Musk Ox Hunting on Nunivak Island

by Randy Kacyon

Musk oxen are one of the most unique and probably one of the most "primitive" ungulates found in the state of Alaska. Musk oxen as a species have changed little since the ice age and are well adapted to live in the harsh arctic environment. The closest, but still distant, living relative of the musk ox is the takin of Tibet and Burma. Musk oxen were once extinct; 2) for contemplated experiments in re-establishing the species; and 3) for experimentation leading to their eventual domestication and utilization.

Musk oxen transplanted to Wrangel Island in the Soviet Union in 1975. The future for musk ox in Alaska appears promising. It is likely that musk ox numbers and beneficial uses of the species will continue to increase for many years. The history of the Nunivak Island musk ox herd is an excellent example of the benefits of scientific wildlife management.

Public hunting of musk oxen in Alaska was initiated on Nunivak Island in 1975. Musk ox hunts on Nunivak Island have provided substantial benefits to the public. Guiding and transporting musk ox hunters is a major component of the economy of Mekoryuk, the only village on Nunivak Island. More than 25,000 pounds of meat is obtained annually in the hunt, most of which remains in Mekoryuk. Revenues collected by the state from the sale of tags and fees for drawing permits and registration permits during 1975-1990 for the Nunivak Island musk ox hunt have exceeded the costs of managing the population.

General Description

The musk ox is a stocky, shaggy, long-haired animal with a slight shoulder hump. Both sexes have horns but bulls' horns are larger and heavier than those of cows. Musks have wide and deep hooves which span nearly the entire forehead. A trained eye can accurately determine the sex and age of musk oxen by their horn structure until about 4 or 5 years of age. After musk oxen become mature adults (4 or 5 years old), the horn structure changes little. The coat consists of a long, coarse, outer layer and a short, fine underhair. The underhair, or qiviut, is a very good insulator and is prized for spinning and making into garments by some residents of Nunivak Island. Most of the fiber used in this way, however, comes from captive musk ox in Palmer, Alaska. The color of the hair is brown with white patches near the horns, on the legs, and on the middle of the back. Musk oxen have cloven hooves which are curved inward at the tips. People who have only seen musk ox in photographs assume they are much larger than they really are. Mature bulls are only about five feet at the shoulder and weigh 600-800 pounds. Cows are smaller, averaging about four feet in height and weighing 400-500 pounds.

Nunivak Island musk ox hunting takes place during the month of September and then again during the months of February and March. The fall season is September 1 through September 30 for both bulls and cows. The spring season for bulls is February 15 until March 15, and for cows the season is February 1 until March 15.

Musk ox hunting on Nunivak Island, as well as the rest of the state, is on a permit system. Bull permits are issued by drawing permit. Hunters wishing to hunt musk ox must fill out and submit a permit drawing application and turn it in by May 31. These permit applications are usually available by April at license vendors throughout the state. It costs $20 for the application fee and a hunter can choose either the fall or the spring hunt at the time of application. A hunter may take only one musk ox per regulatory year. However, during the 1990-91 season, 378 hunters applied for 45 bull permits that were available (10 in the fall and 35 in the spring). Winners are contacted by the end of July. Many of the winners often drop out and additional hunters are contacted from an alternate list who did not get drawn initially. Winners for the fall hunt usually make up their minds by September 1 and for the spring hunt by February 1.

Many of the interior portions of the island is made up of lowland and alpine tundra with numerous lakes and ponds, interspersed with volcanic mountains from 300 to 1,675 feet in elevation. The shoreline next to the water is made up of sandy beaches interspersed with large rocky points backed by large expanses of dunes and very steep rocky cliffs. Musk oxen on Nunivak Island use much of the available habitat on the island, especially during snow-free periods, but are usually found along the coast. During the winter they prefer inhabiting the dunes and the edges of cliffs that are found in the interior of the island during winter, with the exception of the higher mountainous portions. The dunes, cliffs, and mountain ridges provide wind-blown foraging areas where snow depths are usually less than a foot or where bare patches of ground with exposed vegetation can be found. Musk oxen are not very well adapted for digging through heavy snow for food, so winter habitat is generally restricted to those areas with shallow snow accumulation or areas blown free of snow.

How to go to musk ox hunting?

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Permits for musk ox bulls are by drawing permit only.

The cow musk ox hunts on Nunivak are by registration permit only. These permits are offered on a first-come, first-served basis at various locations throughout the state. Five cow permits are issued at the village of Mekoryuk (City Office) on August 31 at 8 a.m. An additional 30 permits are issued on January 31 (8 a.m.) for the spring hunt. Seventeen permits are issued at Mekoryuk (City Office), eight permits are issued in Bethel (ADF&G office), three permits in Anchorage (ADF&G office), and two permits in Fairbanks (ADF&G office). Competition is stiff for these limited number of cow permits and applicants have waited in line up to 24 hours at some of the locations for the opportunity to receive a permit.

What to do if you receive a permit?
Permit winners need to plan well in advance of their hunt in order to go hunting musk ox on Nunivak. A hunter must make arrangements with the area wildlife biologist in Bethel before he or she goes hunting and also make arrangements with a guide or transporter if those services are desired. A guide is not required, but most hunters find that a guide or transportation service is often useful. Also, scheduling airline flights to Bethel and then to Mekoryuk needs to be done well in advance of the hunt, because Nunivak Island is very remote and there is currently only one air taxi service that travels to Mekoryuk. All bull musk ox tags for Nunivak are issued out of the Bethel ADF&G office and both bull and cow musk ox hunters must attend an orientation course prior to hunting and demonstrate their ability to identify the sex of musk oxen. This orientation takes place at the Bethel ADF&G office and hunters need to schedule a time to meet with the area biologist before they arrive in Bethel. To properly manage musk ox populations, it is often necessary to harvest both sexes. It is vital to management that the right, legally permitted animals are killed. Consequently, it is very important for a hunter to be able to identify musk ox correctly before hunting.

Plan on at least one week for travel time and hunting. This allows you a minimum of three days travel time and four days to hunt on the island. Remember, you cannot hunt musk ox the same day you have flown in an airplane, including commercial flights from Bethel to Mekoryuk.

Cost of your musk ox hunt
Permit winners must plan on spending a fair amount of money to go musk ox hunting. Transportation to and accommodations in Mekoryuk are expensive. It costs $500 for resident hunters to purchase a bull musk ox tag, $1,100 for nonresidents, and $1,500 for nonresident alien hunters in addition to the cost of their hunting license. Also, guide and transportation fees are fairly expensive and hunters have paid as much as several thousand dollars for their services. Cow musk ox tags on Nunivak are $25 for residents and $1,100 for nonresidents. Also, freight charges to transport the meat off of the island via scheduled or charter flight can be relatively expensive. Some hunters reduce their costs by hunting without a guide or transporter. Since many of the musk ox are about 40 miles from the village, however, hunters must provide their own transportation once they arrive on the island. Travel by aircraft, boat, or snowmachine to where the musk ox are located is often necessary. Because of the difficult terrain and distances involved, very few hunters have ever successfully hunted and packed out a musk ox on Nunivak by hiking.

Hunting methods and means
Musk oxen are fairly easy to hunt and the success of hunters that enter the field has been between 90 and 100 percent since hunting began on the island. The group defense formation adopted by musk ox in response to predators like the wolf makes them very vulnerable to human hunters. When danger approaches musk oxen run to each other and back against their neighbor. Every animal tries to face the source of threat either in a line or tightly packed circle. This makes the animals fairly easy to stalk and even when the herd stampedes they never travel very far. The problem for the hunter is trying to pick out the desired animal to shoot without hurting another one. Hunters have to walk or snowmachine to within about 300 yards of a musk ox herd. With either the use of a spotting scope or a good pair of binoculars, the hunters can then examine individuals in the herd for one they may be interested in. If an animal is spotted that a hunter wishes to shoot, stalking the herd requires walking slowly towards the herd, stopping often or crawling a short distance so that the herd does not stampede. Hunters use whatever vegetation or ground relief
is available to hide behind until the musk oxen are within safe shooting range. Hunters often have to wait 30 minutes to one hour until the herd separates and begins to mill around before a safe shot can be made. It is not uncommon for more than one musk ox to be killed with a single shot if a hunter is not careful. It is recommended that hunters choose accurate, low velocity, less penetrating rifle calibers for musk oxen, and that they do not shoot until the other animals are safely outside the line of fire. Musk ox hunting is very popular with bowhunting and hand hunters.

In the fall, hunters travel to the musk oxen by aircraft or boat. Aircraft hunters land on the beaches with a small single engine aircraft or land at the Mekoryuk airport and then take a boat around the island. Hunters arriving at Mekoryuk via air taxi service are taken by boat to various anchorages around the island with their transporters or guides. Hunters then stay at a camp and stalk animals by foot. Hunters often enjoy beachcombing, sport fishing, and waterfowl hunting in addition to musk ox hunting during the September season. During the winter, aircraft hunters land near the coast on ski planes and hunt from a camp. The majority of the hunters hunt with snowmachine and sled during the February and March season. Snowmachine transportation is the least risky and most efficient way to get to the musk oxen on Nunivak. Many of the winter hunters also hunt arctic and red fox in addition to musk ox.

Clothes and equipment
As with any excursion in Alaska where considerable time will be spent in the outdoors, it is imperative that a person be well prepared for a variety of weather when hunting musk ox. Inadequate clothing or camping equipment can quickly turn an enjoyable trip into a life-threatening situation. Relatively cool, often windy, and rainy weather is more the rule than the exception during September on Nunivak. During February and March, extreme wind chills of -75 degrees Fahrenheit, drifting snow, and heavy icing conditions are not uncommon. The air temperature in winter ranges from 45 degrees above zero to 50 degrees below zero, without the windchill factor. Good rain gear and wool clothing with polypropylene undergarments are often used during the fall hunt, along with gloves and waterproof boots. During the winter, warm undergarments, arctic coveralls, a good parka, warm mittens with gloves inside, arctic pac boots, fur hats, goggles, and a face mask are the normal attire. Camouflage clothing is often used to stalk musk oxen, especially during the winter when white coveralls are often used. Survival gear (matches, flashlight, lighter, handwarmer, first-aid kit, food, warm liquids, and a sleeping bag) should be carried by each hunter during the winter, because white-out conditions due to blowing snow make travel and orientation nearly impossible. Outside of the village there are virtually no shelters on the island, so a good tent either provided by the hunter or the guide is required. Often just a good waterproof tarp is an adequate overnight shelter and/or windbreak if the weather pins a hunter down. It is highly recommended that hunters travel with local residents, transporters, or guides who know the island well and can find a shelter in a hurry.

Hunting rifles, bow and arrows, and handguns used to hunt musk ox are up to the hunter. Most of the hunters rarely shoot an animal over 100 yards, many hunters can get within 50 yards with a rifle, and many bow hunters have gotten within 15 yards of their animal.

Hunters will also need at least two good skinning knives, a sharpening stone, and a small meat saw to prepare the downed animal.

Care of meat and trophy
One aspect of musk ox hunting common to virtually every hunt is the care of the meat once the animal is down. Musk ox meat is very palatable. The meat is often marbled with fat and is not lean like other game animals. Butchers who have worked on musk ox meat have commented that it was very similar to “choice” cuts of beef. It is imperative that the hide and internal organs be removed as quickly as possible. Even when the weather is very cold, heat from the stomach, insulated by the thick hide and hair, can result in spoilage in a short amount of time. The animals are usually skinned out completely and the head cut off at the neck, using the inside of the hide to lay out the quarters and ribs to avoid contact with the ground until it can be packed to the sled, airplane, or boat. A hunter should bring “wet-lock” freezer boxes or waterproof containers to transport meat off of Nunivak Island. Many of the airlines will not accept meat packaged any other way.

Unless an experienced Skinner or taxidermist is working on the head and cape in the field, the hide and head are usually transported out, salted, and frozen and worked on later, so that the trophy is not damaged. Nunivak Island has produced several trophy bull musk oxen within the last 10 years, and hunters should look over several animals before shooting. There are approximately 200 mature bull musk oxen on Nunivak, so a hunter has ample opportunity to judge a number of animals.

You will appreciate this hunt for a very unusual and relatively rare species. The musk ox hunt has had a great deal of public scrutiny and it is safe to say that both hunters and nonhunters may be critical of any indiscretions which occur. All hunters who are going to hunt musk oxen are encouraged to conduct their hunts in an ethical manner so that we can look forward to offering musk ox hunting for years to come.

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