Submitted by the Alaska Department of Fish and Game at the request of Chair Spraker

March 10, 2010

## Introduction and Background

This information has been prepared for the Alaska Board of Game (BOG) for reference when considering a proposal to expand muskox hunting into Game Management Units (GMUs) 21 and 24. The BOG addressed Proposal 31 at their January 2020 Region V meeting and deferred it to be considered with Proposal 74 at the March 2020 Region III meeting. These proposals have implications for subsistence hunting for muskoxen in GMUs 21D, 22A, and 24D (Figure 1). Under AS 16.05.258(a), the BOG is charged with identifying game populations, or portions of populations, that "are customarily taken or used for subsistence". The proposals provide an opportunity for the BOG and public to review new information and examine the C&T finding on this muskoxen population, which has migrated from Region V to contiguous habitat in Region III.

In 1997, the BOG considered C&T uses for the Seward Peninsula muskox population in GMU 22, which is the population that has migrated to Units 21 and 24, and made a positive finding partially because muskoxen were a reintroduced species in the region.

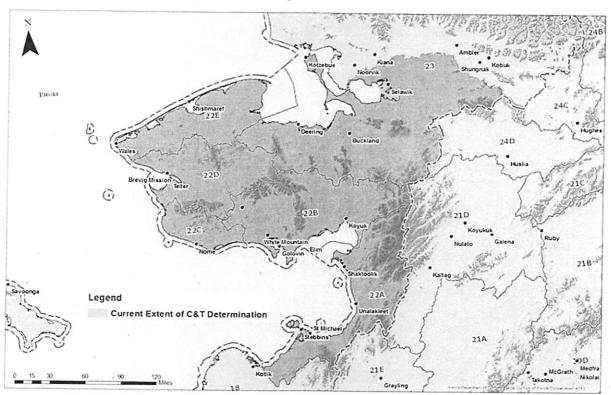


Figure 1.-Current positive C&T area of the Seward Peninsula muskoxen population

Around 2007, the population has continuously expanded its range eastward, moving into GMUs 21D, 22A, and 24. The population was last surveyed in 2017, at which time the population of muskoxen throughout the range was estimated at 2,353 animals.

An amount reasonably necessary for subsistence (ANS) was first established in 1998 for the Seward Peninsula muskox population with input from stakeholders provided through the recommendations of the Seward Peninsula Muskox Cooperators Group. The ANS was last modified in 2011 and currently stands at 100–150 muskoxen with a nested ANS in Unit 22E of 10–25 muskoxen (5 AAC 99.025).

Also at their 2011 Region V meeting, the BOG included GMU 22A and GMU 23 Remainder in the definition of the population in response to changes in the range of the population (Figure 1).

A C&T use determination has not been made for muskoxen that have migrated from Unit 22 to Units 21D and 24D.

#### The Eight Criteria

### Criterion 1: Length and Consistency of Use

A long-term consistent pattern of noncommercial taking, use, and reliance on the fish stock or game population that has been established over a reasonable period of time of not less than one generation, excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns.

- Hunting of muskoxen has not occurred in Units 21 and 24 because opportunity has not previously been provided. However, it is reasonable to assume that customary and traditional uses of muskoxen in GMU 21D and 24D would be similar to those found in the area currently covered by the existing C&T use for this muskox population.
- Muskoxen are frequently observed in the Nulato Hills during the winter and during spring bear hunting and have been observed near the villages of Galena, Ruby, Nulato, Kaltag, and Huslia. Dispersing muskoxen have been killed under "defense of life and property" conditions near Ruby, Galena, and Nulato, as well as along the Kateel River during the fall moose season. Muskoxen in the Nulato Hills would provide an additional hunting opportunity that is not being utilized and could provide an additional source of meat for Alaskan hunters.

#### Criterion 2: Seasonality

A pattern of taking or use recurring in specific seasons of each year.

 Hunting of muskoxen has not occurred in Units 21 and 24 because opportunity has not previously been provided.

#### Criterion 3: Means and Methods of Harvest

A pattern of taking or use consisting of methods and means of harvest that are characterized by efficiency and economy of effort and cost.

 For hunters in Units 21D and 24D, the harvest of muskox would be more efficient and economical if hunters were not required to travel farther from their communities to hunt on more distant lands.

#### Criterion 4: Geographic Areas

The area in which the noncommercial, long-term, and consistent pattern of taking, use, and reliance upon the fish stock and game population has been established.

 Seward Peninsula muskox population has continuously expanded its range eastward; since 2007, mixed sex muskox groups have been observed throughout the known range of the population, including portions of GMUs 21D, 22A, and 24D.

- Currently 20% of the population is found in GMUs 21D, 22A, and 24D: the animals are utilizing areas of contiguous habitat that are bisected by the current region-based customary and traditional use determination boundary between GMU 22 and GMUs 21 and 24. According to the ADF&G Division of Wildlife Conservation, unique populations do not exist within the subunits in the proposed hunt area.
- As the Seward Peninsula muskox population range has expanded, geographic patterns of subsistence use have also expanded to follow these animals. Historical patterns of use of other ungulates show that when animals are available in a local unit, hunters will target them in that unit.

# Criterion 5: Means of Handling, Preparing, Preserving, and Storing

A means of handling, preparing, preserving, and storing fish or game that has been traditionally used by past generations, but not excluding recent technological advances where appropriate.

• It is likely that this expanding population of muskoxen would be handled, prepared, preserved, and stored in the same manner as other big game subsistence species in this area, such as moose and caribou. The meat would be salvaged and used and hides would be used for warmth as blankets or clothing. There would not likely be trophy use of horns or hides.

Criterion 6: Intergenerational Transmission of Knowledge, Skills, Values, and Lore A pattern of taking or use that includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation.

 Hunting of muskoxen has not occurred in Units 21 and 24 because opportunity has not previously been provided. However, hunting traditions are known to be taught to children by their parents, grandparents, and uncles in most areas of the state, especially where subsistence practices are strong.

#### Criterion 7: Distribution and Exchange

A pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter, and gift-giving.

Sharing of big game and other wild resources is common in communities of rural Alaska; household surveys conducted by the ADF&G Division of Subsistence indicate that large percentages of households received such gifts. It is highly likely that if muskoxen had been present in this area in the past, this species would be fully incorporated into the subsistence pattern of these communities.

Criterion 8: Diversity of Resources in an Area; Economic, Social, and Nutritional Elements A pattern that includes taking, use, and reliance for subsistence purposes upon a wide variety of fish and game resources and that provides substantial economic, cultural, social, and nutritional elements of the subsistence way of life.

- Communities in the middle Yukon River area rely heavily on a variety of subsistence resources, including land mammals and fish species. Often, land mammals such as moose or other ungulates, when available, contribute the highest percentage of edible weight to a community's total harvest. For example, in both Galena and Nulato, moose accounted for over one-third of each community's edible harvest in 2010, more than any other single species
- Oral history accounts from this region describe the use and reliance upon caribou when they were locally available. Harvest data also support this. For example, in Galena, harvest of caribou fluctuates depending on migratory patterns. Because these patterns are often unpredictable from

year to year, residents hunt caribou opportunistically (Marcotte 1990:95). In 2010, a few Galena households harvested six caribou in 2010, compared to an estimated harvest of 40 in 1996, the first year of a large land mammal survey conducted by ADF&G (Brown et al. 2015). Targeting ungulates when they are locally available provides residents the chance to meet their wild food needs.

• The harvesting of wild foods continues a long cultural tradition for many people of the communities of this area of Alaska, a tradition which continues to evolve in many ways as social, economic, and environmental conditions change.

#### 97-117-BOG

# Findings of the Alaska Board of Game Regarding Customary and Traditional Use of Muskoxen on the Seward Peninsula

At its October 1997 meeting in Nome, the Board of Game took up a proposal to find a positive Customary and Traditional (C&T) finding for muskoxen on the Seward Peninsula. Muskoxen on the Seward Peninsula represented an unusual situation for the C&T determination process because muskoxen disappeared from the Seward Peninsula and have been absent from that area for at least 100 years. The muskoxen now on the Seward Peninsula were introduced in 1970 and have been protected from hunting by state law, since then. A federal hunt began on this population of muskoxen on federal lands of the Seward Peninsula in 1995-96 and more than 30 muskoxen have been harvested.

Board deliberations on the findings of a customary and traditional use lead to the following conclusions:

<u>Criterion 1:</u> A long-term consistent pattern of non-commercial taking, use, and reliance on the fish stock or game population that has been established over a reasonable period of time of not less than one generation, excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns.

While the Board of Game did not find that a consistent pattern of taking, use, and reliance on this re-established population had occurred over a period of not less than one generation (approximately 30 years), the Board did find that the reason was due to an interruption by circumstances beyond the users' control.

Muskox bones found on and near the Seward Peninsula, the lack of geographical barriers to prevent muskoxen from reaching the peninsula from known populations to the north, and a name for muskoxen in the local language provided evidence that muskoxen once inhabited the area and were known by the people. Interviews conducted by ADF&G Division of Subsistence have included elders of the Seward Peninsula who remember their elders talking about muskoxen. Although the Board found no direct evidence of use of muskoxen prior to the federal hunt established in 1995 by the residents of the Seward Peninsula, there is a much better record for the North Slope of Alaska. A large majority of the people of the Seward Peninsula are Inupiat Eskimos and share the same culture with the Inupiat of the North Slope. Had the Inupiat of the Seward Peninsula been allowed to hunt muskoxen soon after their introduction in 1970 there would be a recorded pattern of taking and use of approximately one generation at the time of this request for a finding. It is reasonable to assume the use of muskoxen would be similar to that found for the Inupiat of the North Slope of Alaska.

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Criterion 2: A pattern of taking or use recurring in specific seasons of each year.

A pattern of taking muskoxen during the late-winter and spring has developed during the recent federal hunt. Even though the hunt was established with specific seasons, extensions have been granted to accommodate the developing pattern of taking.

<u>Criterion 3:</u> A pattern of taking or use consisting of methods and means of harvest that are characterized by efficiency and economy of effort and cost.

The primary transportation is by snowmachine and foot without the use of aircraft or other expensive commercial services. The Board heard testimony that the harvest would be more efficient and economical if the hunters were not forced to travel farther from their villages to hunt on more distant federal lands.

<u>Criterion 4:</u> The area in which the noncommercial, long-term and consistent pattern of taking, use, and reliance upon the fish stock or game population has been established.

For this criterion the area has been defined by land ownership. Federal lands farther from the villages are open for muskox hunting while state and private lands closer to the villages are closed. The Board is confident that a harvest area would be established for muskoxen in the absence of the legal constraints although it would likely be somewhat different from the present area.

<u>Criterion 5:</u> A means of handling, preparing, preserving, and storing fish or game that has been traditionally used by past generations, but not excluding recent technological advances where appropriate.

The Board heard testimony that harvested muskoxen were being handled, prepared, preserved, and stored in the same manner as other big game subsistence species. The meat has been salvaged and used and hides have been used for warmth as blankets or clothing. There has been no trophy use of horns or hides.

<u>Criterion 6:</u> A pattern of taking or use that includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation.

On the Seward Peninsula hunting traditions are known to be taught to children by their parents and grandparents. Although hunting of muskoxen was illegal between 1970 and 1995, information about muskox movements, habits and behavior, especially regarding human safety, was being transferred among generations.

<u>Criterion 7:</u> A pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter; and gift-giving.

The limited number of muskoxen available to be harvested in the federal hunt have been shared widely within the communities. Sharing of big game and other wild resources is common in communities of Northwest Alaska as demonstrated by subsistence surveys indicating that large percentages of households received such gifts. The Board believe that had the harvest of muskoxen been allowed in the past, this species would be fully incorporated into the subsistence pattern of these communities.

Criterion 8: A pattern that includes taking, use, and reliance for subsistence purposes upon a wide diversity of fish and game resources and that provides substantial economic. cultural, social, and nutritional elements of the subsistence way of life.

Subsistence use of about 50 different species of fish, game, and plants is well documented for the Seward Peninsula communities (ADF&G Community Profile Database, Vol. 5 Arctic Region, Division of Subsistence). It is also well documented that economic opportunities for cash are few and mean household income is low, therefore wild foods are essential to many people of the Seward Peninsula.

After weighing the individual criteria, the Board found that there is a customary and traditional use of muskoxen on the Seward Peninsula. The Board believes that muskoxen were used, to the extent they were available, prior to extirpation from the peninsula, and that this sporadic use would have resumed, but for legal constraints, as soon as animals were again available. The extirpation was not within the control of current users.

Vote: 4-2-1 Fleagle absent

Alaska Board of Game