



Facts & Figures About Canadian *Beef Farming*

In General:

- The cattle industry contributes approximately \$24.6 billion to the Canadian economy.
- There are 12.46 million cattle in Canada.
- Canada produces approximately 1.6 billion kilograms (3.5 billion pounds) of beef annually.
- Canadians purchase about 20.2 kilograms (44.5 pounds) of beef per year.
- Canada exports 200 million kilograms (440 million pounds) of beef yearly, primarily to the United States, Japan, and other Asian countries.
- Because 99% of the beef animal is utilized, items manufactured from beef by-products are all around us.
- 48% (109,901) of Canadian farms report a beef cattle population with an average of 61 beef cows per farm
- 15% (\$6.2 billion) of Canadian farm cash receipts are contributed by the cattle industry (2007).
- The meat processing industry is Canada's third largest manufacturing industry, ranking behind motor vehicles and petroleum products.
- 27,326 Canadian manufacturing jobs were attributed to meat processing in 2006, paying \$982.2 million in salaries and wages per year.



Facts courtesy of Canadian Cattlemen's Association

You were asking about...Beef

Housing: Where Do Beef Cattle live?

Cows and calves spend the spring, summer and fall living and grazing on pasture. Often such pastureland is unsuitable for any other cropping practices. During the winter, various methods of protection are provided such as natural shelter areas or barns. The hardiness of the animals allows them to comfortably adapt to our climate.

Cattle are social animals that do well in herds, where the safety of numbers allows them a natural comfort level. The average herd size of an Ontario cow-calf farm is approximately 20 to 25 cows, which is relatively small when compared to some of the large breeding operations that exist in parts of Canada – primarily in the west.

After the calves are weaned, they become known as backgrounders or stockers. These weanling calves will be kept grazing on pasture or in feedlots eating a forage (hay-based) diet until they are moved to specialized feedlots.

Today the majority of cattle in Canada are brought to a finished market weight in feedlots. In these specialized facilities, cattle are able to socialize and have free access to feed and water. Feedlot housing practices are very diverse from farm to farm, ranging from open dry yards where protection is provided from inclement weather to indoor housing. The barns may have any one or a combination of concrete slatted floor systems, straw bedding, or open yards. Ontario feedlots vary in size but have an average capacity of 175 animals.

Modern beef cattle farmers use advanced husbandry practices in accordance with the guidelines set out in the Recommended Code of Practice, developed by farmers, government, animal protection groups, researchers, and processors. Copies may be found at www.livestockwelfare.com.

Nutrition: What Do Beef Cattle Eat?

Cattle are herbivores, meaning that their diet consists of plant matter. Like sheep and goats, they are known as ruminants. Instead of having just one stomach like humans, they have four separate stomach compartments that allow specialized digestion of different components of the feed.

The whole digestive process takes a significant amount of time. A cow will spend approximately six hours a day eating and approximately eight hours a day chewing its cud: regurgitating boluses of feed from the rumen (the first stomach compartment), masticating (chewing) them, and re-swallowing them to be further digested in the next three stomach chambers called the reticulum, omasum and abomasum. This lengthy process allows them to efficiently digest low-grade fibre, turning their feed that would otherwise be unsuitable for human consumption into meat for our tables.

The first meal the calf receives from its mother is thick, sticky milk called colostrum. This milk contains antibodies that provide them with immunity to disease. After two to three days, the colostrum changes to

milk. The calf will nurse for about five to six months with its diet gradually changing from about two kilograms of milk every day to one that includes forages and water as it matures.

From weaning at five months until about 15 months of age, calves will be kept on pasture eating grass, or in feedlots, eating forage diets depending on the season, field conditions and farm facilities. Cattle will also have free access to mineral supplements and fresh water.

Once they are moved to feedlots at fifteen months of age, the cattle are fed a nutritionally balanced mixture of forages such as grasses, alfalfa, or clover, fed either dry or as silage. This silage is supplemented with grain rations that are typically based on corn, barley, wheat or oats. It all looks very similar to your breakfast bowl of granola (without the milk!) with vitamins and minerals added to balance the animal's nutritional needs.

Each mature beef animal will drink between 35 and 65 litres of water every day depending on their feed source and the outside temperature.

About the Life Cycle of Beef Cattle...

Cows are generally bred in the summer because farmers try to time the birthing of calves for the spring. This is so calves are born during the spring so both cow and calf can benefit from fresh pasture and decent weather.

In Ontario, about 90% of beef farmers use natural breeding methods by letting bulls live in the pasture with the herd of cows. The remaining 10% use artificial insemination. Heifers (young females) are normally bred at 12 to 17 months of age, and ideally they calve (give birth) for the first time by 24 months of age.

After a gestation (pregnancy) of nine months, the cow (mature female) will usually give birth to one calf that weighs around 40 kg, depending on the breed. Cows may be kept in calving areas during the calving period so that farmers can keep a close watch over cows and calves during this critical time. Cows will remain active in the breeding herd for about seven years.

After the calf is weaned at five to six months of age at a weight of about 227 kg, a significant percentage are then backgrounded for a 10-month



period, which means allowing them to graze on pasture and/or feeding them a high forage diet, such as hay, until they reach approximately 400 kg.

For the next stage of the beef production cycle, from 15 months up to 24 months old, the beef animal will typically be brought to a finished market weight of approximately 550 to 600 kg in specialized feedlots. The feedlot system produces a consistently uniform and high quality beef product for the consumer while

allowing the farmer to economically feed and care for the herd.

Farmers work along with their veterinarian to develop herd health programs that ensure that the animals receive proper vaccinations and health care. Calves will be dehorned at birth if necessary to reduce the risk of injury to their herd-mates or handlers, but many breeders will use polled bulls (genetically having no horns) to reduce the need for this procedure. Bulls (intact males) are called steers if they have been castrated, a procedure that is performed at an early age to make the animals safer to work around and actually results in producing a better quality beef.

Breeds

Major breeds of beef cattle in Canada include: Angus, Charolais, Hereford, Simmental, Limousin, Maine-Anjou, Salers, Gelbvieh, and Shorthorn. Some beef farmers raise purebreds, but most have herds consisting of commercial crosses (combinations of more than one breed). These crossbred animals are bred to contain the best qualities of each breed and generally have more vigor, produce calves that grow more quickly, and meat that is both well-marbled and lean.

Off to Market

When the time comes to ship to market, beef cattle are loaded and sent to auction under strict guidelines for transportation, regulated under the Federal Health of Animals Act and the Recommended Code of Practice for the Care and Handling of Livestock.

BEEF TRIVIA

Did You Know...

- Alberta and Saskatchewan combined produce approximately 70 per cent of Canada's beef animals.
- Canada has one of the healthiest cattle herds and most wholesome beef products in the world.
- Cows use water, but they don't use it up – water recycles. Only a very small fraction of the water consumed is retained in the body. Most of the water that cattle drink continues to cycle in the environment.
- The average beef animal drinks between 35 and 66 litres of water each day.
- Approximately 30 per cent of Canada's farmland is considered not economically or environmentally able to produce crops, but can support sustained ruminant grazing.
- 80 to 85 per cent of feed eaten by cattle are grasses and forages that are inedible by people.
- Cattle often provide a market for damaged grains originally grown for human consumption but not fit for human consumption at harvest.
- The average daily production of greenhouse gas by a cow is equal to a car being driven 3.2 kilometres.
- Canadian light cars and trucks produce three times as much greenhouse gas as beef cattle.
- A study at Cornell University, New York, calculated the entire beef cattle population in the world contributes 1.0 per cent of greenhouse gases in the atmosphere.
- The medical world relies on beef by-products for many life saving or life improving medications and treatments.
- Automobile tires contain stearic acid, which makes the rubber hold its shape under continuous surface friction. Even the asphalt on our roadways contains a binding agent derived from the fat of beef cattle.
- Because 99% of the beef animal is utilized, items manufactured from beef by-products are all around us.
- Beef is packed with 14 essential nutrients making it a powerfully delicious choice for you and your family.
- Cattle in the feedlot will gain as much as 1.3 kg of weight a day.
- Canadians consume 20.2 kg of beef a year, or about 55 grams per person per day.

Courtesy of CyberSpace Farms:

- More than 100 medicines used by humans come from cattle.
- One cowhide can produce enough leather to make 20 footballs, 18 soccer balls, 18 volleyballs or 12 basketballs.
- The average cow has more than 40,000 jaw movements per day. Cattle only have incisors on their lower jaw.

Beef Cattle Dictionary

- **Backgrounder:** An animal that has been weaned, but is not yet old enough to be placed into a feedlot.
- **Bovine:** The word bovine refers to animals that are members of the cattle family.
- **Bull:** A mature male bovine.
- **Calf:** A newborn bovine.
- **Cow:** A mature female bovine.
- **Cow/calf Farm:** Beef cows and calves typically live on pasture in spring, summer and fall on farms called cow/calf farms where they eat a diet of mostly grasses.
- **Feedlot:** Cattle being raised for market are moved to feedlots (penned yards) from the open range and pastures for the final months before marketing. They are fed a nutritionally balanced mixture of forages such as grasses, alfalfa, or clover, fed either dry or as silage. This silage is supplemented with grain rations that are typically based on corn, barley, wheat or oats.
- **Heifer:** A young female that has not yet had a calf.
- **Ruminant:** An animal with four stomach compartments like cattle, sheep, goats, deer or bison.
- **Steer:** A castrated male.
- **Weaned:** When calves are taken off their mother's milk and fed grasses.



Beef Cattle
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Beef - The Product

The marketing of cattle is not supply-managed, meaning that the market forces of supply and demand will determine the price that the farmer receives. The beef industry will typically pattern on a multi-year cycle. If you add it all up, it takes nearly three years to produce a hamburger from the time the cow is bred until that calf reaches the marketplace.

Lean on Beef!

Canadian beef is recognized by Canada's Food Guide as part of a balanced diet. Lean beef is full of nutrients, 14 that Canadians need every day, including zinc for healthy growth, iron for oxygen and protein to build and repair the body. Many Canadians especially women and children are at risk for iron and zinc deficiencies. Beef provides the most readily available and easily absorbed source of iron. When it comes to fat, lean beef compares favourably to chicken and fish. About half of the total fat in beef is in the form of monounsaturated fatty acids. And about 30% of the saturated fatty acids in beef are in the form of stearic acid which does not raise LDL blood cholesterol. A substantial body of evidence shows the nutrients in lean beef help maintain a healthy weight, build muscle and fuel physical activity - all of which play an important role in a healthful lifestyle and disease prevention.

Source: Canada Beef Inc.

What Comes from Beef Cattle?

A typical 600 kg steer (neutered male) will yield about 360 kg of meat (60%) and 240 kg of residuals and offals (tallow, meat & bone meal, hides, waste, etc.) A typical cow (female) yields a little less meat (53%) and a little more residuals (47%).



About Beef – Additional Website Links

Canadian Cattlemen's Association:
Visit www.cattle.ca

Canada Beef
Visit www.beefinfo.org

Ontario Cattlemen's Association:
Visit www.cattle.guelph.on.ca
Visit www.makeitontariobeef.ca

Ontario Corn Fed Beef:
Visit www.ontariocornfedbeef.com

BC Cattlemen's Association:
Visit www.cattlemen.bc.ca

Alberta Beef Producers
Visit albertabeef.org

Saskatchewan Stock Growers' Association:
Visit www.skstockgrowers.com

Saskatchewan Cattlemen's Association
Visit www.saskbeef.com

Manitoba Beef Producers
Visit www.mcpa.net

Nova Scotia Cattle Producers:
Visit www.nscattle.ca

Prince Edward Island Cattle Producers:
Visit www.peicattleproducers.com

Fédération des producteurs de bovins du Québec
Visit www.bovin.qc.ca

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