

30 August 2002

Mr. Dave Cormany
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Dear Dave

Please find enclosed the Humane Observer Report for the 2002 northern fur seal subsistence harvest on St. Paul Island, Alaska.

The 2002 northern fur seal harvest was fairly typical this year. The harvest started on 3 July and ended on 10 August 2002 and included 14 harvest days. A total of 647 subadult male fur seals were killed. Two females were killed at Polovina on 9 August. Three cases of hyperthermia were found this year. Animals were gathered, handled, and killed in a humane fashion at all harvest.

Wastage was again observed this summer. Seven bags of picked over meat including one heart was found in the blubber dump on 17 July 2002. Ten to fifteen bags of what appeared to be last years frozen seal meat were found on 25 July 2002 hidden on the north side in the rock pile where the beach net cleanup material is stored. This meat was cleaned up and discarded by ECO. On 1 August 2002, two plastic bags were found at the blubber dump that each contained a whole seal with the liver and heart. The only missing parts were the front flippers (the lusta). On 2 August 2002, 11 whole carcasses missing the front flippers were found in the blubber dump. Also that same day another bag containing 4 carcasses with the shoulder meat and the front flippers gone, the remaining meat was rotten in the bags.

As like last year pelts were not found this season that had been contaminated with oil. In 1994:23 animals were found, in 1995:3 animals were found, in 1996:4 animals were found, and in 1997:1 animal was found with oil contamination. From 1998 to 2002 no animals were found with oil contamination.

One interesting finding during the harvest was one animal had a small tumor on the chest. On gross examination the tumor appeared to be a fibroma.

One 2 year old male Steller sea lion was killed at Big Zapadni on 26 July. All of the animal was taken for food. This year Mr. Adam Carmany help with all of the harvest. He worked very well with the people and the animals. He was a tremendous asset to me this year.

I hope all of the work with the co-management organization is working out. Please keep me informed. Have a great day.

Sincerely

Terry R. Spraker, DVM, PhD, DACVP

cc: Aquilina D. Lestenkof
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HUMANE OBSERVER REPORT
Northern Fur Seal Subsistence Harvest
St. Paul Island, Alaska
July-August, 2002
Terry R. Spraker

INTRODUCTION

Northern fur seals (*Callorhinus ursinus*) have been harvested for their pelts for the last 200 years on the Pribilof Islands. During this time period, the native Privilovians could freely take the meat of the harvested animals for food. On St. Paul Island, the commercial harvest for pelts ceased in 1984; therefore a subsistence harvest began with only immature males taken for food. This subsistence harvest has continued for the last eighteen years (1984-2001). The harvest is a well-planned and orderly procedure. Young male northern fur seals are gathered by driving them from their haul-out areas to a specific killing field where they are held in a large pod. Five to ten seals are then cut from this large pod and driven to a group of three to four men who stun the animals by hitting them on the skull or upper neck with a solid wooden club. The animals are dragged a short distance away from the killing area where the chest and heart are cut open. The animals are then skinned and butchered for human consumption. For a more detailed description of the procedures of the harvest, see Humane Observer Report: Stoskopf 1984; Letcher, 1985; Dorsey, 1986; Zimmerman et. al., 1986. This report will be limited to my observations of the humane activities of the northern fur seal harvest for July and August 2002.

Multiple factors were evaluated during this harvest. These factors included environmental conditions, methods of gathering and herding the animals, and the harvesting of animals. These three areas will be discussed separately.

Northern fur seals (*Callorhinus ursinus*) were gathered 15 times this year, but harvested 14 times (animals were gathered once from Gorbatch on 20 July, but not enough animals were in the pod for a harvest) from 3 July through 10 August 2002 from seven haul-out areas (Polovina-4 times, Big Zapadni-3 times, Zapadni Sands-2 times, Lukanin-2 times, Gorbatch-once, Ketovi-once, and Zoltoi-once). A total of 647 subadult male animals were killed this year. Two females were also killed this year (Table 1).

ENVIRONMENTAL CONDITION

The environmental conditions of the harvest from 3 July through 10 August were monitored including the average air temperature, degree of precipitation, wind, and cloud cover. The air temperature was taken when the drive began and ranged from 45°F to 60°F, with an overall average of 50°F. It was misty four times, the air was relative dry eleven times, and rain did not

occur in any of the harvests. A breeze was present 14 of 15 times. The wind speed varied from 0 to 18 knots with an overall average of 9 knots. Cloud cover was complete and high 9 times, complete and low four times and sunny once (Table 2). The environmental conditions were similar warmer this year as compared to previous years.

GATHERING OF ANIMALS

Ten to fifteen men would go to a specific haul-out area and quickly form a line along the shore thus preventing the seals access to the ocean. Then the seals were gathered into several pods and driven to the killing field. The animals were gathered between 9:18am to 1:46pm this summer, but most drives began between 11:00am to 12:30pm. Estimated distance of the drives ranged from 75 to 300 yards. Animals were driven from 2 to 38 yards/minute with an average of 19 yards/minute. The animals were usually rested during the drive. The drives were similar this year as compared to previous years (Table 3).

An estimated difficulty of the drive was graded on a scale of 1+ to 3+, with 1+ being the easiest, and 3+ being the most difficult. These same paths have been used for driving seals to the killing field for several hundred years and were all fairly easy drives (Table 3). The degree of wetness to the grass and terrain was monitored and estimated as this is believed to be an important cooling factor for the animals. The grass was wet 7 days and dry 8 days. This was also similar as compared to previous years (Table 3).

HARVESTING PERIOD

The harvesting activity was characterized by holding the animals in a large pod approximately 20 to 30 yards from the stunning area. While a few young boys held the seals, three to four young men would cut out a small pod of seals and drive them to the stunners. The pod size usually was 8 to 15 animals. Animals were killed by hitting them on the skull at the level of the ears or over the 1st/2nd cervical vertebra. The majority of times, the animals were hit just once. These animals would immediately drop and were hit again on the skull. However, sometimes the first hit missed its mark and one or two more hits were required. The number of double and triple-hits were not counted this year, but my overall impression was that the accuracy was about the same this year as in previous years.

Deep body core temperatures of approximately 20% of the animals were taken throughout each harvest. The temperatures were then divided into three equal time slots during the harvest for each day. The average body temperatures are presented in Table 4. Temperatures ranged in individual animals from 101.3 to 110.0+°F. Three animals died due to hyperthermia this year.

Hyperthermia is due to overheating caused by over activity of the animals. Predisposing factors include warm environmental temperatures, lack of cloud cover and/or mist, dry grass, lack of wind, animals being driven too fast (especially uphill), long drives, animals being held too tight in the large holding pods and having too much activity or moving around in the large holding pods. Another predisposing factor is the amount of rest an animal has had before the drive. For example, an animal that has just arrived on the haul-out from a feeding trip may not be "fully rested" and, if they are subjected to a harvest/dive, become exhausted quicker than a totally rested animal.

To avoid hyperthermia animals should be driven slowly, rested at least 15-20 minutes after the drive and the holding pods should be kept loose. If an animal lags behind during the gathering period they should be allowed to drop out of the pod. If the environment temperature is 55°F, great care has to be taken during the drive and the harvest and if the temperature is >60°F, no cloud cover, wind or mist, the harvest should not be done that day. When the animals in the holding pod show early signs of hyperthermia (including, flipper fanning, open mouth breathing and lying down) the harvest should be stopped and the animals released slowly.

HEALTH STATUS

The health status of the animals was evaluated by examining viscera and carcasses throughout the harvest. Stomachs were opened and checked for parasites and ulcers. A total of 86 stomachs were opened: 11 had no parasites, 71 had + (1 to 25 nematodes), and 4 had ++ (25 to 50 parasites). No stomachs had +++ (>50 parasites). A total of 3 animals had 4 small gastric ulcers. Most animals only had one small ulcer containing 1-2 parasites. A total of 8 animals had 8 small healed gastric ulcers. Most animals had only one small healed ulcers. Parasitic nodules were found in 78 animals and in 8 nodules could not be palpated. Gastric nodules were associated with parasitic feeding sites. Gastric parasites were Contracaecum sp. and Anisakis sp., both of which have been reported previously in fur seals. This year the ileum and caecum were not examined for tapeworms. Parasite numbers were all estimated. The overall parasitic burden was comparable this year as in previous years.

In general, the harvested animals appeared to be thinner for the last several years as previously observed. This may suggest that the over-all nutrition of these animals is decreasing.

OIL CONTAMINATION OF ANIMALS

This year (as last year) animals were not found with oil on their pelts. The number of animals found with oil on their pelts has decreased since 1994 when 23 contaminated animals were found.

SUMMARY

This was a relatively uneventful year. The harvest went well. Only three animals died from hyperthermia and 2 females were killed.

Points to be remembered during the harvest include:

1. Drive the animals slowly to the killing field.
2. Do not unnecessarily harass the seals during the drive.
3. Rest the animals 10 to 15 minutes prior to the harvest.
4. Harvest in the morning; thus avoiding warmer afternoon environmental temperatures.
5. Drive small pods to the stunners. Five to seven animals are good, but not 10 to 15 animals at a time.
6. Take a little more time to isolate the selected animals to be killed.
7. If environmental temperatures are 55°F to 60°F, give the seals frequent rests during the drive and keep the holding pods loose. If environmental temperature is 60°F or above, do not have a harvest.
8. Try to "weed out" (release) older animals and females during the drive.
9. When the animals in the holding pod show early signs of hyperthermia (including, flipper fanning, open mouth breathing and lying down) the harvest should be stopped and the animals released slowly.
10. Discuss driving plans with drivers before drive starts. If driving plans are changed during a drive because not enough animals are gathered or too many big bulls or females are in the group, the animals should be released in a safe area not near cliffs. I am not sure what to do if animals are running towards a cliff. My impression is that they probably should be left alone and not disturbed. I think the animals if not pushed will avoid them, but if scared will go over the cliff.
11. Do not allow intoxicated persons to work in any of the positions at the harvest or even to be on the killing field because of the disruption that they cause and the danger to themselves and others especially if they have a knife.

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