

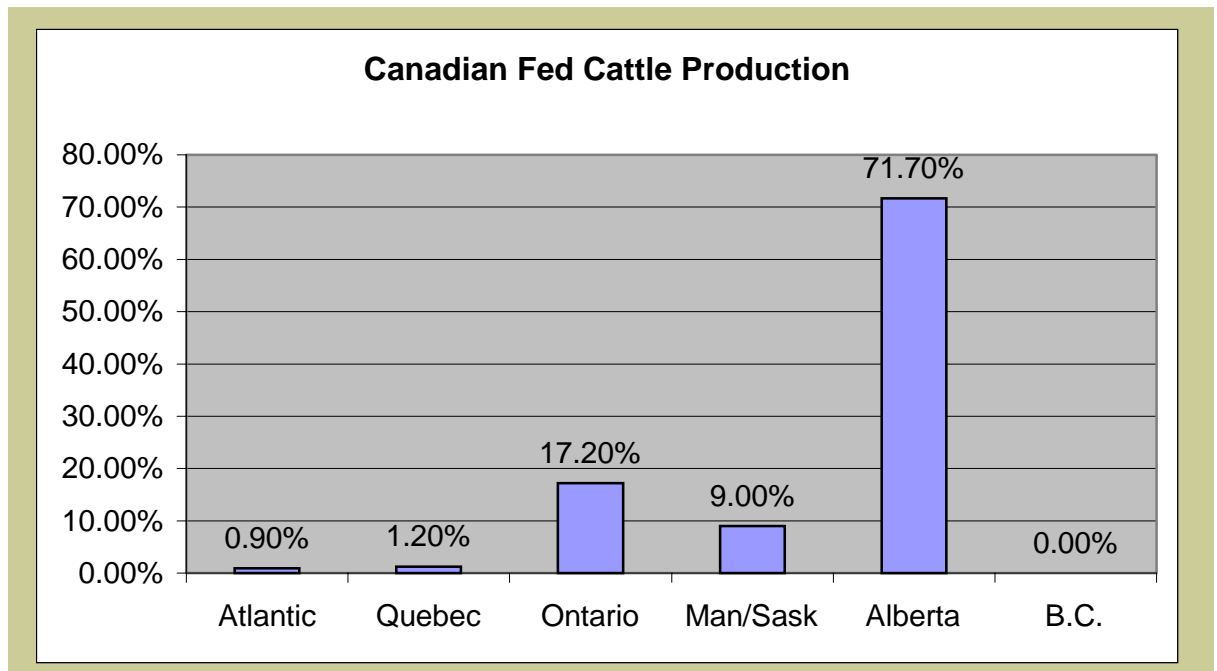
Canada's Beef Industry

Beef production and the economy

While contributing to a safe and nutritious food supply, beef production in Canada also adds significantly to the national and provincial economies. Canada's beef industry is the largest single commodity source of farm cash receipts. Farm cash receipts from the sale of cattle and calves in 2000 totalled \$6.6 billion or about 20 per cent ¹ of the total farm cash receipts. In addition, beef production also contributes to the processing, retail, food service and transportation sectors.

With these other sectors considered, beef production adds about \$26 billion to the Canadian economy ^{2,3}.

Beef production takes place in every province in Canada with a total of 14 million head of cattle and calves ². With 72 per cent of Canada's fed-cattle production, Alberta is by far the largest beef province, followed by Ontario, Saskatchewan, Manitoba, and Quebec. The Atlantic provinces account for about 1.0% of total Canadian beef production, as does British Columbia.



Source: Canfax, Agriculture and Agri-Food Canada & Statistics Canada 2000

There are 103, 673 beef producers in Canada. Most herds (77%) are small to medium sized with less than 122 head ². The average herd size is 45 head of cattle ².

Total Canadian beef production was 3.36 billion pounds in 2000 ⁶. Canadians consumed 2.1 billion pounds of beef ⁶.

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Canadian cattle and beef production for export to other countries in 2000 was valued at approximately \$2.98 billion ¹. Beef exports represented 62 per cent of the total beef and cattle exports for a value of \$1.85 billion. By far, the largest portion of Canadian beef exports are destined for the United States while other important markets include Japan, South Korea, Mexico, Russia, Taiwan and Hong Kong.

From “gate to plate”

There are a number of steps involved in the Canadian beef industry to get beef from “gate to plate” or from the producers to the consumers. The beef industry can be broken down as follows:

The Cow-Calf Farm

Beef production begins with cow-calf operations which raise calves for the industry. Cows are selected for their mothering ability, beef quality traits and other desirable traits. Mating takes place in early summer with peak calving taking place the following spring after the end of harsh weather.

On most farms, the entire cow-calf process takes place exclusively outside on open pasture where the cattle graze and calves nurse until they reach a weight of approximately 500 to 600 pounds. At this stage, calves are weaned from their mothers and over-winter outdoors on a forage-based diet. Sometimes this occurs on the cow-calf farm, or it may take place at another specialized farm known as a backgrounding operation.

The Backgrounding Phase

After weaning, calves are over-wintered on hay-based diets until their weight increases to about 900 pounds. This process is known as backgrounding. During this phase, beef producers take care to provide feeding and bedding areas that are sheltered from the elements and keep the animals comfortable and protected.

The Feedlot Operation

The only intensive part of conventional beef production takes place at the feedlot where cattle are brought to a finished weight. Beef production on a feedlot begins with a diet made up of forages and progressively moves to about 90 per cent grain. The main reason grain is fed to cattle is to produce tender, marbled beef. Cattle will typically spend 60 to 120 days on a feedlot before they are sold to processors.

Industry Programs

Trace-back programs

Developed by the cattle industry in conjunction with the Canadian Food Inspection Agency (CFIA) the Canadian Cattle Identification Program began January 1, 2001. As of that date, beef and dairy cattle will be individually identified with an approved ear tag with a number unique to that animal that it will carry through to slaughter and carcass inspection. The tag will allow the CFIA to trace back animals that have moved beyond their ‘herd of origin’ to ensure that reportable diseases and major food safety defects are contained and eliminated.

On-Farm Food Safety and Quality programs

To enhance and maintain its reputation for product quality and safety, the Canadian cattle industry developed an initiative to assure continued market access and consumer confidence. Called the Canadian Cattlemen: Quality Starts Here[✓], research projects and subsequent educational materials were designed so that producers can incorporate the Hazard Analysis and Critical Control Point (HACCP) principles and definitions as outlined by the Food Safety and Enhancement Program manuals published by the CFIA. Next steps are for the program to be implemented as an industry-driven, third party audit, accredited program.

Beef Quality Grading

Once a carcass has met the stringent requirements for health and safety of a Federal or Provincial inspection program, it may be assessed for quality. The Canadian Beef Grading Regulations assess carcasses on quality and yield. This provides an accurate description of a beef carcass to assist both buyers and sellers in the marketplace and provide consumers with consistent product. Carcasses that are graded fall into one of 13 grades based on assessment of carcass maturity, sex, muscling, meat quality, external fat covering and marbling⁴.

The grades are:

- Canada A, Canada AA, Canada AAA, Canada Prime
- Canada B1, Canada B2, Canada B3, Canada B4
- Canada D1, Canada D2, Canada D3, Canada D4
- Canada E

Canada A/AA/AAA/Prime are the highest quality Canadian grades and represented 93.8 per cent of all Canadian graded beef in 2000⁴.

In addition to quality grading, Canadian carcasses qualifying for Canada A or higher must also be graded for the lean meat content or yield of the carcass. Carcass muscle score and fat score are used to estimate yield.

There are three possible yield grades:

- Carcasses estimated to contain 59 per cent or more lean meat are designated yield classification Canada 1;
- Carcasses estimated to contain between 54 and 58 per cent lean meat are designated yield classification Canada 2;
- Carcasses to contain 53 per cent or less lean meat are designated yield classification Canada 3⁴.

Beef Industry Research

In an effort to have Canadian beef recognized as being of outstanding quality by customers in Canada and around the world, the Canadian beef industry developed the Beef Industry Development Fund (BIDF). From 1994-1999, the federal and provincial governments of Canada invested over \$22 million into the BIDF to commission research projects, export development projects, domestic development projects and training and technology programs⁵.

The Canadian Cattlemen's Association is working to establish a National Checkoff Agency, and a portion of the funds collected by this agency will be directed toward research and technology development through the Beef Cattle Research Council (BCRC). The BCRC will employ a process very similar to that of the BIDF program for identifying research priorities, soliciting and evaluating proposals, and managing research projects. In addition, the BCRC will employ Expert Groups, where appropriate, to provide a strategic framework for research and technology development in key priority areas.

The purpose of the BCRC will be to sponsor research and technology development and adoption in support of the vision of the Canadian beef industry to have high quality Canadian beef products recognized as the most outstanding by Canadian and world customers. To achieve this purpose, the BCRC will:

1. Identify, fund and manage beef research and technology development in strategically focused priority areas of national significance as defined by industry stakeholders from all across the market chain and from all parts of Canada.
2. Promote excellence in Canadian beef research and technology development by facilitating the exchange of information and expertise to encourage collaboration, discourage duplication, and to advocate the adoption of high standards.
3. Support and encourage the rapid commercial adoption of new technologies to sustain competitive advantage.⁵

References

- ¹ *Canfax, Statistics Canada, 2000* — www.cattle.ca/CanFax/
- ² *Statistics Canada, 2000
Census of Agriculture*
- ³ *Economic Impact of Beef and Hog Sector on the Saskatchewan Economy
University of Saskatchewan, 1991*
- ⁴ *Canadian Beef Grading Agency* — www.telusplanet.net/public/cbga/
- ⁵ *Canadian Cattlemen's Association* — <http://www.cattle.ca>
- ⁶ *Statistics Canada 2000; Canfax; Agriculture and Agrifood Canada 2000*