

Harvest
Monitoring
Services,
Subsistence
Harvest of
Northern
Fur Seals on
St. George
Island, AK

2015



The U.S. Department of the Commerce, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), Alaska Region Pribilof Program Office managed the 2015 Northern Fur Seal Pup Harvest on St. George Island with the assistance of the Harvest Observer, a consultant from InupiaQ Alaska Group, LLC, who worked closely with the St. George Tribal Government representatives.

Harvest report for
the 2015 Season
September 15 to
November 30, 2015

I. INTRODUCTION

Laquudax, northern fur seal pup (*Callorhinus ursinus*), is an important customary traditional food for the Unangan of St. George Island, Alaska. The Traditional Council of St. George together with the U.S. National Marine Fisheries Service (NMFS), coordinated, monitored, and managed the subsistence harvest of northern fur seals to safeguard their existence. The 2015 subsistence pup fur seal harvest was conducted in accordance to 50 CFR §216 Subpart F on St. George Island. InupiaQ Alaska Group, LLC (IAG) was contracted by NMFS to monitor the subsistence harvest of northern fur seal pups. Contract specifications included the following four tasks: training, harvest observation, reporting, and sampling. This report meets the contract deliverable requirement and also describes the field aspects of the contract for services.

II. CRITERIA FOR HARVEST MONITORING AND OBSERVER REPORTING

The contract specified 4 tasks to be completed: (A) Training/Planning, (B) Harvest Monitoring, (C) Sampling, and (D) Reporting. We have provided a brief summary of the 3 other contractual tasks along with a detailed description to fulfill the reporting task. During the 2015 subsistence fur seal pup harvest, the below data for items a-h were specified for observed harvests with information provided from NMFS for unobserved harvests.

- a. Date
- b. Location
- c. Weather conditions
- d. Start and end times
- e. Number of young seals taken
- f. Number and disposition of samples collected
- g. Number of seals released after determination of sex
- h. Number of non-young of the year seals encountered and handled

We present Items a-e in Table 1 below. Items f-h, along with additional data added to those specified in the NMFS template, are included in Exhibits A and B at the end of this report. We present recommendations for consideration by NMFS to address subsistence harvest monitoring, local use, and reporting in a subsection entitled:

- i. Recommendations for improvements to the conduct of the harvest”.

The St. George Traditional Council’s report to NMFS for the regulated subsistence harvest of sub-adult male fur seals in the summer included additional criteria, items j-q below.

- j. Incidence of by-products and waste during the harvest process
- k. Female seals killed or injured during the harvest operation
- l. Number of seal deaths due to overheating
- m. Number of seals entangled in marine debris and the number of seals disentangled

- n. Evidence of oil contaminated seal pelts
- o. Other types of fur seal mortality
- p. Attempted harvest and/or other unusual conditions related to the harvest
- q. Research conducted during the harvest

These items are also addressed in the following narrative.

III. NARRATIVE OF RESULTS

A. Training/Planning: Ms. Buffy Meyer, contracted observer, met with Mr. Mike Williams of NMFS prior to travelling to St. George Island, to review the history of the Northern Fur Seal and the Aleut, contract requirements, differences between Spotted and Northern Fur Seals, planning considerations for food and apparel, and on-island living conditions. Flight reservations were made with PenAir (the only air carrier) to arrive on St. George on September 20, 2015, and were successful on the first attempt. Once on the Island, training to understand fur seal behavior could begin. Initial training included tag resighting to observe undisturbed seal behavior. Training included multiple field observation periods, field data collection, and data entry and recording at Cottage C. Subsequent training included participation in pup flipper tagging, adult and pup capturing and handling, and attaching satellite telemetry tags to investigate behavioral responses of fur seals to harvest harassment. This training provided a basic understanding of fur seal behavior and direct experience in safe handling of fur seals, detecting signs of stress, reducing the risk of injury during handling, identifying the sex of individual pups, and a familiarity of the different terrain and locations where fur seals reside on St. George.

During the first week, a Community Meeting occurred to meet with the harvesters and tribal staff, and provide an opportunity for NMFS representatives hear local concerns and make improvements from 2014 pup harvest. The information exchange in the community meeting provided the basis for making decisions about harvest methods to minimize effects on harvested and unharvested seals, how to handle seals safely, and determining sex of pups to ensure compliance with the harvest regulations. NMFS also reviewed the federal harvest regulations to ensure roles, responsibilities, and restrictions were clear for harvesters.

B. Harvest Monitoring: Harvests season was open from September 15 to November 30, 2015 with the first harvest taking place on Sept 24th and the final harvest on November 25th. A total of 57 northern fur seal pups were harvested during the 2015 season. Thirteen harvests were conducted in the two and a half month period, with seven harvests at East Rookery, two in the harbor, two at Zapadni Old Dock and one at North Section 3 Rookery. Table 1 below provides a summary of the harvests including items a-e above. More detail is available to address items f-h above and are included in the individual Pup Harvest Daily Reports found in the Appendix.

C. Sampling: After community members completed harvesting the meat, fat, and pelts were collected. The remaining carcass typically included the head and most organs. Community members did not retain any pelts prior to early October because pups were still in the final stages of the molt into their “silver” non-pup fur. The non-edible remains of the carcasses and intestines were taken to the Cottage “C” facility for sampling. Samples taken were liver, spleen, testicles, lymph nodes, pancreas, kidney, lung, blubber, stomach, whiskers, nasal swabs, longissimus dorsi, neck muscle,

blood, and large and small intestine. Exhibit A at the end of the report contains a table of all samples taken. The un-sampled remains of the carcass were then delivered to the blubber dump.

D. Reporting: On harvest days, a Pup Harvest Report was delivered to the Program Manager via email (See daily harvest summaries attached). A typical harvest report included the attendees, start and end times, location, samples taken, and date and number of seals taken.

a. Date	b. Location	c. Weather Conditions	d. Start & End Times	e. No. of Young Seals Taken
09/24/2015	Zapadni old dock	46 °F	Start: 16:15 End: 16:37	5
10/02/2015	Harbor	46 °F	Start: 17:30 End: 18:15	4
10/06/2015	East Reef Haulout (West)	43 °F	Start: 16:10 End: 16:43	6
10/9/2015	Zapadni old dock	42 °F Rain, Light wind	Start: 16:05 End: 16:44	5
10/16/2015	East Reef Haulout (west)	41 °F Overcast, Drizzles	Start: 15:45 End: 18:30	6
10/19/2015	North Rookery section 3	33 °F Sunny, Cool	Start: 15:30 End: 17:35	6
10/23/2015	Harbor	39 °F Light rain	Start: 16:25 End: 16:55	3
10/30/2015	Harbor	34 °F	<i>off island</i>	1
11/06/2015	East Reef Rookery	39 °F	<i>off island</i>	4
11/18/2015	East Reef & Cliffs Rookery	39 °F Overcast	Start: 13:45 End: 14:10	3
11/20/2015	East Reef Rookery	32 °F Overcast	Start: 10:45 End: 11:30	3
11/24/2015	East Cliffs Rookery	39 °F	Start: 13:35 End: 14:15	6
11/25/2015	East Reef Rookery (between sea lion rock and pond)	23 °F	Start: 11:35 End: 12:15	5
Total	13 Harvests	38 °F Average Temp	Total Duration:	57

Table 1: Specified Data for All Subsistence Harvests of norther fur seal pups on St. George Island. Note column headings relate to items a-e in list of required harvest information.

i. Recommendations for improvements to the conduct of the harvest: While working as an Inupiaq Alaska Native female contractor to NMFS as the humane seal harvest observer on Saint George Island, below are personal observations shared about the Unangan Harvest of the Northern Fur Seals.

(1) Government regulation and monitoring has the potential to harm subsistence food availability. Common foods from the mainland are scarce on this remote island. Cancelled supply

planes limit the availability and increase the costs of purchased goods to a point where subsistence foods are critical to daily nutrition. Alaska Natives enjoyed this meat as a delicacy that required no added spices beyond boiling in sea water. When offered the opportunity to try this during the Laquudax celebration, often described as an Aleut Luau by the Unangan, the event was reminiscent of how others in differing cultures might enjoy lamb chops or baby back ribs. The seal pup meat lacks the game taste of adult harbor or spotted seals and is valued as both a family harvesting tradition and a delicacy of the indigenous residents for only a few months out of the year. This harvest like all subsistence harvests in rural Alaska communities serves both as a critical source of nutritious fresh meat and cultural purpose connecting members of the community. The humane observer/harvest monitor role has the potential to unknowingly affect the community's ability to harvest and must always be prepared for the probable occurrence of the harvest.

(2) NMFS may consider developing a harvest monitoring program similar to U.S. Fish & Wildlife Service's Marking, Tagging, and Reporting Program (MTRP) in the future to track legally harvested northern fur seal pups. I also work as a paid sea otter tagger in the MTRP, and it appears that NMFS could contract two local positions: one to tag (a hide) and the other to collect samples to characterize the harvest. Alaska Natives are more apt to share their harvests with a local native tagger or with a person who understands the Alaska Native subsistence life creating open reporting of harvest numbers to NMFS. A NMFS representative, familiar with the indigenous people, choose the local individuals to take samples, tag hides, fill out required information, turn in the samples and provide information directly to the NMFS representative to receive payment, would improve the process. This system would create a strong working relationship and may help ensure more accurate and complete harvest counts in the future.

(3) The Unangan of the Pribilof Islands have lost knowledge to complete the traditional cycle of subsistence use because of government restriction and control of the subsistence harvest fur seals. Because the government controlled the use and processing of pelts from the early 1900s through 1984, I noted a break in the Alaska Native cultural tradition of individuals retaining, tanning, designing, and sewing skins that is typically passed on from generation to generation throughout the indigenous areas of Alaska. St George subsistence users recounted to me that the start of the subsistence period in the 1970s and again in 1985 & 1986 the government collected skins from the subsistence harvest and resulted in hides being disposed of after harvesting. This loss of local expertise and confusion regarding the opportunity for processing and tanning skins continues to today. The high costs associated with processing and tanning further limit local economic opportunities to fully use this important subsistence resource.

j. Incidence of by-products and waste during the harvest process: Based on my experience from other areas where Alaska Natives harvest marine mammals for subsistence use, I observed no evidence of waste during the subsistence harvest of fur seal pups. The opportunity for greater utilization of by-products may be improved by clarifying the opportunities for tanning and processing fur seal pelts for the creation of products to be used locally or sold as handi-crafts. Hide quality was poor due to the molt from the first harvest on September 24th so they were not retained for tanning. During the following harvest on October 2nd, four hides were taken and of those taken, two seals were in the molting process and still in the dark brown coat. For the other two seal pelts, the molting process was complete and hair holding well with a multi colored coat. The seals from

the later harvests in the season were finished molting and possible to be blubbered, cleaned, and tanned.

k. Female seals killed or injured during the harvest operation: No female pups were harvested.

l. Number of seal deaths due to overheating: No deaths of any fur seal occurred due to heat stroke during the subsistence seal pup harvest. Outside temperatures are low enough and the duration of harvests are short enough that it appears unlikely that seals would overheat.

m. Number of seals entangled in marine debris and the number of seals disentangled: We observed eight entangled seals. I assisted in capturing and removing marine debris from four entangled seals. We were unable to capture the four additional entangled seals to remove the marine debris.

n. Evidence of oil contaminated seal pelts: No oil contamination was encountered on any of the harvested animals.

o. Other types of fur seal mortality: No other fur seal mortality occurred.

p. Attempted harvest and/or other unusual conditions related to the harvest: There were two attempted harvests in the middle of November. Due to the migration of the seals and the weather surrounding the island, the availability of seals in most of the harvest areas ranged from zero to very few. On November 16, 2015 (27 °F) a harvest was unsuccessful. Of the three pups rounded up all were verified as female and released. The rocks, beach and drift wood were covered in ice creating a high risk of falling and injury to the harvesters. It was decided that an additional harvest attempt was not practical on this day. The second attempted harvest was the following day, November 17, 2015 (36 °F). Harvesters chose to attempt a harvest at the Harbor and Zapadni Dock locations, but no seals were observed there. The harvesters hiked to the Zapadni Rookery, and observed about 50 seals, three of which were pups. The decision was made by the harvest crew to not harvest to avoid creating a disturbance and possibly not catch any of the pups. At the North Rookery, about 40 seals were observed, including one pup, and again the decision was made to not harvest the pup to avoid creating a disturbance.

q. Research conducted during the harvest: Additional research was done with the seal harvests including sampling for the National Marine Mammal Laboratory. A list including pup number and samples taken (up to 18 samples) from each individual seal is attached. All samples were bagged, labeled and stored in the freezer at Cottage C. There were a number of sub-adults captured, logged, weighed, and released from groups to ensure no harm occurred to them. No tagged seal pups were harvested during the 2015 season.

IV. LOGISTICS SUPPORTING OBSERVER TASKING

To support the NMFS Subsistence Harvest Program, presence on St. George Island was required and air travel was necessary. Upon mobilization for travel, three scheduled flights per week existed from Anchorage to St. George Island. What follows is a chronological listing of notable logistics activities involved with mobilization, transit from and to the Alaska mainland, and occurrences that are now lessons learned:

9/19/2015 Packed food clothing and gear
9/20/2015 Travel to Anchorage for 3 hour flight to St George Island
10/1/2015 Arranged for additional groceries sent via USPS.
10/25/2015 Packed. Stored work gear and work clothing at Cottage C. Flight check in at 2 pm, Flight left at 4:30 pm arrived in Anchorage 7:30 pm
11/10/2015 Purchased groceries in Anchorage for St George Island stay and packed
11/11/2015 Arrived at airport to check in. Flight cancelled. Penn Air rebooked for next available seat on 11/20/2015. Two options were to charter a plane or to re-pack every day and arrive early every day there was a scheduled flight.
11/13/2015 Took next flight to St. George. Of the five people on standby, one seat was offered. Personal luggage containing clothes, food, and other work materials did not get loaded onto plane due to weight limitations.
10/27/2015 Coordinated flight and worked around schedule changes.
11/15/2015 Flight cancelled for inclement weather, therefore no luggage.
11/18/2015 Flight cancelled for inclement weather, therefore no luggage.
11/20/2015 Waited at St. George airport for flight arrival. Ground crews in Anchorage did not load the personal luggage.
11/22/2015 Flight was cancelled for inclement weather, therefore no luggage.
11/25/2015 Flight arrived with luggage.
11/28/2015 Prepped Cottage C for winterization. Prepared for air travel to the mainland.
11/29/2015 Air travel to Anchorage.

V. LIST OF EXHIBITS

- A. FINAL SAMPLES LOG (2 pages)
- B. PHOTOS WITH CAPTIONS (4 pages)

EXHIBIT A - FINAL SAMPLES LOG

Samples Collected from St George Pup Harvest 24 Sep to 25 Nov 2015

X = sample taken and in freezer

0 = sample taken and removed from freezer and brought back to lab in San Diego

Date	Location	Number	liver	lung	kidney	spleen	lymph	testie	whisker	Nasal	Stomach	pancreas	blubber	blood	sm intestine	lg intestine	neck muscle	Longissimus Dorsi	blubber	liver		
24-Sep-2015	Zap Dock	1A	0	X	X	X	X	X	0	X	0	X	X									
		2A	0	X	X	X	X	X	0	X	0	X	X									
		3A	0	X	X	X	X	X	0	X	0	X	X									
		4A	0	X	X	X	X	X	0	X	0	X	X									
		5A	0	X	X	X	X	X	0	X	0	X	X									
2-Oct-2015	Harbor	1	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0			0		
		2	X	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0			0	
		3	X	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0			0	
		4	X	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0			0	
6-Oct-2015	East Rk	5	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0			0		
		6	X	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0	0	0	0	
		7	X	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0	0	0	0	
		8	X	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0	0			0
		9	X	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0			0	
		10	X	X	X	X	X	X	X	0	X	0	X	X	0	0	0	0	0	0	0	0
9-Oct-2015	Zap Dock	11	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0	0	0	
		12	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0	0	
		13	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0	0	
		14	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0	0	
		15	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0	0	
16-Oct-2015	East Rk	16	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0	0		
		17	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0		
		18	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0		
		19	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0		
		20	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0		
		21	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0		
19-Oct-2015	North 3	22	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0	0			
		23	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0			
		24	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0			
		25	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0			
		26	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0			
		27	X	X	X	X	X	X	X	0	X	0		X	0	0	0	0	0			
23-Oct-2015	Harbor	28	X		X		X	X		X												
		29	X		X		X	X		X												
		30	X		X		X	X		X												

Date	Location	Number	liver	lung	kidney	spleen	lymph	testie	whisker	Nasal	Stomach	pancreas	blubber	blood	sm intestine	lg intestine	neck muscle	Longissimus Dorsi	blubber	liver
30-Oct-2015	see #52																			
6-Nov-2015	East Reef	31																		
		32																		
		33																		
		34																		
18-Nov-2015	East Rk	35	X		X		X	X		X										
		36	X		X		X	X		X										
		37	X		X		X	X		X										
20-Nov-2015	East Rk	38	X		X		X	X		X	X				X	X				
		39	X		X		X	X		X	X				X	X				
		40	X		X		X	X		X	X				X	X				
24-Nov-2015	East Rk	41					X	X		X	X				X	X				
		42					X	X		X	X				X	X				
		43	X				X	X		X	X				X	X				
		44					X	X		X	X				X	X				
		45	X				X	X		X	X				X	X				
		46	X				X	X		X	X				X	X				
25-Nov-2015	East Rk	47						X		X	X									
		48	X				X	X		X	X					X				
		49	X				X	X		X	X					X				
		50					X	X		X	X				X	X				
		51					X	X		X	X					X				
30-Oct-2015	Harbor	52																		

EXHIBIT B – PHOTOS WITH CAPTIONS



25 Sep 2015: Re-sighting is what NOAA calls spotting older tagged female NFS, NOAA hired re-sighters to photograph the tag, confirm tag location, document the surroundings and interaction with a pup. Data is input into a tracking program and submitted to NOAA.



24 Sep 2015: During harvests, disturbances were minimized and effort was expended to detangle seals and release them.



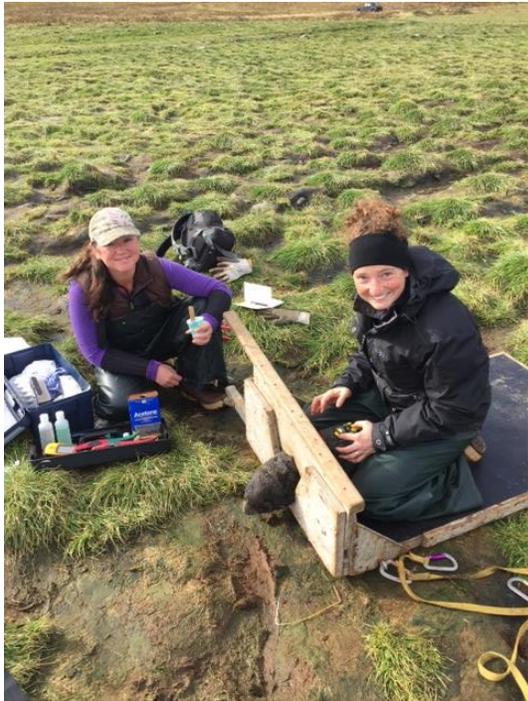
29 Sep 2015: Beach debris clean up while out re-sighting.



21 Sep 2015: Tribal office, food bank and village store.



30 Sep 2015: Process of breaking off a part of the herd to capture and tag.



30 Sep 2015: Satellite tagging of female sub adults.



30 Sep 2015: NSF pup round up and tagging.



3 Oct 2015: Laquttha traditional seal pup boil.



16 Oct 2015: Connected tribe with hide tanning for sub adult hides.



9 Oct 2015: Bagged and labeled Northern Fur Seal Pup samples.



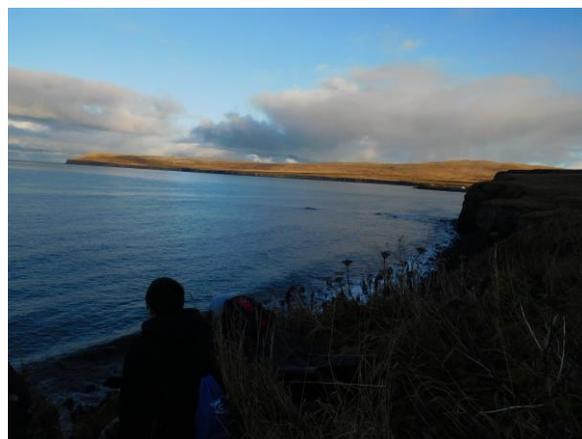
19 Oct 2015: Removing of rookery signs and storing.



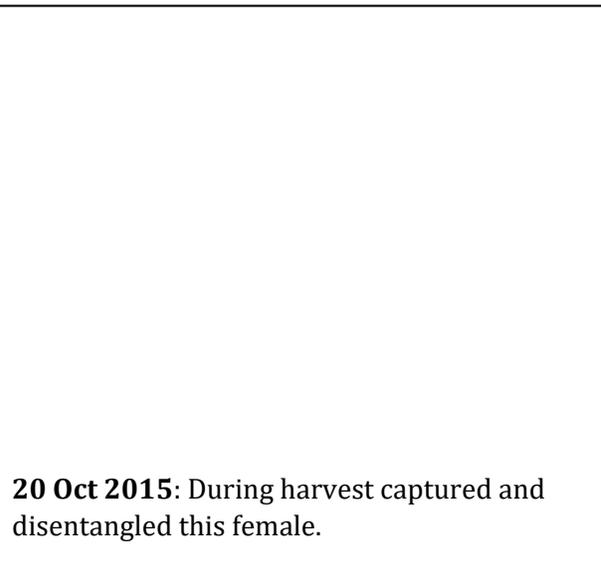
19 Oct 2015: Assisted in sign removal and storing at end of season.



18 Oct 2015: Cottage C facility on St George Island.



20 Oct 2015: Locating entanglements at South Rookery.



20 Oct 2015: During harvest captured and disentangled this female.





20 Oct 2015: Taught Inupiaq way of hide care.



25 Nov 2015: Airport waiting for luggage.

25 Nov 2015: East Rookery at the end of harvest season.

