

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

2016



NFS Pup
September 2016



The west end of
STG Island from
an airplane.

Photo by
Rebekah Leverty

The U.S. Department of the Commerce, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), Alaska Region Pribilof Program Office contracted InupiaQ Alaska Group, LLC, to provide observer services for the 2016 Northern Fur Seal Pup Harvest on St. George Island.

Harvest report for
the 2016 Season
September 16 to
November 30, 2016

I. INTRODUCTION

The subsistence use of northern fur seals (*Callorhinus ursinus*) on the Pribilof Islands is regulated under 50 CFR §216 Subpart F. On St. George Island there are two subsistence use seasons for fur seals. The duration of the first season is from June 24 through August 8, and is exclusively for the harvest of sub-adult male seals less than 124.5 cm in length. The duration of the second season is from September 16 through November 30 and is exclusively for the harvest of male pups. The total number of seals that can be harvested for subsistence uses cannot exceed 500, and is apportioned between 350 sub-adults and 150 pups.

Laaqudaax, northern fur seal pup, is not just an important traditional subsistence food for the Unangan of St. George Island, Alaska, it is a necessity. St. George residents rely on subsistence resources because of unreliable grocery shipments, frequent shortages of basic food items, and high prices. The Traditional Council of St. George (STG) together with the U.S. National Marine Fisheries Service (NMFS), coordinated, monitored, and co-managed the subsistence harvest of northern fur seals to safeguard their existence as part of their co-management agreement signed in 2001. This harvest report is an independent assessment of the 2016 subsistence harvest of fur seal pups to ensure compliance with the regulations authorizing the pup harvest in 2014 on St. George Island.

II. CRITERIA FOR HARVEST MONITORING AND OBSERVER REPORTING

The regulations at 50 CFR 216.74 (d)(6)-(11) restrict the harvest of male pups as follows:

- A. Pribilovians may only harvest male young of the year from September 16 through November 30 annually on St. George Island. Pribilovians may harvest up to 150 male fur seal young of the year annually up to the lower end of the harvest range established for St. George in the notice published pursuant to paragraph (b) of this section. When the lower end of the harvest range has been reached paragraphs (f)(1)(iii) and (f)(3) of this section apply.
- B. No more than 50 male young of the year may be harvested from each of the following regions where fur seals congregate: East region includes the breeding areas known as East Reef and East Cliffs rookeries and the associated non-breeding hauling grounds; South region includes the breeding areas known as Zapadni and South rookeries and the associated non-breeding hauling grounds; and North region includes the breeding areas known as North and Staraya Artil rookeries and associated non-breeding hauling grounds, as shown in Figure 1 to part 216. No area may be harvested more than twice per week and must be in accordance with paragraph (d)(10) of this section.

- C. The scheduling of the young of the year harvest is at the discretion of the Pribilovians, but must be such as to minimize stress to the harvested and un-harvested fur seals and minimize the take of female fur seals. The Pribilovians must give adequate advance notice of their harvest schedules to the NMFS representatives to allow for necessary monitoring activities. No fur seal may be taken except by sealers using the harvesting methods implemented to reduce disturbance, injury, and accidental mortality of female fur seals. Pribilovians may use, but are not limited to, organized drives of young of the year fur seals from congregating areas to inland killing fields. Methods of harvest must include identification of male young of the year, followed by stunning and immediate exsanguination, unless the NMFS representatives, in consultation with the Pribilovians conducting the harvest, determine that alternative methods will not result in increased stress to harvested and un-harvested fur seals, increased disturbance or injury to resting fur seals, or the accidental mortality of female seals.
- D. Any harvest of sub adult or adult fur seals or intentional harvest of young of the year female fur seals is prohibited.
- E. No young of the year fur seals may be taken from any designated breeding area or its associated hauling ground(s) where the most recent NMFS analysis projects that pup production has greater than a 5 percent probability of falling below a level capable of sustaining a harvest in 10 years.
- F. No more than 120 days after the final subsistence harvest each calendar year, NMFS representatives and St. George Island community members must review the implementation of the harvest and consider best harvest practices and determine if implementation can be improved to better meet the subsistence needs of the St. George Island community or reduce negative effects on fur seals.

To ensure compliance with the regulatory restrictions the harvest observers collected the following data (items 1-9) during the 2016 subsistence harvest of fur seal pups. Items 1-5 are presented in Table 1 below. Items 6-8, 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.

1. Date
2. Location
3. Weather conditions
4. Start and end times
5. Number of pups taken
6. Number and disposition of samples collected

7. Number of seals released after determination of sex
8. Number of non-young of the year seals encountered and handled
9. Recommendations for improvements to the conduct of the harvest

The below additional criteria, for items 10-17, were specified and an NMFS reporting template was provided. These items are additionally addressed narratively directly below.

10. Incidence of by-products and waste during the harvest process
11. Female seals killed or injured during the harvest operation
12. Number of seal deaths due to overheating
13. Number of seals entangled in marine debris and the number of seals disentangled
14. Evidence of oil contaminated seal pelts
15. Other types of fur seal mortality
16. Attempted harvest and/or other unusual conditions related to the harvest
17. Research conducted during the harvest

III. NARRATIVE OF RESULTS

A. Training/Planning: Ms. Buffy Meyer contracted observer, arrived on St. George Island on 18, September 2016. On September 22, 2016, Ms. Rebekah Leverty, a secondary contract observer arrived on St. George island. Ms. Meyer and Ms. Leverty met with Mr. Michael Williams of NMFS, on St. George Island to review the history of the northern fur seal (NFS), contract requirements, and familiarize the new observer with local community leaders and subsistence users, the location of rookeries, facilities and the community of STG. Two weeks of new observer training for Ms. Leverty occurred to support harvest monitoring and community relations. On September 22, 2016 field training and orientation began for Ms. Leverty during the first harvest followed by participation in field research. Ms. Meyer and Mr. Williams coordinated training of Ms. Leverty while ensuring all harvests were observed. During the first week, a Community Harvest Meeting occurred to meet with the harvesters and tribal staff, listening to their concerns and comments about the 2015 pup harvest. The information exchange provided the basis for making decisions about adjustments to harvest methods to minimize effects on harvested seals and how to handle seals safely for sexing, a key aspect of the harvest regulations to ensure no females are accidentally harvested. Additional training in animal handling and restraint included participation by Ms. Leverty and Ms. Meyer in field research to examine adult female response to harassment. This training improved the ability of

harvest observers to identify NFS stress responses and gain experience in handling and safely herding seals; also key elements to maintaining the low level of incidental harassment.

B. Harvest Monitoring: Observers were present for all subsistence harvests of pups during the 2016 season from September 16 to November 30, 2016 with the first harvest taking place on Sept 22nd and the final harvest on November 21st. A total of 46 male pups were harvested during the 2016 season and no female pups were accidentally harvested (Table 1). Ten harvests were conducted in the two and a half month period; Table 1 below provides a summary of the harvests including items a-e above. More detail is available from the individual Pup Harvest Daily Reports.

Harvests occurred an average of every six days. The last three harvests occurred within a seven day period and each occurred at a different area. No area was harvested more than twice per week. There were no pup harvests from November 22 through November 30 because none were available at any accessible locations on island. The community agreed to not harvest pups from Staraya Artil Rookery due to the low number of pups born there and the NMFS analysis indicating a continuing decline at this single breeding area on St. George.

C. Sampling: No research projects were associated with the 2016 pup harvest on St. George and as a result there was no tissue sampling. We estimate about 49 female pups were handled, sexed and released during the 2016 harvest. We estimate about 286 yearlings, sub adults and pups were rounded up. Most of yearlings were observed with pups at East Rookery. Getting an accurate count of the number of female pups handled and released is difficult to determine accurately. This is because harvesters release seals that they are uncertain whether they are male pups in order to minimize accidental female mortality; therefore, the counts of females handled and released represents an overestimate.

D. Reporting: On harvest days, a Pup Harvest Report was delivered to the Program Manager. 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
9-22-16	Zapadni Old Dock	43 °F	Start: 13:40 End: 13:45	4
9-28-16	East Rookery	43 °F	Start: 14:24 End: 14:31 Start: 14:34 End 14:54	8

10-7-16	East Reef	46 °F With light intermittent rain	Start: 13:18 End: 13:33	3
10-14-16	East Reef	45 °F Wind: 6 mph	Start: 11:14 End: 11:41	5
10-19-16	North Section 2	41 °F Wind: 15 mph	Start: 10:35 End: 10:38	2
10-26-16	East Reef	42 °F Wind: 15 mph	Start: 13:34 End: 14:03	6
11-3-16	Zapadni Rookery	38 °F Wind: 8 mph	Start: 13:48 End: 14:05	3
11-14-16	East Cliffs Sect 1	32 °F Wind 15 mph Hail at end of harvest	Start: 13:32 End:13:38 Start: 13:58 End: 14:13	2 4
11-18-16	North Section 3	39 °F Wind: 16 mph	Start: 13:24 End: 13:46	6
11-21-16	East Reef	37 °F 36 mph	Start: 13:35 End: 14:00	3
Total	Harvests 10	Average Temp: 40 °F	2 hours 50 mins	46

Table 1: Specified Data for Observed Harvests

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

1. **Observation:** Compared to the 2015 harvest, the 2016 NFS harvest had a higher number of elder natives and a lower number of young men/women available on island earlier in the harvest season. This difference in available personnel resulted in fewer physically capable/experienced people to round up, capture, sex the seals and harvest the young of the year. The limited staffing increased holding time and limited the number of seals that could be maintained, handled, and harvested during each harvest event. The more pups move around on land the more they heat up. In order to dissipate this heat, they divert blood flow towards their skin. This heat-loss mechanism makes the seal fat less desirable, and increases the processing time to render into seal oil. Seal oil created from hot seals has a higher possibility of spoiling due to the higher content of blood in the fat and rendered oil.

2. **Recommendation:** Due to low participation rates during many of the harvests, scheduling more harvests and taking fewer seals at each one may achieve better results.

F. Incidence of by-products and waste during the harvest process: In the 2015 harvest report, a break in the Alaska Native cultural tradition of individuals retaining, tanning, designing, and sewing was observed due to the Unangan natives' harvests being government-controlled from the mid 1867 to 1984. The consultant observer, Ms. Meyer who is of Inupiaq descent, in 2015 started sharing her extensive knowledge of hunting, taking, fleshing, tanning, pattern development, sewing traditional Native Alaskan apparel, and marketing of the products. This knowledge transfer continued in 2016 and resulted in good hides being retained by the Alaska Native harvesters. From this, some community members have started to supplement their earning on STG Island with sewing and creating crafts with their hides. Thus there was higher utilization of the skins in 2016 than in 2015. We observed no waste of the edible portions of seals harvested. In addition, it is our observation that skins from pups harvested prior to the completion of the molt (in early October) are not worth processing and tanning due to the continued slipping of the hair after tanning.

The quality of the skins could be improved by the use of the "nippers" to remove the skin. Nippers were developed by the U.S. Government to avoid nicks and cuts in the skins to maintain the most consistent high quality product for sewing. It takes a sets of two nippers to do this process. We did have a local community member share one nipper during a harvest on 3 November 2016 and it proved that it does take a set to accomplish a smooth skinning. The community member is working towards getting a set made for the 2017 harvest.

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

H. Number of seal deaths due to overheating: No deaths of any fur seal occurred due to heat stroke during the subsistence seal pup harvest.

I. Number of seals entangled in marine debris and the number of seals disentangled:

Removed a rubber ring like gasket on a pup during the harvest on 3 November 2016

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

K. Other types of fur seal mortality: No other fur seal mortality was observed or reported.

L. Attempted harvest and/or other unusual conditions related to the harvest: Harvests are canceled due to a lack of seals, poor weather, lack of interest in seals, or lack of personnel to assist. Often times these reasons are interrelated and cannot be reliably distinguished as a cause per se; for example, the weather or weather forecast may reduce the probability of community members volunteering to help with the harvest. An easily accessible harvest location may have been

harvested previously and a location requiring farther walking with the butchered seals results in lower participation rates and higher cancelations. Weather conditions (typically hard rain) causes most seals to enter the water rather than haulout on land. So some weather conditions reduce the availability of seals, while other weather conditions reduce the willingness of community members to volunteer.

In 2015 the harbor was another area to observe, re-sight, remove entanglements and/or harvest seals due to it being very populated with seals. In 2016 we observed that the seals were no longer hanging out on the sandy beach and rock haulout areas on the south side of the harbor.

Overall eight harvests were scheduled and canceled during 2016. Three harvests were canceled after they were scheduled in October 2016. The Tribal harvest coordinator canceled all three harvests in October due to the weather conditions. Five harvests were canceled in November after they were scheduled. The Tribal harvest coordinator canceled four harvests due to the weather conditions, two harvests due to lack of volunteer help presumed due to inclement weather within an hour before harvest, and two harvests due to a lack of seals in the harvest area also due to poor weather. No harvests were scheduled from September 16-21, and no harvests were canceled after being scheduled in September.

In summary, during the month of October, harvests scheduled for October 2, 4 and 11 were canceled due to the poor weather. For similar reasons in November, harvests scheduled for November 1, 2, 4, 10 and 23 were cancelled.

M. Research conducted during the harvest: No tissue samples were collected for scientific research from the 2016 northern fur seal pup harvest on St. George. Ms. Meyer investigated the quality of fur from the pup harvest to avoid wasting time and resources to process pelts for later tanning. Fur from the younger young of the year is still in the molting process from the first and part of the second harvests and the younger the seal pup, the darker the fur which can appear black when wet. Fur seal pups have black fur, called lanugo, when they are born and begin to molt their lanugo in mid-August. The molt begins on the head and hind end, finishing with the main body in late September. During that first harvest on 22 September 2016 at old Zapadni Dock, there were a few young of the year that appeared to be done with the molting process with usable hides but did not get caught in the roundup for that harvest. A photo of each of these young of the year is in the Exhibit B photos. Both photos were taken the third week of September.

IV. LOGISTICS SUPPORTING OBSERVER TASKING

To support the NOAA 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: Sunday, Wednesday and Friday. When a flight is cancelled due to weather or mechanical issues, re-scheduled flights can range from a few days to three weeks out. What follows is a summary of notable logistics activities involved with mobilization, transit from and to the Alaska mainland, and a recommendation for addressing uncertainties and risk.

A. The plan as proposed and approved for the 2016 harvest training included two weeks of Ms. Meyers' training of an IAG consultant on island. The training was completed but the consultant's departing flight to Anchorage was cancelled on October 2nd, the day of departure from St George, due to weather. The earliest replacement departing flight available was on October 14th. Many calls were placed to the Pen Air agents for a solution to no avail; there was also a NOAA tagging crew left stranded on island.

B. The impact to IAG was added cost for the consultant's time which was neither planned for nor in IAG's contract budget. The risks associated with Pen Air limitations due to a small fleet, Pen Air being the only air travel provider into STG from Anchorage, and unpredictable weather are currently being absorbed by IAG in its Firm Fixed Price contract. IAG has no remedy for this other than to request an equitable adjustment to the contract; IAG's proposal stressed past resourcefulness and stability to work around these events; therefore, IAG has been reluctant to request a contract change.

C. When an IAG consultant and or primary Project Lead are stranded either at Anchorage or on island, added risks occur of unbudgeted hotel costs particularly during period when tagging crews are present.

D. Additional impact costs were absorbed as a result of flight cancellations for re-packing and buying more groceries during the impact periods.

E. To add clarity to a specific scenario experienced, some flights that depart Anchorage, return to Anchorage due to unsafe flight conditions over the airstrip. This exacerbates the impact because not only is the time spent in the air, the labor cost is incurred without an ability, short of exercising the Changes clause, to recover support costs of added travel back to the origin such as to Palmer or other locations, after retrieving baggage.

F. Of the 12 scheduled flights, two were cancelled prior to boarding and one departed to STG and returned Anchorage after making three unsuccessful attempts to land.

G. **Recommendation for Government consideration:** Issue a modification to the contract, preferably that includes the Base Year, but certainly for Option Years One and Two that provides a reimbursable line item for “travel impacts due to sole air carrier discretion or weather-induced flight schedule changes” or provide guidance to IAG on how best to coordinate impact cost recovery for unforeseeable events beyond the control of either the Government or IAG, such as what occurred above.

V. LIST OF EXHIBITS

A. SAMPLES REPORT - No samples were taken for the 2016 NFSH.

B. PHOTOS WITH CAPTIONS

EXHIBIT B – PHOTOS WITH CAPTIONS



Newborn NFS before molting process is complete late September 2015



NFS pup after molting process is complete late September 2016



Zapadni Bay looking towards Zapadni Rookery and South Rookery from Old Zapadni Dock



NFS pups hauled up at Old Zapadni Dock late September 2016



Zapadni Rookery with a lone reindeer at top of hill late September 2016



NFS on Zapadni Rookery late September 2016

EXHIBIT B – PHOTOS WITH CAPTIONS



North Rookery Section 2 Mid
November 2016



Knolls at North Rookery above the
cliffs Mid November 2016



East Rookery late September 2016



Re-sight weighing and logging at
Zapadni Rookery late Sept 2016



1st items made and sold from
promoting the retention, cleaning,
tanning and sewing of hides



2016 NFS young of year harvested
and tanned skin