

Moose, *Alces alces* **(By VN Nola Chow, 2011)**

Description: "Moos" is an Algonquin word that means "twig-eater". The Algonquins say that if you dream of moose often, you will live a very long time. The same animal which is called a moose in North America is called an elk in Europe and Asia. Their body is covered with black or very dark brown hair. They have a very large head with a dewlap of skin, called a "bell," hanging down from the jaw. Moose have long faces and muzzles that dangle over their chins. A flap of skin known as a bell sways beneath each moose's throat. Moose have very long legs so they can wade into a lake and eat plants off the bottom.

Moose are the largest member of the deer family. Males or bulls range to 9 1/2 feet long (of which only four inches is tail), six feet tall at the shoulder, with weights to over 1,000 pounds. Antlers are "palmate"—flattened like a hand. Males are immediately recognizable by their huge antlers, which can spread 6 feet (1.8 meters) from end to end. One of the biggest racks of antlers ever found was 81 inches across! Antlers of bulls in their prime may weigh over 50 pounds. One of the heaviest racks of antlers ever found weighed 77 pounds! Antler growth begins late winter with the formation of soft "velvet," the blood-rich skin that nourishes antler growth. Velvet is rubbed off in fall in preparation for the breeding season. Moose are mostly solitary or found in small groups, not in large herds.

Moose are at home in the water and, despite their staggering bulk, are excellent swimmers. They have been seen paddling several miles at a time, and will even submerge completely, staying under for 30 seconds or more. A moose can swim up to 6 miles an hour and can dive up to 20 feet underwater! Moose have hollow hair which helps them to float. Moose have been known to swim as far as 10 miles without stopping. Moose are similarly nimble on land. They can run up to 35 miles (56 kilometers) an hour over short distances, and trot steadily at 20 miles (32 kilometers) an hour, going as far as 15 miles without stopping.



Range: Moose have wandered into Colorado occasionally, but there was no breeding population until 24 moose were introduced to North Park from Utah and Wyoming in 1978 and 1979. Populations have expanded to nearby counties (and Rocky Mountain National Park). To try to guide moose expansion, beginning in 2005 state wildlife managers relocated some moose westward to Grand Mesa, near Grand Junction, where about 180 are thriving. In 2010, state biologists hauled 20 from the Steamboat Springs area to Rio Blanco County near Colorado's border with Utah. Individual moose may wander widely from their usual mountain haunts, to the edge of the plains, for example, where they sometimes graze alongside cattle. In Colorado, moose are most often found in North Park, but have been sighted in Middle Park, Rocky Mountain National Park, South Park,

near Leadville, near Gunnison, near Yampa, northwest of Creede, south of Fraser, near Colorado Springs, and in Golden, west of Denver. Young bull moose are leading an expansion across Colorado's high country, an emerging southern frontier for a species traditionally rooted in Canada. Some moose are migrating east across the Continental Divide into wooded areas and marshes with willows.

Population: The moose population in Colorado has steadily increased over the years since reintroduction in the 1970s. In 2019 the moose population in Colorado was estimated to be about 3,000 animals. Most moose in Colorado appear healthy, however, as of 2020 Colorado Parks and Wildlife (CPW) has detected Chronic Wasting Disease in two of nine moose herds in Colorado.

Habitat: Moose live in forested areas that are often close to lakes and marshes. They are dependent on early successional ecosystems in areas that have been recently burned, logged, or modified by beavers. Typical moose range in the Rocky Mountains includes a mixture of willow, spruce, fir, aspen, or birch. Moose typically don't compete with cattle, as moose eat woody plants and cattle graze on grass.

Behavior: Moose are very territorial, will defend their space and rarely leave their home territory during winter. No serious tussling with tourists or measurable damage has been observed in Rocky Mountain National Park, but moose are very large, fast animals and can be aggressive when disturbed. Moose are solitary and not inclined toward herd invasions of main streets as elk have been known to do.

Diet: Moose lack upper front teeth and weighing as much as 1,500 pounds, rely on lower incisors as they devour about 70 pounds a day of fruit and plants. Daily forage intake (dry weight) is estimated to be 5 kg in winter and about 11 kg in warmer months. Moose are so tall that they prefer to browse higher grasses and shrubs because lowering their heads to ground level can be difficult. During the winter they are browsers mainly feeding on willows in many western ranges. Willow marshes also serves as shelter. Moose may "yard-up" in winter, creating paths in the deep snow as they scrape snow with their large hooves for food such as mosses and lichens. These hooves also act as snowshoes to support the heavy animals in soft snow and in muddy or marshy ground. They also eat shrubs and pinecones in the winter. Some ranchers in North Park, Colorado welcomed the moose as a control on willows, which invade irrigated hayfields, but in winter moose may turn to grazing and thus compete with domestic livestock as well as elk.

In summer, food is far more plentiful in the northern regions of North America, Europe, and Asia. When the ice melts, moose are often seen in lakes, rivers, or wetlands, feeding on aquatic plants both at and below the surface. During spring, summer, and fall, moose also utilize a variety of herbaceous vegetation including grasses, sedges, emerging aquatic plants, as well as flowering plants. They also graze on coniferous needles and deciduous leaves in the summer.

Reproduction: Moose breed in late September and early October, during the annual “rut.” The adult males spar with their antlers and can be extremely aggressive and dangerous. During breeding season is one of the few times they form small groups. Gestation period is about eight months.

Calving occurs in late May through early June. Calves are born with a reddish-brown coat (no spots) that darkens with age. The cows often have twins. Females give birth to one or two calves in the spring—each weighing some 30 pounds (14 kilograms). These calves grow quickly and can outrun a person by the time they are just five days old. Young moose stay with their mothers until the following mating season.

(Updated 2020)