

info Holstein

May/June 2020 issue no. 163

*A Holstein Canada publication providing
informative, challenging and topical news.*



TO OUR MEMBERS, CLIENTS,
& INDUSTRY PARTNERS:

Thank you!

The Holstein Canada team appreciates your continued positivity in the last few months. As the world around us changed, we cancelled major events to be socially responsible and transitioned our team into a new work reality.

WHILE WE'RE STILL ADJUSTING AND WORKING TO BRING OUR FULL LINE OF SERVICES BACK TO NORMAL, YOU CAN DO THE FOLLOWING:



Keep checking the Holstein Canada website, Facebook, and Twitter for updates



Contact Customer Service with any questions via email at CustomerService@holstein.ca, call 1-855-756-8300, ext. 410 or text us at 226-401-8305.



Continue registering and genotyping your animals



Keep producing great milk!

HOLSTEIN CANADA IS OPEN FOR BUSINESS! THANK YOU FOR STAYING THE COURSE AND PROVIDING OUR NATION WITH NUTRITIOUS DAIRY PRODUCTS.

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10 Scott Ave., Paris, ON 519.442.1242

Printed in Canada by BECK'S PRINTING
445 Hardy Rd Unit 5, Brantford, ON



ABOVE: On page 5, we talk to Young Leader Kyle Bouma and how his operation retrofitted old buildings with new tech; on page 7, we keep the theme going in our Farm Profiles; and on page 18, Cathy Lemire shows you how to learn who has access to your Holstein Canada account in Dear Customer Service!

ON THE COVER: Photo taken on the High Tide Tour at Convention 2015 in New Brunswick!

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Representatives from all the branches coming together for the 2020 National Joint Branch Meeting, taken at Darcroft Farms, Embro, Ontario

DEAR FELLOW PRODUCERS,

Just like that, our world changed completely - or did it?

GERALD SCHIPPER, President, Holstein Canada

As I write these words in late March, we are experiencing a completely different, almost unreal situation due to COVID-19. The worst part is the uncertainty; what would come next? How would our families be affected? Our friends? Our farms? It all seemed to happen so fast. Were we ill-prepared? What more could we have done, individually, collectively, and as an Association which serves its members?

When we are on the "other side" of the current situation - and I trust we will get there - we'll have answers to these questions and lessons will have been learned. Farmers know better than anyone that in challenging times, we have to act and help each other while continuing to manage our herds as if life was the same. We have been "social distancing" for generations, we just didn't

know there was a term for it!

That is why I asked the question in the title. We can all appreciate the recent issue is challenging and yes, even scary. However, if there are lessons already learned, they are the safety and importance of our products, the stability and caring of farming communities and above all, our resilience. These are positive lessons to hang on to after too much negative and unsubstantiated attention in recent times about our dairy industry.

Holstein Canada thanks you for your support, understanding, and flexibility. We had to make tough decisions to adjust to the COVID-19 situation to continue to serve your herd needs, balancing support for the needs of members and the health needs of our staff. A very special acknowledgement

goes to all involved in the 2020 Holstein Canada Convention. We appreciate how much energy our Saskatchewan hosts have devoted in preparing this grand event over recent years, and how our 2019 Master Breeder families and others have had to delay their special moment. You are not forgotten!

Uncertainty and change are two constants in today's world. The first is unsettling, but the second can be exciting. Stability can be a great balance to both. I invite you to look forward to reading all about our new CEO in next issue's editorial. Meanwhile, it is my honour to continue to be your President for a second term, backed by the Board's support. 🇨🇦

young LEADER PROGRAM




Retrofitting Old Facilities with New Systems: Young Leader Kyle Bouma of Bathurst, New Brunswick

Kyle's grandfather, Hans Bouma, moved to Canada from the Netherlands at the age of 16, with his parents and five siblings in 1954. In the Netherlands, his father was a cattle dealer who exported to South America before the war. Hans ended up in Bathurst, New Brunswick, where he started out mining and his father bought a farm where they had beef cattle. In 1969, Hans purchased the farm where they are located today, a 200-acre farm with 60 acres cleared. He started out with beef cattle, but in 1979 made the switch to dairy cows.

He started milking 32 cows in a tie-stall barn, over time growing to 80 cows. In 1990, Kyle's uncle Michael Bouma came back from college and in 1992 converted the tie-stall to a free-stall with a parallel parlor. In 2011, the year they began registering their cattle, they made the switch to robots, and today they have 115 cows milking with 1100 acres, 600 of which is tillable land.

Kyle himself grew up in Truro, Nova Scotia. Both sides of his family have dairy farms, and he always wanted to milk cows since he was a kid. Growing up, he did not spend a lot of time at GRANTSBROOK because of its distance; he mostly worked at WEEKSDALE, the prefix of his mother's family. But Kyle's uncle Michael had three daughters, none of whom were interested in farming, and he was looking for someone to take over the farm. Kyle saw the opportunity and jumped on it!

What older system did you use? How long had you been using that system? We used a double-6 parallel parlour and calf hutches. We had been using this system for 13 years before deciding to go with two Lely robots

What animal barn did you change?

The dairy barn and calf barn facilities.

What drove the change to your new system?

Animal comfort, labour savings, and quality of life.

What were some speed bumps you faced along the way?

I was not on the farm at the time of the changes; I had only ever worked in tie-stall facilities before. There was definitely a learning curve when I started here to learn to let the robots and cows do their job and interfere with them as little as possible. The T4C software was quite easy to learn with a lot of past and current information offered for each cow.

What did the process of retrofitting look like?

Michael had been looking at robots for several years; in 2011, LBJ Farm Equipment became a Lely dealer in New Brunswick, so he decided to make the change and made many visits to other robot facilities. Our barn was still in good shape, so it only made sense for us to retrofit the robots into the existing barn.

In 2014, our calf barn was modified to group housing with automated milk feeders. We chose this style to take full advantage of the flexibility that robots can give you. The health and growth of our calves has improved tremendously compared to our old system, especially at weaning. The feeder slowly decreases their milk starting at 50 days, and they stay in the same group for two weeks after they are weaned.



How has retrofitting your barn affected your daily routine? We definitely do not work fewer hours, but we are able to focus more on the herd, crop management, and overall maintenance of everything around the farm.

What type of software do you use for your herd management? Our herd management is done with the T4C program through Lely. This was a tool that I had to learn when I came to work on the farm. It is very useful, as it gives us readings on heat detection, rumination, ketosis, inversion, conductivity, and activity. It helps us identify health problems quicker, and we have been able to save more cows. It has been a great tool for us when it comes to breeding the cows, too. The program gives you the optimal time to breed, which I think is very important. Currently, we have a pregnancy rate of 37% and 92% of our cows are pregnant before 150 days in milk. This is where I believe the program definitely pays for itself.

Did your animals have a hard time adapting to the new system? The transition from tie-stall to free-stall was easy - the cows were outside that whole summer and fall before we moved them into the free-stall. There was definitely more feet issues at first, but once we learned how to manage them with footbaths and more regular trimming, we were able to get it back up to par. It's not a big problem now and we run less than 5% lameness.

What advice would you give any producers considering retrofitting their barn over building a new? If someone were to come to me for advice about whether they should renovate or build a new facility, I would say that if your barn is still in good condition and is efficient, cow comfort-focused, and the renovation fits well in that barn, then renovating is probably the best way to go financially. However, if the barn is not efficient and cow comfort is not where it should be, then I would say they should look at the cost to fix these problems plus adding the new technology. That is where I believe that new barns have their place; it just has to fit with your farm's vision and goals.

Has the operation gone through more than one significant change in the past? When my grandfather started milking, the barn was built for 32 cows. This went on to be an 80 cow tie-stall in a barn that started out as a Houle structure. We then retrofitted into a two-row free-stall with a center feed bunk. Since then, we have expanded the barn so we could milk the 115 animals we have today.

If you could do it all over again, would you do it the same way or would you change how you did it? We are quite happy with the way everything worked out. I would have liked to have a pack area with access to the robots for our fresh cows but we weren't able to do that because we were limited on space around the robots. Since we weren't able to, we are able to make it work for our needs. 🐄🇨🇦




Calling all Junior Members!

We've got some great themes for #FrameTheHerd2020:

May: *Farming in Action*
June: *Then and Now* – show us your herd, operation, or family in the past and present!

You can also join us for a round of Gamification!
 Check out the categories here on our website:
 > www.holstein.ca > Membership-Programs > Membership types and Benefits > Junior Member.

Email us today at youngleader@holstein.ca to confirm your participation!



Old Barns, New Tech

Tri Lea Farm Inc.: Making the Change Across the Country

Tri Lea Farm Inc., located in Grunthal, Manitoba, made their change recently, but the renovations were major. The Boonstoppel family placed robots in their holding pen behind the milking parlour, turning the parlour area into a special needs and calving pen.

They also renovated the milkhouse, converted their old tie-stall for calves to group pens, and added a Lely Calm feeder. Finally, they built a new heifer and dry cow pack barn to bring all animals to one property and house them indoors.

The biggest change, though, was the new scenery. “We moved from New Brunswick to expand our operation April 2015 with the intent to convert this farm to a robotic facility,” say Richard and Carol, the owners of Tri Lea. “We had a robot in New Brunswick and enjoyed working with it. The transition back to parlour milking was like stepping back in time- we missed the flexibility of robots and the daily data and information available.”

Richard and Carol were used to making changes - they started in New Brunswick

in 1996 with a parlour, and installed a robot in 2010. The move to Manitoba gave them a chance to expand and create new opportunities for their kids, as well as present them with a new challenge. They put the new farm through a number of changes over the past five years to make it what they had envisioned.

They didn’t let the excitement of bringing in a new system to their new location overwhelm them. “We knew what the robots could do, but had to remind ourselves that it took a period of time in New Brunswick to get there,” say Richard and Carol. “In Manitoba, we had to remind ourselves not to expect too much initially and to do the due diligence.”

They continued milking in the complete parlour during the retrofitting process, routing the cows through the construction zone to get them milked. While this slowed construction down - it had to stop during milking – the system brings their operation to where they want it. “We love the flexibility of having robots,” say Richard and Carol. “The day starts at the kitchen table reviewing the barn data.”



West



TRI LEA FARM INC.
Grunthal, Manitoba

PREFIX: ALCORN

PEOPLE INVOLVED: Richard, Carol, and five kids - Rachel, Christina, Isaac, Natalie and David (when home from school!); Werner Wiebe (the former owner) comes daily

OF COWS MILKED: 85

OF ACRES FARMED: 400

FACILITY TYPE: Free-stall

HERD PRODUCTION AVERAGE (L/COW): 40 L

WHAT IS YOUR FEEDING SYSTEM? PMR

ARE THERE OTHER BREEDS IN YOUR HERD? Jersey

HOLSTEIN CANADA SERVICES USED: Registration, Classification, Genomics



Midlee Farms: Tie-stall to Free-stall for Calves

The McDiarmid family of Midlee Farms, located in Osgoode, Ontario, retrofitted their old tie-stall barn into a free-stall for young stock in 2012. The tie-stall barn originally had 70 milking cow stalls and now has 50 free stalls plus two box-stalls. They had been using the system since 1997, and were forced to change their system when they maxed out the capacity of the tie-stall facility.

“With my brother Trevor and I coming home to farm, we needed a system that would allow us to continue to grow,” says David McDiarmid. “We had been boarding out heifers for many years but building a new heifer barn wasn’t going to allow us to expand the milking herd. So we decided to build a new free-stall barn which also housed breeding age replacements.

“With our old tie-stall empty, we decided to renovate it into a free-stall barn for calves 2-6 months old. The barn was still in decent shape with the tunnel ventilation and manure-handling system still functioning, so it was an easy decision to make. We also lacked a barn to house replacements after hutches.”

tried to do most of the labour ourselves, but did hire a local contractor to pour the concrete and posts for the beds. Most of the stabling equipment we found was used and we managed to re-use our existing manure system, which was another large cost savings.”

The retrofitting presented some unique challenges. “The original load bearing posts in our tie-stall were laid out in way that restricted where we could put our scrape alley,” says David. “In order to change the location of the posts, we had to use beams to move their location. It was a fairly expensive part of the reno, but still much cheaper than building a new barn.”

After all the hard work, the new barn has made the McDiarmid’s labour routine much more efficient. “Feeding is done with a TMR, made every three days and dumped into a feed cart, with younger calves getting hay and pellet top dressed.”

Ferme Darnoc: Keeping the Momentum Going with a Robotic System

Ferme Darnoc Holstein Inc. converted their old system, a conventional tie-stall milking system for 66 cows with rail and double chute. They milked three times a day for four years, giving them more efficiency per occupied stall. When they bought quota and expanded, it soon became clear that they were going to run out of stalls to keep up the momentum.

“After consulting with the employees who occasionally replaced us on the weekends, there was no interest in milking a third row that could have been added in the old barn,” says Émilie Benoît, co-owner of Ferme Darnoc. “We had to relocate the replacement heifers that were tied there.”

In looking for a solution, the owners saw an opportunity to renovate the old barn and install a robot. “Since the dimensions were not as recommended, we took some time to visit facilities that were working very well and, above all, performing well,” says Émilie. “The project came to fruition in

“We came up with some rough plans; given that our dimensions were unchangeable, we had to work with what we had,” says David.

“We settled on two rows of head-to-head free-stalls with a scrape alley on each side and a feed alley in front. We started by hiring someone with a mini ex with a jackhammer to smash out all the existing concrete. We brought in sand and regraded the barn once the concrete was gone. We

Ontario

MIDLEE FARMS
Osgoode, Ontario

PREFIX: MIDLEE

PEOPLE INVOLVED: Jim, Connie, David and Trevor McDiarmid

OF COWS MILKED: 143

OF ACRES FARMED: 860 owned, 560 rented

FACILITY TYPE: Free-stall/parlour

HERD PRODUCTION AVERAGE (L/COW): 40

WHAT IS YOUR FEEDING SYSTEM? Bunk silos, TMR

ARE THERE OTHER BREEDS IN YOUR HERD? No

HOLSTEIN CANADA SERVICES USED: Registration, Classification



Quebec

FERME DARNOC HOLSTEIN INC.
Isle-Verte, Quebec

PREFIX: DARNOC

PEOPLE INVOLVED: Émilie Benoît and Joachim Gagnon, owners; Daniel Gagnon, Joachim's dad; Mathieu Lévesque, full-time employee; Daniel Izai Pacheco Esquivel, foreign worker

OF COWS MILKED: 95 cows in the robot barn (main barn) and 40 cows in the tie-stall barn (2nd site)

FACILITY TYPE: Two robots in a free-stall barn

HERD PRODUCTION AVERAGE (L/COW): 40 L/cow

WHAT IS YOUR FEEDING SYSTEM? Feeding conveyor for PMR & automatic feeder

ARE THERE OTHER BREEDS IN YOUR HERD? No

HOLSTEIN CANADA SERVICES USED: Classification, Registration

June 2017 with 50 stalls, where we favoured putting our fresh cows, the other cows stayed in tie-stall.

"As everything was running smoothly and quota was still available, we added the second robot in July 2018 with 61 stalls after renovating an old round barn adjacent to the barn that we used to store straw. Replacement heifers are now housed in a three-sided cold barn."

The main obstacle to the success of the new system came within a year of setting it up, when they very suddenly lost several cows to *Klebsiella mastitis*. "Monitoring teat ends is one thing, but I strongly recommend doing various testing on your robotic milking system to find the liner that best fits your herd," cautions Émilie.

"It is very important for the liner to fit well, as this is expensive equipment and it does quite a lot of work for you."

Another adjustment they needed to make was for their feeding management to maintain good milk and reproductive performances. "The quality of our feed was good, but we discovered that it was essential to have very regular feeding times to avoid breaking the cows' routines and therefore hindering the good performance we had in the past. It's easier to feed a cow that's tied up and doesn't have to move around than it is to motivate one to go to the 'buffet'."

The positives have far outweighed the

issues they faced. "We have a lot more freedom and flexibility to do our daily tasks, which is amazing with young children," says Émilie. "Plus, it was a must since the addition of the second site."

Sunnycroft Farms: From An Old Military Shed to a Robotic Free- stall Facility

Corey and Janette McDonald operate Sunnycroft Farms in Milford Station, Nova Scotia, with Corey's parents, Barb and Doug. Their main barn is a re-purposed military drill shed that was relocated to the farm in 1949. In 1964, it was renovated to a tail-to-tail tie-stall for the milking herd. They used Chore Time drop feeders to deliver top dress to complement a PMR mixed ration. Fifteen years ago, the McDonalds brought in MU480 milkers with automatic take-offs and Del Pro herd management software.

They were fortunate, as the building was much wider than other traditional tie-stalls of the time, and they could renovate it to meet their needs. Fifteen years ago, the McDonalds brought in the MU480 milkers with automatic take-offs and herd management software.

The new robot free-stall was built onto the barn by removing a lean-to built 20 years ago for dry cows. Originally a free-stall lean-to housing their dry cows and heifers, they used the existing concrete pad to add a

free-stall that shares the feed alley with the tie-stall barn. They were also able to reuse the stalls from the original free-stall. "Our design also allowed us to use our current manure handling system, with the addition of a shuttle to take the manure to our pump," say Corey and Janette. "The milk house was also able to accommodate the buffer tank without renovation, and several years ago we purchased a 1250-gallon bulk tank so we have the ability to accommodate growth if quota becomes available."

The flexibility of a robot system drove them to make the change. "We're in a time of transition at the farm; Corey still wanted to be able to work for Eastern Dairy Service, and Barb and Doug weren't quite ready to retire yet, but milking in a tie-stall can certainly take its toll on your body! We were also getting to the point where our existing stalls needed to be renovated in order to improve cow comfort, and our production. We felt that this was a decision that was in everyone's best



interest, to be comfortable and happy!"

The road was fortunate for them, and it took less than a year after making the decision to get the change going. "We did have some small issues, such as the time it took for Nova Scotia Power to upgrade our system to phase three power for the robot, waiting for steel, hurricane Dorian, and wet weather that slowed us down, but we still finished in a good amount of time.

"Once the cows are moved into the free-stall, the tie-stall will be renovated with pens for our young stock, pack for calving to improve our transitions, and stalls for our dry cows and bred heifers," say Corey and Janette. "It is our hope that it will allow us more time to manage the cows. We're implementing activity monitors for heat detection as well to improve our conception rates. [We] have a young family and both work off farm for a portion of the week, so we're hoping it will allow us all more flexibility as we won't have to adhere to a milking schedule."

A Little Advice for Other Producers

What advice would each producer give to other dairy farmers thinking of retrofitting older buildings? "Come up with a plan," says David. "Think about expansion. If the barn can't address your needs in five or 10 years, you have to really consider if it's worth it or not. Renovating is definitely cheaper, but can get more expensive than planned if you run into roadblocks during the process."

Richard and Carol's advice is simple: "Visit as many places new and retrofits as possible before starting." Corey and Janette agree. "Get out and see other barns, and get ideas. See what has worked for others, and learn from both their successes and mistakes."

"There are many positive aspects of retrofitting, and it can be quite cost effective," they continue. "You do need

to have a budget that makes sense in regards to your cash flow, and ensure that you are comfortable with what you want to spend. Where it has been more difficult to acquire quota it might not make as much sense to build a large barn that requires you to expand your herd, to comfortably cover the expenses."

"Find producers who share your breeding philosophy and others who don't to make you think about your methods," says Émilie Benoît. "Don't be afraid to redo your plans over and over; it's easier to move a low wall on the computer and pay the engineer rather than having to pay the workers to build what you envisioned. Always monitor your construction sites even if everything is contracted out. Allow yourself plenty of time to answer questions from workers and think about what to do each day."

Would they do it again? "Likely not," says David. "If we knew we would experience as much growth as we did we probably would have just tore it down and built new. But for the money we have invested in, it has served us well."

"If it would have been financially feasible to build a new dairy barn, we would have," says Richard and Carol. "Due to it being an older barn - smaller stalls, less light, slippery floors, small feedbunk - we have had to do numerous upgrades which were challenging, and we still have an older barn.

"We are unable to maximize capacity of the two robots due to the stall layout of the existing barn. Our focus in this facility is to maximize kilograms of butterfat shipped per stall."

"We would have like to have a little longer transition period for the cows from the tie-stall to the new barn and it would have been ideal to transition over the summer months, but we're happy to be moving into the new barn," say Corey and Janette. "Time will tell how successful our decisions were!" 🍁

East



SUNNYCROFT FARMS LTD.
Milford Station, Nova Scotia

PREFIX: SUNNYCROFT

PEOPLE INVOLVED: Barb and Doug McDonald, son Corey and his wife Janette, daughters Olivia, Lilian and Caroline

OF COWS MILKED: 42

OF ACRES FARMED: 250

FACILITY TYPE: Tie-stall and guided flow free-stall with sand deep-bedded stalls, Jamesway alley scrapers, DeLaval VMS classic robot with online cell counter, DeLaval smart selection gate SSG

HERD PRODUCTION AVERAGE (L/COW): 33 L

WHAT IS YOUR FEEDING SYSTEM? PMR comprised of corn and grass silage, complete feed precision fed from the robot

ARE THERE OTHER BREEDS IN YOUR HERD?
Yes, Guernsey

HOLSTEIN CANADA SERVICES USED: NLID, Registration, Classification

AGÉCO CONFIRMS: **Holstein Canada**

Services are still relevant!

By Michel Dostie, Editor-in-chief of
La Revue Holstein Québec

Canadian Holsteins have long had a reputation for excellence around the world. The development of efficient selection tools is what allowed breeders and Holstein Canada to earn such a reputation. Today, in the age of computers and robotics, are these services still profitable? The economic group AGÉCO says yes!

Holstein Canada has served its members through Registration, the keeping of a Herdbook, and Classification. Lately, however, questions have been raised about these tools, as the on-farm technology now available gives breeders a lot of information about their animals. To thoroughly investigate the issue, Holstein Canada hired AGÉCO Group, an independent group of experts, to fulfill this mandate.

The AGÉCO Group's mandate is to "analyze the benefits and return on investment for various services offered by its clients." Researchers first met with members to understand what the perceived benefits of Holstein Canada services were for producers.

Using the data already available on animal performance accumulated over the years by Holstein Canada, Canadian Dairy Network (CDN), DHI Agencies, as well as data compiled by various independent studies, AGÉCO evaluated the services to determine their true economic efficiency for producers.

Classification

According to data compiled by Holstein Canada over many years on thousands of cows, it was already known that cows with better conformation produced more milk. More specifically, it was known that every five

(5) additional points on the final Classification score generated \$193 more income per cow per year.

What the AGÉCO study revealed is that this performance has positive effects on the farm's income and profitability. Classification makes it possible to identify the conformation weaknesses of a herd, thereby letting producers create an improvement strategy. Obviously, Classification leads to choices that will affect future generations. Researchers calculated that Classification's return on investment (ROI) is between 6 and 8 years, and that the average annual ROI over 10 years is 8 to 12%. (Graph 1: Net benefits over 10 years by herd size)

By influencing the choices breeders make, Classification helps improve the functional conformation of a herd. By increasing the number of cows scoring 80 points or more (GP+) by 10%, researchers have identified a 2.3% decrease in the involuntary culling rate, which translates into a decrease in

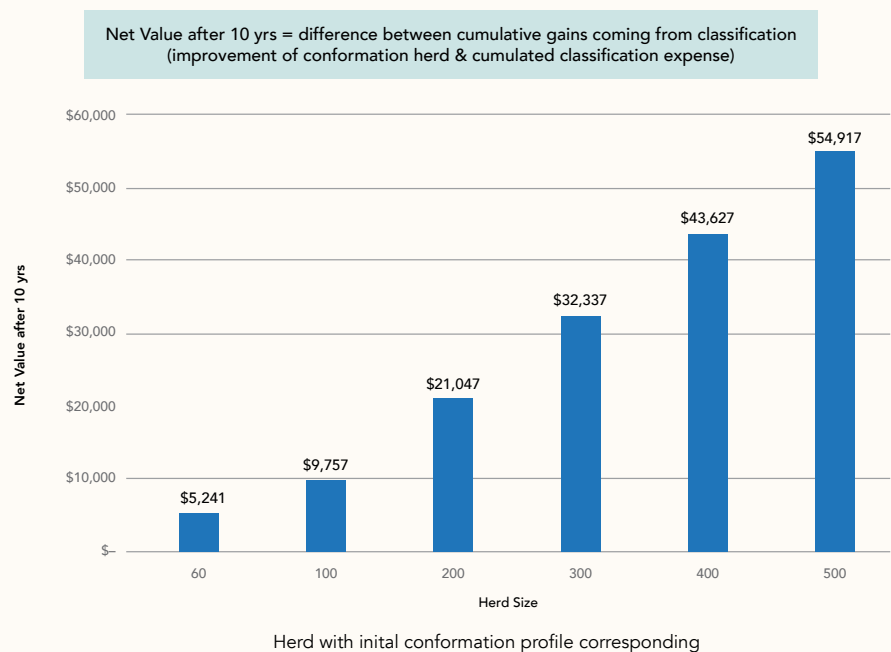
the number of replacement heifers. It was calculated that going from 40 to 50% GP+ cows translates into a decrease of 2.3% in the involuntary culling rate, giving an annual ROI on Classification costs of 4-10% over four to five years. (Graph 2: Net benefits over 7 years by herd size).

Classification should not be about increasing the number of EX cows, but about improving the herd average, according to each breeder's selection objectives.

Giving up Classification is a Bad Idea

Those who are already benefiting from Classification, but are considering no longer investing in it, should think twice. Researchers have shown that such a decision would automatically lead to a lower herd performance. Over three generations, this drop in performance may be more or less pronounced, depending on the selection of bulls. If a breeder who no longer has the information provided by Classification

Net Value After 10 Years



were to select bulls at random (Reference Scenario), the differential would be very strong. In this case, researchers calculated that over three generations, the EBV Conformation of a lineage could drop from +10 to -4. However, if a breeder were to select bulls in the Top 100 Pro\$ list (Max Scenario), the differential would be lower and would only drop from +10 to +6. In both cases and depending on the scenario, within 3 to 7 years the loss of income would exceed the savings made by giving up Classification. On the other hand, the same lineage could gain 2 to 3 EBV points over three generations should the breeder continue to use Classification to guide their bull selection (Classification Scenario). We can therefore conclude that even for an elite herd, Classification is essential to maintaining performance levels. (Graph 3: Stop Classifying : a risk for the profitability of the herd in the medium term)

Although genomics facilitates selection and improves the reliability of genetic proofs, it does not allow the actual evaluation of the performance of an animal. If the number of classified animals were to fall drastically, the quality of evaluations would be negatively affected.

Registration

Registration is Holstein Canada's basic tool that opens the door to all services offered by the Association. However, it also comes with its own usefulness and profitability. For the same amount of work, it provides more than just traceability. The time required to register an animal can vary from 2 to 4 minutes, whereas the time required for traceability would take 4 to 10 minutes.

Registration also makes it possible to track the herd's inbreeding rate. Following all analysis, the researchers estimate that the cost of registration is \$2.80/cow/year (this includes registration cost and Holstein Canada and Provincial membership fees), while underestimating the inbreeding rate by 1% would result in a loss of income of \$9.60 per cow per year.

Finally, by registering their animals, breeders can genomically test them, which, among other things, makes it possible to identify animals carrying different haplotypes. Since haplotypes have important effects, knowing which cows can transmit them is worth its weight in gold. In fact, the researchers calculated that costs related to abortions and early death of calves could range from \$260 to \$340 per carrier progeny.

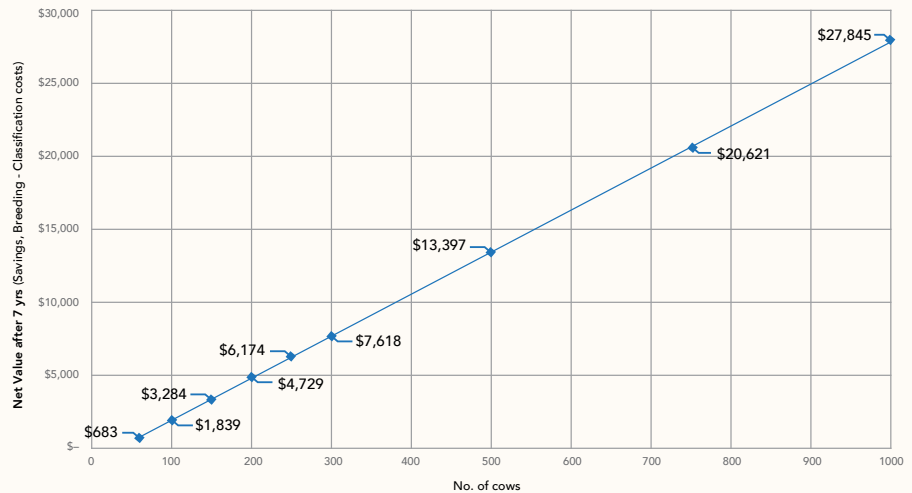
The complete study can be found on the Holstein Canada Website, www.holstein.ca.

About AGÉCO

The AGECO group is well-known in the dairy sector for strategic interventions carried out over the past two decades. As part of the Canadian Dairy Commission for over 20 years, they have been contributing to the calculation of production costs of a hectolitre of milk in dairy production. **Thank you to Michel Dostie and Holstein Québec for this article's inclusion in InfoHolstein.**

of Replacement Calves

↑ 10% GP+ ↓ 2.3% INVOLUNTARY CULLING



Costs of raising \$3,000/calf
Cull cows \$950

Registration to Avoid Inbreeding

↓ 1% INBREEDING

\$2.80
PER YEAR PER COW

\$9.10 to \$11.40
PER YEAR PER COW



*Cost: registration (\$11 + 10% regional fees)
+ membership (\$100) over 100 cows

Holstein PLUS+

NEW REPORTING OPTIONS

With the launch of Holstein PLUS+ in Fall 2020 (pushed back due to the disruption of services caused by COVID-19), Classification clients will have access to new reporting options. Created in a mobile environment and accessible through your Classifier's device, these reports will be available immediately following your visit. This unique feature will allow for in-depth discussions between you and the Classifier on the profitability, benchmarking, and strengths and weaknesses of your herd. If time is a constraint at the end of your visit, each report will also be available for further review, accessible through your Holstein Canada Web Account.

To access your Classification Reports, we will be incorporating a new, easy-to-find tab on your Web Account's homepage, making reports easier to find after each visit. Also included in this tab will be any details regarding upcoming visits including time range, classifier and progress of your visit (scheduled, in progress, complete, etc.).

When in your Web Account, click on "Classification Results"; a new screen will pop up with the details of your last visit. You will see two downloadable PDFs of our Legacy Reports that will give a quick view of your herd and trends: Herd Summary and Herd Conformation Trends.

The new online reports will be broken down into First Lactation and Overall Herd (All Lactations), available through a simple toggle menu. This will let you break down your herd into groups for easier

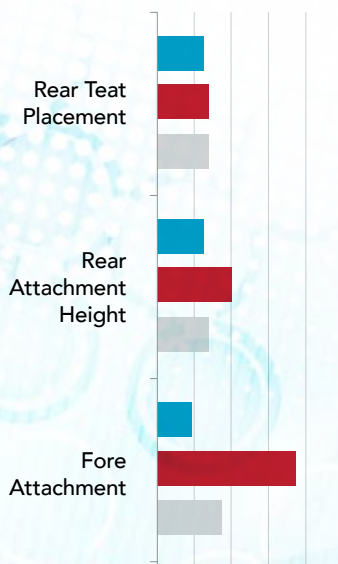
viewing helping you make more efficient management decisions. Should your herd consist of multi-breeds, you will also be able to toggle between breeds (similar to toggling between First Lactation and Overall Herd).

The new Classification Reports will offer different visual depictions of your herd, in a way that respects some of the traditional reporting aspects valued by members while simultaneously offering new and improved options. These reports will be broken down by section, showing your herds results in comparison to both the ideal for each respective trait and the breed average.

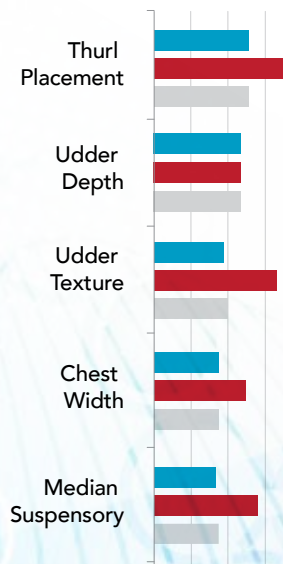
By selecting the desired Classification section, you can receive more information on each specific trait. For example, selecting the Overall Classification tab will give you each major section broken down more specifically, and by selecting for an individual section (e.g. rump) you will have visuals for each trait within that section. Individual animal reports will also be available for you to view and download.

You'll find further information on each section as you scroll through the results page. Each of the major sections includes details on the average linear score, the distribution of your herd within that section, and the number of animals at each score.

Weaknesses

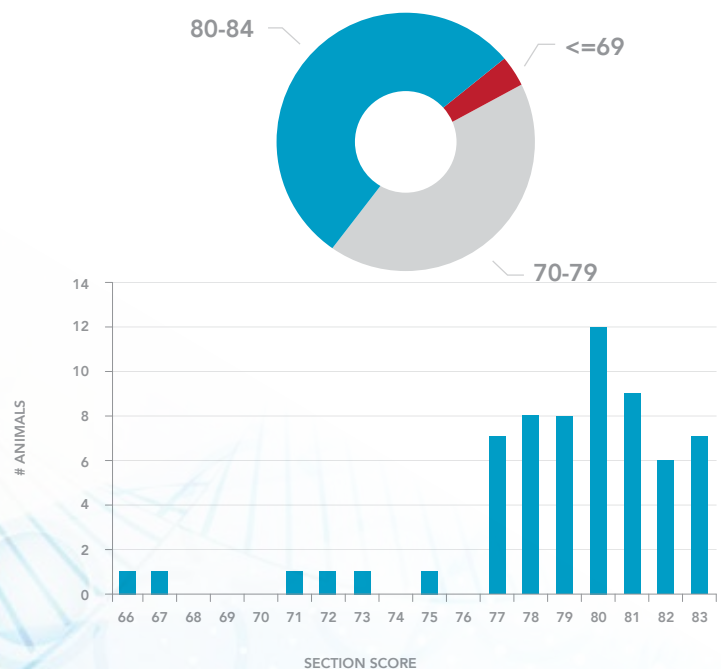


Strengths



HERD IDEAL BREED

Section Distributions



Holstein PLUS+

With the launch of Holstein PLUS+, Holstein Canada is excited to launch new value-added reports that promote building a herd that strives toward longevity and profitability.

The Herd Inventory Breakdown shows the proportion of animals in 1st, 2nd, and 3+ lactations within your herd. On average, a cow needs to complete 1.4 lactations before she begins returning an actual profit (at this point she has “paid off” her rearing cost). By having a visual representation of your herd, you will be able to see what proportion of animals have reached the “break even” point. This encourages longevity and profitability within the herd. At the bottom of the pie chart, you will see additional information on the average herd life, lifetime milk production average, and the Herd of Distinction Ranking within your group

Lactation

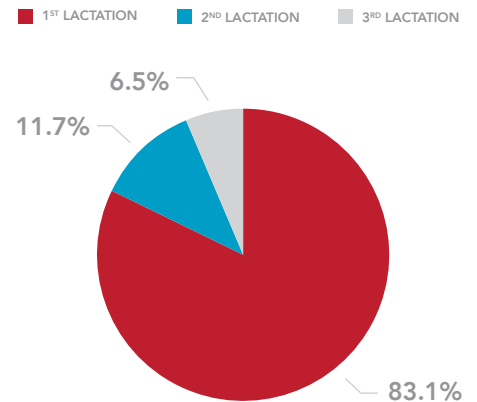
The estimated milk value by lactation report shows the growth in profitability as your herd matures. As there are some major differences in management, herd trends will be based on free-stall and tie-stall environments. The average milk price is derived from the average milk price per liter in Canada (\$0.76)

Profitability is a core function and goal of every herd. Classification, at its foundation, is a herd management tool that builds optimal functional conformation to promote profitability. Holstein Canada is excited to enhance its usefulness to you by providing reports that focus more specifically on the profitability and longevity of your herd. They will give a more complete picture about how your herd conformation relates to its longevity and profitability.

The Lactation Final Score and Lifetime Production graph compares final score to lifetime production, as well as lifetime milk revenue (based on a national average of \$0.76/L). As there are trend differences between free-stall and tie-stall environments, these graphs will be based on the environment in which the animals are housed.

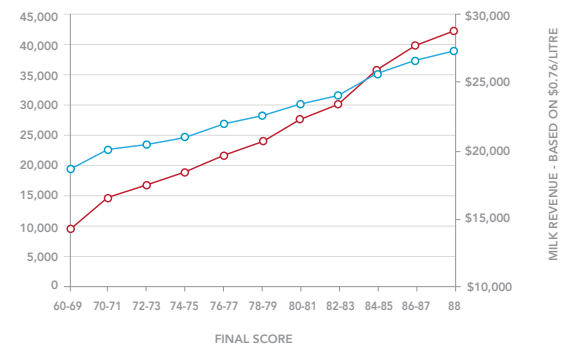
Longevity is an important part of what Classification strives to achieve through generational mating because herds with greater longevity are typically more profitable. Survival % to 6 Years of Age shows the likelihood of animals lasting to six years of age based on final score and the housing type. These trends show that animals with good conformation are built to last; they live longer, calve more often, and produce larger quantities of Milk and Fat – making them money in the bank.

The release of Holstein PLUS+ brings exciting new efficiencies for our Field staff, but the new reporting methods also bring great advantages for you, the producer. With these visual, interactive reports, producers have more value-added data at their fingertips that will improve on-farm management decisions. Combining traditional values with modern, data-driven messaging solidified with a primary focus on profitability and longevity, Holstein PLUS+ will be a great tool to help you build a better herd for tomorrow.

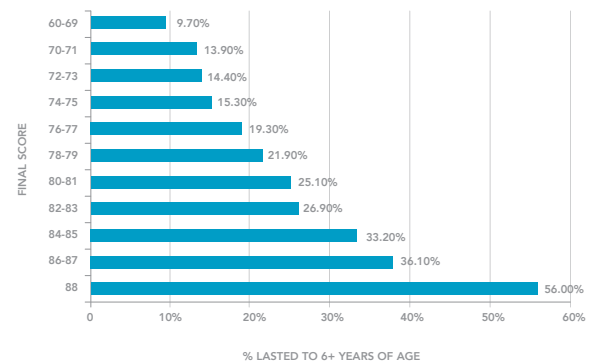


Herd Lactation Average: 1.3 Breed Lactation Average: 2.14
Herd of Distinction ranking 436 of 508 (Herd Size 40-49)
Lifetime Milk Average of Herd: 22033

1st Lactation Final Score & Lifetime Production - Free Stall



Survival % to 6 Years of Age - Free Stall



For more information on Holstein PLUS+

Please contact begink@holstein.ca. To create a Holstein Canada Web Account, please contact Customer Service.

Understanding Inbreeding Today



BY ALLISON FLEMING, PHD.

Inbreeding Basics

Inbreeding is the result of the mating of related animals, meaning they share a common ancestor in their pedigree. The level of inbreeding is a measure of how closely related these relatives are across the sire and dam lines. A higher inbreeding coefficient will result from the mating of two closely related animals compared to relationships that are more distant. The classical measure of inbreeding uses pedigree data and traces it back to identify common ancestors between the sire and dam. The precision of inbreeding values is therefore highly dependent on the depth and completeness of the pedigree, and a low inbreeding value may be a result of a shallow or incomplete pedigree missing the shared ancestor.

Inbreeding Levels are Increasing

Inbreeding levels in the Holstein breed have gradually increased over time (Figure 1). Inbreeding is expected to occur to some degree in a population under selection, and its increasing accumulation in past generations can be attributed to several factors including the adoption of reproductive and genetic technologies by the industry. For example, artificial insemination allowed the widespread use of a small number of prominent bulls and their outsized contribution to the next

generation. Furthermore, advancements of genetic evaluation methodologies enhanced the ability to identify elite individuals and families for the breeding goals which were previously focused on a small number of traits such as production and type.

The introduction of genomic selection has brought faster rates of genetic gain, but has also accelerated the annual increase in inbreeding in the Holstein breed. This annual inbreeding trend is largely a result of a shorter generation interval, a significant consequence of the growing use of genomically tested young sires (and younger animals in general). Genomics has helped promote the use of some broader pedigrees by allowing greater testing and the selection of the best individuals instead of families, and also by enabling more expansive breeding goals which include health and fertility traits. However, it is typically still a small number of elite related individuals contributing to the next generations.

Consequences of Inbreeding

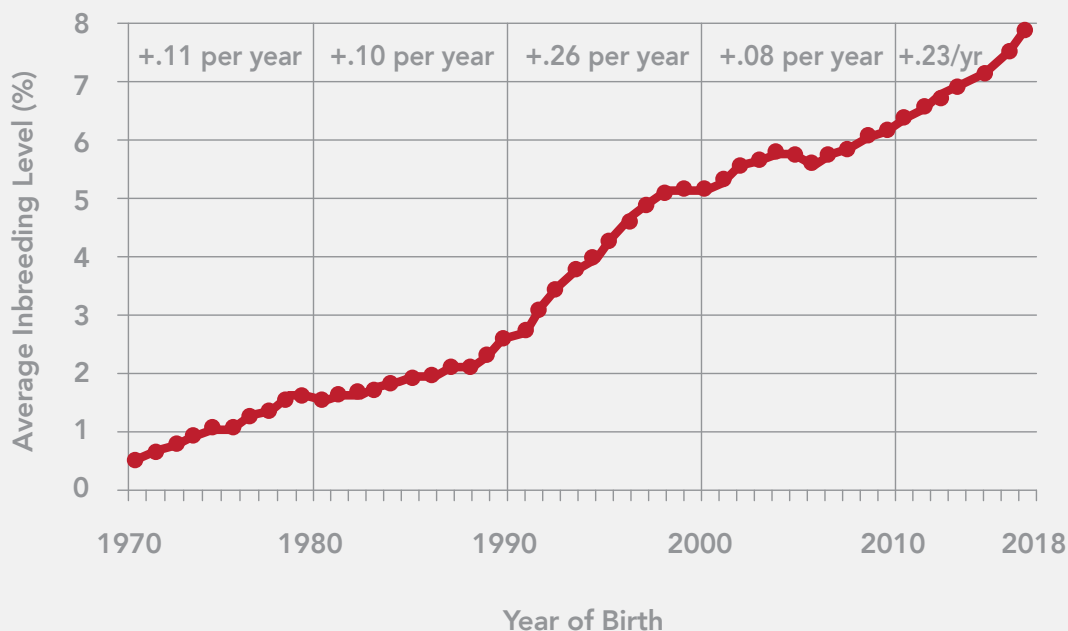
There is still much to be learned about the effects of inbreeding and there is no defined threshold as to what level of inbreeding is acceptable or when serious complications are likely to arise. The responses to inbreeding can

be varied. In general, we know that there are unfavourable effects that we can attribute to the accumulation of inbreeding in dairy cattle populations. The reduced performance that results from inbreeding – known as inbreeding depression - typically impacts fitness traits the most, resulting in reduced fertility or health, but production can also be diminished. The magnitude of such effects with each percent increase in inbreeding have generally been found to be small but significant, and in extremely inbred animals, this could amount to notable economic losses. While inbreeding does not create undesirable genes, it does increase the probability that an individual will receive two copies of the same undesirable gene which may be expressed in its homozygous form. Genomics has made the discovery of several recessive haplotypes with notable effects possible, and it can aid in the avoidance of mating two carriers.

Advancements in genomics have also provided more insight into how we can determine the relationships between individuals and characterize inbreeding and its various effects. While pedigree-based inbreeding is formed on averages and probabilities and is limited by pedigree depth, examining inbreeding through genomics can provide a more detailed look at the actual inbreeding

Figure 1- Inbreeding trend in registered Canadian Holstein females.
Source: Inbreeding Update - August 2019 -, Lactanet Canada

Inbreeding Trend in Canadian Holsteins



or homozygosity at a genome level. Not all inbreeding is harmful, and researchers are now finding specific areas of the genome where inbreeding can be related to reduced performance in various traits while also discovering that inbreeding has no effect in other regions. This knowledge could lead to more advanced mating plans which target the avoidance of inbreeding in certain regions of the genome alone.

Managing Inbreeding

Some degree of inbreeding may be largely unavoidable in a purebred population, but it can be managed. Inbreeding is not passed on to offspring in the same manner as genes, and examining the inbreeding coefficient of a potential bull will not be indicative of the inbreeding coefficient of his progeny. A bull with a high inbreeding coefficient can be mated with a female not closely related to him without creating a highly inbred calf.

When looking broadly at bulls, it is more relevant to consider the Relationship-value (R-value), which represents the percentage of genes that the bull has in common (i.e. its genetic relationship) with active females within the breed, more so than the inbreeding coefficient. A very important element of inbreeding management and understanding the relatedness is the proper identification of each animal, its sire and dam, and the integrity of the pedigree.

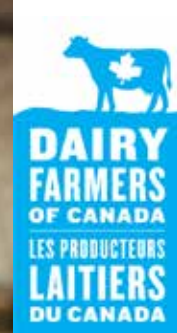
To help manage inbreeding, mating decisions can all be made with the resulting inbreeding level of the progeny in mind. There are several tools available, such as the inbreeding calculator on the CDN website, for breeders to easily see the inbreeding level of the resulting progeny from the mating of specific females in their herd to various sires. In this way, matings producing an inbreeding coefficient above a tolerable level can be avoided. Ideal

genetic improvement strategies should balance genetic gain with increases in inbreeding levels and there may be a time that a sacrifice in genetic gain is required in order to conserve genetic diversity.

Summary

It will become more difficult to avoid inbreeding as the relatedness of animals within a breed increases. Inbreeding in Canadian Holsteins has been gradually increasing over time and will continue to do so. The increase in inbreeding will lead to greater inbreeding depression and possibly an increased occurrence of recessive haplotypes or disorders in the population. Monitoring such trends in the breed and within herds has a growing importance, and the inbreeding level of potential matings should be considered in breeding decisions. 🐄

A message from the President of Dairy Farmers of Canada



In these challenging times, I am so proud that the dairy farming community continues to be hard at work in supplying the milk that offers nutritious and high-quality dairy products to feed our nation. I also want to acknowledge the hard work done in the provinces to ensure continuity in their respective regions. These are unprecedented times, and our industry is stepping up.

Like you, I am concerned for the well-being of my family members and employees, at the same business continuity is top of mind.

Our CEO, Jacques Lefebvre assures me that our staff continues to do its work on key areas of priority for our industry, while teleworking. Meanwhile, DFC and the provinces have a daily call scheduled to monitor developments, identify potential challenges, input to government and find pre-emptive solutions to emerging issues. Everyone is working in the spirit of collaboration to ensure consumers have continuous access to Canadian dairy products.

We have been steadfast in our representations to the Federal government, including to the Prime Minister, on the need to identify, as part of Public Safety Canada's Critical Infrastructure and Action Plan, that dairy be deemed as a critical industry. Within this plan, 'Food' is listed as one of Canada's ten critical infrastructure groups. As dairy has played and will continue to play a central role in feeding

Canadians during this pandemic, we sought that the government make it clear in its communications that dairy is a critical component of this food pillar, thus recognizing our industry as an essential service.

Also, we have reached out to other players in the value chain to help us advocate for a special recognition for dairy as part of the government's action plan. In this regard, I am thankful for the engagement of the Retail Council of Canada, and the Canadian Federation of Independent Grocers.

In this time of great uncertainty, access to domestic foods and the security of these sources becomes top of mind for Canadians. As dairy farmers, we play an essential role in providing quality, and safe dairy products to consumers. In times of need, Canadians can count on us! 🇨🇦



Dear Customer Service Team



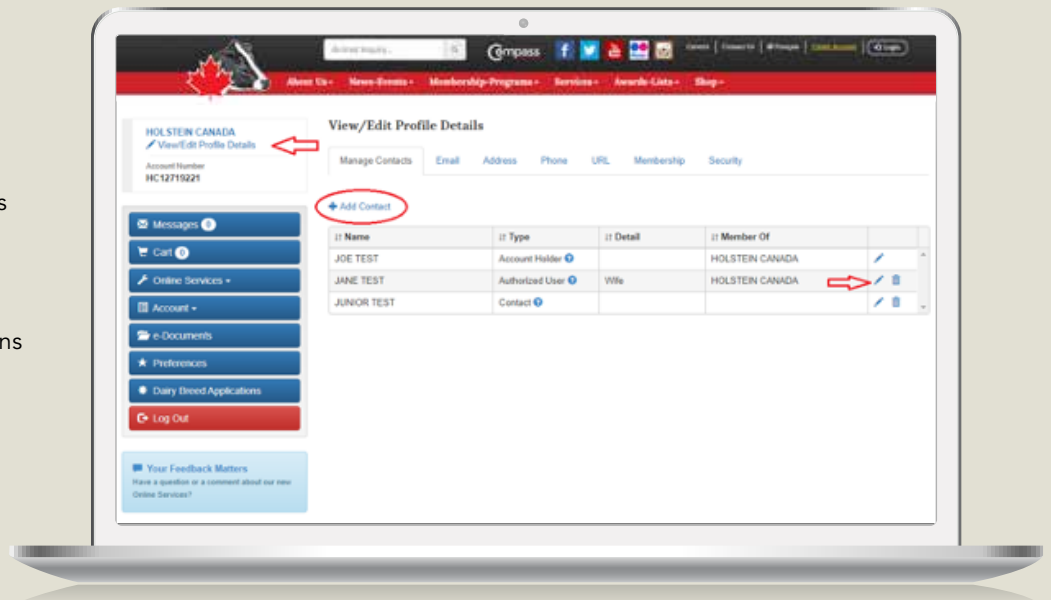
Answering your question this issue is **Cathy Lemire**. Cathy joined the Holstein Canada team a year ago as a Client Services Representative and Print Support. Along with processing web orders and adding new members, Cathy is part of the team that updates customer and member information.

How do I know who's on my Holstein Canada Business Account?

There are two ways to check the people on your Business Account. The direct approach is to call our Customer Service line. We will validate the person calling and identify who is on the Account. For our tech-savvy users, you can log into your Web Account and search under View/Edit Profile Details.

To help understand, here are some definitions about the categories of people on the Account:

- 1 Account Holders** are the owners of the Business Account with Holstein Canada.
- 2 Authorized Users** are the persons authorized to conduct business under the Account.
- 3 Contacts** are the persons to communicate with for information purposes.



The **Account Holder** is the person responsible for farm operations and has full authority to conduct business with Holstein Canada. There can be multiple account holders depending on your farm operation's structure, and through the Web Account, the Account Holder can add other individuals and assign types: Authorized Users and Contacts. To remove an Account Holder, you will need to contact Customer Service, since this requires additional steps.

When assigning an **Authorized User** to the Account, you can grant them full authorization to conduct business on your behalf or limit their access to specific key areas. Authorizations are specific aspects of your Business Account, and you can task them with a specific one or all of the following:

- **Billing** - order products and services
- **Financials** – view financial transaction and make payments
- **Customer Maintenance** - edit profile details

An **Authorized User** has the ability to create a Web Account for your Holstein Canada account.

Contacts have no authorizations for conducting business. This type of designation is for the people you want Holstein Canada staff to communicate with for inquiry and informational purposes only.

Log in to your Web Account to view your profile details and to update authorized users and contacts. While you are there, double check the farm contact information and make sure that your email, phone, and address are up-to-date!

Do you need more assistance?

Contact us toll free at 1-855-756-8300 ext. 410, email CustomerService@holstein.ca, or text us at 226-401-8305. 🇨🇦



A lovely photo from Ferme Janebert - Édouard Pigeon couldn't wait to show off the award to the cow that won!

CLASSIFICATION CHANGES

Maintaining a "Healthy Canadian Dairy Industry for All" continues to be the primary vision of Holstein Canada and its employees. Because of this and in light of the constantly changing environment our nation finds itself in due to COVID-19, we will continue to do our best to communicate to our valued clients the Field staff's "moving schedule." This moving schedule affects Field Services, Classification, and proAction® animal care assessments.

For the most up-to-date schedule times, changes, or cancellations in all areas and work-units, please visit our website, www.holstein.ca. Once on the landing page, click on Services in the menu tab, follow that to the link for Classification and/or Field Service and click on the Schedule tab under these options.

If you have any further questions, please reach out to classification@holstein.ca or Brad Eggink directly at beggink@holstein.ca or 289-455-1701.

For any members who missed the "Top Sires According to Average Final Daughter Score of 1st Lactation Daughters" charts, we will no longer be running these in *InfoHolstein*. They will still be available on the Holstein Canada website under the Classification section.

TOP SIRES FOR HEALTH & FERTILITY AND FAT RELEVANT TO DAUGHTER'S AVERAGE FINAL SCORE

Based on 1st Lactation Classifications January/February 2020

Top 10 Health & Fertility Sires with 100+ Daughters Classified in 2-Month Period

Sire	Daughters Classified	Sire H&F	Avg. Dau Score	Sire	Daughters Classified	Sire EBV Fat Kg	Avg. Daus Score
NUMERO UNO ET	362	616	80	MONTROSS DUKE-ET	154	127	80
KINGBOY RAMBO-ET	200	587	81	BREWMASTER	390	123	81
ADAGIO-P-ET	177	587	80	SILVER-ET	101	108	81
VSG AIRINTAKE	200	560	80	SSI DCY MOGUL-ET	158	87	81
COPIOUS-ET	120	559	80	V WICKHAM	135	75	80
CONTROL	875	558	81	KANE	143	73	80
MONTROSS MISSLE-ET	154	550	80	UPRIGHT-ET	253	72	80
SOLOMON	243	541	82	CAPITAL GAIN	142	71	80
FEVER	214	540	80	V ENTIRE	105	70	80
GALAPAGOS-ET	132	540	79	V EUCLID	135	68	80

Top 10 EBV Fat KG Sires with 100+ Daughters Classified in Two-Month Period

TOP SIRES ACCORDING TO AVERAGE FINAL SCORE OF 1ST LACTATION DAUGHTERS

Based on 1st Lactation Classifications January/February 2020

Top 10 Sires with 100+ Daughters Classified in Two-Month Period

Sire	Daughters Classified	Sire H&F	Avg. Dau Score
JACOBY	105	82.67	82.79
HIGH OCTANE	107	82.05	82.36
GOLD CHIP	112	81.94	82.73
CINDERDOOR	128	81.92	82.33
DOORMAN	423	81.90	82.12
UNIX	242	81.86	82.11
DEMPSEY	183	81.65	81.86
LIGHT MY FIRE	216	81.48	81.60
IMPRESSION	616	81.41	81.08
APPLICABLE	255	81.36	81.41

Get Some Help Promoting Your Digital Learning Events

Farm education, whether it's for consumers, students, or other members of the ag industry, is more important than ever. Luckily, we have more tools than ever to do it! If you have an educational, industry-related event to promote – an online farm tour, a virtual class, etc. – we'd love to help you out!

By adding it to the Holstein Canada calendar on our website or promoting it on social media, our team can boost your Holstein-centric event – which will help boost our great industry! Please email socialmedia@holstein.ca with event details!*



**Promotion of events is subject to approval by Holstein Canada*



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Editor: Steven Spriensma
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Publications Mail
Agreement 40008691

Published six times annually
Subscription: \$18 outside Canada

Return undeliverable Canadian addresses to:

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