info Holstein

January/February/March 2022 issue no. 173

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

Holstein Canada
Hybrid Annual General Meeting

SATURDAY, APRIL 23, 2022 | 11am - 3pm CST

Share your member voice!

- ✓ *Hear updates on the past year*
- ✓ *Vote on resolutions to improve your Association*
- ✓ *Listen to fellow participants speak on topics that matter*
- ✓ *Network with like-minded members of the industry*

A hybrid platform means connecting to the meeting from wherever you are, giving you the opportunity participate in discussions and voting from your mobile devices.

Whether you're with us in-person, riding the tractor, working in the milking parlour, or taking a break in the kitchen, all members are able to join in and be part of the process.

The same rules for voting will apply; every voting member will register by prefix and have one vote. This robust virtual platform will allow for secure voting.

Come join the festivities and make your voice heard in Saskatchewan this April!

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ABOVE: On pages 6-9, our Farm Profiles highlight Environmental Stewardship projects on-farm. On page 26, our new column, Holstein Insider, features department updates from Human Resources and Finance.
ON THE COVER: National Classification Co-ordinator, Bruno Jubinville captured this photo on a recent visit to Manitoba where he visited Donfield Farms in Brandon, Manitoba. Garry and Jamie Donohoe earned another Master Breeder Shield in 2020 and are the first Manitoba producers to win three Master Breeder Shields

contents

The Central Role of our Members in our Decisions

Élyse Gendron, Holstein Canada President

OUR ORGANIZATION DRAWS ITS STRENGTH from its roots: you, the members. To all of you who take the time to attend your club and branch AGMs, thank you. Those meetings give you the opportunity to exchange information as well as share your ideas and your concerns. "Exchange" means it's a two way street: we talk to you, but we also listen to you. Your ways of working are changing quickly, and we need to know how to best meet your needs.

The other strength of Holstein Canada is undoubtedly our staff. We have enlightened managers, a dynamic and dedicated office team and a strong and respected field team. Thank you to each and every one of you!

This winter, the Board of Directors and the Management team are working hard to update our Strategic Plan. Although production is up, the number of producers continues to decline and the farm models vary greatly. Passion for breeding remains important, but criteria such as profitability and work efficiency are essential for you. We asked for your opinion in a survey that will help us direct our services and make them more modern and flexible. The very high participation rate shows us that you have the future of Holstein Canada at heart.

We do not know what the spring will bring in terms of health measures, but my hope is that face-to-face activities can continue: barn days, breeders' cups, training, etc. All the opportunities we can have to see our friends and colleagues, contribute to our well-being. At Holstein Canada, we are looking forward to finally visiting Saskatchewan for the 2022 Convention. We are also committed to making our AGM more democratic and accessible to our members across the country; whether you attend the event on site or from home, you will be able to hear activity and financial reports, participate in discussions on resolutions and vote on decisions.

The upcoming AGM will also mark the end of my time on the Board of Directors. Over the past twelve years, I have been able to visit most provinces and gain a better understanding of how different your realities and values are. Having a national vision is important, but it is essential to respect the differences. Canada is a big country!

For those who knew me when I started on the Board, you will remember how eager I was to make changes; I wanted to understand the reason behind and the background of each action, and I sometimes found frustrating the process of working towards implementing the actions. Fortunately, at that time, my poor English limited my conversation and all the questions I wanted to ask!

Finding the right approach to move our projects forward is important. One accomplishment I am quite proud of is the progress we have made on production data, thanks to a close dialogue with the other breeds – we spoke with a common voice. We must have an inclusive and collaborative vision at our producers' service, at your service.

20 Master BREEDER Maîtres- ÉLEVEURS 21

CONGRATULATIONS TO THE 2021 RECIPIENTS

BELFAST
Saint-Patrice, QC

BERGEROY
Saint-Samuel-de-Horton, QC

COTI
Saint-André-d'Argenteuil, QC

EXPO
Churchville, NS

FLOROMA
Pont-Rouge, QC

GERMEC,
Hérouxville, Qc

HAZELHILL
Sussex, NB

KOOPYCREST
Picton, ON

LINDENRIGHT
Brierly Brook, NS

MERCURY
Ange-Gardien, QC

MILVALEA
Baltimore, ON

NEW MARS
Millet, AB

RIGHTSTAR
Saint-Germain-de-Grantham, QC

PIERRICHE
Saint-Apollinaire, QC

PLAINELAC
Saint-Vallier, QC

PROVETAZ
Compton, QC

ROCKYMOUNTAIN
Water Valley, AB

SAUDER HOLME
Wallenstein, ON

SQUIBBLAND
St.Pauls, ON

MASTER BREEDER GALA
Saskatchewan ✷ April 23, 2022

Environmental Stewardship Projects on Farm

By Natasha McKillop, Field Service Business Partner, Eastern Canada.

East

MCCREA FARMS
Shannon, New Brunswick

PREFIX: MCCREA

PEOPLE INVOLVED: James McCrea, Bruce and Nancy Colpitts and sons Chandler and James

 # COWS MILKED: 50

FACILITY TYPE: Free stall with Lely robot

 # ACRES FARMED: 400

HERD PRODUCTION AVERAGE (L/COW): 33 L

FEEDING SYSTEM: PMR- chopped round bale forages (oats and peas, clover timothy, meadow fescue mix), with concentrate fed at the robot and automated feeder, early lactation animals also receive a topdress.

OTHER BREEDS IN THE HERD: No

HOLSTEIN CANADA SERVICES USED: Registration, NLID

McCrea farms is nestled in historic rural Shannon, New Brunswick. The now 7th and 8th generation family farm was established in 1823, and while roots and tradition run deep on the farm, the blend of history, diversification, technology and focus on environmental stewardship make this farm unique. In addition to the 50 milking head dairy farm, the family also has several other operations. They run a commercial beef cow-calf operation consisting of 40 cows, 40 calves in addition to 25 feeders. They manage a diverse woodlot that produces forest products, maple syrup, and Christmas wreaths. The beautiful woodland hiking trails and cottage rentals make for a wonderful weekend getaway where you can enjoy both a wilderness and farm experience. They also offer outfitting services for the avid hunter or fisher. The family has an excellent relationship with the University of New Brunswick Faculty of Forestry and Environmental Management, and the university hosts their fall camp at the farm. A fish hatchery on the property also grows 30-40,000 brook trout annually, for both the local market and their own stocked pond. With so much of their enjoyment and livelihoods dependent on the land, they feel that environmental stewardship is essential for their continued success.

What inspired you to undertake environmental stewardship projects on your farm and how did you get started?

Environmental stewardship on our farm has been ongoing throughout the generations of our family. We view ourselves as stewards of the land, with a goal to ensure future generations have a healthy and productive land base to farm. We are very fortunate that each of the generations currently on our farm have had the opportunity to learn this philosophy from our great grandparents. In addition, our grandfather/great grandfather Lawrence McCrea always said 'look after the land and it will look after you', and so we really take that to heart. We try to take on projects and manage the land in ways that will continue to improve it for the future.

We have implemented several environmental projects on the farm. In the 1980's we had installed a water turbine to generate power for our previous dairy barn, guesthouse, and hatchery. Unfortunately, flooding events damaged the turbine. We had wanted to restore the turbine for several years, but in the interim, The Smart Energy Company reached out to us about solar power. We were intrigued and they were able to provide us with a package that would meet our goals and timeline for generating renewable energy. The economics of it really needed to be penciled out in order for us to determine that it was worthwhile for us.

We did our first environmental farm plan in 2003 and undertook various improvement projects through the Growing Forward and CAP programs. This allowed us to build manure and fuel containment systems. We also focused on more targeted nutrient management and soil productivity on farm. This shift in focus has led to the use of more selective tillage practices, reducing soil erosion, extending crop rotations, and more precise nutrient management. Our forage based cropping

system uses perennial legumes and grasses focusing on soil health and productivity.

Reduction of waste and effective capture and use of nutrient sources is an area of continued development on the farm. The waste from our fish hatcheries is used as a nitrogen rich nutrient source on our fields. We also reduce our waste through several existing and emerging recycling opportunities for containers and plastics.

Investing in repairing and preserving riparian zones has also been a priority for us. We've acquired permits and repaired the erosion of our brook using Riprap, but have also made sure the area surrounding the brook within 30 meters is protected. Since 2000, we have not plowed or applied synthetic nutrients or fertilizers in that area and we have encouraged growth of native vegetation to anchor the soil and provide shade to the brook.

Having the beef animals on the farm has also allowed us to improve land utilization and help maintain local fauna. For example, the beef animals can eat a more mature forage and still perform well. This allows us to leave forage stands longer for species at risk like the Bobolink to nest and reproduce. Harvesting these fields later in the season for our beef animals, also improves volume, reducing our input costs.

Currently, in cooperation with various woodlot and government organizations, we also have forest test plot research underway to promote stand diversification and species more resilient to anticipated impacts of climate change.

Most recently on the farm, we installed a 95 kW solar array to offset our energy use. The array consists of 216 panels, over 6 different arrays (approximately 150' x 80'), and will produce 137,000 kWh annually. This will meet our energy needs for much of the farm including our new dairy barn, heifer barn, beef barns, a large workshop, fish hatchery, 3 houses and the guest house for our agri-tourism business.

Our farm was a part of a pilot "In a Box" project for the The Smart Energy Company. We assembled much of the array ourselves, testing their prepared instructions and videos.

There were a few challenges with regards to finding an appropriate location for the array; our land is quite hilly and it had to be in a location that made sense for light exposure and proximity to surrounding infrastructure.

The array has only been active since September, but we've already been experiencing exciting results. Since September 9th we have a production surplus. The solar panels are bifacial, collecting energy from both sides and we will be monitoring production over the seasons and various weather conditions.

Have you received any funding from outside partner organizations to help with project costs? How did you get involved with them?

We applied for the Federal Agriculture Clean Technology Program and have been approved. The "In a Box" option offered by The Smart Energy Company also made the pricing more attractive. We received money from the CAP and Growing Forward programs for manure handling and storage, and well as fuel storage, and asphalt in the beef yards and barn floors to capture all the nutrients.

How has the investment paid off?

The investment in manure handling and nutrient management has given us significant forage yield increases allowing us to be more efficient.

Energy was a major cost on our farm and the solar array is already beginning to pay for itself. We expect that it will be paid off in 13 years from the energy savings. It is guaranteed to produce power at the same level for 30 years, which means we will have 17 years of free power. That will be a significant savings that we can re-invest in the farm.

Are there any other projects you are planning for the future?

We're always looking for new ideas and opportunities to become more efficient and better environmental stewards, but we have no fixed goal posts at the moment. We are planning on restoring the turbine, and if the opportunity arises that we can grow the business, we will expand the solar array to meet our energy needs.

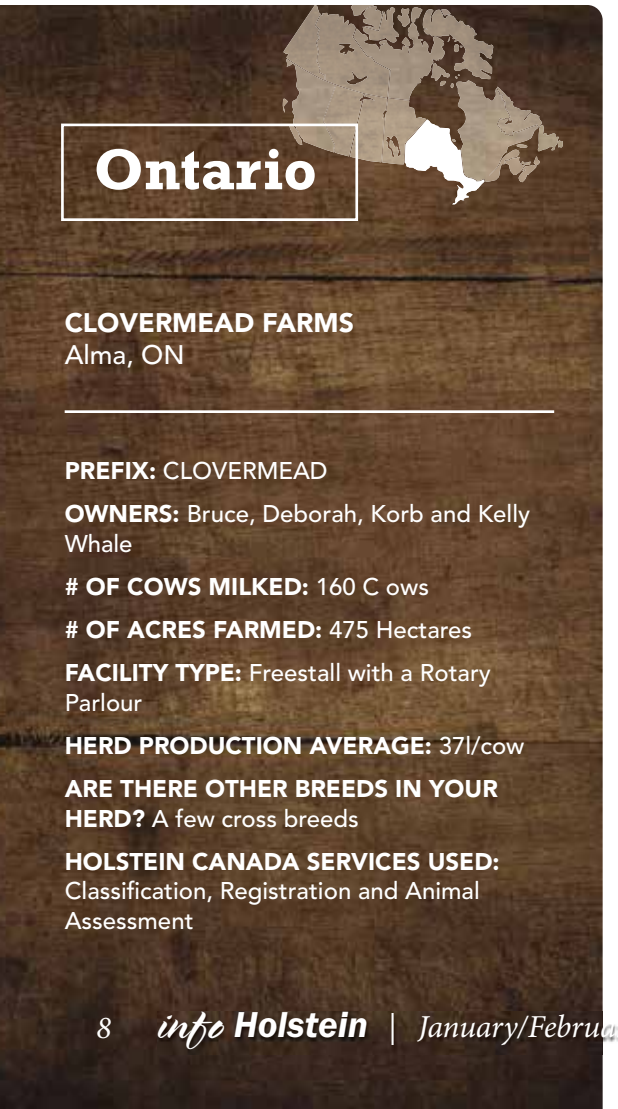
With the Environment Pillar of proAction now in effect, do you see more producers taking on projects? What advice would you give them?

Every farm is unique, and we would not want to speak to other people's goals and needs, but if they are interested in taking on similar projects, we would say go for it!

We'd gladly give other farmers a tour of our farm and projects, to see how it might work for them.

Any other comments or advice you wish to make?

Our farm is very diverse, and we are very fortunate to have Chandler and James on the farm with us. Farming is hard work, and is a lifestyle not a job. We view our farm life as one to enjoy while working together and supporting each other. We may even find ways to enjoy rock picking!



CLOVERMEAD FARMS
Alma, ON

PREFIX: CLOVERMEAD

OWNERS: Bruce, Deborah, Korb and Kelly Whale

 # OF COWS MILKED: 160 C ows

 # OF ACRES FARMED: 475 Hectares

FACILITY TYPE: Freestall with a Rotary Parlour

HERD PRODUCTION AVERAGE: 37l/cow

ARE THERE OTHER BREEDS IN YOUR HERD? A few cross breeds

HOLSTEIN CANADA SERVICES USED: Classification, Registration and Animal Assessment

Environmental Stewardship Projects on Farm

By Amanda Comfort, Field Service Business Partner, Ontario

What inspired you to undertake environmental stewardship projects on your farm?

My grandparents and parents have been environmentalists for their entire lives, even before the word existed! We have always done our best to waste as little as possible, to preserve topsoil, plant trees, recycle, reuse, reduce our water use etc. So, it is safe to say that it is genetic to want to preserve the environment that we live in. After learning about anaerobic digestion at University and at Mason Dixon Farms in the US, I was convinced that if we could find a market for either gas or electricity, it made a lot of sense for our farm to process our manure, remove the greenhouse gas from it, and use that gas to make energy. At the same time, we were able to enhance the nutrient value of the manure, provide heat for buildings and water, remove pathogens and weed seeds, and create an ample supply of bedding. All this while reducing our impact on the environment. Since then, we have processed about 8000 tons a year of waste from the food processing industry, further reducing the amount of greenhouse gases released into the atmosphere.

How did you get started?

A lot of research! We read, talked and visited anybody who would have us!

What types of projects have you implemented?

Over the years, we have done a lot to promote healthy soils and reduce erosion. Some of these projects include grass waterways, 40,000 trees planted in windbreaks and wildlife corridors, enhanced stream buffers, cover crops and recently we have moved to no–till cropping. We have also used our nutrient management strategy to maximize our on- farm nutrients and have managed to use exclusively digestate and raw manure as our fertilizer source for several decades.

> Energywise, we use plate coolers to precool milk, a free heater to capture heat and reduce energy use, timers on lighting to reduce power use, and we reuse our parlour wash water for floor and wall washing.

Our biggest project to date has been the construction of an Anaerobic Digester. We have 2 x 1000m3 digester vessels, that produce enough biogas, (renewable natural gas) to produce 7Mw of electricity every day and even more heat than that. Using all the manure and waste feed from the farm, as well as organic waste from off farm (food processing and slaughter houses mainly) we produce enough energy to power about 50 homes.

The biproducts; heat, digestate and bedding, are also used on the farm

to displace other inputs. Because of the system, we are able to dramatically reduce our farms greenhouse gas emissions by about 75%.

What results have you seen?

The projects centered around soils have been slow and steady, but we have seen an increase in our organic matter, a reduction in weeds, a more forgiving soil (fluffier and able to absorb water and less cracked and hard in dry times), and with fewer passes over the fields with no till, we are using less fuel and seeing fewer signs of erosion. One advantage of cover crops is the ability to double crop some fields. It allows us to get out earlier in the spring to spread manure when the crop has already been established and growing, and makes great forage before corn or soybeans go back in.

The digester has provided another revenue source as well as a dramatic reduction in emissions

Have you received any funding from outside partner organizations to help with project costs? How did you get involved with them?

We have received some funding for the digester project through OMAFRA, and some funding for manure management through OSCIA.

How has the investment paid off?

The soil projects are hard to put a ROI on yet, but I am certain that we are improving our soil health, and reducing our labour and fuel costs. Being able to double crop has increased our tons per acre by almost 20%, and coupled with a 15% increase in yields we attribute to using digestate as fertilizer, our land's productivity has improved significantly, and we are looking forward to more gains moving forward.

The Digester was planned to have an ROI of 8 to 10 years and is on track. As a side benefit, we have been able to heat water for the entire farm, as well as heat the house and many other areas using waste heat from the digester. Bedding is also another way of recouping the investment. We have as much recyclable bedding as we can use, which also locks in that cost.

Are there any other projects you are planning for the future?

We are aiming for more electrification (skid steers, alley scrapers, feed pusher, other vehicles) on farm, and are exploring the possibility of entering the Renewable Natural Gas market. This would involve expanding the digester, cleaning the gas to pipeline grade and injecting into the natural gas pipeline.

The biggest project, with the most impact on the environment will be to increase our production per cow and make sure our heifer numbers are in line with our replacement needs. Running efficiently in the barn always has the biggest impact on the environment and the best ROI!

With the Environment Pillar of proAction now in effect, do you see more producers taking on projects? What advice would you give them?

Yes, I think our consumers and processors are looking for dairy products that are produced in an environmentally sustainable way. Sustainability will be the buzz word we will hear a lot of in the coming years. In order to meet that demand, and the need to take care of the planet, our entire industry will have to do their part to use less while producing more and at the same time minimizing our environmental impact. The good news is, every little bit counts, so if we all make continuous small improvements, collectively we will make a big difference. Dairy farmers have the opportunity to provide many of the solutions that will help society become more sustainable.

To pick projects that are best for each farm will involve research, talking with others who have done it, and careful planning. My advice, Don't wait, start today!

Any other comments or advice you wish to make?

Because this is so important, there will be lots of people/companies trying to make money in this field. Farming, and particularly dairy farming, will be targeted to do a lot of the environmental work on behalf of society as a whole. We need to make sure that the people or companies that we work with on have our best interest at heart. There will be value in what we do, and farmers should work together to keep our part of that value for ourselves. There will be lots of technologies that won't work, and others trying to take advantage of the need, but if we work together, and aggregate our projects, and knowledge, farmers should be able to turn environmental projects into profitable ventures that will help us to continue to farm for generations.

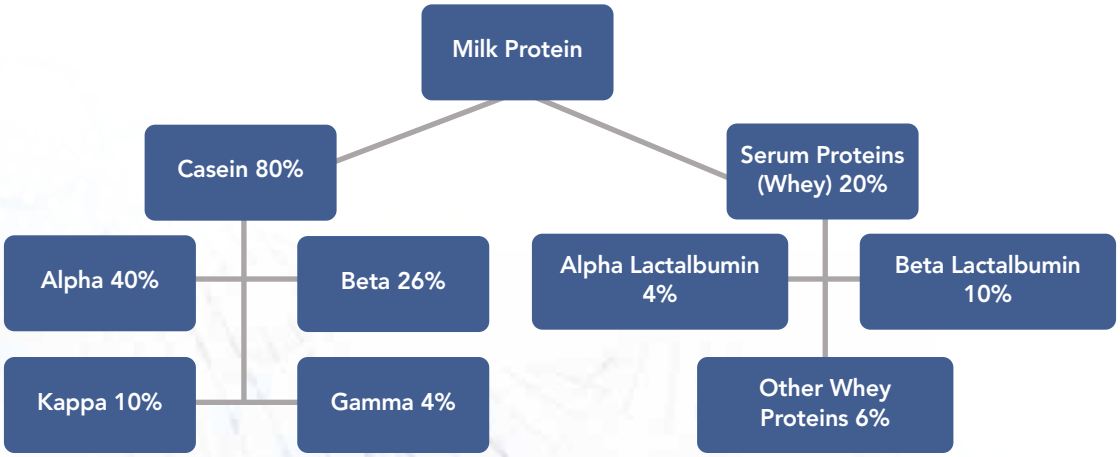
It is way more than A2 - Breeding for milk proteins that can benefit your herd

Since the launch of the first A2-only products in Australia and New Zealand in 2013, the interest in knowing the beta-casein genotype has gained traction around the world. So much so, that everyone in the dairy industry has heard about or is selecting animals that produce this type of milk, although very few herds in the country are actually paid any premium for producing A2-only milk.

Such interest is reflected by the fact that nearly 55% of AI bulls in Canada have an A2A2 genotype, and just 10% of the genotyped Holstein females are A1A1. Because of the current limited economic incentive and very specific niche market, the selection is more like betting on the future of the industry, as market opportunities may not yet exist where you farm. The good news is that other milk proteins play a role in component production and percentage, as well as cheese yield, being desirable from the herd and the dairy processors' standpoint. And now you can test your animals, select for specific genotypes of these milk proteins and benefit from them as well!

What are these proteins?

Within the herd, the yield and percentage of protein are the values that matter the most because they directly affect the paycheque. It is not new that processors are pushing more and more for components; in the end, this is where the value is, as most of the water in the milk is removed to make derivatives with higher aggregate values. As producers, you may not see all the different components that make up your milk protein. There are 2 major types: Caseins and Whey Proteins. The first makes up about 80% of the total content, and A2 is included in this pool as one type of casein. The diagram below makes it easier to visualize the main protein components – the amounts slightly vary between animals, and can be affected by their genetics.



As shown in the diagram, Beta Casein, which A2 is a variant, is just one-quarter of the total average protein content. Obviously, the interest in A2 is due to market factors, but certain genotypes of other proteins play an important role on the percentage of protein produced, cheese yield, and allergy occurrence. Besides Beta caseins, Alpha and Kappa caseins, as well as Beta Lactoglobulin are the other 3 most relevant proteins, which are all included in the new genomic test offered by Holstein Canada.

How can you take advantage?

Knowing the genotype of your animals allows you to select desirable variants, the same way some herds do with A2. Besides beta casein, kappa casein is likely the second most known protein, mainly because of processors' interest. The B variant is ideal because it is associated with higher protein percentage, as well as better curd formation, stability and quality during the cheese-making process.

Being the most frequent protein type, Alpha caseins are the type mostly related to allergies. The Alpha S-1 casein has an effect on cheese quality and yield, and milk and protein production in cows. The variant C (genotype CC) is the most desirable because it is associated with higher yields both from the cow (milk and protein) and the processor standpoint (better coagulation). In addition, variants A and B are more associated with allergies. Looking at Beta-lactoglobulin, which is the non-casein protein we offer a test for, the BB genotype seems to be ideal because it is associated with higher fat content. The table below summarizes it.

Protein type	Preferred Variant	Advantage
Kappa Casein	**B**	Higher protein concentration, better cheese yield and quality
Alpha-S1 Casein	**C**	Higher protein yield, better cheese yield and industrial processing
Beta Lactoglobulin	**B**	Higher fat content

How do you select for these proteins?

Selecting for other milk proteins works the same way as for A2: you need both genes to be the same to produce one variant only, while two different genes result in a cow producing both types. Therefore, the classic Punnet Square can be used to understand the genetic selection for them as shown in the images.

Parents genotypes and possible progeny outcomes

Dam AA, Sire AB

	A	A
A	AA	AA
B	AB	AB

Dam AB, Sire AB

	A	B
A	AA	AB
B	AB	BB

Dam AA, Sire BB

	A	A
B	AB	AB
B	AB	AB

Take-home messages

Genetic tests for milk protein genotypes are becoming more and more popular, and now every genomic test submitted through Holstein Canada will automatically receive results with a complete milk protein panel! You can also request that your AI Rep provide the genotype for all milk proteins from their sire line-up, so you can select for certain variants. Even though A2 Beta Casein is the most popular protein, other types can have an even higher short to mid-term impact within your herd by increasing protein yields. In addition, there is a direct interest from the processors in receiving a raw product that yields higher amounts of cheese, for example. If you have any questions about our new genomic test panel, want to know more, or are looking to start testing your animals, reach out to Holstein Canada for support to make more informed decisions!

Proposal of Amendments to By-laws

For 2021 National Convention AGM

1. Officers of the Association

Repeal Section 9.11.1, which reads as follows:

9.11.1 The Board shall, at its first meeting in each year, elect by ballot from among its members, a President, a Vice-President and a Second Vice-President.

And substitute therefor the following:

9.11.1 The Board shall, at its first meeting in each year, elect by ballot from among its members, a President, a Vice-President and a Chairperson. If the position of Chairperson is assumed by the President or Vice-President, the Board shall elect a third member to the Executive.

Remove the role of Chairmanship from the duties of the Vice-President and replace with Chairperson or elected third member to the Executive.

The President, Vice-President, Second Vice-President, Secretary and such other officers as may from time to time be appointed by the Board shall be the officers of the Association.

2. Repeal Section 9.11.2, which reads as follows:

9.11.2 The President, Vice-President, Second Vice-President, Secretary and such other officers as may from time to time be appointed by the Board shall be the officers of the Association.

And substitute therefor the following:

9.11.2 The President, Vice-President, third member to the Executive, Secretary and such other officers as may from time to time be appointed by the Board shall be the officers of the Association.

Replace Second Vice-President with third member to the Executive.

The President, Vice-President and Second Vice-President of the Association shall hold office for a period of one (1) year, or until their successors are elected or appointed.

3. Term of Office

Repeal Section 9.12.1, which reads as follows:

9.12.1 The President, Vice-President and Second Vice-President of the Association shall hold office for a period of one (1) year, or until their successors are elected or appointed.

And substitute therefor the following:

9.12.1 The President, Vice-President and third member of the Executive of the Association shall hold office for a period of one (1) year, or until their successors are elected or appointed.

Replace Second Vice-President with third member to the Executive.

The Vice-President shall be the Chairman of the Board and preside at all meetings of the Board, when he is present and when absent or unable to perform such duties, the President will, act in his stead. The Vice-President shall perform such other duties as the President may, from time to time, direct.

4. Duties of the Vice-President

Repeal Section 9.16.2 which reads as follows:

9.16.2 The Vice-President shall be the Chairman of the Board and preside at all meetings of the Board, when he is present and when absent or unable to perform such duties, the President will, act in his stead. The Vice-President shall perform such other duties as the President may, from time to time, direct.

And substitute therefor the following:

9.16.2 The Vice-President is responsible for assisting the President and replacing him in case of absence or resignation. The Vice-President shall be called upon to represent the Association and to serve on the Executive.

Remove role of Chairperson from the duties of the Vice-President, Chairperson will be elected by the Board of Directors.

Title Change: Duties of the Third Member of the Executive

If neither the President nor the Vice-President are able to be present at a meeting of the Board or a meeting of the members of the Association then the Second Vice-President shall act in their place.

5. Duties of the Second Vice-President

Repeal Section 9.16.3, which reads as follows:

9.16.3 If neither the President nor the Vice-President are able to be present at a meeting of the Board or a meeting of the members of the Association then the Second Vice-President shall act in their place.

And substitute therefor the following:

9.16.3 If neither the President nor the Vice-President are able to be present at a meeting of the Board or a meeting of the members of the Association then the third member of the Executive shall act in their place.

Remove Second Vice-President and replace with third member of the Executive.

6. ADD NEW By-Law x.xx.x - Duties of the Chairperson

The Chairperson is responsible for chairing all Board meetings, ensuring that each meeting is planned effectively, conducted according to the constitution and that matters are dealt with in an orderly, efficient manner. The Chairperson will be part of the Executive.

7. Repeal Section 9.14.2, which reads as follows:

9.14.2 The Board may appoint annually an Audit and Risk Committee to assist the Board in the effective discharge of its responsibilities for Committee financial reporting, internal controls, financial risk management and external audit.

And substitute therefor the following:

9.14.2 The Board may appoint annually an Audit and Finance Committee to assist the Board in the effective discharge of its responsibilities for Committee financial reporting, internal controls, financial risk management and external audit.

A member who has served as a director for twelve (12) years is not eligible for election.

8. Repeal Section 9.3.3, which reads as follows:

9.3.3 A member who has served as a director for twelve (12) years is not eligible for election.

And substitute therefor the following:

9.3.3 A member can serve as a director for a maximum of twelve (12) years.

DEFINITIONS: Add Officer(s) to the Definitions section of the By-Laws.

PULSE OF THE PRAIRIES / AU CŒUR DES PRAIRIES

CONGRÈS NATIONAL HOLSTEIN CONVENTION 2022

FEEL THE PULSE

SASKATCHEWAN, AP

Wednesday, April 20

- Fly in to Saskatoon or Regina
- Social Evening **"Snack & Yak"**

Thursday, April 21

- Board the bus for farm tours around Regina or Saskatoon or for an alternative tour with unique tourist stops in and about Saskatoon
- Jersey Show
- Taste of Saskatchewan supper/Holstein Sale in Saskatoon

Enjoy some western hospitality as we showcase our beautiful farms

2022 Convention Farm Tours brought to you by STgenetics Canada

TOUR 1 (Saskatoon):
Carlton Trail- **STgenetics** Tour

- Vanzessen Dairy
- Foth Ventures
- Sunnyside Dairy
- Nienhuis Family Farm

TOUR 2 (Saskatoon):
Eagle Creek-**Sexed Ultra 4M** Tour

- Hyljon Holsteins
- Alley Holsteins
- Vandenbrink Dairyfarms
- Kielstra Dairy

Registration opens on February 1, 2022

OF THE PRAIRIES

RIL 20 - 23, 2022

Friday, April 22

- Holstein Show
- Tailgate & Dance in the Dirt Party, featuring award-winning country band Petric

Saturday, April 23

- Annual General Meeting
- Master Breeder Gala

TOUR 3 (Regina):
Saskatchewan Plains-**Ecofeed** Tour

- Chris-Adie Holsteins
- Lovholm Holsteins
- Kenbert Acres

Alternative Tour (Saskatoon):
River Valley Tour

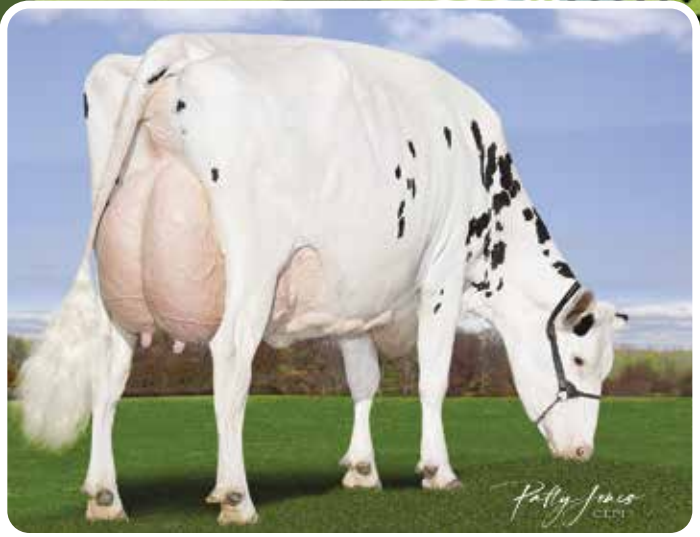
- Western Development Museum
- Black Fox Distillery
- Sunnyside Dairy

events.holstein.ca

CANADIAN COW TOPS GLOBAL COMPETITION

A Canadian bred and owned cow, **Calbrett Kingboy Miranda P *RC EX-93-4*** has made Holstein Canada very proud by being named "Global Holstein Cow" of the year by Holstein International, the international dairy cattle breeding magazine based in the Netherlands. Miranda P is the first Polled, Red Factor Holstein to ever earn this title in the contest's 17-year history.

Miranda P was bred by Cormdale Genetics Inc., Cambridge, ON, Silvercap Holsteins, Puslinch, ON, and Al-Be-Ro Land & Cattle and Agriber Societa Agricola SRL, Piacenza Italy. As a 9-month-old calf, she topped the 2015 Cormdale Genetics Legacy Sale at $34,000 to Vogue Cattle Co., Brighton, ON, who went on to develop and promote this deep-pedigreed "Kingboy" daughter to great success in the coming years. In March 2021, 6-year-old Miranda P was acquired by current owners Patty Jones of Silvercap Holsteins, Puslinch, ON, and Dr. Adam Haight of Braemar Holsteins, St. Marys, ON, in Vogue's Genetics by Design Sale. An outstanding individual in her own right, Miranda P has garnered worldwide respect for her ability to transmit Polled, Red Factor, A2A2, high genomic numbers and outstanding conformation to her progeny.



Calbrett Kingboy Miranda P *RC EX-93-4* Global Holstein Cow of the year

The Global Cow winner is determined by votes from Holstein International's readers and two independent judges and is based on a cow's breeding achievements and influence on the progress of the breed on a global scale.

Congratulations goes out to the breeders and owners of this great cow! A fantastic example of Canadian Genetics at their finest.

Gene Testing and Reporting for a Better Holstein Breed

IN RECENT YEARS, we have drastically increased our awareness about congenital defects and recessive genes/haplotypes. With the advent of genomics, it is easy to trace back the occurrence of a mutation that is associated with a malformation, for example. Back in the day, it was hard to find the origin of these problems because the animal that originated the mutation would spread the recessive gene, but the physical defect only showed up a few generations later. Today, collecting a sample for DNA analysis makes it possible to find the exact point of the mutation, and then trace the origin through the pedigree. This was the case with recessives that are currently controlled, such as Cholesterol Deficiency (HCD), Vertebral Malformation (CVM), and Brachyspina (BY). In the end, not managing these recessives can cause significant losses due to abortions, stillbirths, and calves that are not viable.

Genetic transmission and management

Dam / Sire	H	h
H	HH	Hh
h	Hh	hh

As the name suggests, these conditions are recessive, meaning that an affected animal must carry two equal copies of that piece of DNA. Unless a new mutation occurred (which is rare, but possible), these copies were inherited one from the dam and one from the sire. That way, an abnormal calf is a strong indication that both parents carry a recessive gene – with all AI sires information publicly available, it is easy to find out which recessive the dam also carries and is causing the abnormality. If the sire is not a carrier of any recessives, further investigation is necessary. On the mating table example, both dam and sire are carriers; if the progeny carries both h genes, it is an affected (abnormal) calf.

The fact that the most common abnormalities are recessives makes them easy to manage. All animals with a known pedigree have an estimated chance of being a recessive carrier – you can find it on Lactanet's website or within Compass. For genomically tested animals, they have the codes of the recessives' results on their Holstein Canada page. The more complete the pedigree, the more accurate the estimation is. Whenever breeding a female that has some risk (over 10%) of being a carrier, simply using a bull that does not carry that same gene is enough to prevent any loss. Still, you can genomic test the animal to get an actual result of carrier or free for any of the most common recessives.

Reporting calf abnormalities

Whenever there is a stillbirth or defective calf on the farm, they are rarely reported because of the busy routine. However, these animals can provide very valuable information to find out if the animal actually carries the two recessive genes. If not, it permits a further investigation on the origin of the defect (through parental information), as well as precise identification of regions of the DNA that can have suffered a mutation. With this in mind, Holstein Canada encourages our members to communicate as much information as possible regarding these animals by completing and sending us a Calf Abnormality Report. That way we can quickly communicate back and potentially request samples that can be used for further investigation. The form can be found on the link below, or by going to Holstein Canada's website, under Services>Resources; click on "Calf Abnormality Report" to access it.

Calf Abnormality Report

https://www.holstein.ca/PublicContent/PDFS/EN/Services/Calf_Abnormality_Report_EN.pdf

Take home messages

There is increased awareness for haplotypes and recessives over the past years. With the sire information available for all producers, managing them when planning your breeding program is easy – avoid mating two carriers and the job is pretty much done. You can get very precise information by genomic testing any animal and, most importantly, not managing these recessives at all may result in large losses. Also, it is very important that you, producers, report any abnormal calf born in your herd. This information is extremely valuable for the breed and can help avoid enormous economic losses in the future.

Featuring Canadian Genetics in

BRAZIL

Bom Retiro Farm - Minas Gerais, Brazil

Bom Retiro Farm started in 1966, in the very south of Minas Gerais state, a region very well known for its developed dairy production and where the Holstein breed started in Brazil.

The higher altitude (roughly 1,000 meters) helps bring down the temperatures at night, making the region suitable for Holstein cows to perform well. Nowadays, those who see the two free-stall barns beside another compost pack, on-farm dairy plant, rotary parlour, feed preparation area, and calf barn, would not imagine how different the farm looked 15 years before.

Mr. Amauri Costa's dad started the herd, which he first rented in 1982, and later bought out from the siblings. By the time he took over, the herd was made up of crossbreeds Holstein x Gyr on a low-cost pasture system, which was the reality for the majority of herds in the area.

Changes started in the 90s and never stopped

In 1997, they started a rotational grazing system using Tifton, a hybrid of Bermuda grass. On the herd side, they intensified the use of better Holstein sires. Those two changes boosted production, but it was clear that the genetic gain made over a decade was not in line with a grazing system. Both production and fertility would be compromised during the summer. However, the challenges sparked the desire to invest and become more efficient.

A large step towards growth and sustainability

In 2011, a complete turnaround happened: a new mattress-bedded free-stall barn for 500 lactating cows was built (there is no production quota in Brazil). Along with the change for the cows, came the investment into biodigesters. It was a turning point for the business; very well aligned with the philosophy that producing high-quality and safe food for their customers was tied to practices that are similarly good for the environment. The project was designed around an efficient waste management system – this is why they did not go with sand bedding. It proved to be the best decision with the investment paid back in 2.5 years instead of the 5 initially planned. The methane generated was enough to supply the basic electricity demand at the farm, however, the benefits of the project were much greater than the savings from power generation.

Optimizing every aspect of the operation

Besides the power generation, the solids that are separated from the liquid portion is either used as compost or directly as fertilizer in the fields, while a fertigation system uses the liquid part of the digester. They drastically reduced the need for extra fertilizer, and decreased the raising and feed costs by using the grass area to keep yearlings and dry cows. The excess grass goes to the lactating cow diet.

With the cows adapting to the new system, production went up 30% right away, but genetics became a limiting factor as the heifers that started to calve showed much more potential than the older cows.

Still, culling was limited due to the need to fill up the stalls. To solve that, the farm decided to invest in higher genetic merit. Initially, they bought some heifers for the short-term, but the longer-term strategy was to buy embryos from a Master Breeder herd that had a similar breeding philosophy. With the new barn giving better conditions, they also began breeding cows more aggressively with better bulls.

More changes and more growth

In 2014, another important change: Amauri's daughter, Anna, joined the business. This triggered investments to improve. First, they developed a 220-cow deep-bedded free-stall with shavings, followed by a compost pack for dry, pre and postpartum cows, and late pregnancy heifers. With the growing herd, the parlour became a bottleneck, so they built a rotary that could accommodate the expansion while allowing better working conditions for the employees. Another impactful improvement happened in the calf barn: from an outdoor system to elevated individual hutches under a shed. The initial goal to reach 750 cows was raised to 950, which was possible as they bought out a smaller herd and also more embryos. Meanwhile, the first groups of heifers born from embryos were already old enough to be donors as well.

Besides the improvements directly affecting the animals, the environmental aspect was not left behind. The farm invested in two major projects: a rainwater collection system and a water treatment station. All the water used to wash the parlour and holding pens comes from the collection system, and it is then reused for flushing the barns' alleyways.

The influence of Canadian genetics

The management team emphasizes that Canadian genetics has had a very large contribution to herd improvement, especially during the last 10 years.

Since the decision to invest in better bulls and embryos, they have maintained a strong partnership with the local Semex distributor, that works along with the management team.

In addition, the herd that provided embryos heavily used Canadian genetics for several years. The partnership, along with the investment in higher genetics, quickly showed value. Year after year the groups of heifers would excel in terms of production and conformation.

Today, the herd keeps an aggressive breeding strategy, using sexed semen on the best heifers and first lactation cows, and also produces embryos from the elite heifers and a few lactating animals. Still, they try to avoid disrupting the regular breeding program as much as possible - after pregnancy confirmation, they collect oocytes for embryo production twice, no matter how good the heifer is. Along with management improvements, the higher genetic merit has boosted production by about 20% over the last 6 years. The consequence of better use of resources and higher margins is the possibility to continue investing in the business and thinking about expanding the herd.

Thinking ahead

The farm just started up an on-farm processing plant. Initially producing whole, 2%, 1%, zero fat, and A2A2 milk (from one of the lactating groups), and butter. Yogurts and fresh cream are to be launched, while cheeses should be on the shelves down the road. The farm has received animal welfare and environmental certifications, which stamps the work well done, in line with their philosophy of producing high quality food while environmentally and people friendly. And the investments have been paying off. With higher aggregated value on their product, further expansions are coming: two new pack barns are getting ready to house all the young stock, while another free-stall barn for 500 lactating cows is on the plans.

BRAZIL

BOM RETIRO FARM
Minas Gerais, Brazil

OWNERS: Amauri Costa and Anna Scarpa

 # COWS MILKED: 970

 # ACRES FARMED: Directly for the dairy farm is about 2,500 acres (including preserved areas). They farm a total of 7,000, including cash crop and beef

FACILITY TYPE: Free-stall and Compost Pack

HERD PRODUCTION AVG: 10,300kg/ lactation

OTHER BREEDS IN HERD: No other breeds

COMPARABLE HC SERVICES USED: Genomics and Registration

Updated Herd Performance Trend Reports

THE HERD TREND PERFORMANCE REPORTS are a great way for you to track the genetic progress of your herd over time. For those not familiar with them, they are available by clicking on the Performance Trends tile in the dashboard (main page) of your web account. Several graphs are paired into the genetic composition and the performance of your animals, including production and conformation. This allows you to identify bottlenecks within your genetic improvement, as well as identify aspects where management may be lacking attention. For example, your cows may not be reaching their potential for feet and legs; this could be an indication of lack of or improper hoof trimming, excessive moisture on the alleys, or stabling and comfort issues.

Whenever looking at these trends, keep in mind that the genetic trend is constantly updated with the animals born each year, while the performance trends consider the lactating animals milk tested and classified during that year.

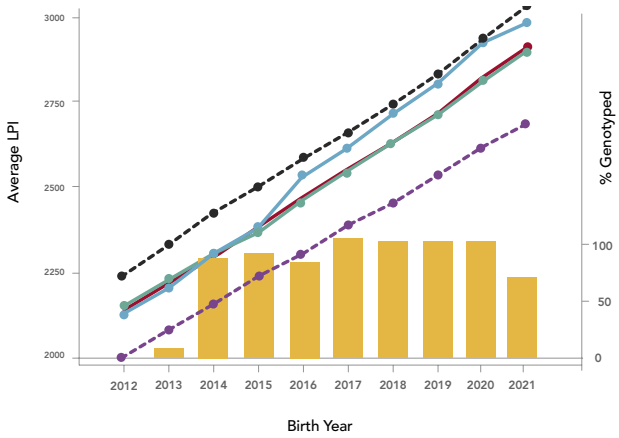
That means your young calves are going to be the ones making up the most recent averages, while your cows represent the performance trend (so animals born 2+ years ago).

WHAT IS NEW?

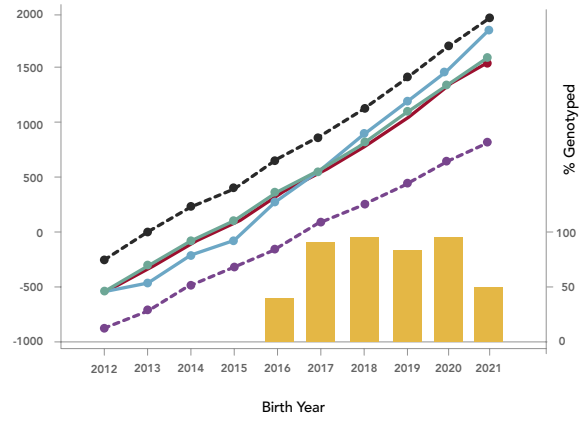
The genetic trends graphs now carry information on the percentage of animals genomically tested according to their birth year. The yellow bars on the bottom show the proportion of the females born each year that are tested – note the values on the vertical axis on the right side. In the example graphs, one herd started testing close to 100% of the females in 2014, and a couple of years later, they had a large jump on LPI. The other one is testing and using the information for mating and culling decisions since 2017. The strategy has been working well as their Pro$ average has drastically increased compared to the breed gains.

This type of information is particularly helpful to allow producers to easily visualize the added value of genomic information and how it is impacting the genetic progress of the herd. Obviously, the impact on performance is not immediate, but we expect that using genomic testing with a well-designed mating and selection strategy will pay dividends in the form of both better genetics, and improved performances as these genetically superior animals enter your milking herds. The other herd slowly started genotyping in 2012, with a strategy around it. Soon, the herd average production ramped up. Later, expanding the use of the tool brought their genetics even further, which has been consistent with the actual performance of the cows.

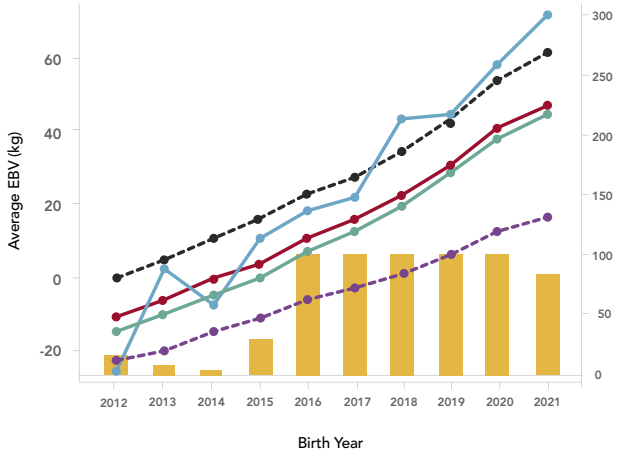
LPI



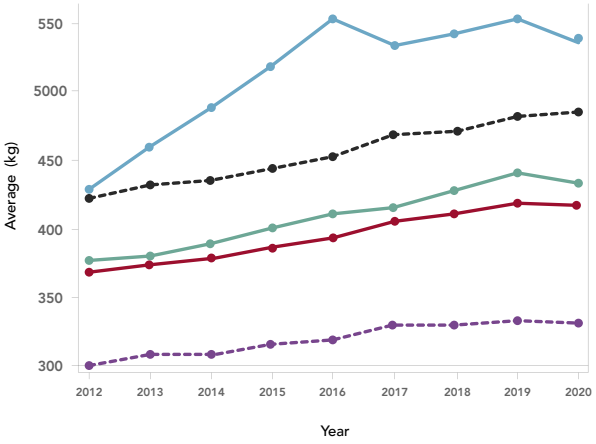
PRO$



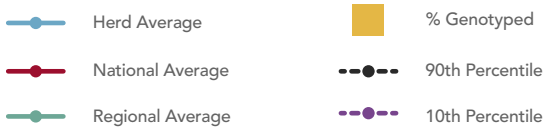
GENETIC FAT (GENOTYPE)



305 DAY FAT (PHENOTYPE)



LEGEND



Show Classes

FOR 2022

SUMMER CALF
June 1 – August 31, 2022

SPRING HEIFER
March 1 – May 31, 2022

WINTER HEIFER
December 1, 2021 – February 28, 2022

FALL HEIFER
September 1, 2021 – November 30, 2021

SUMMER YEARLING
June 1 – August 31, 2021

SPRING YEARLING
March 1 – May 31, 2021

WINTER YEARLING
December 1, 2020 – February 28, 2021

FALL YEARLING
September 1, 2020 – November 30, 2020

WINTER YEARLING IN MILK
December 1, 2020 – February 28, 2021

FALL YEARLING IN MILK
September 1, 2020 – November 30, 2020

SUMMER 2 YEAR OLD
June 1, 2020 – August 31, 2020

SPRING 2 YEAR OLD
March 1, 2020 – May 31, 2020

WINTER 2 YEAR OLD
December 1, 2019 - February 29, 2020

FALL 2 YEAR OLD
September 1, 2019 – November 30, 2019

JUNIOR 3 YEAR OLD
March 1, 2019 – August 31, 2019

SENIOR 3 YEAR OLD
September 1, 2018 – February 28, 2019

4 YEAR OLD
September 1, 2017 – August 31, 2018

5 YEAR OLD
September 1, 2016 – August 31, 2017

MATURE COW
Prior to September 1, 2016

LONGTIME PRODUCTION
70,000 kg

Received comments and feedback at four major shows across Canada in 2021. The Show and Judging Committee listened to what you said and took all comments into consideration. The new class structure was approved by the Board of Directors and respects the mandate received by the committee.

Recognizes the important evolution of the animals during their first lactation

Changes are in line with current classes on both sides of the border

Heifer class names have been changed to reflect the season in which the heifer was born

Maintain flexible and aligned classes throughout the year at all show levels

Changes will be effective for the 2022 show season

Changes will facilitate a more open discussion with American partners

Thank you to everyone that provided comments and feedback.

Altona Lea breaks a record!

10 Generations EX from the same prefix!

After earning their 4th Master Breeder shield in 2020, the team at Altona Lea ended 2021 by breaking a record. Their cow **Altona Lea Classic Jazz** was classified EX on December 6, just 17 days after her 3rd calving, thus completing the 10th consecutive generation of EX cows bred by Altona Lea! The 1st of this line, **Altona Lea Starlite Harriett EX 9 ***, had classified EX 44 years earlier, almost to the day, on December 2, 1977.

Congratulations to Team Altona Lea for achieving this feat!

In the photo: Frazer Puterbough, Glenn Barkey and Holstein Canada Classifier, Carolin Turner.
Jazz calved for the 3rd time while the family was in Quebec for the National Show and Master Breeders Gala, receiving their fouth shield. She had a Milano heifer that twas delivered by the great team back home and got off to a great start! She is weaned and doing well.

2021 COW of the YEAR Competition

This April at the National Convention in Saskatoon, the 2021 "Cow of the Year" will be unveiled. This year, the committee is proud to take a new approach to showcase exceptional cows that the public does not necessarily already know.

In early January of this year, Holstein Canada's Herdbook system generated a list of Canadian cows that met a series of specific criteria established by the committee:

- Having a Lifetime Milk Production of 80,000 kg+
- Being above the national breed average for Fat
- Having a Classification Final Score of 92+ points
- Having at least 3*
- Having calved and/or having been in milk and/or having had progeny in 2021

The owners of these fantastic cows were contacted to invite them to officially enter their animal in the contest. Once registrations are closed, the Cow of the Year committee will choose four (4) finalists and the winner will be voted on by Master Breeder herds from previous years. Upcoming details will be published on our social media. Stay tuned!

young LEADER PROGRAM

2021 Holstein Canada Education Award Winners

MACKENZIE SHEPARD, NB

Mackenzie is from the small town of Keswick Ridge, New Brunswick. Although she is not from a dairy farm, she has been passionate about the dairy industry ever since she started participating in the local 4-H club and eventually working on some different dairy farms in the area. Her passion has only grown over the years and it led her to pursue an Agricultural Business Degree at Dalhousie's Faculty Of Agriculture. She is currently in her third year and cannot wait to graduate and use her knowledge to pursue a career in the dairy industry.

COLE RADBOURNE, ON

Cole is a third-generation dairy farmer on Havalon Farms, located just outside of Allenford, Ontario. He graduated from Animal Biology, University of Guelph, and is currently completing his first year at the Ontario Veterinary College, where he plans to remain working in the dairy industry. As a former 4-H member, Cole has worked in the dairy industry all his life, and knew from a very young age that this was the fit for him. He has worked as a herdsperson for multiple herds before taking roles as animal care specialist and Genetic Advisor for different AI companies in Southwestern Ontario. Cole wants to use the experience he has gained over the years to help out dairy producers and give back to the industry that has played such an important role in his life, being very grateful to all the people that have helped him get to this point.

ISAAC BOONSTOPPEL, MB

Isaac has been involved in the dairy industry since a young age, being a 4-H member for over a decade. He is currently pursuing a diploma in Animal Science in Dairy from Lakeland College in Alberta and planning an Agribusiness degree from the University of Saskatchewan. While completing his studies, he has worked at different dairy operations in the area. Thinking ahead, Isaac plans to take over the family farm but before that, he plans to accumulate experience by working at different herds in Canada and abroad.

MICKAYLA RINGELBERG, ON

Mickayla is currently in her first year of the DVM program at the Ontario Veterinary College. Growing up on her family's dairy farm in Troy, ON ultimately sparked her passion for the agricultural industry and veterinary medicine. She has participated in 4-H, and has had the opportunity to volunteer within the community for several years. More recently, she has worked in the Population Medicine Department at OVC for the last 3 summers, which strengthened her desire to work with producers and industry partners to improve the industry as a whole. Becoming a food animal veterinarian is the primary goal of her career, and returning the knowledge and generosity to the industry is a plan for the future.

ALEXIS VERMETTE, QC

Since he was young, Alexis has been involved in agriculture through his family farm in Saint-Gervais, QC, and the desire to make a living as a dairy farmer has developed. He went to college at the ITA in La Pocatière to deepen his theoretical and practical knowledge in addition to expanding his network for his future in the field. Getting out of his comfort zone helped him to develop new skills while improving aspects of communication with his peers to understand each other. As he concludes his studies, Alexis wants to be full-time at the family farm while being actively involved in the Bellechasse agricultural community. Eventually, he plans to become a shareholder of the farm and continue the work his parents are doing to continually improve the business over time.

GAËLLE BERGERON, QC

Gaëlle comes from Saint-Édouard-de-Lotbinière, QC, where she has been very involved in the family farm since a young age. She has actively shown cattle for years, winning a variety of junior prizes. The interest in agriculture brought her to pursue a diploma at the ITAQ in La Pocàtiere, which confirmed her desire to work in the industry in the future. She plans to attend university to study agronomy. Gaëlle has always been particularly interested in the field work and the feed production part of the business. By studying agronomy, she can actively be part of the family farm but also build a career as an agronomist in the industry.

Holstein Insider

DEPARTMENT UPDATES

Human Resource Department Hiring Process

Holstein Canada is always looking for people to join our team of passionate and knowledgeable Classifiers. Keeping 25-30 people on the road is a big job!

BUT DID YOU ALSO KNOW THAT HIRING IS A 3 STEP PROCESS:

1. **Introductory telephone call with Human Resources, you can ask questions and learn more about the job**
2. **Video meeting – you review photos and talk cows, showing us your understanding of the classification program**
3. **On-Farm interview – show your knowledge and cow skills on-farm**

New classifiers take part in a **thorough and dedicated training process,** customized to their knowledge and needs.

- The first week is spent in the Brantford office – get important training and information about our services; meet all the head office staff who support the field team; collect equipment, vehicle, etc.
- For the next 6-10 weeks, training is on-farm with other classifier team members – to build relationships and gain experience from experienced team members

Over the initial training program, the new classifier evolves from ***job-shadowing → participating → performing the role.*** There's always a supportive team member at their side and lots of time to ask questions and learn. Development happens at the pace of the individual!

Do you think you have the keen eye of a classifier? Contact us with your resume to set up an initial call. hr@holstein.ca

If you aren't sure if you have what it takes, but you want to give it a try… look for our ***Try Your Hand At Classifying workshops!*** They are a fun way to brush up on your program knowledge, meet classifiers, score cows and ask questions. You can try classifying, with no commitment on your part. If you like it and you want to learn more, we can set up an online meeting to talk further.

What's Happening in the Finance Department

The first quarter is always a busy time for the Finance team at Holstein Canada. Once the books of account are completed for the year, the Finance team and the Audit team from KPMG start our annual year-end audit at the end of January. Just like last year, all the work this year will be conducted virtually through emails, video calls and exchange of documents and analysis via KPMG's secure document portal. The draft financial statements are presented to Holstein Canada's Audit & Finance committee in March and KPMG outline their procedures and findings from the audit. Following committee review, the audited statements are provided to the Board of Directors for their final review and approval before they are included as part of the Association's Annual Report to be presented at our AGM, April 23, 2022. Alongside Holstein Canada's audit, the Finance team is also working on the year-end audits for the Holstein Canada Ontario Branch, Ayrshire Canada and the Canadian Brown Swiss and Braunvieh Association since we provide accounting services to these organizations throughout the year.

Legendary Linda

Linda Markle, Assistant CEO/Manager, Herdbook & Genotyping Services celebrates 45 legendary years with Holstein Canada. She worked in all three of the Holstein Canada buildings, has worked for 5 different CEOs, and manages the largest department in the office. At one point in time, she managed 60 incredible staff members! This great lady of the industry is one of the key figures of the National Identification Program and many other great projects. As a member, colleague or friend, you know Linda for her accessibility and her generosity. Congratulations Linda and thank you for dedication to the dairy industry!

Based on 1st Lactation Classifications October 2021 - November 2021

Top 10 Sires for Health and Fertility with 100+ Daughters Classified in Two-Month Period

Sire	Daughters Classified	Sire Health & Fertility	Avg. Final Score of Daughters
MOEMONEY	106	580	80.6
BLOOMFIELD	105	562	80.1
GALAHAD	118	561	80.5
ALBUM	386	542	79.7
BLUFF	101	534	80.3
DELTA-LAMBDA	124	524	81.6
CONTROL	137	524	81.1
KINGPIN	202	515	81.5
BOMBERO	149	515	80.1
CARDINALS	236	515	79.6

Top 10 Sires for 305d Fat Production with 100+ Daughters Classified in Two-Month Period

Common Name	Classified Daughters (100+)	Avg. Final Score	Average 305-Day Fat
FUEL	136	81.1	425.6
SEABISCUIT	172	81.6	419.5
MIDNIGHT	120	80.3	413.8
DELTA	165	81.0	413.6
LAUTRUST	423	80.9	398.6
BREWMASTER	132	80.9	397.6
THOREAU	159	81.2	396.8
KINGPIN	118	81.4	388.2
RUMMY	133	80.9	384.6
CRUSHABULL	103	82.8	380.3

NOTE: Daughters are included in the statistics if they had their last milk test in the last three-month period.

CLASSIFICATION SCHEDULE

MID-ROUND MR

FEBRUARY

EARLY
- QC Riviere-du-Loup, Rimouski, Matapedia, Temiscouata, Bonaventure
- BC

MID
- ON MR Compton, Richmond
- QC Megantic

LATE
- ON MR Thunder Bay, Northern ON, Prescott, Carleton, Russell, Dundas, Brant, Haldimand, Norfolk
- ON Leeds, Lanark, Renfrew, Grey
- QC Iberville, St-Jean, Shefford, Brome, Missisquoi, Sherbrooke, Stanstead
- QC Arthabaska, Megantic

MARCH

EARLY
- ON MR Glengarry, Stormont, Niagara, Wentworth
- ON Leeds, Lanark, Grey

MID
- ON Bruce, Renfrew
- QC Pontiac, Wolfe, Lotbiniere

LATE
- ON Perth, Grenville, Huron
- QC Nicolet, Yamaska, Drummond, Rouville
- NB
- NS
- PEI
- NL

APRIL

EARLY
- QC Bagot, St-Hyacinthe, Chambly, Richelieu
- SK

MID
- QC MR Frontenac, Beauce, Levis, Dorchester
- QC Vercheres, Abitibi, Temiscaminguee

Missed out on attending the 2021 National Shows & Master Breeder Gala?

Relive the moments today!

View the photo galleries
flickr.com/holsteincanada

Watch the show classes and Master Breeder farm videos,
youtube.com/HolsteinCanadaVideo

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