

info **Holstein**

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





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ABOVE: On pages 7-9, our Farm Profiles highlight On-Farm Processing operations. On page 18, our Dear Customer Service article is talking about Inbreeding.

ON THE COVER: 'Pete' the dog at Weeksdale Holsteins. PEI - Photo credits to Sheila Sundborg.

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CEO Message

By Vincent Landry, CEO, Holstein Canada

CLUB MEETINGS ARE STARTING and are the perfect opportunity for you, the members, to ask questions and for us to follow-up on the issues you have addressed through various resolutions. At the last Annual General Membership Meeting, we received the 2019 and 2020 resolutions in one year. **Today, I would like to follow-up on a major issue that has generated many resolutions and requests over the past few years; the inclusion of more production data collected by different milking system sensors by the various industry partners.**

Having taken part in each step, I can say that a lot of work has been done so far and that the collaboration on this file has been excellent on both sides. I would like to remind you that this is a 50 plus year legacy of rules, built over time, that have not been put into question. In order to ensure that everything still makes sense in the end, we must validate the impact of all changes. This will allow us to initiate the programming for all of the changes, for each of the organizations, on an IT level.

Let's briefly review the chronology of events for this specific issue:

- The various Breed Associations met with the Lactanet Board to discuss this critical issue.
- A joint Breeds and Lactanet Working Committee was established to develop an action plan.
- Lactanet announced at the Holstein Canada AGM last July, the intention to deliver the changes in 2022.
- The Working Committee mandated the Industry Standards Committee revise the set of rules for the publication and use of various production data to include more production data and to consider its source.
- The Standards Committee is in the process of submitting its findings to the Breed Council and Lactanet for final validation.



In the coming months, we will be able to communicate all the details and impact that this will bring to the producers. Rest assured that every effort is being made to keep our industry aligned with the evolving needs of Canadian Dairy Producers of today, and, tomorrow. 🇨🇦

Vincent Landry

Holiday Office Hours

Friday, December 24	Open ½ day
Monday, December 27	Closed (for Christmas Day)
Tuesday, December 28	Closed (for Boxing Day)
Friday, December 31	Open ½ day
Monday, January 3, 2022	Closed (for New Year's day)

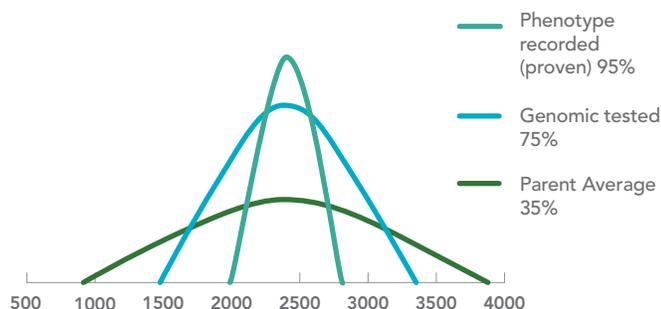
Increasing reliability with genomics to achieve your goals

SINCE THE COMMERCIAL LAUNCH of genomic testing in 2009, the rate of genetic gain has increased drastically. The two main factors allowing for this increase are higher reliability predictions along with shorter generation intervals. In simple terms, genotyping has allowed breeders to select for better animals to be the parents of the next generation at a younger age, and with higher accuracy. Along with reproductive technologies (IVF, ET, sexed & beef semen), genomics has drastically accelerated genetic gain on the female side. Each producer has the opportunity to increase their odds of selecting the best heifers to create future replacements from. This results in more profitable options for what to do with the rest - breed to beef, or even cull and save on feeding and housing costs. On the male side, the utilization of young bulls rapidly increased to record levels because breeders have recognized the opportunity to improve rates of genetic gain.

Starting from the basics: what is reliability and what does it represent?

In genetics and breeding, we say that the reliability of a trait increases once the animal is genotyped compared to Parent Average (PA). Simply, the reliability percentage is a measure of the accuracy of the prediction with higher values indicating greater reliability. Genotyping an animal allows you to be more confident in the prediction as we remove as much of the environmental influence as possible from our predictions, focusing on the DNA. The graph below is a visual representation of what a Pro\$ prediction of \$2400 means for different reliability levels. We see the range of values shrink as we add reliability to our predictions. Genomic testing a calf at birth eliminates roughly half of the range in her expected profitability over the first 6 years of her life,

Phenotypic Pro\$ range for 9 out of 10 animals with \$2400 prediction according to different reliabilities



allowing more precise decision making for her future.

Building a strategy for your herd – do not put all your eggs in one basket

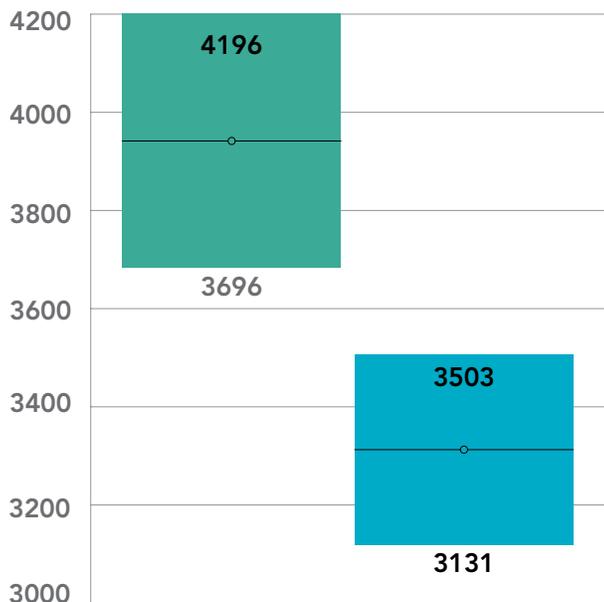
You may remember when AI companies would sell semen from young sires at a substantially discounted rate and also incentivize the classification of their daughters. This was common because the reliability of a bulls PA was low (30 to 35%). With a PA that low, the risk of 'putting all your eggs in one basket' became too high. Once these young sires' daughters started to calve, we would frequently see those sires removed from AI because their progeny were subpar. Now, the reliability gap between the predictions for a young genomic sire and a newly proven sire is much smaller. This is good news, as you can confidently take advantage of young bulls superior genetics in a safe way, by following this simple and essential strategy: Hedge your risks when using lower reliability genomic bulls by using a greater number of them. This means you are not going to breed all your cows to one or two bulls for half of the year, but use a group of bulls instead. Lower reliability means that the actual performance can be further from the prediction (higher or lower). You will find some genomic bulls may deliver some daughters below average, while others overperform. In the end, the reliability for the group average is high, which means that the average performance for the group of daughters is close to the prediction. This table helps to illustrate the idea; the reliability for a group of 3 bulls is similar to one recently proven bull. So, as a rule of thumb, for every proven bull that you would select in the

Number of young bulls in the group	Group Reliability (75% average individual)
3	91.6%
4	93.8%
5	95.0%
10	97.5%

past, aim for 3 or 4 young genomic bulls.

You are already familiar with setting genetic criteria that a bull must reach in order to be included in your breeding program. Now consider adding a minimum group size for young genomic bulls to increase reliability! In the past, if you were comfortable using 3 or 4 proven bulls at any time, increase that number to around 10 young genomic sires at any one time. This allows you to take full advantage of young bulls superior genetics, while

Top 20 Young (green) x Top 5 Proven (blue) Pro\$ average and range according to group reliability



controlling risk at levels comparable to highly proven bulls.

If you are looking at top tier genomic young sires, the gain achieved from selecting a group of these with higher potential (but slightly lower reliability) will outperform the top proven sires. The graphs illustrates this well – if you were to use the current top 20 young sires for Pro\$, the average sire contribution would be between \$3696 and \$4196, while the sire contribution of the top 5 highest proven Pro\$ sires would be between \$3131 and \$3503.

You can still take advantage even using just proven bulls

We talked a lot about young genomic sires without mentioning the female side. It is easy to blame the sire for a subpar heifer (or cow), but you must keep in mind that it is about the mating. A not-so-good dam will drag a good bull's progeny down, and even two good parents may not result in the best offspring. In consequence, this is often a reason producers completely stop using young bulls – sometimes, personal beliefs play a role too. If you are skeptical about using young genomic sires, the good news is that you can still benefit from genomic testing, by using it as a tool for different purposes.

One tool, several possibilities

The essential recommendation for everyone using genomic testing is to define clear goals to build a strategy around. In that

sense, we see producers with several different approaches. Some producers use genotyping on heifers that fall in the “mid-pack” to re-rank them and potentially find a cutoff point to select the ones not to raise. This method has a clear and immediate economic impact especially for herds that have an excess of replacement heifers. This strategy is limited in that the full value of genomic testing is not realized on the best heifers that are going be used to create replacements. More and more we see producers extending genomic testing to larger groups of animals with the goal of not only deciding which animals to keep, but also to make better breeding decisions. This may include selecting heifers for sexed semen, beef semen, or to do ET/IVF. The benefits of genomic enhanced breeding values, correcting parent errors, haplotype and genetic recessive statuses benefit your best animals the most, as they drive the future of your herd.

A broad breeding strategy based on genomic results is a profitable, long term investment and has the ability to drastically increase your herd's profitability. This is due to two main factors: more accurate selection of the dams of the next generation; and more reliable and detailed information on traits that need to be emphasized in your breeding program. Breeding heifers solely based on the observed weaknesses of their dams is not optimal because these weaknesses may be environmental and not at all genetic, and the reliability of the parent average is low. The table helps illustrate how the higher conformation prediction translates into better scores in the first lactation; roughly, every 1-point increase on the Conformation EBV results in 0.5 higher average final score.

EBV Confirmation	0	2	4	6	8	10	12
Final Score Average	79.6	80.5	81.4	82.3	83.2	84.0	84.6

Take home messages

Altogether, the greatest impact of genomics is increasing the reliability of genetic predictions, which is proven to translate to faster genetic gains. You have seen it is possible to keep your risk very low with changes to old strategies. Even for those more skeptical about young genomic sires, there are impactful ways to use this profitable tool. We must always remember that one mating is not the solution for all of an animals weaknesses, and the dam is as important as the sire. There is no zero-risk investment, but a simple, well-designed strategy can hedge your risks while selecting the sires and dams of your future replacements based on genomic predictions to increase your herds long term profitability and longevity.

On-farm Processing Operations

By Morgan Sangster, Field Service Business Partner, Western Canada; Amanda Comfort, Field Representative, Holstein Ontario; Émy Lampron, Advisor for Eastern Quebec, Holstein Québec.

Sunnyside Dairy/Sunnyside Creamery/Farmyard Market

Being a small farm and the desire to both work at home, prompted us to make the jump to direct farm sales, rather than one of us working off the farm to supplement our income. We felt that our location along a busy highway and in close proximity to three urban centers was well suited to direct farm sales. Everything we have done with our farm is because of our location.



It all started with Martha making and selling pies and perogies from our milk house freezer, then we started raising our bull calves for meat and buying some feeder pigs for butchering, which required more space for housing. Our initial investment was fairly modest and involved converting our detached garage into a store. Getting into on-farm milk processing meant a much larger investment and navigating many regulatory requirements involved with that. After our first year, we expanded the creamery, added a commercial kitchen, and hired a kitchen manager.

Other challenges were developing products, learning to work with suppliers and managing staff.

Overall, our customers seem very thankful for the opportunity to come out to the farm to buy milk and other food products, and to be able to interact with the animals and the folks who look after them.

Customers appreciate the hard work and dedication that goes into producing and processing food.

Recently, we had a customer who thanked one of our cows by name for producing their milk. Selling from the farm definitely improves the image of dairy production.

It's not really our goal to stand out but rather to stick around as a small dairy farm in an industry that sees increased consolidation of smaller dairy farms into larger production units. We really enjoy the purebred Holstein industry and hope to be able to continue to be part of it for a long time to come. Farming is a long-term commitment and anything we do to diversify has to fit that mold.

Hard work is key to our success and we take pride in being the first dairy farm in Saskatchewan with an on-farm milk processing facility and to offer pasteurized whole milk on tap. We often hear the words "you are a one-stop shop." Our on-farm store carries products made right here on our farm. Baking, canning, soups, pies, perogies, prepared meals, chocolate milk, yogourt, cream, curds, and so much more.

With the help of our staff, we hope to continue to improve and expand on what we do, give more farm tours, hold more music festivals, and maybe even start to look forward to some down time!



West



SUNNYSIDE DAIRY
20 minutes north of Saskatoon

Owners: Bas and Martha Froese-Kooijenga

PREFIX: Cornerstone

PEOPLE INVOLVED: Bas and Martha, 3 full time staff, 2 part time/casual

OF COWS MILKED: 34

OF ACRES FARMED: 80 acres, 80 acres rented

FACILITY TYPE: Freestall with access to outdoor straw pack in winter.

HERD PRODUCTION AVERAGE (L/cow): 34 kgs

WHAT IS YOUR FEEDING SYSTEM? Pasture and free choice hay in summer months, free choice hay in winter months. Prepared ration during milking.

ARE THERE OTHER BREEDS IN YOUR HERD? No

HOLSTEIN CANADA SERVICES USED: Registration, Classification, Genotyping, Animal Inquiries, Classification results.



Quebec

BOUCHARD ARTISAN BIO
(previously known as Ferme Des Chutes)
Saint-Félicien, QC

PREFIX: LISU

PEOPLE INVOLVED: Carl Bouchard, Annie Bouchard, Valérie Lefebvre, Suzie Brassard, Gérard Bouchard, Lyse Rosa, Rodrigue Bouchard & Pierre Bouchard

OF COWS MILKED: Approx. 100 cows

OF ACRES FARMED: 370 hectares, including forages & cereals (305) and organic wild blueberries (16)

FACILITY TYPE: Free-Stall

HERD PRODUCTION AVERAGE: 600,000 litres per year (organic milk)

ARE THERE OTHER BREEDS IN YOUR HERD? No

HOLSTEIN CANADA SERVICES USED: Registration & Classification

Almost 50% of our milk production is processed through our cheese factory; we make various products, including many different types of cheeses and yogurts.

Bouchard Artisan Bio (previously known as Ferme Des Chutes)

In the early 1990s, Rodrigue, Gérard and Pierre Bouchard set up their cheese factory to promote organic milk. At that time, there was no real distinction between organic and conventional milk. They produced high quality milk and they thought it was a shame that it didn't reach the consumers directly. They turned to selling direct from the farm as a way to add value to their product.

Artisanal micro-cheese factories did not actually exist in Quebec at that time. The administrative part was a crucial step in setting up the cheese factory. When the cheese factory was launched, no changes or investments were required at the farm. In fact, the cheese factory had to adapt to the farm's conditions. Even today, the cheese factory is entirely dependent on the farm's production conditions as the cheese factory only buys milk from the farm and is dependent on the farm's production.

Selling direct from the farm is part of what sets our family business apart. We can control our milk production and our milk processing from A to Z.

We have a very artisanal process at Bouchard Artisan Bio; we limit handling as much as possible so that the good taste of our milk is found in our various products. Nowadays, people are very concerned about where their food comes from and we can cater to this growing customer base. However, our biggest

challenge is by far our remoteness from the major market outlets. We are located quite far from densely populated areas. With our remoteness comes high transportation costs as well as limiting transportation factors as our products must be refrigerated. It is also important to note that the freshness of our products is significantly impacted by this type of transportation.

There is no question that you have to believe in what you are doing, have a solid project, and put in the work to be successful. In order for this venture to last, we think it is very important to focus on the marketing of our products and not underestimate it. Before starting such a project, you need to have a client base and a quality product they will like.

Teamwork and a strong sense of family are essential to the smooth operation and success of our cheese factory and our farm. Everyone is assigned a task that fits their strengths and interests.

We are very proud to be an organic farm since 1978 and everyday, we strive to work towards the continuity and sustainability of our businesses. We are currently wondering about adding new products to our cheese factory and as for the farm, we will keep farming organically with the health of our animals and of our soil at heart. This is our guiding principle; it is rock solid and we will stick by it.

Walker Farms

We have been toying with the idea of building our own brand for over 5 years now. With the new trade agreements placing more pressure on the dairy industry in Canada, it felt like the timing was right to greenlight the endeavor. Like most new startups, building a brand from scratch is difficult and an ongoing process. The biggest challenge was educating consumers on both our milk and the entire landscape of the dairy industry. People want to support local, farm fresh products so conveying that was essential in our branding. The great part about a farm selling directly to consumers is the connection you are able to have with them. Consumers always have questions about where their food comes from and how it's made, and this farm to table relationship gives them an opportunity to directly ask the producers these types of questions. We love having a dialogue with the consumers and we feel they appreciate being able to voice their comments and concerns right to the farmer. This way, they get a more genuine image of the farm and how the food is made. Having the Walker Dairy Bar in Aylmer, just 5 minutes from the farm, as the location to buy our milk, along with other local products, has been a great place to have these conversations with our customers.

We set this up as a new, separate start-up business and we plan to manage and operate it that way going forward. Of course, it is connected and intertwined to the farm, but it has to be able to operate as a stand-alone operation with its own people, planning, and business objectives.

We just completed the plant in June of this year, so that came with a multitude of unforeseen challenges as do most new builds. Building and sourcing equipment through a pandemic was challenging. There was a large learning curve in operating the equipment as well. Luckily, we had great support with our suppliers to help us overcome that curve.

Easily, the people and team we have here at Walker Farms are our greatest success. We have challenged them a lot over the past two years to help during this new phase and they have consistently stepped up and performed. We love the culture we have here at the farm and are grateful and proud of our team.

Going forward, keeping the cows happy and healthy is always the priority, so this means adapting and making changes to increase cow comfort and health in the herd. We will continue to grow our brand moving forward and possibly grow the product line to include new and exciting products that consumers want.

Ontario



WALKER FARMS

Aylmer, ON

PREFIX: FUTURECREST

PEOPLE INVOLVED: 40 Employees

OF COWS MILKED: 1600

OF ACRES FARMED: >3000

FACILITY TYPE: Sand-bedded freestall

HERD PRODUCTION AVERAGE: 34L

WHAT IS YOUR FEEDING SYSTEM: TMR

ARE THERE OTHER BREEDS IN YOUR HERD? No

HOLSTEIN CANADA SERVICES USED: Registration



FEEL THE PULSE

SASKATCHEWAN, APRIL



Wednesday, April 20

- ♥ Fly in to Saskatoon or Regina
- ♥ Social Evening



Thursday, April 21

- ♥ Board the bus for farm tours/alternative tour around Regina or Saskatoon
- ♥ Holstein Sale in Saskatoon

Don't miss a beat

PULSE OF THE PRAIRIES

APRIL 20 - 23, 2022



Friday, April 22

- ♥ Holstein Show
- ♥ Taste of SK



Saturday, April 23

- ♥ Annual General Meeting
- ♥ Master Breeder Gala

eat; stay tuned!

PULSE OF THE PRAIRIES
AU CŒUR DES
CONGRÈS NATIONAL HOLSTEIN CONVENTION 2022



"The Real Dairy Company of Newfoundland" is serving up Real Dairy Innovation in the Atlantic

Brent Chaffey (New World Dairy) and Les Brophy (Brophy's Dairy) are the interim directors and designated producer leads on the development of "The Real Dairy Company of Newfoundland", a producer led secondary processing facility that's proposed to be built in Deer Lake, Newfoundland. This small but agile processing facility will be enough to handle Newfoundland's production requirements and then some. It will allow for quality, value added dairy products to be produced in Newfoundland.

The plant will start out with butter, powder and powder blends, and as things progress they will begin working on other products, including cheese and yogurt. The plan is to use some of the bountiful resources found in Newfoundland to create unique products, including native berries like partridge berries, cloud berries, lingonberries and bake apple. Research has shown that these native berries as well as those berries grown in harsh climates have higher levels of antioxidants and so they would like

to harness that potential, not just for the unique, delicious, flavours, but also for their health benefits.

There were many factors that contributed to the need for a Newfoundland owned processing facility. With the merger of existing processors, there was an overall reduction in processing capacity. Consumer preferences are also changing with more demand for cheese, cultured products and value added beverages, while moving away

from fluid milk. Newfoundland is the only province in Canada that does not have commercial scale secondary processing; there is only on Island processing for fluid milk. These issues led to an uncertain future for the dairy industry in the province. As industrial milk is being shipped off Island to be processed, this also leaves them vulnerable, as poor weather can cause significant shipping delays and product wastage.

The government of Newfoundland has consistently promoted the need for food security and the disruptions in food supply caused by the global pandemic really highlighted that need for Newfoundland to be more self-reliant.

Investing in a processing facility is an opportunity for Newfoundland dairy producers to create stability for their market, provide consumers with high quality local products and to help Newfoundland achieve more food security.

They had tried to attract Canadian processors to the province, and after several years and a lot of money spent, it became apparent that we needed to change how we were going about things. We needed to create something that was Newfoundland driven; something that put Newfoundland dairy producers and consumers first, which led to some unconventional conversations. "While we had a lot of experience as dairy producers, we recognized that we needed to partner with a company that had strengths in product development and marketing, and shared our vision for producing high quality, genuine, locally sourced products. This led us to Richard Walsh and his Irish company Glenstal Foods. Glenstal was already well known in the Canadian market for their cultured products, and we appreciated his honest, down to earth approach.

From there, we created The Real Dairy Company of Newfoundland. We wanted to be able to include producers at

whatever capital investment level that they were comfortable with, and so we're taking a shareholder approach. Once the shareholder agreement is finalized, there will be an elected board with management put in place."

Bricks and mortar are the easy part, and now that they have Glenstal's experience and strengths, they are just waiting on the last of government funding to put the final pieces of the puzzle in place. If that can happen for the beginning of the new year, the project build will start, and in 18-24 months the first products are expected to roll out the door. As mentioned previously, producers have the opportunity to invest in the facility at whatever level they are comfortable with, and there has been a tremendous amount of producer support.

Newfoundland consumers have a strong history of supporting local products, but the attention consumers have given to buying local has taken on a new life since COVID 19.

"We want consumers to want the products because the products are high quality, real and wholesome. Product quality will always come first."

In the grand scheme of things, the plant will be relatively small compared to other facilities in the country, but with the volume produced, they will market outside of the province and hope build the same relationship with consumers outside the province.

"We feel the key to success is first and foremost, to keep this a Newfoundland processing facility driven by Newfoundland interests." This strategy will not only help protect our shareholders but also prevent

the processing facility from being purchased by outside interests. If this project is Newfoundland driven, the hope is that it will have a lengthy life expectancy so that it can provide long term value to the industry and help secure the industry for producers and future Newfoundland dairy farmers.

The small size of the plant is also an advantage. Not being dedicated to a single secondary product will allow us to be more nimble. "We will be able to develop and market different products as consumer demands change, and if certain products underperform, we can drop them from our product line, without large costs associated with redesigning a traditional single secondary product plant."

Our success is quite limited at this point, and won't really be measurable it until we open the doors to receive the raw milk for processing.

"We are extremely proud of the support that has been received for this project from producers, DFNL, the Government of Newfoundland and Labrador, DFC, the Canadian Dairy Commission, and the P5 provinces."

"All have recognized the need for this facility and the significance of the project, not only for Newfoundland, but the Atlantic Dairy Industry as a whole."

"Once the doors to the processing facility open, there are really no limits on where this project can go. This facility can help to secure a future for the dairy industry in Newfoundland and Atlantic Canada." 



"I am so honoured to have been awarded a 2020 Holstein Canada Scholarship. Not only did it provide generous financial support towards my Master's of Science degree focused in dairy calf health and welfare at the UofGuelph, but it also served as a reminder of the support available to those aspiring a career in the dairy industry - something especially encouraging this past year during the Covid-19 pandemic. I am so proud to continue my research and career path in dairy! Thank you, Holstein Canada!"

– Brooke McNeil,
2020 Young Leader Scholarship recipient



My future lies in: Canadian Holsteins

Where does your future lie?

Each year, Holstein Canada invests in six outstanding students. Share your passion for agriculture for a chance to be awarded \$1000.

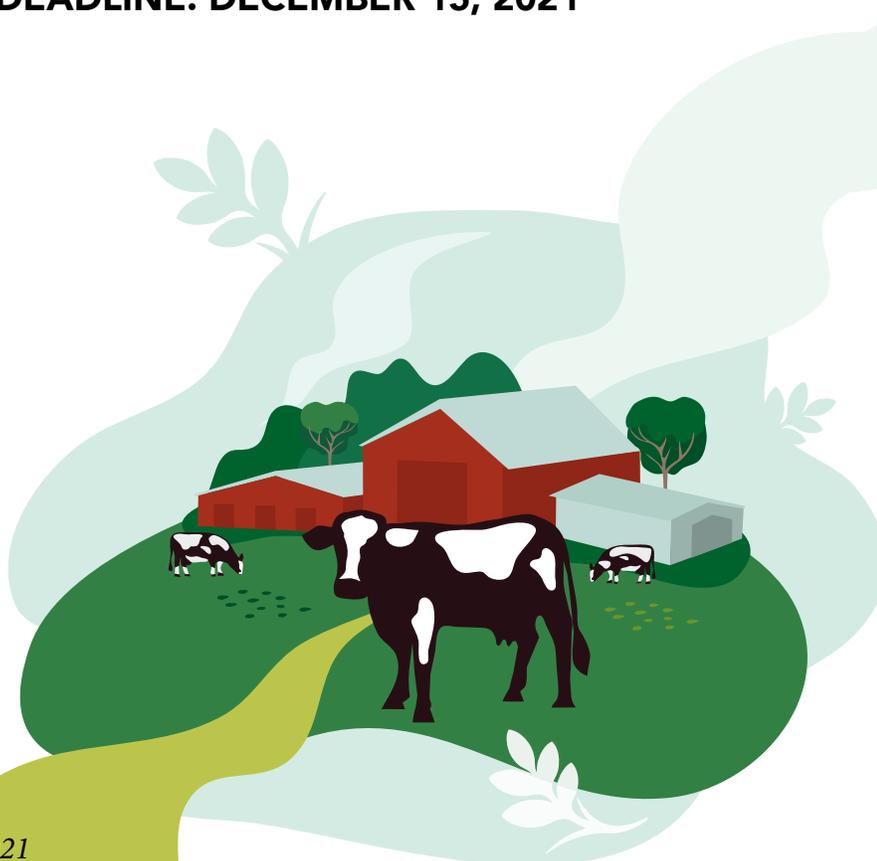
Apply for a Young Leader Scholarship today.

HOW TO APPLY:

Visit www.holstein.ca to read the full criteria and fill out an online application today.

Membership-Programs → Young Leaders Program → Awards & Recognition

DEADLINE: DECEMBER 15, 2021



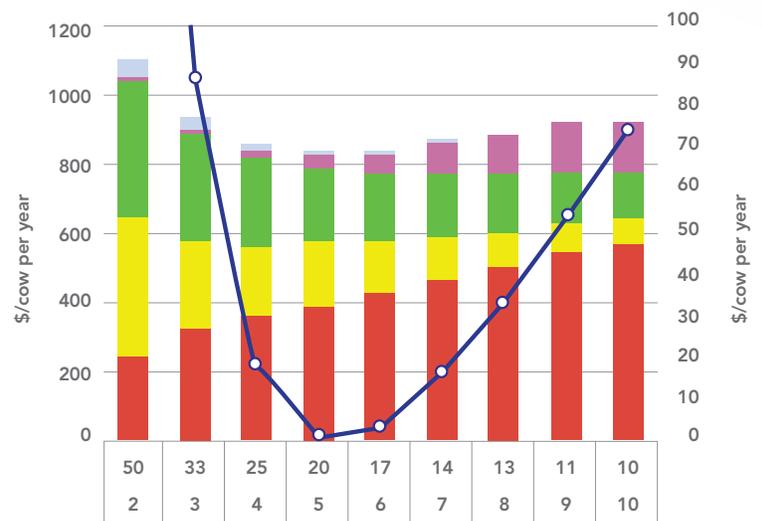
Breeding for Profitable Longevity PT. 2

In the last issue of Info Holstein (digital version: available on our website and our social media channels), we reviewed the updates to the Net Merit formula, and how Pro\$ emphasizes longevity without sacrificing production. The concepts of Genetic Opportunity, Maturity Cost, and Replacement Cost were discussed, and how they play a role in the lifetime profitability of the herd. In this next edition, we get into the practical aspects of how productive lifespan and genetic gain dynamics – how long of a productive lifetime would be ideal considering financial return, and strategies to increase longevity without sacrificing production.

I want more profitability while improving my herd - Where is the sweet spot?

To answer this question, we bring back a graph from an Info Holstein article published last fall, showing that the ideal replacement rate was around 20%/year. This rate translates into a productive lifetime of about 5 lactations and is the point where you have the optimum balance between maturity and genetic gain (if the genetic gain of your herd is similar to the breed's yearly gain). Looking at the table prepared by USDA for the NM\$ update, it agrees with the graph: cows are most profitable in their 3rd and 4th lactations, dropping a little bit in their 5th. Obviously, these values vary between herds, but it gives a clear idea of the missed profits due to shortened lifespan. In a hockey analogy, culling cows very early is like getting the best prospects every year; it will not bring your franchise anywhere unless you keep them in the team until they have the experience to play their best.

Specific scenarios that would justify a slightly higher culling rate would include a mix of high cull cow price, low raising cost, very high production, and/or very high genetic gain between generations. Considering the average lifetime production in Canada is 2.4 lactations, focusing your genetic program on improving cow health, fertility, production, and functional conformation is the best formula to achieve higher lifetime profitability.



- calf value opportunity cost
- aged cow cost
- lack of maturity cost
- herd replacement cost
- genetic opportunity cost
- opportunity from optimal

PROFIT BY LACTATION USED FOR NET MERIT CALCULATIONS

Lactation	NM\$ Trend (\$)*	Mature Return (\$)	Compound Interest (\$)	Profit (\$) **
1	\$98	\$-451	\$-100	\$-65
2	\$40	\$0	\$-105	\$324
3	\$-18	\$152	\$-111	\$412
4	\$-75	\$211	\$-116	\$408
5+	\$-134	\$200	\$-121	\$333

Values in this table are converted to Canadian dollars

*Net Merit Trend takes into account the genetic gain made year-over-year. A similar calculation is made if you use Pro\$

**Profit takes into account the NM\$ gains, mature return and compound interest, plus a constant of \$201 considered an average profit per lactation

How to achieve longevity with high production?

We know that longevity is multifactorial, meaning that it is necessary to deploy efforts on different fronts to increase lifespan. In terms of genetic selection, striving for functionally built, healthier, highly productive, and fertile animals is the way to go. The recent changes in the Net Merit calculation reinforce the need to improve productive longevity, as it is a more accurate representation of real-life profitability in the barn.

The good news for Canadian producers is that since it was launched, Pro\$ takes into account factors such as longevity, health, fertility and age at first calving – as well as production. In fact, NM\$ and Pro\$ emphasize similar traits, but some relevant differences between them must be highlighted. First, Pro\$ uses Canadian economic information to calculate lifetime revenues and expenses per cow. This results in far more accurate predictions of profitability for Canadian herds. In the US, milk prices and composition of dairy herds are very different, translating to a different selection focus. For example, the NM\$ formula carries a severe penalty on dairy strength traits; in Canada, we know there is a positive correlation among some of these traits with lifetime production and profitability. Another advantage of using an economic index like PRO\$ is the flexibility - it can be used as the main parameter for selection as it embodies several different traits, or it can be a filter or decision factor when selecting bulls or females according to your criteria. For example, you can run an initial screening with a few desired traits, and then selecting the highest Pro\$ individuals among that sorted group.

Take-home messages

In barns today, fine-tuning your on-farm processes is necessary to reach sustainable margins, and corrective breeding focusing on profitability is one good tool. Holstein Canada recognizes the need to improve productive lifespan to improve the herds' sustainability and, ultimately, the consumer perception of the dairy industry. It is clear that mature cows return more income (through milk) to what is invested, so it is essential to make sure they reach their "prime", between 3rd and 4th lactations. Finally, the awareness of detailed economic aspects of dairy operations is increasing across the world, and Pro\$ provides a simple and easy tool to help you achieve better production and lifespan. As a member association, we want to be at the forefront of promoting better cows and better herds. 🇨🇦

Understanding the use of DairyTrace

THE CONCEPT OF LIVESTOCK TRACEABILITY IS NOT NEW.

Livestock traceability can be defined as the ability to follow one animal or a group of animals from one point forward and one step back in the supply chain, throughout all stages of its life. This is the importance of animal movement recording and reporting to DairyTrace which launched over a year ago on October 5, 2020.

DairyTrace is a federal responsible administrator, that securely houses regulatory dairy bovine data in addition to proAction traceability data. DairyTrace is an important program that can be used as part of an effective Canadian livestock traceability system. DairyTrace connects the three pillars of a national livestock traceability system

- **Premises Identification (PID);**
- **Animals Identification; and**
- **Animal Movement Reporting.**

The DairyTrace portal and mobile app, allow all three pillars to be connected by recording and reporting traceability events. With reporting to DairyTrace, designated officials can know and quickly access specific traceability information for the protection of animal health, public health, and market access for the dairy industry.

DairyTrace account users can easily submit animal birthdates, also known as tag activations, as well as report the movement of animals, either received to their PID or report the movement of animals that leave their PID. As a producer using DairyTrace, PID numbers and vehicles can easily be added to your address book for reporting to DairyTrace. For users who have activated their DairyTrace account online, the DairyTrace mobile app is free to use for traceability reporting.

If you do not know the PID of departure, please contact the previous owner or sales barn. You can search some PIDs that have been authorised as searchable through your portal under the tab "Premises" and then selecting "Public Premises Search."

From a Dairy Farmer's Perspective: Move-In Reporting Requirements

Listed below is the specific information that would be required to be reported to DairyTrace, within seven days after the day the animal is received at the destination PID:

- The site identification numbers (PID numbers) of the departure and destination;
- The date and time of arrival of the vehicle that transported the animal;
- The ISO tag number that has been applied to the animal; and
- If a vehicle was used, the licence plate number or other identification of the vehicle that transported the animal to the destination PID site.

Please note, if you own dairy cattle or simply have dairy animals under your care or control, dependant upon your provincial law, a DairyTrace account is essential for livestock traceability recording and reporting.

To register and learn more information about DairyTrace, visit dairytrace.ca or contact our customer service agents at **1-866-55-TRACE (1-866-558-7223)** or email us at info@dairytrace.ca



Dear Customer Service Team



Meet Alison - Having grown up on a dairy farm, Alison enjoys speaking with producers on a daily basis. Over the last 4 months, she has been calling producers across Canada to talk about registrations. Recently, there have been great conversations on the added value of registration; from being a time saver by reporting traceability tag activation, to having access to a wide range of information such as pedigree, parent average genetic values, haplotypes, recessives, and inbreeding levels.

1. There has been lots of talk recently about inbreeding – why is it getting so much attention?

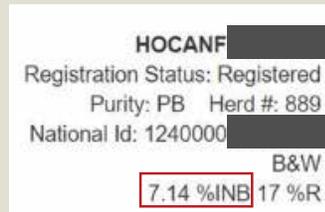
In 2020, the inbreeding average for the Holstein breed reached 8.6% and is growing by a quarter percent a year. The Holstein breed has the highest level of the top four dairy breeds. Several studies have shown that as inbreeding increases, there can be loss of vigour, lower fertility, production decreases and shorter lifespan. All these combined can impact profitability.

2. What is the inbreeding coefficient?

In the early 1900's, breeders knew that breeding related animals produced more consistent, predictable traits. They also found there could be negative effects from breeding closely related animals. A statistic was devised that estimated the level of inbreeding that would result from a particular cross, which gave breeders a qualitative way of evaluating the risks and benefits of the breeding. This statistic was called the inbreeding coefficient.

3. How can I find the inbreeding coefficient (level) for my animals?

All registered animals have the inbreeding level identified when they do an animal inquiry through Holstein Canada. Once you have selected the animal, you will find the inbreeding value in the top right-hand corner of the information page.



4. How is the number determined? What does it mean?

The inbreeding level identifies the probability of inheriting two copies of the same piece of DNA – one from the maternal side and the same one from the paternal side (homozygous) but to know the risk, the ancestors must be included in the database. As the inbreeding value increases, so does the risk of expression of deleterious recessive mutations such as HCD, fertility haplotypes, BLAD.

This is why registration is so important. The more complete the pedigree, the more family history is included in the calculation, resulting in a more accurate estimation. 🇨🇦

Need help? Call us toll-free at 1-855-756-8300 or email CustomerService@holstein.ca.



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Based on 1st Lactation Classifications August 2021/September 2021

Top Sires According to Average Final Score with 100+ Daughters Classified in Two-Month Period

Sire	Daughters Classified	Avg Daus Score	Avg Dam Score
SIDEKICK	182	82.40	82.79
DOORMAN	125	82.02	82.06
UNIX	319	81.84	82.14
IMPRESSION	334	81.34	81.68
DELTA	136	81.06	81.31
HIGH OCTANE	126	81.04	81.93
THOREAU	239	80.98	80.69
MIDNIGHT	126	80.74	80.39
LAUTRUST	307	80.72	81.21
FUEL	206	80.70	80.93

Top Sires According to Average Final Score with 30-100 Daughters Classified in Two-Month Period

Sire	Daughters Classified	Avg Daus Score	Avg Dam Score
SOLOMON	58	82.47	82.53
CRUSHABULL	75	82.27	82.53
DELTA-LAMBDA	70	82.14	81.87
DOC	91	82.04	81.76
UNSTOPABULL	47	81.87	82.55
RAGER-RED	72	81.26	81.43
VICTOR	76	81.20	81.26
DROPKICK	75	81.17	81.32
KINGBOY	70	81.10	81.66
DRASTIC-P	36	81.08	81.14

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**

NOVEMBER

ON Niagara, Brant, Wentworth
 ON **MR** Lanark, Renfrew, Grey, Bruce, Huron
 QC Dorchester, Quebec, Montmorency
 QC **MR** Pontiac, Abitibi, Temiscamingue, Quebec Central, Quebec West
 NB **MR**
 NS **MR**
 PEI **MR**
 NL **MR**

EARLY

ON **MR** Halton, York, Peel, Ontario

MID

ON Lambton, Middlesex, Elgin
 ON **MR** Leeds, Grenville, Simcoe, Dufferin, Victoria, Durham, Perth
 QC Levis, Bellechasse, Montmagny, L'Islet
 QC **MR** Deux Montagnes, Terrebonne, Bagot, St-hyacinthe

LATE

DECEMBER

ON **MR** Waterloo
 QC Kamouraska
 QC **MR** North Shore Central
 SK **MR**

EARLY

ON **MR** Northumberland, Peterborough, Ontario Central,
 QC **MR** Quebec North Central

MID

QC **MR** Portneuf

LATE

This schedule is subject to change within a 1-2 week period. For the full Field Service schedule, see the Field Services section under Services on our website, holstein.ca.



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