

About Canada Beef

Canada Beef works on behalf of the over 60,000 Canadian cattle farms and ranches that produce some of the world's best beef. Canada Beef is responsible for domestic and international market development on behalf of Canadian cattle producers. We have representatives located in Canada, Mexico, Japan, South Korea, China, Vietnam and Taiwan. Canada Beef provides dedicated programs and services to support our global network of industry partners. We are also committed to consumer education to enhance awareness and enjoyment of beef as a nutrient rich food with outstanding eating quality.

Mission

To create value for our producers and the entire Canadian beef value-chain through impactful and innovative marketing solutions to enhance demand, experience, and awareness.

Vision

Position Canadian beef as the protein of choice, appreciated worldwide, to maximize the return on investment for our producers, partners, and customers.

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Canada Beef Offices



Canadian Beef Suppliers



cdnbeefperforms.ca



The Canadian Beef Advantage

Animal Health | Food Safety | Grading Standards | Beef Quality



Dear Friends,

We appreciate the opportunity to share with you this resource describing the Canadian Beef Advantage. The Canadian beef industry is firmly committed to growing demand for Canadian beef by meeting the expectations of our customers. In fact, more than 90% of Canadians surveyed would prefer to purchase beef that is produced on Canadian farms and ranches instead of beef imported from other countries*.

Food safety remains our highest priority and is supported by interlocking controls throughout the beef supply chain. We have implemented a mandatory Canadian Livestock Tracking System (CLTS) as well as a National Animal Health Program to safeguard the cattle herd. Comprehensive food safety systems at beef processing facilities are developed and administered under the oversight of the Canadian Food Inspection Agency. Our internationally recognized livestock genetics, grain feeding protocols and strict national grading standards have created beef products with outstanding eating quality and cutability.

Thank you for your continued support and we look forward to working with you to maximize the value of Canadian beef for your business.

Sincerely,



Eric Bienvenue
President
Canada Beef



Chris White
President & CEO
Canadian Meat
Council



Dennis Laycraft
Executive Vice President
Canadian Cattle
Association



Janice Tranberg
President & CEO
National Cattle Feeders'
Association



Melinda German
General Manager
Canadian Beef
Check-Off Agency



Sandy Russell
Chief Executive Officer
Canadian Beef
Breeds Council



* National survey of 1,000 Canadian consumers in February, 2024.



93% of Canadians prefer to purchase beef from cattle raised on Canadian farms versus product imported from other countries.”



Our Producers

Many of Canada's farms have been passed down through multiple generations. Caring for the land, and the cattle that depend on it, is an important responsibility and sustains the natural environment for the future.



As a third generation cattle farmer, I am proud to continue the Canadian tradition of high-quality beef production. Canadian producers are committed to caring for our animals and the environment in an ethical and respectful manner.

Nathan Phinney *President, Canadian Cattle Association*

The Canadian Agricultural Tradition

Cattle production has been an essential part of the Canadian agricultural tradition for more than 300 years. Settlers coming to Canada in the 1600s relied on cattle for their meat, milk, and leather. Production expanded and at present there are more than 60,000 beef cattle farms and ranches across Canada. The Canadian cattle industry is dedicated to the production of nutritious, high-quality and safe beef products for our customers around the world.

Raising Cattle in Canada

The process of raising cattle for beef production begins on the cow-calf farm where breeding typically occurs in the summer, followed by birth of the calf the following spring. After weaning, calves are provided with feed, shelter and bedding throughout the Canadian winter. During this period the snow and cold temperatures act as a natural barrier to disease. When animals reach a target weight of 300–350 kg they are fed a carefully formulated diet of grain to promote well-marbled, flavourful and tender meat with firm fat.

Canada's Natural Environment

Canada is the second largest country in the world and has an abundance of fresh water and wide-open spaces. In Canada, one in three acres of land is not well suited to other types of agriculture and cattle production allows these areas to be used productively. Cattle are also an important contributor to a balanced and productive agriculture system. They utilize the forages and legumes which are part of a crop rotation system to improve soil fertility and decrease soil erosion. Canada's beef production system is one of the most environmentally sustainable in the world. Producing one kilogram of Canadian beef (boneless and consumed) created 15% less greenhouse gases in 2021 than in 2014.¹

High-Quality Beef Production

The Canadian beef industry is firmly committed to growing demand for Canadian beef by meeting the expectations of our consumers. Canada is one of the leading beef-producing nations in the world. For many years Canada has exported approximately half of its beef production to international markets.

1. Canadian Journal of Animal Science. 104(2): 221-240. <https://doi.org/10.1139/cjas-2023-0077>

The Canadian Beef Advantage

The value proposition for Canadian beef is created by the shared efforts of the entire supply chain. Key attributes of the product and the production system are described under **four pillars** that create the foundation for the Canadian Beef Advantage.



Animal Health



Canada maintains a strong commitment to the control and elimination of serious animal diseases through our National Animal Health Program.



Food Safety



Canada's food safety system for beef slaughter and fabrication is based on an internationally recognized approach to risk management.



Grading Standards



Quality grades are assigned by a Canadian Beef Grading Agency certified grader in accordance with strict national standards.



Beef Quality



Careful management and grain feeding contribute to well-marbled, flavourful and tender Canadian beef with firm, white-coloured fat.



Scan the QR code to know more about the Four Pillars of the Canadian Beef Advantage

Animal Health



Animal Welfare Standards



Animal Health Monitoring



There is nothing more important for the production of high-quality beef than healthy cattle. Canada's National Code of Practice for the care and handling of cattle has been developed collaboratively by industry organizations, government and experts working in animal health and welfare.

Canada's National Animal Health Program

Demonstrated Leadership in Animal Health

The health of Canada's breeding herd is protected by strict controls on importation of livestock genetics. The Animal Import/Export Division of the Canadian Food Inspection Agency (CFIA) determines if importation of animals, embryos or semen will be permitted based on a detailed risk assessment, including a review of the exporting country's animal health status. Canada maintains programs for point-of-entry inspection and quarantine as well as foreign animal disease (FAD) testing at the National Centre for Foreign Animal Disease.

Animal Disease Surveillance

The CFIA experts work to detect potentially emerging animal diseases and monitor the effectiveness of control programs. Through the formation of a nationwide network, the disease detection capabilities of Canada's veterinarians, provincial and university diagnostic laboratories and the federal government are combined. If disease is detected, the ability to rapidly and accurately identify the herd of origin of affected animals is supported by the Canadian Livestock Tracking System. Canada communicates the results of its surveillance for reportable diseases to the World Organization for Animal Health (WOAH). The exchange of information is an important part of Canada's commitment to work with other nations to establish the best approaches to protecting both animal and human health.

Approval and Usage of Veterinary Medications

Under the Canadian Food and Drug Regulations, all veterinary drugs must be authorized by Health Canada prior to their use in the cattle industry. These veterinary drugs are an important tool in the production of healthy animals which are destined for use as food. Acceptable limits of residues of animal health products in beef are called maximum residue limits (MRLs). Canada develops its MRL standards by reviewing the best available scientific information and contributes to international MRL standards as a member of the Codex Alimentarius Commission of the United Nations.

National Chemical Residue Monitoring Program

Canada's National Chemical Residue Monitoring Program (NCRMP) tests samples of beef fat, muscle tissue and internal organs for chemical residues. Testing is performed for veterinary drugs as well as other agricultural and industrial chemicals. Any finding of chemical residues is evaluated to determine if there is a violation of Canadian MRLs which are enforced under the Canadian Food and Drugs Act. In the very rare event that a violation is found, an investigation is conducted, and further compliance testing is performed.



Animal health and welfare standards serve as a fundamental pillar that supports the entire Canadian beef supply chain. Raising healthy cattle allows us to produce healthful, safe food.”

Dr. Leigh Rosengren Chief Veterinary Officer, Canadian Cattle Association



Cattle Identification

Canada's mandatory national cattle identification program is the first of its type in North America and is designed to support efficient trace back and containment of serious animal health or food safety concerns.



Canadian Cattle Identification Agency



Canadian Livestock Tracking System



The Canadian Livestock Tracking System

Canadian Cattle Identification Agency

The Canadian Cattle Identification Agency (CCIA) is a non-profit, industry-led organization incorporated in 1998 and is dedicated to the implementation of technologies and services supporting Canada's national cattle identification program. The agency is led by a board of directors made up of representatives from all sectors of the Canadian industry, including cow/calf operations, feedlots, auction markets, processing plants and veterinarians. Due to strong industry and government support for its activities, the CCIA has become a global leader in animal identification.

Animal Identification

Unlike older bar code systems, the radio frequency identification (RFID) tag does not require "line of sight" to facilitate tag reading. Use of passive RFID technology enables the tag to store the animals' unique identification number without the need for batteries, ensuring the information is available for the life of the animal.

Supporting Disease Eradication

Canada maintains a strong commitment to the control and elimination of serious animal diseases through its National Animal Health Program. This program, administered by the Canadian Food Inspection Agency (CFIA), requires ongoing surveillance for disease. Canadian Livestock Tracking System (CLTS) is vital to trace backs conducted to investigate reportable diseases and other conditions.

How Does the System Work?

1. An approved CCIA RFID tag must be applied to the animal's ear prior to leaving its herd of origin.
2. All RFID tags are visually and electronically embedded with a unique identification number that is allocated from the national database.
3. The national RFID tag distribution network securely reports all tag issuance records directly to the CLTS database.
4. The unique number of each individual animal is maintained to the point of export or carcass inspection for traceability purposes. The CLTS database maintains all historical records of unique animal identification data.

Only approved CCIA RFID tags may be utilized in the Canadian Livestock Tracking System

The RFID transponder does not require batteries and can function in extreme cold or hot temperatures

The RFID reader provides a magnetic field which energizes the transponder causing it to transmit the animal's unique ID number



Accurate and Efficient Information Transfer



RFID TAGS

Each RFID tag has a unique number assigned by the Canadian Cattle Identification Agency (CCIA). Only approved CCIA RFID tags may be used.



COW-CALF

Each animal must have a CCIA RFID ear tag when leaving the original herd. The CCIA and the Government of Canada recommend that birth dates are registered with the Age Verification System.



AUCTION

Cattle can't be sold at an auction without a CCIA RFID ear tag. The tag number and the date of processing for export must be reported to the CLTS database.



FEEDLOT

Upon arrival at the feedlot, cattle are checked to ensure the presence of a CCIA RFID ear tag. The unique tag number can be used to track production information and report animal movement events.



MEAT PROCESSING

Packers are required to record and report numbers from tags on the cattle they receive to the CLTS database. ID numbers from harvested cattle are then retired in the CLTS database.



AUDIT AND ENFORCEMENT

The Canadian Food Inspection Agency (CFIA) is the government agency which is responsible for auditing and enforcing the Canadian National Cattle Identification Program.



Food Safety



Canadian Food
Inspection Agency



Health Canada

Canada's food safety systems focus on prevention and involve a comprehensive partnership between government and industry.[†] This approach has resulted in Canada being among the highest ranked countries globally in terms of food quality and safety.¹

Food Safety is Our Most Important Priority

National Food Safety Standards

Health Canada is responsible for setting national standards and providing guidance on the safety and nutritional value of food. The Canadian Food Inspection Agency enforces the food safety and nutritional quality standards established by Health Canada. Under the federal Safe Food for Canadians Regulations, beef processing establishments are required to develop a preventive control plan (PCP) to ensure that food safety standards are achieved at all times. The PCP is based on the internationally recognized Hazard Analysis and Critical Control Point (HACCP) approach.

Prerequisite Programs and HACCP Plans

The implementation of a complete HACCP system satisfies Canadian regulations for a documented program to prevent chemical, biological or physical hazards in food. The system requires both Prerequisite Programs as well as HACCP plans. Prerequisite Programs are procedures and practices that provide the basic environmental and operational conditions to enhance food safety for all meat production processes. HACCP plans build on the foundation provided by the prerequisite programs and are designed specifically for each production process.

Critical Control Points (CCPs)

HACCP plans function by using CCPs which are monitored by specially trained employees to control potential food safety risks. CCPs are determined by conducting a comprehensive analysis of possible biological, physical or chemical hazards associated with each step in a meat production process. Prior to implementing the HACCP plan, processing establishments validate that their proposed control measures and critical limits for CCPs are effective using laboratory testing, technical data or published scientific research. Once in operation, the effectiveness of the HACCP plan and CCPs is again assessed using laboratory testing or other types of objective measurements.

Role of the Canadian Food Inspection Agency (CFIA)

To ensure the HACCP system is functioning correctly, the CFIA verifies the compliance of a beef processing establishment. Verification measures can include reviews of documentation and records, as well as on-site inspections. If non-compliance is identified, the CFIA takes appropriate compliance and enforcement actions. Suppliers of meat ingredients as well as cold storage and freezer facilities must also have preventive control programs to support food safety throughout the supply chain.



“

Canadian beef processors are dedicated to ensuring the highest standards of food safety for our products. To achieve this outcome, we work closely with the Canadian Food Inspection Agency in the development and implementation of our food safety systems.”

Russ Mallard *Chair, Canadian Meat Council*



¹ Economist Global Food Security Index
<https://impact.economist.com/sustainability/project/food-security-index/>
[†] The information provided here relates to federally-inspected establishments.

Food Safety and Cattle Harvest

Each step during cattle harvest is performed with great care to ensure all food safety requirements are satisfied.



1. Live Animal Inspection

Under Canadian law, each animal must undergo ante-mortem (before harvest) screening by trained operators to detect potential illness or injury. Canadian Food Inspection Agency (CFIA) personnel then conduct a further ante-mortem inspection, including a detailed assessment of any animal showing evidence of disease. Cattle not meeting animal health requirements are clearly identified, segregated from other cattle, and completely excluded from meat production.



2. Stunning Procedures

Healthy animals are slaughtered using only methods approved by the CFIA.



3. Carcass Identification

Following the removal of the hide, it is a requirement that the animal ID tag be attached to the carcass to maintain its unique identity. The head is also tagged before separation from the carcass and prepared for inspection.



4. Inspection of the Head

Following post-mortem inspection of the head, the tongue and cheek meat are removed from healthy animals and all specified risk materials (SRMs) are disposed of in a container used exclusively for this purpose. Scientific research has shown that BSE infectivity is concentrated in specific tissues in an animal (such as brain and spinal cord) which have been defined as SRMs. Canada removes all tissues from cattle which are classified as SRMs by the World Organization for Animal Health (WOAH).



5. Inspection of the Viscera

A post-mortem inspection of the thoracic and abdominal viscera including lungs, heart, kidneys, liver, and digestive tract is also conducted following evisceration.



6. Inspection of the Split Carcass

The carcass is split and a careful inspection of the external and internal surfaces of the carcass is made.



7. Spinal Cord Removal

Removal of the spinal cord by an approved method, such as the use of a high power vacuum device, is required by law. Application of the Meat Hygiene Legend stamp to the carcass occurs only after removal of the spinal cord and successful completion of all post-mortem inspection procedures.



8. Trimming, Washing and Chilling

Following trimming, the carcass is subjected to one or more washing steps. Due to its ability to effectively reduce any bacteria on meat surfaces, carcasses typically undergo a brief exposure to steam, hot water or other antimicrobial treatment. Carcasses are then chilled, and microbiological testing can be used to verify the effectiveness of food safety measures.



Food Safety and Boxed Beef Production



Preventive Control Program

A food safety preventive control plan (PCP) supports the safety of Canadian beef during fabrication and packaging. The PCP must be validated during development and verified once in operation by the Canadian Food Inspection Agency.



Temperature Control and Sanitation Requirements

To ensure beef cutting and packaging areas meet Canadian regulatory standards, there are strict requirements for temperature control and sanitation. Each facility is required to have a written Sanitation Standard Operating Procedure (SSOP). Monitoring of the temperatures of room air, carcasses and finished cuts is conducted throughout the day, as required by each operation's PCP system.



Finished Product Inspection

In addition to meat hygiene controls utilized throughout the production process, inspection of beef products is undertaken to monitor the quality and safety

of the beef before packaging. Inspections are performed by quality control personnel and verified by the CFIA. The inspection process operates by utilizing a lot sampling procedure where corrective actions must be taken for the entire lot if the randomly selected sample is found to contain physical, chemical or biological hazards which would impact food safety.



Microbiological Testing Programs

Each establishment conducts microbiological testing in accordance with the frequency outlined in their PCP and regulatory requirements. Microbiological testing is used to verify the effectiveness of the sanitation program as well as critical control points for boxed beef production.



Packaging Process and Shelf Life

Fresh beef products are typically packaged in vacuum packaging with very low oxygen transmission rates because of the ability of this technology to reduce the growth of bacteria which would cause premature spoilage. The use of antimicrobial interventions along the production process enhances food safety as well as shelf life.



Canadian Cattle Production System Standards

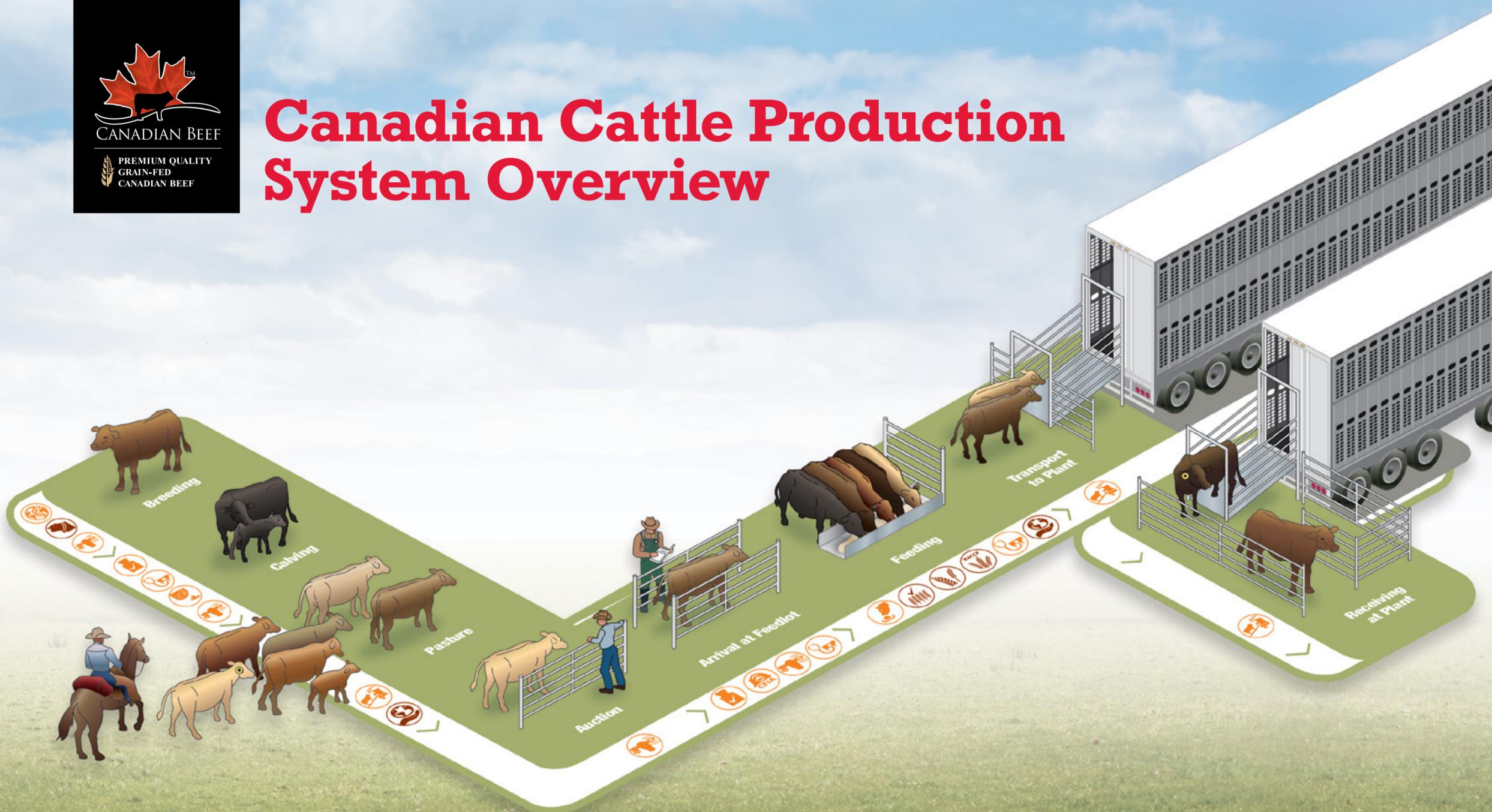
Canada's cattle production system utilizes internationally recognized genetics, mandatory cattle identification and national disease surveillance.



Scan the QR codes to watch our Canadian Cow/Calf and Feeding Operation Virtual Tours



Canadian Cattle Production System Overview



Organizations



Canadian Cattle Identification Agency implements technologies and services supporting Canada's mandatory national cattle identification program.



Canadian Food Inspection Agency monitors aspects related to cattle transport, animal health, feed production and veterinary medication use.



Programs & Attributes



Animal Genetics Import Controls include point-of-entry inspection and quarantine as well as foreign animal disease testing.



Animal Health Monitoring is conducted by beef producers and veterinarians throughout the production process.



Feed Ingredient Approvals are required for cattle feed and are enforced by the Canadian Food Inspection Agency.



Cattle Breed Improvement Programs enhance beef eating quality and lean yield percentage of Canadian cattle.



Cattle Transport Best Practices are designed to protect cattle during transport and reduce quality defects.



Grain Feeding promotes well marbled, tender and flavourful beef with firm, white fat.



Canadian Livestock Tracking System uses RFID ear tags and a national database to enable rapid and accurate animal identification.



Environmental Standards safeguard Canada's natural environment to support sustainable high-quality beef production.



HACCP Feed Production Program are designed to analyze and control potential hazards related to cattle feed.



Animal Health Product Approvals are determined by the Government of Canada before use in cattle is permitted.



BSE Feed Controls are defined in Canadian federal law and prohibit inclusion of specified risk materials in animal feed.



LEGEND



Animal Health Pillar



Food Safety Pillar



Grading Standards Pillar



Beef Quality Pillar



RFID Ear Tags

Organizations



Canadian Food Inspection Agency enforces federal laws relating to animal health and the safety of Canadian beef.



Canadian Beef Grading Agency provides grading services for beef in accordance with Canada's national standards.



Programs & Attributes



Animal Welfare Standards protect cattle and are a shared responsibility of the government and the Canadian industry.



Canadian Livestock Tracking System uses RFID ear tags and a national database to enable rapid and accurate animal identification.



Ante-mortem Inspection is performed to monitor the health of live cattle prior to slaughter.



Removal of Specified Risk Materials (SRMs) are designed to analyze and control potential hazards related to cattle feed.



Post-mortem Inspection is performed to verify animal health and food safety standards.



National Chemical Residue Monitoring Program tests beef for residues of chemicals to protect human health.



A Preventive Control Program (PCP) protects beef products from chemical, physical or biological hazards.



Product Specifications describe the attributes of finished beef products and strongly influence value and utilization.



Carcass Food Safety Treatments include carcass pasteurization and organic acids as part of the food safety system.



Microbial Testing Programs are implemented by all Canadian beef processors to monitor sanitation and food safety.



Computer Vision Grading provides objective assessment of quality attributes such as beef marbling.



Beef Quality Grade is used to describe the eating quality of beef and includes Canada's high-quality Prime, AAA and AA grades.



Beef Yield Grade is a classification system to predict the amount of boneless closely trimmed retail cuts.



Cut/Trim Food Safety Treatments include sprays of organic acids to enhance food safety and shelf life.



Export Certification by the Canadian Food Inspection Agency assures that all export requirements are satisfied.



Box Label Information contains product weight and specification along with food safety and traceability information.



Temperature Monitoring is conducted throughout the beef production process as required by the establishment's food safety system.



Canadian Beef Processing System Overview



LEGEND



Animal Health Pillar



Food Safety Pillar



Grading Standards Pillar



Beef Quality Pillar



Canadian Beef Grading Agency



Canadian Food Inspection Agency



RFID Ear Tags



HACCP Food Safety System

The information provided here relates to federally-inspected establishments.



Canadian Beef Processing System Standards

HAACP based food safety systems and national grading standards support the quality and safety of Canadian beef.



Scan the QR code to view the Canadian Beef Processing System Virtual Tour.



Grading Standards



Canadian beef is graded by certified Canadian Beef Grading Agency personnel. Each quality attribute requirement must be satisfied to qualify for the Canada AA, Canada AAA and Canada Prime grades and any deficiency cannot be offset by other traits.

The Canadian Beef Grading System

A carcass may be graded only after it has been inspected and received the meat inspection stamp, indicating that the beef satisfies all food safety requirements. Quality and yield grades are assigned to carcasses by a Canadian Beef Grading Agency (CBGA) certified grader. Each grader must successfully complete a comprehensive training program. Once certified, graders are regularly audited by CBGA officials and through the National Grade Monitoring Program administered by the Canadian Food Inspection Agency (CFIA). These ongoing audits ensure that grading is performed in a manner which is consistent and accurately reflects Canada's national standards.

The objective of grading is to place carcasses into uniform groups of similar quality, yield and value. This grouping facilitates marketing and production decisions and provides consumers with a consistent product with a predictable eating experience. Each quality attribute requirement must be satisfied to qualify for the Canada AA, Canada AAA and Canada Prime grades and any deficiency cannot be offset by other traits. Canada's high-quality beef grades are differentiated by the degree of marbling with Canada Prime having more than any other grade.

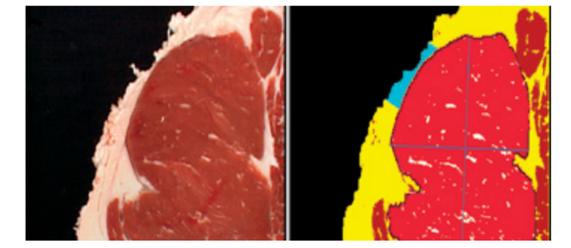
Canadian Yield and Quality Grades

Canada's highest quality grades for beef from youthful carcasses are Canada AA, Canada AAA and Canada Prime. To assign these grades, a detailed assessment is made by a certified grader following chilling of the carcass. Attributes evaluated include maturity, sex, meat colour, fat colour, carcass muscling, fat coverage and texture, meat texture and marbling level.

The yield grade is a measure related to the predicted amount of boneless, closely trimmed retail cuts (BCTRC) produced from the hip, loin, rib and chuck primals. Carcasses with the highest predicted amount of BCTRC will be assigned the Canada 1 yield grade. Yield grade is determined by measuring the fat depth and ribeye size at the grading site between the 12th and 13th rib.

Computer Vision Augmented Grading

Computer vision grading technology enables multiple measurements of yield and quality grade parameters to be made more quickly than would be possible using manual approaches. Further, the digital format of the data enables the information to be stored, shared and further analysed for use in production decision making.



In Canada, our strict national standards for beef grading are designed to support an objective, science-based assessment to ensure consistent quality for suppliers and the end consumer.”

Dr. Oscar Lopez-Campos
Research Scientist (Carcass Grading), Agriculture and Agri-Food Canada



Canadian Beef Marbling Standards

The assessment of marbling is made by certified graders after the carcass is chilled for 24 to 48 hours. The amount and distribution of fat deposits is evaluated using the cut surface of the rib eye between the 12th and 13th rib. Marbling contributes significantly to eating quality by enhancing flavour and juiciness and perceived tenderness.

GRADE	MARBLING	USA
	CLASS ¹	
CANADA PRIME	Very Abundant	USDA Prime
	Abundant	
	Moderately Abundant	
CANADA AAA	Slightly Abundant	USDA Choice
	Moderate	
	Modest	
CANADA AA	Small	USDA Select
	Slight	

¹ The Canadian marbling standards were changed in 1996 to mirror the copyrighted marbling standards of the United States. The minimum marbling standards used for USDA Prime (slightly abundant), Choice (small) and Select (slight) are the same minimum standards used in Canada to segregate the youthful quality carcasses into Canada Prime, AAA and AA respectively.



Quality Grade Standards for Youthful Cattle*

Grade	Marbling**	Maturity***	Meat Colour	Fat Colour	Muscling	Meat Texture**
CANADA[†]						
CANADA PRIME	Slightly Abundant	Youthful	Bright red only	No yellow fat permitted	Good muscling or better	Firm only
CANADA AAA	Small	Youthful	Bright red only	No yellow fat permitted	Good muscling or better	Firm only
CANADA AA	Slight	Youthful	Bright red only	No yellow fat permitted	Good muscling or better	Firm only

* The Canadian marbling standards were changed in 1996 to mirror the copyrighted marbling standards of the United States. The minimum marbling standards used for USDA Prime (slightly abundant) Choice (small) and Select (slight) are the same minimum standards used in Canada to segregate the youthful quality carcasses into Canada Prime, AAA and AA respectively.

** Minimum marbling and meat texture permitted for quality grade class.

*** Maturity categories reflect domestic requirements.

Canadian Beef Grading Attributes



Fat and Meat Colour

Consumers consider meat and fat colour as important indicators of beef quality and freshness. To qualify as Canada AA, Canada AAA or Canada Prime the carcass must have bright red meat colour and the fat cannot have a yellow tinge.



Beef Texture

Beef texture must be firm to meet the requirements for high-quality Canadian beef. Texture influences how the beef feels in the mouth during chewing, and is an important contributor to eating quality and consumer satisfaction.



Marbling Level

To assess marbling, the exposed cross-section of the ribeye muscle is evaluated for the amount, size and distribution of intramuscular fat deposits. Official photographic standards are utilized to ensure consistent and accurate assessment of marbling levels.



Carcass Muscling

A well-muscled side will provide high yields and permit more efficient fabrication into cuts. Canada's high-quality beef grades do not permit carcasses with deficient muscling.



Carcass Maturity

The Canada AA, Canada AAA or Canada Prime quality grades require that the maturity must be assessed as youthful on the basis of skeletal development observed in the split carcass. A younger age at harvest enhances tenderness and overall eating quality.



Fat Texture and Cover

To qualify for the Canada AA, Canada AAA and Canada Prime grades the fat cover must be assessed as firm and consistent. Optimal fat cover enables the carcass to cool in a way which maximizes eating quality.



Grade Stamp

When all required examinations have been completed the grade is applied using edible ink. The official grade stamp is applied to the short loin and rib of both sides of the carcass. Grading stamps are maintained at all times under the supervision of the Canadian Beef Grading Agency.



Beef Quality



Cattle Breed
Improvement Program



Grain Feeding



Careful management of the cattle feeding process is essential to produce premium quality grain-fed Canadian beef.”

Will Lowe
Chair, National Cattle Feeders' Association

Grain-Fed for Outstanding Eating Quality

An Abundant Supply of Grain

Canada is one of the largest grain producers in the world. In the western provinces, farmers often grow crops of barley and wheat. In Eastern Canada, the climate supports the growth of significant amounts of corn. Given the abundance of feed grains, Canada can supply beef produced from cattle that are fed diets containing barley, wheat and corn.

Outstanding Eating Quality

Canada's feeding practices enable more than 85% of cattle raised for beef production to be harvested at 2 years of age or less. A younger age at harvest enhances tenderness and overall eating quality. Feeding corn, barley and wheat grain contributes to well-marbled, flavourful and tender Canadian beef with firm, white-coloured fat.

Canada's National Livestock Feed Program

The CFIA administers a national livestock feed program to verify that livestock feeds are manufactured and sold in accordance with the federal Feeds Act. The program includes evaluation by feed specialist personnel of products before sale, as well as post-market inspection and monitoring by CFIA field staff located throughout Canada.

Internationally Recognized Livestock Genetics

The ultimate goal of Canada's breed improvement programs is to enhance beef quality for consumers while also targeting more efficient cattle production.



Breed Selection and Genetic Improvement Programs

Breed Associations incorporated under The Animal Pedigree Act of Canada, are responsible for ensuring accurate pedigrees and developing breed improvement programs. These associations support the ongoing efforts to enhance quality attributes through breed selection and genetic improvement programs. Canadian breeding stock producers utilize tools such as real-time ultrasound to examine the rib eye area, backfat and marbling levels in the live animal, to help determine its genetic potential. In this way characteristics of the live animal are related to yield and quality attributes of the carcass. Statistical analysis is also used to calculate carcass Expected Progeny Differences (EPDs) which provide cattle producers with an effective tool to select breeding stock.

Breeding Stock Production

There are approximately 10,000 cattle producers who produce breeding stock in Canada. Through their focus on genetic improvement with each successive generation, Canada has become an internationally recognized supplier of breeding stock. Canada's cooler weather allows the extensive utilization of Bos taurus type genetics, which include breeds such as Angus, Charolais, Hereford, Simmental and Limousin. Bos taurus are known to produce high-quality, tender beef on a consistent basis. Canada raises more than 30 Bos taurus breeds and cross breeding is used to combine the best characteristics of several breeds into one animal. Over time Canadian producers have produced cattle that deliver more beef in the carcass which delivers additional value with fewer resources.



Ultrasound measurements are used to determine the rib eye area in the live animal and are taken at the same site used for grading of carcasses.



Environmental Sustainability

Canada's National Beef Sustainability Assessment found that production of one kilogram of Canadian beef (boneless and consumed) created 15% less greenhouse gases in 2021 than in 2014.¹



Canadian Beef Environmental Practises



Environmental Standards



National Sustainability Assessment



Guardians of the Grasslands

Beef production protects Canada's grasslands and wetlands from being cultivated and drained, helping to make sure these ecosystems remain intact along with all of their environmental benefits. Land preserved through ranching supports more than 60 species at risk that depend on Canada's grasslands. Wetlands behave as the natural filter of a grassland's ecosystem. Riparian areas, which connect land and water, help to clean water, create flood and drought resiliency, and provide habitat including nesting and spawning grounds for fish and other wildlife. Almost 25% of the world's wetlands are in Canada.²

Measuring our Progress

Formed in 2014, the Canadian Roundtable for Sustainable Beef (CRSB) has created a collaborative community to make continual progress in the sustainability of the Canadian beef value chain. CRSB membership is diverse and spans the entire Canadian beef supply chain and beyond. The CRSB's National Beef Sustainability Assessment (NBSA) measures the Canadian beef value chain's environmental, social and economic sustainability performance and progress against an initial baseline of indicators and metrics approximately every seven years. The first NBSA was published in 2016 utilizing data from 2014, which provided a baseline for evaluating progress and improvements over time. A second study utilizing data from 2021, found that in the interval of 2014 to 2021, the Canadian beef industry improved its carbon footprint, fossil fuel depletion, freshwater eutrophication and photochemical oxidant formation by increasing production efficiency.¹ Producing 1 kg of beef, (boneless and consumed) in 2021 created 15% less greenhouse gases than it did in 2014. This improvement is largely due to increased efficiency of cattle growth, reducing the time needed to produce an individual animal, thereby reducing the number of resources to produce the same amount of beef.¹

¹ Canadian Journal of Animal Science. 104(2): 221-240. <https://doi.org/10.1139/cjas-2023-0077>.
² Extent of Canada's Wetlands by the Government of Canada. www.canada.ca/en/environment-climate-change/services/environmental-indicators/extent-wetlands.html

Farm and Ranch Environmental Practices

Canadian farmers and ranchers manage their natural resources to ensure their farms remain environmentally sustainable, economically viable, and to enhance the health and productivity of their land. Beef cattle now fill the vital role of grazer on the landscape, promoting a healthy, biodiverse ecosystem and preserving critical habitat for many wildlife species. Well managed grazing increases the soil organic matter, encouraging root growth and increasing the amount of carbon stored in the soil.



Cow/Calf

Most beef calves are born in the spring when their mothers will have access to spring grass. Calves spend the majority of their lives on open pasture.



Feeding Operation

When cattle enter a feeding operation, they are provided a diet that includes grain. Cattle are typically placed into pens that permit close observation and less waste when feeding.



GRAZING MANAGEMENT

Effective grazing management allows farmers and ranchers to obtain the highest forage yields for cattle while supporting the pasture ecosystem.



WETLANDS MANAGEMENT

Raising cattle helps preserve wetland ecosystems. Almost 25% of the world's wetlands are in Canada.²



SOIL HEALTH

Manure and cattle grazing activity adds more soil organic matter with improved water-holding capacity.



WILDLIFE HABITAT CONSERVATION

Grassland landscapes are preserved through cattle production and are home to some of Canada's most endangered species.



TARGETED GRAZING FOR WILDFIRE PREVENTION

Grazing reduces dry flammable material and promotes the growth of new, green grasses, which burn more slowly.



FEEDING EFFICIENCY

Management practises as well as genetics enable Canadian cattle to use less feed to produce beef.



BYPRODUCT UPCYCLING

Cattle's digestive system is able to utilize byproduct such as distillers' grains or grocery waste to produce high-quality and nutritious food.



MANURE MANAGEMENT

Manure from cattle contains valuable nutrients and serves as organic fertilizer for plants and crops.



PEN DESIGN

Areas holding livestock must be carefully designed to protect the natural environment as well as animal welfare.



Scan the QR code to watch the Guardians of the Grasslands documentary film

Boxed Beef Production Environmental Practices



Beef Processing Plant

Like farmers and ranchers, Canada's beef processors continue to work to enhance practices that influence environmental sustainability. This includes reducing inputs such as water and energy, while maximizing the utilization of each animal, including both edible and inedible components. Water used in beef production processes and for cleaning equipment and work surfaces, is often recycled using specialized treatment facilities. The reduction of waste during processing is a critical element in Canada's goals to ensure we efficiently utilize as much of the animal as possible.



WATER MANAGEMENT

The most sophisticated treatment systems used in Canadian beef processing can return water that exceeds Canadian drinking standards.



PAUNCH MANURE

The partially digested contents of the stomach, called "paunch manure", can be spread on crop land and used as a valuable natural fertilizer.



BIODIGESTER USE

The biodigester uses bacteria to digest organic waste, producing biogas that is used to create electricity or heat used in the processing plant.



CARCASS UTILIZATION

An estimated 99% of the beef animal can now be used for human food, clothing, pet food, medicine production and much more.



FLUIDIZED BED BOILER

This technology converts manure or inedible materials from the carcass into steam, heat and electricity to be used inside the plant.



SHELF-LIFE EXTENSION

Improvements in processing practices, as well as packaging technology, have also extended the shelf-life of beef which reduces the amount lost to spoilage.



RENDERING

Rendering recycles byproducts such as bone, blood and fat to make them into new products, including pet foods, soap, candles and biodiesel.



As a cattle rancher, I know that we produce our beef in a responsible, sustainable way in Canada. I am immensely proud of the continued progress made by industry in this regard."

Ryan Beierbach *Chair, Canadian Roundtable for Sustainable Beef*

Learn more about the
CANADIAN BEEF ADVANTAGE



Canadian Beef Advantage (CBA)



Overview



CBA Videos



Why Canadian Beef



Canada Beef Websites



Industry Website
cdnbeefperforms.ca



Canadian Beef Centre
of Excellence



Consumer Website
canadabeef.ca



Canadian Beef Information Gateway

Wholesale Gateway
for Meat Professionals



Enter the Retail
Wholesale Gateway



Enter the Foodservice
Wholesale Gateway

Canadian Beef Experience Virtual Tours



Cow Calf Operation



Environmental Practises



Feeding Operation



Beef Grading System



Beef Processing



Beef Carcass

We are here to help



Scan the QR code to obtain our contact information.