



*pro***Action**[®]

Documenting
progress

2017-2018

Our commitment to continuous on-farm improvement

VISION:

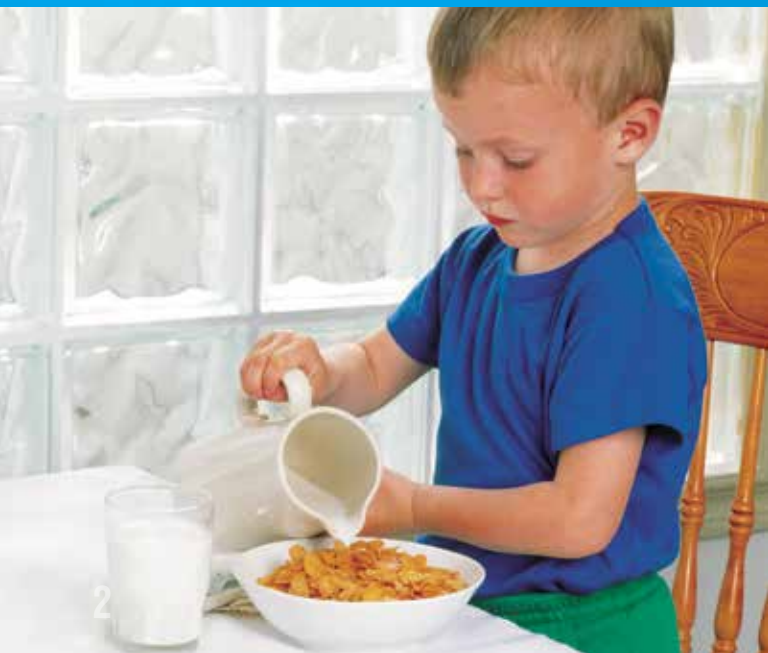
*Through proAction,
Canadian dairy farmers
collectively demonstrate
responsible stewardship of their
animals and the environment,
sustainably producing high
quality, safe and nutritious
food for consumers.*

The Canadian dairy industry is a world leader in producing quality milk. This level of excellence requires the entire supply chain, starting with the farmer, to be proactively committed to high standards and attention to detail. Farmers recognize that Canadians increasingly care about where their food comes from and how it is produced.

Dairy farmers understand their role and responsibility in delivering safe, sustainably produced milk and meat. They take pride in respecting existing regulations, and further building on their culture of excellence through the proAction program. Farm leaders took the initiative of developing proAction to verify every Canadian dairy farm and to document that farmers do the right thing. Through credible metrics and independent validation, proAction shows Canadians how farmers continue to lead the way to meet clearly-defined, world-leading standards to produce safe, high quality milk.

Farm practices and verification

The on-farm quality assurance program for Canadian dairy farmers integrates six modules – milk quality, food safety, animal care, livestock traceability, biosecurity and environment – that together form a standard of practice and care that every Canadian dairy farm is required to meet. This standard includes procedures, record-keeping and other good management practices that result in continuous improvement on farms. Farmers document how they adhere to proAction requirements on a daily and ongoing basis, and this adherence is verified annually. Moreover, trained and independent professionals audit each farm in person at least once every two years.



What proAction does:

1. *Demonstrates that Canadian dairy farmers meet clearly-defined, world-leading standards.*
2. *Provides transparent proof to customers that farmers produce milk and meat responsibly.*
3. *Provides a measurable, third-party recognized system where dairy farmers can demonstrate their commitment to continuous improvement.*

The national implementation of proAction is happening in a phased manner. As each module is implemented, farmers are trained on the program's requirements to ensure they understand the standards they need to demonstrate within proAction. The standards go beyond important quality and safety regulations, which are the basic pre-requisites. As such, the first principle is that farmers are law-abiding citizens who respect existing regulations. Today, doing the right thing

also means that every Canadian dairy farmer must meet proAction requirements for quality, food safety, animal care and livestock traceability. The requirements which form the biosecurity and environment modules will be included in on-farm validations in the fall of 2019 and 2021 respectively. Requirements are subject to periodic updates or refinement, with input from technical committees composed of subject matter experts such as veterinarians, researchers, dairy professionals and farmers.

Third-party recognition for proAction

Maintaining a rigorous and credible program is important to Dairy Farmers of Canada. As part of our commitment, our organization voluntarily undergoes an internal audit by a third-party, NSF International, of the proAction registration system three times in a five-year period. This audit provides insight into opportunities for improvements. Provincial dairy organizations, who are the delivery agents of the program, also undergo regular internal audits of their role in the registration process.

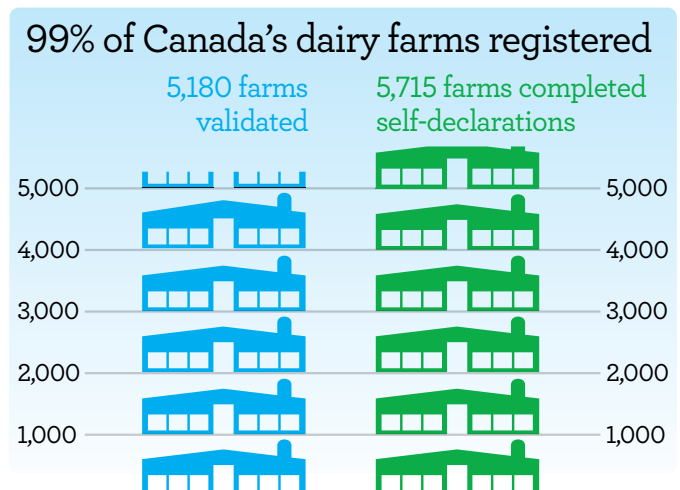
These audits validate that the administration, implementation and delivery of the initiative are effective and operating consistently across the country. In 2014-2015, DFC underwent a rigorous third-party audit by NSF International. Due to our diligent process, the Canadian Food Inspection Agency (CFIA) officially provided Recognition Status in 2015 for the implementation of the Food Safety module.

The Animal Care component of the program also achieved recognition from the National Farm Animal Care Council (NFACC) in 2014, which was renewed in June 2017.

DFC's goal is to maintain recognition by third parties such as CFIA and the National Farm Animal Care Council to ensure proAction continues to be relevant and meaningful for today's food industry and farmers.

REGISTRATION STATUS

SEPTEMBER 2017 TO AUGUST 2018



What is the role of the validator?

A validator is a trained on-farm auditor who evaluates the degree to which a Canadian dairy farm meets proAction standards. A validator observes the dairy barn and animals, checks a farm's standard operating procedures (SOPs) and records, interviews farmers and farm staff to verify that practices are consistent with their stated procedures, verifies that best management practices are in place, and scores the farm according to the proAction requirements.

Validators document their visit and results, including any corrective actions that may be needed. This process determines if a farm maintains its good standing or needs to take further action to achieve this standing. If outlined criteria are not met, and corrective actions are not taken in a specified timeframe, a mechanism for non-conformance is initiated and a farm can face penalties.

VALIDATORS AS OF SEPT. 1st, 2018: 62

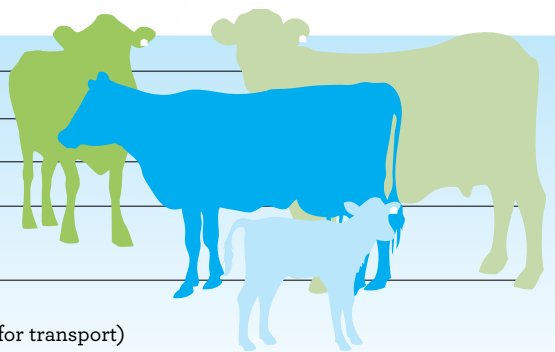
Animal Care Results in the Spotlight

Farmers have long been diligent caretakers of their cattle, and they know that healthy, well-cared for animals enjoy a longer life and produce more high quality milk. The Animal Care module fosters excellent farm practices and builds on an existing culture of continuous improvement. The Code of Practice for the Care and Handling of Dairy Cattle (2009) is the backbone of the current standards, and the Animal Care module serves as an evaluation tool to verify that farms meet or exceed the Code's requirements.

The Codes of Practice are the national reference of animal care in Canada and are developed by many stakeholders from across the supply chain, industry and society, under the umbrella of the National Farm Animal Care Council. Together, these groups are dedicated to promoting excellence in animal care.

ANIMAL CARE REQUIREMENTS

- **Comfortable housing**
- **Adequate access to feed and water**
- **Staff training and communication**
- **Animal health management**
(prompt medical care, pain management)
- **Handling and shipping animals**
(calm and quiet handling, assessment of fitness for transport)





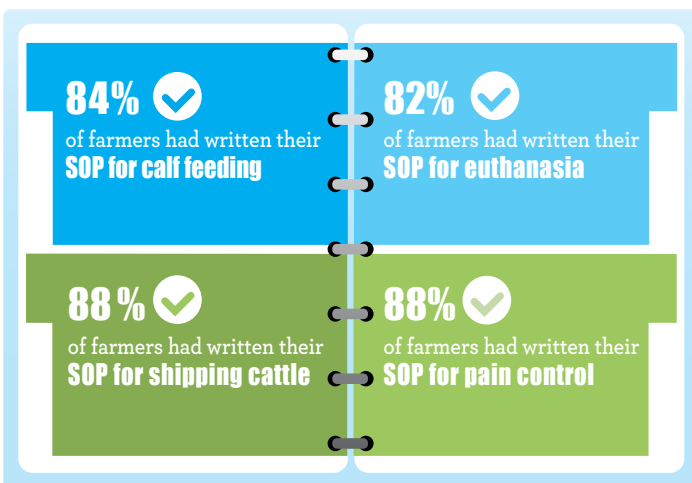
A standard operating procedure (SOP) is the farm's written process for specific tasks or procedures on the farm, to be applied on the farm by farmers, family members and employees. SOPs must meet industry standards.

First we measure

It is no secret that dairy farmers love their cows and make investments to increase cow comfort and care. The results from the first year of on-farm validations show a high level of compliance with animal care requirements. An opportunity for improvement is increasing the percentage of farms that have documented standard operating procedures.

STANDARD OPERATING PROCEDURES

At the time of their first validation of animal care requirements (Sept 2017-Sept 2018):



At the time of the first Animal Care validation, between 12% and 18% of farmers still needed to write formal SOPs for some of the practices on their farms.

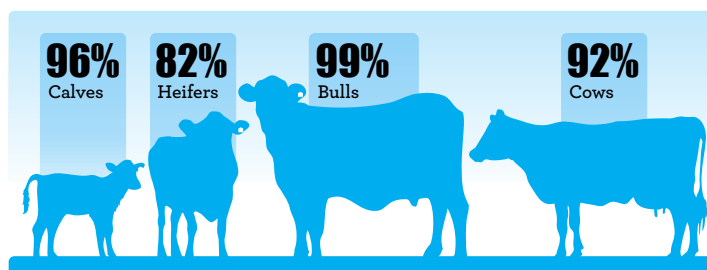
The end of tail docking

Tail docking, or removal of a portion of a cow's tail, is prohibited in the Code and proAction. The very few farms where validators found tail docking to have continued were given 30 days to show compliance. A follow-up occurred with these farms to verify the practice had indeed ended.

Cleanliness and housing

Cattle cleanliness is an important component of animal health and comfort, and contributes greatly to milk safety and quality. The Code of Practice requires that cattle of all ages be comfortably housed, with enough space to rest and enough bedding to keep them clean and dry. This requirement is met for most animals. However, validations have shown that some farms need to improve the amount of bedding provided to heifers.

FARMS MEETING STANDARDS ON ACCESS TO CLEAN AND DRY BEDDING



Cattle Assessments: Observing Cows

Prior to completing validations for the animal care module, each farm must undergo an independent assessment of key indicators of animal care and comfort. An external assessor evaluates a statistically significant sample of each farm's lactating herd for body condition, hock, knee and neck condition, as well as locomotion. The assessor then provides the farm with a report detailing the results for each cow included in the sample, as well as a herd summary.

Dairy Farmers of Canada contracted Holstein Canada to conduct cattle assessments on all dairy farms across Canada between October 2016 and October 2018. This first round of assessments was undertaken to establish a baseline for each of the indicators, which is essential to understanding the current level of performance across the country. Knowing what this baseline is, we will be able to track the evolution of performance over time. Moreover, we can also identify where further research or training is needed to encourage improvement.

For each of the five indicators, best available science and expert opinion have been used to set “excellence” targets toward which all farms should aim. As an example, to meet the excellence target for hocks, knees and necks, at least 90 percent of the animals in the sample must have a score that falls within the indicator's designated conformity range.

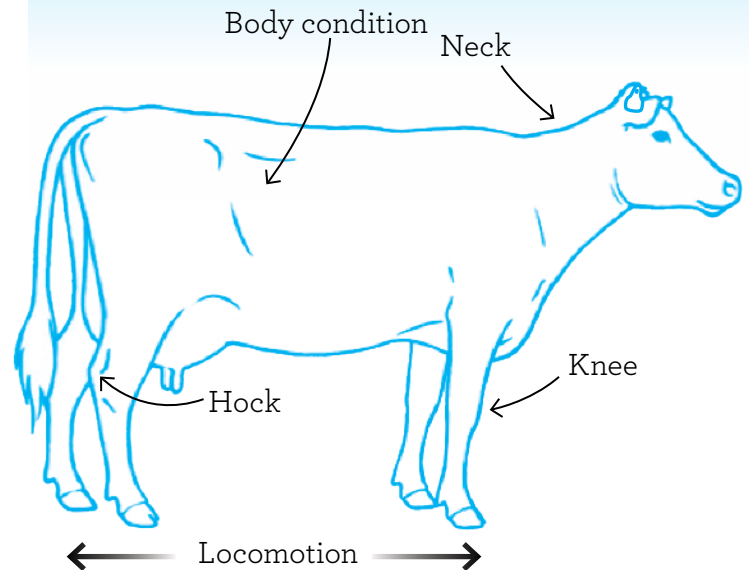
Each of the indicators included within the cattle assessments has its specific scoring system. For example, hock health scoring uses a scale of 1 (no swelling) to 4 (major swelling with possible lesions). In this scale, a cow that scores a 1 or 2 falls within the conformity range, but corrective actions are needed for a cow scoring a 3 or 4. Similarly, cows that receive a body condition score of greater than 2, on a scale of 1 to 5, fall within the conformity range.

Who conducts the independent assessments on Canadian dairy farms?

At the national level, Dairy Farmers of Canada selected Holstein Canada to conduct on-farm cattle assessments. Holstein Canada's team of professionals are highly trained in animal observation and undergo rigorous and regular training. The two national organizations work together to deliver a consistent program coast to coast. Other parties can provide assessment services in some provinces but they must undergo the same training.

Assessors as of Sept. 1st, 2018: 37
All are periodically tested to ensure consistency

INDICATORS INCLUDED IN THE CATTLE ASSESSMENTS



The scoring procedure for each indicator is described in the proAction Reference Manual and the quick guides available on the proAction website.

How did farms fare?

The results of the first round of cattle assessments illustrate that Canadian dairy farmers care for their cattle. On average, 98% of sampled cows in a herd scored within the conformity range for body condition. Similarly, an average of 90 percent scored within the conformity range for locomotion, 85 percent for hocks, 94 percent for knees and 97 percent for necks.

Encouraging improvement

proAction aims to encourage improvement. With their individual farm results, farmers are provided with an indication of how their herd scored in relation to the excellence target for each indicator, and how their herd compared to other herds across the country.

These details help farms determine any improvements that should be prioritized.

Corrective action plan

A farm that has received a low score in any indicator of this assessment is required to implement a written corrective action plan in order to drive improvement. Farmers are encouraged to seek the guidance of veterinarians, nutritionists, or other dairy specialists in their efforts to improve their results and meet the excellence targets in an agreed-upon timeframe.

Research corner

In 2015, a survey of dairy farmers and stakeholders identified animal welfare and locomotion as the most important herd health priorities to manage. DFC has been investing in production research for a number of decades now, with animal care topics a specific priority. DFC helped establish two research chairs related to dairy animal welfare, one at the University of British Columbia (Dairy Cattle Welfare) in 1997, and one at McGill University (Sustainable Life of Dairy Cattle) in 2016.

Between 2013 and 2018, and within the Dairy Research Cluster II partnership between Agriculture and Agri-Food Canada and industry, DFC financed 10 research projects to develop best practices for animal health and care, cow comfort in different milking environments, calf management practices, as well as to develop a genetic index for improved disease resistance.

This work built on outcomes of investments made previously under the Dairy Research Cluster I (2010-2013), such as:

- an animal care assessment tool for advisors,
- an online cow comfort self-assessment tool for farmers,

- economic impacts of applying best practices, standard operating procedures for managing, feeding and housing calves,
- validated approaches to identify lameness and injuries and
- genomic evaluations for dairy cattle hoof health.

Researchers are currently testing new and existing housing options for their impact on cow welfare, working on a herd welfare index based on indicators routinely collected through Dairy Herd Improvement (DHI) data as well as new technologies for objective and automated welfare measures (3D).

In addition, DFC and other dairy organizations actively distribute information to farmers and their advisors to accelerate the adoption of innovative practices to help farmers meet requirements. For instance, over 19,000 copies of fact sheets on the key indicators of cattle assessments were distributed to farmers and their advisors across Canada, raising awareness and identifying practical solutions for cow welfare improvements. For more information on research, visit www.dairyresearch.ca.

Living up to our commitment to continuous learning

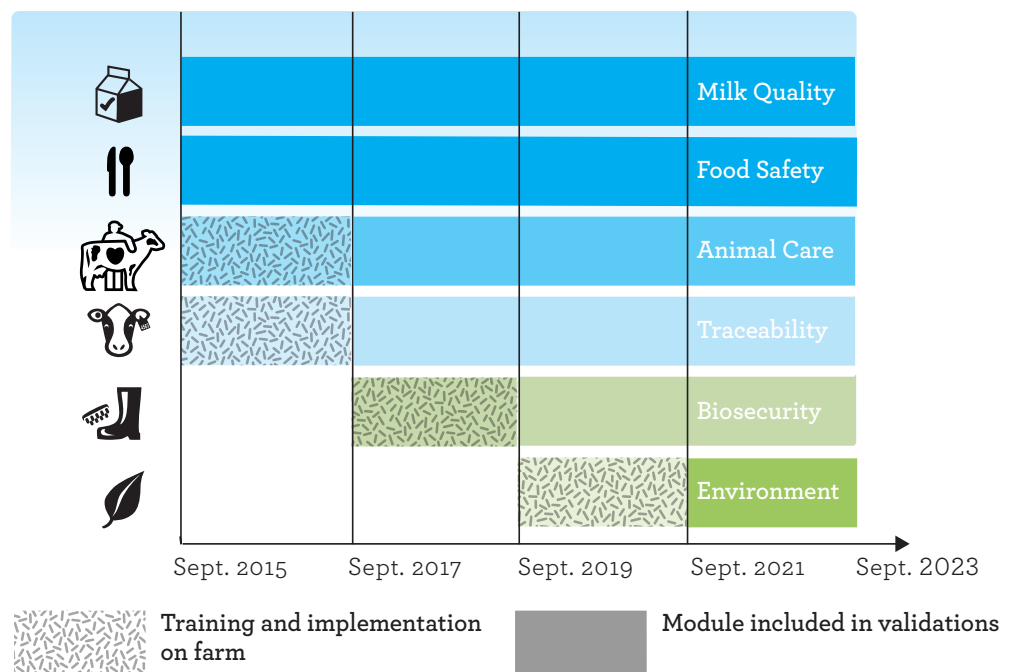
The proAction modules are detailed, specific, carefully tested and continually refined to ensure the value chain and consumers can have confidence in the program's ability to monitor, measure and drive continuous improvement. Following development by a group of technical experts and farmers, each module is implemented through a transparent, staged approach to allow farmers time to understand the scope of requirements. Farms are verified, given results that compare them to their peers, and if needed, they must take corrective action within an acceptable timeframe. This fosters continuous learning and improvement.

Building on the successful development and implementation of the Food Safety program, the expansion of proAction to other modules began in 2013, with the establishment of a 10-year schedule for the gradual implementation of additional modules. The schedule allowed for technical development, on-farm testing, and training

phases for each module prior to including them as mandatory requirements. Today, dairy organizations remain on track in implementing the program according to the schedule.

The next milestone in the program implementation is the upcoming inclusion of the biosecurity module in on-farm validations as of September 2019. To maintain and improve herd health, farmers will be required to conduct a risk assessment with their herd veterinarians, implement measures to minimize the risk of a disease being brought onto their farm, and to manage problems when they do arise. Various activities are already in place to build farmers' understanding of the requirements so they can effectively implement them on their farms. Training is also being provided to bovine veterinarians across the country to help them assist farmers.

MODULE IMPLEMENTATION SCHEDULE



Going forward

This first proAction progress report highlights the work on Animal Care. In the coming years, DFC will measure the efforts of, and report on, the continuous work of Canadian dairy farmers in employing the most efficient and sustainable practices, and producing the highest quality milk with healthy, well-cared for cows. Through continued research and participation in programs like proAction, Canada's dairy farmers will continue to stay on the leading edge of sustainable milk production into the future. This commitment is part of our pledge to always raise the bar and deliver the best.

For more information on proAction and our progress in delivering the initiative, please visit dairyfarmers.ca/proAction.





1.

Milk Quality

Farmers adhere to strict regulated milk quality criteria, and milk is tested for antibiotics to ensure there is no residue.



2.

Food Safety

Farmers prevent, monitor and reduce food safety risks on farms, based on the principles of Hazard Analysis and Critical Control Points and Canadian Food Inspection Agency recognized requirements.



3.

Animal Care

Farmers care for cattle by following the requirements in the Code of Practice for the Care and Handling of DairyCattle. Verification of these practices includes an assessment of animal-based measures.



4.

Livestock Traceability

All farms have unique premises identification numbers, cattle are tagged and their movements are traceable. This ensures the industry is prepared to respond to emergencies should they occur.



5.

Biosecurity

To improve herd health, farmers manage risks and focus on keeping disease away, preventing the introduction of disease into, and its spread within, a herd.



6.

Environment

Dairy farmers will demonstrate that they employ environmentally-beneficial practices on their farms to protect land, water and air quality for their families, surrounding communities and future generations.



Acknowledgments

DFC would like to thank the many farmers, experts, researchers and other industry partners who have contributed to the development and implementation of the proAction program, through research, services, and expert working groups.

DFC would also like to acknowledge funding through the Assurance Program, under the Canadian Agricultural Partnership to the development of this program.

