

American Elk

The American elk, or Wapiti (the Shawnee name that means “white rump”) crossed the Bering land bridge from Asia 120,000 years ago. Large numbers, perhaps as many as ten million, once wandered over much of the United States and southern Canada. Now, the largest remaining herds live in northwestern Wyoming. Some roam wild in northwestern Nebraska. The Nature Center has a small herd.

Although elk have adapted to many habitats, their preferred diet is grasses. In winter, when grass is hard to find they browse on twigs, bark, and buds. Some also eat mushrooms and lichen. Like cows, elk are ruminants with four stomach chambers. Because plant material is hard to digest it first goes to the rumen, a chamber where bacteria begins to break it down. The elk regurgitates the food (cud), chews it, and swallows it once more. The food is then passed through the other stomach chambers for further digestion until its nutrition is available.



Elk are big, though not as large as their cousin the moose.. Weighing an average of 500 to 700 pounds they are three to four times heavier than another relative, the white-tailed deer.

The most imposing features of this majestic animal are the antlers of a mature male. These can grow to be over four feet long and weigh as much as 40 pounds each. It is difficult to imagine carrying two of them on one’s head.

Even more amazing is the fact that a male elk must grow a new pair each year. Antlers, unlike horns, are living bone. They grow at an astonishing rate – up to ½ inch a day. While growing they are soft and covered with fluffy skin called “velvet” which carries blood to the tissue. Gradually the bone mineralizes and becomes hard. Once growth is complete in late summer the velvet falls or is rubbed off in large ribbons.

The huge investment required to grow and carry such massive head ornaments has puzzled science for years. Antler growth may require as many resources as bearing young. Elk don’t really depend on their antlers for protection – their front feet are adequate weapons. Rather their function seems primarily to serve as symbols of dominance over other males and sexual attractiveness to females.

In the wild, especially further north, antlers are often shed soon after the fall mating season and before snow makes movement and foraging difficult. Our males carry theirs until February or March. Lengthening days trigger increasing testosterone levels and new antler growth. The cycle begins again.



The next time you are in the Prairie Building pick up one of the elk antlers on display. Trace the ridges and grooves that mark the path of the veins that carried the nourishment necessary for growth. Feel the weight, marvel at the spread, and wonder at the grandeur of these former wanderers of the prairie.