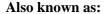
American Bison (Bison bison)

ORDER: Artiodactyla FAMILY: Bovidae

The American Bison's recovery from near extinction parallels what happened to the European Bison, Bison bonasus. Once abundant and widespread in northern latitudes, their decline in several countries since the 6th century has been documented. The last wild populations in Poland and the Caucasus Mountains became extinct early in the 20th century. They now exist as managed, reintroduced populations in Poland, Russia, and the Caucasus. In North America, the wild population once numbered in the tens of millions. The herds were gradually being reduced by hunting pressures before the Civil War, and after the war, with westward expansion, American Bison were pushed almost to extinction. In the 1880s, when only 541 animals were counted, conservation efforts began in earnest. Now there are more than 150,000 animals, 90 percent of which live on private lands. Bison graze on prairie grasses, roaming in herds of thousands of individuals. They, Brown Bears, and Moose are the largest land mammals in North America.



American Buffalo, Búfalo Americano

Sexual Dimorphism:

Males are larger than females.

Length:

Range: 3.1-3.8 m males; 2.1-3.2 m females

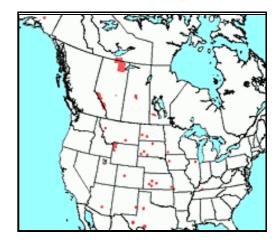
Weight:

Range: 460-907 kg males; 360-544 kg females



Plains bison – male (right) and female (left)

Credit: painting by Elizabeth McClelland from Kays and Wilson's Mammals of North America, © Princeton University Press (2002)



DATE:	LOCATION:

Mountain Goat (Oreamnos americanus)

ORDER: Artiodactyla FAMILY: Bovidae

Mountain Goats live on remarkably steep, craggy cliffs for most of their lives, spending only about a quarter of their time in less forbidding meadows and nearby fields. The steep slopes offer safety from predators such as mountain lions and grizzly bears. The Goats eat vegetation that grows in small pockets of earth that collect among the rocks. Even when migrating to lower elevations during winter, the Goats stay on steep slopes above the timberline. There, high winds scour snow from the rocks, exposing food for forage. Special adaptations enable Mountain Goats to navigate rock faces. They have powerful forelimbs that help them climb or brake, and hooves that can spread to brake or squeeze like pincers to grasp irregularly shaped rock. They also have textured foot pads that give them extra traction. Their high–altitude habitat is harsh, and juvenile mortality is high. Goats that survive to adulthood tend not to live beyond 10 years.



Rocky Mountain Goat, Cabra Montés,

Length:

Average: 1.5 m males; 1.4 m females

Range: 1.2–1.8 m males; 1.3–1.4 m females

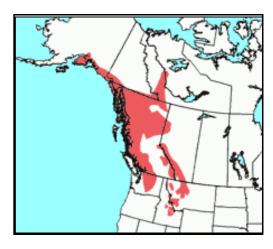
Weight:

Average: 61.7 kg males; 57.2 kg females

Range: 46.2–126 kg males; 45.8–83.9 kg females



Credit: painting by Elizabeth McClelland from Kays and Wilson's Mammals of North America, © Princeton University Press (2002)



DATE:	LOCATION:

Muskox (Ovibos moschatus)

ORDER: Artiodactyla FAMILY: Bovidae

Muskoxen are well adapted to their cold Arctic habitat, with short, stocky bodies and a thick coat of ground-length hair, enhanced in the winter by woolly underhairs for added insulation. They feed on sedges, grasses, and willows. Like other mammals in the family Bovidae, they are ruminants: they gulp down a large quantify of food, then regurgitate and re-chew it at leisure. This behavior chewing their cud – lets them break down the vegetation and digest it better. It also lets them forage quickly, which may be a protection from predators. Females and young Muskoxen live in mixed-sex groups year-round. Some bulls live alone in the summer, but are likely to join all-male or mixed-sex groups in winter. Bulls breed with several females. Competition involves clashing with horns and their heavily shielded heads. Muskoxen also use their horns in a group defense strategy against their principle predators, wolves and brown bears: they back into a circle or cluster, with head and horns facing outward. Individual animals dart out to charge at the intruder.



Ovibos moschatus – female, left; male, right

Credit: painting by Elizabeth McClelland from Kays and Wilson's Mammals of North America, © Princeton University Press (2002)

Also known as:

Oomingmak

Sexual Dimorphism:

Males are larger than females.

Length:

Range: 2.1–2.6 m males; 1.9–2.4 m females

Weight:

Range: 186-410 kg males; 160-191 kg females

FIELD NOTES		
DATE:	LOCATION:	

Bighorn Sheep (Ovis canadensis)

ORDER: Artiodactyla FAMILY: Bovidae

Conservation Status: The Peninsula Bighorn Sheep, *Ovis canadensis cremnobates*, is an Endangered subspecies; the Mexican Bighorn Sheep, *Ovis canadensis mexicana*, is Vulnerable.

Bighorn Sheep live only in remote, treeless mountain terrain. They use steep slopes and cliffs to escape from wolves, coyotes, and cougars. Many migrate seasonally, some moving a few hundred meters up or down a mountainside and others going 10-20 km from one mountain range to another. Some males make much longer migrations. Males and females live apart except during the mating season, when males vie for access to females. Larger size and age usually confer an advantage. The males rear up on their hind legs, kicking with their front legs and clashing their horns. Although Bighorn Sheep have heavily buttressed heads that absorb the shock of butting, these battles can result in death. Ewes usually give birth to one lamb, in May; twins are extremely rare. The lambs can follow their mothers within a day after birth, and nurse for 4–5 months. Bighorns eat seasonally available grasses and other vegetation, and cactus in the desert. They are attracted to natural salt licks, cattle licks, and piles of salt placed along highways for melting snow. In some places where bighorn populations went extinct, groups have been reintroduced, but many parts of their original range are no longer suitable. The species is declining in desert areas.



Mountain Sheep

Sexual Dimorphism:

Males are larger than females.

Length:

Range: 1.6-1.9 m males; 1.6-1.7 m females

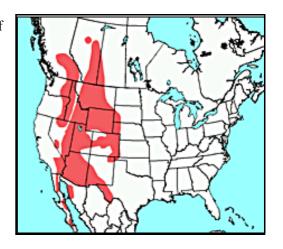
Weight:

Range: 75–135 kg males; 48–85 kg females



Ovis canadensis – male (upper), female (lower)

Credit: painting by Elizabeth McClelland from Kays and
Wilson's Mammals of North America, © Princeton
University Press (2002)



DATE:	LOCATION:

Dall's Sheep (Ovis dalli)

ORDER: Artiodactyla FAMILY: Bovidae

Dall's Sheep inhabit undisturbed and extremely rugged mountains. They migrate between summer and winter ranges, eating grasses and shrubs. Males and females live apart except during the mating season. Both sexes have horns, which – as with all bovids – are permanent, not shed annually as are antlers. Bovid horns have a bony core that is attached to the skull and a horny outer sheath. The horns of Dall's Sheep grow throughout the animal's lifetime, developing annual bands that can be counted much like tree—rings. Males' horns are larger. Predators include wolves, lynx, coyote, grizzly bears, and wolverines, and lambs are sometimes taken by golden eagles. Lambs are born in May in the safety of secluded cliffs, which they are able to negotiate with their mothers within 24 hours. To survive their first hard winter, they have to gain weight rapidly.



Stone's Sheep, Fannin's Sheep

Sexual Dimorphism:

Males are much heavier than females.

Length:

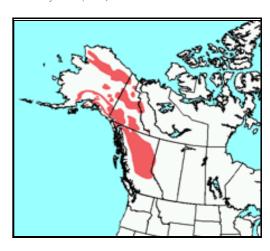
Range: 1.3–1.8 m males; 1.3–1.6 m females

Weight:

Range: 73–110 kg males; 46–50 kg females



Ovis dalli – typical coloring, left; O. dalli stonei (Yukon, British Columbia) coloring, right (male, upper; female lower) Credit: painting by Elizabeth McClelland from Kays and Wilson's Mammals of North America, © Princeton University Press (2002)



DATE:	LOCATION: