8.0	8.0	8.0	8.0	8.0	9.6	9.6	9.6	9.6	9.6		
Cum. Take (%)	0.0%	0.0%	83.3%	83.3%	83.3%	83.3%	83.3%	100.0%	100.0%	100.0%	100.0%	100.0%		

SOURCE: SAIFWC Household Surveys, 2009.

Table 13. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Saxman, 2008**HARVEST BY AGE AND SEX**

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	5	83.3%	8.0	83.3%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	1	16.7%	1.6	16.7%
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	---	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	---	6	100.0%	9.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL**ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR**

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	22.2	1.2	23.5
1993	0.0	0.0	0.0	1993	5.6	0.0	5.6
1994	0.0	0.0	0.0	1994	16.5	0.0	16.5
1995	0.0	0.0	0.0	1995	15.9	0.0	15.9
1996	0.0	0.0	0.0	1996	4.9	0.0	4.9
1997	0.0	0.0	0.0	1997	11.0	0.0	11.0
1998	0.0	0.0	0.0	1998	19.6	0.0	19.6
2000	0.0	0.0	0.0	2000	45.6	1.9	47.5
2001	0.0	0.0	0.0	2001	12.9	0.0	12.9
2002	0.0	0.0	0.0	2002	25.5	3.0	28.5
2003	0.0	0.0	0.0	2003	12.0	0.0	12.0
2004	0.0	0.0	0.0	2004	5.0	0.0	5.0
2005	0.0	0.0	0.0	2005	6.8	5.5	12.3
2006	0.0	0.0	0.0	2006	20.2	0.0	20.2
2007	0.0	0.0	0.0	2007	12.5	0.0	12.5
2008	0.0	0.0	0.0	2008	9.6	0.0	9.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
SAIFWC Household Surveys, 2000-2009.

Table 14. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Sitka, 2008**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	55
Surveyed Households	54
Sampling Fraction	98.2%
Sample Household Members	164
Estimated Household Members	167.2
2000 U.S. Census Estimated Native Population	2178

HARVEST AND USE INFORMATION*Percentage of Sample Households:*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	77.8%
Hunted	0.0%	63.0%
Harvested	0.0%	57.4%
Received	0.0%	35.2%
Gave Away	0.0%	53.7%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	140.6
Total Number Struck and Lost	0.0	1.0
Total Number Taken	0.0	141.6
Number Harvested Per Capita	0.00	0.06

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	13	25	36	3	0	0	0	1	2	26	16	16	0	138
Struck & Lost	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total Take	13	26	36	3	0	0	0	1	2	26	16	16	0	139
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	13.2	25.5	36.7	3.1	0.0	0.0	0.0	1.0	2.0	26.5	16.3	16.3	0.0	140.6
Struck & Lost	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Total Take	13.2	26.5	36.7	3.1	0.0	0.0	0.0	1.0	2.0	26.5	16.3	16.3	0.0	141.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	13.2	25.5	36.7	3.1	0.0	0.0	0.0	1.0	2.0	26.5	16.3	16.3		140.6
Struck & Lost	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.0
Total Take	13.2	26.5	36.7	3.1	0.0	0.0	0.0	1.0	2.0	26.5	16.3	16.3		141.6
Total Take (%)	9.4%	18.7%	25.9%	2.2%	0.0%	0.0%	0.0%	0.7%	1.4%	18.7%	11.5%	11.5%		100.0%
Cum. Take	13.2	39.7	76.4	79.4	79.4	79.4	79.4	80.5	82.5	109.0	125.3	141.6		
Cum. Take (%)	9.4%	28.1%	54.0%	56.1%	56.1%	56.1%	56.1%	56.8%	58.3%	77.0%	88.5%	100.0%		

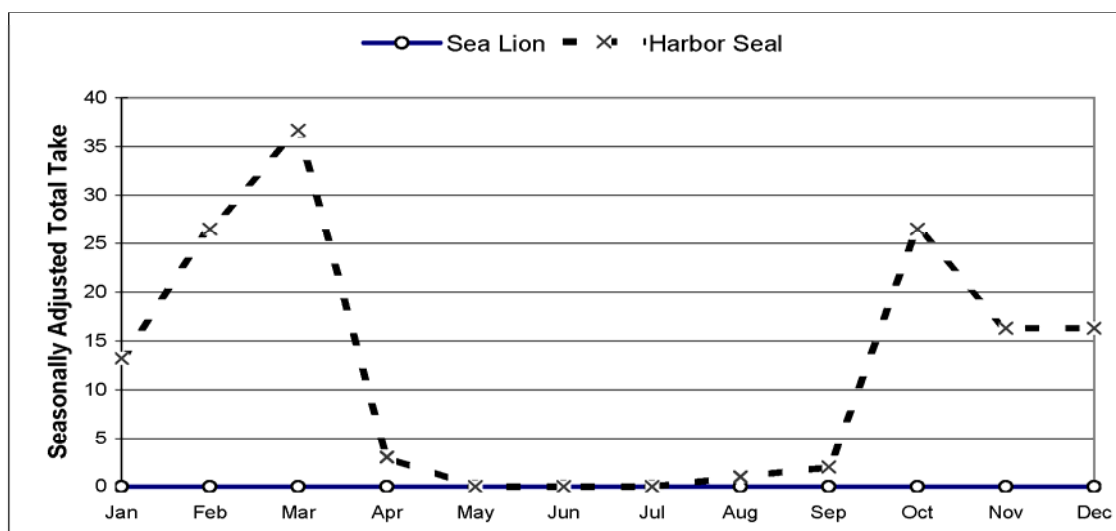
SOURCE: SAIFWC Household Surveys, 2009.

Table 14. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Sitka, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	44	31.9%	44.8	31.9%
Adult Female	0	---	0.0	---	33	23.9%	33.6	23.9%
Adult Unknown Sex	0	---	0.0	---	1	0.7%	1.0	0.7%
Juvenile Male	0	---	0.0	---	29	21.0%	29.5	21.0%
Juvenile Female	0	---	0.0	---	13	9.4%	13.2	9.4%
Juvenile Unknown Sex	0	---	0.0	---	1	0.7%	1.0	0.7%
Pup Male	0	---	0.0	---	9	6.5%	9.2	6.5%
Pup Female	0	---	0.0	---	2	1.4%	2.0	1.4%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	5	3.6%	5.1	3.6%
Female Unknown Age	0	---	0.0	---	1	0.7%	1.0	0.7%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	138	100.0%	140.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	3.8	1.3	5.0	1992	124.7	21.4	146.1
1993	0.0	1.1	1.1	1993	109.3	20.6	129.9
1994	1.1	1.1	2.2	1994	110.5	20.1	130.6
1995	0.0	0.0	0.0	1995	93.8	6.3	100.0
1996	0.0	0.0	0.0	1996	126.8	4.1	130.9
1997	0.0	0.0	0.0	1997	150.6	3.7	154.3
1998	3.3	4.4	7.6	1998	237.6	29.4	267.0
2000	0.0	0.0	0.0	2000	276.8	41.1	317.8
2001	0.0	0.0	0.0	2001	241.3	32.8	274.1
2002	6.0	0.0	6.0	2002	169.7	19.3	189.0
2003	0.0	0.0	0.0	2003	220.4	5.2	225.6
2004	0.0	0.0	0.0	2004	141.2	19.3	160.5
2005	0.0	0.0	0.0	2005	23.0	1.0	24.0
2006	0.0	0.0	0.0	2006	141.2	19.3	160.5
2007	0.0	0.0	0.0	2007	128.4	2.1	130.5
2008	0.0	0.0	0.0	2008	140.6	1.0	141.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; SAIFWC Household Surveys, 2000-2009.

Table 15. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Wrangell, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	10
Surveyed Households	6
Sampling Fraction	60.0%
Sample Household Members	15
Estimated Household Members	25.0
2000 U.S. Census Estimated Native Population	550

HARVEST AND USE INFORMATION*Percentage of Sample Households:*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	33.3%
Hunted	0.0%	33.3%
Harvested	0.0%	33.3%
Received	0.0%	0.0%
Gave Away	0.0%	16.7%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	33.3
Total Number Struck and Lost	0.0	8.3
Total Number Taken	0.0	41.7
Number Harvested Per Capita	0.00	0.06

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	8	3	0	0	0	0	0	1	5	3	0	20
Struck & Lost	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Take	0	0	13	3	0	0	0	0	0	1	5	3	0	25
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	13.3	5.0	0.0	0.0	0.0	0.0	0.0	1.7	8.3	5.0	0.0	33.3
Struck & Lost	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3
Total Take	0.0	0.0	21.7	5.0	0.0	0.0	0.0	0.0	0.0	1.7	8.3	5.0	0.0	41.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	13.3	5.0	0.0	0.0	0.0	0.0	0.0	1.7	8.3	5.0		33.3
Struck & Lost	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		8.3
Total Take	0.0	0.0	21.7	5.0	0.0	0.0	0.0	0.0	0.0	1.7	8.3	5.0		41.7
Total Take (%)	0.0%	0.0%	52.0%	12.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	20.0%	12.0%		100.0%
Cum. Take	0.0	0.0	21.7	26.7	26.7	26.7	26.7	26.7	26.7	28.3	36.7	41.7		
Cum. Take (%)	0.0%	0.0%	52.0%	64.0%	64.0%	64.0%	64.0%	64.0%	64.0%	68.0%	88.0%	100.0%		

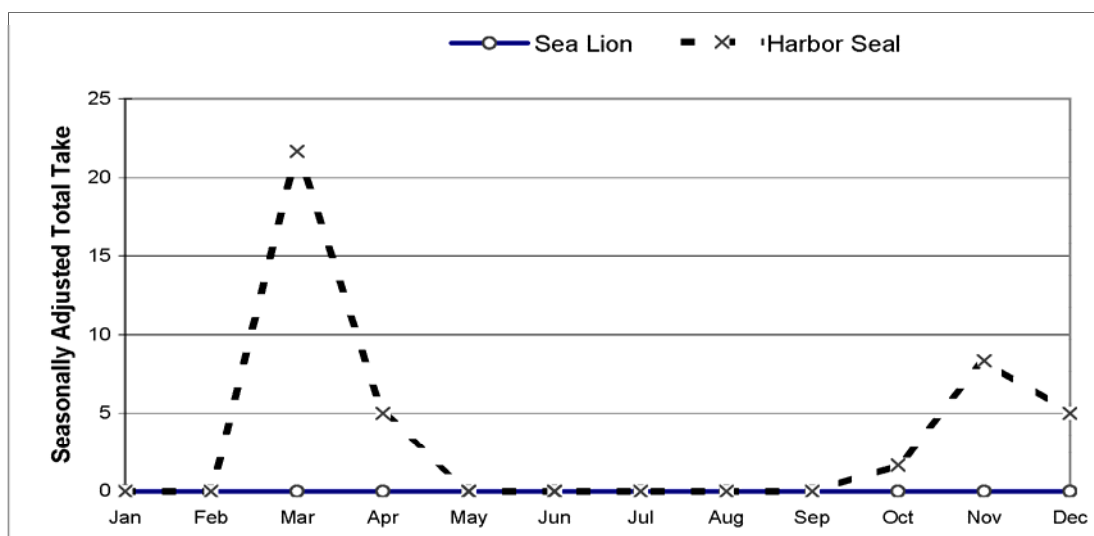
SOURCE: SAIFWC Household Surveys, (Numbers based on 2004 harvest estimates).

Table 15. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Wrangell, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	2	10.0%	3.3	10.0%
Adult Female	0	---	0.0	---	1	5.0%	1.7	5.0%
Adult Unknown Sex	0	---	0.0	---	1	5.0%	1.7	5.0%
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	---	16	80.0%	26.7	80.0%
Total	0	---	0.0	---	20	100.0%	33.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	6.0	8.0	14.0
1993	0.0	0.0	0.0	1993	19.5	9.0	28.5
1994	0.0	0.0	0.0	1994	101.0	27.0	128.0
1995	0.0	0.0	0.0	1995	89.3	22.8	112.0
1996	0.0	0.0	0.0	1996	79.3	22.2	101.5
1997	0.0	0.0	0.0	1997	68.8	29.2	98.0
1998	0.0	0.0	0.0	1998	174.0	30.0	204.0
2000	0.0	0.0	0.0	2000	28.5	12.0	40.5
2001	0.0	0.0	0.0	2001	16.0	29.0	45.0
2002	0.0	0.0	0.0	2002	20.0	9.0	29.0
2003	0.0	0.0	0.0	2003	68.0	18.7	86.7
2004	0.0	0.0	0.0	2004	33.3	8.3	41.7
2005	0.0	0.0	0.0	2005	33.3	8.3	41.7
2006	0.0	0.0	0.0	2006	33.3	8.3	41.7
2007	0.0	0.0	0.0	2007	33.3	8.3	41.7
2008	0.0	0.0	0.0	2008	33.3	8.3	41.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; SAIFWC Household Surveys, 2000-2009. (Numbers based on 2004 harvest estimates).

Table 16. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Yakutat, 2008

SAMPLING DESIGN:

CHAIN REFERRAL

Total Referred Households	47
Surveyed Households	40
Sampling Fraction	85.1%
Sample Household Members	102
Estimated Household Members	119.4
2000 U.S. Census Estimated Native Population	375

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	100.0%
Hunted	0.0%	65.0%
Harvested	0.0%	57.5%
Received	0.0%	97.5%
Gave Away	0.0%	90.0%

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	115.2
Total Number Struck and Lost	0.0	20.0
Total Number Taken	0.0	135.1
Number Harvested Per Capita	0.00	0.31

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	1	1	14	6	8	0	6	3	7	3	49	98
Struck & Lost	0	0	0	0	3	3	3	0	2	0	0	0	6	17
Total Take	0	0	1	1	17	9	11	0	8	3	7	3	55	115
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.2	1.2	16.5	7.1	9.4	0.0	7.1	3.5	8.2	3.5	57.6	115.2
Struck & Lost	0.0	0.0	0.0	0.0	3.5	3.5	3.5	0.0	2.4	0.0	0.0	0.0	7.1	20.0
Total Take	0.0	0.0	1.2	1.2	20.0	10.6	12.9	0.0	9.4	3.5	8.2	3.5	64.6	135.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	2.4	2.4	32.9	14.1	18.8	0.0	14.1	7.1	16.5	7.1		115.2
Struck & Lost	0.0	0.0	0.0	0.0	5.4	5.4	5.4	0.0	3.6	0.0	0.0	0.0		20.0
Total Take	0.0	0.0	2.4	2.4	38.3	19.5	24.2	0.0	17.7	7.1	16.5	7.1		135.1
Total Take (%)	0.0%	0.0%	1.7%	1.7%	28.4%	14.5%	17.9%	0.0%	13.1%	5.2%	12.2%	5.2%		100.0%
Cum. Take	0.0	0.0	2.4	4.7	43.0	62.6	86.8	86.8	104.6	111.6	128.1	135.1		
Cum. Take (%)	0.0%	0.0%	1.7%	3.5%	31.9%	46.3%	64.3%	64.3%	77.4%	82.6%	94.8%	100.0%		

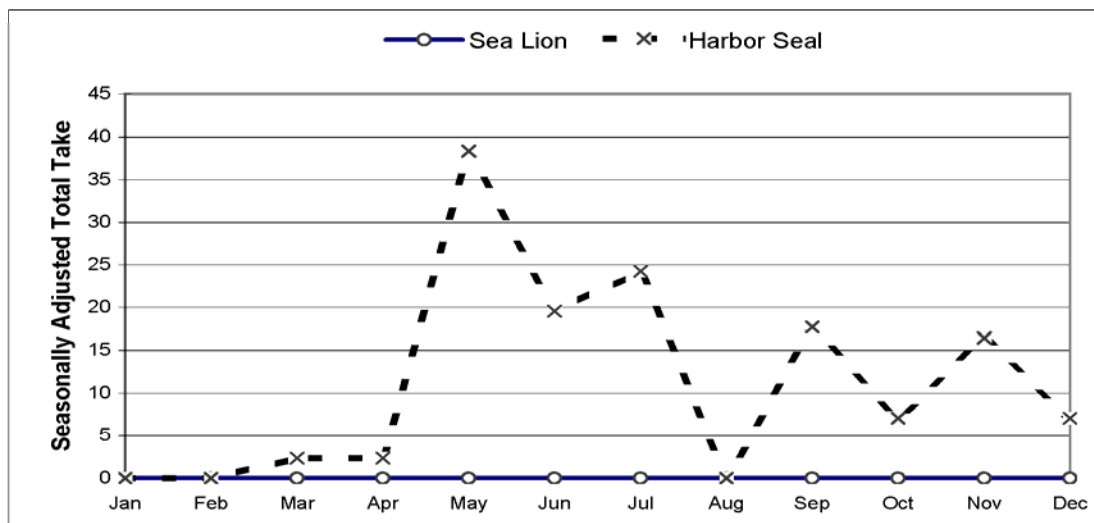
SOURCE: SAIFWC Household Surveys, 2009.

Table 16. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Yakutat, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	12	12.2%	14.1	12.2%
Adult Female	0	---	0.0	---	4	4.1%	4.7	4.1%
Adult Unknown Sex	0	---	0.0	---	35	35.7%	41.1	35.7%
Juvenile Male	0	---	0.0	---	26	26.5%	30.6	26.5%
Juvenile Female	0	---	0.0	---	20	20.4%	23.5	20.4%
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	1.0%	1.2	1.0%
Total	0	---	0.0	---	98	100.0%	115.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	248.0	61.3	309.3
1993	0.0	0.0	0.0	1993	568.4	57.4	625.8
1994	0.0	0.0	0.0	1994	417.1	35.0	452.1
1995	0.0	0.0	0.0	1995	615.5	79.6	695.1
1996	0.0	0.0	0.0	1996	640.3	124.1	764.5
1997	0.0	0.0	0.0	1997	491.5	139.9	631.5
1998	0.0	0.0	0.0	1998	289.0	72.3	361.3
2000	0.0	0.0	0.0	2000	193.3	56.8	250.1
2001	0.0	0.0	0.0	2001	208.8	36.2	245.0
2002	0.0	0.0	0.0	2002	110.3	27.2	137.5
2003	0.0	0.0	0.0	2003	251.7	51.5	303.2
2004	0.0	0.0	0.0	2004	147.7	27.1	174.8
2005	0.0	0.0	0.0	2005	140.2	24.1	164.3
2006	0.0	0.0	0.0	2006	137.3	33.8	171.0
2007	0.0	0.0	0.0	2007	118.6	15.9	134.4
2008	0.0	0.0	0.0	2008	115.2	20.0	135.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; SAIFWC Household Surveys, 2000-2009.

Table 17. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Chenega Bay, 2008

<i>SAMPLING DESIGN:</i>		
<i>CENSUS</i>	Total Native Households	15
	Surveyed Households	7
	Sampling Fraction	46.7%
	Sample Household Members	17
	Estimated Household Members	36.4
	2000 U.S. Census Estimated Native Population	67

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>		
	Sea	Harbor		Sea	Harbor
	<u>Lion</u>	<u>Seal</u>		<u>Lion</u>	<u>Seal</u>
Used	0.0%	85.7%	Total Number Harvested	0.0	10.7
Hunted	0.0%	28.6%	Total Number Struck and Lost	0.0	0.0
Harvested	0.0%	28.6%	Total Number Taken	0.0	10.7
Received	0.0%	85.7%			
Gave Away	0.0%	42.9%	Number Harvested Per Capita	0.00	0.16

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

<i>HARBOR SEAL HARVEST BY MONTH</i>													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	2	0	0	1	2	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	0	0	2	0	0	1	2	0	0	0	0	5
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	4.3	0.0	0.0	2.1	4.3	0.0	0.0	0.0	0.0	10.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	4.3	4.3	0.0	0.0	2.1	4.3	0.0	0.0	0.0	0.0	10.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	4.3	0.0	0.0	2.1	4.3	0.0	0.0	0.0		10.7
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	0.0	0.0	0.0	0.0	4.3	0.0	0.0	2.1	4.3	0.0	0.0	0.0		10.7
Total Take (%)	0.0%	0.0%	0.0%	0.0%	40.0%	0.0%	0.0%	20.0%	40.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	4.3	4.3	4.3	6.4	10.7	10.7	10.7	10.7		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	40.0%	40.0%	40.0%	60.0%	100.0%	100.0%	100.0%	100.0%		

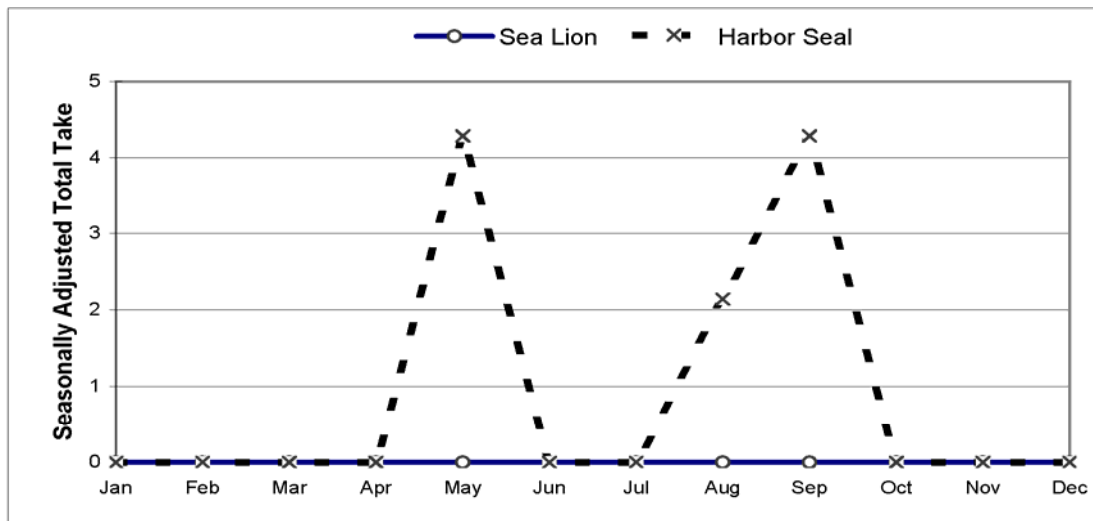
SOURCE: ANHSC Household Surveys, 2009.

Table 17. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Chenega Bay, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	1	20.0%	2.1	20.0%
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	---	4	80.0%	8.6	80.0%
Total	0	---	0.0	---	5	100.0%	10.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	6.9	1.2	8.1	1992	42.6	2.3	44.9
1993	11.1	6.6	17.7	1993	60.8	2.2	63.0
1994	6.6	0.0	6.6	1994	42.0	3.9	45.9
1995	6.6	0.0	6.6	1995	44.4	1.6	46.0
1996	2.0	0.0	2.0	1996	16.0	3.0	19.0
1997	0.0	0.0	0.0	1997	25.7	0.0	25.7
1998	0.0	0.0	0.0	1998	15.6	0.0	15.6
2000	0.0	0.0	0.0	2000	15.0	0.0	15.0
2001	1.2	0.0	1.2	2001	13.0	0.0	13.0
2002	0.0	0.0	0.0	2002	9.3	1.2	10.5
2003	0.0	2.4	2.4	2003	44.9	14.6	59.5
2004	0.0	0.0	0.0	2004	21.1	1.1	22.2
2005	0.0	0.0	0.0	2005	4.9	0.0	4.9
2006	0.0	0.0	0.0	2006	21.3	0.0	21.3
2007	2.9	0.0	2.9	2007	40.4	0.0	40.4
2008	0.0	0.0	0.0	2008	10.7	0.0	10.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 18. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Cordova, 2008**SAMPLING DESIGN:
CHAIN REFERRAL**

Total Referred Households	8
Surveyed Households	8
Sampling Fraction	100.0%
Sample Household Members	17
Estimated Household Members	17.0
2000 U.S. Census Estimated Native Population	368

HARVEST AND USE INFORMATION*Percentage of Native Households:*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	87.5%
Hunted	0.0%	87.5%
Harvested	0.0%	87.5%
Received	0.0%	12.5%
Gave Away	0.0%	87.5%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	32.0
Total Number Struck and Lost	0.0	4.0
Total Number Taken	0.0	36.0
Number Harvested Per Capita	0.00	0.09

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	3	4	7	2	0	0	0	0	7	7	2	0	0	32
Struck & Lost	0	0	1	0	0	0	0	0	3	0	0	0	0	4
Total Take	3	4	8	2	0	0	0	0	10	7	2	0	0	36
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.0	4.0	7.0	2.0	0.0	0.0	0.0	0.0	7.0	7.0	2.0	0.0	0.0	32.0
Struck & Lost	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	4.0
Total Take	3.0	4.0	8.0	2.0	0.0	0.0	0.0	0.0	10.0	7.0	2.0	0.0	0.0	36.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	3.0	4.0	7.0	2.0	0.0	0.0	0.0	0.0	7.0	7.0	2.0	0.0		32.0
Struck & Lost	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0		4.0
Total Take	3.0	4.0	8.0	2.0	0.0	0.0	0.0	0.0	10.0	7.0	2.0	0.0		36.0
Total Take (%)	8.3%	11.1%	22.2%	5.6%	0.0%	0.0%	0.0%	0.0%	27.8%	19.4%	5.6%	0.0%		100.0%
Cum. Take	3.0	7.0	15.0	17.0	17.0	17.0	17.0	17.0	27.0	34.0	36.0	36.0		
Cum. Take (%)	8.3%	19.4%	41.7%	47.2%	47.2%	47.2%	47.2%	47.2%	75.0%	94.4%	100.0%	100.0%		

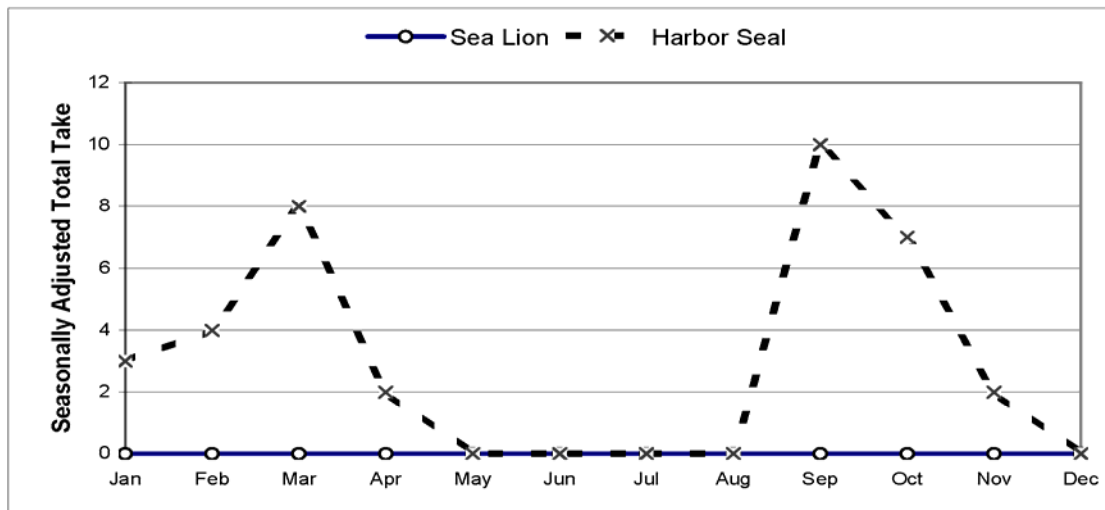
SOURCE: ANHSC Household Surveys, 2009.

Table 18. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Cordova, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	11	34.4%	11.0	34.4%
Adult Female	0	---	0.0	---	4	12.5%	4.0	12.5%
Adult Unknown Sex	0	---	0.0	---	12	37.5%	12.0	37.5%
Juvenile Male	0	---	0.0	---	1	3.1%	1.0	3.1%
Juvenile Female	0	---	0.0	---	1	3.1%	1.0	3.1%
Juvenile Unknown Sex	0	---	0.0	---	3	9.4%	3.0	9.4%
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	---	32	100.0%	32.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	103.8	8.8	112.5
1993	1.5	0.0	1.5	1993	147.4	5.5	152.9
1994	0.0	0.0	0.0	1994	135.8	9.1	144.9
1995	0.0	1.0	1.0	1995	83.4	2.0	85.4
1996	0.0	0.0	0.0	1996	122.2	8.6	130.8
1997	0.0	0.0	0.0	1997	120.8	0.0	120.8
1998	0.0	0.0	0.0	1998	79.1	9.3	88.3
2000	0.0	0.0	0.0	2000	87.8	14.0	101.8
2001	3.5	0.0	3.5	2001	102.7	5.8	108.5
2002	3.5	0.0	3.5	2002	102.7	5.8	108.5
2003	2.7	0.0	2.7	2003	77.7	2.7	80.5
2004	2.7	0.0	2.7	2004	77.7	2.7	80.5
2005	0.0	0.0	0.0	2005	57.0	9.0	66.0
2006	0.0	0.0	0.0	2006	30.9	2.6	33.4
2007	1.0	0.0	1.0	2007	32.0	4.0	36.0
2008	0.0	0.0	0.0	2008	32.0	4.0	36.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 19. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Nanwalek, 2008

SAMPLING DESIGN:
CENSUS

Total Native Households	47
Surveyed Households	46
Sampling Fraction	97.9%
Sample Household Members	185
Estimated Household Members	189.0
2000 U.S. Census Estimated Native Population	165

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	23.9%	89.1%
Hunted	2.2%	21.7%
Harvested	2.2%	15.2%
Received	23.9%	87.0%
Gave Away	15.2%	34.8%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	1.0	33.7
Total Number Struck and Lost	1.0	8.2
Total Number Taken	2.0	41.9
Number Harvested Per Capita	0.01	0.20

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

HARBOR SEAL HARVEST BY MONTH													Unknown	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	2	1	8	0	3	13	5	1	0	0	0	33
Struck & Lost	0	0	0	0	1	0	0	5	2	0	0	0	0	8
Total Take	0	0	2	1	9	0	3	18	7	1	0	0	0	41
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	2.0	1.0	8.2	0.0	3.1	13.3	5.1	1.0	0.0	0.0	0.0	33.7
Struck & Lost	0.0	0.0	0.0	0.0	1.0	0.0	0.0	5.1	2.0	0.0	0.0	0.0	0.0	8.2
Total Take	0.0	0.0	2.0	9.2	9.2	0.0	3.1	18.4	7.2	1.0	0.0	0.0	0.0	41.9
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	2.0	1.0	8.2	0.0	3.1	13.3	5.1	1.0	0.0	0.0		33.7
Struck & Lost	0.0	0.0	0.0	0.0	1.0	0.0	0.0	5.1	2.0	0.0	0.0	0.0		8.2
Total Take	0.0	0.0	2.0	1.0	9.2	0.0	3.1	18.4	7.2	1.0	0.0	0.0		41.9
Total Take (%)	0.0%	0.0%	4.9%	2.4%	22.0%	0.0%	7.3%	43.9%	17.1%	2.4%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	2.0	3.1	12.3	12.3	15.3	33.7	40.9	41.9	41.9	41.9		
Cum. Take (%)	0.0%	0.0%	4.9%	7.3%	29.3%	29.3%	36.6%	80.5%	97.6%	100.0%	100.0%	100.0%		

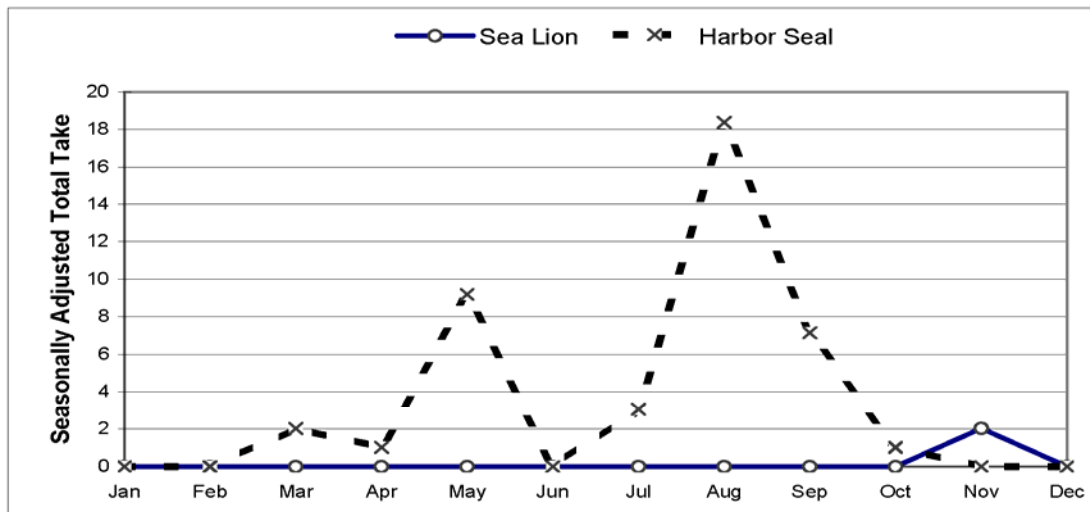
SOURCE: ANHSC Household Surveys, 2009.

Table 19. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Nanwalek, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	4	12.1%	4.1	12.1%
Adult Female	1	100.0%	1.0	100.0%	3	9.1%	3.1	9.1%
Adult Unknown Sex	0	0.0%	0.0	0.0%	1	3.0%	1.0	3.0%
Juvenile Male	0	0.0%	0.0	0.0%	2	6.1%	2.0	6.1%
Juvenile Female	0	0.0%	0.0	0.0%	1	3.0%	1.0	3.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	11	33.3%	11.2	33.3%
Pup Male	0	0.0%	0.0	0.0%	3	9.1%	3.1	9.1%
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%	8	24.2%	8.2	24.2%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	1	100.0%	1.0	100.0%	33	100.0%	33.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	6.3	0.0	6.3	1992	27.9	0.0	27.9
1993	8.5	1.1	9.5	1993	33.9	3.2	37.1
1994	1.2	2.3	3.5	1994	29.0	4.6	33.7
1995	9.2	0.0	9.2	1995	23.6	0.0	23.6
1996	4.3	1.1	5.3	1996	22.4	0.0	22.4
1997	0.0	0.0	0.0	1997	20.2	0.0	20.2
1998	2.1	0.0	2.1	1998	30.9	1.0	31.9
2000	6.5	0.0	6.5	2000	52.9	3.9	56.8
2001	3.7	0.0	3.7	2001	42.3	1.2	43.5
2002	2.0	0.0	2.0	2002	40.0	12.0	52.0
2003	3.0	2.0	5.0	2003	30.0	3.0	33.0
2004	2.1	0.0	2.1	2004	30.2	12.5	42.7
2005	1.1	0.0	1.1	2005	20.3	6.4	26.7
2006	1.0	0.0	1.0	2006	23.6	5.1	28.7
2007	2.4	2.4	4.7	2007	22.3	5.9	28.2
2008	1.0	1.0	2.0	2008	33.7	8.2	41.9

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 20. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Port Graham, 2008

**SAMPLING DESIGN:
CENSUS**

Total Native Households	44
Surveyed Households	32
Sampling Fraction	72.7%
Sample Household Members	74
Estimated Household Members	101.8
2000 U.S. Census Estimated Native Population	151

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	18.8%	71.9%
Hunted	3.1%	25.0%
Harvested	3.1%	15.6%
Received	15.6%	71.9%
Gave Away	6.3%	40.6%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	2.8	16.5
Total Number Struck and Lost	0.0	5.5
Total Number Taken	2.8	22.0
Number Harvested Per Capita	0.02	0.11

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	2	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	2.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	2.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0		2.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0		2.8
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	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	0.0	2.8	2.8		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	1	1	2	5	0	2	1	0	0	0	12
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Total Take	0	0	0	1	1	2	5	0	2	1	0	0	4	16
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.4	1.4	2.8	6.9	0.0	2.8	1.4	0.0	0.0	0.0	16.5
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	5.5	5.5
Total Take	0.0	0.0	0.0	1.4	1.4	2.8	6.9	0.0	2.8	1.4	0.0	0.0	5.5	22.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	1.4	1.4	2.8	6.9	0.0	2.8	1.4	0.0	0.0		16.5
Struck & Lost	0.0	0.0	0.0	0.5	0.5	0.9	2.3	0.0	0.9	0.5	0.0	0.0		5.5
Total Take	0.0	0.0	0.0	1.8	1.8	3.7	9.2	0.0	3.7	1.8	0.0	0.0		22.0
Total Take (%)	0.0%	0.0%	0.0%	8.3%	8.3%	16.7%	41.7%	0.0%	16.7%	8.3%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	1.8	3.7	7.3	16.5	16.5	20.2	22.0	22.0	22.0		
Cum. Take (%)	0.0%	0.0%	0.0%	8.3%	16.7%	33.3%	75.0%	75.0%	91.7%	100.0%	100.0%	100.0%		

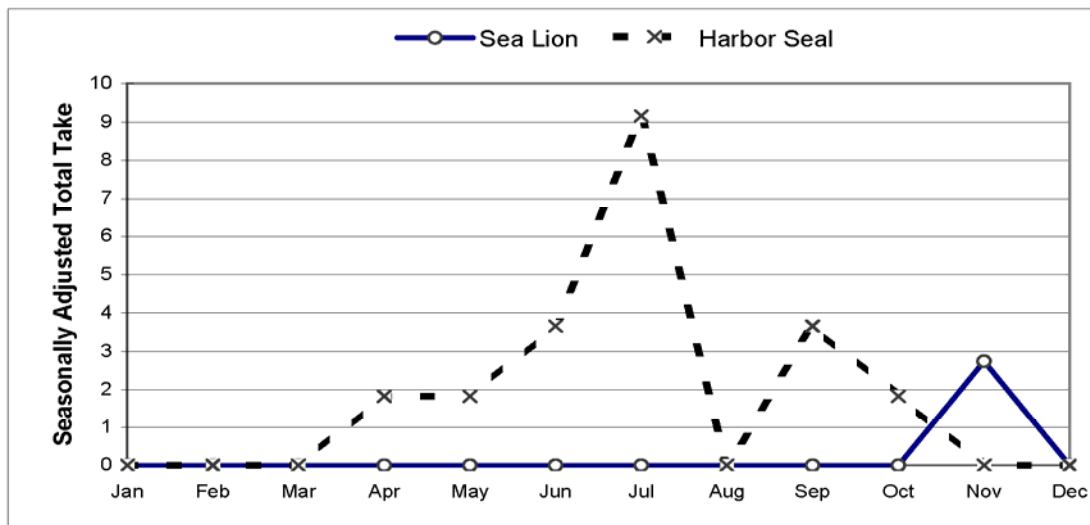
SOURCE: ANHSC Household Surveys, 2009.

Table 20. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Port Graham, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	4	33.3%	5.5	33.3%
Adult Female	1	50.0%	1.4	50.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	2	16.7%	2.8	16.7%
Juvenile Male	1	50.0%	1.4	50.0%	3	25.0%	4.1	25.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	1	8.3%	1.4	8.3%
Pup Male	0	0.0%	0.0	0.0%	1	8.3%	1.4	8.3%
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%	1	8.3%	1.4	8.3%
Total	2	100.0%	2.8	100.0%	12	100.0%	16.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	3.5	1.2	4.7	1992	36.2	4.7	40.8
1993	1.1	0.0	1.1	1993	30.6	3.2	33.7
1994	0.0	0.0	0.0	1994	15.5	5.2	20.7
1995	10.0	2.0	12.0	1995	23.0	0.0	23.0
1996	1.1	0.0	1.1	1996	15.5	2.2	17.7
1997	0.0	0.0	0.0	1997	15.8	3.2	19.0
1998	1.2	0.0	1.2	1998	52.3	3.6	55.9
2000	1.7	3.4	5.0	2000	40.2	1.7	41.9
2001	0.0	0.0	0.0	2001	39.4	8.3	47.6
2002	0.0	0.0	0.0	2002	39.4	8.3	47.6
2003	1.0	0.0	1.0	2003	45.0	0.0	45.0
2004	6.9	5.6	12.5	2004	44.4	2.8	47.2
2005	0.0	0.0	0.0	2005	63.5	8.5	71.9
2006	0.0	0.0	0.0	2006	51.0	0.0	51.0
2007	0.0	0.0	0.0	2007	7.8	1.6	9.3
2008	2.8	0.0	2.8	2008	16.5	5.5	22.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 21. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Seldovia, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	4
Surveyed Households	3
Sampling Fraction	75.0%
Sample Household Members	5
Estimated Household Members	6.7
2000 U.S. Census Estimated Native Population	66

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	66.7%
Hunted	0.0%	66.7%
Harvested	0.0%	33.3%
Received	0.0%	66.7%
Gave Away	0.0%	66.7%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	1.3
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	1.3
Number Harvested Per Capita	0.00	0.02

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

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

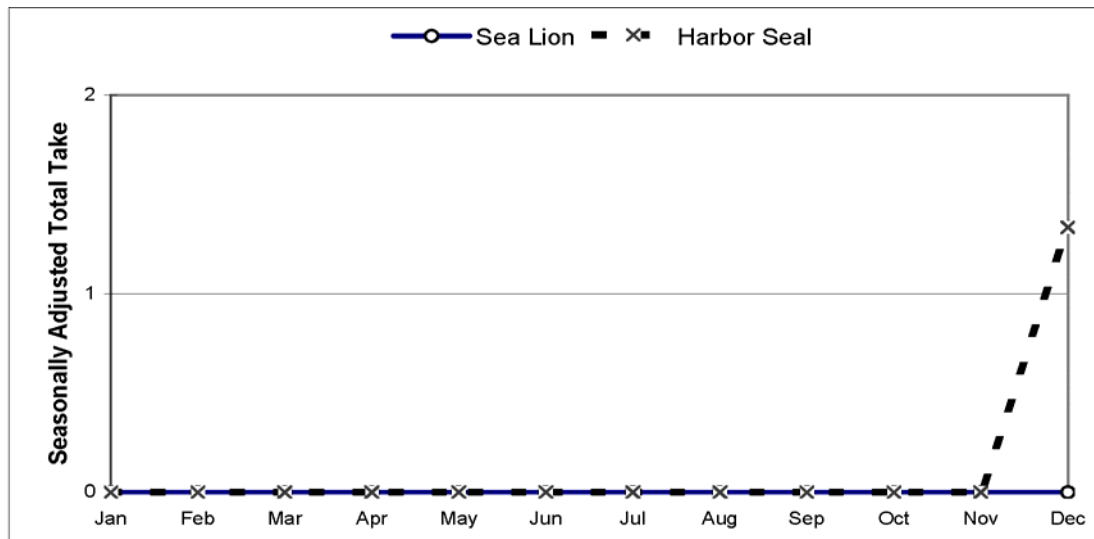
SOURCE: ANHSC Household Surveys, 2009.

Table 21. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Seldovia, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	1	100.0%	1.3	100.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	1	100.0%	1.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	12.4	0.0	12.4
1993	0.0	0.0	0.0	1993	7.9	4.9	12.8
1994	0.0	0.0	0.0	1994	8.0	0.0	8.0
1995	0.0	0.0	0.0	1995	4.0	0.0	4.0
1996	0.0	0.0	0.0	1996	3.0	0.0	3.0
1997	1.7	0.0	1.7	1997	2.8	2.8	5.5
1998	0.0	0.0	0.0	1998	3.0	0.0	3.0
2000	0.0	0.0	0.0	2000	2.0	0.0	2.0
2001	0.0	0.0	0.0	2001	3.0	0.0	3.0
2002	0.0	0.0	0.0	2002	0.0	0.0	0.0
2003	0.0	0.0	0.0	2003	0.0	0.0	0.0
2004	0.0	0.0	0.0	2004	1.0	1.0	2.0
2005	0.0	0.0	0.0	2005	1.0	1.0	2.0
2006	0.0	0.0	0.0	2006	2.7	0.0	2.7
2007	0.0	0.0	0.0	2007	2.0	0.0	2.0
2008	0.0	0.0	0.0	2008	1.3	0.0	1.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 22. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Seward, 2008

SAMPLING DESIGN:

CHAIN REFERRAL	Total Native Households	7
	Surveyed Households	2
	Sampling Fraction	28.6%
	Sample Household Members	7
	Estimated Household Members	24.5
	2000 U.S. Census Estimated Native Population	592

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	100.0%
Hunted	0.0%	0.0%
Harvested	0.0%	0.0%
Received	0.0%	100.0%
Gave Away	0.0%	50.0%

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

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

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

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

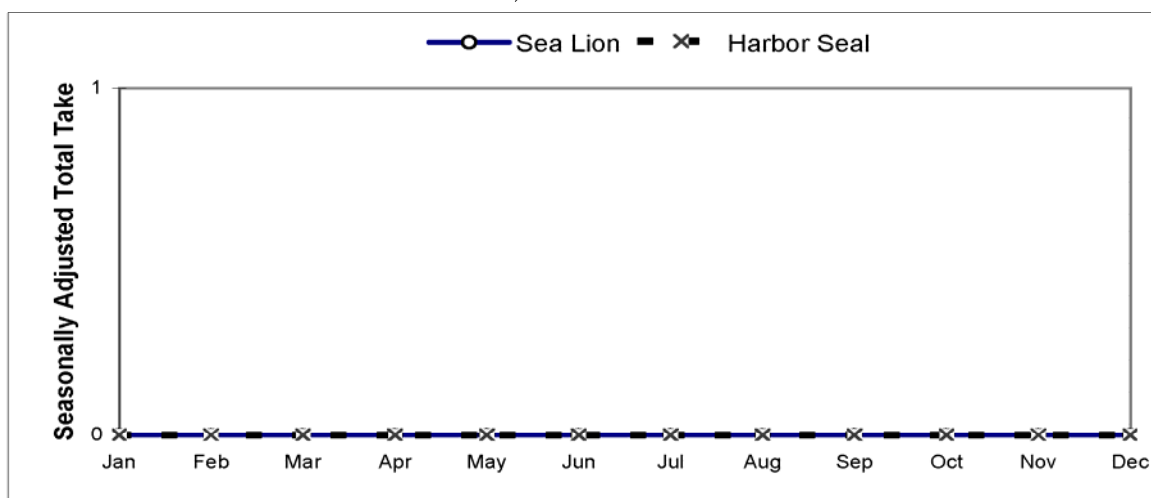
SOURCE: ANHSC Household Surveys, 2009.

Table 22. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Seward, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	2.0	0.0	2.0
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0
1994	0.0	0.0	0.0	1994	5.0	0.0	5.0
1995	0.0	0.0	0.0	1995	10.9	5.5	16.4
1996	0.0	0.0	0.0	1996	5.6	0.0	5.6
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	4.0	0.0	4.0
2001	0.0	0.0	0.0	2001	0.0	0.0	0.0
2002	0.0	0.0	0.0	2002	3.5	0.0	3.5
2003	0.0	0.0	0.0	2003	0.0	0.0	0.0
2004	0.0	0.0	0.0	2004	0.0	0.0	0.0
2005	0.0	0.0	0.0	2005	0.0	0.0	0.0
2006	0.0	0.0	0.0	2006	0.0	0.0	0.0
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0
2008	0.0	0.0	0.0	2008	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 23. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Tatitlek, 2008**SAMPLING DESIGN:****CENSUS**

Total Native Households	22
Surveyed Households	20
Sampling Fraction	90.9%
Sample Household Members	57
Estimated Household Members	62.7
2000 U.S. Census Estimated Native Population	91

HARVEST AND USE INFORMATION*Percentage of Native Households:*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	55.0%	90.0%
Hunted	20.0%	30.0%
Harvested	20.0%	30.0%
Received	45.0%	80.0%
Gave Away	45.0%	75.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	16.5	125.4
Total Number Struck and Lost	3.3	15.4
Total Number Taken	19.8	140.8
Number Harvested Per Capita	0.18	1.38

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	2	2	2	1	1	0	0	0	0	0	0	7	15
Struck & Lost	0	0	0	2	1	0	0	0	0	0	0	0	0	3
Total Take	0	2	2	4	2	1	0	0	0	0	0	0	7	18
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.2	2.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	7.7	16.5
Struck & Lost	0.0	0.0	0.0	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Total Take	0.0	2.2	2.2	2.2	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	7.7	19.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	4.1	4.1	4.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0		16.5
Struck & Lost	0.0	0.0	0.0	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		3.3
Total Take	0.0	4.1	4.1	6.3	3.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0		19.8
Total Take (%)	0.0%	20.8%	20.8%	31.9%	16.0%	10.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	4.1	8.3	14.6	17.7	19.8	19.8	19.8	19.8	19.8	19.8	19.8		
Cum. Take (%)	0.0%	20.8%	41.7%	73.6%	89.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	5	5	7	7	9	15	14	8	7	10	10	7	10	114
Struck & Lost	0	0	0	0	2	4	4	0	0	0	0	0	4	14
Total Take	5	5	7	7	11	19	18	8	7	10	10	7	14	128
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	5.5	5.5	7.7	7.7	9.9	16.5	15.4	8.8	7.7	11.0	11.0	7.7	11.0	125.4
Struck & Lost	0.0	0.0	0.0	0.0	2.2	4.4	4.4	0.0	0.0	0.0	0.0	0.0	4.4	15.4
Total Take	5.5	5.5	7.7	12.1	12.1	20.9	19.8	8.8	7.7	11.0	11.0	7.7	15.4	140.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	6.0	6.0	8.4	8.4	10.9	18.1	16.9	9.6	8.4	12.1	12.1	8.4		125.4
Struck & Lost	0.0	0.0	0.0	0.0	3.1	6.2	6.2	0.0	0.0	0.0	0.0	0.0		15.4
Total Take	6.0	6.0	8.4	8.4	13.9	24.2	23.0	9.6	8.4	12.1	12.1	8.4		140.8
Total Take (%)	4.3%	4.3%	6.0%	6.0%	9.9%	17.2%	16.4%	6.9%	6.0%	8.6%	8.6%	6.0%		100.0%
Cum. Take	6.0	12.1	20.5	28.9	42.9	67.1	90.2	99.8	108.2	120.3	132.4	140.8		
Cum. Take (%)	4.3%	8.6%	14.6%	20.6%	30.4%	47.7%	64.0%	70.9%	76.9%	85.4%	94.0%	100.0%		

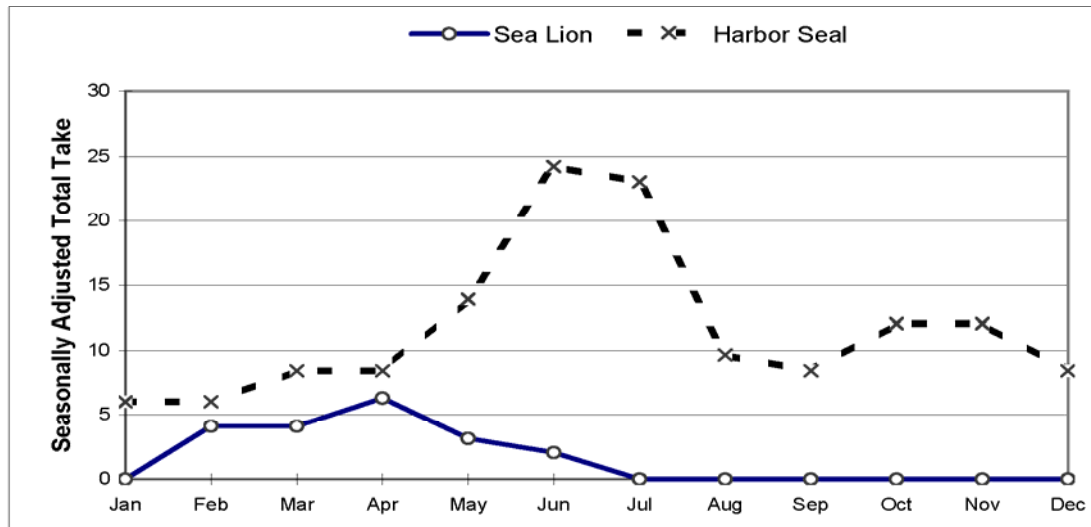
SOURCE: ANHSC Household Surveys, 2009.

Table 23. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Tatitlek, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	6.7%	1.1	6.7%	16	14.0%	17.6	14.0%
Adult Female	1	6.7%	1.1	6.7%	14	12.3%	15.4	12.3%
Adult Unknown Sex	0	0.0%	0.0	0.0%	4	3.5%	4.4	3.5%
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	0.9%	1.1	0.9%
Juvenile Unknown Sex	6	40.0%	6.6	40.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	9	7.9%	9.9	7.9%
Pup Female	0	0.0%	0.0	0.0%	6	5.3%	6.6	5.3%
Pup Unknown Sex	0	0.0%	0.0	0.0%	15	13.2%	16.5	13.2%
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	7	46.7%	7.7	46.7%	49	43.0%	53.9	43.0%
Total	15	100.0%	16.5	100.0%	114	100.0%	125.4	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	8.3	4.2	12.5	1992	152.9	17.7	170.6
1993	4.1	1.0	5.2	1993	110.8	15.5	126.4
1994	8.8	7.4	16.2	1994	145.9	30.9	176.8
1995	2.6	0.0	2.6	1995	46.1	2.6	48.7
1996	5.0	0.0	5.0	1996	90.8	3.8	94.6
1997	2.7	1.4	4.1	1997	97.2	6.8	104.0
1998	15.1	6.8	21.9	1998	171.1	19.2	190.2
2000	1.9	0.0	1.9	2000	46.3	1.9	48.2
2001	6.3	0.0	6.3	2001	61.6	4.7	66.3
2002	0.0	0.0	0.0	2002	13.1	1.9	14.9
2003	12.4	1.1	13.5	2003	91.1	0.0	91.1
2004	26.3	10.3	36.6	2004	90.2	23.1	113.3
2005	39.0	9.1	48.1	2005	137.8	16.9	154.7
2006	16.0	8.0	24.0	2006	218.7	16.0	234.7
2007	41.3	7.9	49.2	2007	133.4	19.1	152.5
2008	16.5	3.3	19.8	2008	125.4	15.4	140.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 24. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Valdez, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	6
Surveyed Households	1
Sampling Fraction	16.7%
Sample Household Members	4
Estimated Household Members	24.0
2000 U.S. Census Estimated Native Population	410

HARVEST AND USE INFORMATION**Percentage of Sample Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	100.0%
Hunted	0.0%	100.0%
Harvested	0.0%	100.0%
Received	0.0%	100.0%
Gave Away	0.0%	100.0%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	24.0
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	24.0
Number Harvested Per Capita	0.00	0.06

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	2	0	0	0	2	0	0	0	0	0	0	4
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	2	0	0	0	2	0	0	0	0	0	0	4
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	12.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
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	12.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	12.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0		24.0
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	12.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0		24.0
Total Take (%)	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	12.0	12.0	12.0	12.0	24.0	24.0	24.0	24.0	24.0	24.0		
Cum. Take (%)	0.0%	0.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

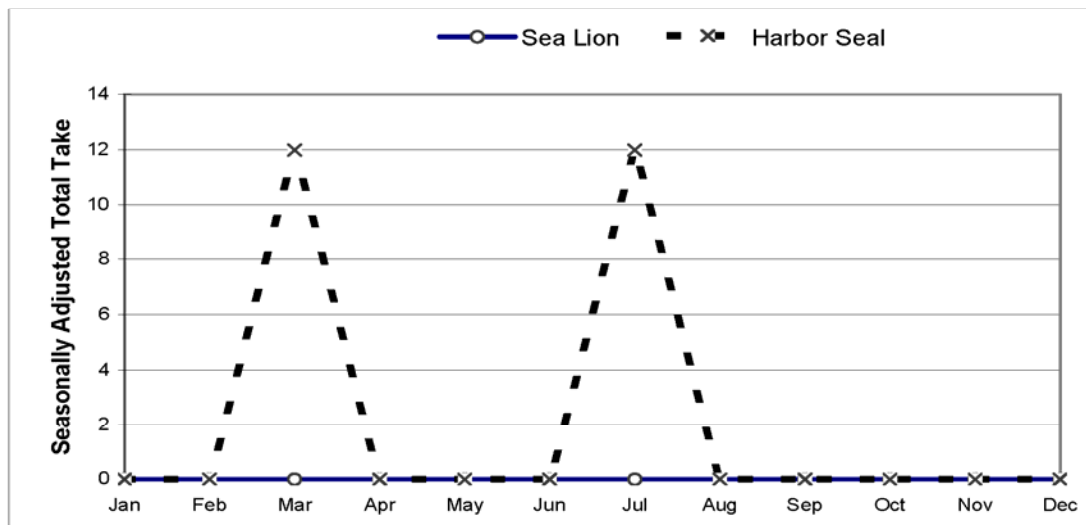
SOURCE: ANHSC Household Surveys, 2009.

Table 24. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Valdez, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	4	100.0%	24.0	100.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	4	100.0%	24.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	0.0	0.0	0.0
1993	0.0	0.0	0.0	1993	21.0	4.0	25.0
1994	0.0	0.0	0.0	1994	30.0	3.0	33.0
1995	0.0	0.0	0.0	1995	16.8	0.0	16.8
1996	0.0	0.0	0.0	1996	13.5	4.5	18.0
1997	0.0	0.0	0.0	1997	12.5	0.0	12.5
1998	1.7	1.7	3.3	1998	41.7	8.3	50.0
2000	1.7	1.7	3.3	2000	41.7	8.3	50.0
2001	0.0	0.0	0.0	2001	18.0	0.0	18.0
2002	0.0	0.0	0.0	2002	44.0	6.0	50.0
2003	0.0	0.0	0.0	2003	60.0	5.0	65.0
2004	0.0	0.0	0.0	2004	58.0	0.0	58.0
2005	0.0	0.0	0.0	2005	63.0	6.0	69.0
2006	0.0	0.0	0.0	2006	63.0	6.0	69.0
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0
2008	0.0	0.0	0.0	2008	24.0	0.0	24.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
ANHSC Household Surveys, 2000-2009.

Table 25. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Anchorage, 2008

SAMPLING DESIGN:

CHAIN REFERRAL	Total Referred Households	34
	Surveyed Households	19
	Sampling Fraction	55.9%
	Sample Household Members	80
	Estimated Household Members	143.2
	2000 U.S. Census Estimated Native Population	26995

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	68.4%
Hunted	0.0%	36.8%
Harvested	0.0%	31.6%
Received	0.0%	47.4%
Gave Away	0.0%	42.1%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	28.6
Total Number Struck and Lost	0.0	1.8
Total Number Taken	0.0	30.4
Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	2	4	1	1	3	0	2	2	1	0	0	16
Struck & Lost	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total Take	0	0	2	4	1	1	3	0	3	2	1	0	0	17
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.6	7.2	1.8	1.8	5.4	0.0	3.6	3.6	1.8	0.0	0.0	28.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	1.8
Total Take	0.0	0.0	3.6	1.8	1.8	1.8	5.4	0.0	5.4	3.6	1.8	0.0	0.0	30.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	3.6	7.2	1.8	1.8	5.4	0.0	3.6	3.6	1.8	0.0		28.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0		1.8
Total Take	0.0	0.0	3.6	7.2	1.8	1.8	5.4	0.0	5.4	3.6	1.8	0.0		30.4
Total Take (%)	0.0%	0.0%	11.8%	23.5%	5.9%	5.9%	17.6%	0.0%	17.6%	11.8%	5.9%	0.0%		100.0%
Cum. Take	0.0	0.0	3.6	10.7	12.5	14.3	19.7	19.7	25.1	28.6	30.4	30.4		
Cum. Take (%)	0.0%	0.0%	11.8%	35.3%	41.2%	47.1%	64.7%	64.7%	82.4%	94.1%	100.0%	100.0%		

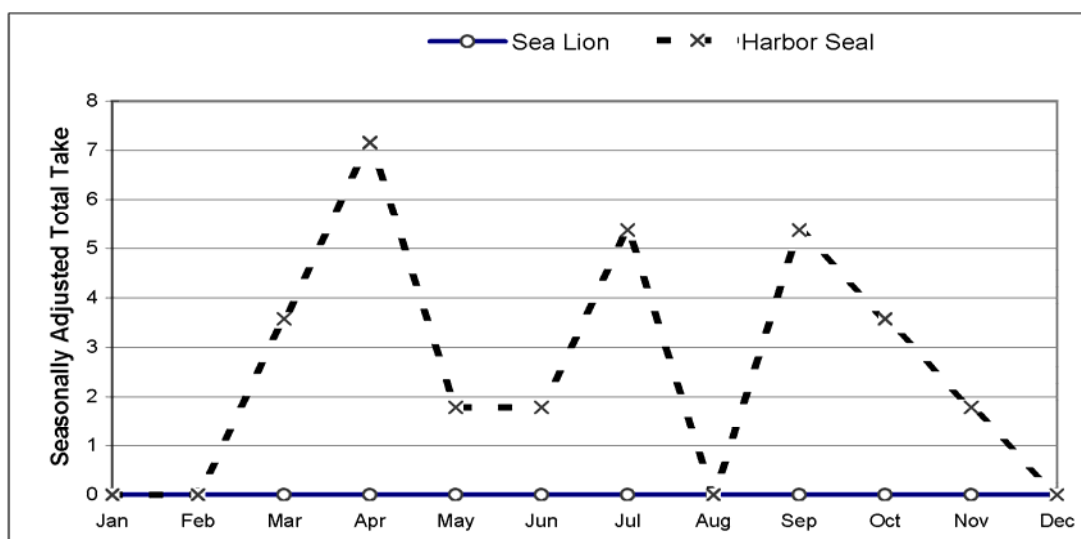
SOURCE: ANHSC Household Surveys, 2009.

Table 25. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Anchorage, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	3	18.8%	5.4	18.8%
Adult Female	0	---	0.0	---	2	12.5%	3.6	12.5%
Adult Unknown Sex	0	---	0.0	---	3	18.8%	5.4	18.8%
Juvenile Male	0	---	0.0	---	6	37.5%	10.7	37.5%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	1	6.3%	1.8	6.3%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	1	6.3%	1.8	6.3%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	16	100.0%	28.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	5.7	3.8	9.5	1992	17.1	0.0	17.1
1993	7.8	3.3	11.1	1993	24.4	5.6	30.0
1994	1.4	0.0	1.4	1994	4.2	0.0	4.2
1995	0.0	0.0	0.0	1995	3.7	0.0	3.7
1996	1.0	0.0	1.0	1996	28.9	6.2	35.1
1997	0.0	0.0	0.0	1997	23.6	1.2	24.8
1998	0.0	0.0	0.0	1998	43.8	7.5	51.3
2000	0.0	0.0	0.0	2000	43.8	7.5	51.3
2001	1.3	0.0	1.3	2001	45.3	2.7	48.0
2002	0.0	0.0	0.0	2002	39.8	8.0	47.7
2003	0.0	0.0	0.0	2003	55.0	15.0	70.0
2004	0.0	0.0	0.0	2004	46.8	13.4	60.2
2005	0.0	0.0	0.0	2005	25.0	13.3	38.3
2006	0.0	0.0	0.0	2006	25.0	13.3	38.3
2007	0.0	0.0	0.0	2007	27.0	4.0	31.0
2008	0.0	0.0	0.0	2008	28.6	1.8	30.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 26. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Homer, 2008

SAMPLING DESIGN:

CHAIN REFERRAL	Total Referred Households	14
	Surveyed Households	8
	Sampling Fraction	57.1%
	Sample Household Members	28
	Estimated Household Members	49.0
	2000 U.S. Census Estimated Native Population	371

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	37.5%
Hunted	0.0%	12.5%
Harvested	0.0%	0.0%
Received	0.0%	37.5%
Gave Away	0.0%	37.5%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	0.0
Total Number Struck and Lost	0.0	1.8
Total Number Taken	0.0	1.8
Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total Take	0	0	0	0	0	0	0	1	0	0	0	0	0	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	1.8	0.0	0.0	0.0	0.0	0.0	1.8
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	1.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	1.8	0.0	0.0	0.0	0.0		1.8
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0		1.8
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

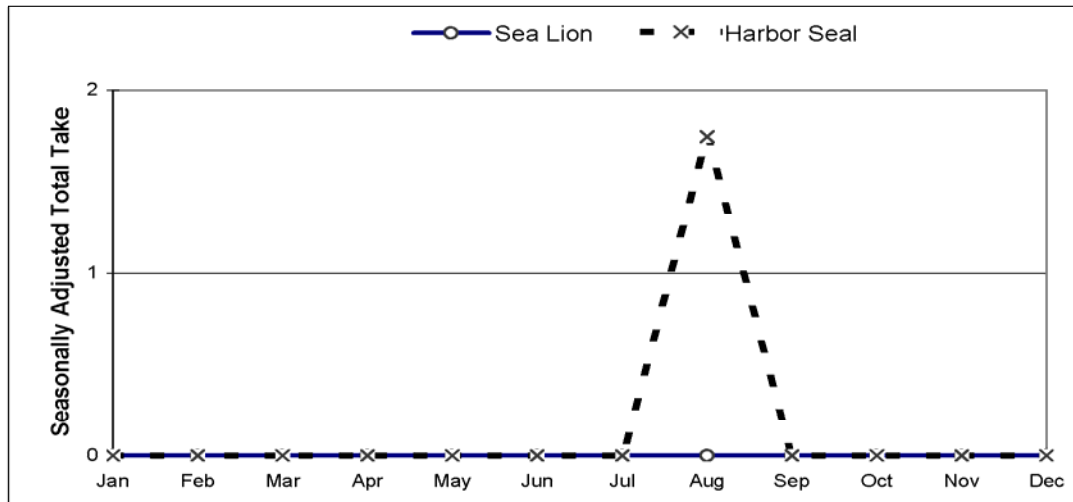
SOURCE: ANHSC Household Surveys, 2009.

Table 26. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Homer, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	---	---	---	1992	---	---	---
1993	0.0	0.0	0.0	1993	4.8	0.0	4.8
1994	0.0	0.0	0.0	1994	12.0	0.0	12.0
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0
1996	0.0	0.0	0.0	1996	10.5	1.5	12.0
1997	0.0	0.0	0.0	1997	41.1	2.6	43.7
1998	0.0	0.0	0.0	1998	22.8	6.0	28.8
2000	0.0	0.0	0.0	2000	22.8	6.0	28.8
2001	0.0	0.0	0.0	2001	21.0	0.0	21.0
2002	0.0	0.0	0.0	2002	23.5	0.0	23.5
2003	0.0	0.0	0.0	2003	10.8	0.0	10.8
2004	0.0	0.0	0.0	2004	3.7	0.0	3.7
2005	0.0	0.0	0.0	2005	5.6	0.0	5.6
2006	0.0	0.0	0.0	2006	5.6	0.0	5.6
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0
2008	0.0	0.0	0.0	2008	0.0	1.8	1.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 27. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Kenai, 2008

<i>SAMPLING DESIGN:</i>		
<i>CHAIN REFERRAL</i>	Total Referred Households	5
	Surveyed Households	1
	Sampling Fraction	20.0%
	Sample Household Members	2
	Estimated Household Members	10.0
	2000 U.S. Census Estimated Native Population	2120

HARVEST AND USE INFORMATION

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

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

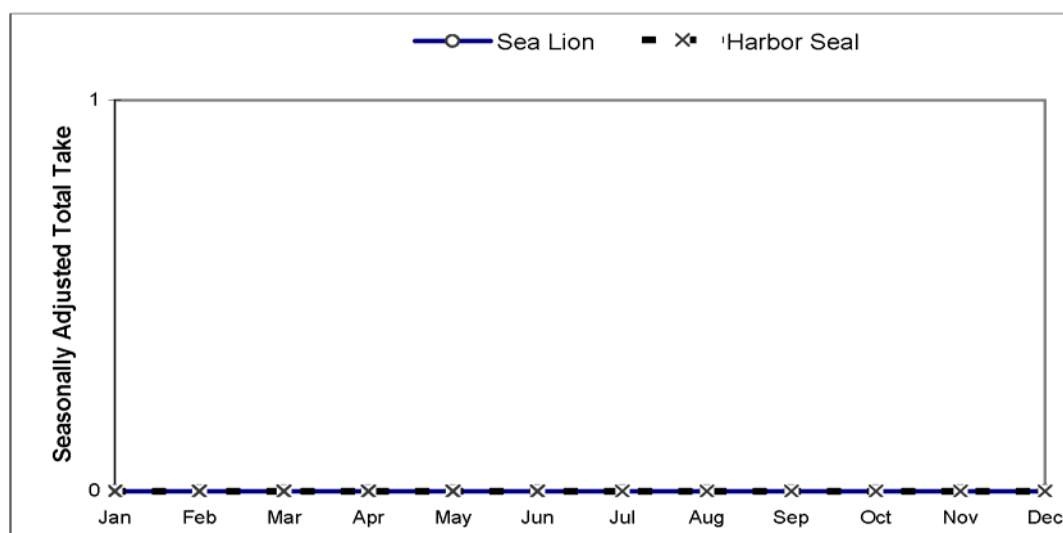
SOURCE: ANHSC Household Surveys, 2009.

Table 27. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Kenai, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	33.3	0.0	33.3
1993	0.0	0.0	0.0	1993	20.0	0.0	20.0
1994	---	---	---	1994	---	---	---
1995	---	---	---	1995	---	---	---
1996	2.3	0.0	2.3	1996	22.9	1.1	24.0
1997	0.0	0.0	0.0	1997	35.0	5.0	40.0
1998	0.0	0.0	0.0	1998	12.6	0.0	12.6
2000	0.0	0.0	0.0	2000	12.6	0.0	12.6
2001	0.0	0.0	0.0	2001	24.9	0.0	24.9
2002	0.0	0.0	0.0	2002	9.0	0.0	9.0
2003	0.0	0.0	0.0	2003	20.0	0.0	20.0
2004	0.0	0.0	0.0	2004	6.0	0.0	6.0
2005	0.0	0.0	0.0	2005	6.0	0.0	6.0
2006	0.0	0.0	0.0	2006	6.0	0.0	6.0
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0
2008	0.0	0.0	0.0	2008	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
ANHSC Household Surveys, 2000-2009.

Table 28. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Tyonek, 2008

SAMPLING DESIGN:

CHAIN REFERRAL	Total Referred Households	3
	Surveyed Households	2
	Sampling Fraction	66.7%
	Sample Household Members	8
	Estimated Household Members	12.0
	2000 U.S. Census Estimated Native Population	184

HARVEST AND USE INFORMATION

Percentage of Sample Households:			Estimated Community Harvest and Take (Expanded):		
	Sea <u>Lion</u>	Harbor <u>Seal</u>		Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	50.0%	Total Number Harvested	0.0	4.5
Hunted	0.0%	50.0%	Total Number Struck and Lost	0.0	0.0
Harvested	0.0%	50.0%	Total Number Taken	0.0	4.5
Received	0.0%	0.0%			
Gave Away	0.0%	50.0%	Number Harvested Per Capita	0.00	0.02

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

HARBOR SEAL HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	3	0	0	0	0	0	0	0	3
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0		4.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0		4.5
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

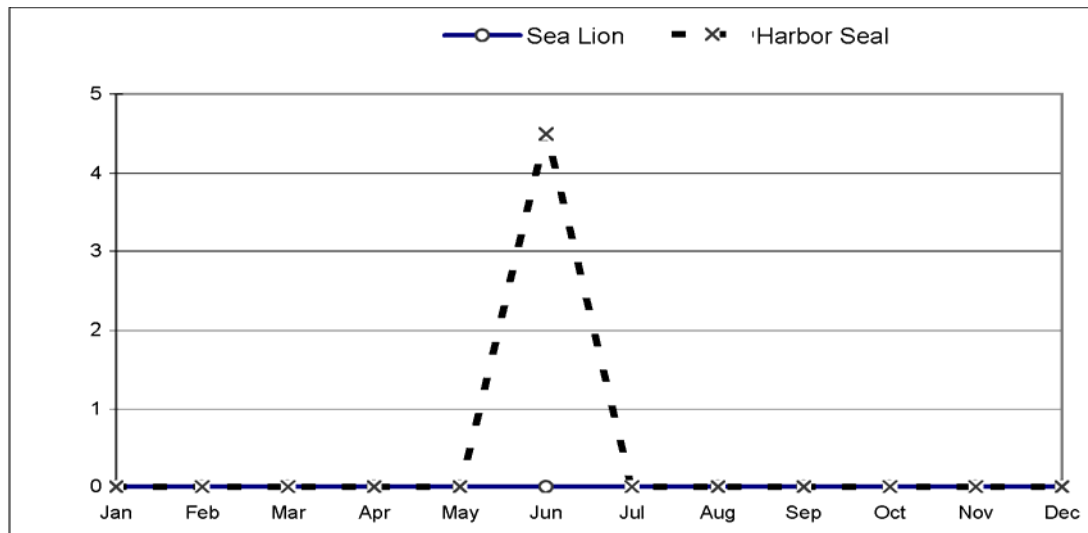
SOURCE: ANHSC Household Surveys, 2009.

Table 28. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Tyonek, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	3	100.0%	4.5	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	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	3	100.0%	4.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	1.1	0.0	1.1
1993	---	---	---	1993	---	---	---
1994	---	---	---	1994	---	---	---
1995	---	---	---	1995	---	---	---
1996	0.0	0.0	0.0	1996	2.0	0.0	2.0
1997	---	---	---	1997	---	---	---
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	0.0	0.0	0.0
2001	0.0	0.0	0.0	2001	0.0	0.0	0.0
2002	0.0	0.0	0.0	2002	3.0	0.0	3.0
2003	0.0	0.0	0.0	2003	5.0	0.0	5.0
2004	0.0	0.0	0.0	2004	0.0	0.0	0.0
2005	0.0	0.0	0.0	2005	1.0	0.0	1.0
2006	0.0	0.0	0.0	2006	1.0	0.0	1.0
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0
2008	0.0	0.0	0.0	2008	4.5	0.0	4.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
ANHSC Household Surveys, 2000-2009.

Table 29. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Akhiok, 2008

SAMPLING DESIGN:

<i>CENSUS</i>	Total Native Households	23
	Surveyed Households	22
	Sampling Fraction	95.7%
	Sample Household Members	86
	Estimated Household Members	89.9
	2000 U.S. Census Estimated Native Population	75

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	13.6%	81.8%
Hunted	9.1%	36.4%
Harvested	9.1%	36.4%
Received	9.1%	50.0%
Gave Away	9.1%	27.3%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	2.1	10.5
Total Number Struck and Lost	3.1	5.2
Total Number Taken	5.2	15.7
Number Harvested Per Capita	0.03	0.14

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	1	1	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	2	1	0	3
Total Take	0	0	0	0	0	0	0	0	0	0	3	2	0	5
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	2.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0	0.0	3.1
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	2.1	0.0	5.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0		2.1
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0		3.1
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	2.1		5.2
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%	40.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	5.2		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	0	0	2	2	0	0	0	0	1	3	1	0	10
Struck & Lost	0	0	0	0	1	0	0	0	0	0	4	0	0	5
Total Take	1	0	0	2	3	0	0	0	0	1	7	1	0	15
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	0.0	1.0	3.1	1.0	0.0	10.5
Struck & Lost	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	5.2
Total Take	1.0	0.0	0.0	2.1	3.1	0.0	0.0	0.0	0.0	1.0	7.3	1.0	0.0	15.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	0.0	1.0	3.1	1.0		10.5
Struck & Lost	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0		5.2
Total Take	1.0	0.0	0.0	2.1	3.1	0.0	0.0	0.0	0.0	1.0	7.3	1.0		15.7
Total Take (%)	6.7%	0.0%	0.0%	13.3%	20.0%	0.0%	0.0%	0.0%	0.0%	6.7%	46.7%	6.7%		100.0%
Cum. Take	1.0	1.0	1.0	3.1	6.3	6.3	6.3	6.3	6.3	7.3	14.6	15.7		
Cum. Take (%)	6.7%	6.7%	6.7%	20.0%	40.0%	40.0%	40.0%	40.0%	40.0%	46.7%	93.3%	100.0%		

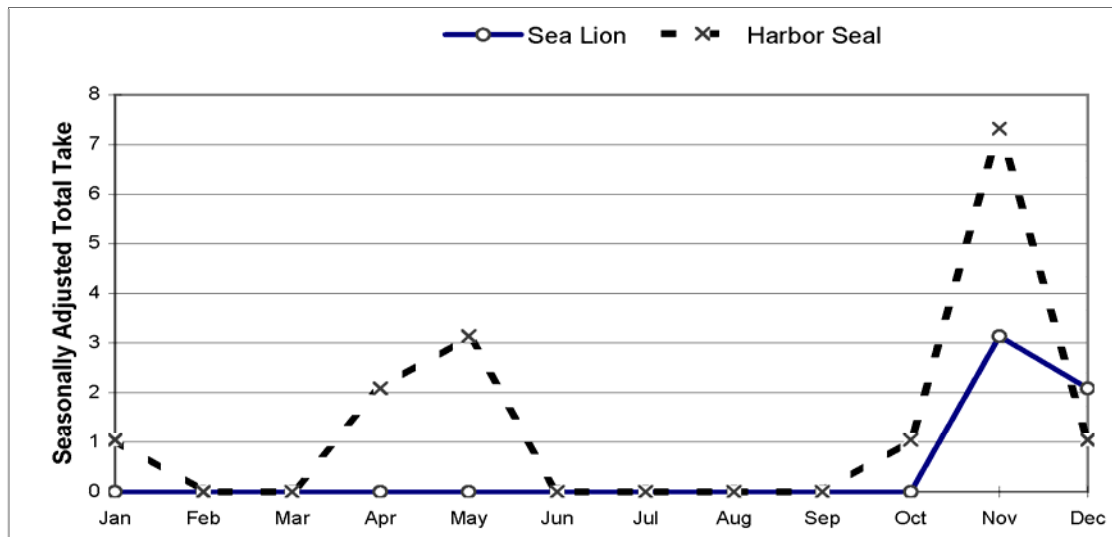
SOURCE: ANHSC Household Surveys, 2009.

Table 29. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Akhiok, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	3	30.0%	3.1	30.0%
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	2	20.0%	2.1	20.0%
Juvenile Male	1	50.0%	1.0	50.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	1	10.0%	1.0	10.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	1	10.0%	1.0	10.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	1	10.0%	1.0	10.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	1	50.0%	1.0	50.0%	1	10.0%	1.0	10.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	1	10.0%	1.0	10.0%
Total	2	100.0%	2.1	100.0%	10	100.0%	10.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	3.0	1.0	4.0	1992	20.0	3.0	23.0
1993	0.0	0.0	0.0	1993	13.3	0.0	13.3
1994	3.2	0.0	3.2	1994	14.5	0.0	14.5
1995	1.0	1.0	2.0	1995	5.0	0.0	5.0
1996	6.0	1.0	7.0	1996	12.0	1.0	13.0
1997	6.6	1.3	7.9	1997	7.9	0.0	7.9
1998	3.1	0.0	3.1	1998	7.3	0.0	7.3
2000	3.2	0.0	3.2	2000	17.6	0.0	17.6
2001	1.4	0.0	1.4	2001	7.2	0.0	7.2
2002	0.0	0.0	0.0	2002	6.3	0.0	6.3
2003	2.7	1.4	4.1	2003	5.5	0.0	5.5
2004	1.4	0.0	1.4	2004	4.2	1.4	5.6
2005	0.0	0.0	0.0	2005	6.9	0.0	6.9
2006	2.3	0.0	2.3	2006	13.6	1.1	14.7
2007	3.0	0.0	3.0	2007	7.0	0.0	7.0
2008	2.1	3.1	5.2	2008	10.5	5.2	15.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 30. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Karluk, 2008

**SAMPLING DESIGN:
CENSUS**

Total Native Households	14
Surveyed Households	14
Sampling Fraction	100.0%
Sample Household Members	36
Estimated Household Members	36.0
2000 U.S. Census Estimated Native Population	26

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	N/A	N/A
Hunted	0.0%	0.0%
Harvested	0.0%	0.0%
Received	N/A	N/A
Gave Away	N/A	N/A

*Estimated Community Harvest
and Take (Expanded):*

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

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

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

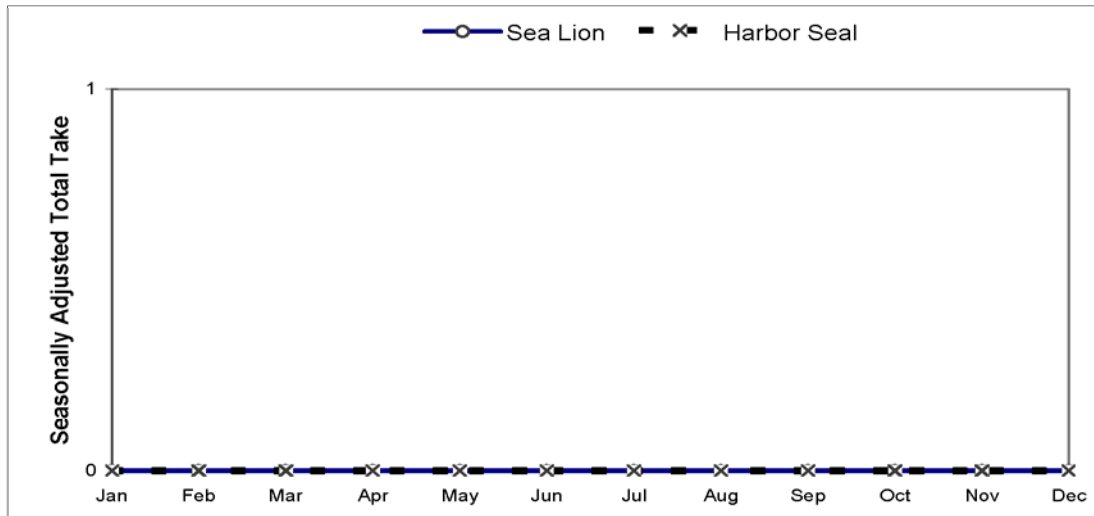
SOURCE: ANHSC Household Surveys. (Numbers based on local assistant personal communication, 2009).

Table 30. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Karluk, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	16.5	1.5	18.0
1993	0.0	0.0	0.0	1993	10.0	1.3	11.3
1994	0.0	0.0	0.0	1994	7.5	0.0	7.5
1995	0.0	0.0	0.0	1995	28.1	6.8	34.9
1996	0.0	0.0	0.0	1996	15.1	0.0	15.1
1997	0.0	0.0	0.0	1997	19.0	0.0	19.0
1998	0.0	0.0	0.0	1998	11.0	0.0	11.0
2000	0.0	0.0	0.0	2000	19.5	1.5	21.0
2001	0.0	0.0	0.0	2001	8.3	0.0	8.3
2002	0.0	0.0	0.0	2002	8.3	0.0	8.3
2003	0.0	0.0	0.0	2003	4.3	0.0	4.3
2004	0.0	0.0	0.0	2004	3.1	0.0	3.1
2005	0.0	0.0	0.0	2005	19.4	0.0	19.4
2006	0.0	0.0	0.0	2006	19.4	0.0	19.4
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0
2008	0.0	0.0	0.0	2008	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
 ANHSC Household Surveys, 2000-2009 (2008 harvest estimates based on local assistant personal communication).

Table 31. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Kodiak City, 2008

SAMPLING DESIGN:

CHAIN REFERRAL	Total Referred Households	54
	Surveyed Households	25
	Sampling Fraction	46.3%
	Sample Household Members	83
	Estimated Household Members	178.2
	2000 U.S. Census Estimated Native Population	829

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	0.0%	100.0%
Hunted	0.0%	88.0%
Harvested	0.0%	64.0%
Received	0.0%	56.0%
Gave Away	0.0%	60.0%

Estimated Community Harvest and Take (Expanded):

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	0.0	62.6
Total Number Struck and Lost	0.0	8.6
Total Number Taken	0.0	71.3
Number Harvested Per Capita	0.00	0.08

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	2	6	1	0	0	0	0	3	3	7	2	4	1	29
Struck & Lost	1	0	0	0	0	0	0	0	0	2	0	1	0	4
Total Take	3	6	1	0	0	0	0	3	3	9	2	5	1	33
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	4.3	13.0	2.2	0.0	0.0	0.0	0.0	6.5	6.5	15.1	4.3	8.6	2.2	62.6
Struck & Lost	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	2.2	0.0	8.6
Total Take	6.5	13.0	2.2	0.0	0.0	0.0	0.0	6.5	6.5	19.4	4.3	10.8	2.2	71.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	4.5	13.4	2.2	0.0	0.0	0.0	0.0	6.7	6.7	15.7	4.5	8.9		62.6
Struck & Lost	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	2.2		8.6
Total Take	6.6	13.4	2.2	0.0	0.0	0.0	0.0	6.7	6.7	20.0	4.5	11.1		71.3
Total Take (%)	9.3%	18.8%	3.1%	0.0%	0.0%	0.0%	0.0%	9.4%	9.4%	28.0%	6.3%	15.6%		100.0%
Cum. Take	6.6	20.1	22.3	22.3	22.3	22.3	22.3	29.0	35.7	55.7	60.2	71.3		
Cum. Take (%)	9.3%	28.1%	31.3%	31.3%	31.3%	31.3%	31.3%	40.7%	50.1%	78.1%	84.4%	100.0%		

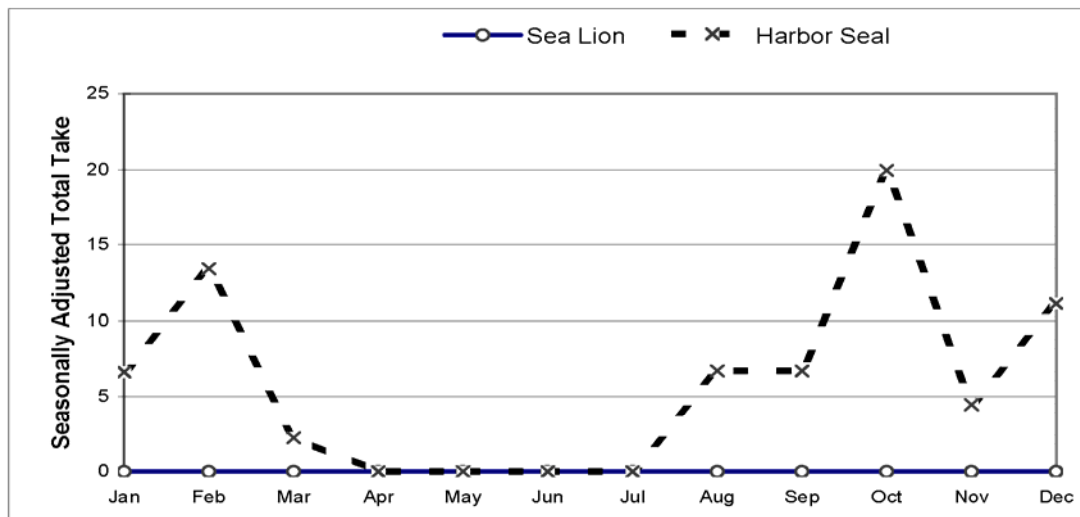
SOURCE: ANHSC Household Surveys, 2009.

Table 31. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Kodiak City, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	26	89.7%	56.2	89.7%
Adult Female	0	---	0.0	---	2	6.9%	4.3	6.9%
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	3.4%	2.2	3.4%
Total	0	---	0.0	---	29	100.0%	62.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	36.9	0.0	36.9
1993	0.0	12.7	12.7	1993	6.0	1.0	7.0
1994	1.1	0.0	1.1	1994	7.6	0.0	7.6
1995	2.2	0.0	2.2	1995	8.8	0.0	8.8
1996	3.0	0.0	3.0	1996	9.0	0.0	9.0
1997	3.0	0.0	3.0	1997	13.0	0.0	13.0
1998	0.0	1.0	1.0	1998	11.0	0.0	11.0
2000	2.4	0.0	2.4	2000	21.6	4.8	26.4
2001	2.5	0.0	2.5	2001	17.5	0.0	17.5
2002	2.5	0.0	2.5	2002	17.5	0.0	17.5
2003	0.0	0.0	0.0	2003	32.0	6.0	38.0
2004	0.0	0.0	0.0	2004	21.0	4.5	25.5
2005	0.0	0.0	0.0	2005	10.8	0.0	10.8
2006	0.0	0.0	0.0	2006	10.8	0.0	10.8
2007	0.0	0.0	0.0	2007	21.3	2.2	23.6
2008	0.0	0.0	0.0	2008	62.6	8.6	71.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
ANHSC Household Surveys, 2000-2009.

Table 32. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Larsen Bay, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	28
Surveyed Households	27
Sampling Fraction	96.4%
Sample Household Members	67
Estimated Household Members	69.5
2000 U.S. Census Estimated Native Population	91

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	44.4%
Hunted	0.0%	18.5%
Harvested	0.0%	18.5%
Received	0.0%	29.6%
Gave Away	0.0%	22.2%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	5.2
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	5.2
Number Harvested Per Capita	0.00	0.06

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	2	1	1	1	0	5
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	2	1	1	1	0	5
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0	1.0	1.0	0.0	5.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0	1.0	1.0	0.0	5.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0	1.0	1.0		5.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0	1.0	1.0		5.2
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	20.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	3.1	4.1	5.2		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	60.0%	80.0%	100.0%		

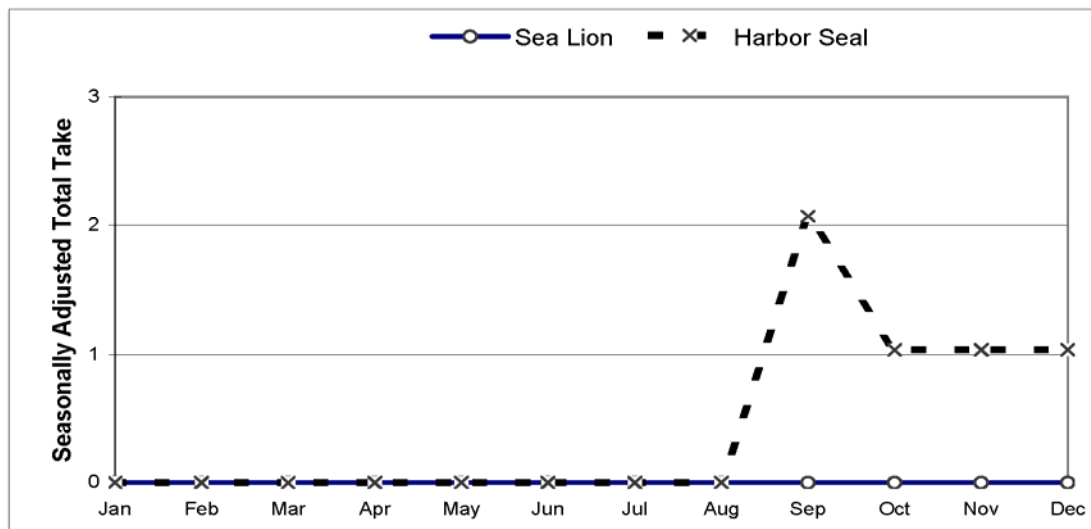
SOURCE: ANHSC Household Surveys, 2009.

Table 32. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Larsen Bay, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	5	100.0%	5.2	100.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	5	100.0%	5.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	1.1	0.0	1.1	1992	6.5	0.0	6.5
1993	0.0	0.0	0.0	1993	7.7	5.5	13.2
1994	2.2	0.0	2.2	1994	13.4	2.2	15.7
1995	2.0	1.0	3.0	1995	11.0	0.0	11.0
1996	0.0	0.0	0.0	1996	15.0	0.0	15.0
1997	0.0	0.0	0.0	1997	9.8	4.2	13.9
1998	0.0	0.0	0.0	1998	1.7	0.0	1.7
2000	0.0	0.0	0.0	2000	18.6	0.0	18.6
2001	0.0	0.0	0.0	2001	9.0	1.1	10.2
2002	0.0	0.0	0.0	2002	3.3	0.0	3.3
2003	0.0	0.0	0.0	2003	2.5	0.0	2.5
2004	0.0	0.0	0.0	2004	12.5	0.0	12.5
2005	0.0	0.0	0.0	2005	17.0	0.0	17.0
2006	0.0	0.0	0.0	2006	20.3	0.0	20.3
2007	0.0	0.0	0.0	2007	8.6	0.0	8.6
2008	0.0	0.0	0.0	2008	5.2	0.0	5.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
ANHSC Household Surveys, 2000-2009.

Table 33. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Old Harbor, 2008

SAMPLING DESIGN:

CENSUS

Total Native Households	75
Surveyed Households	64
Sampling Fraction	85.3%
Sample Household Members	173
Estimated Household Members	202.7
2000 U.S. Census Estimated Native Population	203

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	56.3%	79.7%
Hunted	9.4%	20.3%
Harvested	7.8%	20.3%
Received	56.3%	79.7%
Gave Away	53.1%	71.9%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	7.0	35.2
Total Number Struck and Lost	3.5	3.5
Total Number Taken	10.5	38.7
Number Harvested Per Capita	0.03	0.17

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	1	0	3	0	2	0	6
Struck & Lost	0	0	0	0	0	0	0	1	0	1	0	1	0	3
Total Take	0	0	0	0	0	0	0	2	0	4	0	3	0	9
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	3.5	0.0	2.3	0.0	7.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2	0.0	1.2	0.0	3.5
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	4.7	0.0	3.5	0.0	10.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	3.5	0.0	2.3		7.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2	0.0	1.2		3.5
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	4.7	0.0	3.5		10.5
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.2%	0.0%	44.4%	0.0%	33.3%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	7.0	7.0	10.5		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.2%	22.2%	66.7%	66.7%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	2	1	1	0	3	0	2	1	6	7	6	0	30
Struck & Lost	0	0	0	0	0	1	0	0	0	0	1	1	0	3
Total Take	1	2	1	1	0	4	0	2	1	6	8	7	0	33
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.2	2.3	1.2	1.2	0.0	3.5	0.0	2.3	1.2	7.0	8.2	7.0	0.0	35.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	1.2	0.0	3.5
Total Take	1.2	2.3	1.2	1.2	0.0	4.7	0.0	2.3	1.2	7.0	9.4	8.2	0.0	38.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.2	2.3	1.2	1.2	0.0	3.5	0.0	2.3	1.2	7.0	8.2	7.0		35.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	1.2		3.5
Total Take	1.2	2.3	1.2	1.2	0.0	4.7	0.0	2.3	1.2	7.0	9.4	8.2		38.7
Total Take (%)	3.0%	6.1%	3.0%	3.0%	0.0%	12.1%	0.0%	6.1%	3.0%	18.2%	24.2%	21.2%		100.0%
Cum. Take	1.2	3.5	4.7	5.9	5.9	10.5	10.5	12.9	14.1	21.1	30.5	38.7		
Cum. Take (%)	3.0%	9.1%	12.1%	15.2%	15.2%	27.3%	27.3%	33.3%	36.4%	54.5%	78.8%	100.0%		

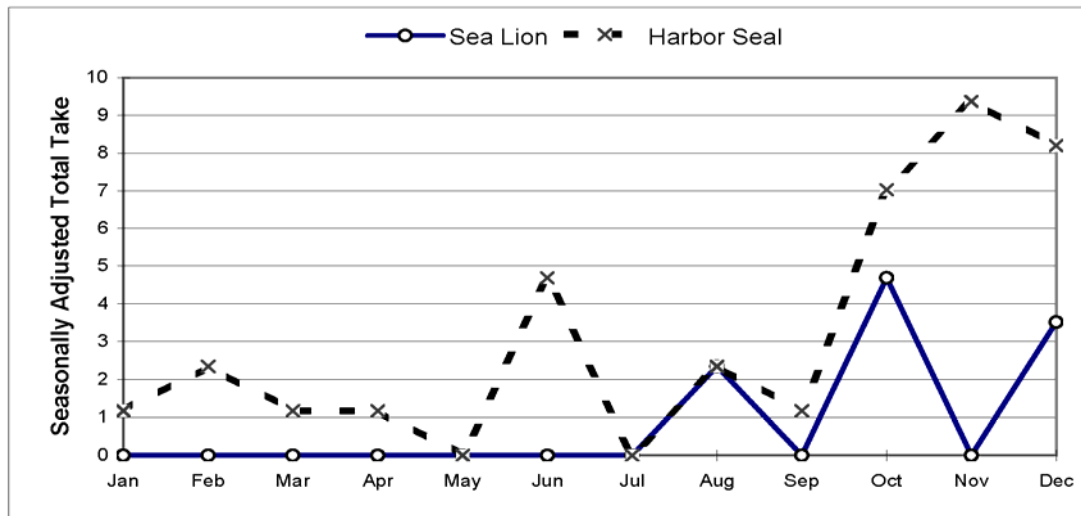
SOURCE: ANHSC Household Surveys, (Numbers based on 2007 harvest estimates).

Table 33. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Old Harbor, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	6	100.0%	7.0	100.0%	21	70.0%	24.6	70.0%
Adult Female	0	0.0%	0.0	0.0%	1	3.3%	1.2	3.3%
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%	8	26.7%	9.4	26.7%
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	6	100.0%	7.0	100.0%	30	100.0%	35.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	32.9	13.2	46.1	1992	86.8	5.3	92.1
1993	32.1	1.0	33.2	1993	67.6	2.7	70.3
1994	46.2	1.3	47.5	1994	83.7	1.3	85.0
1995	107.1	5.7	112.9	1995	112.0	2.4	114.4
1996	44.9	5.3	50.2	1996	113.5	1.3	114.8
1997	22.7	3.6	26.3	1997	80.0	4.8	84.8
1998	10.3	2.3	12.6	1998	55.1	1.1	56.2
2000	12.9	0.0	12.9	2000	59.1	0.0	59.1
2001	26.3	2.2	28.5	2001	71.3	0.0	71.3
2002	8.5	0.0	8.5	2002	40.5	0.0	40.5
2003	27.6	4.4	31.9	2003	66.7	2.9	69.6
2004	8.3	3.5	11.8	2004	37.8	5.9	43.7
2005	18.2	3.2	21.4	2005	37.5	1.1	38.6
2006	1.1	0.0	1.1	2006	20.2	0.0	20.2
2007	7.0	3.5	10.5	2007	35.2	3.5	38.7
2008	7.0	3.5	10.5	2008	35.2	3.5	38.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
 ANHSC Household Surveys, 2000-2009. (Numbers based on 2007 harvest estimates).

Table 34. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Ouzinkie, 2008

SAMPLING DESIGN:

CHAIN REFERRAL

Total Native Households	29
Surveyed Households	28
Sampling Fraction	96.6%
Sample Household Members	93
Estimated Household Members	95.9
2000 U.S. Census Estimated Native Population	197

HARVEST AND USE INFORMATION

Percentage of Sample Households:

	Sea Lion	Harbor Seal
Used	0.0%	100.0%
Hunted	0.0%	82.1%
Harvested	0.0%	57.1%
Received	0.0%	67.9%
Gave Away	0.0%	60.7%

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

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	32.1
Total Number Struck and Lost	0.0	3.1
Total Number Taken	0.0	35.2
Number Harvested Per Capita	0.00	0.16

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	7	2	1	0	1	2	0	1	2	5	5	5	0	31
Struck & Lost	0	1	1	0	0	1	0	0	0	0	0	0	0	3
Total Take	7	3	2	0	1	3	0	1	2	5	5	5	0	34
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	7.3	2.1	1.0	0.0	1.0	2.1	0.0	1.0	2.1	5.2	5.2	5.2	0.0	32.1
Struck & Lost	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1
Total Take	7.3	3.1	2.1	0.0	1.0	3.1	0.0	1.0	2.1	5.2	5.2	5.2	0.0	35.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	7.3	2.1	1.0	0.0	1.0	2.1	0.0	1.0	2.1	5.2	5.2	5.2		32.1
Struck & Lost	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0		3.1
Total Take	7.3	3.1	2.1	0.0	1.0	3.1	0.0	1.0	2.1	5.2	5.2	5.2		35.2
Total Take (%)	20.6%	8.8%	5.9%	0.0%	2.9%	8.8%	0.0%	2.9%	5.9%	14.7%	14.7%	14.7%		100.0%
Cum. Take	7.3	10.4	12.4	12.4	13.5	16.6	16.6	17.6	19.7	24.9	30.0	35.2		
Cum. Take (%)	20.6%	29.4%	35.3%	35.3%	38.2%	47.1%	47.1%	50.0%	55.9%	70.6%	85.3%	100.0%		

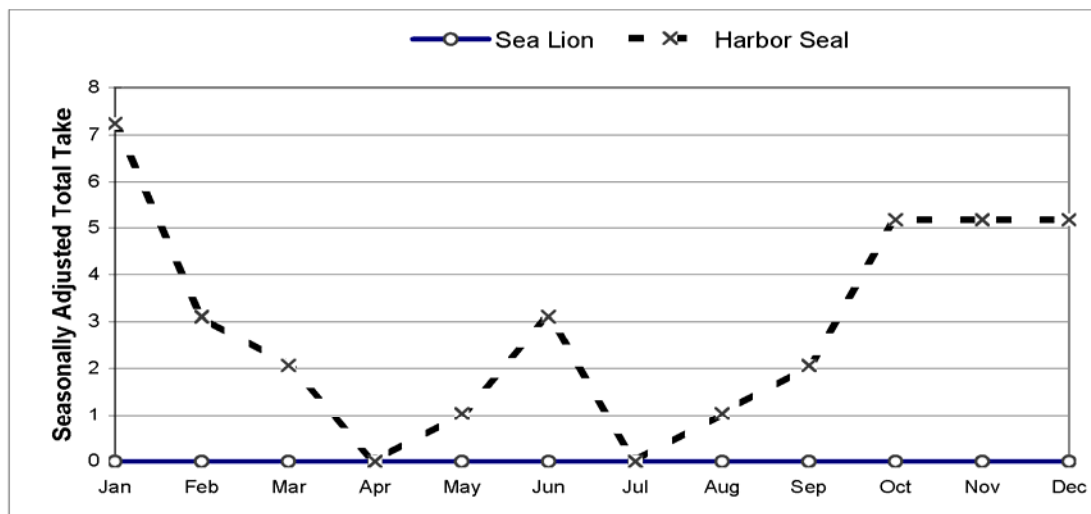
SOURCE: ANHSC Household Surveys, 2009.

Table 34. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Ouzinkie, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	27	87.1%	28.0	87.1%
Adult Female	0	---	0.0	---	3	9.7%	3.1	9.7%
Adult Unknown Sex	0	---	0.0	---	1	3.2%	1.0	3.2%
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	---	31	100.0%	32.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	3.4	0.0	3.4	1992	21.8	1.1	23.0
1993	5.4	2.2	7.6	1993	41.2	8.7	49.8
1994	4.4	2.9	7.3	1994	33.4	0.0	33.4
1995	15.6	0.0	15.6	1995	56.1	0.0	56.1
1996	0.0	0.0	0.0	1996	16.7	2.6	19.3
1997	0.0	0.0	0.0	1997	55.2	9.4	64.6
1998	0.0	0.0	0.0	1998	82.0	2.5	84.5
2000	0.0	0.0	0.0	2000	43.0	1.0	44.0
2001	2.6	0.0	2.6	2001	33.4	2.6	36.0
2002	5.1	0.0	5.1	2002	63.4	10.2	73.6
2003	0.0	0.0	0.0	2003	48.8	4.1	52.8
2004	2.6	0.0	2.6	2004	73.0	3.9	76.9
2005	0.0	0.0	0.0	2005	136.6	9.5	146.1
2006	0.0	0.0	0.0	2006	49.0	9.1	58.1
2007	2.1	0.0	2.1	2007	49.5	0.0	49.5
2008	0.0	0.0	0.0	2008	32.1	3.1	35.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
ANHSC Household Surveys, 2000-2009.

Table 35. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Port Lions, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	15
Surveyed Households	15
Sampling Fraction	100.0%
Sample Household Members	40
Estimated Household Members	40.0
2000 U.S. Census Estimated Native Population	163

HARVEST AND USE INFORMATION**Percentage of Sample Households:**

	Sea Lion	Harbor Seal
Used	13.3%	40.0%
Hunted	13.3%	40.0%
Harvested	13.3%	33.3%
Received	0.0%	20.0%
Gave Away	13.3%	26.7%

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

	Sea Lion	Harbor Seal
Total Number Harvested	3.0	20.0
Total Number Struck and Lost	0.0	6.0
Total Number Taken	3.0	26.0
Number Harvested Per Capita	0.02	0.12

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	0	1	1	0	0	0	0	0	0	0	0	0	3
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	0	1	1	0	0	0	0	0	0	0	0	0	3
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
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	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		3.0
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	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		3.0
Total Take (%)	33.3%	0.0%	33.3%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	1.0	1.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Cum. Take (%)	33.3%	33.3%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	2	3	1	3	2	1	0	0	1	3	2	2	0	20
Struck & Lost	1	1	1	0	0	0	0	0	0	1	1	1	0	6
Total Take	3	4	2	3	2	1	0	0	1	4	3	3	0	26
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.0	3.0	1.0	3.0	2.0	1.0	0.0	0.0	1.0	3.0	2.0	2.0	0.0	20.0
Struck & Lost	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	6.0
Total Take	3.0	4.0	2.0	3.0	2.0	1.0	0.0	0.0	1.0	4.0	3.0	3.0	0.0	26.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.0	3.0	1.0	3.0	2.0	1.0	0.0	0.0	1.0	3.0	2.0	2.0		20.0
Struck & Lost	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0		6.0
Total Take	3.0	4.0	2.0	3.0	2.0	1.0	0.0	0.0	1.0	4.0	3.0	3.0		26.0
Total Take (%)	11.5%	15.4%	7.7%	11.5%	7.7%	3.8%	0.0%	0.0%	3.8%	15.4%	11.5%	11.5%		100.0%
Cum. Take	3.0	7.0	9.0	12.0	14.0	15.0	15.0	15.0	16.0	20.0	23.0	26.0		
Cum. Take (%)	11.5%	26.9%	34.6%	46.2%	53.8%	57.7%	57.7%	57.7%	61.5%	76.9%	88.5%	100.0%		

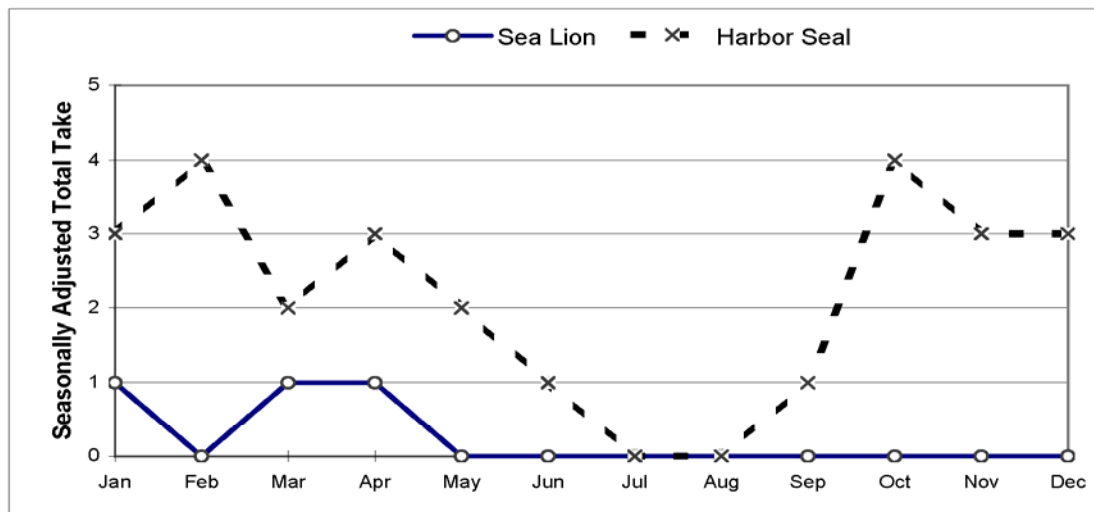
SOURCE: ANHSC Household Surveys, 2009.

Table 35. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Port Lions, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	12	60.0%	12.0	60.0%
Adult Female	0	0.0%	0.0	0.0%	5	25.0%	5.0	25.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	3	15.0%	3.0	15.0%
Juvenile Male	3	100.0%	3.0	100.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	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	3	100.0%	3.0	100.0%	20	100.0%	20.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	1.1	2.2	3.3	1992	36.9	2.2	39.1
1993	4.0	1.0	5.0	1993	26.0	1.0	27.0
1994	0.0	0.0	0.0	1994	8.0	0.0	8.0
1995	0.0	0.0	0.0	1995	2.0	0.0	2.0
1996	0.0	0.0	0.0	1996	4.0	0.0	4.0
1997	1.0	0.0	1.0	1997	5.0	0.0	5.0
1998	1.0	0.0	1.0	1998	6.0	0.0	6.0
2000	0.0	0.0	0.0	2000	6.4	0.0	6.4
2001	0.0	0.0	0.0	2001	8.8	1.1	9.9
2002	0.0	0.0	0.0	2002	13.0	0.0	13.0
2003	0.0	0.0	0.0	2003	12.9	0.0	12.9
2004	1.2	0.0	1.2	2004	20.6	0.0	20.6
2005	3.7	0.0	3.7	2005	77.0	0.0	77.0
2006	3.7	0.0	3.7	2006	77.0	0.0	77.0
2007	3.7	0.0	3.7	2007	77.0	0.0	77.0
2008	3.0	0.0	3.0	2008	20.0	6.0	26.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; ANHSC Household Surveys, 2000-2009.

Table 36. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Chignik Bay, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	16
Surveyed Households	14
Sampling Fraction	87.5%
Sample Household Members	36
Estimated Household Members	41.1
2000 U.S. Census Estimated Native Population	48

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	14.3%
Hunted	0.0%	7.1%
Harvested	0.0%	7.1%
Received	0.0%	7.1%
Gave Away	0.0%	7.1%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	2.3
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	2.3
Number Harvested Per Capita	0.00	0.05

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	1	0	0	0	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	0	1	0	0	0	0	0	0	1	0	0	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	2.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	2.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0		2.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0		2.3
Total Take (%)	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.3	2.3	2.3	2.3		
Cum. Take (%)	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%		

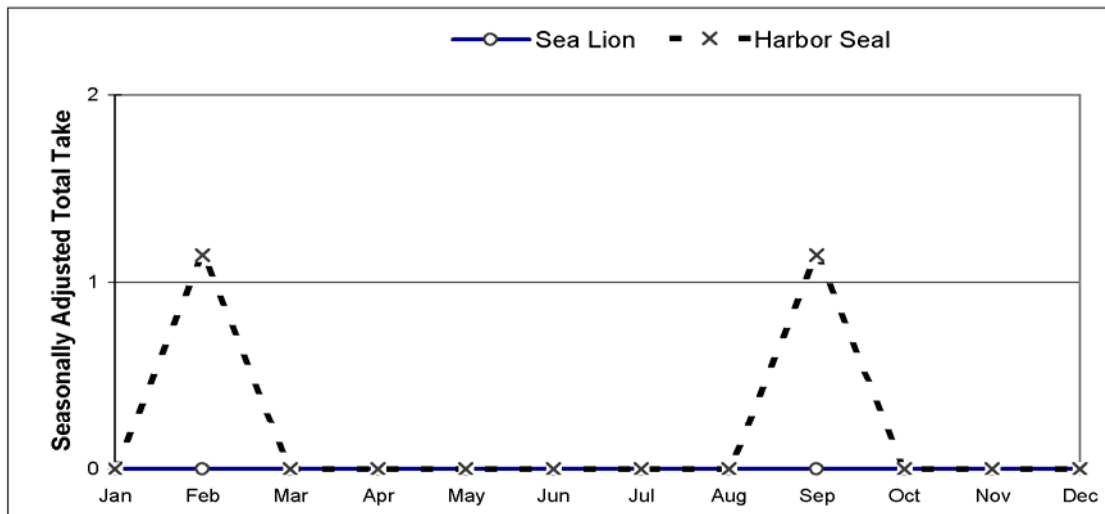
SOURCE: BBNA Household Surveys, 2009.

Table 36. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Chignik Bay, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	2	100.0%	2.3	100.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	2	100.0%	2.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	2.4	1.2	3.6
1993	0.0	0.0	0.0	1993	6.3	5.0	11.3
1994	0.0	0.0	0.0	1994	3.4	0.0	3.4
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0
1996	0.0	0.0	0.0	1996	1.0	0.0	1.0
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	0.0	0.0	0.0
2001	0.0	0.0	0.0	2001	0.0	0.0	0.0
2002	0.0	0.0	0.0	2002	1.3	0.0	1.3
2003	0.0	0.0	0.0	2003	2.8	0.0	2.8
2004	0.0	0.0	0.0	2004	0.0	0.0	0.0
2005	0.0	0.0	0.0	2005	0.0	0.0	0.0
2006	0.0	0.0	0.0	2006	4.3	1.4	5.8
2007	0.0	0.0	0.0	2007	4.3	0.0	4.3
2008	0.0	0.0	0.0	2008	2.3	0.0	2.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.

**Table 37. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES:
Chignik Lagoon, 2008**

<i>SAMPLING DESIGN:</i>		
<i>CENSUS</i>	Total Native Households	25
	Surveyed Households	17
	Sampling Fraction	68.0%
	Sample Household Members	47
	Estimated Household Members	69.1
	2000 U.S. Census Estimated Native Population	85

HARVEST AND USE INFORMATION

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

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

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

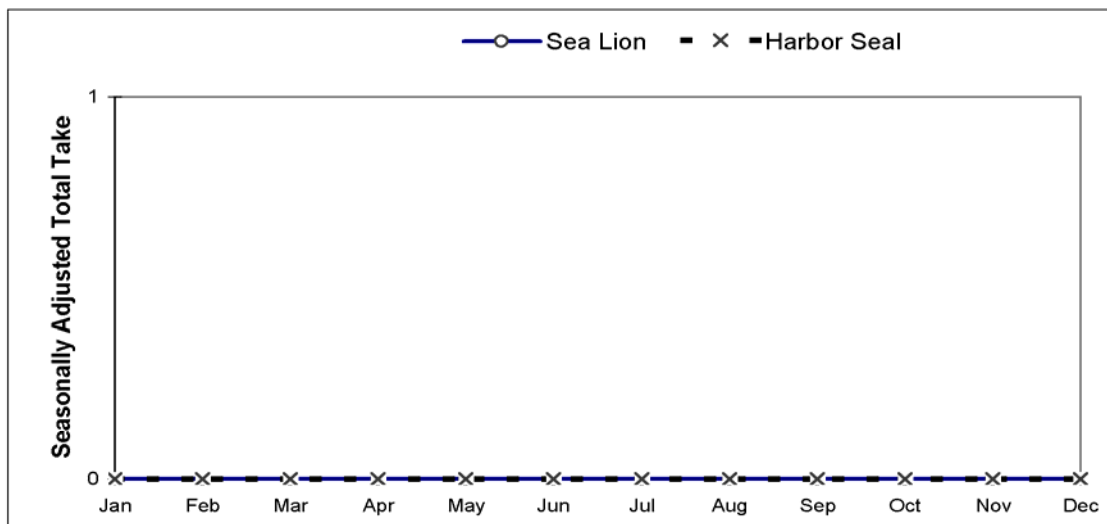
SOURCE: AMMC Household Surveys, 2009.

Table 37. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Chignik Lagoon, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	4.0	0.0	4.0
1993	1.1	0.0	1.1	1993	4.3	1.1	5.3
1994	0.0	0.0	0.0	1994	0.0	1.0	1.0
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0
1997	0.0	0.0	0.0	1997	1.3	1.3	2.7
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	1.2	0.0	1.2
2001	0.0	0.0	0.0	2001	1.1	0.0	1.1
2002	0.0	0.0	0.0	2002	0.0	0.0	0.0
2003	0.0	0.0	0.0	2003	0.0	0.0	0.0
2004	0.0	0.0	0.0	2004	1.1	0.0	1.1
2005	0.0	0.0	0.0	2005	0.0	0.0	0.0
2006	0.0	0.0	0.0	2006	0.0	0.0	0.0
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0
2008	0.0	0.0	0.0	2008	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
AMMC Household Surveys, 2000-2009.

Table 38. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Chignik Lake, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	19
Surveyed Households	15
Sampling Fraction	78.9%
Sample Household Members	42
Estimated Household Members	52.8
2000 U.S. Census Estimated Native Population	127

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	40.0%
Hunted	0.0%	40.0%
Harvested	0.0%	40.0%
Received	0.0%	13.3%
Gave Away	0.0%	13.3%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	20.3
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	20.3
Number Harvested Per Capita	0.00	0.16

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	0	0	0	0	0	1	4	8	1	1	0	0	16
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	0	0	0	0	0	1	4	8	1	1	0	0	16
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.3	0.0	0.0	0.0	0.0	0.0	1.3	5.1	10.1	1.3	1.3	0.0	0.0	20.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	1.3	0.0	0.0	0.0	0.0	0.0	1.3	5.1	10.1	1.3	1.3	0.0	0.0	20.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.3	0.0	0.0	0.0	0.0	0.0	1.3	5.1	10.1	1.3	1.3	0.0		20.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	1.3	0.0	0.0	0.0	0.0	0.0	1.3	5.1	10.1	1.3	1.3	0.0		20.3
Total Take (%)	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	25.0%	50.0%	6.3%	6.3%	0.0%		100.0%
Cum. Take	1.3	1.3	1.3	1.3	1.3	1.3	2.5	7.6	17.7	19.0	20.3	20.3		
Cum. Take (%)	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	12.5%	37.5%	87.5%	93.8%	100.0%	100.0%		

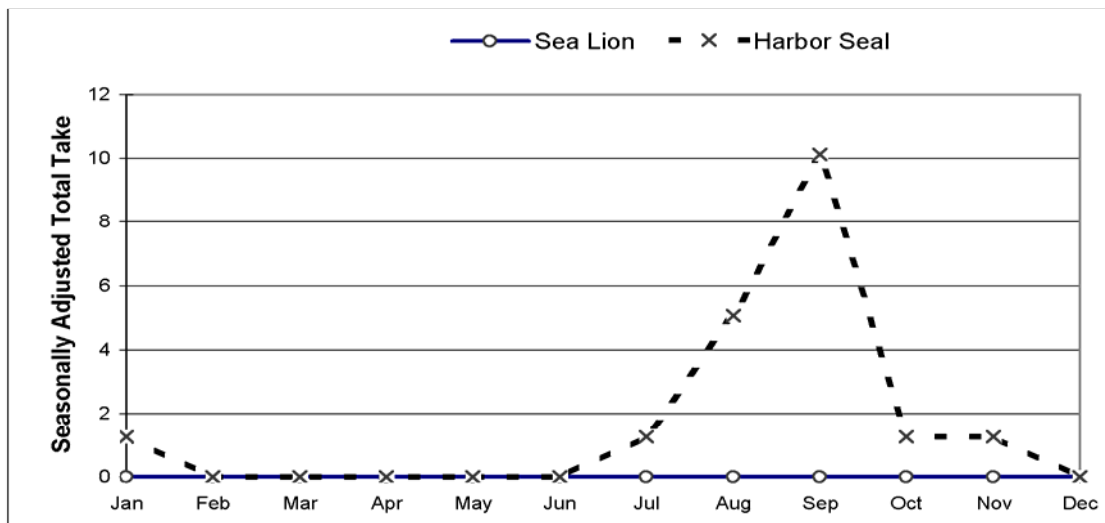
SOURCE: AMMC Household Surveys, 2009.

Table 38. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Chignik Lake, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	11	68.8%	13.9	68.8%
Adult Female	0	---	0.0	---	1	6.3%	1.3	6.3%
Adult Unknown Sex	0	---	0.0	---	1	6.3%	1.3	6.3%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	3	18.8%	3.8	18.8%
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	---	16	100.0%	20.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	8.3	2.1	10.3
1993	0.0	0.0	0.0	1993	15.2	5.5	20.8
1994	0.0	0.0	0.0	1994	20.8	1.3	22.1
1995	0.0	0.0	0.0	1995	3.2	1.1	4.3
1996	0.0	0.0	0.0	1996	3.5	0.0	3.5
1997	0.0	0.0	0.0	1997	2.2	1.1	3.3
1998	0.0	0.0	0.0	1998	1.9	0.0	1.9
2000	0.0	0.0	0.0	2000	3.3	0.0	3.3
2001	0.0	0.0	0.0	2001	1.3	1.3	2.6
2002	0.0	0.0	0.0	2002	2.9	0.0	2.9
2003	0.0	0.0	0.0	2003	8.9	3.0	11.8
2004	0.0	0.0	0.0	2004	6.7	3.3	10.0
2005	0.0	0.0	0.0	2005	3.6	1.2	4.8
2006	0.0	0.0	0.0	2006	0.0	2.9	2.9
2007	0.0	0.0	0.0	2007	8.1	0.0	8.1
2008	0.0	0.0	0.0	2008	20.3	0.0	20.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; AMMC Household Surveys, 2000-2009.

Table 39. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: False Pass, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	11
Surveyed Households	8
Sampling Fraction	72.7%
Sample Household Members	27
Estimated Household Members	37.1
2000 U.S. Census Estimated Native Population	42

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea Lion	Harbor Seal
Used	0.0%	75.0%
Hunted	12.5%	25.0%
Harvested	0.0%	12.5%
Received	0.0%	62.5%
Gave Away	0.0%	12.5%

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

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	2.8
Total Number Struck and Lost	1.4	0.0
Total Number Taken	1.4	2.8
Number Harvested Per Capita	0.00	0.07

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total Take	0	0	0	0	0	0	0	0	0	0	1	0	0	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	1.4	0.0	0.0	1.4
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	1.4	0.0		1.4
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0		1.4
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	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	0.0	1.4	1.4		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	0	0	0	0	0	0	0	0	1	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	0	1	0	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	2.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	2.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0		2.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0		2.8
Total Take (%)	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%		100.0%
Cum. Take	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8		
Cum. Take (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%		

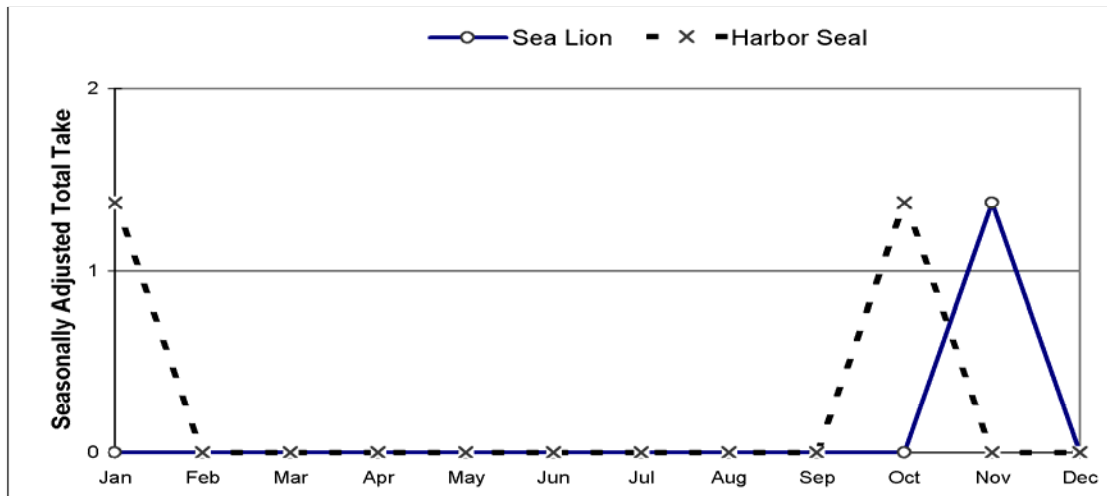
SOURCE: AMMC Household Surveys, 2009.

Table 39. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: False Pass, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	1	50.0%	1.4	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	---	1	50.0%	1.4	50.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	2	100.0%	2.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	18.0	0.0	18.0
1993	0.0	0.0	0.0	1993	19.0	0.0	19.0
1994	0.0	0.0	0.0	1994	12.6	2.1	14.7
1995	0.0	0.0	0.0	1995	25.9	1.2	27.1
1996	0.0	0.0	0.0	1996	13.9	0.0	13.9
1997	0.0	0.0	0.0	1997	8.0	0.0	8.0
1998	0.0	0.0	0.0	1998	17.8	1.3	19.1
2000	0.0	0.0	0.0	2000	2.5	1.2	3.7
2001	0.0	0.0	0.0	2001	2.5	1.2	3.7
2002	0.0	0.0	0.0	2002	2.5	0.0	2.5
2003	0.0	0.0	0.0	2003	2.8	0.0	2.8
2004	0.0	0.0	0.0	2004	2.8	0.0	2.8
2005	0.0	0.0	0.0	2005	5.7	0.0	5.7
2006	0.0	0.0	0.0	2006	0.0	0.0	0.0
2007	0.0	0.0	0.0	2007	1.0	0.0	1.0
2008	0.0	1.4	1.4	2008	2.8	0.0	2.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; AMMC Household Surveys, 2000-2009.

Table 40. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Ivanof Bay, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	0
Surveyed Households	0
Sampling Fraction	0.0%
Sample Household Members	0
Estimated Household Members	0.0
2000 U.S. Census Estimated Native Population	21

HARVEST AND USE INFORMATION*Percentage of Native Households:*

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

*Estimated Community Harvest
and Take (Expanded):*

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

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

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

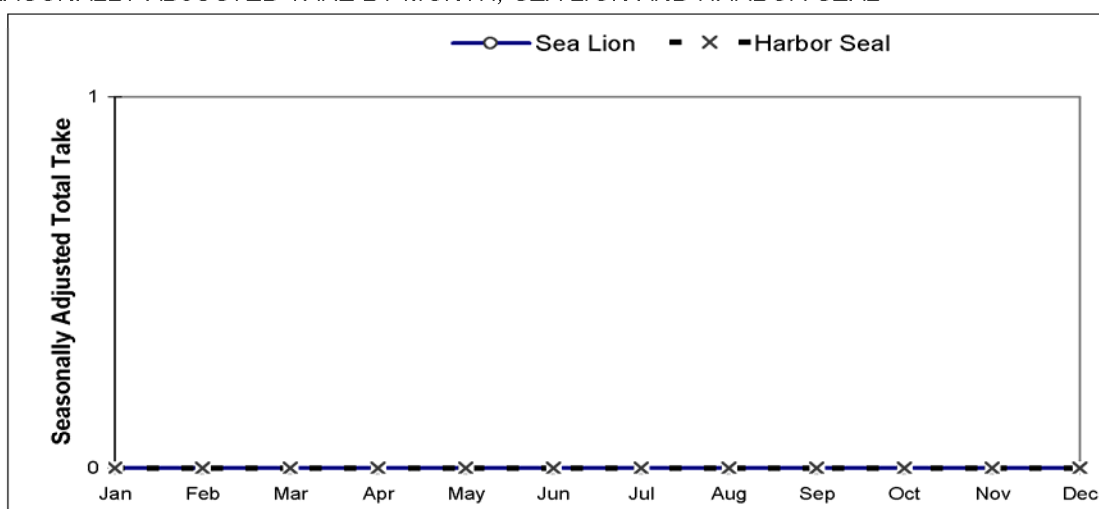
SOURCE: AMMC Household Surveys, (No residents lived in Ivanof Bay in 2008).

Table 40. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Ivanof Bay, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	0.0	0.0	0.0
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0
1994	0.0	0.0	0.0	1994	0.0	0.0	0.0
1995	0.0	0.0	0.0	1995	18.7	2.7	21.3
1996	2.4	0.0	2.4	1996	13.2	0.0	13.2
1997	1.8	0.0	1.8	1997	9.0	1.8	10.8
1998	1.8	0.0	1.8	1998	9.0	1.8	10.8
2000	0.0	0.0	0.0	2000	3.2	0.0	3.2
2001	1.4	1.4	2.8	2001	7.0	1.4	8.4
2002	1.4	1.4	2.8	2002	7.0	1.4	8.4
2003*	0.0	0.0	0.0	2003*	0.0	0.0	0.0
2004*	0.0	0.0	0.0	2004*	0.0	0.0	0.0
2005*	0.0	0.0	0.0	2005*	0.0	0.0	0.0
2006	0.0	0.0	0.0	2006	3.0	0.0	3.0
2007	0.0	0.0	0.0	2007	3.0	0.0	3.0
2008*	0.0	0.0	0.0	2008*	0.0	0.0	0.0

*From 2003-2005 and 2008 there were no year round residents in Ivanof Bay.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;

BBNA Household Surveys, 2000-2009.

Table 41. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: King Cove, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	14
Surveyed Households	11
Sampling Fraction	78.6%
Sample Household Members	37
Estimated Household Members	47.1
2000 U.S. Census Estimated Native Population	379

HARVEST AND USE INFORMATION**Percentage of Sample Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	9.1%	27.3%
Hunted	9.1%	18.2%
Harvested	9.1%	18.2%
Received	0.0%	18.2%
Gave Away	0.0%	9.1%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	1.3	3.8
Total Number Struck and Lost	0.0	0.0
Total Number Taken	1.3	3.8
Number Harvested Per Capita	0.00	0.01

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	1	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		1.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		1.3
Total Take (%)	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%		100.0%
Cum. Take	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.2	1.3		
Cum. Take (%)	8.3%	16.7%	25.0%	33.3%	41.7%	50.0%	58.3%	66.7%	75.0%	83.3%	91.7%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	1	0	2	3
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	1	0	2	3
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	2.5	3.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	2.5	3.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0		3.8
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0		3.8
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	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	0.0	3.8	3.8		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%		

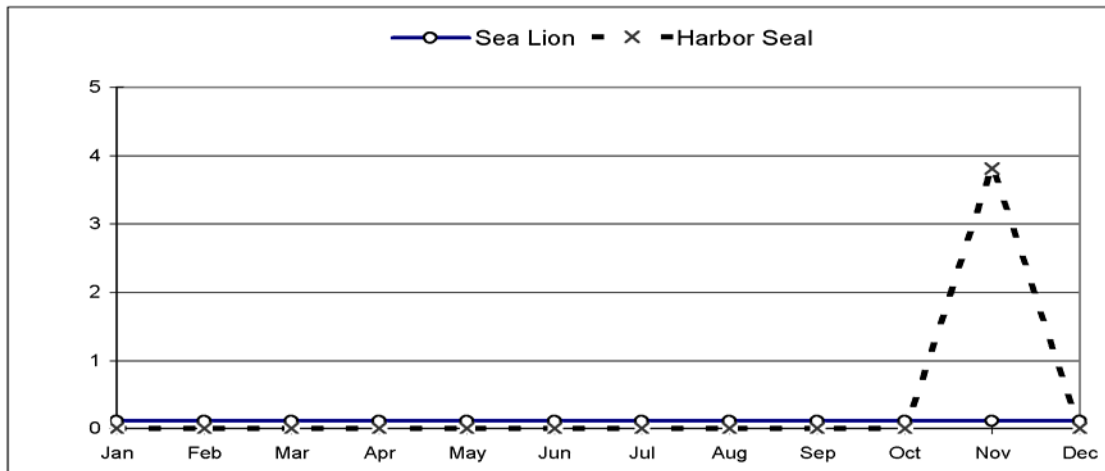
SOURCE: AMMC Household Surveys, 2009.

Table 41. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: King Cove, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	100.0%	1.3	100.0%	3	100.0%	3.8	100.0%
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	1	100.0%	1.3	100.0%	3	100.0%	3.8	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	1.3	0.0	1.3	1992	26.0	6.7	32.7
1993	1.2	0.0	1.2	1993	12.8	3.5	16.3
1994	3.2	1.1	4.3	1994	20.9	1.1	22.0
1995	5.0	0.0	5.0	1995	49.0	3.0	52.0
1996	0.0	0.0	0.0	1996	14.0	5.0	19.0
1997	4.2	0.0	4.2	1997	16.9	2.1	19.1
1998	4.3	0.0	4.3	1998	18.2	0.0	18.2
2000	4.3	0.0	4.3	2000	19.3	2.1	21.4
2001	3.0	0.0	3.0	2001	22.0	4.0	26.0
2002	0.0	1.5	1.5	2002	7.5	3.0	10.5
2003	0.0	0.0	0.0	2003	11.0	4.4	15.4
2004	1.7	0.0	1.7	2004	32.3	0.0	32.3
2005	3.2	0.0	3.2	2005	21.5	0.0	21.5
2006	11.8	1.1	12.9	2006	14.0	0.0	14.0
2007	1.3	0.0	1.3	2007	3.9	1.3	5.1
2008	1.3	0.0	1.3	2008	3.8	0.0	3.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; AMMC Household Surveys, 2000-2009.

Table 42. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Perryville, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	34
Surveyed Households	13
Sampling Fraction	38.2%
Sample Household Members	54
Estimated Household Members	141.2
2000 U.S. Census Estimated Native Population	105

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea Lion	Harbor Seal
Used	7.7%	100.0%
Hunted	7.7%	84.6%
Harvested	7.7%	69.2%
Received	0.0%	53.8%
Gave Away	7.7%	92.3%

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

	Sea Lion	Harbor Seal
Total Number Harvested	2.6	47.1
Total Number Struck and Lost	0.0	15.7
Total Number Taken	2.6	62.8
Number Harvested Per Capita	0.02	0.45

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	1	0	0	0	0	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	2.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	2.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0		2.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0		2.6
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	3	1	3	0	2	0	1	0	1	3	4	0	0	18
Struck & Lost	2	0	0	0	0	0	0	0	1	1	1	1	0	6
Total Take	5	1	3	0	2	0	1	0	2	4	5	1	0	24
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	7.8	2.6	7.8	0.0	5.2	0.0	2.6	0.0	2.6	7.8	10.5	0.0	0.0	47.1
Struck & Lost	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	0.0	15.7
Total Take	13.1	2.6	7.8	0.0	5.2	0.0	2.6	0.0	5.2	10.5	13.1	2.6	0.0	62.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	7.8	2.6	7.8	0.0	5.2	0.0	2.6	0.0	2.6	7.8	10.5	0.0		47.1
Struck & Lost	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6		15.7
Total Take	13.1	2.6	7.8	0.0	5.2	0.0	2.6	0.0	5.2	10.5	13.1	2.6		62.8
Total Take (%)	20.8%	4.2%	12.5%	0.0%	8.3%	0.0%	4.2%	0.0%	8.3%	16.7%	20.8%	4.2%		100.0%
Cum. Take	13.1	15.7	23.5	23.5	28.8	28.8	31.4	31.4	36.6	47.1	60.2	62.8		
Cum. Take (%)	20.8%	25.0%	37.5%	37.5%	45.8%	45.8%	50.0%	50.0%	58.3%	75.0%	95.8%	100.0%		

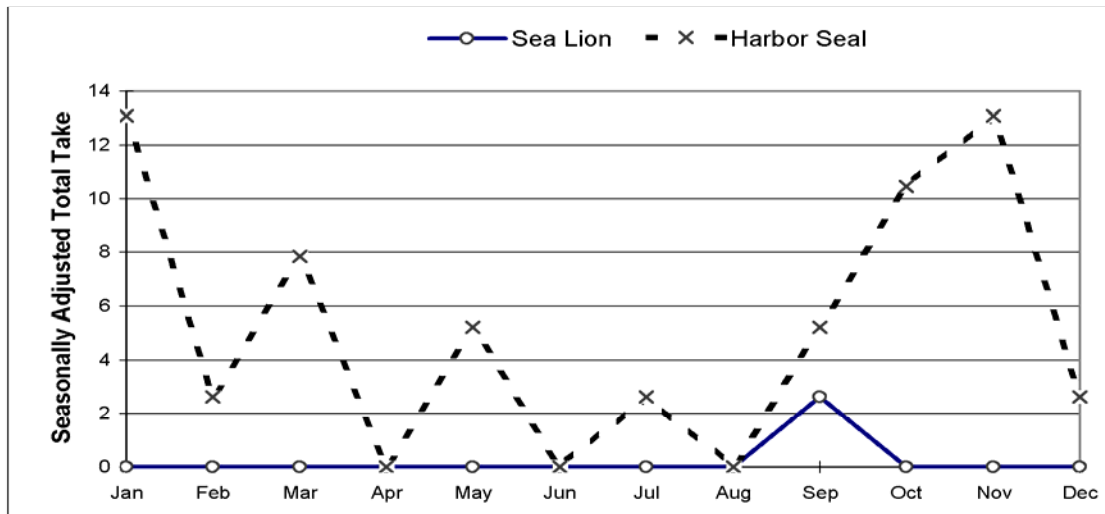
SOURCE: AMMC Household Surveys, 2009.

Table 42. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Perryville, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	100.0%	2.6	100.0%	8	44.4%	20.9	44.4%
Adult Female	0	0.0%	0.0	0.0%	4	22.2%	10.5	22.2%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	2	11.1%	5.2	11.1%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	1	5.6%	2.6	5.6%
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%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	2	11.1%	5.2	11.1%
Female Unknown Age	0	0.0%	0.0	0.0%	1	5.6%	2.6	5.6%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	1	100.0%	2.6	100.0%	18	100.0%	47.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	1.1	0.0	1.1	1992	8.9	2.2	11.1
1993	0.0	0.0	0.0	1993	12.8	2.1	15.0
1994	1.4	0.0	1.4	1994	21.1	0.0	21.1
1995	3.1	0.0	3.1	1995	11.0	3.1	14.1
1996	1.3	1.3	2.6	1996	20.5	0.0	20.5
1997	2.3	0.0	2.3	1997	21.7	5.7	27.4
1998	1.1	0.0	1.1	1998	21.0	4.4	25.4
2000	4.5	0.0	4.5	2000	21.0	15.0	36.0
2001	1.1	0.0	1.1	2001	24.0	6.9	30.9
2002	2.5	1.3	3.8	2002	33.8	15.0	48.8
2003	1.2	2.4	3.7	2003	51.3	6.1	57.4
2004	2.2	0.0	2.2	2004	20.0	5.6	25.6
2005	1.0	0.0	1.0	2005	21.0	6.0	27.0
2006	0.0	0.0	0.0	2006	27.4	14.3	41.7
2007	0.0	0.0	0.0	2007	18.9	12.1	31.0
2008	2.6	0.0	2.6	2008	47.1	15.7	62.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; AMMC Household Surveys, 2000-2009.

Table 43. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Sand Point, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	28
Surveyed Households	17
Sampling Fraction	60.7%
Sample Household Members	55
Estimated Household Members	90.6
2000 U.S. Census Estimated Native Population	421

HARVEST AND USE INFORMATION**Percentage of Sample Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	11.8%	64.7%
Hunted	5.9%	41.2%
Harvested	5.9%	41.2%
Received	5.9%	23.5%
Gave Away	5.9%	47.1%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	3.3	31.3
Total Number Struck and Lost	0.0	1.6
Total Number Taken	3.3	32.9
Number Harvested Per Capita	0.01	0.07

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	1	0	0	0	0	1	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	1	0	0	0	0	1	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	1.6	0.0	3.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	1.6	0.0	3.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	1.6		3.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	1.6		3.3
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	3.3		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	1	0	1	0	2	4	5	2	1	0	2	1	0	19
Struck & Lost	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Total Take	1	0	1	0	2	5	5	2	1	0	2	1	0	20
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.6	0.0	1.6	0.0	3.3	6.6	8.2	3.3	1.6	0.0	3.3	1.6	0.0	31.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Total Take	1.6	0.0	1.6	0.0	3.3	8.2	8.2	3.3	1.6	0.0	3.3	1.6	0.0	32.9
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	1.6	0.0	1.6	0.0	3.3	6.6	8.2	3.3	1.6	0.0	3.3	1.6		31.3
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0		1.6
Total Take	1.6	0.0	1.6	0.0	3.3	8.2	8.2	3.3	1.6	0.0	3.3	1.6		32.9
Total Take (%)	5.0%	0.0%	5.0%	0.0%	10.0%	25.0%	25.0%	10.0%	5.0%	0.0%	10.0%	5.0%		100.0%
Cum. Take	1.6	1.6	3.3	3.3	6.6	14.8	23.1	26.4	28.0	28.0	31.3	32.9		
Cum. Take (%)	5.0%	5.0%	10.0%	10.0%	20.0%	45.0%	70.0%	80.0%	85.0%	85.0%	95.0%	100.0%		

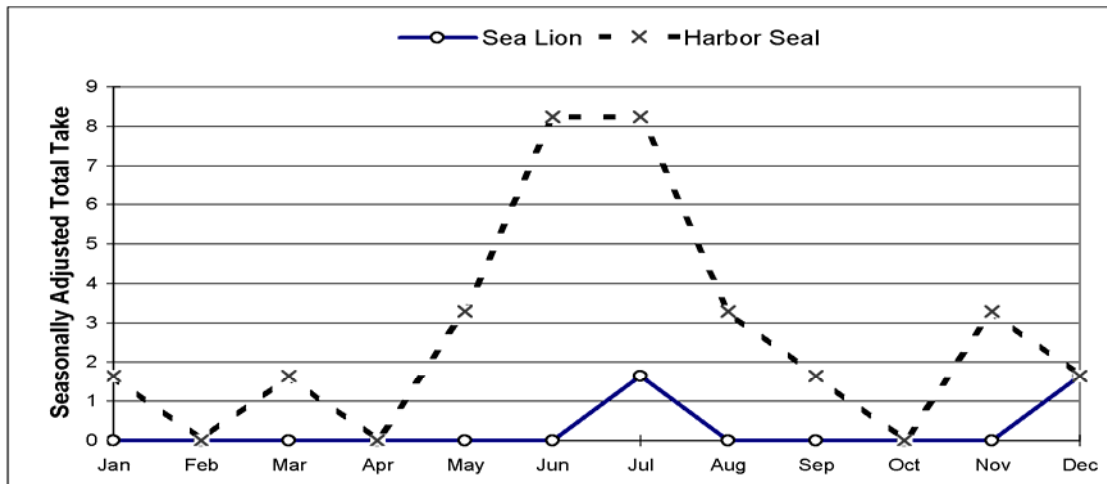
SOURCE: AMMC Household Surveys, 2009.

Table 43. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Sand Point, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	7	36.8%	11.5	36.8%
Adult Female	2	100.0%	3.3	100.0%	1	5.3%	1.6	5.3%
Adult Unknown Sex	0	0.0%	0.0	0.0%	3	15.8%	4.9	15.8%
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%	3	15.8%	4.9	15.8%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	1	5.3%	1.6	5.3%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	4	21.1%	6.6	21.1%
Total	2	100.0%	3.3	100.0%	19	100.0%	31.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	37.9	0.0	37.9
1993	0.0	0.0	0.0	1993	13.3	1.2	14.4
1994	0.0	0.0	0.0	1994	7.8	4.3	12.1
1995	0.0	0.0	0.0	1995	9.2	0.0	9.2
1996	0.0	0.0	0.0	1996	20.2	0.0	20.2
1997	0.0	0.0	0.0	1997	9.1	0.0	9.1
1998	2.0	0.0	2.0	1998	12.0	0.0	12.0
2000	5.0	0.0	5.0	2000	15.0	0.0	15.0
2001	4.7	0.0	4.7	2001	10.9	1.6	12.4
2002	0.0	0.0	0.0	2002	15.0	0.0	15.0
2003	1.3	0.0	1.3	2003	14.3	0.0	14.3
2004	0.0	0.0	0.0	2004	15.0	1.3	16.3
2005	0.0	0.0	0.0	2005	15.0	1.3	16.3
2006	5.6	0.0	5.6	2006	3.8	1.9	5.6
2007	8.4	0.0	8.4	2007	48.8	5.1	53.9
2008	3.3	0.0	3.3	2008	31.3	1.6	32.9

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; AMMC Household Surveys, 2000-2009.

Table 44. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Adak, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	2
Surveyed Households	2
Sampling Fraction	100.0%
Sample Household Members	0
Estimated Household Members	0.0
2000 U.S. Census Estimated Native Population	118

HARVEST AND USE INFORMATION**Percentage of Native Households:****Estimated Community Harvest
and Take (Expanded):**

	Sea <u>Lion</u>	Harbor <u>Seal</u>		Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	100.0%	100.0%	Total Number Harvested	4.0	2.0
Hunted	100.0%	100.0%	Total Number Struck and Lost	0.0	0.0
Harvested	100.0%	100.0%	Total Number Taken	4.0	2.0
Received	0.0%	0.0%			
Gave Away	100.0%	100.0%	Number Harvested Per Capita	0.03	0.02

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	4	4
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	4	4
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		4.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		4.0
Total Take (%)	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%		100.0%
Cum. Take	0.3	0.7	1.0	1.3	1.7	2.0	2.3	2.7	3.0	3.3	3.7	4.0		
Cum. Take (%)	8.3%	16.7%	25.0%	33.3%	41.7%	50.0%	58.3%	66.7%	75.0%	83.3%	91.7%	100.0%		

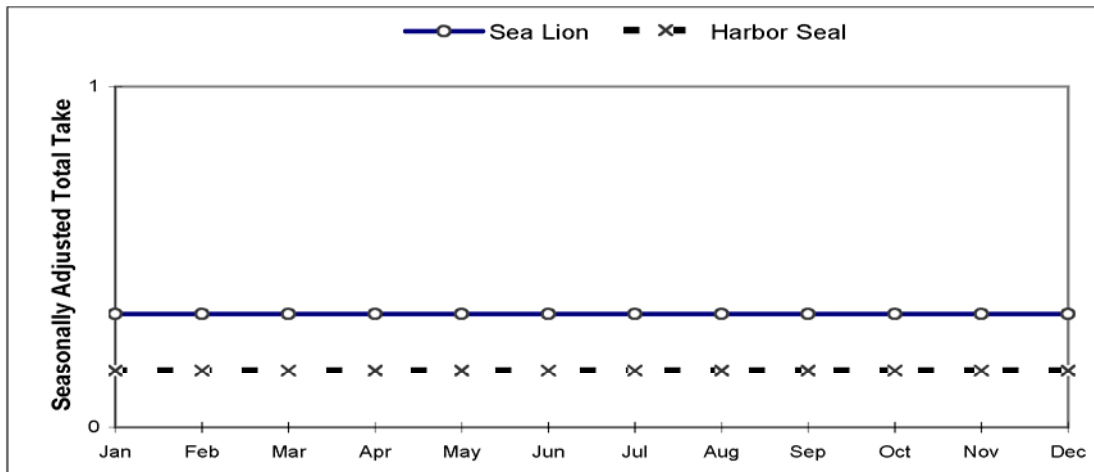
HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	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 HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		2.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
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		2.0
Total Take (%)	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%		100.0%
Cum. Take	0.2	0.3	0.5	0.7	0.8	1.0	1.2	1.3	1.5	1.7	1.8	2.0		
Cum. Take (%)	8.3%	16.7%	25.0%	33.3%	41.7%	50.0%	58.3%	66.7%	75.0%	83.3%	91.7%	100.0%		

SOURCE: AMMC Household Surveys, 2009.

Table 44. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Adak, 2008**HARVEST BY AGE AND SEX**

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	0	0.0%	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	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	4	100.0%	4.0	100.0%	2	100.0%	2.0	100.0%
Total	4	100.0%	4.0	100.0%	2	100.0%	2.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL**ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR**

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	---	---	---	1992	---	---	---
1993	---	---	---	1993	---	---	---
1994	---	---	---	1994	---	---	---
1995	---	---	---	1995	---	---	---
1996	---	---	---	1996	---	---	---
1997	---	---	---	1997	---	---	---
1998	---	---	---	1998	---	---	---
2000	---	---	---	2000	---	---	---
2001	---	---	---	2001	---	---	---
2002	---	---	---	2002	---	---	---
2003	1.0	0.0	1.0	2003	4.0	1.0	5.0
2004	2.0	1.0	3.0	2004	0.0	0.0	0.0
2005	4.0	0.0	4.0	2005	12.0	0.0	12.0
2006	0.0	0.0	0.0	2006	0.0	0.0	0.0
2007	0.0	0.0	0.0	2007	4.0	0.0	4.0
2008	4.0	0.0	4.0	2008	2.0	0.0	2.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
AMMC Household Surveys, 2003-2009.

Table 45. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Akutan, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	35
Surveyed Households	33
Sampling Fraction	94.3%
Sample Household Members	72
Estimated Household Members	76.4
2000 U.S. Census Estimated Native Population	117

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	54.5%	54.5%
Hunted	12.1%	24.2%
Harvested	9.1%	24.2%
Received	45.5%	39.4%
Gave Away	9.1%	27.3%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	4.2	17.0
Total Number Struck and Lost	0.0	0.0
Total Number Taken	4.2	17.0
Number Harvested Per Capita	0.04	0.15

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	1	1	0	0	2	0	0	4
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	1	1	0	0	2	0	0	4
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	2.1	0.0	0.0	4.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	2.1	0.0	0.0	4.2
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	2.1	0.0		4.2
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	2.1	0.0		4.2
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	50.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.1	2.1	2.1	4.2	4.2		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	50.0%	50.0%	50.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	1	0	0	3	2	1	1	0	0	4	0	4	16
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	1	0	0	3	2	1	1	0	0	4	0	4	16
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.1	0.0	0.0	3.2	2.1	1.1	1.1	0.0	0.0	4.2	0.0	4.2	17.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	1.1	0.0	0.0	3.2	2.1	1.1	1.1	0.0	0.0	4.2	0.0	4.2	17.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	1.4	0.0	0.0	4.2	2.8	1.4	1.4	0.0	0.0	5.7	0.0		17.0
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	1.4	0.0	0.0	4.2	2.8	1.4	1.4	0.0	0.0	5.7	0.0		17.0
Total Take (%)	0.0%	8.3%	0.0%	0.0%	25.0%	16.7%	8.3%	8.3%	0.0%	0.0%	33.3%	0.0%		100.0%
Cum. Take	0.0	1.4	1.4	1.4	5.7	8.5	9.9	11.3	11.3	11.3	17.0	17.0		
Cum. Take (%)	0.0%	8.3%	8.3%	8.3%	33.3%	50.0%	58.3%	66.7%	66.7%	66.7%	100.0%	100.0%		

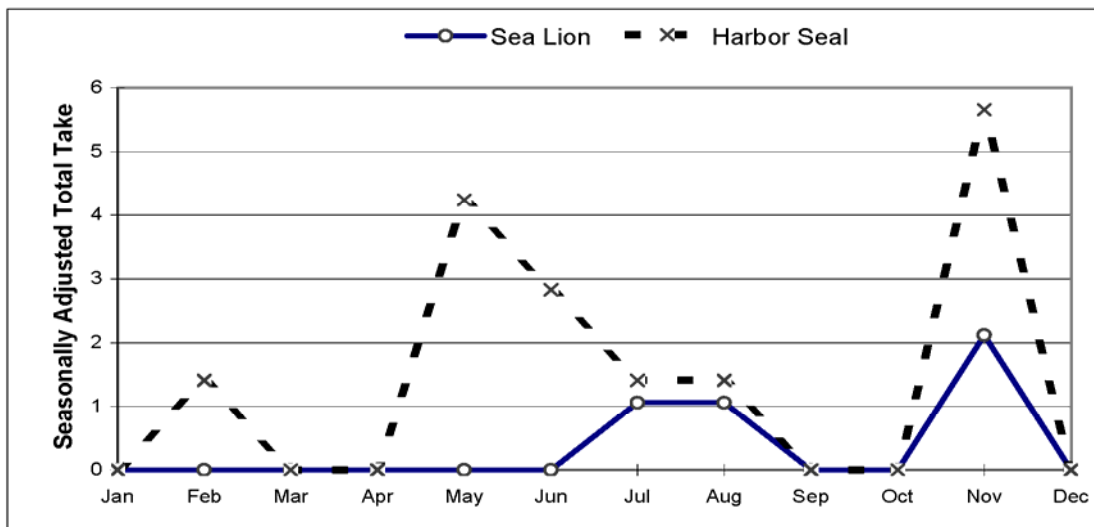
SOURCE: AMMC Household Surveys, 2009.

Table 45. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Akutan, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	3	75.0%	3.2	75.0%	6	37.5%	6.4	37.5%
Adult Female	1	25.0%	1.1	25.0%	6	37.5%	6.4	37.5%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	4	25.0%	4.2	25.0%
Total	4	100.0%	4.2	100.0%	16	100.0%	17.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	25.7	4.3	30.0	1992	12.9	4.3	17.1
1993	14.5	8.9	23.4	1993	15.6	4.5	20.1
1994	12.7	3.5	16.2	1994	13.8	3.5	17.3
1995	6.0	0.0	6.0	1995	7.0	0.0	7.0
1996	11.0	5.0	16.0	1996	8.0	7.0	15.0
1997	6.4	0.0	6.4	1997	14.0	3.8	17.8
1998	6.4	0.0	6.4	1998	14.0	3.8	17.8
2000	4.1	1.4	5.4	2000	25.7	5.4	31.1
2001	15.0	2.7	17.7	2001	13.6	2.7	16.4
2002	2.9	0.0	2.9	2002	10.2	0.0	10.2
2003	8.7	0.0	8.7	2003	10.8	4.3	15.2
2004	4.8	0.0	4.8	2004	9.5	1.6	11.1
2005	4.8	0.0	4.8	2005	8.5	2.4	10.9
2006	2.4	0.0	2.4	2006	2.4	0.0	2.4
2007	5.1	1.3	6.4	2007	11.5	1.3	12.7
2008	4.2	0.0	4.2	2008	17.0	0.0	17.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; AMMC Household Surveys, 2000-2009.

Table 46. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Atka, 2008

SAMPLING DESIGN:
CENSUS

Total Native Households	25
Surveyed Households	10
Sampling Fraction	40.0%
Sample Household Members	29
Estimated Household Members	73.6
2000 U.S. Census Estimated Native Population	84

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Used	90.0%	70.0%
Hunted	40.0%	30.0%
Harvested	40.0%	30.0%
Received	70.0%	50.0%
Gave Away	60.0%	30.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>
Total Number Harvested	35.0	17.5
Total Number Struck and Lost	0.0	5.0
Total Number Taken	35.0	22.5
Number Harvested Per Capita	0.42	0.21

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	2	8	1	3	0	0	14
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	2	8	1	3	0	0	14
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	20.0	2.5	7.5	0.0	0.0	35.0
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	5.0	20.0	2.5	7.5	0.0	0.0	35.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	20.0	2.5	7.5	0.0		35.0
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	5.0	20.0	2.5	7.5	0.0		35.0
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	57.1%	7.1%	21.4%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	25.0	27.5	35.0	35.0		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	71.4%	78.6%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	2	0	0	0	1	0	0	0	2	2	0	0	7
Struck & Lost	0	0	1	0	0	0	0	0	1	0	0	0	0	2
Total Take	0	2	1	0	0	1	0	0	1	2	2	0	0	9
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	5.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	5.0	5.0	0.0	0.0	17.5
Struck & Lost	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	5.0
Total Take	0.0	5.0	2.5	0.0	0.0	2.5	0.0	0.0	2.5	5.0	5.0	0.0	0.0	22.5
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	5.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	5.0	5.0	0.0		17.5
Struck & Lost	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0		5.0
Total Take	0.0	5.0	2.5	0.0	0.0	2.5	0.0	0.0	2.5	5.0	5.0	0.0		22.5
Total Take (%)	0.0%	22.2%	11.1%	0.0%	0.0%	11.1%	0.0%	0.0%	11.1%	22.2%	22.2%	0.0%		100.0%
Cum. Take	0.0	5.0	7.5	7.5	7.5	10.0	10.0	10.0	12.5	17.5	22.5	22.5		
Cum. Take (%)	0.0%	22.2%	33.3%	33.3%	33.3%	44.4%	44.4%	44.4%	55.6%	77.8%	100.0%	100.0%		

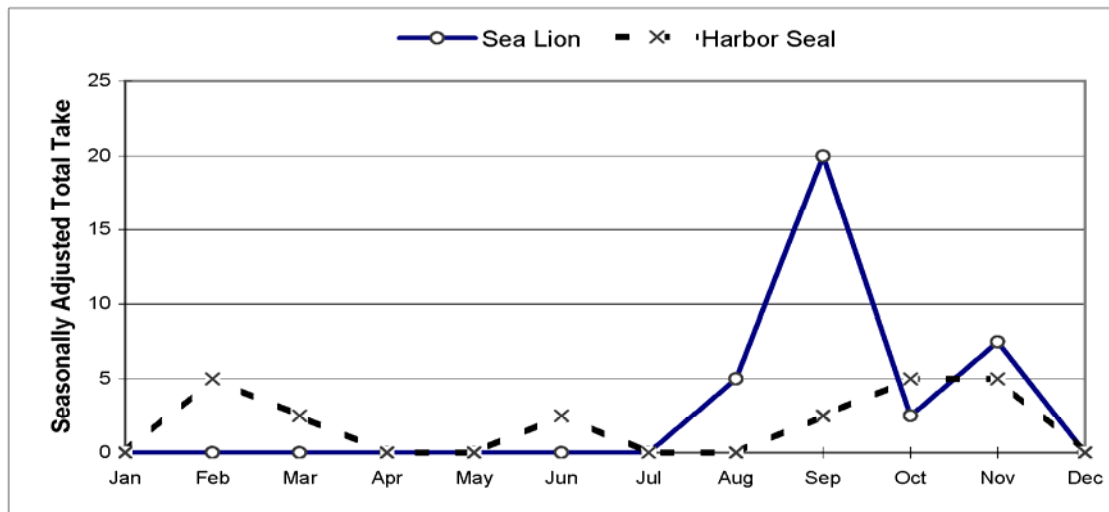
SOURCE: AMMC Household Surveys, 2009.

Table 46. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Atka, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	4	28.6%	10.0	28.6%	1	14.3%	2.5	14.3%
Adult Female	3	21.4%	7.5	21.4%	2	28.6%	5.0	28.6%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	4	28.6%	10.0	28.6%	2	28.6%	5.0	28.6%
Juvenile Female	3	21.4%	7.5	21.4%	2	28.6%	5.0	28.6%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	14	100.0%	35.0	100.0%	7	100.0%	17.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	28.6	9.9	38.5	1992	28.6	9.9	38.5
1993	25.1	0.0	25.1	1993	32.7	0.0	32.7
1994	45.5	8.7	54.2	1994	73.7	8.7	82.3
1995	40.0	0.0	40.0	1995	42.5	0.0	42.5
1996	17.3	0.0	17.3	1996	22.7	2.2	24.8
1997	12.2	0.0	12.2	1997	26.0	1.5	27.5
1998	16.8	0.0	16.8	1998	16.8	0.0	16.8
2000	16.8	0.0	16.8	2000	16.8	0.0	16.8
2001	33.3	11.7	45.0	2002	63.3	6.7	70.0
2002	73.5	12.0	85.5	2001	36.0	0.0	36.0
2003	68.8	12.8	81.6	2003	57.6	1.6	59.2
2004	50.7	12.7	63.3	2004	73.9	16.9	90.8
2005	54.9	6.1	61.0	2005	47.2	9.1	56.4
2006	52.0	14.0	66.0	2006	26.0	4.0	30.0
2007	46.0	8.0	54.0	2007	38.0	2.0	40.0
2008	35.0	0.0	35.0	2008	17.5	5.0	22.5

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; AMMC Household Surveys, 2000-2009.

Table 47. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Nikolski, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	7
Surveyed Households	7
Sampling Fraction	100.0%
Sample Household Members	12
Estimated Household Members	12.0
2000 U.S. Census Estimated Native Population	27

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	42.9%
Hunted	0.0%	42.9%
Harvested	0.0%	42.9%
Received	0.0%	0.0%
Gave Away	0.0%	42.9%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	7.0
Total Number Struck and Lost	0.0	1.0
Total Number Taken	0.0	8.0
Number Harvested Per Capita	0.00	0.26

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	2	0	1	0	0	0	0	2	2	0	0	0	0	7
Struck & Lost	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total Take	2	0	1	0	0	0	0	2	3	0	0	0	0	8
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	7.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0
Total Take	2.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0	3.0	0.0	0.0	0.0	0.0	8.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0		7.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0		1.0
Total Take	2.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0	3.0	0.0	0.0	0.0		8.0
Total Take (%)	25.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	25.0%	37.5%	0.0%	0.0%	0.0%		100.0%
Cum. Take	2.0	2.0	3.0	3.0	3.0	3.0	3.0	5.0	8.0	8.0	8.0	8.0		
Cum. Take (%)	25.0%	25.0%	37.5%	37.5%	37.5%	37.5%	37.5%	62.5%	100.0%	100.0%	100.0%	100.0%		

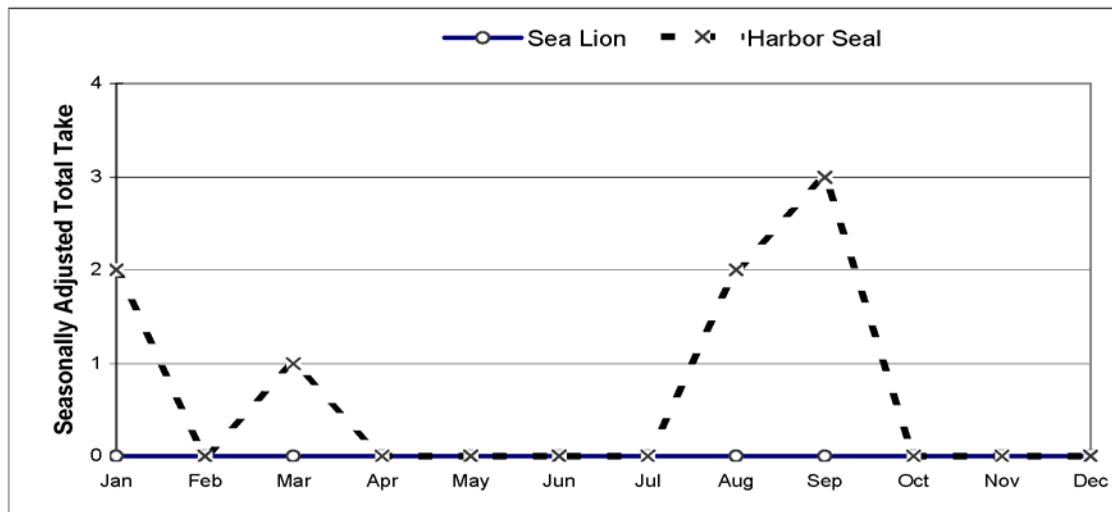
SOURCE: AMMC Household Surveys, 2009.

Table 47. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Nikolski, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	4	57.1%	4.0	57.1%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	3	42.9%	3.0	42.9%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	7	100.0%	7.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	8.2	0.0	8.2	1992	5.8	3.5	9.3
1993	6.0	0.0	6.0	1993	4.0	1.0	5.0
1994	0.0	0.0	0.0	1994	6.0	0.0	6.0
1995	---	---	---	1995	---	---	---
1996	3.0	0.0	3.0	1996	4.0	1.0	5.0
1997	3.0	0.0	3.0	1997	4.0	1.0	5.0
1998	1.1	0.0	1.1	1998	2.2	0.0	2.2
2000	1.1	0.0	1.1	2000	2.2	0.0	2.2
2001	6.7	0.0	6.7	2001	5.3	0.0	5.3
2002	1.0	0.0	1.0	2002	3.0	1.0	4.0
2003	0.0	0.0	0.0	2003	11.0	3.0	14.0
2004	2.0	0.0	2.0	2004	6.0	1.0	7.0
2005	2.0	0.0	2.0	2005	6.0	1.0	7.0
2006	0.0	0.0	0.0	2006	17.0	1.0	18.0
2007	1.2	0.0	1.2	2007	6.0	0.0	6.0
2008	0.0	0.0	0.0	2008	7.0	1.0	8.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; AMMC Household Surveys, 2000-2009.

Table 48. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Unalaska, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	18
Surveyed Households	7
Sampling Fraction	38.9%
Sample Household Members	20
Estimated Household Members	51.9
2000 U.S. Census Estimated Native Population	397

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea Lion	Harbor Seal
Used	28.6%	14.3%
Hunted	28.6%	0.0%
Harvested	14.3%	0.0%
Received	14.3%	14.3%
Gave Away	14.3%	0.0%

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

	Sea Lion	Harbor Seal
Total Number Harvested	2.6	0.0
Total Number Struck and Lost	2.6	0.0
Total Number Taken	5.1	0.0
Number Harvested Per Capita	0.01	0.00

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Struck & Lost	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total Take	0	1	0	0	0	0	0	1	0	0	0	0	0	2
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	2.6
Struck & Lost	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Total Take	0.0	2.6	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	5.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0		2.6
Struck & Lost	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		2.6
Total Take	0.0	2.6	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0		5.1
Total Take (%)	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	2.6	2.6	2.6	2.6	2.6	2.6	5.1	5.1	5.1	5.1	5.1		
Cum. Take (%)	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

HARBOR SEAL HARVEST BY MONTH

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

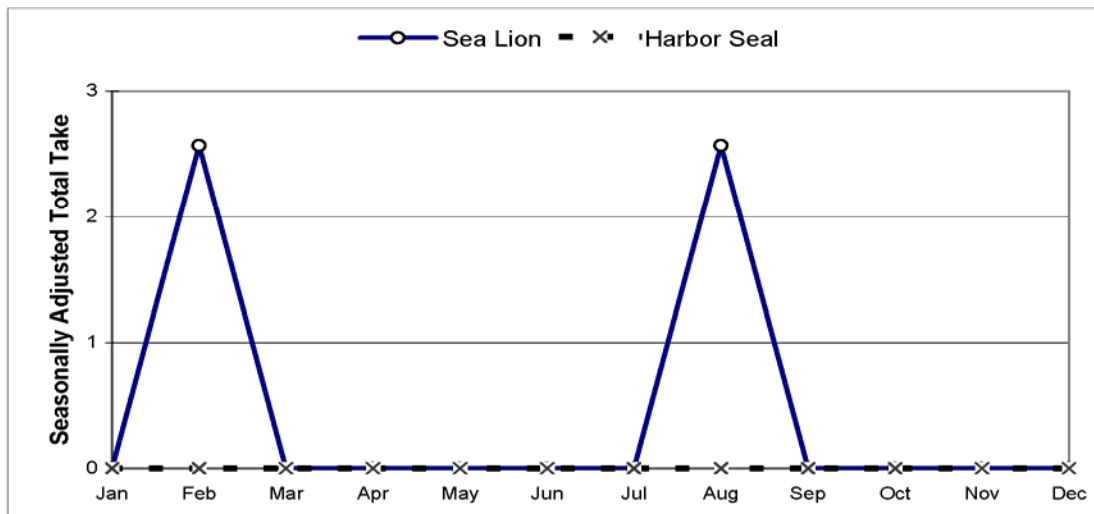
SOURCE: AMMC Household Surveys, 2009.

Table 48. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Unalaska, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	0	---	0.0	---
Adult Female	0	0.0%	0.0	0.0%	0	---	0.0	---
Adult Unknown Sex	0	0.0%	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	1	100.0%	2.6	100.0%	0	---	0.0	---
Total	1	100.0%	2.6	100.0%	0	---	0.0	---

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	41.8	16.7	58.5	1992	47.0	3.7	50.8
1993	53.4	15.9	69.3	1993	32.7	9.9	42.6
1994	43.6	8.4	51.9	1994	31.4	10.5	41.8
1995	39.0	11.1	50.1	1995	37.4	9.7	47.1
1996	15.2	6.3	21.6	1996	20.3	5.1	25.4
1997	29.1	1.3	30.3	1997	26.5	0.0	26.5
1998	7.3	5.5	12.7	1998	12.7	0.0	12.7
2000	49.2	3.4	52.6	2000	34.3	5.1	39.4
2001	23.1	5.3	28.4	2001	37.8	3.2	41.0
2002	10.0	5.7	15.7	2002	14.3	1.4	15.7
2003	10.0	5.7	15.7	2003	14.3	1.4	15.7
2004	11.4	11.4	22.9	2004	28.6	8.6	37.1
2005	12.0	4.5	16.5	2005	30.0	4.5	34.5
2006	9.0	5.4	14.4	2006	9.0	3.6	12.6
2007	9.0	5.4	14.4	2007	9.0	3.6	12.6
2008	2.6	2.6	5.1	2008	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
AMMC Household Surveys, 2000-2009.

Table 49. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: St. George, 2008**SAMPLING DESIGN:****CHAIN REFERRAL**

Total Referred Households	7
Surveyed Households	3
Sampling Fraction	42.9%
Sample Household Members	9
Estimated Household Members	21.0
2000 U.S. Census Estimated Native Population	140

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	100.0%	0.0%
Hunted	100.0%	0.0%
Harvested	100.0%	0.0%
Received	66.7%	0.0%
Gave Away	100.0%	0.0%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	9.3	0.0
Total Number Struck and Lost	4.7	0.0
Total Number Taken	14.0	0.0
Number Harvested Per Capita	0.07	0.00

SEA LION HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	3	0	0	0	0	0	1	0	0	0	0	4
Struck & Lost	0	0	1	0	0	0	0	0	0	1	0	0	0	2
Total Take	0	0	4	0	0	0	0	0	1	1	0	0	0	6
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	9.3
Struck & Lost	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	4.7
Total Take	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0	2.3	2.3	0.0	0.0	0.0	14.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0		9.3
Struck & Lost	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0		4.7
Total Take	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0	2.3	2.3	0.0	0.0		14.0
Total Take (%)	0.0%	0.0%	66.7%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	16.7%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	9.3	9.3	9.3	9.3	9.3	9.3	11.7	14.0	14.0	14.0		
Cum. Take (%)	0.0%	0.0%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	83.3%	100.0%	100.0%	100.0%		
HARBOR SEAL HARVEST BY MONTH													Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)	---	---	---	---	---	---	---	---	---	---	---	---		---
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. Take (%)	---	---	---	---	---	---	---	---	---	---	---	---		

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

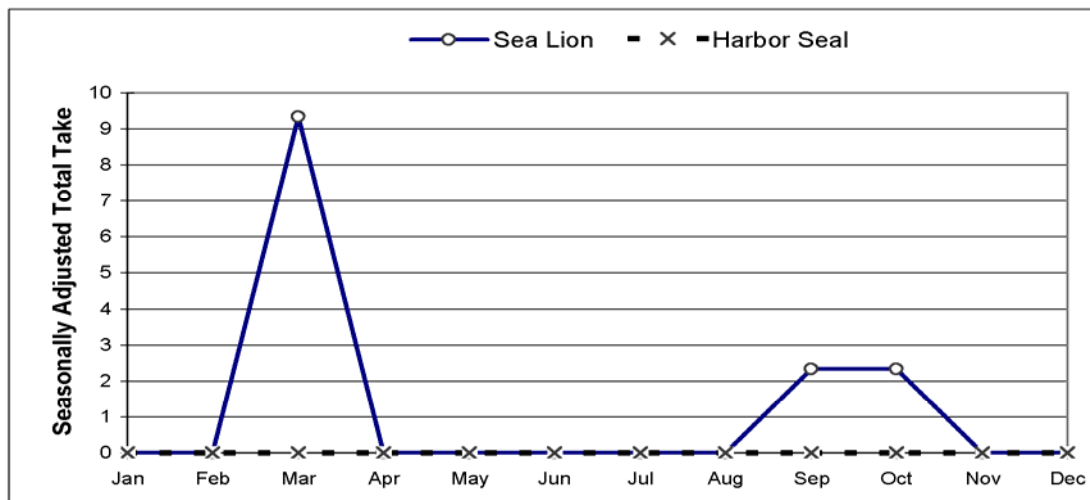
with assistance from the St. George Traditional IRA Council, City of St. George, and St. George Tanaq Corporation, 2003. (Numbers based on 2003 Survey Estimates)

Table 49. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: St. George, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	25.0%	2.3	25.0%	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	3	75.0%	7.0	75.0%	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	4	100.0%	9.3	100.0%	0	---	0.0	---

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	14.9	55.0	69.9	1992	0.0	0.0	0.0
1993	3.7	14.8	18.6	1993	0.0	0.0	0.0
1994	2.8	17.1	19.9	1994	0.0	0.0	0.0
1995	4.0	4.0	8.0	1995	0.0	0.0	0.0
1996	4.0	4.0	8.0	1996	0.0	0.0	0.0
1997	19.6	8.1	27.7	1997	0.0	0.0	0.0
1998	11.8	8.5	20.3	1998	0.0	0.0	0.0
2000	11.8	8.5	20.3	2000	0.0	0.0	0.0
2001	7.0	7.0	14.0	2001	0.0	1.0	1.0
2002	6.0	1.0	7.0	2002	0.0	0.0	0.0
2003	9.3	4.7	14.0	2003	0.0	0.0	0.0
2004	9.3	4.7	14.0	2004	0.0	0.0	0.0
2005	9.3	4.7	14.0	2005	0.0	0.0	0.0
2006	9.3	4.7	14.0	2006	0.0	0.0	0.0
2007	9.3	4.7	14.0	2007	0.0	0.0	0.0
2008	9.3	4.7	14.0	2008	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; St George Traditional IRA Council and St. George Tanaq Corporation 2000-2009 (Numbers based on 2003 harvest estimates).

Table 50. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: St. Paul, 2008

SAMPLING DESIGN:
CENSUS

Total Native Households	N/A
Surveyed Households	N/A
Sampling Fraction	N/A
Sample Household Members	N/A
Estimated Household Members	N/A
2000 U.S. Census Estimated Native Population	460

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	N/A	N/A
Hunted	N/A	N/A
Harvested	N/A	N/A
Received	N/A	N/A
Gave Away	N/A	N/A

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	20.0	N/A
Total Number Struck and Lost	2.0	N/A
Total Number Taken	22.0	N/A
Number Harvested Per Capita	0.04	N/A

SEA LION HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	2	0	0	5	4	0	0	0	0	5	2	2	0	20
Struck & Lost	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Total Take	2	0	0	5	4	0	0	0	0	5	4	2	0	22
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.0	0.0	0.0	5.0	4.0	0.0	0.0	0.0	0.0	5.0	2.0	2.0	0.0	20.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
Total Take	2.0	0.0	0.0	5.0	4.0	0.0	0.0	0.0	0.0	5.0	4.0	2.0	0.0	22.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	2.0	0.0	0.0	5.0	4.0	0.0	0.0	0.0	0.0	5.0	2.0	2.0		20.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0		2.0
Total Take	2.0	0.0	0.0	5.0	4.0	0.0	0.0	0.0	0.0	5.0	4.0	2.0		22.0
Total Take (%)	9.1%	0.0%	0.0%	22.7%	18.2%	0.0%	0.0%	0.0%	0.0%	22.7%	18.2%	9.1%		100.0%
Cum. Take	2.0	2.0	2.0	7.0	11.0	11.0	11.0	11.0	11.0	16.0	20.0	22.0		
Cum. Take (%)	9.1%	9.1%	9.1%	31.8%	50.0%	50.0%	50.0%	50.0%	50.0%	72.7%	90.9%	100.0%		

HARBOR SEAL HARVEST BY MONTH

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

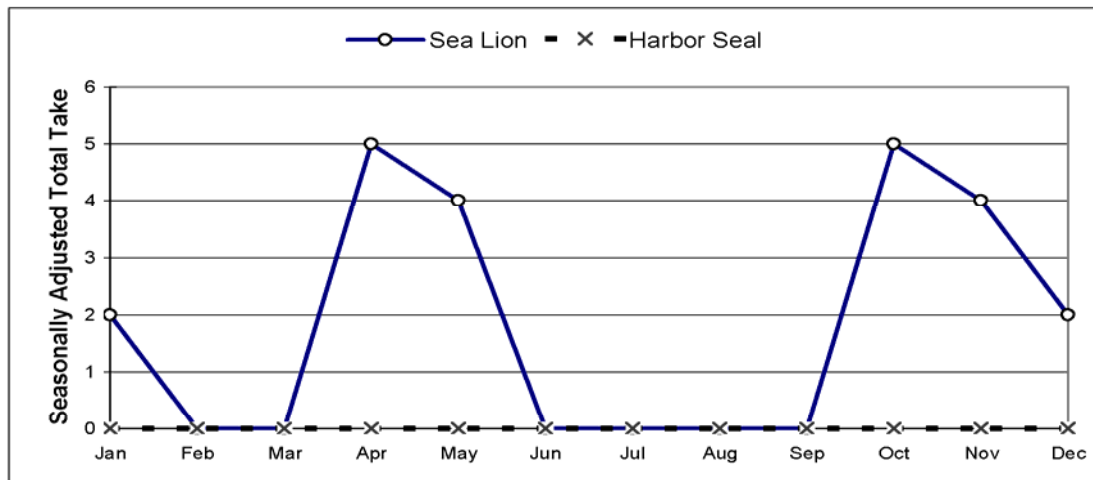
SOURCE: Jones 2009.

Table 50. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: St. Paul, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	N/A		N/A	
Adult Female	0	0.0%	0.0	0.0%	N/A		N/A	
Adult Unknown Sex	0	0.0%	0.0	0.0%	N/A		N/A	
Juvenile Male	20	100.0%	20.0	100.0%	N/A		N/A	
Juvenile Female	0	0.0%	0.0	0.0%	N/A		N/A	
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	N/A		N/A	
Pup Male	0	0.0%	0.0	0.0%	N/A		N/A	
Pup Female	0	0.0%	0.0	0.0%	N/A		N/A	
Pup Unknown Sex	0	0.0%	0.0	0.0%	N/A		N/A	
Male Unknown Age	0	0.0%	0.0	0.0%	N/A		N/A	
Female Unknown Age	0	0.0%	0.0	0.0%	N/A		N/A	
Unknown Sex and Age	0	0.0%	0.0	0.0%	N/A		N/A	
Total	20	100.0%	20.0	100.0%	N/A		N/A	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	161.7	65.2	226.8	1992	2.3	1.2	3.5
1993	161.7	65.2	226.8	1993	2.3	1.2	3.5
1994	147.0	26.4	173.4	1994	7.3	0.0	7.3
1995	53.6	6.3	59.9	1995	2.5	0.0	2.5
1996	28.2	10.2	38.4	1996	0.0	0.0	0.0
1997	25.9	2.3	28.2	1997	0.0	0.0	0.0
1998	41.0	16.9	57.8	1998	4.6	0.0	4.6
2000	17.3	5.7	23.0	2000	N/A	N/A	N/A
2001	12.0	12.0	24.0	2001	N/A	N/A	N/A
2002	18.0	18.0	36.0	2002	N/A	N/A	N/A
2003	13.0	5.0	18.0	2003	N/A	N/A	N/A
2004	9.0	9.0	18.0	2004	N/A	N/A	N/A
2005	19.0	3.0	22.0	2005	N/A	N/A	N/A
2006	20.0	6.0	26.0	2006	N/A	N/A	N/A
2007	22.0	12.0	34.0	2007	N/A	N/A	N/A
2008	20.0	2.0	22.0	2008	N/A	N/A	N/A

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;

2000-2004 Zavadil et al. (2006); 2005 Lestenkof and Zavadil (2005); 2006 Lestenkof et al. (2007); 2007 Lestenkof et al. (2008); 2008 Jones (2009).

Table 51. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Egegik, 2008

**SAMPLING DESIGN:
CENSUS**

Total Native Households	28
Surveyed Households	25
Sampling Fraction	89.3%
Sample Household Members	49
Estimated Household Members	54.9
2000 U.S. Census Estimated Native Population	89

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	0.0%
Hunted	0.0%	4.0%
Harvested	0.0%	0.0%
Received	0.0%	0.0%
Gave Away	0.0%	0.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	0.0
Total Number Struck and Lost	0.0	1.1
Total Number Taken	0.0	1.1
Number Harvested Per Capita	0.00	0.00

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

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

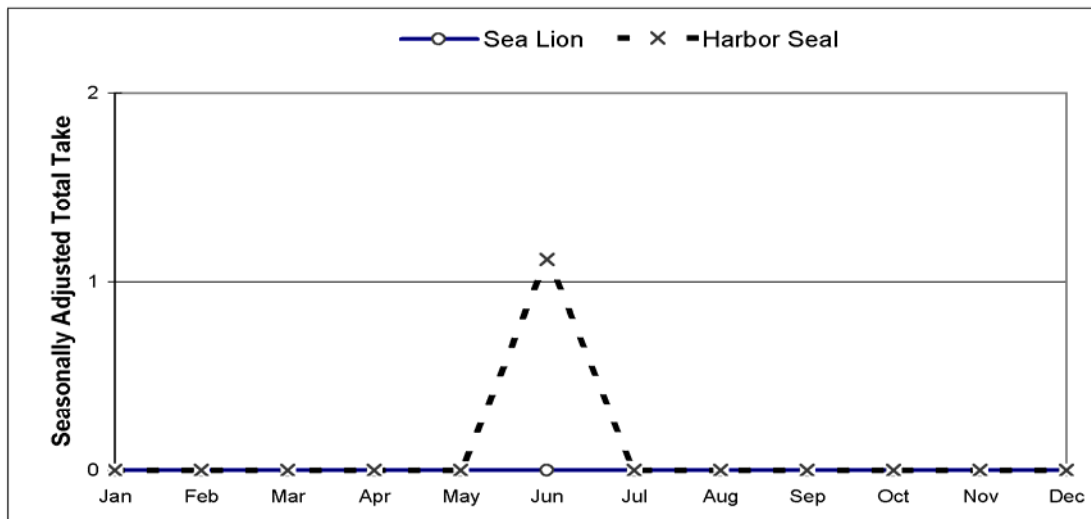
SOURCE: BBNA Household Surveys, 2009.

Table 51. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Egegik, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	3.3	14.3	17.7
1993	0.0	0.0	0.0	1993	7.7	3.3	11.0
1994	0.0	0.0	0.0	1994	12.8	0.0	12.8
1995	0.0	0.0	0.0	1995	1.4	0.0	1.4
1996	0.0	0.0	0.0	1996	2.8	0.0	2.8
1997	0.0	0.0	0.0	1997	1.6	0.0	1.6
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	4.0	3.0	7.0
2001	0.0	0.0	0.0	2001	6.3	1.0	7.3
2002	0.0	0.0	0.0	2002	2.2	1.1	3.2
2003	0.0	0.0	0.0	2003	4.0	1.0	5.0
2004	0.0	0.0	0.0	2004	15.4	4.4	19.8
2005	0.0	0.0	0.0	2005	1.1	2.1	3.2
2006	0.0	0.0	0.0	2006	3.0	0.0	3.0
2007	0.0	0.0	0.0	2007	3.0	0.0	3.0
2008	0.0	0.0	0.0	2008	0.0	1.1	1.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.

Table 52. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: King Salmon, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	19
Surveyed Households	11
Sampling Fraction	57.9%
Sample Household Members	39
Estimated Household Members	67.4
2000 U.S. Census Estimated Native Population	133

HARVEST AND USE INFORMATION*Percentage of Native Households:*

	Sea Lion	Harbor Seal
Used	0.0%	9.1%
Hunted	0.0%	0.0%
Harvested	0.0%	0.0%
Received	0.0%	9.1%
Gave Away	0.0%	0.0%

*Estimated Community Harvest
and Take (Expanded):*

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

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

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

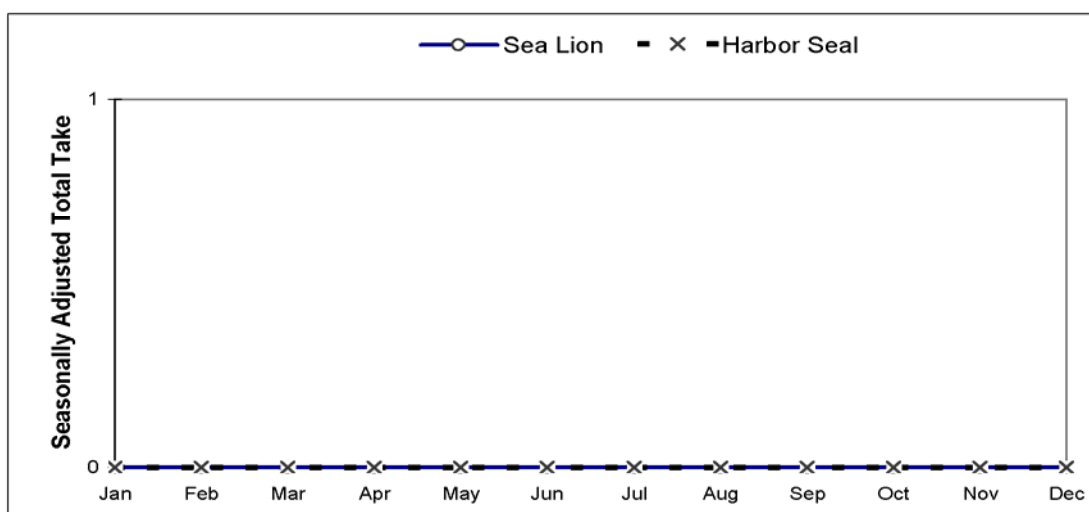
SOURCE: BBNA Household Surveys, 2009.

Table 52. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: King Salmon, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	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	17.0	4.5	21.5
1995	0.0	0.0	0.0	1995	13.0	3.0	16.0
1996	0.0	0.0	0.0	1996	9.5	2.4	11.9
1997	0.0	0.0	0.0	1997	9.7	0.0	9.7
1998	0.0	0.0	0.0	1998	5.2	0.0	5.2
2000	0.0	0.0	0.0	2000	3.3	9.8	13.0
2001	0.0	0.0	0.0	2001	8.5	6.1	14.6
2002	0.0	0.0	0.0	2002	2.9	0.0	2.9
2003	0.0	0.0	0.0	2003	7.3	6.1	13.4
2004	0.0	0.0	0.0	2004	5.0	3.3	8.3
2005	0.0	0.0	0.0	2005	0.0	0.0	0.0
2006	0.0	0.0	0.0	2006	7.0	0.0	7.0
2007	0.0	0.0	0.0	2007	1.3	0.0	1.3
2008	0.0	0.0	0.0	2008	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.

Table 53. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Levelock, 2008**SAMPLING DESIGN:
CENSUS**

Total Native Households	29
Surveyed Households	20
Sampling Fraction	69.0%
Sample Household Members	67
Estimated Household Members	97.2
2000 U.S. Census Estimated Native Population	116

HARVEST AND USE INFORMATION*Percentage of Native Households:*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	65.0%
Hunted	0.0%	60.0%
Harvested	0.0%	30.0%
Received	0.0%	45.0%
Gave Away	0.0%	45.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	13.1
Total Number Struck and Lost	0.0	13.1
Total Number Taken	0.0	26.1
Number Harvested Per Capita	0.00	0.11

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	1	0	5	2	1	0	0	0	0	9
Struck & Lost	0	0	0	1	1	1	4	2	0	0	0	0	0	9
Total Take	0	0	0	1	2	1	9	4	1	0	0	0	0	18
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	1.5	0.0	7.3	2.9	1.5	0.0	0.0	0.0	0.0	13.1
Struck & Lost	0.0	0.0	0.0	1.5	1.5	1.5	5.8	2.9	0.0	0.0	0.0	0.0	0.0	13.1
Total Take	0.0	0.0	0.0	1.5	2.9	1.5	13.1	5.8	1.5	0.0	0.0	0.0	0.0	26.1
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	1.5	0.0	7.3	2.9	1.5	0.0	0.0	0.0		13.1
Struck & Lost	0.0	0.0	0.0	1.5	1.5	1.5	5.8	2.9	0.0	0.0	0.0	0.0		13.1
Total Take	0.0	0.0	0.0	1.5	2.9	1.5	13.1	5.8	1.5	0.0	0.0	0.0		26.1
Total Take (%)	0.0%	0.0%	0.0%	5.6%	11.1%	5.6%	50.0%	22.2%	5.6%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	1.5	4.4	5.8	18.9	24.7	26.1	26.1	26.1	26.1		
Cum. Take (%)	0.0%	0.0%	0.0%	5.6%	16.7%	22.2%	72.2%	94.4%	100.0%	100.0%	100.0%	100.0%		

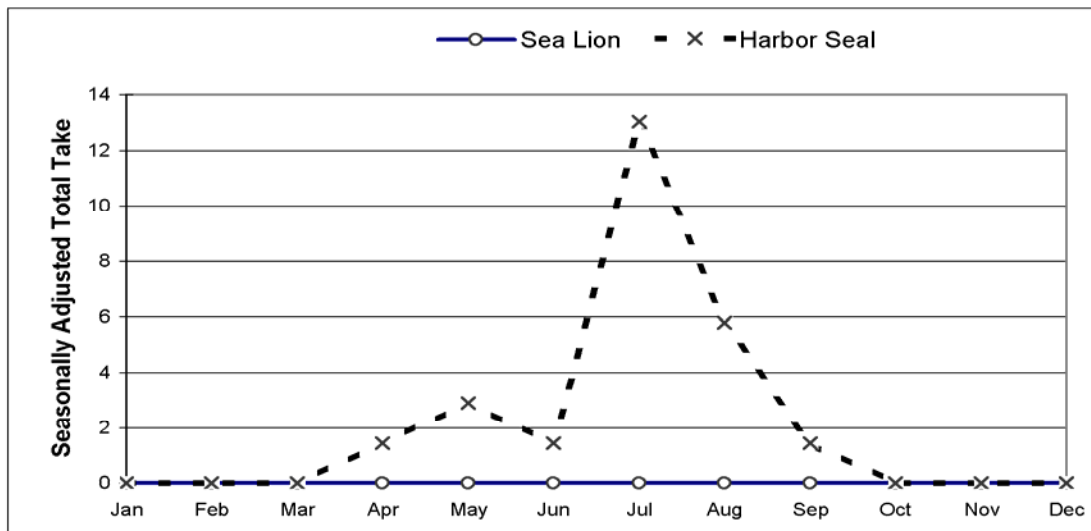
SOURCE: BBNA Household Surveys, 2009.

Table 53. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Levelock, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	4	44.4%	5.8	44.4%
Adult Female	0	---	0.0	---	5	55.6%	7.3	55.6%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	9	100.0%	13.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	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
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	2.8	0.0	2.8
2001	0.0	0.0	0.0	2001	0.0	0.0	0.0
2002	0.0	0.0	0.0	2002	0.0	0.0	0.0
2003	0.0	0.0	0.0	2003	0.0	0.0	0.0
2004	0.0	0.0	0.0	2004	0.0	0.0	0.0
2005	0.0	0.0	0.0	2005	2.7	0.0	2.7
2006	0.0	0.0	0.0	2006	0.0	0.0	0.0
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0
2008	0.0	0.0	0.0	2008	13.1	13.1	26.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
BBNA Household Surveys, 2000-2009.

Table 54. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Naknek, 2008**SAMPLING DESIGN:
TWO-STRATA**

Total Referred Households	68
Surveyed Households	42
Sampling Fraction	61.8%
Sample Household Members	119
Estimated Household Members	195.3
2000 U.S. Census Estimated Native Population	319

HARVEST AND USE INFORMATION**Percentage of Native Households:**

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Used	0.0%	17.2%
Hunted	0.0%	11.1%
Harvested	0.0%	6.5%
Received	0.0%	10.6%
Gave Away	0.0%	6.5%

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

	Sea <u>Lion</u>	Harbor <u>Seal</u>
Total Number Harvested	0.0	15.1
Total Number Struck and Lost	0.0	7.6
Total Number Taken	0.0	22.7
Number Harvested Per Capita	0.00	0.05

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

HARBOR SEAL HARVEST BY MONTH														Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)															
Harvest	0	0	0	0	4	2	2	2	0	0	0	0	0	0	10
Struck & Lost	0	0	0	0	1	2	0	2	0	0	0	0	0	0	5
Total Take	0	0	0	0	5	4	2	4	0	0	0	0	0	0	15
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	0.0	0.0	0.0	5.3	2.6	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	15.1
Struck & Lost	0.0	0.0	0.0	0.0	1.3	2.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	7.6
Total Take	0.0	0.0	0.0	0.0	6.6	5.3	3.6	7.2	0.0	0.0	0.0	0.0	0.0	0.0	22.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	0.0	0.0	0.0	5.3	2.6	3.6	3.6	0.0	0.0	0.0	0.0			15.1
Struck & Lost	0.0	0.0	0.0	0.0	1.3	2.6	0.0	3.6	0.0	0.0	0.0	0.0			7.6
Total Take	0.0	0.0	0.0	0.0	6.6	5.3	3.6	7.2	0.0	0.0	0.0	0.0			22.7
Total Take (%)	0.0%	0.0%	0.0%	0.0%	29.0%	23.2%	16.0%	31.9%	0.0%	0.0%	0.0%	0.0%			100.0%
Cum. Take	0.0	0.0	0.0	0.0	6.6	11.8	15.4	22.7	22.7	22.7	22.7	22.7			
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	29.0%	52.1%	68.1%	100.0%	100.0%	100.0%	100.0%	100.0%			

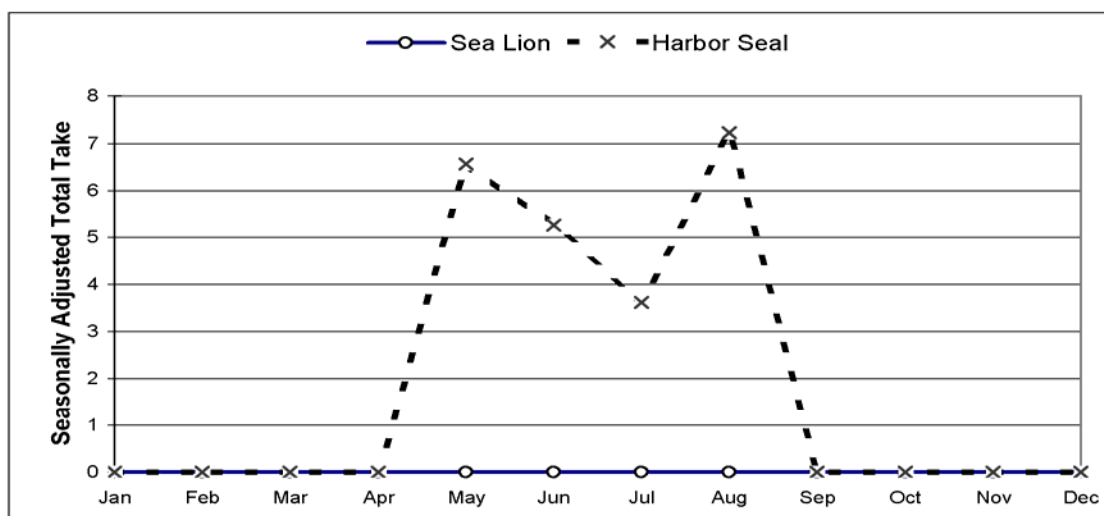
SOURCE: BBNA Household Surveys, 2009.

Table 54. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Naknek, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	6	60.0%	9.4	62.0%
Adult Female	0	---	0.0	---	2	20.0%	3.1	20.7%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	1	10.0%	1.3	8.7%
Juvenile Unknown Sex	0	---	0.0	---	1	10.0%	1.3	8.7%
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	---	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	---	10	100.0%	15.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	26.6	7.0	33.6
1993	0.0	0.0	0.0	1993	2.7	0.0	2.7
1994	0.0	0.0	0.0	1994	21.4	8.3	29.7
1995	0.0	0.0	0.0	1995	34.8	15.3	50.2
1996	0.0	0.0	0.0	1996	16.2	7.5	23.7
1997	0.0	0.0	0.0	1997	24.8	6.5	31.2
1998	0.0	0.0	0.0	1998	15.7	7.8	23.5
2000	0.0	0.0	0.0	2000	16.3	0.0	16.3
2001	0.0	0.0	0.0	2001	15.1	4.3	19.4
2002	0.0	0.0	0.0	2002	26.2	12.5	38.7
2003	0.0	0.0	0.0	2003	10.5	0.0	10.5
2004	0.0	0.0	0.0	2004	15.2	3.8	19.0
2005	0.0	0.0	0.0	2005	6.2	0.0	6.2
2006	0.0	0.0	0.0	2006	15.1	7.5	22.6
2007	0.0	0.0	0.0	2007	20.1	0.0	20.1
2008	0.0	0.0	0.0	2008	15.1	7.6	22.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
BBNA Household Surveys, 2000-2009.

Table 55. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Pilot Point, 2008

SAMPLING DESIGN:

CENSUS

Total Native Households	21
Surveyed Households	8
Sampling Fraction	38.1%
Sample Household Members	15
Estimated Household Members	39.4
2000 U.S. Census Estimated Native Population	86

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	0.0%	12.5%
Hunted	0.0%	12.5%
Harvested	0.0%	12.5%
Received	0.0%	0.0%
Gave Away	0.0%	0.0%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	2.6
Total Number Struck and Lost	0.0	0.0
Total Number Taken	0.0	2.6
Number Harvested Per Capita	0.00	0.03

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	1	0	0	0	0	0	0	1
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	2.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0		2.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0		2.6
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6	2.6		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

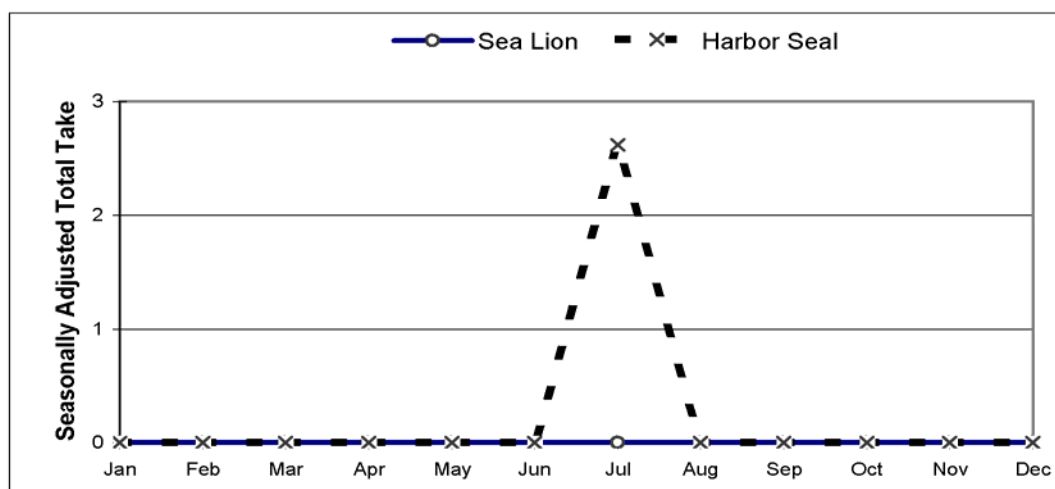
SOURCE: BBNA Household Surveys, 2009.

Table 55. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Pilot Point, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	1	100.0%	2.6	100.0%
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%	2.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	5.4	4.3	9.7
1993	0.0	0.0	0.0	1993	2.2	0.0	2.2
1994	0.0	0.0	0.0	1994	3.1	0.0	3.1
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0
1998	0.0	0.0	0.0	1998	0.0	0.0	0.0
2000	0.0	0.0	0.0	2000	5.3	2.1	7.4
2001	0.0	0.0	0.0	2001	2.0	2.0	4.0
2002	0.0	0.0	0.0	2002	2.0	2.0	4.0
2003	0.0	0.0	0.0	2003	2.7	2.7	5.3
2004	0.0	0.0	0.0	2004	1.9	5.6	7.4
2005	0.0	0.0	0.0	2005	0.0	0.0	0.0
2006	0.0	0.0	0.0	2006	3.0	0.0	3.0
2007	0.0	0.0	0.0	2007	3.0	0.0	3.0
2008	0.0	0.0	0.0	2008	2.6	0.0	2.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
BBNA Household Surveys, 2000-2009.

Table 56. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Port Heiden, 2008

SAMPLING DESIGN:
CENSUS

Total Native Households	23
Surveyed Households	21
Sampling Fraction	91.3%
Sample Household Members	70
Estimated Household Members	76.7
2000 U.S. Census Estimated Native Population	93

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	0.0%	38.1%
Hunted	0.0%	38.1%
Harvested	0.0%	28.6%
Received	0.0%	14.3%
Gave Away	0.0%	28.6%

*Estimated Community Harvest
and Take (Expanded):*

	Sea Lion	Harbor Seal
Total Number Harvested	0.0	36.1
Total Number Struck and Lost	0.0	16.4
Total Number Taken	0.0	52.6
Number Harvested Per Capita	0.00	0.39

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unknown Month	Total
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	6	14	9	4	0	0	0	0	0	33
Struck & Lost	0	0	0	0	8	6	1	0	0	0	0	0	0	15
Total Take	0	0	0	0	14	20	10	4	0	0	0	0	0	48
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	6.6	15.3	9.9	4.4	0.0	0.0	0.0	0.0	0.0	36.1
Struck & Lost	0.0	0.0	0.0	0.0	8.8	6.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	16.4
Total Take	0.0	0.0	0.0	0.0	15.3	21.9	11.0	4.4	0.0	0.0	0.0	0.0	0.0	52.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	6.6	15.3	9.9	4.4	0.0	0.0	0.0	0.0		36.1
Struck & Lost	0.0	0.0	0.0	0.0	8.8	6.6	1.1	0.0	0.0	0.0	0.0	0.0		16.4
Total Take	0.0	0.0	0.0	0.0	15.3	21.9	11.0	4.4	0.0	0.0	0.0	0.0		52.6
Total Take (%)	0.0%	0.0%	0.0%	0.0%	29.2%	41.7%	20.8%	8.3%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	15.3	37.2	48.2	52.6	52.6	52.6	52.6	52.6		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	29.2%	70.8%	91.7%	100.0%	100.0%	100.0%	100.0%	100.0%		

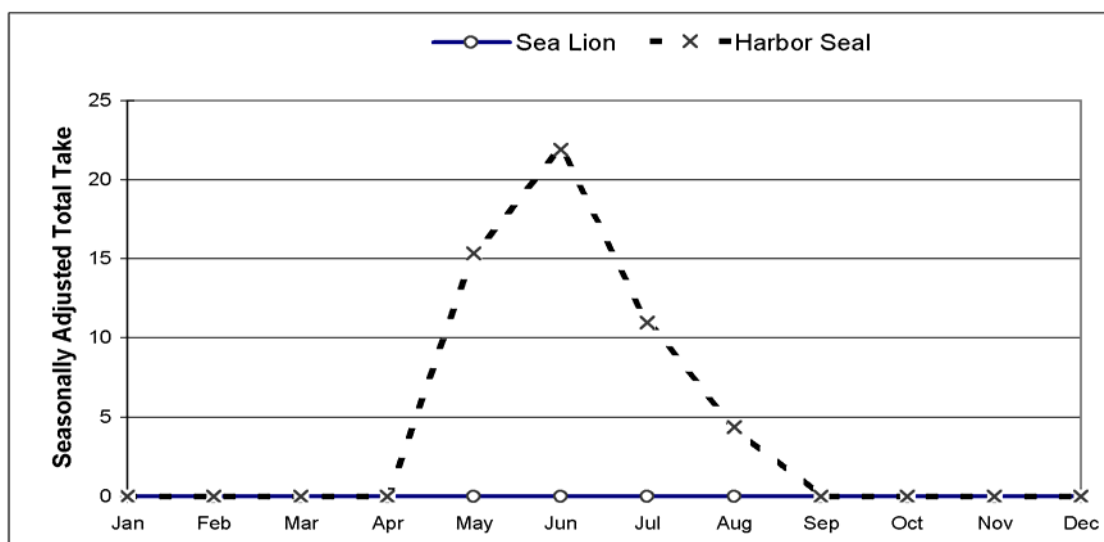
SOURCE: BBNA Household Surveys, 2009.

Table 56. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: Port Heiden, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal			
	Reported by		Community Est.		Reported by		Community Est.	
	Sample		(Expanded)		Sample		(Expanded)	
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	13	39.4%	14.2	39.4%
Adult Female	0	---	0.0	---	5	15.2%	5.5	15.2%
Adult Unknown Sex	0	---	0.0	---	13	39.4%	14.2	39.4%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	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	6.1%	2.2	6.1%
Total	0	---	0.0	---	33	100.0%	36.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	40.5	36.0	76.5
1993	0.0	0.0	0.0	1993	30.7	19.9	50.6
1994	0.0	0.0	0.0	1994	63.0	45.3	108.3
1995	0.0	0.0	0.0	1995	17.0	10.0	27.0
1996	0.0	0.0	0.0	1996	34.3	34.3	68.6
1997	0.0	0.0	0.0	1997	69.2	50.0	119.2
1998	0.0	0.0	0.0	1998	36.1	18.6	54.7
2000	0.0	0.0	0.0	2000	19.6	0.0	19.6
2001	0.0	0.0	0.0	2001	10.1	3.4	13.4
2002	0.0	0.0	0.0	2002	30.4	18.3	48.7
2003	0.0	0.0	0.0	2003	10.0	5.6	15.6
2004	0.0	0.0	0.0	2004	20.0	13.0	33.0
2005	0.0	0.0	0.0	2005	13.0	19.5	32.5
2006	0.0	0.0	0.0	2006	17.3	6.5	23.8
2007	0.0	0.0	0.0	2007	24.0	22.0	46.0
2008	0.0	0.0	0.0	2008	36.1	16.4	52.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
BBNA Household Surveys, 2000-2009.

Table 57. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: South Naknek, 2008

**SAMPLING DESIGN:
CENSUS**

Total Native Households	21
Surveyed Households	9
Sampling Fraction	42.9%
Sample Household Members	24
Estimated Household Members	56.0
2000 U.S. Census Estimated Native Population	115

HARVEST AND USE INFORMATION

Percentage of Native Households:

	Sea Lion	Harbor Seal
Used	0.0%	33.3%
Hunted	0.0%	0.0%
Harvested	0.0%	0.0%
Received	0.0%	33.3%
Gave Away	0.0%	0.0%

*Estimated Community Harvest
and Take (Expanded):*

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

SEA LION HARVEST BY MONTH

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

HARBOR SEAL HARVEST BY MONTH

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

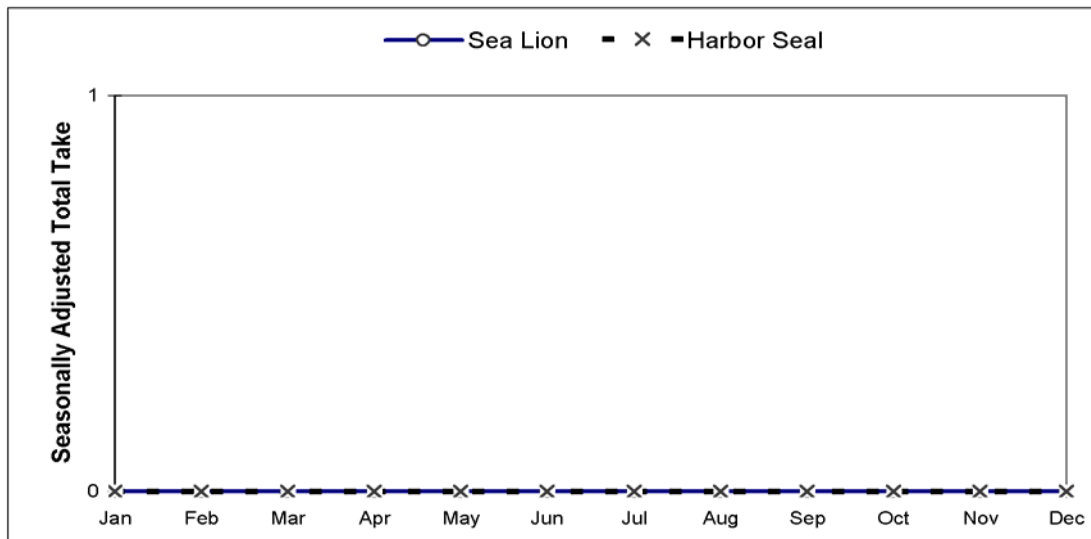
SOURCE: BBNA Household Surveys, 2009.

Table 57. (cont.) SEA LION & HARBOR SEAL HARVEST ESTIMATES: South Naknek, 2008

HARVEST BY AGE AND SEX

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



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

SEA LION				HARBOR SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	2.3	6.9	9.2
1993	0.0	0.0	0.0	1993	6.4	18.0	24.4
1994	0.0	0.0	0.0	1994	4.4	1.1	5.5
1995	0.0	0.0	0.0	1995	2.1	0.0	2.1
1996	0.0	0.0	0.0	1996	1.0	0.0	1.0
1997	0.0	0.0	0.0	1997	2.5	9.8	12.3
1998	0.0	0.0	0.0	1998	5.2	7.9	13.1
2000	0.0	0.0	0.0	2000	4.1	2.7	6.8
2001	0.0	0.0	0.0	2001	11.0	3.0	14.0
2002	0.0	0.0	0.0	2002	16.0	3.0	19.0
2003	0.0	0.0	0.0	2003	1.1	0.0	1.1
2004	0.0	0.0	0.0	2004	15.4	4.4	19.8
2005	0.0	0.0	0.0	2005	17.3	9.2	26.5
2006	0.0	0.0	0.0	2006	0.0	0.0	0.0
2007	0.0	0.0	0.0	2007	1.0	0.0	1.0
2008	0.0	0.0	0.0	2008	0.0	0.0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998;
BBNA Household Surveys, 2000-2009.

Table 58. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Aleknagik, 2008

SAMPLING DESIGN:		<u>Total</u>
CENSUS	Total Native Households	45
	Surveyed Households	27
	Sampling Fraction	60.0%
	Sample Household Members	113
	Estimated Household Members	187.6
	2000 U.S. Census Estimated Native Population	187

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):			
	Sea <u>Lion</u>	Harbor Seal and <u>Spotted Seal</u>		Sea <u>Lion</u>	Harbor <u>Seal</u>	Spotted <u>Seal</u>
Used	0.0%	48.1%	Total Number Harvested	0.0	5.0	6.7
Hunted	0.0%	18.5%	Total Number Struck and Lost	0.0	1.7	0.0
Harvested	0.0%	14.8%	Total Number Taken	0.0	6.7	6.7
Received	0.0%	33.3%				
Gave Away	0.0%	22.2%	Number Harvested Per Capita	0.00	0.03	0.04

SEA LION HARVEST BY MONTH

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

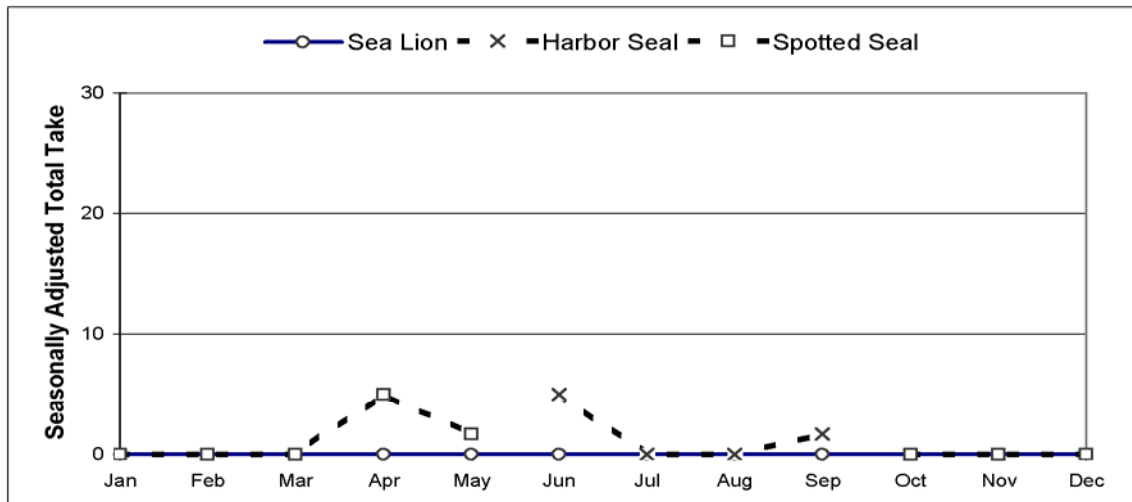
	Spotted Seal					Harbor Seal					Spotted Seal					Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)																	
Harvest	0	0	0	3	1	2	0	0	1	0	0	0	0	0	0	0	7
Struck & Lost	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Take	0	0	0	3	1	3	0	0	1	0	0	0	0	0	0	0	8
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)																	
Harvest	0.0	0.0	0.0	5.0	1.7	3.3	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Total Take	0.0	0.0	0.0	5.0	1.7	5.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)																	
Harvest	0.0	0.0	0.0	5.0	1.7	3.3	0.0	0.0	1.7	0.0	0.0	0.0					11.7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0					1.7
Total Take	0.0	0.0	0.0	5.0	1.7	5.0	0.0	0.0	1.7	0.0	0.0	0.0					13.3
Total Take (%)	0.0%	0.0%	0.0%	37.5%	12.5%	37.5%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%					100.0%
Cum. Take	0.0	0.0	0.0	5.0	6.7	11.7	11.7	11.7	13.3	13.3	13.3	13.3					
Cum. Take (%)	0.0%	0.0%	0.0%	37.5%	50.0%	87.5%	87.5%	87.5%	100.0%	100.0%	100.0%	100.0%					

SOURCE: BBNA Household Surveys, 2009.

Table 58. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Aleknagik, 2008**HARVEST BY AGE AND SEX**

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	3	100.0%	5.0	100.0%	4	100.0%	6.7	100.0%
Total	0	---	0.0	---	3	100.0%	5.0	100.0%	4	100.0%	6.7	100.0%

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

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL**ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR**

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	0.0	3.6	3.6	1992	28.6	5.5	34.1
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0	1993	4.8	0.0	4.8
1994	0.0	0.0	0.0	1994	0.0	3.3	3.3	1994	21.5	0.0	21.5
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0	1995	11.8	13.0	24.9
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0	1996	7.1	0.0	7.1
1997	0.0	0.0	0.0	1997	1.2	0.0	1.2	1997	10.8	0.0	10.8
1998	0.0	0.0	0.0	1998	3.1	0.0	3.1	1998	5.2	0.0	5.2
2000	0.0	0.0	0.0	2000	2.5	0.0	2.5	2000	6.1	2.5	8.6
2001	0.0	0.0	0.0	2001	0.0	1.2	1.2	2001	0.0	0.0	0.0
2002	0.0	0.0	0.0	2002	0.0	2.2	2.2	2002	6.6	11.0	17.6
2003	0.0	0.0	0.0	2003	0.0	0.0	0.0	2003	3.8	0.0	3.8
2004	0.0	0.0	0.0	2004	0.0	0.0	0.0	2004	4.6	1.5	6.1
2005	0.0	0.0	0.0	2005	0.0	0.0	0.0	2005	9.6	7.2	16.9
2006	0.0	0.0	0.0	2006	0.0	0.0	0.0	2006	9.6	7.2	16.9
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0	2007	14.3	3.9	18.2
2008	0.0	0.0	0.0	2008	5.0	1.7	6.7	2008	6.7	0.0	6.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.

Table 59. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Clark's Point, 2008

SAMPLING DESIGN:		Total
CENSUS	Total Native Households	18
	Surveyed Households	11
	Sampling Fraction	61.1%
	Sample Household Members	23
	Estimated Household Members	37.6
	2000 U.S. Census Estimated Native Population	69

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):		
	Sea Lion	Harbor Seal and Spotted Seal		Sea Lion	Harbor Seal Spotted Seal
Used	0.0%	45.5%	Total Number Harvested	0.0	0.0 14.7
Hunted	0.0%	27.3%	Total Number Struck and Lost	0.0	0.0 3.3
Harvested	0.0%	27.3%	Total Number Taken	0.0	0.0 18.0
Received	0.0%	18.2%			
Gave Away	0.0%	9.1%	Number Harvested Per Capita	0.00	0.00 0.21

SEA LION HARVEST BY MONTH

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

HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH

	Spotted Seal					Harbor Seal				Spotted Seal			Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	1	8	0	0	0	0	0	0	0	0	0	9
Struck & Lost	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Total Take	0	0	1	10	0	0	0	0	0	0	0	0	0	11
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.6	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.7
Struck & Lost	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Total Take	0.0	0.0	1.6	16.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	1.6	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		14.7
Struck & Lost	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		3.3
Total Take	0.0	0.0	1.6	16.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		18.0
Total Take (%)	0.0%	0.0%	9.1%	90.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	1.6	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0		
Cum. Take (%)	0.0%	0.0%	9.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

SOURCE: BBNA Household Surveys, 2009.

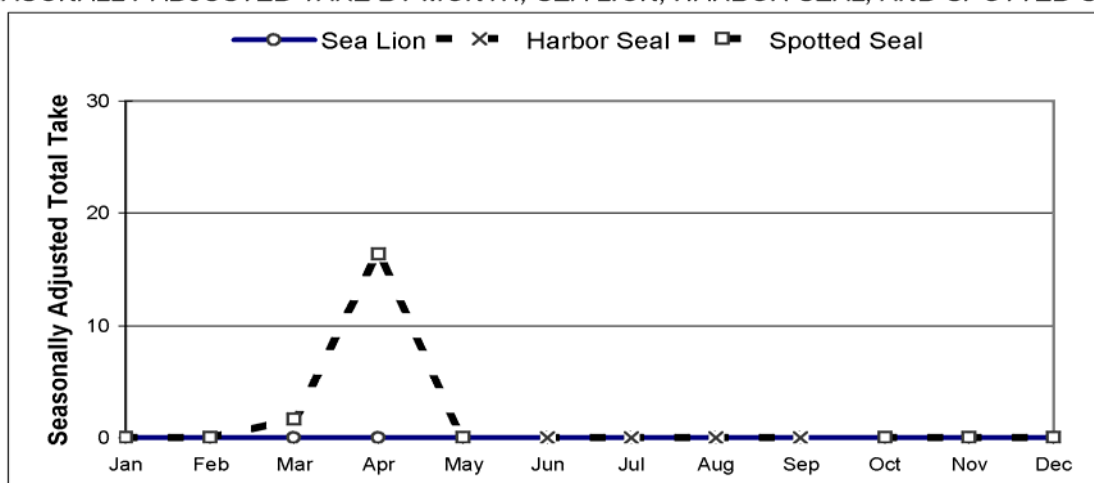
Table 59. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Clark's Point, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	---	0.0	---	3	33.3%	4.9	33.3%
Adult Female	0	---	0.0	---	0	---	0.0	---	1	11.1%	1.6	11.1%
Adult Unknown Sex	0	---	0.0	---	0	---	0.0	---	1	11.1%	1.6	11.1%
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	---	4	44.4%	6.5	44.4%
Pup Male	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	0	---	0.0	---	9	100.0%	14.7	100.0%

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

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



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

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	0.0	0.0	0.0	1992	0.0	0.0	0.0	1992	10.6	8.5	19.1
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0	1993	2.0	0.0	2.0
1994	0.0	0.0	0.0	1994	0.0	0.0	0.0	1994	2.0	0.0	2.0
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0	1995	10.0	5.0	15.0
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0	1996	17.1	3.8	20.9
1997	0.0	0.0	0.0	1997	1.3	0.0	1.3	1997	3.8	1.3	5.0
1998	0.0	0.0	0.0	1998	1.3	0.0	1.3	1998	3.8	1.3	5.0
2000	0.0	0.0	0.0	2000	0.0	0.0	0.0	2000	22.4	1.4	23.8
2001	0.0	0.0	0.0	2001	0.0	0.0	0.0	2001	28.2	11.5	39.7
2002	0.0	0.0	0.0	2002	0.0	0.0	0.0	2002	81.0	13.3	94.3
2003	0.0	0.0	0.0	2003	0.0	0.0	0.0	2003	2.0	0.0	2.0
2004	0.0	0.0	0.0	2004	0.0	0.0	0.0	2004	27.0	15.0	42.0
2005	0.0	0.0	0.0	2005	2.8	0.0	2.8	2005	5.5	0.0	5.5
2006	0.0	0.0	0.0	2006	0.0	0.0	0.0	2006	14.1	2.6	16.6
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0	2007	24.1	0.0	24.1
2008	0.0	0.0	0.0	2008	0.0	0.0	0.0	2008	14.7	3.3	18.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.

Table 60. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Dillingham, 2008

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>TWO-STRATA</i>				
	Total Native Households	19	156	175
	Surveyed Households	15	143	158
	Sampling Fraction	78.9%	91.7%	90.3%
	Sample Household Members	40	437	477
	Estimated Household Members	50.7	477.2	527.9
	2000 U.S. Census Estimated Native Population	---	---	1503

HARVEST AND USE INFORMATION

Percentage of Native Households:			Estimated Community Harvest and Take (Expanded):			
	Sea Lion	Harbor Seal and Spotted Seal		Sea Lion	Harbor Seal	Spotted Seal
Used	0.0%	65.3%	Total Number Harvested	0.0	5.5	1.1
Hunted	0.0%	3.2%	Total Number Struck and Lost	0.0	0.0	1.1
Harvested	0.0%	1.2%	Total Number Taken	0.0	5.5	2.2
Received	0.0%	65.3%				
Gave Away	0.0%	2.0%	Number Harvested Per Capita	0.00	0.00	0.00

SEA LION HARVEST BY MONTH

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

	Spotted Seal					Harbor Seal				Spotted Seal			Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	0	0	0	1	1	0	0	4	0	0	0	0	6
Struck & Lost	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total Take	0	0	0	0	2	1	0	0	4	0	0	0	0	7
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	4.4	0.0	0.0	0.0	0.0	6.5
Struck & Lost	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Total Take	0.0	0.0	0.0	0.0	2.2	1.1	0.0	0.0	4.4	0.0	0.0	0.0	0.0	7.6
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	4.4	0.0	0.0	0.0		6.5
Struck & Lost	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.1
Total Take	0.0	0.0	0.0	0.0	2.2	1.1	0.0	0.0	4.4	0.0	0.0	0.0		7.6
Total Take (%)	0.0%	0.0%	0.0%	0.0%	28.6%	14.3%	0.0%	0.0%	57.1%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	2.2	3.3	3.3	3.3	7.6	7.6	7.6	7.6		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	28.6%	42.9%	42.9%	42.9%	100.0%	100.0%	100.0%	100.0%		

SOURCE: BBNA Household Surveys, 2009.

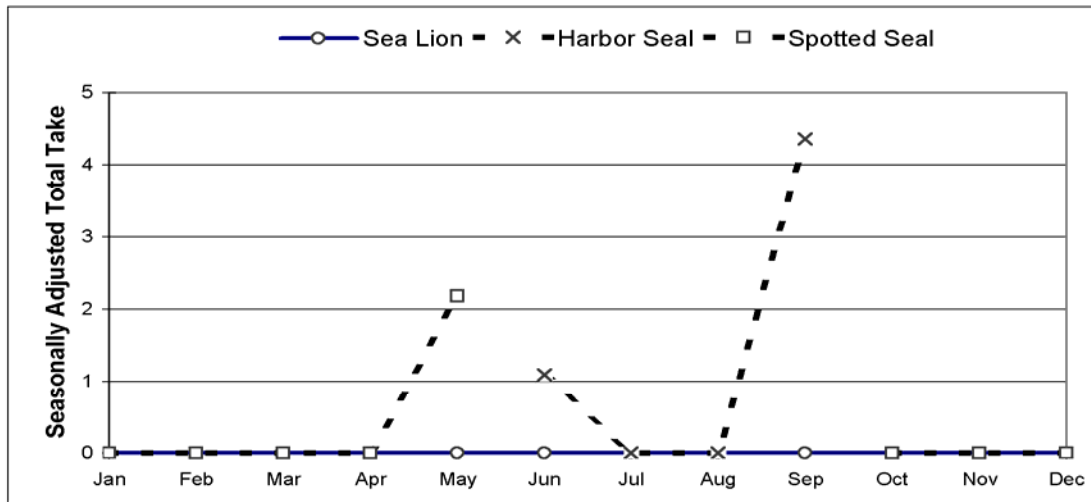
Table 60. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Dillingham, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	2	40.0%	2.2	40.0%	1	100.0%	1.1	100.0%
Adult Female	0	---	0.0	---	2	40.0%	2.2	40.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	1	20.0%	1.1	20.0%	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	5	100.0%	5.5	100.0%	1	100.0%	1.1	100.0%

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

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



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

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take	Year	Harvest	Struck/ Lost	Total Take
1992	0.0	0.0	0.0	1992	29.2	3.8	32.9	1992	49.6	3.8	53.3
1993	0.0	0.0	0.0	1993	18.0	4.2	22.2	1993	26.1	0.0	26.1
1994	0.0	0.0	0.0	1994	16.2	0.0	16.2	1994	35.2	3.0	38.2
1995	0.0	0.0	0.0	1995	13.3	0.0	13.3	1995	7.5	7.5	15.0
1996	0.0	0.0	0.0	1996	0.0	0.0	0.0	1996	40.6	1.0	41.6
1997	0.0	0.0	0.0	1997	1.2	0.0	1.2	1997	18.0	0.0	18.0
1998	0.0	0.0	0.0	1998	8.5	0.0	8.5	1998	12.2	1.2	13.4
2000	0.0	0.0	0.0	2000	0.0	0.0	0.0	2000	11.9	3.6	15.5
2001	0.0	0.0	0.0	2001	0.0	0.0	0.0	2001	6.1	3.6	9.7
2002	0.0	0.0	0.0	2002	0.0	0.0	0.0	2002	7.7	0.0	7.7
2003	0.0	0.0	0.0	2003	0.0	0.0	0.0	2003	4.1	0.0	4.1
2004	0.0	0.0	0.0	2004	0.0	0.0	0.0	2004	0.0	0.0	0.0
2005	0.0	0.0	0.0	2005	1.3	0.0	1.3	2005	22.5	3.8	26.2
2006	0.0	0.0	0.0	2006	0.0	1.0	1.0	2006	15.2	0.0	15.2
2007	0.0	0.0	0.0	2007	0.0	1.0	1.0	2007	15.2	0.0	15.2
2008	0.0	0.0	0.0	2008	5.5	0.0	5.5	2008	1.1	1.1	2.2

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.

Table 61. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Manokotak, 2008

SAMPLING DESIGN:		<u>Active</u>	<u>Other</u>	<u>Total</u>
TWO-STRATA				
	Total Native Households:	26	71	97
	Surveyed Households:	25	50	75
	Sampling Fraction	96.2%	70.4%	77.3%
	Sample Household Members	115	203	318
	Estimated Household Members	119.6	288.3	407.9
	2000 U.S. Census Estimated Native Population	---	---	378

HARVEST AND USE INFORMATION*Percentage of Native Households:*

	<u>Sea Lion</u>	<u>Harbor Seal and Spotted Seal</u>
Used	0.0%	58.8%
Hunted	0.0%	22.8%
Harvested	0.0%	13.1%
Received	0.0%	52.3%
Gave Away	0.0%	26.1%

*Estimated Community Harvest
and Take (Expanded):*

	<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Spotted Seal</u>
Total Number Harvested	0.0	9.2	16.6
Total Number Struck and Lost	0.0	1.4	7.4
Total Number Taken	0.0	10.6	24.0
Number Harvested Per Capita	0.00	0.02	0.04

SEA LION HARVEST BY MONTH

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

	<u>Spotted Seal</u>					<u>Harbor Seal</u>				<u>Spotted Seal</u>			Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)														
Harvest	0	2	0	6	5	1	0	4	2	0	0	0	0	20
Struck & Lost	0	1	0	5	0	1	0	0	0	0	0	0	0	7
Total Take	0	3	0	11	5	2	0	4	2	0	0	0	0	27
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.1	0.0	7.4	7.1	1.4	0.0	5.7	2.1	0.0	0.0	0.0	0.0	25.7
Struck & Lost	0.0	1.0	0.0	6.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Total Take	0.0	3.1	0.0	13.8	7.1	2.8	0.0	5.7	2.1	0.0	0.0	0.0	0.0	34.7
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	2.1	0.0	7.4	7.1	1.4	0.0	5.7	2.1	0.0	0.0	0.0		25.7
Struck & Lost	0.0	1.0	0.0	6.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0		8.8
Total Take	0.0	3.1	0.0	13.8	7.1	2.8	0.0	5.7	2.1	0.0	0.0	0.0		34.6
Total Take (%)	0.0%	9.0%	0.0%	39.8%	20.5%	8.2%	0.0%	16.4%	6.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	3.1	3.1	16.9	24.0	26.8	26.8	32.5	34.6	34.6	34.6	34.6		
Cum. Take (%)	0.0%	9.0%	9.0%	48.8%	69.3%	77.6%	77.6%	94.0%	100.0%	100.0%	100.0%	100.0%		

SOURCE: BBNA Household Surveys, 2009

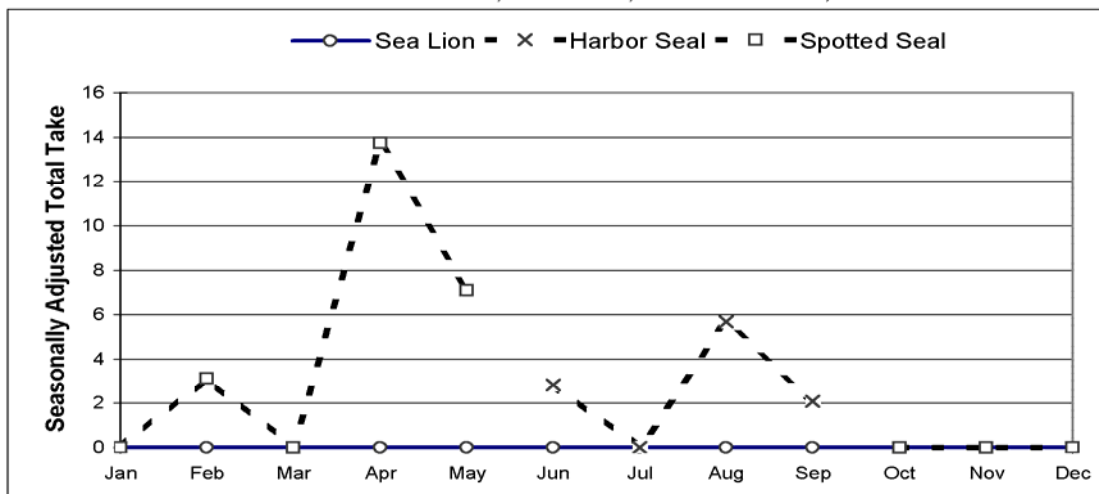
Table 61. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Manokotak, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample*		Community Est. (Expanded)		Reported by Sample*		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	2	28.6%	2.1	22.7%	2	15.4%	2.5	14.9%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%	1	7.7%	1.4	8.6%
Adult Unknown Sex	0	---	0.0	---	4	57.1%	5.7	61.9%	2	15.4%	2.8	17.1%
Juvenile Male	0	---	0.0	---	1	14.3%	1.4	15.5%	2	15.4%	2.1	12.6%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%	1	7.7%	1.0	6.3%
Juvenile Unknown Sex	0	---	0.0	---	0	0.0%	0.0	0.0%	4	30.8%	5.7	34.3%
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%	1	7.7%	1.0	6.3%
Female Unknown Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	0	---	0.0	---	7	100.0%	9.2	100.0%	13	100.0%	16.6	100.0%

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

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



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

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	3.9	0.0	3.9	1992	4.9	3.8	8.7	1992	25.1	1.0	26.1
1993	0.0	0.0	0.0	1993	3.2	0.0	3.2	1993	7.4	0.0	7.4
1994	0.0	0.0	0.0	1994	0.0	0.0	0.0	1994	13.7	0.0	13.7
1995	0.0	0.0	0.0	1995	9.3	2.4	11.7	1995	22.9	3.6	26.5
1996	0.0	0.0	0.0	1996	2.4	3.6	6.0	1996	31.5	8.4	39.9
1997	0.0	0.0	0.0	1997	0.0	0.0	0.0	1997	19.7	7.2	26.9
1998	0.0	0.0	0.0	1998	4.0	0.0	4.0	1998	4.2	1.0	5.2
2000	0.0	0.0	0.0	2000	1.2	0.0	1.2	2000	23.0	4.7	27.7
2001	0.0	0.0	0.0	2001	3.5	0.0	3.5	2001	8.3	1.2	9.4
2002	0.0	0.0	0.0	2002	0.0	0.0	0.0	2002	0.0	0.0	0.0
2003	0.0	0.0	0.0	2003	2.2	0.0	2.2	2003	5.5	1.1	6.5
2004	0.0	0.0	0.0	2004	4.0	0.0	4.0	2004	27.1	29.6	56.7
2005	0.0	0.0	0.0	2005	6.6	8.9	15.5	2005	45.9	8.9	54.8
2006	0.0	0.0	0.0	2006	6.6	8.9	15.5	2006	45.9	8.9	54.8
2007	0.0	0.0	0.0	2007	0.0	0.0	0.0	2007	18.3	2.6	20.8
2008	0.0	0.0	0.0	2008	9.2	1.4	10.6	2008	16.6	7.4	24.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.

Table 62. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Togiak, 2008

<i>SAMPLING DESIGN:</i>		<u>Active</u>	<u>Other</u>	<u>Total</u>
<i>TWO-STRATA</i>				
	Total Native Households	28	140	168
	Surveyed Households	21	118	139
	Sampling Fraction	75.0%	84.3%	82.7%
	Sample Household Members	106	469	575
	Estimated Household Members	141.3	556.4	697.8
	2000 U.S. Census Estimated Native Population	---	---	750

HARVEST AND USE INFORMATION

<i>Percentage of Native Households:</i>				<i>Estimated Community Harvest and Take (Expanded):</i>			
	Sea Lion	Harbor Seal and Spotted Seal			Sea Lion	Harbor Seal	Spotted Seal
Used	0.0%	70.1%		Total Number Harvested	0.0	46.0	167.7
Hunted	0.0%	36.6%		Total Number Struck and Lost	0.0	14.1	42.2
Harvested	0.0%	33.7%		Total Number Taken	0.0	60.0	209.9
Received	0.0%	46.3%					
Gave Away	0.0%	37.9%		Number Harvested Per Capita	0.00	0.06	0.22

SEA LION HARVEST BY MONTH

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

HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH

	Spotted Seal					Harbor Seal				Spotted Seal				Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)															
Harvest	2	3	11	19	22	1	3	13	20	45	35	0	0	0	174
Struck & Lost	0	1	1	7	9	1	1	2	7	12	4	0	0	0	47
Total Take	2	4	12	26	31	2	4	15	27	57	39	0	0	0	221
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	2.4	3.7	13.2	23.1	27.1	1.3	3.7	15.9	25.1	55.3	42.8	0.0	0.0	0.0	213.6
Struck & Lost	0.0	1.3	1.3	8.5	11.3	1.3	1.3	2.7	8.7	14.5	5.3	0.0	0.0	0.0	58.7
Total Take	2.4	5.0	14.5	31.6	38.4	2.7	5.0	18.5	33.8	69.8	48.2	0.0	0.0	0.0	272.3
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	2.4	3.7	13.2	23.1	27.1	1.3	3.7	15.9	25.1	55.3	42.8	0.0			213.6
Struck & Lost	0.0	1.3	1.3	8.5	11.3	1.3	1.3	2.7	8.7	14.5	5.3	0.0			56.3
Total Take	2.4	5.0	14.5	31.6	38.4	2.7	5.0	18.5	33.8	69.8	48.2	0.0			270.0
Total Take (%)	0.9%	1.9%	5.4%	11.7%	14.2%	1.0%	1.9%	6.9%	12.5%	25.9%	17.8%	0.0%			100.0%
Cum. Take	2.4	7.4	21.9	53.5	91.9	94.6	99.6	118.2	152.0	221.8	270.0	270.0			
Cum. Take (%)	0.9%	2.7%	8.1%	19.8%	34.0%	35.0%	36.9%	43.8%	56.3%	82.2%	100.0%	100.0%			

SOURCE: BBNA Household Surveys, 2009.

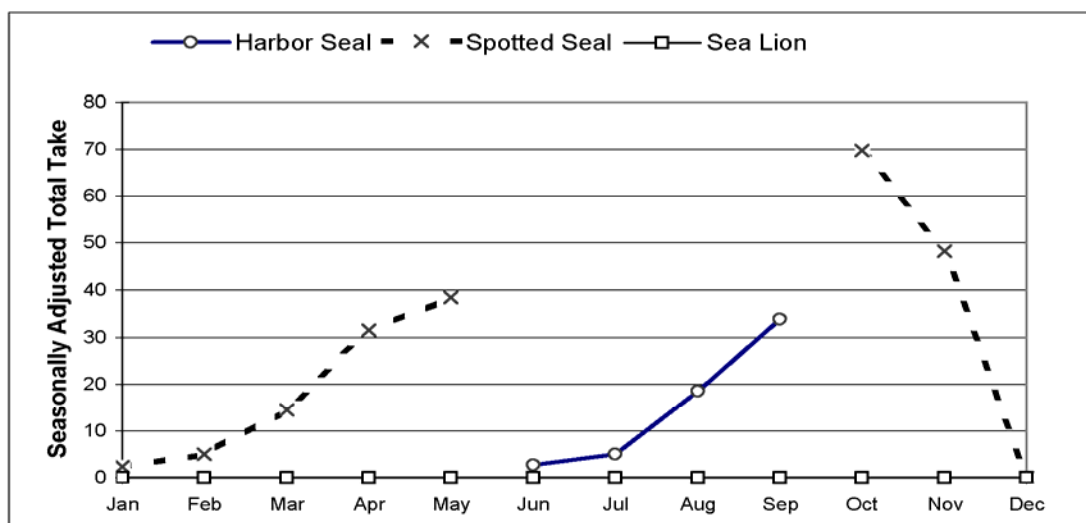
Table 62. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Togiak, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample*		Community Est. (Expanded)		Reported by Sample*		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	6	16.2%	7.3	15.8%	45	32.8%	55.2	32.9%
Adult Female	0	---	0.0	---	0	0.0%	0.0	0.0%	17	12.4%	20.5	12.2%
Adult Unknown Sex	0	---	0.0	---	8	21.6%	9.9	21.6%	24	17.5%	28.9	17.2%
Juvenile Male	0	---	0.0	---	3	8.1%	3.9	8.4%	7	5.1%	8.6	5.1%
Juvenile Female	0	---	0.0	---	0	0.0%	0.0	0.0%	2	1.5%	2.7	1.6%
Juvenile Unknown Sex	0	---	0.0	---	8	21.6%	10.7	23.2%	22	16.1%	27.4	16.4%
Pup Male	0	---	0.0	---	0	0.0%	0.0	0.0%	1	0.7%	1.3	0.8%
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%	4	2.9%	5.3	3.2%
Male Unknown Age	0	---	0.0	---	3	8.1%	3.6	7.7%	2	1.5%	2.4	1.4%
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	---	9	24.3%	10.7	23.2%	13	9.5%	15.4	9.2%
Total	0	---	0.0	---	37	100.0%	46.0	100.0%	137	100.0%	167.7	100.0%

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

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



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

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/Lost	Total	Year	Harvest	Struck/Lost	Total	Year	Harvest	Struck/Lost	Total
1992	3.9	0.0	3.9	1992	24.3	2.0	26.3	1992	250.2	53.8	304.0
1993	3.3	3.3	6.5	1993	24.9	15.8	40.7	1993	174.7	49.1	223.8
1994	1.2	0.0	1.2	1994	0.0	0.0	0.0	1994	154.2	39.9	194.1
1995	0.0	0.0	0.0	1995	3.3	0.0	3.3	1995	111.5	4.4	115.9
1996	0.0	0.0	0.0	1996	3.9	0.0	3.9	1996	101.9	7.8	109.7
1997	3.6	0.0	3.6	1997	6.7	0.0	6.7	1997	79.2	7.1	86.4
1998	0.0	0.0	0.0	1998	14.1	1.4	15.5	1998	105.0	15.3	120.4
2000	0.0	0.0	0.0	2000	5.1	1.1	6.3	2000	147.0	26.7	173.6
2001	0.0	0.0	0.0	2001	5.3	0.0	5.3	2001	60.8	4.5	65.3
2002	0.0	0.0	0.0	2002	13.9	3.6	17.4	2002	79.2	18.6	97.9
2003	0.0	0.0	0.0	2003	22.0	0.0	22.0	2003	32.8	8.9	41.7
2004	0.0	0.0	0.0	2004	6.9	9.7	16.6	2004	63.8	0.0	63.8
2005	0.0	0.0	0.0	2005	10.8	0.0	10.8	2005	82.0	10.9	92.9
2006	0.0	0.0	0.0	2006	11.5	0.0	11.5	2006	50.9	7.4	58.3
2007	0.0	0.0	0.0	2007	7.8	2.2	10.0	2007	63.3	7.8	71.1
2008	0.0	0.0	0.0	2008	46.0	14.1	60.0	2008	167.7	42.2	209.9

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.

Table 63. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Twin Hills, 2008

<i>SAMPLING DESIGN:</i>	<u>Total</u>
<i>CENSUS</i>	
Total Native Households	22
Surveyed Households	20
Sampling Fraction	90.9%
Sample Household Members	58
Estimated Household Members	63.8
2000 U.S. Census Estimated Native Population	65

HARVEST AND USE INFORMATION

<i>Percentage of Sample Households:</i>			<i>Estimated Community Harvest and Take (Expanded):</i>			
	<u>Sea Lion</u>	<u>Harbor Seal and Spotted Seal</u>		<u>Sea Lion</u>	<u>Harbor Seal</u>	<u>Spotted Seal</u>
Used	0.0%	60.0%	Total Number Harvested	0.0	0.0	6.6
Hunted	0.0%	15.0%	Total Number Struck and Lost	0.0	0.0	4.4
Harvested	0.0%	15.0%	Total Number Taken	0.0	0.0	11.0
Received	0.0%	45.0%				
Gave Away	0.0%	15.0%	Number Harvested Per Capita	0.00	0.00	0.10

SEA LION HARVEST BY MONTH

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

HARBOR SEAL AND SPOTTED SEAL HARVEST BY MONTH

	Spotted Seal					Harbor Seal					Spotted Seal			Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)															
Harvest	0	0	0	1	1	0	0	0	0	0	4	0	0	0	6
Struck & Lost	0	0	0	1	0	0	0	0	0	0	3	0	0	0	4
Total Take	0	0	0	2	1	0	0	0	0	0	7	0	0	0	10
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	6.6
Struck & Lost	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	4.4
Total Take	0.0	0.0	0.0	2.2	1.1	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	11.0
ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)															
Harvest	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	0.0	4.4	0.0			6.6
Struck & Lost	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0			4.4
Total Take	0.0	0.0	0.0	2.2	1.1	0.0	0.0	0.0	0.0	0.0	7.7	0.0			11.0
Total Take (%)	0.0%	0.0%	0.0%	20.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	70.0%	0.0%			100.0%
Cum. Take	0.0	0.0	0.0	2.2	3.3	3.3	3.3	3.3	3.3	3.3	11.0	11.0			
Cum. Take (%)	0.0%	0.0%	0.0%	20.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	100.0%	100.0%			

SOURCE: BBNA Household Surveys, 2009.

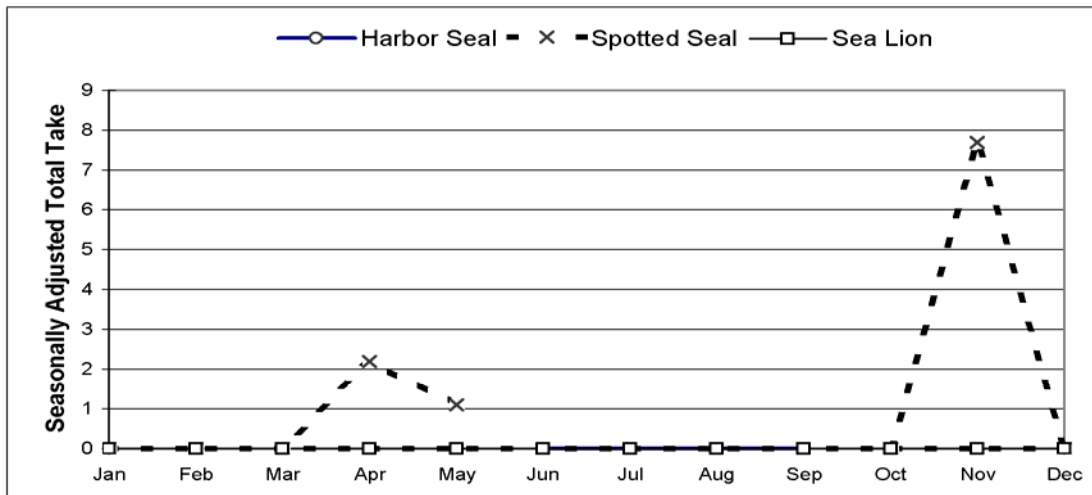
Table 63. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Twin Hills, 2008

HARVEST BY AGE AND SEX

	Sea Lion				Harbor Seal				Spotted Seal			
	Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)		Reported by Sample		Community Est. (Expanded)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Adult Male	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
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	---	1	16.7%	1.1	16.7%
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	---	1	16.7%	1.1	16.7%
Pup Female	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Male Unknown Age	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Female Unknown Age	0	---	0.0	---	0	---	0.0	---	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	---	0.0	---	0	---	0.0	---	4	66.7%	4.4	66.7%
Total	0	---	0.0	---	0	---	0.0	---	6	100.0%	6.6	100.0%

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

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



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

SEA LION				HARBOR SEAL				SPOTTED SEAL			
Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take	Year	Harvest	Struck/Lost	Total Take
1992	---	---	---	1992	---	---	---	1992	---	---	---
1993	---	---	---	1993	---	---	---	1993	---	---	---
1994	---	---	---	1994	---	---	---	1994	---	---	---
1995	---	---	---	1995	---	---	---	1995	---	---	---
1996	0.0	0.0	0.0	1996	23.3	6.5	29.8	1996	3.9	3.9	7.8
1997	0.0	0.0	0.0	1997	8.4	2.1	10.5	1997	2.1	1.1	3.2
1998	0.0	0.0	0.0	1998	2.2	2.2	4.4	1998	15.5	6.6	22.1
2000	0.0	0.0	0.0	2000	1.6	0.0	1.6	2000	6.6	1.6	8.2
2001	0.0	0.0	0.0	2001	0.0	0.0	0.0	2001	2.5	0.0	2.5
2002	0.0	0.0	0.0	2002	1.7	1.7	3.3	2002	10.0	1.7	11.7
2003	0.0	0.0	0.0	2003	5.6	1.4	7.0	2003	4.2	0.0	4.2
2004	1.2	0.0	1.2	2004	6.8	1.9	8.8	2004	1.4	0.4	1.8
2005	0.0	0.0	0.0	2005	2.5	0.0	2.5	2005	4.9	0.0	4.9
2006	0.0	0.0	0.0	2006	1.0	0.0	1.0	2006	4.0	4.0	8.0
2007	0.0	0.0	0.0	2007	1.0	2.0	3.0	2007	2.0	2.0	4.0
2008	0.0	0.0	0.0	2008	0.0	0.0	0.0	2008	6.6	4.4	11.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys 1992-1998; BBNA Household Surveys, 2000-2009.