

Facts & Figures About Canadian *Deer & Elk*

In General:

- Deer and elk are members of the cervidae family.
- Elk have been farmed in Canada for over 30 years.
- Male elk are called bulls and live for 12 to 14 years. They weigh between 800 and 1100 pounds.
- Mature female elk are called cows and live for 15 to 20 years. They weigh between 550 and 600 pounds.
- Fallow deer are the second most farmed cervidae world-wide.
- Male fallow deer are called bucks and weigh between 110 and 150 kg.
- Female fallow deer are called does and weigh between 40 and 75 kg.
- Red deer are the most common breed of deer farmed in Canada.
- A female red deer, called a hind, weighs 110kg at maturity.
- A male red deer, called a stag, weighs 250kg at maturity.
- Currently, there are over 2200 deer and elk farms in Canada with an estimated 145,000 animals.
- Most elk, mule deer and whitetail deer farms in Canada are found in Alberta and Saskatchewan.
- Most red deer farms are found in Ontario and Quebec.
- Of the 145,000 cervids farmed in Canada, 62% are elk, 14.5% are red deer, 14.4% are whitetail deer, 7.8% are fallow deer, and the final 1.2% are a combination of mule deer, reindeer and moose.
- Elk are also called Wapiti. This was the Native American name for them, and was adopted by scientists to avoid confusion, because what the Europeans call elk are similar to our moose.



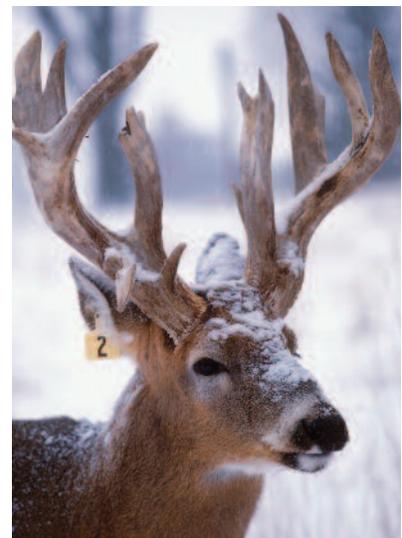
You were asking about...Deer and Elk

Nutrition: What do Deer and Elk Eat?

Deer and elk are ruminant herbivores. This means they eat plant matter and digest it in a series of four stomach compartments. When a cervid eats, it chews and swallows and the feed enters the first stomach compartment, the rumen, where it is mixed with fluids containing bacteria and other microorganisms to help break down the cellulose fibres. The cervid will then “chew its cud”: regurgitate the food and re-chew it into smaller particles. The chewed cud is swallowed again and eventually passes into the second stomach compartment, the reticulum, for further processing. Then it's on to the third stomach compartment, the omasum, which removes a lot of the moisture from the mixture. The fourth stomach compartment is the abomasum, which, like the human stomach, is very acidic for the digestion of proteins.

Deer and elk are both browsers and grazers. This means they eat a combination of grass and shrubs, limiting their environmental impact. Farmers should provide minerals in addition to good pastures, and hay and grain when grazing and browsing is scarce. As with all animals, providing a good supply of clean water is crucial.

During the winter months, the dietary requirements of elk and deer are cut in half. This is an evolutionary adaptation from living in harsh environments



Housing: Where do Deer and Elk Live?

Deer and elk are well adapted to life in the Canadian wilderness. Farmers and ranchers can house them outside as long as there is shelter for bad weather. Shelter can be man-made or can be natural, such as a bush. Pastures can be natural or seeded, with a variety of both grasses and legumes.

Fences for deer and elk enclosures have to be at least eight feet tall because they can jump so high. Stocking densities vary based on the kind of cervid being farmed.

Farmers monitor cervids closely, but handling is kept to a minimum. When cervids have to be moved, for example from one pasture to another, it is done by moving them along a series of fences and gates. Stress during handling is kept to a minimum.

About the Life Cycle of Deer and Elk

Elk:

The elk rut (breeding season) lasts from late August to late October. It is controlled by the daylight hours. One bull can service between 20 and 40 cows, which he separates from the rest of the herd. After a gestation of approximately 246 days, the cow will give birth to a calf. Male calves weigh between 45 and 50 pounds at birth, while female calves weigh between 34 and 40 pounds. Before calving, cows will walk along the fences to find a private place to deliver. Cows will normally deliver calves without assistance.

Breeds

Elk:

There are four sub-species of elk: Rocky Mountain, Manitoba, Roosevelt and Tule. They all originate from different areas of North America.

Mature elk bulls weigh between 800 and 1100 pounds on average, stand between 5' and 5'6" at the shoulder, and are 7 to 8 years old. Bulls can begin breeding at two years old, and live for 12 to 14 years. Only male elk grow antlers and produce velvet. Mature elk cows weigh between 550 and 600 pounds on average, stand between four and five feet at the shoulder, and are three to four years old.

Elk calves are born in May or June, and spend the first week or so hiding in tall grass with their mother watching from a distance. During this time, they only get up to nurse. They are brown with white spots at birth, and lose their spots by six months of age. Adult elk have tan bodies with dark brown heads and necks, and a white rump and tail.

Deer:

Red deer: Red deer are the kind of deer found most often on Eastern Canadian farms. The male Red deer, called a stag, is known for its magnificent antlers. The antlers are 36 inches in length, hard and spikey. The antlers are shed, or cast, every year, usually in March or April. The new antlers start to grow immediately and reach maturity in July. Antlers that are in the growing stage are soft and workable and covered with furry skin, which is called velvet. When

Deer:

The height of the deer rut, or breeding season, is October. Fawns are born in June, with a spotted coat. In red deer and fallow deer, twins are rare, but twins are common in whitetail deer and mule deer with triplets also being possible. Deer breeds vary in size and colourings, as described in the breeds section.

Deer have a gestation of approximately 233 days. They will find a quiet place to give birth, and do not require assistance from the farmer while giving birth. A fawn, like an elk calf, will spend the first week or two of its life hiding in the long grass and only get up to nurse. Both natural breeding and artificial insemination is used on cervid farms.

maturity is reached, the velvet dries out and is rubbed off, which leaves hard and bare fully mature antlers. The antlers stay this way until they fall off the following March or April. Velvet is harvested usually 60 to 80 days after the new antlers appear. When harvested, velvet can weigh one to five kilograms.

A female red deer, called a hind, weighs 110 kilograms at maturity. A mature male red deer, called a stag, will weigh 250 kilograms. Calves weigh about eight kilograms when born. In the winter, the stag's coat is dark brown in colour. In the summer, both the stag and hind's coats are dark red. The stag grows a significant mane in the summer months. When fawns are born they have a white spotted coat that turns to dark red in five to six weeks after their birth.

Red deer are forest dwellers and browsers, but they are also very adaptable. It is suggested that red deer have access to both pasture and a shelter, and open access to water. It is suggested that you have four to six animals per acre of pasture.

Whitetail Deer: Whitetail deer are the smallest of the North American deer family. Males, called bucks, have a prominent set of antlers which fall off each winter and grow back in the spring. Females, or does, do not grow antlers.

Whitetail deer weigh between 110 and 300 pounds, with bucks being larger than does. They will live up to 15 years in captivity. Adults are a reddish-brown colour in the summer, and their coats fade to a dull grayish-brown in the winter. Fawns are reddish-brown

with white spots to help camouflage them in the grass and trees. The underside of the tail is white, giving the deer their name. When the deer sense danger or are startled, they show the underside of their tail to warn others in the herd. When moving through long grass and bushes, does will also use their white tails to make it easier for their fawns to follow them.

Whitetail deer require high fences, as they can leap up to 10 feet high. They can run at speeds up to 48km/hr. They are raised outdoors on native or seeded pastures, with a shelter to protect them from adverse weather conditions.

Fallow Deer: On a worldwide scale, Fallow deer are the second most farmed cervidae, and continue to spread worldwide due to their adaptability. The colour of the coat of fallow deer is usually one of four colours: white, menil (light brown with white spots), common (ginger) and black. Fallow deer have gained their popularity with producers due to their low aggressiveness, ease of handling and natural immunity to diseases. Furthermore, they have low feed requirements and can be successfully raised on only a few acres of land.

Male fallow deer, called bucks, weigh between 110 and 150 kilograms. Females, called does, weigh between 40 and 75 kilograms. Fallow deer are raised outdoors on native or seeded pastures. Farmers also provide natural shelters or barns for protection against poor weather conditions.

Mule Deer: Mule deer are approximately three feet tall at the shoulder. They are tan coloured, with white patches on their face, throat, and around their tails. Their tails are small, white and rope-like with a black tip. Mule deer have very large ears which are extremely sensitive to sound. Their ears are even bigger than whitetail deer's ears. Mule deer fawns are tan with white spots. They will lose their spots within the first few months. Mule deer normally have twins, but single births and triplets are also possible.

As with other cervids, mule deer bucks shed their antlers in the winter, and regrow a new set for the spring. This makes their antlers velvety during the spring and summer months.

Mule deer are sometimes called jumping deer, because they jump high in the air when they hear a noise or are startled.

Mule deer are raised outdoors on native or seeded pastures. Farmers also provide natural shelters or barns for protection against poor weather conditions.

Reindeer: Reindeer, or Caribou, are the only deer in which both males and females have antlers, although not all females have them. Males, or bulls, weigh between 100 and 300 kg and are 1.80 to 2.14m tall. Females, or cows, weigh between 50 and 150 kg, and are approximately 2m tall. Domestic reindeer have shorter legs and are heavier than wild reindeer. Reindeer are a tan colour, with a shaggy mane on their neck. Their

noses have bones specially adapted for warming air they are breathing in before it reaches their lungs, and the texture and hardness of their hoof changes depending on the terrain.

Bulls shed their antlers in December, while cows shed their antlers in the summer and after calving.

Reindeer are raised outdoors on native or seeded pastures. Farmers also provide natural shelters or barns for protection against poor weather conditions.

Moose: Male moose, or bulls, are taller and heavier than females, or cows. Moose are the largest member of the deer family, weighing approximately 600kg. They measure eight to 10 feet in length, and are five to seven feet tall at the shoulder. Males have impressive antlers which are between four and five feet across. Calves have a reddish-brown coat, and adults are dark brown. Moose have a humpback and long legs, with short tails. They also have large ears and hooves, a drooping nose, and an overhanging top lip. The fur-covered flap of skin under their chin is called a bell.

Bulls shed their antlers in the late fall, and grow a new set for the spring.

Even though moose look big and awkward, they can move quickly on many terrains. Deep snow is the hardest for moose to move in. Moose are raised outdoors on native or seeded pastures with a shelter for protection from bad weather.

Deer & Elk Dictionary

- **Buck:** Male fallow, mule and whitetail deer.
- **Bull:** Male elk, moose or reindeer.
- **Calf:** Young elk, moose and reindeer.
- **Calving:** The act of giving birth to a calf.
- **Caribou:** Another name for reindeer.
- **Cervids:** Elk and deer are both cervids, which means they are members of the Cervidae (or deer) family.
- **Cow:** Female elk, moose or reindeer.
- **Doe:** Female fallow, mule and whitetail deer.
- **Fawn:** Young fallow, mule and whitetail deer.
- **Hide:** The cured, or tanned, skin of an animal.
- **Hind:** Female Red deer.
- **Ruminant:** An animal with four stomach compartments that chews its cud. Some are cattle, sheep, deer, goats, and bison.
- **Rut:** Breeding season. For deer, it usually starts in September and lasts until early November.
- **Stag:** Male Red deer.
- **Tanning:** The act of curing an animal skin for use as leather.
- **Venison:** Meat from cervids.
- **Wapiti:** Another name for elk.

DEER & ELK TRIVIA

- Three elk cows' feed intake is equivalent to the feed intake of one beef cow.
- Elk have a natural immunity to most diseases.
- Elk's life is conditioned by the seasons; elk's metabolism slows down in winter, and as a consequence, its nutritional needs decrease.
- The calorie intake of an elk is twice as much in the summer as it is in the winter.
- An area that can accommodate one cow can support four red deer.
- Red deer that are domesticated tend to have more points on their antlers than those deer that are found in the wild.
- Whitetail deer can run up to 48km/hr and jump up to 10 feet high.
- There are some moose and reindeer (caribou) farms in Canada.
- Wapiti is another name for elk, and is the name preferred by scientists.
- There is a large variation in sizes of cervid species.
- Some species of cervids have multiple births normally, while with other species multiple births are quite rare.
- Domestic cervids are only handled when necessary.



Deer & Elk
FACT SHEET

Deer and Elk - The Product

What Comes From Deer and Elk?

Some species of cervids, including moose, elk, caribou, whitetail deer and mule deer, are native to Canada, while fallow deer and red deer were introduced from overseas. Cervid farming started in New Zealand, and over 30 years ago farmers and ranchers in Canada began cervid farming. Until the 1990s, wild deer and elk were caught and introduced to herds to increase genetic diversity. Since then, genetic variation comes from other farms, and through selective breeding.

Deer and elk farming is growing in popularity as the meat and velvet antler demand increases. Farms and ranches come in all sizes, with a Canadian average of approximately 66 animals.

History: Deer and Elk

Deer and elk are farmed as breeding stock, as trophy animals, or for their meat (called venison), velvet antler, and hides.

Deer and elk are sold between breeders or to new breeders to improve genetics in the herd. Since the 1990s, genetics from the wild are no longer being introduced to domestic herds. This helps control risk of disease and also allows farmers to selectively breed for certain characteristics such as mothering ability and temperament.

Venison flavour is described as mild yet distinctive. The meat used to be reserved for European royalty for centuries, but is now enjoyed by people from all different backgrounds. Domestic deer and elk have a more mild flavour than animals found in the wild. Venison is high in protein, iron and B vitamins, and low in fat and cholesterol.

Velvet antler is harvested 60 to 80 days after new antlers emerge, before antlers harden in the fall. Harvest is done by a vet to ensure welfare standards are met and there is no discomfort to the animal. Velvet antler is used in the natural health market for energy, boosting the immune system, and helping with joint pain. It is also used in the pet industry for similar uses as in humans.

Deer and elk hides are sometimes cured and sold for use as leather.

Some farmers and ranchers will raise trophy bulls for use on game farms. Visitors use the trophy animals for a wide range of things, from viewing and photography to hunting.

Off to Market

Anyone who is handling or transporting deer must be trained and knowledgeable in deer behavior and welfare. Deer can only be moved in specially designed trailers, and whenever they are transported off of the farm a transit record must be completed. These records, combined with ear tags on all farmed deer and elk, will make it possible to trace where animals came from in the rare incidence of an illness.

About Deer and Elk – Additional website links

Canadian Cervid Alliance
www.cervid.ca/en/index.php

Alberta Elk Commission
www.albertaelkcommission.com

Alberta Whitetail and Mule Deer Association
www.albertadeer.com

Manitoba Elk Growers Association
www.manitobaelk.com

Association des Éleveurs de Wapitis du Québec
(Quebec Elk Breeders Association)
www.wapitiquebec.com

L'Association Cerfs Rouges de Québec
(Quebec Red Deer Association)
www.cerfsrouges.com/index.html

Sources

- www.wapitiquebec.com/english/elevage.html
- www.cervid.ca/en/canadiancervidallianceprovincialcontacts.php
- www.ontariodeerelkfarmers.com/deer-elk-farming-information.html
- <http://animals.nationalgeographic.com/animals/mammals/white-tailed-deer/?source=A-to-Z>



Prepared by:



Farm & Food Care Ontario
www.farmfoodcare.org
519-837-1326
info@farmfoodcare.org