

2009 Comprehensive Subsistence Harvest Survey

Savoonga, Alaska

Final Report for Agreement NA07NMF4720082

CFDA#11.472

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September 2011

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Abstract

This report assesses the subsistence harvest of numerous natural resources between January and December of 2009 in the northern St. Lawrence Island community of Savoonga, Alaska. The residents of Savoonga harvest a wide variety of natural resources for subsistence use. The most prevalent harvests, in terms of usable or edible pounds are marine mammals such as bowhead whale, walrus, bearded seal, spotted and ringed seals. Subsistence hunters and gatherers also harvest salmon and non-salmon fish, migratory birds, bird eggs, reindeer and a diverse assortment of plants, roots, berries and seaweeds.

Key Words

Subsistence, Traditional Ecological Knowledge (TEK), Local Traditional Knowledge (LTK), harvest assessment, subsistence harvests, Savoonga, Alaska.

Citation

Tahbone, Sandra T., Trigg, Eric W., 2010. 2009 Comprehensive Subsistence Harvest Survey, Savoonga, Alaska. Native Village of Savoonga, Kawerak, Inc., North Pacific Research Board, National Science Foundation, 2010.

Study Chronology

The Kawerak Subsistence Resources Program was contracted by the Native Village of Savoonga in August of 2008 to plan, conduct, and report on subsistence harvest as part of the Local and Traditional Knowledge (LTK) component of the National Science Foundation (NSF) Bering Sea Ecosystem Study (BEST), and the North Pacific Research Board (NPRB) Bering Sea Integrated Ecosystem Research Program (BSIERP), known as the BEST – BSIERP.

Introduction

The community of Savoonga is located on the northern shore of St. Lawrence Island, just north of the Kookooligit Mountains. The Native Village of Savoonga received funds to complete a Comprehensive Subsistence Harvest Survey under the BSIERP. The 2009 Comprehensive Subsistence Harvest Survey conducted in Savoonga is one of many components of the BEST – BSIERP Bering Sea Project, Understanding Ecosystem Processes in the Bering Sea, 2007 – 2012, funded by the NPRB, and the NSF. Seven other communities located on the Bering Sea are participating in the project. The seven

communities are Akutan - located in the eastern Aleutian Islands, Emmonak – located at the mouth of the Yukon River, St. Paul in the Pribilof Islands, Togiak – located on the north shore of Bristol Bay, and Nightmute, Toksook Bay and Tununak – all located on Nelson Island. The five year project seeks to understand how climate change and decreasing sea ice coverage affects the Bering Sea ecosystem and how it might be affected over time. The figure below shows the locations of participating communities from the NPRB website at: http://bsierp.nprb.org/images/region/comm_map_lg.jpg .



Figure 1. BSIERP participating communities

A sixteen page “at a glance” brochure providing more information on the BEST - BSIERP project can be viewed online at: http://doc.nprb.org/web/BSIERP/zzWebsite/proj_mgmt/01.10_bsag_web.pdf .

The community of Savoonga also participated in Kawerak’s Bering Strait Region Local and Traditional Knowledge Pilot Project, *A Comprehensive Subsistence Use Study of the Bering Strait Region* (Ahmasuk et. al 2007) funded by the NPRB. The study documented subsistence harvests in 12 regional communities for the period of July 2005 through June 2006. In the 2005-2006 survey 141 of 147 households in Savoonga, 95.9%, participated in the survey. Harvest data were collected for salmon, non-

salmon fish including clams and king crab, small land mammals, large land mammals, marine mammals, migratory birds and their eggs, and plants and berries. Where possible, subsistence harvests from the 2009 survey will be compared with the 2005-2006 harvest data. The Bering Strait Region Local and Traditional Knowledge Pilot Project, *A Comprehensive Subsistence Use Study of the Bering Strait Region* (Ahmasuk et. al 2007) will be referred to throughout this report as the “2005-2006 comprehensive survey”.

Objectives

The main objective of the project was to document subsistence harvest and use information of numerous resources by residents of Savoonga between January and December of 2009. Information collected include harvest numbers, resource usage, usable pounds of harvest, household member involvement in subsistence activities, household demographic information including household members age, gender, ethnicity, birthplace and length of residency in Savoonga. The tables in this report will quantify the percentages of households usually harvesting, attempting to harvest, harvesting, using, giving and receiving resources. Also, the estimated number of resources harvested, and usable or edible pounds harvested of salmon, non-salmon fin fish, large land mammals, small land mammals, marine mammals, migratory birds – waterfowl, seabirds and shorebirds, bird eggs, plant leaves and berries. **No harvest and other tables are shown for marine invertebrates and shellfish, beach seafood, plant roots and seaweed because common and scientific names for those resources are unknown at this time.** No tables showing household income, other income and household expenses are shown in this report due to reluctance of households to provide their personal income and expense information. Response rates to those questions were very low and would not be representative of the community’s personal income and expenses.

Common, Scientific and Siberian Yup’ik names of resources

Kawerak Subsistence Resources staff met with the Native Village of Savoonga residents to determine which natural resources harvested by residents of the community would be included in the survey instrument. Afterwards, a survey instrument was created for use in the survey.

Common and scientific names were not obtainable for eleven marine invertebrates/shellfish; all ten clams and shrimp. Common and scientific names were not available for eight beach seafood; all ‘Other’ beach

seafood (Other beach food 1-8). Common and scientific names were not obtainable for three plant leaves; small potato, other plants leaves 1 & 2; for fifteen plant roots; all 'Other root' plants – roots (Other root 1-15), and five seaweed (Other seaweed 1-3, 5 and 7). Two seaweeds were identified with assistance from Mandy Lindeberg with the National Oceanic and Atmospheric Association (NOAA). Tables listing known common, scientific and Siberian Yupik names for the resources included in the survey are shown in each section of this report.

Methods

Survey data including household demographics, subsistence harvest data were collected using a 27 page survey instrument. James Magdanz with the Alaska Department of Fish and Game (ADF&G), Division of Subsistence, provided Kawerak staff with a survey instrument template. The final survey instrument is located in Appendix 1. All survey data were entered in a Microsoft® Excel 2003 data file containing twenty one individual worksheets; one worksheet for each section and resource category of the survey instrument. Each individual worksheet was then transferred to PASW® Statistics 18.0 for Windows®, formerly known as SPSS, for data analysis. The PASW® Custom Tables 18.0 module was used to create harvest and other summary tables. The tables were then exported to Microsoft Excel and reformatted for this report.

Sample Collection

An existing household list of Savoonga residents on file with the Kawerak Subsistence Resources program was updated by a local surveyor. The list contained columns for the household's identification number, the head of household's name or names, and a column labeled "Comments", where surveyors noted if a household had either moved away, moved to another household, or were deceased. Blank rows were also provided to add new households who recently moved to the community.

After the household list was updated, a tracking sheet was created for surveyor use. Tracking sheets provide surveyors with a method to document their progress; recording the households they had interviewed and the households they still need to contact. The tracking sheet contains a survey name header, the community name and community code number, and the surveyor's name. There are nine columns in the main body of the tracking sheet. The first column lists the HH ID # or each individual household's identifier number. The second column lists the head of household's name or names. The following seven columns are used for recording contact results when surveyors contact or cannot contact

households. The first of the seven column labels is “Completed Survey”; the second column is labeled “Refused”; the third labeled “No Contact”; the fourth labeled “Moved Away”; the fifth column is labeled “Moved to other HH”; the sixth labeled “Deceased”, and the last column is a “Comments” column for any notes the surveyor may have describing problems contacting or interviewing households.

Survey sample

A sixty percent sample was attempted in the 2009 survey. Eighty two households were surveyed of a total 140 households in the community for 58.6% household participation. Table 1-1, Sampling and Participation lists the estimated and revised number of households in Savoonga, the number of households interviewed or the sample households, the number of households who refused to participate, the number of households not contacted, the number of households who had moved away or moved to another household, and the number of households who were deceased.

Data Processing and Analysis

Kawerak Subsistence Resources staff entered all survey data in a Microsoft Excel file. The Excel file contained twenty one worksheets; one worksheet for:

- a. Cover page (survey information)
- b. Household demographics
- c. Commercial fishing retention
- d. Salmon
- e. Other fish (non-salmon fin fish)
- f. Marine invertebrates/Shellfish
- g. Beach seafood
- h. Large land mammals
- i. Small land mammals
- j. Marine mammals
- k. Migratory birds – waterfowl, seabirds and shorebirds
- l. Bird eggs
- m. Plants – leaves
- n. Plants – roots
- o. Plants – berries

- p. Seaweed
- q. Survey assessment
- r. Employment
- s. Other income
- t. Expenses
- u. Comments

PASW Statistics 18 and PASW Custom Tables 18 software

PASW® Statistics 18, formerly known as SPSS - the Statistical Program for the Social Sciences, and PASW® Custom Tables 18 were used to create tables for this report. The SPSS software program can open or import data from many different file formats and software programs. The Excel harvest data file worksheets were then saved as SPSS files for the data analysis and harvest summary and other table creation. The 95% Confidence Limit (+/-) harvest percentages were calculated in SPSS using command syntax originally provided by ADF&G Information Management staff.

Statistical Formulas used for Subsistence Harvests provided by Information Management, Division of Subsistence, A.D.F. & G.

Listed below are formulas used in harvest data analysis. Computer software is used to calculate formulas. Following the formulas are descriptions of the mathematical symbols and descriptions of Data Expansion and the 95% Confidence Interval.

Harvest Expansion

$$x_e = x \times \left(\frac{N}{n} \right)$$

Sample Mean

$$\bar{x} = \frac{\sum x}{n}$$

Standard Deviation (single strata)

$$s = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$$

Variance

$$s^2 = \frac{\sum (x - \bar{x})^2}{n - 1}$$

Standard Error of the Mean (sometimes represented as SE)

$$S_{\bar{x}} = \frac{s}{\sqrt{n}}$$

Finite Population Correction (FPC)

$$FPC = \sqrt{\frac{N - n}{N - 1}}$$

Confidence Interval Percentage with Finite Population Correction

$$C.I. \% (\pm) = \frac{t_{\alpha/2} \times S_{\bar{x}}}{\bar{x}} \times FPC$$

Symbols and definitions

n = Number of households sampled in a community.

N = Number of households in the community or population.

x = Individual case value (i.e. harvest amount of a resource).

\bar{x} = Sample Mean for a community.

x_e = Expanded harvest amount.

Σ = Greek capital letter sigma means to find the sum.

$S_{\bar{x}}$ = Standard error of the mean.

FPC = Finite Population Correction.

$t_{\alpha/2}$ = Student's t statistic for given alpha level (α) with $n-1$ degrees of freedom (95% C.I. with $n-1$ degrees of freedom).

Data Expansion (Estimated harvests)

$$x_e = x \times \left(\frac{N}{n} \right)$$

The data expansion formula is used to make an estimate of total responses within a community for a particular resource. For quantitative questions, the amount indicated is used directly in the formula as 'x'. The key assumption is that the portion of the community not sampled has the same distribution of successfully harvesting households as the portion of the community that was sampled. This formula represents a simple scaling-up of known harvests to what we assume was harvested if the entire population was sampled.

95% Confidence Interval

$$C.I. \% (\pm) = \frac{t_{\alpha/2} \times S_x^-}{\bar{x}} \times FPC$$

The confidence interval is a measure of accuracy applied to harvest estimates. It basically states we are 95% confident the actual harvest amount, if it were known, is within +/- the confidence percentage. This means there is a 95% chance the actual harvest could be between C.I. % lower and C.I. % upper than estimated. A smaller percentage indicates a more accurate estimate. If the confidence interval percentage is 0%, it means either no expansion has taken place, (100% of the population was surveyed), or no resources were harvested. A large confidence interval, like 100% indicates lower accuracy and a higher possibility that the actual estimate could be twice as high or low. A more complete sample with less variable data will produce a more accurate estimate. Since the division of subsistence, (ADF&G), deals with small communities and large samples of those communities, the confidence interval also contains a finite population correction factor that makes the confidence interval a little more accurate.

Results

Household Data

In the 82 households surveyed, 99.5% of household members were Alaska Native. The typical household contained 5.0 members with an average age of 31.1 years. Sixty percent of household members reported harvesting wild resources, and nearly two-thirds of surveyed residents processed wild resources.

Household sampling, household demographics, household gender and ethnicity, household member age and length of residency, and household members who harvested or processed wild resources data are shown in the following six tables.

Table 1-1. Sampling and Participation

Estimated households	Total revised households	Completed survey	Refused	No contact	Moved away	Moved to other HH	Deceased
146	140	82	8	50	3	2	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 1-2. Household demographic data

	Mean	Minimum	Maximum
Household Size	5.0	1	11

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 1-3. Household gender and ethnicity

Household Member ID	Is person Male or Female		Is person Alaska Native	
	Male	Female	No	Yes
Head 1	65	17	1	81
Head 2	6	46	1	53
03	31	36	0	65
04	32	29	0	61
05	20	31	0	51
06	18	16	0	34
07	16	9	0	25
08	6	12	0	18
09	2	8	0	10
10	1	3	0	4
11	2	1	0	3
Total	199	208	2	405

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 1-4. Household member age and length of residency

Household Member ID	Estimated age			Number of years lived in Savoonga		
	Mean	Min	Max	Mean	Min	Max
Head 1	59.2	35	83	51.4	0	82
Head 2	52.5	23	76	46.5	0	75
03	25.4	2	53	19.6	0	52
04	17.6	1	50	14.2	0	49
05	13.9	0	54	10.2	0	53
06	10.6	1	25	7.0	0	24
07	8.3	1	20	4.7	0	19
08	5.1	1	14	2.7	0	13
09	1.8	1	4	0.7	0	3
10	2.0	1	3	0.5	0	2
11	3.5	3	4	1.7	0	3
Totals	31.1	0	83	24.0	0	82

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 1-5. Where were parents living when person born

Where parents living when born	Count
Anchorage	28
Bethel	1
California	1
Gambell	4
Kotzebue	2
Montana	1
Nome	97
NY	1
Savoonga	248
Stebbins	2
White Mountain	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 1-6. Household members harvesting and processing wild resources

Household Member ID	In 2009 did person Harvest wild resources		In 2009 did person Process wild resources	
	Yes		Yes	
	Count	Percent	Count	Percent
Head 1	65	79.3%	67	81.7%
Head 2	42	51.2%	49	59.8%
03	40	48.8%	43	52.4%
04	31	37.8%	32	39.0%
05	23	28.0%	27	32.9%
06	17	20.7%	17	20.7%
07	10	12.2%	13	15.9%
08	9	11.0%	10	12.2%
09	4	4.9%	6	7.3%
10	1	1.2%	2	2.4%
11	2	2.4%	2	2.4%
Totals	244	60.0%	268	65.8%

Source: Native Village of Savoonga, Kawerak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Usable Pounds

To determine the amount of usable pounds of resources harvested, average usable weights of subsistence harvested fish, game, marine mammals and plant life from the ADF&G Community Subsistence Information System (CSIS) were used for usable pound conversion factors. The conversion factors were entered manually in formulas in the original Excel data file. The CSIS Conversion Factor Summary webpage is available online at: <http://www.subsistence.adfg.state.ak.us/CSIS/> . After the harvest data was imported to SPSS, usable pounds and gallons harvested were converted to usable kilograms and liters harvested.

For several resources, conversion factors were not available. No usable pound conversion factors were available for small land mammals except the ground squirrel. No usable pound conversion factors were available for salmon shark and right whale, and five birds - guillemot, ivory gull, arctic tern, whimbrel and golden plover. Common or scientific names were not obtainable for all ‘Other beach seafood’ (Other beach seafood 1-9) resources, all ‘plants – roots’ (Other root 1-15) except the Roseroot. Three seaweed

resources were identified – Bladderwrack, Sieve kelp and Dragon kelp. A conversion factor of 1.6 pounds per gallon was used for all clams in the Marine Invertebrates/Shellfish category.

Resource Availability and Usage

When asked “Were there less, same, or more (resource) available in 2009 than in recent years”, many replies were left blank because the household did not use or harvest those resources. It would be safe to assume those replies could be compiled as “Don’t know” for all resources in this report, but the actual numbers of responses are recorded in the availability of resource tables. The majority of households responding believed there were less large land mammals (reindeer), marine mammals, birds and berries available in 2009; and also felt the same amount of salmon, other fish, marine invertebrates/shellfish, bird eggs, plant leaves, roots and seaweed available in 2009 than in recent years. Table 3-1 shows the counts and percents of responses to “Were there less, same, or more (resource) available in 2009 than in recent years?”

Respondents were also asked “Did your household use less, same, or more (resource) as in recent years”. Many respondents did not reply to this question for all species also. Those responses could be compiled as “Never use”, but again, the actual responses to the use less, same or more question are displayed in the tables for all resources. Though respondents believed there were less reindeer, marine mammals and birds, their use of these resources in 2009 were the same, while berries were both thought to be less available and were also used less. Availability of salmon and other fish was believed to be the same but use of salmon and other fish was reported as less than in previous years. Table 3-2 shows counts and percentages of responses to “Did your household use less, same, or more (resource) as in recent years?”

Two more questions asked for each resource category, (i.e. salmon), were asked with few responses. The first question was “Did your household notice changes in the condition of (resource category)?”, and the second, “Did your household receive (resource category) from outside the community?” Both questions were ‘Yes’ or ‘No’ questions and actual yes or no responses were reported in those tables shown later in this report.

Table 2-1. Were there less, same or more (resource) available than in recent years

Category	Were there less, same or more (resource)								
	Never use		Less		Same		More		Total count
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	
Salmon	3	11%	9	33%	12	44%	3	11%	27
Other fish	17	11%	32	21%	78	52%	22	15%	149
Marine Inv/Shellfish	7	18%	9	23%	17	44%	6	15%	39
Beach seafood	38	10%	124	34%	137	37%	71	19%	370
Large land mammals	14	31%	31	69%	0	0%	0	0%	45
Small land mammals	0	0%	1	100%	0	0%	0	0%	1
Marine mammals	12	22%	43	78%	0	0%	0	0%	55
Birds	16	30%	36	68%	1	2%	0	0%	53
Bird eggs	8	13%	6	10%	33	52%	16	25%	63
Plants-Leaves	31	21%	31	21%	73	50%	12	8%	147
Plants-Roots	4	6%	15	24%	37	59%	7	11%	63
Plants-Berries	6	8%	45	63%	15	21%	6	8%	72
Seaweed	10	10%	28	27%	55	53%	10	10%	103
All resources	166	14%	410	35%	458	39%	153	13%	1,187

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 2-2. Did the household use less, same or more (resource) in 2009 than previous years

Category	Did household use less, same or more (resource)								
	Never use		Less		Same		More		Total count
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	
Salmon	0	0%	11	65%	4	24%	2	12%	17
Other fish	0	0%	27	47%	24	42%	6	11%	57
Marine Inv/Shellfish	0	0%	15	43%	18	51%	2	6%	35
Beach seafood	0	0%	28	39%	32	44%	12	17%	72
Large land mammals	0	0%	8	18%	25	57%	11	25%	44
Small land mammals	0	0%	0	0%	0	0%	1	100%	1
Marine mammals	0	0%	16	30%	26	49%	11	21%	53
Birds	0	0%	18	35%	27	52%	7	13%	52
Bird eggs	0	0%	15	25%	31	53%	13	22%	59
Plants-Leaves	0	0%	18	36%	27	54%	5	10%	50
Plants-Roots	0	0%	16	48%	16	48%	1	3%	33
Plants-Berries	0	0%	28	61%	14	30%	4	9%	46
Seaweed	0	0%	22	42%	27	51%	4	8%	53
All resources	0	0%	222	39%	271	47%	79	14%	572

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Salmon

In the 2009 study, residents of Savoonga harvested an estimated 2,214.4 salmon with a mean per household harvest of 27.0 salmon. The primary salmon harvested were chum, coho and pink. In the 2005-2006 comprehensive survey, salmon were harvested along the St. Lawrence Island coast and coastal rivers east and southeast of Savoonga. Specific harvest areas reported were the Aivichtik River which flows into Flora Lake, then drains into the Bering Sea. Another nearby river, the Fossil River was also listed as a salmon fishing area - both rivers run to a fish camp area called Camp Iveetok. Another area where salmon were harvested was rivers and lakes by Tomname Lagoon, also southeast of Savoonga. Households also harvested salmon on the ‘south side of Savoonga’, but no specific locations were given.

Fourteen households received salmon from outside of the community. Dried and frozen salmon, along with other native foods, are often traded for ‘mungtuk’ with Seward Peninsula and Norton Sound mainland family and friends. Table 3-3 summarizes the estimated number of salmon harvested by gear type, total harvest, usable pounds of salmon harvested and household usage percentages by species.

Table 3-1. Salmon common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	Awisu
Sockeye Salmon	<i>Oncorhynchus nerka</i>	Awisu-Naayvam
Coho Salmon	<i>Oncorhynchus kisutch</i>	Kitaqa
Chum Salmon	<i>Oncorhynchus keta</i>	Tunguya
Pink Salmon	<i>Oncorhynchus gorbuscha</i>	Amaghtu

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 3-2. Households usually harvesting and using or trying to harvest salmon

Does household usually harvest salmon		In 2009 did household use or try to harvest salmon	
Yes		Yes	
Count	Percent	Count	Percent
43	52.4%	18	22.0%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 3-3. Estimated harvest and use of salmon

Native name	Resource	Percentage of Households						Pounds Harvested			Number Harvested					
		Usually harvest	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	Gillnet or seine	Rod n reel	Other gear	Total harvest	Mean per household	95% Conf Limit (+/-) Harvest
Awisu	Chinook	52%	6%	5%	5%	4%	2%	282.9	2.0	0.4	13.7	6.8	-	20.5	0.2	71.7%
Awisu-naayvam	Sockeye	52%	1%	1%	1%	1%	0%	72.0	0.5	0.1	17.1	-	-	17.1	0.2	128.5%
Kitaqa	Coho	52%	12%	12%	12%	9%	5%	2,460.7	17.6	3.5	230.5	305.6	-	536.1	6.5	49.0%
Tunguya	Chum	52%	9%	9%	9%	6%	2%	1,549.2	11.1	2.2	332.9	13.7	-	346.6	4.2	69.8%
Amaghtu	Pink	52%	10%	10%	10%	9%	5%	2,963.6	21.2	4.3	1,215.6	78.5	-	1,294.1	15.8	64.7%
All resources		52%	22%	22%	22%	16%	10%	7,328.5	52.3	10.5	1,809.8	404.6	-	2,214.4	27.0	92.8%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 3-4. Were there less, same or more salmon than in recent years

		Were there less, same or more salmon			
		Don't know	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Awisu	Chinook	0	1	2	0
Tunguya	Chum	1	3	3	0
Kitaqa	Coho	1	4	2	1
Amaghtu	Pink	1	1	4	2
Awisu-naayvam	Sockeye	0	0	1	0
All resources		3	9	12	3

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 3-5. Did household receive salmon from outside the community

Did household receive salmon from outside the community	
Yes	No
14	4

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 3-6. Did household use less, same or more salmon

		Did household use less, same or more salmon			
		Never use	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Tunguya	Chum	0	3	0	0
Kitaqa	Coho	0	5	0	1
Amaghtu	Pink	0	3	4	1
All resources		0	11	4	2

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 3-7. How and why was your use of salmon different

Why was use of salmon different	Count
Bigger fish come late in fall, net not in rivers, mostly on beach on the sea.	1
Didn't dry as much, none to give away, supported mother in law, not as much as other years.	1
Due to weather.	1
Just not time to catch.	1
Year before less this year more, notice people getting them.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 3-8. Did you notice changes in the condition of salmon

Did household notice changes in the condition of salmon	
Yes	No
3	14

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 3-9. If yes, please describe changes in salmon

If yes, please describe changes in salmon	Count
Some were kinda skinny.	1
With bear marks.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Other fish (Non-salmon)

In 2009, 55 of the 82 participating households reported harvesting at least one species of non-salmon finfish. Non-salmon fish are mainly harvested through the ice during winter months using homemade hand lines. An estimated 26,921.7 usable pounds of non-salmon were harvested by Savoonga residents in 2009. The main species harvested were arctic cod, tomcod, trout, grayling, and whitefish. Though the nearly 13 and ½ tons of non-salmon fish is the second highest category of resources harvested, it was still only 2.5% of the total poundage of resources harvested. Non-salmon harvest locations in the 2005-2006 comprehensive survey were similar to salmon harvest areas. Two locations were mentioned as the 'South side of Savoonga' locations; the Koozata River and Silook Camp, both south of the Kookooligit Mountains.

Table 4-1. Other fish common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Halibut	<i>Hippoglossus stenolepis</i>	Ivisa
Herring	<i>Clupea pallasii</i>	Puvangitaghq
Tom cod	<i>Microgadus proximus</i>	Nunaangiik
Arctic cod	<i>Boreogadus saida</i>	Iqalluwaq
Whitefish, Alaska	<i>Coregonus nelsonii</i>	
Whitefish, Broad	<i>Coregonus nasus</i>	
Whitefish, Humpback	<i>Coregonus pidschian</i>	Qupneq (whitefish)
Whitefish, Least cisco	<i>Coregonus sardinella</i>	
Whitefish, Round	<i>Prosopium cylindraceum</i>	
Smelt	<i>Osmerus mordax</i>	Teptaakrak
Grayling	<i>Thymallus arcticus</i>	Satuvak
Sculpin	<i>Scorpaeniformes</i>	Kayupik
Flounder	<i>Platichthys stellatus</i>	Ivisaaghaaq
Trout - unspecified	<i>Iteroparous Oncorhynchus</i>	Ivisaaghaaq
Pacific Cod (commercial fishing)	<i>Gadus macrocephalus</i>	Uukaq

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 4-2. Households usually harvesting and using or trying to harvest other fish

Does household usually harvest other fish		In 2009 did household use or try to harvest other fish	
Yes		Yes	
Count	Percent	Count	Percent
67	81.7%	59	72.0%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 4-3. Estimated harvest and use of other fish

Native name	Resource	Percentage of Households						Pounds Harvested			Number harvested					95% Conf Limit (+/-) Harvest
		Usually harvest	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	Gillnet or seine	Rod & reel	Other gear	Total harvest	Mean per household	
Ivisa	Halibut	82%	20%	18%	21%	13%	7%	5,418.4	38.7	7.8	-	44.4	226.5	270.9	3.3	52.7%
Puvangitaghaq	Herring	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	N/A
Nunaangiik	Tom Cod (Saffron Cod)	82%	29%	28%	29%	22%	6%	1,145.7	8.2	1.6	-	256.1	5,199.6	5,455.7	66.5	36.9%
Iqalluwaq	Arctic Cod (Blue Cod)	82%	32%	29%	32%	24%	9%	2,455.4	17.5	3.5	-	2,429.5	9,263.1	11,692.6	142.6	40.1%
Qupneq	Whitefish	82%	17%	16%	21%	15%	6%	6,604.9	47.2	9.5	2,108.3	93.3	-	2,201.6	26.8	48.2%
Teptaakrak	Smelt	82%	6%	6%	6%	5%	1%	69.4	0.5	0.1	51.8	-	443.9	495.7	6.0	68.2%
Satuvak	Grayling	82%	29%	28%	32%	26%	9%	1,641.2	11.7	2.4	768.3	266.3	1,309.9	2,344.6	28.6	29.6%
Kayupik	Bullhead (Sculpin)	82%	20%	20%	20%	12%	5%	398.0	2.8	0.6	-	119.5	676.6	796.1	9.7	36.4%
Ivisaaghaaq	Flounder	82%	2%	2%	2%	0%	0%	32.4	0.2	0.0	-	15.4	17.1	32.4	0.4	90.4%
Iqallupik	Trout (Unknown)	82%	50%	49%	51%	35%	15%	9,156.1	65.4	13.2	2,744.3	1,779.0	54.8	4,578.1	55.8	24.6%
Cod fish	Cod fish	82%	1%	0%	1%	0%	0%	-	-	-	-	-	-	-	-	N/A
Uukaq	Pacific Cod	82%	1%	1%	1%	1%	0%	-	-	-	-	-	34.1	34.1	0.4	N/A
All resources		82%	68%	67%	72%	56%	26%	26,921.7	192.3	38.7	5,672.7	5,003.6	17,225.6	27,901.9	340.3	63.3%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 4-4. Were there less, same or more other fish than in recent years

Native name	Resource	Were there less, same or more other fish			
		Don't know	Less	Same	More
		Count	Count	Count	Count
Ivisa	Halibut	3	3	7	1
Nunaangiik	Tom Cod (Saffron Cod)	1	6	11	2
Iqalluwaq	Arctic Cod (Blue Cod)	3	5	10	3
Qupneq	Whitefish	1	2	8	2
Teptaakrak	Smelt	0	0	4	1
Satuvak	Grayling	1	3	17	2
Kayupik	Bullhead (Sculpin)	1	2	8	3
Ivisaaghaaq	Flounder	0	0	2	0
Iqallupik	Trout (Unknown)	6	11	11	7
Cod fish	Cod fish	1	0	0	0
Uukaq	Pacific Cod	0	0	0	1
All resources		17	32	78	22

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 4-5. Did household receive other fish from outside the community

Did household receive other fish from outside the community	
Yes	No
35	22

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 4-6. Did household use less, same or more other fish

		Did household use less, same or more other fish			
		Never use	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Nunaangiik	Tom Cod (Saffron Cod)	0	2	0	0
Iqalluwaq	Arctic Cod (Blue Cod)	0	3	2	0
Satuvak	Grayling	0	4	4	0
Ivisaaghaaq	Flounder	0	1	0	0
Iqallupik	Trout (Unknown)	0	17	17	5
Cod fish	Cod fish	0	0	1	0
Uukaq	Pacific Cod	0	0	0	1
All resources		0	27	24	6

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 4-7. How and why was your use of other fish different

Why was use of other fish different	Count
Bad weather last year, too much wind.	1
Big grayling, cause of nature.	1
Death in the family.	1
Didn't do much, camp longer.	1
Didn't go out.	1
Didn't go southside, real early for fishing like salmon.	1
Gather more than other years, I like 'em.	1
Hard to get every year.	1
Hardly count em.	1
Not as many to dry, only have 30 left.	1
Nothing else except fishing, but for seal hunting.	1
Pacific cod & halibut more.	1
Received less.	1
Since commercial gotten less even smaller halibut.	1
Some came in late.	1
Usually we go out every year.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 4-8. Did you notice changes in the condition of other fish

Did household notice changes in condition of other fish	
Yes	No
2	54

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 4-9. If yes, please describe changes in other fish

If yes, please describe changes in other fish	Count
2 different types of grayling. One kind migrates and one stay, hibernate in mud. Every year Gambell & Savoonga what have seen there some fish, fish that come into the lagoon. They go out to grow up to the sea, mass amount goes to the river, south side maybe those commercial fishermen catch those salmon, not any more cause of those commercial fishermen, in one river he sees two kinds of trout. Late 1940's whitefish change in lagoon, abundance of that time, certain time the earth movement caused a sudden change in "nuna". That movement happened years ago, everythings collapsed in that area. Change of that area when whitefish everything got shallow over there cause of earth movement during freeze up time. It causes, that causes abundance of fish maybe foxes fed on them, less of whitefish for 5-10 years now back to normal.	1
2 years ago trout had some kind of worm in the skin on the side. Some kind of magget, small and thin from sea.	1
Getting smaller.	1
One ugly fish (bullhead) eyeball sist about the chicken egg.	1
Thank you bag for bait.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Marine Invertebrates/Shellfish

Common and scientific names are unknown for all clams; Clams – Walrus stomach, and Other clams 1-9. Residents of Savoonga harvest several species of clams. The most common or abundant clams are found in the stomachs of harvested Walrus. Harvest numbers for all unknown clam species were recorded in gallons (GAL) harvested and crab were recorded as individual (IND) harvests. A usable pounds conversion factor of 1.6 pounds per gallon for all clams was used to determine usable pounds harvested.

Residents harvested an estimated 256.3 gallons of the unknown clam species with a total estimated usable weight of 410.1 pounds. Three species of crab were also harvested in 2009. Residents harvested an

estimated 106.1 total crab with a usable weight of 222.7 pounds. Table 5-3 shows the estimated number and usable pounds of marine invertebrates/shellfish harvested by Savoonga residents in 2009.

Table 5-1. Marine invertebrates/shellfish common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Clams - Walrus stomach		Imanaq
Other clams 1		Nuvulqughnak
Other clams 2		Unegyuuk
Other clams 3		Tamuneq
Other clams 4		Quprughaq
Other clams 5		Kamekruk
Other clams 6		Uqlumrek
Other clams 7		Imanapiik
Other clams 8		Tapghaaghaq (Scallop)
Other clams 9		Kingupak
King Crab		Neghnapik
Red Crab	<i>Paralithodes camtschaticus</i>	Suflugtaq
Blue Crab	<i>Paralithodes platypus</i>	Neghnaq
Shrimp	<i>Caridea</i>	Kemegtungiiq

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 5-2. Households usually harvesting and using or trying to harvest marine invertebrates/shellfish

Does household usually harvest marine invertebrates/shellfish		In 2009 did your household use or try to harvest marine invertebrates/shellfish	
Yes		Yes	
Count	Percent	Count	Percent
45	55%	36	44%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 5-3. Estimated harvest and use of marine invertebrates/shellfish

Native name	Resource	Units	Percentage of Households						Pounds Harvested			Number harvested		
			Usually harvest	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	Total harvest	Mean per household	95% Conf Limit (+/-) Harvest
Imanaq	Clams - Walrus Stomach	GAL	55%	33%	33%	37%	24%	17%	254.4	1.8	0.4	159.0	1.9	26.2%
Nuvulqughnak	Other clams 1	GAL	55%	5%	5%	5%	4%	0%	49.2	0.4	0.1	30.7	0.4	89.2%
Unegyuk	Other clams 2	GAL	55%	0%	0%	0%	0%	0%	-	-	-	-	-	N/A
Tamuneq	Other clams 3	GAL	55%	1%	1%	1%	0%	0%	2.7	0.0	-	1.7	-	128.5%
Quprughaq	Other clams 4	GAL	55%	1%	1%	1%	0%	0%	2.7	0.0	-	1.7	-	128.5%
Kamekruk	Other clams 5	GAL	55%	2%	2%	2%	1%	0%	35.5	0.3	0.1	22.2	0.3	118.9%
Uqlumrek	Other clams 6	GAL	55%	1%	1%	1%	0%	0%	2.7	0.0	-	1.7	-	128.5%
Imanapiik	Other clams 7	GAL	55%	1%	1%	1%	0%	0%	2.7	0.0	-	1.7	-	128.5%
Tapghaaghaq	Other clams 8	GAL	55%	2%	2%	2%	0%	0%	57.4	0.4	0.1	35.9	0.4	122.5%
Kingupak	Other clams 9	GAL	55%	1%	1%	1%	0%	0%	2.7	0.0	-	1.7	-	128.5%
Neghnapik	King Crab	IND	55%	5%	5%	5%	0%	1%	93.2	0.7	0.1	44.4	0.5	78.0%
Suflughtaq	Red Crab	IND	55%	2%	2%	2%	1%	0%	36.3	0.3	0.1	17.3	0.2	127.0%
Neghnaq	Blue Crab	IND	55%	5%	5%	5%	2%	1%	93.2	0.7	0.1	44.4	0.5	84.1%
Kemegtungiiq	Shrimp	GAL	55%	0%	0%	0%	0%	0%	-	-	-	-	-	N/A
All resources		-	55%	42%	42%	44%	31%	18%	632.8	4.5	0.9	362.4	4.3	95.6%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 5-4. Were there less, same or more marine invertebrates/shellfish than in recent years

Native name	Resource	Were there less, same or more marine invertebrates/shellfish				
		Don't know	Less	Same	More	
		Count	Count	Count	Count	
Imanaq	Clams - Walrus Stomach		4	5	13	3
Nuvulqughnak	Other clams 1		1	1	0	1
Kamekruk	Other clams 5		0	0	0	1
Tapghaaghaq	Other clams 8		0	0	1	0
Neghnapik	King Crab		0	1	2	1
Suflughtaq	Red Crab		0	1	0	0
Neghnaq	Blue Crab		2	1	1	0
All resources			7	9	17	6

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 5-5. Did household receive marine invertebrates/shellfish from outside the community

Did household receive marine invertebrates/shellfish from outside the community	
Yes	No
24	10

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 5-6. Did household use less, same or more marine invertebrates/shellfish

Native name	Resource	Did household use less, same or more marine invertebrates/shellfish			
		Never use	Less	Same	More
		Count	Count	Count	Count
Imanaq	Clams - Walrus Stomach	0	9	11	1
Nuvulqughnak	Other clams 1	0	1	1	0
Kamekruk	Other clams 5	0	0	1	0
Kingupak	Other clams 9	0	0	0	1
Neghnapik	King Crab	0	1	3	0
Suflughtaq	Red Crab	0	2	0	0
Neghnaq	Blue Crab	0	2	2	0
All resources	All resources	0	15	18	2

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 5-7. How and why was your use of marine invertebrates/shellfish different

Why was use of marine invertebrates/shellfish different	Count
Allergic to crab.	1
Gave some away.	1
Less clam less use.	1
Only went one day.	1
Walrus tend to stay in iceberg for 5 days after eating those clams, go back to that same place after they ate.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 5-8. Did you notice changes in the condition of marine invertebrates/shellfish

Did household notice changes in condition of marine invertebrates/shellfish	
Yes	No
1	34

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 5-9. If yes, please describe changes in marine invertebrates/shellfish

If yes, please describe changes in marine invertebrates/shellfish	Count
Some of the legs of crabs were off.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Beach seafood

Researchers were unable to determine common and scientific names for 8 of the 9 beach seafood species, or usable pound conversion factors for all beach seafood. Sea Peach *Halocynthia pyriformis*, Siberian Yupik name “Uupa”, was the only beach seafood identified.

Nearly all households surveyed reported harvesting beach seafood. Residents harvested an estimated 2,082.3 gallons of the nine different beach seafood species. Ninety-six percent of surveyed households reported they usually harvest beach seafood and 91% used or tried to harvest beach seafood in 2009. For all beach seafood resources, 92% of households reported using, trying to harvest and harvesting beach seafood, 74% of households gave beach seafood and 40% received beach seafood. When asked if there were less, same or more beach seafood available in 2009 than in recent years, responses for all beach seafood were as follows: Same – 137, Less – 124, More – 71 and Don’t know - 38. Responses to “Did the household use less, same or more beach seafood as in recent years” were: Same – 32, More – 12, Less – 28 and Never use – 0. Twenty-eight households reported receiving beach seafood from outside the community.

Large Land Mammals

The only large land mammal residents of Savoonga harvest with regularity are reindeer. The Native Village of Savoonga owns a reindeer herd and members are permitted to harvest reindeer each year. Reindeer harvest numbers are reported harvest numbers and are not expanded. No confidence interval percentages are calculated when recording reported harvests. In the 2005-2006 comprehensive survey, 141 households in Savoonga reported harvesting 160 reindeer. In 2009, 82 households harvested a reported 86.5 reindeer.

Table 6-1. Large land mammal common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Reindeer	<i>Rangifer tarandus tarandus</i>	Quyniq
Caribou	<i>Rangifer tarandus</i>	Tungtu
Moose	<i>Alces alces</i>	Tungtuvak
Brown Bear	<i>Ursus arctos</i>	Kaynga

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 6-2. Households usually harvesting and using or trying to harvest large land mammals

Does household usually hunt for large land mammals		In 2009 did your household use or try to harvest large land mammals	
Yes		Yes	
Count	Percent	Count	Percent
60	73.2%	48	58.5%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 6-3. Reported harvest and use of large land mammals

Native name	Resource	Percentage of Households						Pounds Harvested			Number Harvested														
		Usually harvest	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	January	February	March	April	May	June	July	August	September	October	November	December	Unknown	Total harvest	Mean per household
Quyniq - Male	Reindeer - Male	73%	52%	51%	52%	39%	21%	10,650.0	76.1	15.3	7	3	-	-	-	3	12	23	4	2	10	5	2	71	0.9
Quyniq - Female	Reindeer - Female	73%	4%	4%	4%	4%	4%	750.0	5.4	1.1	-	-	-	-	-	1	-	1	-	-	-	-	3	5	0.1
Quyniq - Unknown	Reindeer - Unknown	73%	5%	5%	5%	5%	2%	1,575	11.3	2.3	-	-	-	-	-	-	1	1.5	-	-	1	0	7	10.5	0.1
Tungtu - Bull	Caribou - Bull	73%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tungtu - Cow	Caribou - Cow	73%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tungtu - Unknown	Caribou - Unknown	73%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tungtuvak - Bull	Moose - Bull	73%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tungtuvak - Cow	Moose - Cow	73%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tungtuvak - Unknown	Moose - Unknown	73%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kaynga - Female	Brown Bear - Female	73%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kaynga - Male	Brown Bear - Male	73%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kaynga - Unknown	Brown Bear - Unknown	73%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All resources		73%	59%	57%	59%	45%	24%	12,975.0	92.7	18.7	7	3	-	-	-	4	13	25.5	4	2	11	5	12	86.5	1.0

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 6-4. Were there less, same or more large land mammals than in recent years

Native name	Resource	Were there less, same or more large land mammals			
		Don't know	Less	Same	More
Quyniq - Male	Reindeer - Male	12	27	0	0
Quyniq - Female	Reindeer - Female	1	2	0	0
Quyniq - Unknown	Reindeer - Unknown	1	2	0	0
All resources		14	31	0	0

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 6-5. Did household receive large land mammals from outside the community

Did household receive large land mammals from outside the community	
Yes	No
32	14

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 6-6. Did household use less, same or more large land mammals

Native name	Resource	Did household use less, same or more large land mammals			
		Never use	Less	Same	More
Quyniq - Male	Reindeer - Male	0	7	20	10
Quyniq - Female	Reindeer - Female	0	0	3	0
Quyniq - Unknown	Reindeer - Unknown	0	1	2	1
All resources		0	8	25	11

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 6-7. How and why was your use of large land mammals different

Why was use of large land mammals different	Count
1940's reindeer over grazed.	1
Because family grew.	1
Cause that guy shot extra.	1
Didn't go out.	1
Eldest son is a different household.	1
Respondent won one as door prize.	1
The reindeer are producing quickly.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 6-8. Did you notice changes in the condition of large land mammals

Did household notice changes in condition of large land mammals	
Yes	No
1	44

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 6-9. If yes, please describe changes in large land mammals

If yes, please describe changes in large land mammals	Count
Concern about young people let bucks go out and hit other deer. Kill with broken legs.	1
Heard someone say run across sickly one and dispose of it.	1
They are healthier than the mainland, planning to put them to store, "sell them".	1
Usually if we see limping ones or sick one get rid of them, put them out of misery.	1
Year round harvest of deer = 6. One deer had club feet, fused lungs.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Small Land Mammals

Residents of Savoonga do not usually harvest small land mammals. In the 2005-2006 survey, no small land mammals were harvested. In 2009, one wolverine was harvested. When asked how and why was use of small land mammals different the respondent replied, "1st time in history."

Table 7-1. Small land mammal common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Wolf	<i>Canis lupus</i>	Amaa
Arctic Fox	<i>Vulpes lagopus</i>	Kaviiq
Red Fox	<i>Vulpes vulpes</i>	Kaviipik
Blue Fox	<i>Vulpes lagopus</i>	Qenghaghtu
Ground Squirrel	<i>Spermophilus parryii</i>	Sikik
Wolverine	<i>Gulo gulo</i>	

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 7-2. Households usually harvesting and using or trying to harvest small land mammals

Does household usually hunt small land mammals		In 2009 did your household use or try to harvest small land mammals	
Yes		Yes	
Count	Percent	Count	Percent
2	2.4%	1	1.2%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 7-3. Estimated harvest and use of small land mammals

Native name	Resource	Percentage of Households						Pounds Harvested			Number Harvested													95% Conf Limit (+/-) Harvest											
		Usually hunt	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	January	February	March	April	May	June	July	August	September	October	November	December	Unknown		Total harvest	Mean per household									
Amaa	Wolf	2%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Kaviiq	Arctic Fox	2%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Kavipik	Red Fox	2%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Qenghaghtu	Blue Fox	2%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Sikik	Ground Squirrel	2%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Wolverine	Wolverine	2%	1%	1%	1%	0%	0%	-	-	-	-	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
All resources		2%	1%	1%	1%	0%	0%	-	-	-	-	-	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	287.7%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 7-4. Were there less, same or more small land mammals than in recent years

Resource	Were there less, same or more small land mammals			
	Don't know	Less	Same	More
Wolverine	0	1	0	0
Total	0	1	0	0

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 7-5. Did household receive small land mammals from outside the community

Did household receive small land mammals from outside the community	
Yes	No
1	0

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 7-6. Did household use less, same or more small land mammals

Resource	Did household use less, same or more small land mammals			
	Never use	Less	Same	More
Wolverine	0	0	0	1
Total	0	0	0	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 7-7. How and why was your use of small land mammals different

Why was use of small land mammals different	Count
1st time in history.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 7-8. Did you notice changes in the condition of small land mammals

Did household notice changes in condition of small land mammals	
Yes	No
0	1

Source: Native Village of Savoonga, Kawerak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Marine Mammals

In terms of usable pounds, the main subsistence food sources for indigenous residents of Savoonga are marine mammals. Marine mammals comprised 93% of all known usable pounds harvested in 2009. In the 2005-2006 comprehensive survey, marine mammals were 88% of all usable pounds harvested in Savoonga. Walrus and Bearded seals are the most harvested in both harvest numbers and usable pounds. The majority of marine mammal harvests occur in the month of May when ice flows are more accessible to island residents in the northern Bering Sea. Although the survey sample or participating households in 2009 is notably lower than in the 2005-2006 comprehensive survey, expanded marine mammal total harvests declined by nearly half in 2009 compared to 2005-2006. This decline could be a result of our changing environment and sea ice decline in thickness and abundance.

After preliminary marine mammal harvest tables were reviewed by principle investigators, usable pounds of walrus were adjusted to mirror a former study, Conger and Magdanz 1990:7-8. In the study, researchers proposed a model of declining utility. The model assumed that for a given household the first walrus was fully utilized (770 pounds), the second walrus was 50 percent utilized (385 pounds), and the third and all subsequent walrus were 25 percent utilized (192.5 pounds). Using this model, estimated usable pounds of walrus were reduced from 740,483.7 pounds to 282,006.4 pounds. Total usable pounds of marine mammals harvested were reduced from 1,000,477.3 pounds to a total 542,000.0 pounds.

Table 8-1. Marine mammal common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Walrus	<i>Odobenus rosmarus divergens</i>	Ayveq
Bearded Seal	<i>Erignathus barbatus</i>	Maklak
Ringed Seal	<i>Pusa hispida</i>	Neghsapik
Ribbon Seal	<i>Histiophoca fasciata</i>	Kukupak
Spotted Seal	<i>Phoca largha</i>	Qazigyaq
Fur Seal	<i>Callorhinus ursinus</i>	Pightughseghaq
Stellar Sea Lion	<i>Eumetopias jubatus</i>	Ulghaaq
Porpoise	<i>Phocoenoides dalli</i>	Aghveqengertaq
Salmon Shark	<i>Lamna ditropis</i>	Kalngak
Sea Otter	<i>Enhydra lutris kenyoni</i>	Ari
Polar Bear	<i>Ursus maritimus</i>	Nanuq
Bowhead Whale	<i>Balaena mysticetus</i>	Aghvepik
Beluga	<i>Delphinapterus leucas</i>	Puugzaq
Grey Whale	<i>Eschrichtius robustus</i>	Angtughhaq
Minke Whale	<i>Balaenoptera acutorostrata</i>	Qungvughaq
Right Whale	<i>Eubalaena japonica</i>	Aghveghpak

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 8-2. Households usually harvesting and using or trying to harvest marine mammals

Does household usually hunt marine mammals		In 2009 did your household use or try to harvest marine mammals	
Yes		Yes	
Count	Percent	Count	Percent
70	85.4%	56	68.3%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 8-3. Estimated harvest and use of marine mammals

Native name	Resource	Percentage of Households						Pounds Harvested			Number Harvested													Total harvest	Mean per household	95% Conf Limit (+/-) Harvest	
		Usually hunt	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	January	February	March	April	May	June	July	August	September	October	November	December	Unknown				
Ayveq	Walrus	85%	61%	61%	61%	54%	30%	282,006.4	2,014.3	405.8	-	-	-	82.0	651.3	18.8	1.7	-	-	-	3.4	17.1	185.8	961.7	11.7	20.5%	
Maklak	Bearded Seal	85%	54%	52%	54%	41%	26%	126,547.8	903.9	182.1	-	-	12.0	20.5	211.7	13.7	1.7	-	6.8	1.7	1.7	-	31.5	301.3	3.7	23.1%	
Neghsapik	Ringed Seal	85%	34%	34%	34%	23%	17%	16,638.6	118.8	23.9	1.7	-	-	-	42.7	-	18.8	-	10.2	22.2	3.4	3.4	124.0	224.8	2.7	51.1%	
Kukupak	Ribbon Seal	85%	10%	10%	10%	7%	4%	3,758.7	26.8	5.4	-	-	-	-	3.4	-	-	-	-	32.4	3.4	-	10.8	50.1	0.6	72.7%	
Qazigyaq	Spotted Seal	85%	48%	46%	46%	33%	22%	26,211.6	187.2	37.7	-	-	-	-	31.0	-	8.5	22.2	41.0	46.1	5.1	-	113.5	267.5	3.3	29.5%	
Pightughseghaq	Fur Seal	85%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Ulghaaq	Sea Lion	85%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Aghveqengertaq	Porpoise	85%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Kalngak	Salmon Shark	85%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Ari	Sea Otter	85%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Nanuq	Polar Bear	85%	1%	1%	1%	0%	0%	635.1	4.5	0.9	-	-	-	1.7	-	-	-	-	-	-	-	-	-	-	1.7	0.0	128.5%
Aghvepik	Bowhead Whale	85%	7%	4%	9%	2%	5%	86,031.0	614.5	123.8	-	-	1.0	1.0	1.0	-	-	-	-	-	-	-	-	-	3.0	0.0	73.3%
Puugzaq	Belukha	85%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Angtughhaq	Gray Whale	85%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Qungwughaq	Minke Whale	85%	5%	1%	6%	1%	6%	170.7	1.2	0.2	-	-	-	-	-	-	-	0.9	-	-	-	-	-	-	0.9	0.0	128.5%
Aghveghpak	Right Whale	85%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
All resources	All resources	85%	13%	12%	13%	10%	6%	542,000.0	3,871.4	779.9	1.7	-	13.0	105.1	941.2	32.4	30.7	23.0	58.0	102.4	17.1	20.5	465.7	1,811.0	22.1	61.3%	

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 8-4. Were there less, same or more marine mammals than in recent years

		Were there less, same or more marine mammals			
		Don't know	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Ayveq	Walrus	1	5	0	0
Maklak	Bearded Seal	1	3	0	0
Neghsapik	Ringed Seal	1	1	0	0
Kukupak	Ribbon Seal	0	3	0	0
Qazigyaq	Spotted Seal	6	25	0	0
Nanuq	Polar Bear	0	1	0	0
Aghvepik	Bowhead Whale	1	2	0	0
Qungvughaq	Minke Whale	2	3	0	0
All resources		12	43	0	0

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 8-5. Did household receive marine mammals from outside the community

Did household receive marine mammals from outside the community	
Yes	No
43	12

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 8-6. Did household use less, same or more marine mammals

		Did household use less, same or more marine mammals			
		Never use	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Ayveq	Walrus	0	1	2	2
Maklak	Bearded Seal	0	3	1	0
Neghsapik	Ringed Seal	0	0	2	0
Kukupak	Ribbon Seal	0	2	1	0
Qazigyaq	Spotted Seal	0	9	15	7
Nanuq	Polar Bear	0	0	1	0
Aghvepik	Bowhead Whale	0	0	1	2
Qungvughaq	Minke Whale	0	1	3	0
All resources		0	16	26	11

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 8-7. How and why was your use of marine mammals different

Why was use of marine mammals different	Count
10 year period less.	1
Almost got minke, walrus stay under the ice. One group of walrus 20,000+ on Siberian side.	1
Cause people landed walrus, but minke whale.	1
Community Bowhead harvest.	1
Didn't get female.	1
Didn't go hunting that much in fall.	1
Don't go out for those by blinds, just what he want for himself, for eating in spring. Sometimes stay there until night at his camp in the 1940's. 30-40 back then for clothing and that.	1
Dried 6 gallon minke whale in the freezer, real good meat.	1
Got back late in season.	1
Had to take care of father.	1
I don't know.	1
Last year was good.	1
More from year before, less beared seal.	1
My sons get them.	1
Nephew give me more.	1
Oldest daughter was hunter.	1
Some years ice goes fast, last spring good for me.	1
Stored more than other years.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 8-8. Did you notice changes in the condition of marine mammals

Did household notice changes in condition of marine mammals	
Yes	No
15	37

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 8-9. If yes, please describe changes in marine mammals

If yes, please describe changes in marine mammals	Count
4 years ago one skinny walrus, every 3-5 yrs. I see diseased animal, once a stomach tumor, some skinny walrus have tapeworms.	1
At camp notice disease seal, green thing came out, just throw it back out.	1
Bad spotted livers on walrus.	1
Couple had some kind of yellow blubber.	1
Less seals, don't see as many.	1
Maklak (bearded seal) had worms in liver.	1
Occasionally we will see them, skinny or puss, we just harvest the tusks.	1
One bearded seal we sink it, should have taken sample. Skinny and smells, smell something bad, on top of ice. When they keep complaining I say sink it, should have sampled it for F & G.	1
One bearded seal with yellow blubber, usually don't get big bearded seal, usually go far out. It was old too. Took samples brought them over.	1
One seals blubber was yellow and thin.	1
One sick walrus from May.	1
One spotted seal didn't look healthy, spots in liver, stunk, blubber was discolored, appeared kinda skinny.	1
Some kind of lesion on the blubber, just cut it out one walrus had that, with a white heart.	1
Spotted seal had some kind of disease, lots of blood clots. Some kind of hole on back.	1
Usually don't get the ones with spotted livers, one rogue walrus.	1
We check the liver, check if it's good, the more fat the more healthy it is.	1
Young seals kinda skinny and dried, didn't take much meat off them.	1

Source: Native Village of Savoonga, Kawerak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Migratory Birds

With miles of coastal cliffs where seabird colonies typically breed, St. Lawrence Island is rich in seabirds. Common Murre, Cormorant and Auklets are main bird harvests for the residents of Savoonga. St. Lawrence Island also has an abundance of lowlands with ponds, lakes and lagoons for numerous waterfowl habitat to the south and southeast of the Kookooligit Mountains. Hunters harvested 21 different species or swan, geese, ducks, loons, cormorants, gulls and alcids in 2009. In the 2005-2006 comprehensive survey hunters harvested an estimated 19,774.1 birds of 26 different species. Table 9-3 shows the usage percentages, usable pounds harvested, and harvests by season of birds in 2009.

Table 9-1. Migratory bird common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Tundra Swan	<i>Cygnus columbianus</i>	Quuk
Sandhill Crane	<i>Grus canadensis</i>	Satelgaq
Black Brant	<i>Branta bernicla nigricans</i>	Teghqilkak
White Fronted Goose	<i>Anser albifrons</i>	Wilwitu
Lesser Canada Goose	<i>Branta canadensis parvipes</i>	Teghqilkagpak
Snow Goose	<i>Chen caerulescens caerulescens</i>	Kaangu
Emperor Goose	<i>Chen canagica</i>	Leghileq
Northern Pintail	<i>Anas acuta</i>	Qulvekesiiq
Northern Shoveler	<i>Anas clypeata</i>	Pekutaghraak
Harlequin	<i>Histrionicus histrionicus</i>	Qagiingiiq
Long-tailed Duck	<i>Clangula hyemalis</i>	Kang'Ghwaak / Ugeyiighaq (Male)
Red-breasted Merganser	<i>Mergus serrator</i>	Aqfasuk
Common Eider	<i>Somateria mollissima</i>	Qatepak/Metghaq
King Eider	<i>Somateria spectabilis</i>	Qengalek
Spectacled Eider	<i>Somateria fischeri</i>	livghaan
Steller's Eider	<i>Polysticta stelleri</i>	Aglekesegaq
Yellow-billed Loon	<i>Gavia adamsii</i>	Nangqwalek-Female
Red-throated Loon	<i>Gavia stellata</i>	Eghqaaq
Common Loon	<i>Gavia immer</i>	Yuwayu
Pacific Loon	<i>Gavia pacifica</i>	Melqupak
Auklet, Crested	<i>Aethia cristatella</i>	Sukilpaq
Auklet, Parakeet	<i>Aethia psittacula</i>	Suklugrak
Auklet, Least	<i>Aethia pusilla</i>	Akmaaliighaq
Murre, Common	<i>Uria aalge</i>	Alpa
Murre, Thick-billed	<i>Uria lomvia</i>	Alpapik/Quwaaghet
Cormorant	<i>Phalacrocorax pelagicus</i>	Ngelqaq
Kittiwake	<i>Rissa tridactyla</i>	Qaqsungiq
Guillemot, Black	<i>Cepphus grylle</i>	Samseghhaghaq
Ivory gull	<i>Pagophila eburnea</i>	Kuruwiiq
Mew Gull	<i>Larus canus</i>	Ungazim Naghuyangi
Glaucous Gull	<i>Larus glaucescens</i>	Naghuyapik
Arctic Tern	<i>Sterna paradisaea</i>	Tekeyiighaq
Puffin, Tufted	<i>Fratercula cirrhata</i>	Pagrugaq
Puffin, Horned	<i>Fratercula corniculata</i>	Quprughaq
Whimbrel	<i>Numenius phaeopus</i>	Sugtuvak
Golden Plover	<i>Pluvialis dominica</i>	Sagilmak

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 9-2. Households usually harvesting and using or trying to harvest migratory birds

Does household usually harvest birds		In 2009 did household use or try to harvest birds	
Yes		Yes	
Count	Percent	Count	Percent
67	81.7%	53	64.6%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 9-3. Estimated harvest and use of migratory birds

Native name	Resource	Percentage of Households						Pounds Harvested			Number harvested						95% Conf Limit (+/-) Harvest	
		Usually hunt	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	Winter	Spring	Summer	Fall	Unknown	Total harvest		Mean per household
Quuk	Tundra Swan	82%	1%	1%	1%	0%	0%	19.1	0.1	0.0	-	1.7	-	-	-	1.7	0.0	128.5%
Satelgaq	Sandhill Crane	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Teghqilkak	Brant	82%	13%	13%	13%	9%	0%	411.8	2.9	0.6	-	70.0	-	110.6	-	180.6	2.2	49.3%
Wilwitu	White-fronted Goose	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Teghqilkagpak	Lesser Canada Goose	82%	4%	4%	4%	2%	0%	105.4	0.8	0.2	-	8.5	-	18.8	-	27.3	0.3	73.6%
Kaangu	Lesser Snow Goose	82%	20%	20%	23%	11%	7%	1,420.4	10.1	2.0	-	-	-	356.0	-	356.0	4.3	41.6%
Qulvekesiiq	Northern Pintail	82%	1%	1%	1%	0%	0%	16.0	0.1	0.0	-	10.2	-	-	-	10.2	0.1	128.5%
Pekutaghraak	Northern Shoveler	82%	1%	1%	1%	0%	0%	9.3	0.1	0.0	-	8.5	-	-	-	8.5	0.1	128.5%
Qagiingiiq	Harlequin duck	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Kang'ghwaak / (male) ugeyiighaq	Long-tailed duck	82%	1%	1%	1%	0%	0%	6.9	0.0	0.0	-	5.1	-	-	-	5.1	0.1	128.5%
Aqfasuk	Red-breasted Merganser	82%	4%	4%	4%	1%	1%	12.5	0.1	0.0	-	5.1	-	5.1	-	10.2	0.1	79.4%
Qatepak/Metghaq	Common Eider	82%	21%	21%	21%	11%	4%	1,154.7	8.2	1.7	1.3	104.2	6.8	165.9	0.0	278.2	3.4	35.0%
Qengalek	King Eider	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Eghqaaq	Red-throated Loon	82%	1%	1%	1%	0%	0%	58.6	0.4	0.1	-	-	-	20.5	-	20.5	0.2	128.5%
Yuwayu	Common Loon	82%	12%	12%	12%	6%	2%	548.0	3.9	0.8	-	5.1	3.4	92.2	-	100.7	1.2	49.3%
Melqupak	Pacific Loon	82%	4%	4%	4%	4%	0%	165.4	1.2	0.2	-	-	-	51.2	-	51.2	0.6	82.6%
Sukilpaq	Crested Auklet	82%	12%	12%	12%	7%	2%	247.2	1.8	0.4	-	525.9	-	-	-	525.9	6.4	41.7%
Suklugrak	Parakeet Auklet	82%	1%	1%	1%	1%	0%	18.1	0.1	0.0	-	34.1	-	-	-	34.1	0.4	128.5%
Akmaaliighaq	Least Auklet	82%	2%	2%	2%	2%	1%	6.0	0.0	0.0	-	42.7	-	-	-	42.7	0.5	105.7%
Alpa	Common Murre	82%	56%	56%	57%	35%	17%	6,075.4	43.4	8.7	-	3,494.2	-	187.8	-	3,682.0	44.9	20.1%
Alpapik/Quwaaghet	Thick-billed Murre	82%	2%	2%	2%	2%	0%	337.2	2.4	0.5	-	213.4	-	-	-	213.4	2.6	118.6%
Ngelqaq	Cormorant	82%	30%	30%	30%	21%	7%	2,623.8	18.7	3.8	-	-	95.6	953.9	-	1,049.5	12.8	33.9%
Qaqsungiq	Kittiwake	82%	1%	1%	1%	1%	0%	34.1	0.2	0.0	-	-	-	17.1	-	17.1	0.2	128.5%
Samseghhaghaq	Guillemot	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Kuruwiiq	Ivory Gull	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Ungazim Naghuyangi	Mew Gull	82%	1%	1%	1%	1%	0%	57.6	0.4	0.1	-	-	-	20.5	-	20.5	0.2	128.5%
Naghuyapik	Glaucous Gull	82%	4%	4%	4%	2%	0%	268.7	1.9	0.4	-	-	20.5	75.1	-	95.6	1.2	88.4%
Tekeyiighaq	Arctic Tern	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Pagruqaq	Tufted Puffin	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Quprughaq	Horned Puffin	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Sugtuvak	Whimbrel	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Sagilmak	Golden Plover	82%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
All resources		82%	63%	63%	65%	43%	20%	13,596.1	97.1	19.6	1.3	4,529.0	126.3	2,074.7	0.0	6,731.3	82.1	87.3%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 9-4. Were there less, same or more migratory birds than in recent years

		Were there less, same or more birds			
		Don't know	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Quuk	Tundra Swan	1	0	0	0
Kaangu	Lesser Snow Goose	1	2	0	0
Qatepak / Metghaq	Common Eider	0	2	0	0
Alpa	Common Murre	10	12	0	0
Ngelqaq	Cormorant	3	18	1	0
Naghuyapik	Glaucous Gull	1	2	0	0
All resources		16	36	1	0

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 9-5. Did household receive migratory birds from outside the community

Did household receive birds from outside the community	
Yes	No
37	16

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 9-6. Did household use less, same or more migratory birds

		Did household use less, same or more birds			
		Never use	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Quuk	Tundra Swan	0	1	0	0
Kaangu	Lesser Snow Goose	0	3	0	0
Qatepak / Metghaq	Common Eider	0	1	0	1
Alpa	Common Murre	0	8	11	3
Ngelqaq	Cormorant	0	5	13	3
Naghuyapik	Glaucous Gull	0	0	3	0
All resources		0	18	27	7

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 9-7. How and why was your use of migratory birds different

Why was use of birds different	Count
Cost of ammunition.	1
Didn't hunt much, just to change your diets.	1
Didn't hunt much.	1
Hang and dry them.	1
No murre at Puduk Island.	1
Pellet gun broke.	1
Process, dry em, etc. Skin and hang.	1
Recall now, give some.	1
Sometimes come back empty.	1
Stored less.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 9-8. Did you notice changes in the condition of migratory birds

Did household notice changes in condition of birds	
Yes	No
1	51

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 9-9. If yes, please describe changes in migratory birds

If yes, please describe changes in birds	Count
One murre with lots of worms.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Bird Eggs

Egg gatherers have the option of cliffs to the east and west of Savoonga to harvest bird eggs. Common Murre eggs are undeniably the most prevalent bird egg harvested on St. Lawrence Island. Egg gatherers also collect Thick-billed Murre, Cormorant, King Eider, Auklet and Gull eggs. In 2009, eggers harvested

an estimated 45,599 eggs, of which 99.1% were Common Murre eggs. In the 2005-2006 comprehensive survey residents harvested an estimated 59,427.6 eggs. Of those eggs, 97.6% were Murre eggs.

Table 10-1. Bird egg common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Emperor Goose	<i>Chen canagica</i>	Leghllaq
King Eider	<i>Somateria spectabilis</i>	Qengalek
Spectacled Eider	<i>Somateria fischeri</i>	livghaan
Yellow-billed Loon	<i>Gavia adamsii</i>	Nangqwalek-Female
Auklet, Crested	<i>Aethia cristatella</i>	Sukilpaq
Auklet, Parakeet	<i>Aethia psittacula</i>	Suklugrak
Auklet, Least	<i>Aethia pusilla</i>	Akmaaliighaq
Murre, Common	<i>Uria aalge</i>	Alpa
Murre, Thick-billed	<i>Uria lomvia</i>	Alpapik/Quwaaghet
Cormorant	<i>Phalacrocorax pelagicus</i>	Ngelqaq
Kittiwake	<i>Rissa tridactyla</i>	Qaqsungiq
Mew Gull	<i>Larus canus</i>	Ungazim Naghuyangi
Glaucous Gull	<i>Larus glaucescens</i>	Naghuyapik
Golden Plover	<i>Pluvialis dominica</i>	Sagilmak

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 10-2. Households usually harvesting and using or trying to harvest bird eggs

Does household usually harvest bird eggs		In 2009 did your household use or try to harvest bird eggs	
Yes		Yes	
Count	Percent	Count	Percent
73	89.0%	63	76.8%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 10-3. Estimated harvest and use of bird eggs

Native name	Resource	Percentage of Households						Pounds Harvested			Number Harvested							
		Usually hunt	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	Winter	Spring	Summer	Fall	Unknown	Total harvest	Mean per household	95% Conf Limit (+/-) Harvest
Qengalek	King Eider eggs	89%	5%	5%	5%	2%	0%	17.6	0.1	0.0	-	116.1	-	-	1.4	117.5	1.4	82.8%
Sukilpaq	Crested Auklet eggs	89%	1%	1%	1%	1%	1%	2.0	0.0	0.0	-	41.0	-	-	-	41.0	0.5	128.5%
Suklugrak	Parakeet Auklet eggs	89%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Akmaaliighaq	Least Auklet eggs	89%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Alpa / Tagitugiiq (quuqiiq)	Common Murre eggs	89%	76%	76%	77%	56%	37%	10,989.7	78.5	15.8	-	40,794.2	3,824.4	-	550.5	45,169.1	550.8	32.9%
Alpapak / Quwaaghet	Thick-billed Murre eggs	89%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Ngelqaq	Cormorant eggs	89%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Qaqsungiq	Kittiwake eggs	89%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
Ungazim Naghuyangi	Mew Gull eggs	89%	2%	2%	2%	1%	0%	17.9	0.1	0.0	-	59.8	-	-	-	59.8	0.7	111.5%
Naghuyapik	Glaucous Gull Eggs	89%	6%	6%	6%	1%	0%	63.5	0.5	0.1	-	211.7	-	-	-	211.7	2.6	79.5%
Sagilmak	Golden Plover eggs	89%	0%	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	N/A
All resources		89%	76%	76%	77%	56%	37%	11,090.9	79.2	16.0	-	41,222.7	3,824.4	-	551.9	45,599.0	556.1	131.3%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 10-4. Were there less, same or more bird eggs than in recent years

Native name	Resource	Were there less, same or more eggs			
		Don't know	Less	Same	More
		Count	Count	Count	Count
Qengalek eggs	King Eider eggs	0	0	3	0
Sukilpaq eggs	Crested Auklet eggs	0	0	1	0
Alpa / Tagitugiiq (quuqiiq) eggs	Common Murre eggs	6	5	27	15
Ungazim naghuyangi eggs	Mew Gull eggs	1	0	1	0
Naghuyapik eggs	Glaucous Gull Eggs	1	1	1	1
All resources		8	6	33	16

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 10-5. Did household receive bird eggs from outside the community

Did household receive eggs from outside the community	
Yes	No
39	19

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 10-6. Did household use less, same or more bird eggs

Native name	Resource	Did household use less, same or more eggs			
		Never use	Less	Same	More
		Count	Count	Count	Count
Alpa / Tagitugiiq (quuqiiq) eggs	Common Murre eggs	0	15	27	10
Ungazim naghuyangi eggs	Mew Gull eggs	0	0	1	0
Naghuyapik eggs	Glaucous Gull Eggs	0	0	2	3
All resources		0	15	31	13

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 10-7. How and why was your use of bird eggs different

Why was use of eggs different	Count
Cause I'm busy to go out.	1
Depending on transportation.	1
Depends on the weather.	1
Didn't go out very much.	1
Don't know for sure, we have a share.	1
Mostly more than 5 miles from SVA.	1
Store away, distribute to friends & relatives.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 10-8. Did you notice changes in the condition of bird eggs

Did household notice changes in condition of eggs	
Yes	No
1	57

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 10-9. If yes, please describe changes in bird eggs

If yes, please describe changes in eggs	Count
Strange egg, a large 5" egg, giant murre.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Plants – Leaves

Savoonga residents harvested an estimated 1,507.2 gallons of 20 different species of plants-leaves, plants-roots and plants-berries in 2009; of those 956.4 gallons were plants-leaves. In the 2005-2006 comprehensive survey, gatherers harvested 1,273.5 gallons of Sourdock, Stinkweed and Willow leaves. Table 11-3 shows the household usage percents, usable pounds and gallons of plants-leaves harvested in

2009. No usable pounds were available for Willow leaves. The harvest unit for plants-leaves, plants-roots and plants-berries are in gallons (GAL).

Table 11-1. Plants – leaves common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Willow Leaves	<i>Salix pulchra</i>	Ququngaq
Sourdock	<i>Rumex arcticus</i>	Alqegkaq
Wild Celery	<i>Apium graveolens</i>	Tepluk
Small potato		Uulqiq
Labrador Tea	<i>Ledum palustre</i>	Qayughqun
River beauty	<i>Chamerion latifolium</i>	Angukaq
Saxifrage	<i>Saxifraga nelsoniana ssp. nelsoniana</i>	Amluuqiirak
Grass	<i>Graminae species</i>	Pigineghqat
Roseroot (plant)	<i>Sedum rosea</i>	Nunivak
Stinkweed	<i>Artemisia tilesii</i>	Riiglluk
Other plant leaves 1		Quwelngiq
Other plant leaves 2		Ungllevnarak

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 11-2. Households usually harvesting and using or trying to harvest plants – leaves

Does household usually harvest plants-leaves		In 2009 did your household use or try to harvest plants-leaves	
Yes		Yes	
Count	Percent	Count	Percent
65	79.3%	54	65.9%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 11-3. Estimated harvest and use of plants – leaves

Native name	Resource	Percentage of Households						Pounds Harvested			Number Harvested (GAL)		
		Usually gather	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	Total harvest	Mean per household	95% Conf Limit (+/-) Harvest
Ququngaq	Willow leaves	79%	34%	34%	35%	15%	9%	-	-	-	70.9	0.9	24.8%
Alqegkaq	Sourdock	79%	23%	23%	24%	13%	6%	77.3	0.6	0.1	77.3	0.9	33.6%
Tepluk	Angelica - Wild Celery	79%	13%	13%	15%	7%	2%	49.5	0.4	0.1	49.5	0.6	53.6%
Uulqiq	Small Potato	79%	0%	0%	0%	0%	0%	-	-	-	-	-	N/A
Qayughqun	Labrador Tea	79%	1%	1%	1%	0%	0%	5.1	0.0	0.0	5.1	0.1	128.5%
Angukaq	River Beauty	79%	43%	43%	44%	29%	15%	134.9	1.0	0.2	134.9	1.6	21.6%
Amlluuqiirak	Saxifrage - White flower	79%	10%	10%	10%	2%	1%	15.8	0.1	0.0	15.8	0.2	61.6%
Pigineghqat	Grass	79%	0%	0%	0%	0%	0%	-	-	-	-	-	N/A
Nunivak	Roseroot (plant)	79%	52%	51%	54%	37%	27%	448.5	3.2	0.6	448.5	5.5	21.5%
Riiglluk	Stinkweed	79%	7%	7%	7%	4%	1%	128.0	0.9	0.2	128.0	1.6	111.5%
Quwelngiq	Other plant leaves 1	79%	17%	17%	17%	10%	4%	26.5	0.2	0.0	26.5	0.3	44.9%
Ungllevnarak	Other plant leaves 2	79%	0%	0%	0%	0%	0%	-	-	-	-	-	N/A
All resources		79%	65%	63%	66%	44%	32%	885.5	6.3	1.3	956.4	11.7	68.3%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 11-4. Were there less, same or more plants - leaves than in recent years

		Were there less, same or more plants-leaves			
		Don't know	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Ququngaq	Willow leaves	6	3	13	3
Alqegkaq	Sourdock	4	3	10	0
Tepluk	Angelica - Wild Celery	3	3	3	0
Qayughqun	Labrador Tea (Hudson Bay tea)	0	1	0	0
Angukaq	River Beauty	5	7	16	4
Amlluuqiirak	Saxifrage - White flower	4	1	3	0
Nunivak	Roseroot (plant)	6	9	19	5
Riiglluk	Stinkweed	0	2	2	0
Quwelngiq	Other plant leaves 1	3	2	7	0
All resources		31	31	73	12

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 11-5. Did household receive plants - leaves from outside the community

Did household receive plants-leaves from outside the community	
Yes	No
29	22

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 11-6. Did household use less, same or more plants – leaves

		Did household use less, same or more plants-leaves			
		Never use	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Ququngaq	Willow leaves	0	3	0	0
Angukaq	River Beauty	0	1	3	0
Nunivak	Roseroot (plant)	0	10	14	4
Riiglluk	Stinkweed	0	1	0	0
Quwelngiq	Other plant leaves 1	0	3	10	1
All resources		0	18	27	5

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 11-7. How and why was your use of plants - leaves different

Why was use of plants-leaves different	Count
"Pulik" real quick, bloom ripe real quick.	1
Bring us share we eat.	1
Cause of the nunivak (roseroot plant) usually more than 15 gallons.	1
Climate change.	1
Dependiing on transportation.	1
Didn't go out much.	1
Didn't pick as much.	1
I walk for greens, walk 4-5 miles, no honda.	1
Nunivak more.	1
Patches getting smaller.	1
Sun spoils them fast sometimes.	1
Used to get nearby but lots of dumps now.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 11-8. Did you notice changes in the condition of plants – leaves

Did household notice changes in condition of plants-leaves	
Yes	No
4	46

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 11-9. If yes, please describe changes in plants - leaves

If yes, please describe changes in plants-leaves	Count
Brown early this year, had limited time to pick them.	1
Kinda cold for greens.	1
Last year greens kinda thin. Some years dry cause of weather. Some years lots of rain, cause of weather. For me growing up fast and drying up fast. Some year grown-up end of June. Getting earlier to grown. I think it's warmer, less snow. Used to go by walk, picking greens with old ladies. Snow is not falling like it used to be. Still picking up greens. Used to have a 50 pound flour bag.	1
Sorta dried up.	1
Weathered, some kind of discoloration, maybe dried. Tend to grow thin.	1
When they build that road, we quit going there cause of dust.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Plants – Roots

Again, common and scientific names for 15 of the 16 plants-roots species were not available, as well as usable pound conversion factors for all plants-roots. The Roseroot root *Rhodiola rosea*, Siberian Yupik name “Saqlak”, was the lone plants-root species identified. Households harvested an estimated 141.4 gallons of eight of the 16 plants-roots species. Sixty-seven percent of households surveyed usually harvest plants-roots, though in 2009, 43% used or tried to harvest plants-roots. Overall, 43% of households reported using, trying to harvest and harvesting plants-roots, 20% of households gave plants-roots and 9% received plants-roots. Responses to the availability of plants-roots in 2009 were: Same – 37, Less – 15, More – 7 and Don’t know – 4. Replies to the usage of plants-roots compared to previous years were: Same – 16, Less – 16, More – 1 and Never use – 0. Twenty-two households received plants-roots from outside the community.

Plants – Berries

Berries are a delicacy in the diet of many people in the Bering Strait/Norton Sound Region. Residents of Savoonga harvested an estimated 409.4 gallons of blueberries, salmonberries and blackberries in 2009. In the 2005-2006 comprehensive survey residents harvested 1,458 gallons of blackberries, cranberries, currants and salmonberries. Table 12-3 shows the household usage percents, usable pounds and gallons of plants-berries harvested in 2009.

Table 12-1. Plants – berries common, scientific and Yupik names

Common name	Scientific name	Siberian Yupik name
Currants	<i>Ribes species</i>	
Blueberry	<i>Vaccinium uliginosum</i>	Pagunghaq
Salmonberry	<i>Rubus spectabilis</i>	Aqavzik
Blackberry	<i>Empetrum nigrum</i>	Pagunghaq
Cranberry	<i>Vaccinium vitis-idaea</i>	Kiitmik
Raspberry	<i>Rubus idaeus</i>	
Bear berry	<i>Arctostaphylos uva-ursi</i>	Kaavlak

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 12-2. Households usually harvesting and using or trying to harvest berries

Does household usually harvest berries		In 2009 did your household use or try to harvest berries	
Yes		Yes	
Count	Percent	Count	Percent
68	82.9%	49	59.8%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 12-3. Estimated harvest and use of berries

Native name	Resource	Percentage of Households						Pounds Harvested			Number Harvested (GAL)		
		Usually gather	Attempt to harvest	Harvest	Use	Give	Receive	Total pounds	Mean per household	Mean per capita	Total harvest	Mean per household	95% Conf Limit (+/-) Harvest
Currants	Currants	82.9%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	N/A
Pagunghaq	Blueberries	82.9%	11.0%	11.0%	11.0%	6.1%	3.7%	158.8	1.1	0.2	39.7	0.5	48.6%
Aqavzik	Salmonberries	82.9%	37.8%	34.1%	40.2%	22.0%	20.7%	792.2	5.7	1.1	198.0	2.4	29.7%
Pagunghapik	Blackberries	82.9%	46.3%	42.7%	46.3%	24.4%	18.3%	686.6	4.9	1.0	171.6	2.1	31.6%
Kiitmik	Cranberries	82.9%	2.4%	0.0%	2.4%	1.2%	0.0%	-	-	-	-	-	N/A
Raspberries	Raspberries	82.9%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	N/A
Kaavlak	Bear berry	82.9%	1.2%	0.0%	1.2%	1.2%	0.0%	-	-	-	-	-	N/A
All resources		82.9%	58.5%	54.9%	58.5%	30.5%	26.8%	1,637.5	11.7	2.4	409.4	5.0	56.5%

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 12-4. Were there less, same or more berries than in recent years

		Were there less, same or more berries			
		Don't know	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Pagunghaq	Blueberries	2	4	2	1
Aqavzik	Salmonberries	2	21	6	2
Pagunghapik	Blackberries	2	17	7	3
Kiitmik	Cranberries	0	2	0	0
Kaavlak	Bear berry	0	1	0	0
All resources		6	45	15	6

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 12-5. Did household receive berries from outside the community

Did household receive berries from outside the community	
Yes	No
32	16

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 12-6. Did household use less, same or more berries

		Did household use less, same or more berries			
		Never use	Less	Same	More
Native name	Resource	Count	Count	Count	Count
Currants	Currants	0	2	0	0
Pagunghaq	Blueberries	0	1	0	0
Aqavzik	Salmonberries	0	5	5	0
Pagunghapik	Blackberries	0	19	9	4
Kaavlak	Bear berry	0	1	0	0
All resources		0	28	14	4

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 12-7. How and why was your use of berries different

Why was use of berries different	Count
Bad weather and hardly any aqavzik, mostly from southside. Trying to trade mangtak for salmonberries.	1
Cold summer, lots of rain, no salmonberries, got some from mom in Nome.	1
Death in family.	1
Different type of snow condition, too much rain.	1
Dry season.	1
Due to global warming.	1
Every year get less.	1
Hardly any salmonberries at South side.	1
Last year we hardly had any.	1
Less salmonberries, cold, hardly any sunshine.	1
Less salmonberries, less salmonberries when less snow, depends on snow we get.	1
Little less.	1
Low in camp. Kinda low in 1st year, salmon & black, kinda low last year.	1
Strange weather.	1
There were less berries, bad year for berries, too cold, rain.	1
There weren't any salmonberries last year.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 12-8. Did you notice changes in the condition of berries

Did household notice changes in condition of berries	
Yes	No
6	40

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 12-9. If yes, please describe changes in berries

If yes, please describe changes in berries	Count
70 years ago use the moon, calendar now days go by fast.	1
Black berries were not as prolific, due to climate.	1
Cold summer, hardly go, tiny berries.	1
Kind of dry & small.	1
Kind of small.	1
Little less hardly any berries.	1
Sorta dried up, more black spots.	1
There was lots of snow.	1

Source: Native Village of Savoonga, Kawerak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Seaweed

Common and scientific names for three of the eight seaweed listed on the survey instrument were identified. Sieve kelp and Dragon kelp were identified with photographs provided by Mandy Lindeberg with the NOAA. Eighty-four percent of households declared they usually harvest seaweed and 67% used or tried to harvest seaweed in 2009. For all seaweed species, 66% of households tried to harvest seaweed, 65% harvested seaweed, 67% used seaweed, 32% gave and 18% received seaweed. Residents harvested an estimated 400.3 gallons of six seaweed species in 2009. In the 2005-2006 comprehensive survey, seaweed users reported harvesting and estimated 180.6 gallons. When asked about seaweed availability, households replied to six of the eight species: Same – 55, Less – 28, More – 10, and Don't know – 10. When asked about seaweed usage households replied to 3 species: Same – 27, Less – 22, More – 4, and Never use – 0. Thirty-one households reported receiving seaweed from outside the community.

Assessment of Harvest and Use

The majority of participating households believe their use of wild resources in 2009 was the same compared to previous years, though 28 households or 35% of respondents thought their use was less than previous years. Table 12-2 shows 28 replies to why their use of wild resources was different in 2009.

The majority of respondents, 81%, said fuel costs affected harvesting activities. Table 12-4 lists 26 responses to how fuel costs affected subsistence harvesting activities.

Table 13-1. Did household use less, same or more wild resources

Did household use less, same or more wild resources	Count
Less	28
Same	42
More	9
Never used wild resources	0
Total	79

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 13-2. If household use was less or more, how and why

If household use of wild resources was less or more, how and why	Count
Always concerned about seals, several seals were very sickly when we cut em up. We throw them but, would like to sample but how to keep them. Our camp is kinda close to NE Cape. Even I hardly see walrus our men have to go farther out. Hardly any polar bear.	1
Cause I never go.	1
Commercial fishing for halibut, walrus takes a different route. Number of kills is minusing. Some springs take different route. Hardly see nanuq anymore, lots lots greys and minke #'s are rising. More humpbacks now. Haven't seen sperm whale in 10 years, otters once in a while.	1
Concerned about airborne contamination.	1
Didn't go camp.	1
Due to not as much hunting due to time.	1
Every year use resources.	1
Feed my family all over.	1
For walrus due to global warming, have to go farther out, due to weather, same way with greens.	1
Got to share with other people.	1
Less baby walrus, bearded seal. Freezers full, share our resources, bounty of God's resources, huge birthday dinners for b-day we had 200 people, when Russians are here we have them for lunch.	1
More in terms of marine mammals.	1
More seal this year, went to camp.	1
No bowhead, didn't do much of the seal hunting.	1
One extra adult living with us.	1
Only three of us.	1
Retired hunting.	1
Seaweeds we got more.	1
Seeing same amount of population, what I hear from other hunters.	1
Son provides for HH.	1
Spring time we go out further because of the ice, don't form as much as it used to. Early 80's spring ice used to be till June, deep snow used to be that could cover a whole house. Maybe last 10 years been worse, some years hard to get snow, one year not until January.	1
Tired of these surveys and living off the gov't. All these years of these surveys, gives me a big question mark in my head.	1
To me seaweeds are getting less.	1
Try to harvest more walrus.	1
We don't hardly keep track of what we get.	1
Weather worse, sometimes storm, waves not good for hunting. Weather change looks to me.	1
Weather, rain, cold, availability, marine mammals were less, travel farther for marine mammals.	1
What about the weather.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 13-3. Did fuel costs affect harvesting activities

Did fuel costs affect harvesting activities	Count
Yes	35
No	8
Do Not Harvest	0
Total	43

Source: Native Village of Savoonga, Kawerak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Table 13-4. If yes, how did fuel costs affect harvesting activities

If yes, how did fuel costs affect harvesting activities	Count
?	1
Every year, not as bad as last year.	1
Fuel cost expensive.	1
Fuel cost high.	1
Fuel costs was so high, anticipating costs, hunting conditions were good. Within 20 mile radius in that way it was good. 2009 was something else.	1
Fuel gas price went up, try and conserve. Gambell will be out of gas soon.	1
Fuel is on the rise, getting hard to get a hold it. Gov't grant is getting smaller.	1
Fuel very expensive last year.	1
Fuel was outrageous last year.	1
Gasoline was high.	1
Great big deal, especially with \$7.65 gallon, I bought stove oil instead of gas.	1
High cost of living, everything sky high. Don't change on diet from store, I go out hunting & still go out hunting.	1
High fuel costs.	1
Last year fuel went up.	1
Last year it was real expensive.	1
Last year pretty expensive, dollar more almost 2 dollars.	1
Lots, cost lots, when the gas went up. Hunters use about \$300 worth of gas for one trip.	1
Miss some game, didn't earn extra gas at right time.	1
Really affected our hunting, too high. 150 just for 20 miles.	1
Sky high for oil, really slow us down.	1
This year we have to travel other end of the island for whale hunting.	1
Too expensive.	1
Too high.	1
Too much.	1
We had to travel shorter ways in order to save our gas. Cost too much put gasoline for trip.	1
Went hunting less cause gas cost too much.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Employment, Other Income and Expenses

Employment data, other income data such as Alaska Permanent Funds and other assistance and benefits, and household and subsistence expenses questions were included on the survey instrument but households were reluctant to divulge their personal income and expense information. The replies were very low and would not be representative of the communities' true income and expenses.

Questions, Comments or Concerns

Thirteen households replied with questions, comments or concerns. Table 13-1 lists the responding household comments and concerns.

Table 14-1. Do you have any questions, comments or concerns

	Do you have any questions, comments or concerns	Count
1	Always give to whoever ask. Household with young, healthy male, we don't give them. My son give to elders, some are used to getting food stamps.	1
2	Animals going farther away, too much noise, too much pollution. Now camp is dirty, camp was clean, more storm brought trash. When we used to live there, closer to native easier to hunt. Many animal we caught. Lots of dogs that time. Mostly by hunting and trapping and old timers like to earn it themselves. Every day look with binocs. Old timers were real clean when they work on stuff. Old timers were spotless. They used to let the animals have fresh water.	1
3	Each month has it's own food gathering, fall time is for seafood. We go to "qagu" for fishing.	1
4	Get from friends & relations all stuff.	1
5	Help with getting gas for boys. It's about the same, the same is getting farther out. Too many planes coming in. Pretty quiet when we were young. Ice is getting thinner, this year tomcod getting small. Picking greens is getting farther out. Used to go by walk, but our dump is right there, wind is blowing plastic bag way out.	1
6	I was working all summer.	1
7	It's getting harder to get subsistence especially seals. We used to have quite a bit come to shore now hardly come around. Sometimes they would come around high tide, hardly do that anymore. Year later got 10 spotted seal, my sons went out most of the time. State and Fed misunderstand us. The importance of having subsistence to harvest, to me healthy, no preservatives, it's natural. Somebody should define subsistence. I've heard family perish when they went out whaling, my son fall down the cliffs, but went to hospital. They do that kind of hazards. I heard one person pulled by walrus. That part is not being understood by anyone except the people themselves. In the past used to have ceremonies when they catch a big whale. There are religious rights to go with that, we still celebrate that. When I go out seal hunting I feel like a part of the ecosystem when I go out. One time a fox in a blind, fox waiting for me, gulls, ravens, they all came and wait. When I catch a seal, next day there is just bones left. I am glad no one eats me. When I shoot a seal the krill, they swarm around the blood, pretty soon gulls come around to eat those. What I learned I become part of that ecosystem when I hunt. Hunters are very important when they hunt. Same way with picking berries, we pollinate the plant when we walk around, probably fertilize the ground when we dig for roots. When we walk around the loose part of the plants go on the roots, we pollinate them. Subsistence a very important part of our life, anywhere in AK.	1
8	Less marine mammals, have to go farther to harvest.	1
9	Like this program.	1
10	Our subsistence activities watch the weather, hardly any calmer weather, gotta go nearby more often, ice is getting thinner, less ice, ice getting bad & dangerous to get our food now.	1
11	Son provides subsistence resources.	1
12	Thank you.	1
13	We rarely see diseased animals, sometimes, I don't try too much at one.	1

Source: Native Village of Savoonga, Kaw erak, Inc., North Pacific Research Board, National Science Foundation, 2009 Comprehensive Subsistence Survey, Savoonga, Alaska.

Discussion

Residents of Savoonga have been continuously surveyed by various organizations and may be suffering from survey burn out. Before Kawerak-hired surveyors began working in the community, another organization had just completed a survey effort and paid participants for their involvement. Several individuals approached by surveyors were reluctant to cooperate and take personal time to complete yet another survey, especially without compensation.

Several resources harvested and recorded in the datasets contained only local Yupik names. The surveyors and Kawerak staff could not attribute the species name to several harvested resources. Those unknown species are in categories identified on the survey as: 1) marine invertebrates/shellfish, 2) beach seafood, 3) plants – roots, 4) seaweed. We recommend further research be completed to document and identify unknown species harvested by Savoonga residents.

Savoonga residents are heavily reliant on marine mammals as documented by the report completed by Austin Ahmasuk. Although the methods and samples varied between Ahmasuk's 2006 study and this 2009 study, there appears to be a decline in the volume of marine mammal resources harvested. Comments expressed on several surveys mention that marine mammal hunters had to travel farther to access marine mammal resources such as walrus and that ice thickness and hunter safety was a concern.

Acknowledgements

Kawerak staff would like to thank Dylan Iya from Savoonga and Austin Ahmasuk from Nome for their diligence in surveying households willing to participate in this survey. Thanks to Mandy Lindeberg with the NOAA for providing photographs of various seaweeds to assist in identifying unknown seaweed species. Thanks to James Magdanz with ADF&G for providing the survey instrument template.

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Appendices

Appendix 1. Survey instrument

HOUSEHOLD MEMBERS

HOUSEHOLD ID

Between JANUARY and DECEMBER, 2009...
...who lived in your household?

ID#	IS THIS PERSON ANSWERING QUESTIONS ON THIS SURVEY? <i>(circle)</i>	MALE OR FEMALE? <i>(circle)</i>	ALASKA NATIVE? <i>(circle)</i>	IN WHAT YEAR WAS THIS PERSON BORN? <i>(year)</i>	WHERE WERE PARENTS LIVING WHEN THIS PERSON WAS BORN? <i>(ak city or state)</i>	HOW IS THIS PERSON RELATED TO HOUSEHOLD HEAD 1? <i>(relation)</i>	HOW MANY YEARS HAS THIS PERSON LIVED IN SAVOONGA? <i>(number)</i>	IN 2009 DID THIS PERSON HARVEST WILD RESOURCES? <i>(circle)</i>	IN 2009 DID THIS PERSON PROCESS WILD RESOURCES? <i>(circle)</i>
HEAD 1	Y N	M F	Y N				YRS	Y N	Y N
01									
<i>Enter spouse or partner next. If household has a SINGLE HEAD, leave HEAD 2 blank.</i>									
HEAD 2	Y N	M F	Y N				YRS	Y N	Y N
02									
<i>Enter children (oldest to youngest), grandchildren, grandparents, brothers, sisters, or anyone else living full-time in this household.</i>									
03	Y N	M F	Y N				YRS	Y N	Y N
04	Y N	M F	Y N				YRS	Y N	Y N
05	Y N	M F	Y N				YRS	Y N	Y N
06	Y N	M F	Y N				YRS	Y N	Y N
07	Y N	M F	Y N				YRS	Y N	Y N
08	Y N	M F	Y N				YRS	Y N	Y N
09	Y N	M F	Y N				YRS	Y N	Y N
10	Y N	M F	Y N				YRS	Y N	Y N
11	Y N	M F	Y N				YRS	Y N	Y N
12	Y N	M F	Y N				YRS	Y N	Y N
13	Y N	M F	Y N				YRS	Y N	Y N
14	Y N	M F	Y N				YRS	Y N	Y N
15	Y N	M F	Y N				YRS	Y N	Y N

PERMANENT HH MEMBERS: 02

SAVOONGA: 300

HARVESTS: COMMERCIAL FISHING

HOUSEHOLD ID

Do members of your household USUALLY participate in COMMERCIAL FISHING ?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household participate in commercial fishing?..... Y N

If NO, go to the next harvest page.

If YES, continue on this page...

Please estimate the commercially harvested other fish ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED this year. INCLUDE the fish you gave away, ate fresh, fed to dogs, lost to spoilage, caught as incidental catch while fishing for another species, or got by helping others. If harvested with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...		IN 2009, HOW MANY DID YOU REMOVE FROM THE CATCH AND GAVE AWAY TO CREW OR OTHERS?	IN 2009, HOW MANY DID YOUR REMOVE FOR OWN USE?		ID NUMBER FROM PAGE 2	
	COMMERCIAL FISH FOR _____? <i>(circle)</i>	CAUGHT AS INCIDENTAL CATCH _____? <i>(circle)</i>		CREW	OTHERS	PERMIT HOLDER <i>(number)</i>	CREW <i>(number)</i>
HALIBUT <i>Ivisa</i> 12100000	Y N	Y N	IND	IND	IND		
PACIFIC COD (GRAY COD) <i>Uukag</i> 12100400	Y N	Y N	IND	IND	IND		
SALMON SHARK <i>Kalngak</i> 12300400	Y N	Y N	LBS	LBS	LBS		
	Y N	Y N	IND	IND	IND		
	Y N	Y N	GAL	GAL	GAL		

HARVESTS: SALMON

HOUSEHOLD ID

Do members of your household USUALLY harvest SALMON ?.....Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO HARVEST salmon?.....Y N

IF NO, go to the next harvest page.

IF YES, continue on this page...

Please estimate how many salmon ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED this year, including with a rod and reel. INCLUDE salmon you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. If fishing with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY () DID YOUR HOUSEHOLD...			HOW MANY OF THOSE WERE CAUGHT JUST FOR DOGS?	UNITS	WERE LESS, SAME, OR MORE () AVAILABLE IN 2009, THAN IN RECENT YEARS?
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	...CATCH WITH GILL NET OR SEINE?	...CATCH WITH ROD AND REEL?	...CATCH WITH OTHER GEAR?			
	(circle)				(number taken by each gear type)					
CHINOOK SALMON (KING) <i>Awisu</i> 11300000	Y N	Y N	Y N	Y N					IND	L S M ?
SOCKEYE SALMON (RED) <i>Awisu-Naayvam</i> 11500000	Y N	Y N	Y N	Y N					IND	L S M ?
COHO SALMON (SILVER) <i>Kitaga</i> 11200000	Y N	Y N	Y N	Y N					IND	L S M ?
CHUM SALMON (DOG) <i>Tunguya</i> 11700000	Y N	Y N	Y N	Y N					IND	L S M ?
PINK SALMON (HUMPY) <i>Amaghtu</i> 11400000	Y N	Y N	Y N	Y N					IND	L S M ?
<i>These columns should include all the salmon HARVESTED by members of this household in 2009.</i>									<i>" ? " means "I don't know"</i>	

If your household did not harvest, but used and received salmon, did you get your salmon from outside your community?

Yes No

SALMON

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE salmon as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE, skip the next question.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the salmon that your household harvested, processed, or used for subsistence?

X N Y

If Yes, please describe the changes in condition you observed

X = DID NOT USE

HARVESTS: OTHER FISH

HOUSEHOLD ID

Do members of your household USUALLY harvest OTHER FISH?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO HARVEST other fish?..... Y N

If NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many other fish ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED use this year, including with a rod and reel. INCLUDE other fish you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. If fishing with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...					IN 2009, HOW MANY () DID YOUR HOUSEHOLD...			HOW MANY OF THOSE WERE CAUGHT JUST FOR DOGS?	UNITS (ind, gal)	WERE LESS, SAME, OR MORE () AVAILABLE IN 2009, THAN IN RECENT YEARS?
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	...CATCH WITH GILL NET OR SEINE?	...CATCH WITH ROD AND REEL?	...CATCH WITH OTHER GEAR?	...			
	(circle)					(number taken by each gear type)					
HALIBUT <i>Iviisa</i> 12180000	Y N	Y N	Y N	Y N					IND	L S M ?	
HERRING <i>Puvangitaghag</i> 12000000	Y N	Y N	Y N	Y N					GAL	L S M ?	
TOMCOD (SAFFRON COD) <i>Nunaangiik</i> 12101000	Y N	Y N	Y N	Y N					IND	L S M ?	
ARCTIC COD (BLUE COD) <i>Iqalluwag</i> 12100200	Y N	Y N	Y N	Y N					IND	L S M ?	
WHITEFISH <i>Qupneg</i> 12640000	Y N	Y N	Y N	Y N					IND	L S M ?	
SMELT <i>Teptaakrak</i> 12000000	Y N	Y N	Y N	Y N					IND	L S M ?	
GRAYLING <i>Satuvak</i> 12520000	Y N	Y N	Y N	Y N					IND	L S M ?	
BULLHEAD <i>Kayupik</i> 12300400	Y N	Y N	Y N	Y N					IND	L S M ?	
FLOUNDER <i>Iviisaaghaag</i> 12140000	Y N	Y N	Y N	Y N					IND	L S M ?	
TROUT (UNKNOWN) <i>Iviisaaghaag</i> 12000000	Y N	Y N	Y N	Y N					IND	L S M ?	
	Y N	Y N	Y N	Y N					IND	L S M ?	

These columns should include all the other fish HARVESTED by members of this household in 2009.

" ? " means "I don't know"

If your household did not harvest, but used and received other fish, did you get your other fish from outside your community? Yes No

OTHER FISH

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE skip the next question.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the that your household harvested, processed, or used for subsistence?

If Yes, please describe the changes in condition you observed

X = DID NOT USE

MARINE INVERTEBRATES/SHELLFISH

HOUSEHOLD ID

Do members of your household USUALLY fish for MARINE INVERTEBRATES/SHELLFISH?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO HARVEST marine invertebrates/shellfish?..... Y N

IF NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many marine invertebrates/shellfish ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED for subsistence use this year. INCLUDE marine invertebrates/shellfish you gave away, ate fresh, lost to spoilage, or got by helping others. If fishing with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY _____ DID YOUR HOUSEHOLD HARVEST? <i>(number)</i>	UNITS <i>(gal, ind)</i>	WERE LESS, SAME, OR MORE (____) AVAILABLE IN 2009, THAN IN RECENT YEARS? <i>(circle)</i>
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?			
	<i>(circle)</i>						
CLAMS - WALRUS STOMACH <i>Imanaq</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER CLAMS 1 <i>Nuvulqughnak</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER CLAMS 2 <i>Unegyruk</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER CLAMS 3 <i>Tamuneg</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER CLAMS 4 <i>Quprugahq</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER CLAMS 5 <i>Kamekruk</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER CLAMS 6 <i>Uqlumrek</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER CLAMS 7 <i>Imanapiik</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER CLAMS 8 <i>Tapghaaqhaq (Scallop)</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER CLAMS 9 <i>Kingupak</i> 50060000	Y N	Y N	Y N	Y N		GAL	L S M ?
KING CRAB <i>Neghnapik</i> 50100800	Y N	Y N	Y N	Y N		IND	L S M ?
RED CRAB <i>Sufuqhtaq</i> 50100800	Y N	Y N	Y N	Y N		IND	L S M ?

Continue on next page.

These columns should include all the marine invertebrates/shellfish HARVESTED by members of this household in 2009.

" ? " means "I don't know"

MARINE INVERTEBRATES/SHELLFISH

HOUSEHOLD ID

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY _____ DID YOUR HOUSEHOLD HARVEST? <i>(number)</i>	UNITS <i>(gal, ind)</i>	WERE LESS, SAME, OR MORE (____) AVAILABLE IN 2009, THAN IN RECENT YEARS? <i>(circle)</i>
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?			
	<i>(circle)</i>						
BLUE CRAB <i>Neghnaq</i> 50008020	Y N	Y N	Y N	Y N		IND	L S M ?
SHRIMP <i>Kemagunjiq</i> 50340000	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N		IND	L S M ?
	Y N	Y N	Y N	Y N		IND	L S M ?
	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N			L S M ?

These columns should include all the marine invertebrates/shellfish HARVESTED by members of this household in 2009.

" ? " means "I don't know"

If your household did not harvest, but used and received marine invertebrates/shellfish, did you get your marine invertebrates/shellfish from outside your community? Yes No

MARINE INVERTEBRATES/SHELLFISH

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE marine invertebrates/shellfish as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE, skip the next question.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the marine invertebrates/shellfish that your household harvested, processed, or used for subsistence? X N Y

If Yes, please describe the changes in condition you observed.

X = DID NOT USE

HARVESTS: SEAFOOD - BEACH

HOUSEHOLD ID

Do members of your household USUALLY gather SEAFOOD - BEACH?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO HARVEST seafood - beach?..... Y N

If NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many seafood - beach ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED for subsistence use this year. INCLUDE seafood - beach you gave away, ate fresh, lost to spoilage, or got by helping others. If gathered with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY HOUSEHOLD HARVEST? <i>(number)</i>	UNITS <i>(gal)</i>	WERE LESS, SAME, OR MORE (____) AVAILABLE IN 2009, THAN IN RECENT YEARS? <i>(circle)</i>
	USE? <i>(circle)</i>	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?			
SEA PEACH <i>Uupa</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER BEACH FOOD - 1 <i>Keraqluk</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER BEACH FOOD - 2 <i>Tukughnak</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER BEACH FOOD - 3 <i>Aahnaahug</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER BEACH FOOD - 4 <i>Milugutaq</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER BEACH FOOD - 5 <i>Kemkeghnak</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER BEACH FOOD - 6 <i>Uughyu</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER BEACH FOOD - 7 (SOFT CORAL?) <i>Mamaghwaag</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER BEACH FOOD - 8 <i>Riighnag</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER BEACH FOOD	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N		GAL	L S M ?

These columns should include all the seafood - beach HARVESTED by members of this household in 2009.

" ? " means "I don't know"

If your household did not harvest, but used and received marine beach foods, did you get your marine beach foods from outside your community?
Yes No

MARINE BEACH FOODS

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE marine beach foods as in recent years?..... X L S M
X = NEVER USE

If the SAME or NEVER USE, skip the next question.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the marine beach foods that your household harvested, processed, or used for subsistence?

If Yes, please describe the changes in condition you observed X N Y
X = DID NOT USE

HARVESTS: LARGE LAND MAMMALS

HOUSEHOLD ID

Do members of your household USUALLY hunt for LARGE LAND MAMMALS for subsistence?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO HARVEST large land mammals?..... Y N

IF NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many large land mammals ALL MEMBERS OF YOUR HOUSEHOLD HARVEST for subsistence use this year. INCLUDE large land mammals you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. If hunting with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY (_____) DID MEMBERS OF YOUR HOUSEHOLD HARVEST?												UNITS (ind)	WERE LESS, SAME, OR MORE (____) AVAILABLE IN 2009, THAN IN RECENT YEARS? (circle)		
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	SEX	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER			DECEMBER	UNKNOWN
	(circle)				(enter number by sex and month of take)														(ind)	
REINDEER <i>Quyniq</i> 230800000	Y N	Y N	Y N	Y N	M														IND	L S M ?
CARIBOU <i>Tungtu</i> 211000000	Y N	Y N	Y N	Y N	M														IND	L S M ?
MOOSE <i>Tungtuvak</i> 211800000	Y N	Y N	Y N	Y N	M														IND	L S M ?
BROWN BEAR <i>Kaynga</i> 210800000	Y N	Y N	Y N	Y N	M														IND	L S M ?
	Y N	Y N	Y N	Y N	M														IND	L S M ?
												These columns should include all the large land mammals HARVESTED by members of this household in 2009.						" ? " means "I don't know"		

If your household did not harvest, but used and received large land mammals, did you get your large land mammals from outside your community?

Yes No

LARGE LAND MAMMALS

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE large land mammals as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE, skip the next question.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the large land mammals that your household harvested, processed, or used for subsistence?

X N Y

If Yes, please describe the changes in condition you observed

X = DID NOT USE

HARVESTS: SMALL LAND MAMMALS

HOUSEHOLD ID

Do members of your household USUALLY hunt or trap SMALL LAND MAMMALS for subsistence?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO HARVEST small land mammals?..... Y N

If NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many small land mammals ALL MEMBERS OF YOUR HOUSEHOLD HARVEST for subsistence use this year. INCLUDE small land mammals you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. If hunting or trapping with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY () DID MEMBERS OF YOUR HOUSEHOLD HARVEST?												UNITS (ind)	WERE LESS, SAME, OR MORE () AVAILABLE IN 2009, THAN IN RECENT YEARS? (circle)	
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER			UNKNOWN
	(circle)				(enter number by sex and month of take)														
WOLF <i>Amaa</i> 223200000	Y N	Y N	Y N	Y N														IND	L S M ?
ARCTIC FOX <i>Kaviig</i> 220802000	Y N	Y N	Y N	Y N														IND	L S M ?
RED FOX <i>Kaviipik</i> 220804000	Y N	Y N	Y N	Y N														IND	L S M ?
BLUE FOX <i>Qenqhaghtu</i>	Y N	Y N	Y N	Y N														IND	L S M ?
GROUND SQUIRREL <i>Skik</i> 222800000	Y N	Y N	Y N	Y N														IND	L S M ?
	Y N	Y N	Y N	Y N														IND	L S M ?
	Y N	Y N	Y N	Y N														IND	L S M ?

These columns should include all the small land mammals HARVESTED by members of this household in 2009.

" ? " means "I don't know"

If your household did not harvest, but used and received small land mammals ,did you get your small land mammals from outside your community?

Yes No

SMALL LAND MAMMALS

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE go on to next page.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the that your household harvested, processed, or used for subsistence?

X N Y

If Yes, please describe the changes in condition you observed

X = DID NOT USE

HARVESTS: MARINE MAMMALS

HOUSEHOLD ID

Do members of your household USUALLY hunt for MARINE MAMMALS for subsistence?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO HARVEST marine mammals?..... Y N

IF NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many marine mammals ALL MEMBERS OF YOUR HOUSEHOLD HARVEST for subsistence use this year. INCLUDE marine mammals you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. If hunting with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY () DID MEMBERS OF YOUR HOUSEHOLD HARVEST?												UNITS (ind)	WERE LESS, SAME, OR MORE () AVAILABLE IN 2009, THAN IN RECENT YEARS? (circle)		
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	SEX	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER			DECEMBER	UNKNOWN
	(circle)				(enter number by sex and month of take)														(ind)	(circle)
WALRUS <i>Ayveg</i> 301400000	Y N	Y N	Y N	Y N	M														IND	L S M ?
BEARDED SEAL <i>Maklak</i> 300802000	Y N	Y N	Y N	Y N	M														IND	L S M ?
RING SEAL <i>Neqhsapik</i> 300810000	Y N	Y N	Y N	Y N	M														IND	L S M ?
RIBBON SEAL <i>Kukupak</i> 300808000	Y N	Y N	Y N	Y N	M														IND	L S M ?
SPOTTED SEAL <i>Qazigvaq</i> 300812000	Y N	Y N	Y N	Y N	M														IND	L S M ?
FUR SEAL <i>Piqhtughseahaa</i> 300804000	Y N	Y N	Y N	Y N	M														IND	L S M ?
SEA LION <i>Ulohaaq</i> 301200000	Y N	Y N	Y N	Y N	M														IND	L S M ?
PORPOISE <i>Aghvegenqertaq</i> 300600000	Y N	Y N	Y N	Y N	M														IND	L S M ?
SALMON SHARK <i>Kalngak</i> 123204000	Y N	Y N	Y N	Y N	M														IND	L S M ?
SEA OTTER <i>Ari</i> 301000000	Y N	Y N	Y N	Y N	M														IND	L S M ?
POLAR BEAR <i>Nanuq</i> 300400000	Y N	Y N	Y N	Y N	M														IND	L S M ?
BOWHEAD WHALE <i>Aghvepik</i> 301606000	Y N	Y N	Y N	Y N	M														IND	L S M ?

Continue on next page.

These columns should include all the marine mammals HARVESTED by members of this household in 2009.

" ? " means "I don't know"

HARVESTS: MARINE MAMMALS

HOUSEHOLD ID

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY (_____) DID MEMBERS OF YOUR HOUSEHOLD HARVEST?												UNITS (ind)	WERE LESS, SAME, OR MORE (____) AVAILABLE IN 2009, THAN IN RECENT YEARS? (circle)		
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	SEX	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER			DECEMBER	UNKNOWN
	(circle)				(enter number by sex and month of take)														(ind)	(circle)
BELUGA WHALE <i>Puugzaq</i> 30160200	Y N	Y N	Y N	Y N	M														IND	L S M ?
GREY WHALE <i>Angtughhaq</i> 30160000	Y N	Y N	Y N	Y N	M														IND	L S M ?
MINKE WHALE <i>Qunqvughaq</i> 30162200	Y N	Y N	Y N	Y N	M														IND	L S M ?
RIGHT WHALE <i>Aghveghpak</i> 30162600	Y N	Y N	Y N	Y N	M														IND	L S M ?
	Y N	Y N	Y N	Y N	M														IND	L S M ?

These columns should include all the marine mammals HARVESTED by members of this household in 2009.

" ? " means "I don't know"

If your household did not harvest, but used and received marine mammals ,did you get your marine mammals from outside your community?

Yes No

MARINE MAMMALS

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE marine mammals as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE, skip the next question.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the marine mammals that your household harvested, processed, or used for subsistence?

X N Y

If Yes, please describe the changes in condition you observed

X = DID NOT USE

HARVESTS: MIGRATORY BIRDS

HOUSEHOLD ID

Do members of your household USUALLY hunt for MIGRATORY BIRDS for subsistence?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO CATCH migratory birds?..... Y N

IF NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many migratory birds ALL MEMBERS OF YOUR HOUSEHOLD CAUGHT for subsistence use this year. INCLUDE migratory birds you gave away, ate fresh, lost to spoilage, or got by helping others. If hunting with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY () DID MEMBERS OF YOUR HOUSEHOLD CATCH?											WERE LESS, SAME, OR MORE () AVAILABLE IN 2009, THAN IN RECENT YEARS? (circle)		
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER		DECEMBER	UNKNOWN
	(circle)				winter	spring			summer	fall	Winter							
TUNDRA SWAN <i>Quuk</i> 410604000	Y N	Y N	Y N	Y N														L S M ?
SANDHILL CRANE <i>Satelqag</i> 410802000	Y N	Y N	Y N	Y N														L S M ?
BRANT <i>Teqhjikak</i> 410402000	Y N	Y N	Y N	Y N														L S M ?
WHITE-FRONTED GEESE (SPECKLEBELLY) <i>Wlwitu</i> 410410000	Y N	Y N	Y N	Y N														L S M ?
LESSER CANADA GEESE <i>Teqhjikagpak</i> 410404080	Y N	Y N	Y N	Y N														L S M ?
SNOW GEESE <i>Kaangu</i> 410408000	Y N	Y N	Y N	Y N														L S M ?
EMPEROR GEESE <i>Leqhileq</i> 410406000	Y N	Y N	Y N	Y N														L S M ?
NORTHERN PINTAIL <i>Qulvekesiq</i> 4220000	Y N	Y N	Y N	Y N														L S M ?
NORTHERN SHOVELER <i>Pekutaghraak</i> 410230000	Y N	Y N	Y N	Y N														L S M ?
HARLEQUIN DUCK <i>Qagiiingiq</i> 4212000	Y N	Y N	Y N	Y N														L S M ?
LONG-TAILED DUCK <i>Kang'Ghwaak / Ugeyiighaq</i> (Male) 4218000	Y N	Y N	Y N	Y N														L S M ?
RED-BREAST MERGANSER <i>Aafasuk</i> 410216000	Y N	Y N	Y N	Y N														L S M ?
COMMON EIDER <i>Qatepak / Metghaq</i> 4206020	Y N	Y N	Y N	Y N														L S M ?
Continue on next page.																		
These columns should include all the migratory birds HARVESTED by members of this household in 2009.																	" ? " means "I don't know"	

HARVESTS: MIGRATORY BIRDS

HOUSEHOLD ID

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY () DID MEMBERS OF YOUR HOUSEHOLD HARVEST?												WERE LESS, SAME, OR MORE () AVAILABLE IN 2009, THAN IN RECENT YEARS? (circle)	
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER		UNKNOWN
	(circle)				winter			spring			summer		fall		winter			
KING EIDER <i>Qengalek</i> 410206040	Y N	Y N	Y N	Y N														L S M ?
SPECTACLED EIDER <i>livghaan</i> 410206060	Y N	Y N	Y N	Y N														L S M ?
STELLER'S EIDER <i>Aglekesegaaq</i> 410206080	Y N	Y N	Y N	Y N														L S M ?
YELLOW-BILLED LOON <i>Nangqawalek-Female</i> 411216080	Y N	Y N	Y N	Y N														L S M ?
RED-THROATED LOON <i>Eghqaag</i> 411216060	Y N	Y N	Y N	Y N														L S M ?
COMMON LOON <i>Yuwayu</i> 411216040	Y N	Y N	Y N	Y N														L S M ?
PACIFIC LOON <i>Melqupak</i> 411216020	Y N	Y N	Y N	Y N														L S M ?
CRESTED AUKLET <i>Sukilpaq</i> 411202040	Y N	Y N	Y N	Y N														L S M ?
PARAKEET AUKLET <i>Suklugrak</i> 411202080	Y N	Y N	Y N	Y N														L S M ?
LEAST AUKLET <i>Akmaaliqhag</i> 411202060	Y N	Y N	Y N	Y N														L S M ?
COMMON MURRE <i>Alpa</i> 411218000	Y N	Y N	Y N	Y N														L S M ?
THICK-BILLED MURRE <i>Alpapiq/Quwaaghet</i> 411218040	Y N	Y N	Y N	Y N														L S M ?
CORMORANT <i>Ngelqag</i> 411204000	Y N	Y N	Y N	Y N														L S M ?
KITTIWAKE <i>Qaqsungiq</i> 411214000	Y N	Y N	Y N	Y N														L S M ?
GUILLEMOT <i>Samsaghaghag</i> 411210000	Y N	Y N	Y N	Y N														L S M ?
IVORY GULL <i>Kuruwiig</i>	Y N	Y N	Y N	Y N														L S M ?

Continue on next page.

These columns should include all the migratory birds HARVESTED by members of this household in 2009.

" ? " means "I don't know"

HARVESTS: MIGRATORY BIRDS

HOUSEHOLD ID

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY () DID MEMBERS OF YOUR HOUSEHOLD HARVEST?												WERE LESS, SAME, OR MORE () AVAILABLE IN 2009, THAN IN RECENT YEARS? (circle)	
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER		UNKNOWN
	(circle)				winter		spring			summer		fall		winter				
MEW GULL <i>Ungazim Naghuyangi</i> 411212080	Y N	Y N	Y N	Y N														L S M ?
GLAUCOUS GULL <i>Naghuyapik</i> 411212020	Y N	Y N	Y N	Y N														L S M ?
ARCTIC TERN <i>Tekeyi ghaq</i> 411226040	Y N	Y N	Y N	Y N														L S M ?
TUFTED PUFFIN <i>Pagruqag</i> 411222040	Y N	Y N	Y N	Y N														L S M ?
HORNED PUFFIN <i>Quprughaq</i> 411222020	Y N	Y N	Y N	Y N														L S M ?
WHIMBREL <i>Sigtuvak</i> 411009040	Y N	Y N	Y N	Y N														L S M ?
GOLDEN PLOVER <i>Sagilmak</i> 411006020	Y N	Y N	Y N	Y N														L S M ?
	Y N	Y N	Y N	Y N														L S M ?
	Y N	Y N	Y N	Y N														L S M ?

These columns should include all the migratory birds HARVESTED by members of this household in 2009. " ? " means "I don't know"

If your household did not harvest, but used and received migratory waterfowl, did you get your migratory waterfowl from outside your community?

Yes No

MIGRATORY WATERFOWL

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE migratory waterfowl as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE go on to next page.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the migratory waterfowl that your household harvested, processed, or used for subsistence?

X N Y

If Yes, please describe the changes in condition you observed

X = DID NOT USE

HARVESTS: BIRD EGGS

HOUSEHOLD ID

Do members of your household USUALLY look for BIRD EGGS for subsistence?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO GATHER bird eggs?..... Y N

If NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many bird eggs ALL MEMBERS OF YOUR HOUSEHOLD GATHERED for subsistence use this year. INCLUDE bird eggs you gave away, ate fresh, lost to spoilage, or got by helping others. If looking with others, report ONLY YOUR SHARE of the catch.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY () DID MEMBERS OF YOUR HOUSEHOLD GATHER?												WERE LESS, SAME, OR MORE () AVAILABLE IN 2009, THAN IN RECENT YEARS? (circle)	
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER		UNKNOWN
	(circle)				winter			spring			summer			fall				
EMPEROR GEESE EGGS <i>Leqhlleq Eggs</i> 43106000	Y N	Y N	Y N	Y N														L S M ?
KING EIDER EGGS <i>Qeqalek Eggs</i> 43020604	Y N	Y N	Y N	Y N														L S M ?
SPECTACLED EIDER EGGS <i>Iivghaan Eggs</i> 43020600	Y N	Y N	Y N	Y N														L S M ?
YELLOW-BILLED LOON EGGS <i>Nanqwaalek-Female Eggs</i> 43121609	Y N	Y N	Y N	Y N														L S M ?
CRESTED AUKLET EGGS <i>Sukilpaq Eggs</i> 43120204	Y N	Y N	Y N	Y N														L S M ?
PARAKEET AUKLET EGGS <i>Suklugrak Eggs</i> 43120209	Y N	Y N	Y N	Y N														L S M ?
LEAST AUKLET EGGS <i>Akmaaliighaq Eggs</i> 43120206	Y N	Y N	Y N	Y N														L S M ?
MURRE EGGS <i>Alpa/Taqitugiiq Eggs</i> 43121809	Y N	Y N	Y N	Y N														L S M ?
THICK-BILLED MURRE EGGS <i>Alpapiq/Quwaaghet</i> 43121804	Y N	Y N	Y N	Y N														L S M ?
CORMORANT EGGS <i>Ngelaq Eggs</i> 43120409	Y N	Y N	Y N	Y N														L S M ?
KITTIWAKE EGGS <i>Qagsungia Eggs</i> 43121400	Y N	Y N	Y N	Y N														L S M ?
MEW GULL EGGS <i>Ungazim/Naghuyangiq Eggs</i> 43121209	Y N	Y N	Y N	Y N														L S M ?
GLAUCOUS GULL EGGS <i>Naghuyapik Eggs</i> 43121202	Y N	Y N	Y N	Y N														L S M ?
GOLDEN PLOVER EGGS <i>Saqilmak Eggs</i> 43100602	Y N	Y N	Y N	Y N														L S M ?
	Y N	Y N	Y N	Y N														L S M ?

These columns should include all the bird eggs HARVESTED by members of this household in 2009. " ? " means "I don't know"

If your household did not harvest, but used and received bird eggs, did you get your bird eggs from outside your community?

Yes No

BIRD EGGS

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE bird eggs as in recent years?..... X L S M

If the SAME or NEVER USE go on to next page.

X = NEVER USE

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the bird eggs that your household harvested, processed, or used for subsistence?

X N Y

If Yes, please describe the changes in condition you observed

X = DID NOT USE

HARVESTS: PLANTS - LEAVES

HOUSEHOLD ID

Do members of your household USUALLY pick PLANTS - LEAVES for subsistence?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO PICK plants - leaves?..... Y N

IF NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many plants - leaves ALL MEMBERS OF YOUR HOUSEHOLD PICKED for subsistence use this year. INCLUDE plants - leaves you gave away, ate fresh, lost to spoilage, or got by helping others. If picking with others, report ONLY YOUR SHARE of the harvest.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY DID MEMBERS OF YOUR HOUSEHOLD PICK? <i>(number)</i>	UNITS <i>(gal)</i>	WERE LESS, SAME, OR MORE (<u> </u>) AVAILABLE IN 2009, THAN IN RECENT YEARS? <i>(circle)</i>
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?			
	<i>(circle)</i>						
WILLOW LEAVES <i>Quungaq</i> 602031000	Y N	Y N	Y N	Y N		GAL	L S M ?
SOURDOCK <i>Algegkag</i> 602028000	Y N	Y N	Y N	Y N		GAL	L S M ?
ANGELICA - WILD CELERY <i>Tepluk</i> 602032000	Y N	Y N	Y N	Y N		GAL	L S M ?
SMALL POTATO <i>Uulqig</i> 602009000	Y N	Y N	Y N	Y N		GAL	L S M ?
LABRADOR TEA <i>Qayughqun</i> 602018000	Y N	Y N	Y N	Y N		GAL	L S M ?
RIVER BEAUTY <i>Anqukag</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
SAXIFRAGE - WHITE FLOWER <i>Amlluqjirak</i> 602000000	Y N	Y N	Y N	Y N		GAL	L S M ?
GRASS <i>Pigineghqat</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
ROSEROOT (PLANT) <i>Nunivak</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
STINKWEED <i>Riqalluk</i> 600044000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER PLANT LEAVES - 1 <i>Quwelngiq</i>	Y N	Y N	Y N	Y N		GAL	L S M ?

Continue on next page.

These columns should include all the plants - leaves HARVESTED by members of this household in 2009.

" ? " means "I don't know"

HARVESTS: PLANTS - LEAVES

HOUSEHOLD ID

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY DID MEMBERS OF YOUR HOUSEHOLD PICK? <i>(number)</i>	UNITS <i>(each, gallons, tubs, etc.)</i>	WERE LESS, SAME, OR MORE (____) AVAILABLE IN 2009, THAN IN RECENT YEARS? <i>(circle)</i>
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?			
	<i>(circle)</i>						
OTHER PLANT LEAVES - 2 <i>Ungllevnarak</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N		GAL	L S M ?

These columns should include all the plants - leaves HARVESTED by members of this household in 2009.

" ? " means "I don't know"

If your household did not harvest, but used and received plant leaves ,did you get your plant leaves from outside your community?

Yes No

PLANT LEAVES

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE plant leaves as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE go on to next page.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the plant leaves that your household harvested, processed, or used for subsistence?

If Yes, please describe the changes in condition you observed

X N Y

X = DID NOT USE

HARVESTS: PLANTS - ROOTS

HOUSEHOLD ID

Do members of your household USUALLY pick PLANTS - ROOTS for subsistence?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO PICK plants - roots?..... Y N

IF NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many plants - roots ALL MEMBERS OF YOUR HOUSEHOLD PICKED for subsistence use this year. INCLUDE plants - roots you gave away, ate fresh, lost to spoilage, or got by helping others. If picking with others, report ONLY YOUR SHARE of the harvest.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY DID MEMBERS OF YOUR HOUSEHOLD PICK? <i>(number)</i>	UNITS <i>(gal)</i>	WERE LESS, SAME, OR MORE <i>(circle)</i> AVAILABLE IN 2009, THAN IN RECENT YEARS? <i>(circle)</i>
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?			
	<i>(circle)</i>						
ROSEROOT (ROOT) <i>Saqlak</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 1 <i>Qakeqaaq</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 2 <i>Qullikag</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 3 <i>Melli</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 4 <i>Suqlamestaq</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 5 <i>Tegetuwaaq</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 6 <i>Akughag</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 7 <i>Uqfiqag</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 8 <i>Uqfiqag-lalagaq</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 9 <i>Uqfiqag-Qesukaq</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 10 <i>Uqfiqag-Uqfiqapiik</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 11 <i>Qaghmini (Tunuq Mix W/Fat)</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?

Continue on next page.

These columns should include all the plants - roots HARVESTED by members of this household in 2009.

" ? " means "I don't know"

HARVESTS: PLANTS - ROOTS

HOUSEHOLD ID

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY DID MEMBERS OF YOUR HOUSEHOLD PICK? <i>(number)</i>	UNITS <i>(gal)</i>	WERE LESS, SAME, OR MORE (<u> </u>) AVAILABLE IN 2009, THAN IN RECENT YEARS? <i>(circle)</i>
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?			
	<i>(circle)</i>						
OTHER ROOT 12 <i>Ungllevnaarak</i> 604004000	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 13 <i>Unatat</i> 604004001	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 14 <i>Ungllevnaarak</i> 604004002	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER ROOT 15 <i>Pekneg</i> 604004003	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N		GAL	L S M ?

These columns should include all the plants - roots HARVESTED by members of this household in 2009.

" ? " means "I don't know"

If your household did not harvest, but used and received roots ,did you get your roots from outside your community?
 Yes No

PLANTS - ROOTS █

Between JANUARY and DECEMBER, 2009...
 ...Did your household use LESS, SAME, or MORE roots as in recent years?..... X L S M
 X = NEVER USE

If the SAME or NEVER USE go on to next page.
 If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the roots that your household harvested, processed, or used for subsistence?
 If Yes, please describe the changes in condition you observed X N Y
 X = DID NOT USE

HARVESTS: PLANTS - BERRIES

HOUSEHOLD ID

Do members of your household USUALLY pick PLANTS - BERRIES for subsistence?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO PICK plants - berries?..... Y N

IF NO, go to the next harvest page.

If YES, continue on this page...

Please estimate how many plants - berries ALL MEMBERS OF YOUR HOUSEHOLD PICKED for subsistence use this year. INCLUDE plants - berries you gave away, ate fresh, lost to spoilage, or got by helping others. If picking with others, report ONLY YOUR SHARE of the harvest.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY DID MEMBERS OF YOUR HOUSEHOLD PICK? <i>(number)</i>	UNITS <i>(gal)</i>	WERE LESS, SAME, OR MORE <i>()</i> AVAILABLE IN 2009, THAN IN RECENT YEARS? <i>(circle)</i>
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?			
	<i>(circle)</i>						
CURRANTS 601012000	Y N	Y N	Y N	Y N		GAL	L S M ?
BLUEBERRIES <i>Paqunghaq</i> 601002000	Y N	Y N	Y N	Y N		GAL	L S M ?
SALMONBERRIES <i>Aqavzik</i> 601022000	Y N	Y N	Y N	Y N		GAL	L S M ?
BLACKBERRIES <i>Paqunghaq</i> 601030000	Y N	Y N	Y N	Y N		GAL	L S M ?
CRANBERRIES <i>Kiitmik</i> 601004002	Y N	Y N	Y N	Y N		GAL	L S M ?
RASPBERRIES 601020000	Y N	Y N	Y N	Y N		GAL	L S M ?
BEAR BERRY <i>Kaavlak</i> 601000000	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N		GAL	L S M ?

These columns should include all the plants - berries HARVESTED by members of this household in 2009.

" ? " means "I don't know"

If your household did not harvest, but used and received berries ,did you get your berries from outside your community?

Yes No

PLANTS - BERRIES

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE berries as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE go on to next page.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the berries that your household harvested, processed, or used for subsistence?

If Yes, please describe the changes in condition you observed

X = DID NOT USE

HARVESTS: SEAWEED

HOUSEHOLD ID

Do members of your household USUALLY pick SEAWEED for subsistence?..... Y N

Between JANUARY and DECEMBER, 2009...

...Did members of your household USE or TRY TO PICK seaweed?..... Y N

IF NO, go to the next harvest page.

IF YES, continue on this page...

Please estimate how many seaweed ALL MEMBERS OF YOUR HOUSEHOLD PICKED for subsistence use this year. INCLUDE seaweed you gave away, ate fresh, lost to spoilage, or got by helping others. If picking with others, report ONLY YOUR SHARE of the harvest.

	IN 2009 DID MEMBERS OF YOUR HOUSEHOLD...				IN 2009, HOW MANY DID MEMBERS OF YOUR HOUSEHOLD PICK? <i>(number)</i>	UNITS <i>(gal)</i>	WERE LESS, SAME, OR MORE <i>(circle)</i> AVAILABLE IN 2009, THAN IN RECENT YEARS? <i>(circle)</i>
	USE?	TRY TO HARVEST?	RECEIVE?	GIVE AWAY?			
	<i>(circle)</i>						
BLADDERWRACK <i>Aqetaahuk</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER SEAWEED 1 <i>Elqwaag</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER SEAWEED 2 <i>Anqgaperuuget</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER SEAWEED 3 <i>Nuvakataq</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER SEAWEED 4 <i>Maaqhsi</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER SEAWEED 5 <i>Aqatu</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER SEAWEED 6 <i>Estegtaq</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
OTHER SEAWEED 7 <i>Efteghruk</i>	Y N	Y N	Y N	Y N		GAL	L S M ?
	Y N	Y N	Y N	Y N		GAL	L S M ?

These columns should include all the seaweed HARVESTED by members of this household in 2009.

" ? " means "I don't know"

If your household did not harvest, but used and received seaweed, did you get your seaweed from outside your community?

Yes No

SEAWEED

Between JANUARY and DECEMBER, 2009...

...Did your household use LESS, SAME, or MORE seaweed as in recent years?..... X L S M

X = NEVER USE

If the SAME or NEVER USE go on to next page.

If different (LESS or MORE), how and why was your use different?

In 2009, did you notice any changes in the condition of the seaweed that your household harvested, processed, or used for subsistence?

If Yes, please describe the changes in condition you observed

X = DID NOT USE

X N Y

Considering all your uses of wild resources total between January and December 2009 ...
Did your household use LESS, SAME or MORE wild resources as in recent years?

L S M X

X = NEVER USE WILD RESOURCES

If the SAME or NEVER USE WILD RESOURCES, skip the next question

If your household use of wild resources was LESS or MORE than recent years, how and why was your use different?

In 2009, did fuel costs affect your household's subsistence harvesting activities?

Y N X

If yes, how?

X = DO NOT HARVEST

JOBS

FOR EACH PERSON IN THE HOUSEHOLD, 16 YEARS OLD AND OLDER

HOUSEHOLD ID

Between JANUARY and DECEMBER, 2009...

...Did any members of your household earn money from a JOB or from SELF EMPLOYMENT?..... Y N

For each member of this household born before 1994, please list EACH JOB held between JANUARY and DECEMBER, 2009.

For household members who did not have a job, write: "RETIRED," "UNEMPLOYED," "STUDENT," "HOMEMAKER," etc.

There should be at least ONE ROW for each member of this household born BEFORE 1994.

We ask about jobs and income because we are trying to understand all parts of the community economy. Many people use wages from jobs to support subsistence activities. If one person has more than one job, list each job on a separate line. (One person may have several lines.)

REMEMBER COMMERCIAL FISHING AND TRAPPING IF APPLICABLE

WORK SCHEDULE...

	WHO HAD THIS JOB? person	WHAT KIND OF WORK DID HE/SHE DO IN THIS JOB? job title	FOR WHOM DID HE/SHE WORK IN THIS JOB? employer, SIC	JOB LOCATION? (community)	IN 2009, WHAT MONTHS DID HE OR SHE WORK IN THIS JOB? circle each month worked	WORK SCHEDULE...					IN 2009, HOW MUCH DID HE/SHE EARN IN THIS JOB? gross income
						FULL TIME	PART TIME	SHIFT - FULL TIME	ON-CALL, VARIES	SHIFT - PART TIME	
1ST JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
1 6 9.1E+08						SCHEDULE					
2ND JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
2 6 9.1E+08						SCHEDULE					
3RD JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
3 6 9.1E+08						SCHEDULE					
4TH JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
4 6 9.1E+08						SCHEDULE					
5TH JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
5 6 9.1E+08						SCHEDULE					
6TH JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
6 6 9.1E+08						SCHEDULE					
7TH JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
7 6 9.1E+08						SCHEDULE					
8TH JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
8 6 9.1E+08						SCHEDULE					
9TH JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
9 6 9.1E+08						SCHEDULE					
10TH JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
10 6 9.1E+08						SCHEDULE					
11TH JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
11 6 9.1E+08						SCHEDULE					
12TH JOB					J F M A M J J A S O N D	FT	PT	SF	OC	SP	\$ / YR
12 6 9.1E+08						SCHEDULE					

If a person is SELF-EMPLOYED (selling carvings, crafts, bread, etc), list that as a separate job. Enter "sewer," "carver," "baker," etc. as JOB TITLE. Work schedule usually will be "ON CALL." For gross income from self employment ("profit"), enter revenue MINUS expenses.

If a person is UNEMPLOYED, specify retired, unemployed, disabled, student, or homemaker as the JOB TITLE.
TRAPPING for barter or sale IS a job.

WORK SCHEDULE
1 - Fulltime (35+ hours/week)
2 - Parttime (<35 hours/week)
3 - Shift (2 wks on/2 off, etc.)
4 - Irregular, on call
5 - Shift - part time

GROSS INCOME is the same as **TAXABLE INCOME** on a W-2 form.

OTHER INCOME THIS PAGE IS ONLY FOR INCOME THAT IS NOT EARNED FROM WORKING HOUSEHOLD ID

Between JANUARY and DECEMBER, 2009...

...Did any members of your household receive a dividend from the Permanent Fund or a Native Corporation?..... Y N

IF NO, go to the next section on this page.

If YES, continue below...

		DID ANYONE IN YOUR HH RECEIVE INCOME FROM _____ IN 2009? (circle one)	TOTAL AMOUNT ALL MEMBERS OF YOUR HH RECEIVED IN 2009? (dollars)	ALASKA PFD IN 2009
DIVIDENDS	ALASKA PERMANENT FUND DIVIDEND	Y N	\$ _____ /YR	1 PFD = \$1,305
	NATIVE CORPORATION DIVIDENDS	Y N	\$ _____ /YR	2 PFDs = \$2,610
				3 PFDs = \$3,915
				4 PFDs = \$5,220
				5 PFDs = \$6,525
				6 PFDs = \$7,830
				7 PFDs = \$9,135
				8 PFDs = \$10,440
				9 PFDs = \$11,745
				10 PFDs = \$13,050
				11 PFDs = \$14,355

Between JANUARY and DECEMBER, 2009...

...Did any members of your household receive OTHER income such as SENIOR BENEFITS or UNEMPLOYMENT?..... Y N

IF NO, go to the next page.

If YES, continue below...

		RECEIVED IN 2009? (circle one)	TOTAL AMOUNT IN 2009? (dollars)	scratch paper for calculations
JOB BENEFITS	UNEMPLOYMENT	Y N	\$ _____ /YR	\$ _____ per week for _____ weeks = \$ _____ per month for _____ months =
	WORKERS' COMPENSATION	Y N	\$ _____ /YR	\$ _____ per week for _____ weeks = \$ _____ per month for _____ months =
ASSISTANCE	FOOD STAMPS (QUEST CARD)	Y N	\$ _____ /YR	\$ _____ per week for _____ weeks = \$ _____ per month for _____ months =
	ADULT PUBLIC ASSISTANCE	Y N	\$ _____ /YR	\$ _____ per week for _____ weeks = \$ _____ per month for _____ months =
ELDER BENEFITS	ALASKA SENIOR BENEFITS (LONGEVITY)	Y N	\$ _____ /YR	Depends on Income \$125 per month for 12 months = \$1,500 per elder \$175 per month for 12 months = \$2,100 per elder \$250 per month for 12 months = \$3,000 per elder
	PENSION & RETIREMENT	Y N	\$ _____ /YR	\$ _____ per week for _____ weeks = \$ _____ per month for _____ months =
	SOCIAL SECURITY	Y N	\$ _____ /YR	\$ _____ per week for _____ weeks = \$ _____ per month for _____ months =
CHILD BENEFITS	SUPPLEMENTAL SECURITY	Y N	\$ _____ /YR	\$ _____ per week for _____ weeks = \$ _____ per month for _____ months =
	FOSTER CARE	Y N	\$ _____ /YR	\$ _____ per week for _____ weeks = \$ _____ per month for _____ months =
	CHILD SUPPORT	Y N	\$ _____ /YR	\$ _____ per week for _____ weeks = \$ _____ per month for _____ months =
OTHER	ENERGY ASSISTANCE	Y N	\$ _____ /YR	
	OTHER (describe)	Y N	\$ _____ /YR	

HOUSEHOLD EXPENSES

HOUSEHOLD ID

I'M GOING TO READ A LIST OF HOUSEHOLD EXPENSES. PLEASE TELL ME HOW MUCH YOUR HOUSEHOLD SPENT ON EACH IN 2009. THEN I AM GOING TO ASK WHO PAID THOSE EXPENSES FOR YOUR HOUSEHOLD.

Enter the ANNUAL total. If respondent gives you their MONTHLY expenses write the "(monthly amount) x 12 = (annual total)."

GROCERIES	\$	PER YEAR

RENT OR MORTGAGE	\$	PER YEAR
HEATING FUEL	\$	PER YEAR
PROPANE	\$	PER YEAR
ELECTRICITY	\$	PER YEAR
WATER-SEWER GARBAGE	\$	PER YEAR
TELEPHONE	\$	PER YEAR
TELEVISION (CABLE OR SAT.)	\$	PER YEAR
TRAVEL / MEDICAL	\$	PER YEAR

GASOLINE	\$	PER YEAR
AMMUNITION	\$	PER YEAR
SUBSISTENCE GEAR	\$	PER YEAR
CAMP SUPPLIES	\$	PER YEAR

List the most important person first. INCLUDE people living in this household.

order, res. & role	PERSON CODE	HOW MUCH DID THIS PERSON SPEND ON THIS FOR YOUR HH?
	00000	dollars
1ST CASH SOURCE		\$
1 1 110000000		
2ND CASH SOURCE		\$
2 1 110000000		
3RD CASH SOURCE		\$
3 1 110000000		
4TH CASH SOURCE		\$
4 1 110000000		
5TH CASH SOURCE		\$
5 1 110000000		
6TH CASH SOURCE		\$
6 1 110000000		
7TH CASH SOURCE		\$
7 1 110000000		
8TH CASH SOURCE		\$
8 1 110000000		
9TH CASH SOURCE		\$
9 1 110000000		
10TH CASH SOURCE		\$
10 1 110000000		

List the most important person first. INCLUDE people living in this household.

order, res. & role	PERSON OR CREW CODE	HOW MUCH DID THIS PERSON SPEND ON THIS FOR YOUR HH?
	00000	dollars
1ST CASH SOURCE		\$
1 1 110000000		
2ND CASH SOURCE		\$
2 1 110000000		
3RD CASH SOURCE		\$
3 1 110000000		
4TH CASH SOURCE		\$
4 1 110000000		
5TH CASH SOURCE		\$
5 1 110000000		
6TH CASH SOURCE		\$
6 1 110000000		
7TH CASH SOURCE		\$
7 1 110000000		
8TH CASH SOURCE		\$
8 1 110000000		
9TH CASH SOURCE		\$
9 1 110000000		
10TH CASH SOURCE		\$
10 1 110000000		

List the most important person first. INCLUDE people living in this household.

order, res. & role	PERSON OR CREW CODE	HOW MUCH DID THIS PERSON SPEND ON THIS FOR YOUR HH?
	00000	dollars
1ST CASH SOURCE		\$
1 1 110000000		
2ND CASH SOURCE		\$
2 1 110000000		
3RD CASH SOURCE		\$
3 1 110000000		
4TH CASH SOURCE		\$
4 1 110000000		
5TH CASH SOURCE		\$
5 1 110000000		
6TH CASH SOURCE		\$
6 1 110000000		
7TH CASH SOURCE		\$
7 1 110000000		
8TH CASH SOURCE		\$
8 1 110000000		
9TH CASH SOURCE		\$
9 1 110000000		
10TH CASH SOURCE		\$
10 1 110000000		

