



Photo 1: mature bulls, winter (photo courtesy of Patrick Jones)



Photo 2: mature bull, winter (photo courtesy of Patrick Jones)

MUSKOX

Information on identification and hunting

Identification

- Identifying muskoxen by age and sex is important for many reasons:
 - It is important to make sure the animal you choose to harvest is legal.
 - If you are looking for the highest quality meat, immature bulls and cows may be more tender and taste better than mature bulls.
 - It is important to avoid harvesting a cow with a calf.



Identification Terms

Horn Boss

Horn Tip



Photo 3: mature bull, summer (photo courtesy of Tom Kohler)

**** Note****

Color of the horn tips is not a diagnostic characteristic to distinguish sexes. Dark or black horn tips are found on many cows and most bulls.

Horn Hook

Horn Base



Photo 4: mature cow, fall (photo courtesy of Claudia Ihl)

Calves

1. Sex is indistinguishable in calves.
2. Horns are not present and size can vary since calves are born between mid-April and mid-June.
3. Guard hairs have not yet grown, and the coat at this age appears very short.



Photo 5: new calf, spring (photo courtesy of Tom Kohler)



Photo 6: calf, summer (photo courtesy of ADF&G)

**** Be sure to account for all calves in a group prior to shooting. They are small and can easily be hidden by larger animals. Make certain a calf is not behind your target animal.**

Yearlings

1. Yearling muskox can change drastically from spring to fall. Horns start growing in the late spring and are most visible on yearlings in the late summer.
2. The forehead is covered by short white hair.
3. Horns are short and no horn bases have developed.
4. Guard hairs are longer than in calves, but still appear short compared to adults.
5. Males are usually larger than females and may have black horn tips.



Photo 7: yearling bull, summer
(photo courtesy of Claudia Ihl)



Photo 8: yearlings, fall
(photo courtesy of Sue Steinacher)

Two-Year-Old Bulls

1. Horns in two-year-old bulls curve down and then forward and are much thicker than in cows.
2. Horn tips point up and forward in bulls and are often black tipped.
3. The forehead of both sexes is covered with white curly hair and no horn base is visible. Horns of both sexes change drastically in the second year.
4. A spring two-year-old has shorter horns that stick outward (photo 10). By the following fall, horns have increased in thickness and curve downward (photo 9).



Photo 9: two-year-old bulls, summer
(photo courtesy of Claudia Ihl)



Photo 10: two-year-old bull, spring
(photo courtesy of Peter Bente)

Two-Year-Old Cows



Photo 11: two-year-old cow, two-year-old cow, three-year-old cow, spring (photo courtesy of Peter Bente)

1. Horns in two year old cows are more slender than males but otherwise very similar in shape.
2. Horn tips curve up and forward and are generally not black tipped.
3. Forehead is covered with white curly hair and the horn base is not visible.



Photo 12: two-year-old cow, two-year-old cow, three-year-old cow, summer (photo courtesy of Claudia Ihl)

Three-Year-Old Bulls

1. In three-year-old bulls, horn bases are well developed, but not as thick as in mature bulls.
2. They have a crease of white hair in the middle and horns point upward.
3. Body size is smaller than mature bulls, and is approximately as large or slightly larger than a fully grown cow.
4. Horn hooks are also much thicker on the male than the female.
5. Most variation in bull horn development occurs between early and late in the third year. Early, there is no boss development (photo 13) and late in the year, the boss will have expanded over the forehead (photo 14).

Photo 13: three-year-old bull, spring
(photo courtesy of Peter Bente)



Photo 14: three-year-old bull, fall (photo courtesy of Sue Steinacher)

Three-Year-Old Cows

1. In three-year-old cows, horns are near full size and forehead is covered with hair.
2. Horn bases in cows are much smaller and thinner than bulls (photo 16).
3. Body size approximates that of an adult. Three-year-old cows have thin tipped horns that curve upward and a considerable amount of fuzzy hair between the horn bases.
4. Cows at this age may or may not be accompanied by a calf.

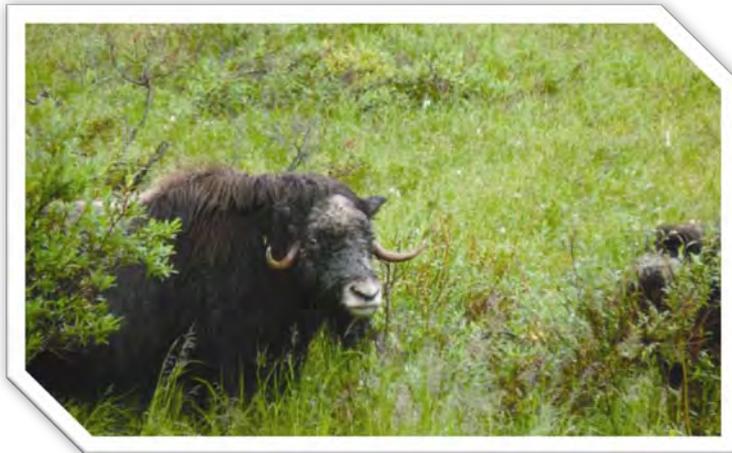


Photo 15: three-year-old cow, summer (photo courtesy of ADF&G)



Photo 16: three-year-old cow left, three-year-old bull right, spring (photo courtesy of Charlotte Westing)

Mature Bulls

1. In mature bulls, the horn boss is present.
2. The horn boss is thick and massive, covering the whole forehead with slight or no hair between horns.
3. Horn tips may be broken off.
4. In older males, horns are dark brown with a weathered look (photo 17).



Photo 17: mature bull, spring (photo courtesy of Tom Kohler)



Photo 18: mature bull, summer (photo courtesy of Claudia Ihl)

Mature Cows

1. Horn bases in mature cows are fully developed, but do not reach the size and bulk of fully grown bulls.
2. Unlike bulls, cows always retain some white hair between horn bases in the middle of the forehead.
3. Look for the presence of a calf as they can be near or hiding behind a mature cow.



Photo 19: mature cow missing left horn, fall
(photo courtesy of Claudia Ihl)

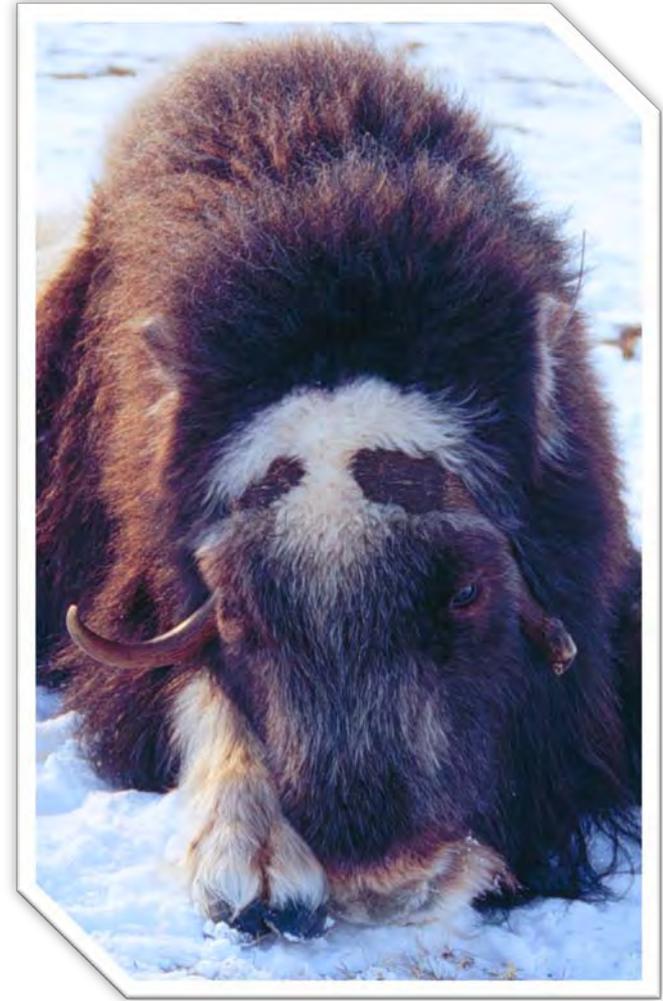


Photo 20: mature cow, winter (photo
courtesy of Claudia Ihl)

Preventing Wounding Loss

1. Smaller animals are commonly hidden behind larger animals. Be sure to look for extra legs before shooting (see photo 21).
2. Study the photos in this slide-show and request a copy of: *Muskox: a guide to identification, hunting, and viewing* from the Bethel, Nome, or Kotzebue Fish and Game office. Knowing how to identify muskox can prevent the taking or wounding of an illegal animal.
3. After the first shot, the targeted muskox may walk back into the group. By taking your time and waiting out the injured animal, you will avoid the unnecessary risk of wounding other animals.

Notice extra legs of small animal behind mature bull. Do not shoot until legal animal is clear of all other animals.

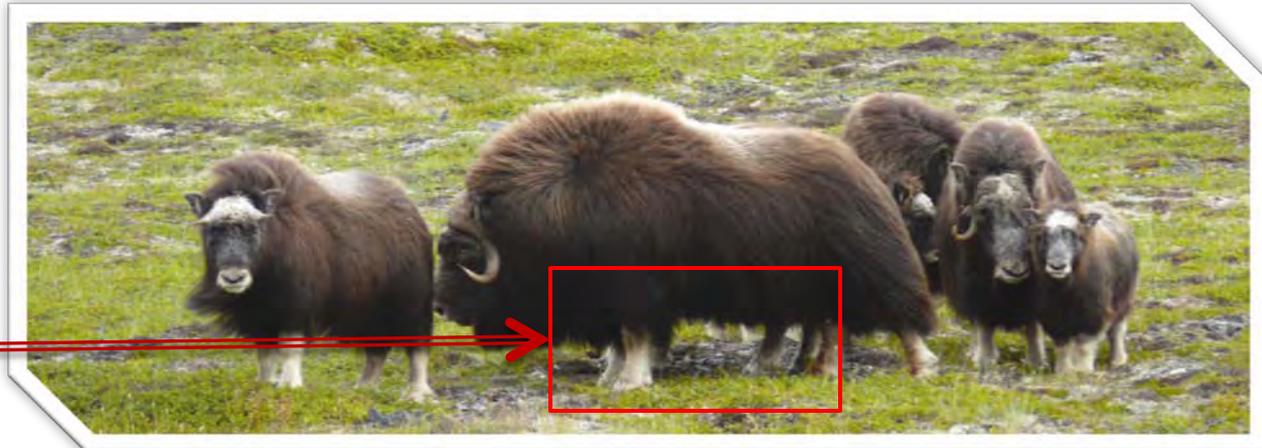


Photo 21: yearling, mature bull (small muskox behind), mature cow, calf, fall (photo courtesy of Sue Steinacher)

Preventing Wounding Loss

1. Proper Caliber

A minimum of a 30.06 or larger is recommended.

2. Shooting

Patience is necessary because muskox often group up after a shot. Take your time and wait for muskox to disperse. Allow your first shot to be the best shot for a clean kill.

3. Shot Placement

ADF&G recommends a broadside and center of the shoulder shot angled slightly forward so the bullet passes through the heart and lungs and exits through the opposite shoulder. Neck shots are not recommended.



Staying Safe in Muskox Country

1. Muskox are tolerant animals and may allow you to get surprisingly close. However, they are powerful and will react if they feel threatened in their space.
2. If a muskox becomes agitated, the group will form a defensive line and face you. In addition, they may begin to sway their head from side to side. Give stressed muskox room by retreating from the area quickly.
3. As with any other wild animal, do not agitate or approach cows with calves.
4. Bull muskox are more aggressive during the fall breeding season which takes place from August to October. Precautions should be taken to avoid disturbing males in rut.
5. Keep dogs under control at all times in muskox country.
6. View muskox from at least 150 ft, give the group a wide berth, and do not box muskox in with people or vehicles.
7. If you are charged; run, do not stand your ground.
8. Muskox stand their ground; as a result, it is very difficult to drive muskox from areas.
9. Do not feed muskox, it is both dangerous and illegal.

Enjoy watching muskox from a safe distance and avoid unnecessary disturbances!

Thank you.