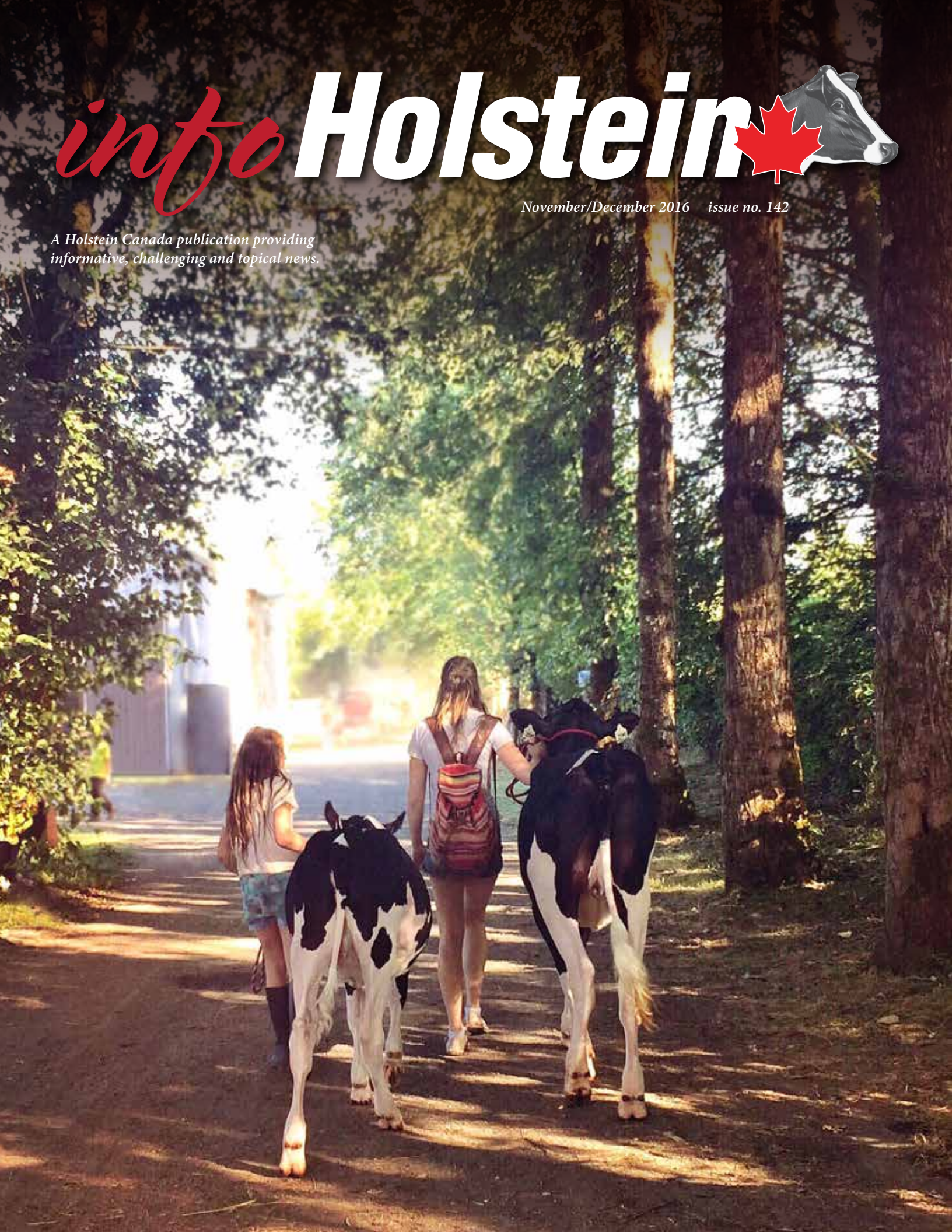


# *info* Holstein

November/December 2016 issue no. 142

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





APRIL 5-8, 2017

# York Region invites you to Experience the City Lights!

Hosted by York Region, Richmond Hill, Ontario



## 2017 NATIONAL HOLSTEIN CONVENTION

### Wednesday April 5, 2017

#### Canadian Dairy Xpo



#### Taste of Ontario National Convention Sale



### Thursday April 6, 2017

#### Ontario Spring Discovery Show



Judge: Richard Landry,  
Ste-Bridgitte des Saults, Que.

#### Don Mills Downtown Alternative Tour (Toronto, Ont.)

**York Heritage Evening and Welcome Night**  
Explore York Region's Rich Holstein Heritage.  
Enjoy dinner with music by *Irwin Smith* of *Ocala Winery*, and a repeat performance of *Hank Sinatra's Moo York, Moo York*.

### Friday, April 7, 2017

#### Farm Tours

##### Humber River Farm Tour

Quality Holsteins      Dandyland Holsteins  
Farisview Holsteins      Earincliffe Holsteins  
Sunny Maple Holsteins      Goreridge Farms

##### Oak Ridges Moraine Tour

Hulsdale Farms      On the Hill Farms  
Belridge Holsteins      Beckridge Holsteins  
Lockmar Holsteins      Beckholm Holsteins

##### Holland Marsh Alternative Tour

Holland Marsh, Cooking workshop, dinner at King Cole Ducks, and Wine Tasting.



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Wear your favorite sports jersey to cheer on your home team, enjoy our buffet dinner and get ready to party with the *James Barker Band!*

### Saturday April 8, 2017

#### Annual General Meeting

##### Master Breeder Gala

The Master Breeder Gala will light up the City with all its glitz and glam.  
Don't miss this prestigious black tie event!

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Visit [events.holstein.ca](http://events.holstein.ca) for complete program details.

★ Registration opens January 9, 2017

2017 CONGRÈS NATIONAL CONVENTION



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**GENETICS**  
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**ABOVE:** Be sure to check out the Farm Profiles feature in this edition of InfoHolstein! In this issue we feature four Canadian herds with a focus on niche breeding. Have a theme you would like us to cover? Let us know!

**ON THE COVER:** Sisters Amelia Lydan and Anastasia Pool-Bouwman take their calves for a walk at Nathan Creek Farms in Matsqui, BC. (Photo submitted by Sabrina Lydan).

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# No Shortcuts

By Holstein Canada President,  
Robert Chabot, Saint-Patrice, Quebec

**AS PART OF MY DUTIES** at Holstein Canada, I have had the opportunity to make a few trips outside the country over the past few months. I was able to witness once again – and with great pride – the admiration of foreign producers for the Canadian dairy industry.

We need to thank previous generations. They put tools in place – such as supply management, performance awards, as well as genetic and phenotypic evaluation programs – that allow us to perform. These tools are some of the best around the world. They were implemented for the sake of and to serve the whole country. For decades, all Canadian producers have benefited from this collective effort to create their own business to their liking.

Winds of change have been blowing for some time now on the services offered to breeders. New technologies offer unique opportunities that were previously unimaginable, transforming all tools used by breeders. Over the years, some adjustments have been made, but probably not as quickly as many would have liked, and certainly not in a way to maximize the potential of these



technologies.

The tools developed by previous generations will need to be updated to maximize their potential, otherwise they will become outdated and obsolete.

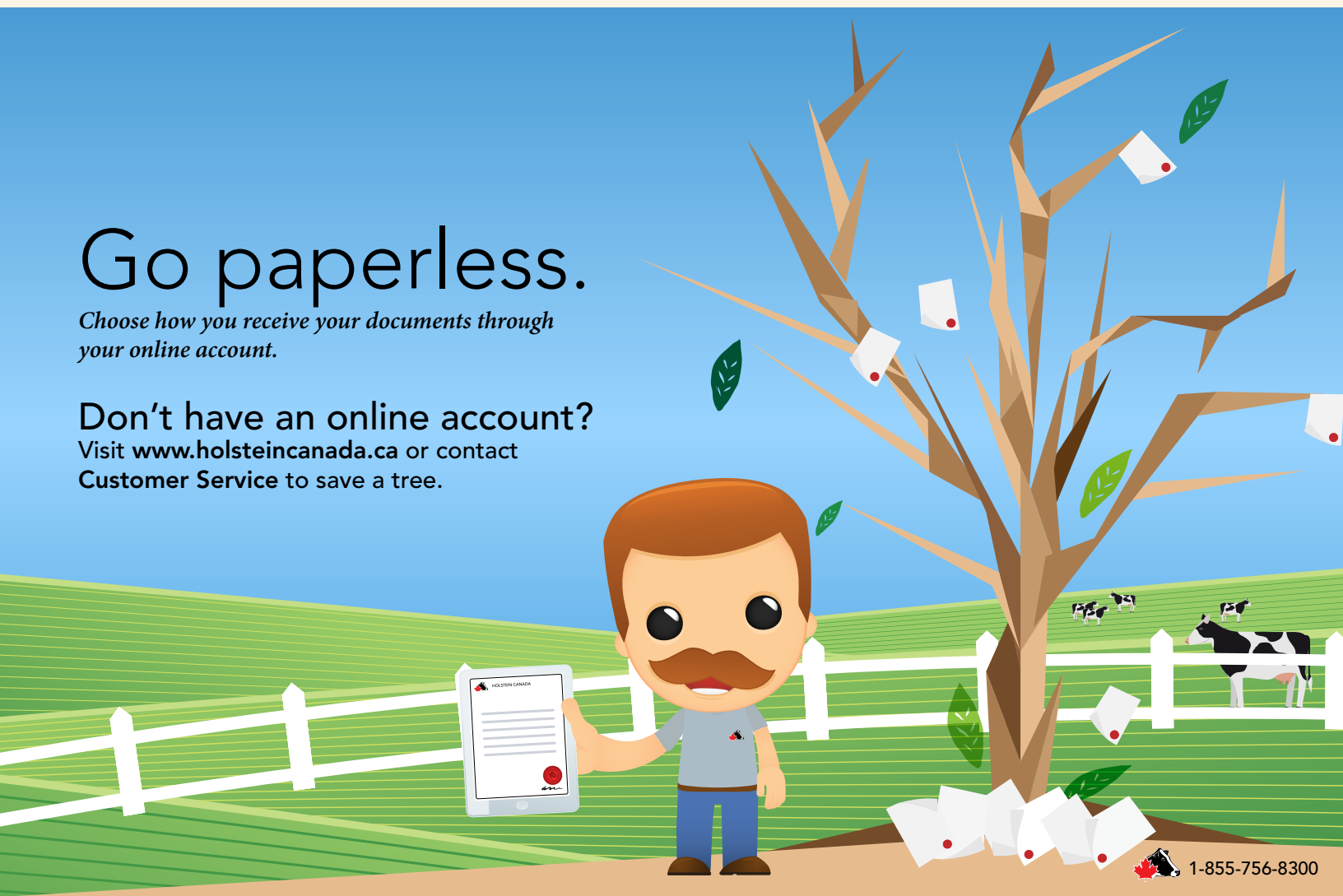
If we want to keep on breeding the best cows, we cannot take any shortcuts. We must ensure that we use the best dams and the best available sires. The tools that were developed several years ago still stand and are more essential than ever. We must work hand in hand to help the next generation be as successful as we were and to give them the chance to work with the best cows on the planet. 🇨🇦

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## DFC-FUNDED SCIENTISTS AWARDED FOR RESEARCH EXCELLENCE

**OVER THE COURSE OF 2016**, a number of Canadian dairy scientists were recognized at home and abroad for their exceptional contributions to dairy science in the areas of animal nutrition, food safety, animal care and welfare, and animal health. They are all currently conducting research on behalf of the dairy sector in projects co-financed by Dairy Farmers of Canada (DFC) or its member organizations.

DFC would like to congratulate these researchers for their achievements in the dairy field. Here is Part I of our annual research roundup—a brief description of the honours these researchers have received in recognition of the innovative work they perform every day to ensure the strength of our industry.



### **CANADIAN SOCIETY OF ANIMAL SCIENCE AWARDS**

**Dr. Filippo Miglior, Chief of Research and Strategic Development, Canadian Dairy Network—Award in Technical Innovation in**

#### ***Enhancing Production of Safe Affordable Food***

Dr. Filippo Miglior is a world-renowned dairy cattle geneticist working in the areas of genetic evaluation and improvement. He is responsible for the management of research projects for dairy cattle genetic improvement financed by the Canadian Dairy Network (CDN) and is the lead on strategic planning and research priorities for the organization. He is the lead investigator for two major dairy genetics and genomics projects in the Dairy Research Cluster (DRC) and a co-investigator for two others. He is also co-leading a \$10.3 million project funded by several partners, including the CDN and Genome Canada, to increase dairy cattle feed efficiency and reduce GHG emissions from dairy cattle.



**Dr. Trevor DeVries, Associate Professor, Department of Animal Biosciences, University of Guelph—Canadian Animal Industries Award in Extension and Public Service**

Dr. Trevor DeVries has made considerable contributions to the Canadian dairy industry through his research and

extension work on the effects of feeding management and housing on behaviour in dairy cattle. He was a technical lead, contributor and advisor in the development of DFC's proAction Animal Care module and has been a member of its technical committee. Recently, Dr. DeVries delivered extension information on dairy cattle care and comfort through a webinar series for Canadian dairy farmers developed by DFC and Valacta. The series provides important information on the evaluation of cow comfort, comfortable surfaces and comfortable spaces based on the latest research financed by farmers in the DRC. To watch the webinars by Dr. DeVries and transfer expert Julie Baillargeon (Valacta), visit [dairyknowledge.ca](http://dairyknowledge.ca).



**Dr. Michael Steele, Assistant Professor, Department of Agriculture, Food and Nutritional Science, University of Alberta—Young Scientist Award (CSAS) and the Lallemand Animal Nutrition Award for**

#### ***Scientific Excellence in Dairy Nutrition (ADSA)***

Dr. Michael Steele's areas of investigation are understanding how early-life nutrition and management programs can affect a calf's biological outcomes later in life; discovering and evaluating feeding schemes and bioactive nutrients that display the properties necessary to improve gut health in dairy calves; and characterizing ruminal and intestinal adaptations during the transition to high-energy diets in early lactation using feeding schemes based on commonly used commercial dairy rations. His lab focuses on the implementation of novel feeding schemes with innovative feeding systems, such as automatic calf feeders and automatic milking systems.

Stay tuned for Part II of our annual research roundup in the January edition of *InfoHolstein*. In the meantime, for more detailed information about the above-mentioned researchers and their projects, visit [dairyresearchblog.ca](http://dairyresearchblog.ca).

# A Registrar's Review of 2016

"WHAT DO YOU DO, MR. LEMIRE?" Have you asked that question before? Sometimes that is a daunting and tough question for me to answer. To be honest, I find it easier to answer that question by providing a snapshot of what I have done. Just in case you ARE wondering what exactly I do – let's take a look at what I have been up to in 2016.



## WORKING OUT THE KINKS IN THE NEW HERDBOOK

Many hours have been spent at Head Office in Brantford working on the new Herdbook program. Many work processes and rules were reviewed to ensure they still have their place in today's dairy industry. The management team wanted to ensure Holstein Canada is following rules for a reason and not simply "because that is the way it has always been done".

As an example, our Herdbook validations are always under review to ensure that they meet today's farm management realities. When we ask for a genotyping sample, we want to make sure it is absolutely required and not a waste of your money. With the exception of Microsatellite tested animals, you get a genomic evaluation with your sample result. As a result, we will re-evaluate our registration validation options for base and low purity animals. This adds value to the validation when we ask for a genotyping sample.

To be fair, the management team (past and present) has always been committed and open-minded to the idea of reviewing processes to ensure that there is no unnecessary labour or cost. The implementation of the Herdbook program provided a great opportunity to transition into these new work processes.

## GUIDING FIELD SERVICE FOR EASTERN & WESTERN CANADA

When one door closes, another one opens. Our previous Atlantic field service representative received an offer she could not refuse and left the Holstein Canada herd. While we thank her for all of her hard work, we are excited that Robert Beckwith has joined us to fill that role. I would like all of our Maritimes members to take note – if you need a helping hand with our services; Robert is just one call away!

Brian Nelson continues to serve as our Western province representative. Brian is always "on", never stops running and has been a "tour de force" in the west. By email and by phone, I am continually receiving positive feedback and thanks for the efforts that he puts out on a daily basis. Anyone in Manitoba, Saskatchewan, Alberta and British Columbia – talk to Brian if you need help.

Field Service is a two-way street; we love seeing, talking to and assisting people, but we also need to know who needs our help. Members are telling us they are happy to see both Brian and Rob. If you need them, please don't hesitate to call them. The same goes for our members in Ontario and Québec – if you need assistance, be sure to call your Holstein Branch. The reps are there to help however they can!

## WEARING A GREEN JACKET

*Kermit the Frog* said it best when he said, "It ain't easy being green". Watch out for your show associates in those beautiful light green jackets (especially at the Royal). The show associates are the ones working behind the scenes, to monitor and ensure the rules and regulations for showing are being upheld. We work in an educational fashion and do our best to ensure the best cows, within the confines of the rules, are shown and judged in the ring. In addition to our monitoring duties, we also do our best to educate the inquisitive

public – those who are ultimately the biggest fans and consumers for the dairy industry every time they drink a glass of milk.

## LEADING SHOW ETHICS FOR THE FUTURE

Leading "Show Ethics" and developing the standards by which they are enforced at shows has been quietly successful. The quiet part is due to my mandate to enforce the rules with respect and with class. If an exhibitor is caught breaking the rules, the matter is settled discreetly and professionally. We also don't "air dirty laundry", meaning that neither the public, nor our members will find out which exhibitor received an infraction notice from my show associate team. This is a different style than previous years which may lead members to ask if being quiet about it really works – but we can assure you, it has worked so far.

Some rules are easy to come up with, while others are difficult and need careful thought. When the public can physically see an action that leads to an unfavourable opinion of exhibitors, members and the dairy industry, those rules are easy to come up with. Over-bagging, slapping the winning cow, excessive dextrose injections and electro-shock machines on udders are prime examples of actions that can easily lead to negative opinions by the public. Show Ethics is developing rules and actively working towards eliminating these behaviours. Some rules are actively in place for this show season, while others will come in future years. Our guiding principle is that we must do what we can to ensure the public remains our biggest fans and consumers.

This hopefully gives you a better understanding of some of what I do as Registrar of Holstein Canada. Thank you to everyone who has helped with these projects, and many others. I hope you, our members, feel the positive effects and outcomes of these 2016 projects and goals, and I look forward to a busy 2017.



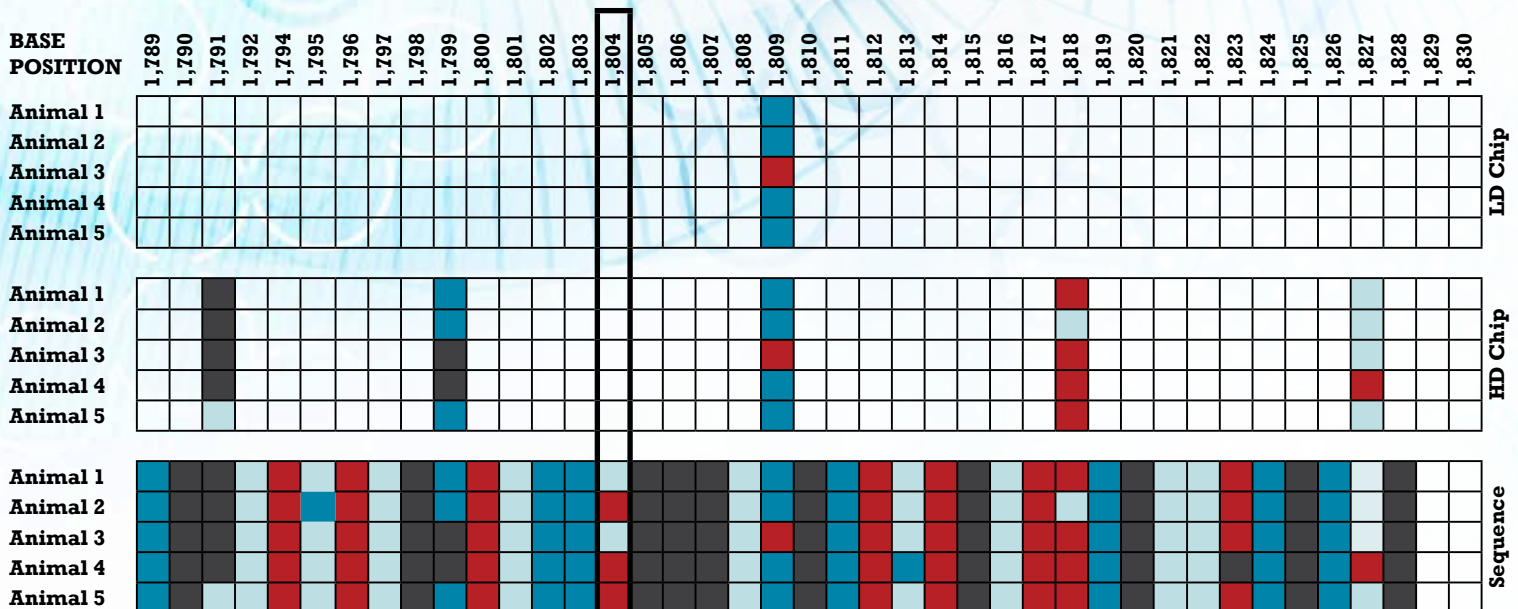




# DISSECTING THE BOVINE GENOME: IT'S ALL IN THEIR GENES

By Dr. Christine Baes, Assistant Professor,  
Department of Animal Bioscience, University of Guelph.

Genomic selection has become routine. Genotyping promising young animals using SNP-Chips is standard practice on many farms. Current developments allow analysis of the entire hereditary material of an animal.



**FIGURE 1: Overview from an LD-Chip to sequence information**

Each base of the genetic alphabet is coloured differently (A = blue, C = red, G = light blue and T = grey). The figure shows the different SNP densities, from the small Low Density (LD) chip, which contains only a few SNPs, all the way up to Sequence, which contains all the SNPs in an animal. For example, animal 1 and 3 are blue at position 1,804 (letter "G"), whereby all other animals are red. This variation is not visible on the 50K or LD SNPs. If the key ancestors of the population are sequenced, the missing positions (white boxes) on 50K or LD Chip can be imputed.



**THERE ARE AROUND 22,000 GENES** in each cell of a cow. These genes control the composition and function of the body. The “alphabet” of genes consists of only four letters (A, C, G, and T), which occur in a very specific order (called “sequence”). A specific portion of the sequence may be associated with a specific function – this is called a “gene”. The entire sequence of the bovine genome was decoded in 2009. It contains approximately 3 billion letters (bases).

It is extraordinary that most of the letters in different animals of a population are identical – on average, only every 300th base is different. For example, where *Monument Impression-ET* might have an “A”, *Marbri Facebook* might have a “T”. These differences in single bases are called “SNP”, and they are the simplest kind of variation between animals. Today, approximately 13 million SNP in the Holstein cattle genome are known. A few of them are included on Chips (High Density, 50K, or Low Density), which can be used for genomic breeding value estimation.

## Sequencing: What’s the advantage?

Instead of using only 50,000 or 800,000 SNP, sequence information contains all existing 13 million SNP (Figure 1). The sequence can therefore be thought of as “the ultimate SNP chip”. Estimating breeding values with all of these SNPs, however, doesn’t really make sense, because only a precious few of them affect fitness or performance traits. It is therefore important to understand and identify the most important SNP, and to take these into special consideration. This will eventually allow even more accurate estimation of genomic breeding values. The current goal of a lot of research is to analyze SNP function in order to identify the most important regions of the DNA. Here, the main focus is on traits with low heritability, because the gains are most difficult to achieve with traditional breeding.

## Sequencing: What are the challenges?

Sequencing is still an evolving area of research. Universities and breeding organizations all over the world are trying to use this information to better understand the heredity of economically important traits and, ultimately, to further improve genomic breeding value estimation. Massive amounts of data and computing power can be limiting factors, as well as the technical know-how of dealing with this new and sometimes tricky information. International collaborations are essential in order to keep up with the incredible speed of development in this area.

## Summary:

In the age of genomics, constant adjustment of routine procedures to account for new developments and information are important. The use of sequence information in routine breeding value estimation is not yet ready for practical application, however the Canadian dairy industry is involved in various research projects which will help to move this area forward.

Genetic regions with significant influence on traits of economic interest are being identified, and it will likely become possible to eventually increase the reliability of genomic breeding values. This will ultimately lead to higher genetic gain – especially for traits with low heritability.



**Dr Christine Baes holds the Semex / Canadian Dairy Network / Holstein Canada Professorship in Dairy Genomics at the University of Guelph. As a member of the Centre for Genetic Improvement of Livestock, Dr. Baes is responsible for research in the area of quantitative genetics and genomics, as well as teaching the next generation of livestock geneticists.**

**For more information, see <http://animalbiosciences.uoguelph.ca/users/cbaes> or email [cbaes@uoguelph.ca](mailto:cbaes@uoguelph.ca)**

*Photo courtesy of Mido Melebari*



## FARM PROFILE

### Niche Breeding

## Delichte Farms Ltd.

St. Alphonse, Manitoba



By Brian Nelson, HC Field Service Business Partner

**PEOPLE INVOLVED:** Meredith & Henry Delichte and their children, Trent and Laura

**# OF YEARS AS A HOLSTEIN CANADA MEMBER:** Since 1980

**# OF COWS MILKED:** 50

**# OF ACRES FARMED:** 1,100 acres (forages, oilseeds, cereals, corn silage)

**FACILITY TYPE:** Tie-stall

**WHAT IS YOUR FEEDING SYSTEM?** Pasture in the summer; otherwise long stem dry hay, prepared ration and corn silage with plans in place to switch to TMR

**ARE THERE OTHER BREEDS IN YOUR HERD?** Holsteins and Jerseys (35 Holsteins, 15 Jerseys)

**HOLSTEIN CANADA SERVICES USED:** Registration, classification and some genomic testing



**WHICH NICHE(S) DO YOU HAVE IN YOUR HERD?** For the past few years, we have been breeding for polled Holsteins and Jerseys. We would like to breed for homozygous polled lines in both Jerseys and Holsteins. Our goal is to breed a consistently polled herd and completely eliminate the need for dehorning on the farm.

#### **WHAT MADE YOU DECIDE TO START BREEDING FOR THIS PARTICULAR NICHE?**

Our decision to start breeding polled was made based on the CQM program, consumer concerns with on-farm practices, and the desire to eliminate an unnecessary routine job on the farm. We dehorned calves using paste or a hot iron, and found there was always risk for infection and set back due to increased stress on animals. Even dehorning with pain killers and lidocaine, it was nobody's favourite job.

#### **WHAT RESEARCH DID YOU DO BEFORE DECIDING TO TAKE STEPS TOWARD POLLED BREEDING IN YOUR HERD?**

We researched on the internet to find out how common polled Holsteins were, and where to get genetics. There is still some belief in the industry that purebred polled Holsteins do not exist. We also talked to our AI reps about availability of polled genetics, and their experiences with polled genetics. There are also risks associated with polled genetics that you have to get comfortable with. What are the costs of breeding for a specific gene, and what might you be giving up elsewhere to get that gene?

#### **WHAT PERCENTAGE OF YOUR HERD IS COMPRISED OF THE POLLED ANIMALS?**

60% of the Jerseys are polled, and 50% of the Holstein heifers are polled. We are now milking our first polled Holstein.

#### **FROM A BREEDING STRATEGY PERSPECTIVE, WHAT DO YOU LOOK FOR?**

The first step is to introduce the gene. Once the gene is introduced, we go back to our breeding philosophy of selection for type and production traits with a preference for polled bulls. We select for bulls that are a +10 for conformation (with focus on feet and legs, and udders), positive deviations, and high

yields for Fat and Protein.

#### **WHAT HAS BEEN YOUR BIGGEST SUCCESS SINCE YOU BEGAN POLLED BREEDING? WHAT HAS BEEN YOUR BIGGEST CHALLENGE?**

Our biggest success so far is that our first generation of milking polled Jersey heifers has been competitive in the herd. Their production is the same as their herdmates, and we've had success with the polled gene being transmitted to the next generation. So far the gene has been coming through in more than 50% of the offspring of polled dams. Lowered inbreeding coefficient within the herd has been a nice bonus as well. The biggest challenge now and moving forward will be sourcing new polled blood lines.

#### **DO YOU FEEL THE MARKET AND DEMAND FOR POLLED ANIMALS WILL CONTINUE TO GROW?**

Yes. Between consumer concerns and work demands on dairy farms, this niche will continue to grow. The limiting factor for polled genetics will be producer perception and the availability of high quality genetics.

#### **FOR OTHER PRODUCERS THAT WOULD LIKE TO START BREEDING FOR A CERTAIN NICHE, WHAT ADVICE DO YOU HAVE FOR THEM?**

Work with your genetic advisors to seek advice on sourcing good bulls. Go in with an open mind, and accept there is some risk. It is important to think about the long term breeding goal for your operation, not just the next generation of daughters. Stay committed to the process with the end goal in mind.

#### **HAS BREEDING FOR POLLED ANIMALS IMPACTED THE OVERALL BREEDING STRATEGY FOR YOUR HERD?**

We have had to eliminate some sires from the breeding line-up. As a result, we have fewer daughters of the top breed sire, in order to have polled carriers in the herd. Once the polled gene is introduced, we will go back to using top sires on polled heifers in hopes that they pass on the polled gene. We also raise some bull calves to address the market for polled



The Donnan family: Aaron, Rebekah, Eric, Heidi (holding Isaiah), Tyler (holding Haven), Jane and Mark (standing and holding Asher)



**WHICH NICHE(S) DO YOU CURRENTLY BREED FOR IN YOUR HERD?** Currently we are breeding our herd for A2A2 beta casein.

**WHAT MADE YOU DECIDE TO START BREEDING FOR THIS PARTICULAR TRAIT?**

We decided to head in this direction with our breeding program because of the possibility of filling a new market down the road, and to reach more people who are currently unable to consume dairy due to casein sensitivity.

**WHAT RESEARCH DID YOU DO BEFORE DECIDING TO TAKE STEPS TOWARD BREEDING FOR A2A2 IN YOUR HERD?**

We read through various online articles and international Holstein publications, and observed what has been going on in other countries that have dairy operations producing 100% A2A2 milk. We liked what we saw, so we began to incorporate A2A2 bulls into our breeding program.

**WHAT PERCENTAGE OF YOUR HERD IS COMPRISED OF A2 ANIMALS? WHAT IS YOUR TARGET PERCENTAGE?** We are pretty close to 50% A2A2 animals right now, with our goal being 100%.

**FROM A BREEDING STRATEGY PERSPECTIVE, ASIDE FROM THE A2 TRAIT, WHAT DO YOU LOOK FOR?**

We aim to breed functional cattle with well-attached udders, good mobility, positive deviations for fat and protein, as well as being in the +1000 range for milk.

**WHAT HAS BEEN YOUR BIGGEST SUCCESS SINCE YOU BEGAN BREEDING FOR A2? WHAT HAS BEEN YOUR BIGGEST CHALLENGE?** Our biggest success thus far has been to maintain the quality of genetics

we currently have in our herd, while faced with the challenge of a smaller pool of bulls to pick from when making our mating decisions.

**DO YOU FEEL THE MARKET AND DEMAND FOR A2 ANIMALS AND/OR MILK WILL CONTINUE TO GROW?** Yes, we do.

Living in a health-focused society, and with increasing amounts of research to suggest the A2A2 milk is easier for some people to digest, we believe A2A2 will gain more traction in North America over the coming years.

**FOR OTHER PRODUCERS THAT WOULD LIKE TO START BREEDING FOR A CERTAIN NICHE, WHAT ADVICE DO YOU HAVE FOR THEM?** Weigh the positives and negatives of that particular niche carefully to make the best decision for your operation, even if that means you're not "cookie cutter" with the majority of the breed.

**HAS BREEDING FOR A2 IMPACTED THE OVERALL BREEDING STRATEGY FOR YOUR HERD?** No, it hasn't changed the strategy; it has simply made the group of bulls to choose from narrower. As a result, we select sires from various AI companies in order to keep some variety in the gene pool.

**WHAT DOES YOUR HERD LOOK LIKE 10 YEARS FROM NOW?** In 10 years' time, our herd will have the same genetic quality we have today, but with the added bonus of being 100% A2A2.

**AND, OF COURSE, WHAT DOES THE IDEAL COW LOOK LIKE ON YOUR FARM?**

The ideal cow in our operation is a medium statured cow with a wide chest, sound feet and legs, a correctly sloped rump, and a well-attached udder.



## FARM PROFILE

Niche Breeding

### Donnandale Farms

Stirling, Ontario



By Jennifer Kyle, HC Communications Coordinator

**PEOPLE INVOLVED:** The Donnan family

**# OF YEARS AS A HOLSTEIN CANADA MEMBER:** 50+ years

**# OF COWS MILKED:** 300 cows

**# OF ACRES FARMED:** 1,700 acres

**FACILITY TYPE:** Free-stall with a double 10 herringbone parlour

**WHAT IS YOUR FEEDING SYSTEM?** We have a pull type TMR mixer, and feed is stored in bunks and harvestor tower silos

**ARE THERE OTHER BREEDS IN YOUR HERD?** Just one crossbred Holstein Jersey

**HOLSTEIN CANADA SERVICES USED:** Registration (online), classification and genomic testing





## Niche Breeding

### Ferme Pocatoise

Sainte-Anne-de-la-Pocatière, Que.

By Myriam Côté, agr, Holstein Quebec Advisor

**PEOPLE INVOLVED:** Charles-Étienne & Pascal Pelletier (50/50 partners), Alphée Pelletier (Charles-Étienne's & Pascal's dad, employee & advisor) and Pierrick Pelletier-Guimond (full-time employee)

**# OF YEARS AS A HOLSTEIN CANADA MEMBER:** The Pocatoise prefix dates back to 1988, but before that the farm was run under the Rogedap prefix.

**# OF COWS MILKED:** 100 cows

**# OF ACRES FARMED:** 500 acres

**FACILITY TYPE:** Free-stall with milking parlour

**WHAT IS YOUR FEEDING SYSTEM?** TMR

**ARE THERE OTHER BREEDS IN YOUR HERD?** Holstein and about 10% Ayrshire

**HOLSTEIN CANADA SERVICES USED:** Registration & Classification

**HERD'S CLASSIFICATION:** EX-91 2E, EX- 91 3E, 31 VG, 58 GP, 13 G



Photo: Simon Bégin



Photo: Simon Bégin

**WHICH NICHE(S) DO YOU HAVE IN YOUR HERD?** Our herd is a certified organic herd.

**WHAT MADE YOU DECIDE TO BECOME CERTIFIED ORGANIC?** Our father, Alphée Pelletier, has always been a great believer in organic production. He took part in several workshops in the 1990s, and the dairy farm received its organic certification in 2006. The land had been certified organic a few years earlier. The premium earned for organic milk produced on the farm allowed us to pay for the transfer of the farm to us. At the time of the transfer, the herd was smaller.

**WHAT RESEARCH DID YOU DO BEFORE DECIDING TO TAKE STEPS TOWARD CERTIFYING YOUR HERD?** Our father underwent training prior to the farm being certified. We also received training through continuing education. We love trying new techniques, and innovate in the fields as well as in the barn. Organic agriculture offers a world of possibilities and that's what we like in this type of production.

**WHAT PERCENTAGE OF YOUR HERD IS COMPRISED OF THE NICHE GROUP?**

As we are organic certified, 100% of the cows must be organic.

**FROM A BREEDING STRATEGY PERSPECTIVE, WHAT DO YOU LOOK FOR?** We look for functional cows. Health traits, Somatic Cell Count and Herd Life are our main criteria for sire selection. Feet & Legs are also a priority and we also take inbreeding into account. We have finally reached the level of health and conformation we wanted to achieve. The next step is to improve our herd's production.

**WHAT HAS BEEN YOUR BIGGEST SUCCESS SINCE YOU BECAME ORGANIC?**

**WHAT HAS BEEN YOUR BIGGEST CHALLENGE?** Our biggest success is to have reached an acceptable productivity level while keeping our herd healthy. We also managed to balance organic management in the fields and in the barn while obtaining very good results in these

two aspects of the operation. Our herd's production average is 8,500 kg/cow/year vs. under 7,301 kg/cow/year for the average organic farm in Quebec (*Valacta, 2015*). The calving interval is also a good indicator of the herd's health: ours is between 385 and 395 days while the average calving interval for conventional farms is at 419 days. Remember that the use of hormones is prohibited both for production and breeding in organic farming. Therefore at Ferme Pocatoise, we use 100% Artificial Insemination in our breeding program.

Organic dairy production is full of challenges! We work with living animals and all the little details are important. The interrelation between the fields and the barn is even more important in organic dairy production. We strive to produce the best possible forages to optimize the rumen health of our cows. The ration is simple: 12 to 16 kg of corn silage depending on the quality of hay, but we rarely exceed 4 kg of mixed grains per cow, and forages are available at will. Our priorities: sustainable agriculture and animal welfare.

**DO YOU FEEL THE MARKET AND DEMAND FOR ORGANIC DAIRY WILL CONTINUE TO GROW?**

The organic milk market is booming because it is very popular, especially in the major urban centres. Quebec sends a lot of organic milk to Ontario. Several producers are currently being certified. Organic cows are in demand, it is a specific market.

**FOR OTHER PRODUCERS THAT WOULD LIKE TO START BREEDING FOR A CERTAIN NICHE, WHAT ADVICE DO YOU HAVE FOR THEM?**

Control what you can. Herd health and good Feet & Legs are two very important aspects that every producer should work on before embarking on organic dairy production. In organic dairy production, we try to mimic nature as much as we can, both in the fields and in the barn. Cropping rotations ensure soils are fertile in order to get good yields. We know that a cow can produce a little less at times





**WHICH NICHE(S) DO YOU HAVE IN YOUR HERD?** We breed for RW Holsteins.

**WHAT MADE YOU DECIDE TO START BREEDING FOR THIS PARTICULAR NICHE?**

My Father picked up *Gardenvale Amy*, a RW *Spring Farm Creation* daughter, from a neighbour back in 1981. Back then, there was no market for RW animals so it was more of just a hobby, or the challenge of trying to breed one. Since then, the market has improved and we have been able to sell many of our RW cattle.

**WHAT RESEARCH DID YOU DO BEFORE DECIDING TO TAKE STEPS TOWARD NICHE BREEDING IN YOUR HERD?**

I was lucky because my father had already started the red family for me! So, for me, it has been the challenge of always keeping up on the RW bulls that were available. And, we're always on the lookout for the highest type RW bulls to breed our cows to.

**WHAT PERCENTAGE OF YOUR HERD IS COMPRISED OF THE NICHE GROUP?**

Currently 20-25% of our herd is RW. At one point, we had 12 out of 35 milking cows that were RW animals.

**FROM A BREEDING STRATEGY PERSPECTIVE, WHAT DO YOU LOOK FOR?**

100% Type – We breed for type. We believe that animals will all milk eventually, so first and foremost, we need to breed cattle that are going to last.

**WHAT HAS BEEN YOUR BIGGEST SUCCESS SINCE YOU BEGAN NICHE BREEDING? WHAT HAS BEEN YOUR BIGGEST CHALLENGE?**

Our biggest success was selling *Valley Dell Ranger Daisy* to John

Beerwort in Quebec, and then seeing her win Grand Champion RW and best udder of the show at the Quebec Spring Show in 2007. We still have photos of her around the house! Our biggest challenge with breeding RW has been trying to breed for good feet & legs. We had a hard time trying to find high type RW bulls to breed to back in the day, but this has improved significantly over the years.

**DO YOU FEEL THE MARKET AND DEMAND FOR RW ANIMALS WILL CONTINUE TO GROW?**

I think there is still a market for RW animals, but you have to have a really good one. She needs to have great type. People will still pay money for a great RW one. We still tend to sell some of our red bull calves locally as well, and some for breeding stock.

**FOR OTHER PRODUCERS THAT WOULD LIKE TO START BREEDING FOR A CERTAIN NICHE, WHAT ADVICE DO YOU HAVE FOR THEM?**

Depending on how much money you wanted to spend, you could buy a nice RW heifer calf to start off your RW families. Or you could buy a nice RW bull calf (which would be cheaper!) and then use him for breeding stock. I always try to use RW bulls on RW cows and RDC cows to keep my chances of getting red at its highest. Most of our herd has the red gene in their blood.

**HAS BREEDING FOR RW IMPACTED THE OVERALL BREEDING STRATEGY FOR YOUR HERD?**

We like to keep around 20-25% RW animals in our herd. Our breeding strategy is the same for both our RW and BW cows – to breed high type cattle that will last. We just like to keep our red families red!

**WHAT DOES YOUR HERD LOOK LIKE 10 YEARS FROM NOW?**

At one point, I thought I would try and go 100% RW. But, now I am expecting our herd to look similar to what it is now. We will probably see our RW population up over the 30% mark. We love the high butterfat that we are seeing from these cows.

**AND, OF COURSE, WHAT DOES THE IDEAL COW LOOK LIKE ON YOUR FARM?**

Great feet and Legs with a correctly sloped, wide rump, and a high, wide, and strongly attached udder! That goes for both the RW and BW animals!



## FARM PROFILE

### Niche Breeding

## Valley Dell Farms

North Minton, PEI

By Rob Beckwith, HC Field Service Business Partner

**PEOPLE INVOLVED:** Gordon & Denise Laird

**# OF YEARS AS A HOLSTEIN CANADA MEMBER:**

The farm has had a membership since 1960 – Gordon & Denise took over the farm in 1991

**# OF COWS MILKED:** 35 cows

**# OF ACRES FARMED:** 255 acres

**FACILITY TYPE:** Tie-stall

**WHAT IS YOUR FEEDING SYSTEM?** Grass silage & Hay; Pasture

**ARE THERE OTHER BREEDS IN YOUR HERD?** No, just Holsteins

**HOLSTEIN CANADA SERVICES USED:**

Registration and Classification



# Beta Casein A2 Genotyping

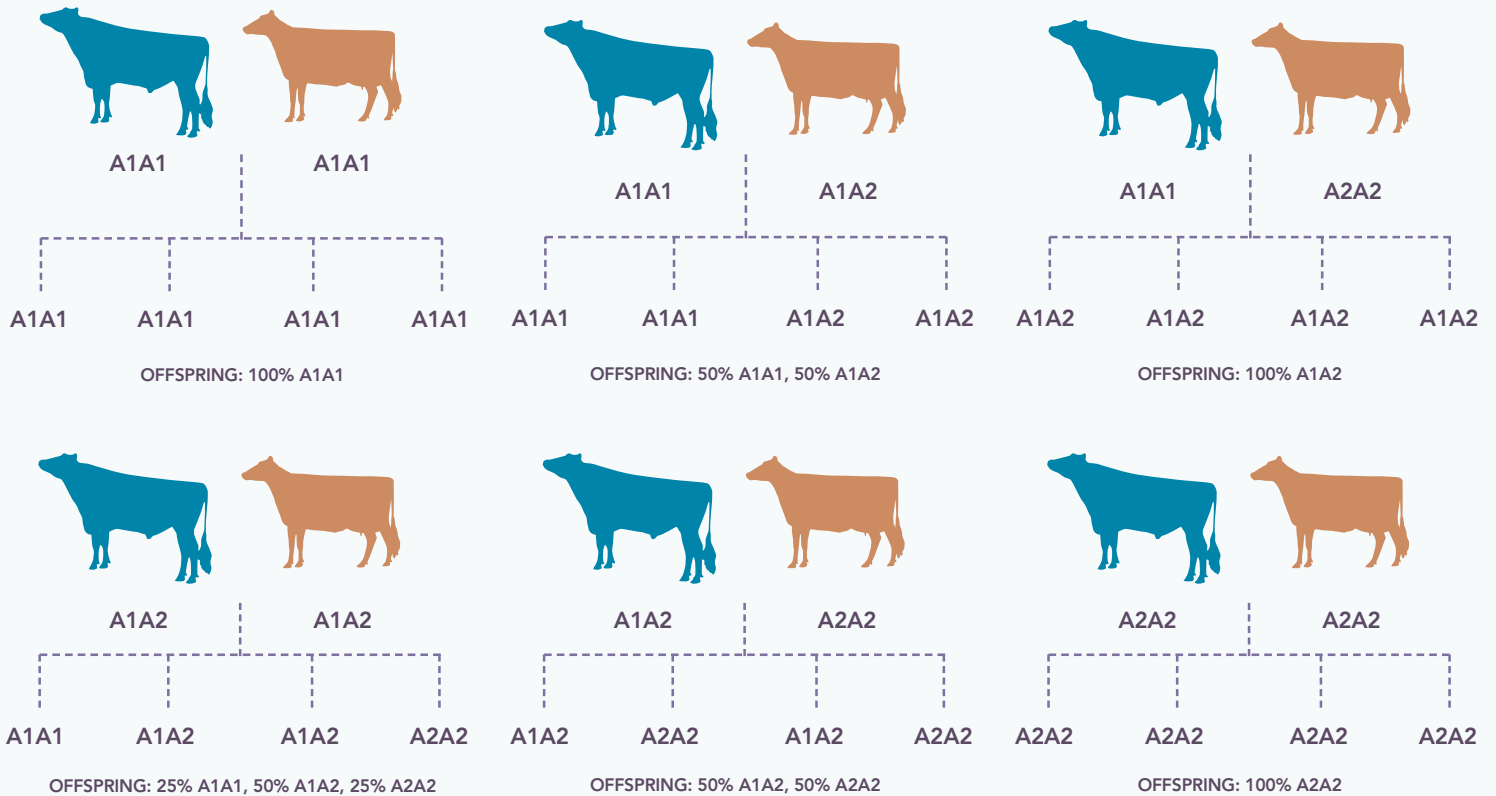
**A2 MILK AND A2 PROTEIN** is an emerging trend topic that is creating discussion amongst both consumers and producers.

Cow's milk contains Beta Casein proteins, which comes in several forms depending on a cow's genetic make-up. Beta Casein comprises approximately 30% of the total protein in the milk. The Beta Casein proteins can be broken down into two types – A1 and A2.

A2 milk is derived and sourced exclusively from cows which naturally produce A2 protein milk. To get A2 milk, you need to have A2 producing cows and this can be determined through genetic testing. Recent studies have suggested possible health benefits to A2 milk consumption. The prevalence of the A2 allele is found in an estimated 60% of Holstein animals. This means approximately 36% of Holsteins produce A2 milk, 48% produce A1/A2 milk, and 16% produce A1 milk.

Test results can assist you with your breeding program for production of A2 exclusive animals. See the distribution chart below for the probability of genetic combinations.

## Probability of Genetic A1/A2 Beta-Casein Combinations



Beta Casein A2 testing is available for all dairy breeds through Holstein Canada. If you would like to test your animals to determine which form of protein they are producing, please complete the Genotyping Request Form and submit your TSU, nasal swab or hair sample to Holstein Canada. The cost for testing is \$15 per animal; allow 4 to 6 weeks for your results. The Beta Casein A2 test results and invoice will be sent to you. Results will be published on all official documents, and on the Animal Inquiry page of the Holstein Canada website; along with the other genetic traits and colour codes. For more information on Beta Casein A2 testing, please contact our customer service team at 1-855-756-8300 ext. 410. 🇨🇦





## FARM PROFILE

### Niche Breeding

## Delichte Farms Ltd.

St. Alphonse, Manitoba



**continued from page 10**

clean-up bulls. In our experience, the current polled bulls available are no further behind the average bull on the proof sheet and will still contribute to overall breed improvement. Polled sires we use are still above breed average for the traits that are important to us.

#### WHAT DOES YOUR HERD LOOK LIKE 10 YEARS FROM NOW?

In 10 years our herd will ideally be 75% polled, with 40-50% homozygous polled. Our goal is to have first lactation heifers that score 83 points on average and are built to last five or six lactations. We hope to still be milking cows in a vibrant supply managed dairy system.

#### AND, OF COURSE, WHAT DOES THE IDEAL COW LOOK LIKE ON YOUR FARM?

Our ideal cow is *Delichte Baxter Manhattan EX-3E*. She will be calving for seventh time this fall. She shows up and gets the job done trouble free. You don't even know she's there. 🇨🇦



## FARM PROFILE

### Niche Breeding

## Ferme Pocatoise

Sainte-Anne-de-la-Pocatière, Que.



**continued from page 12**

which is fine with us, providing she calves that same year and gives us two more lactations.

#### HAS ORGANIC PRODUCTION IMPACTED THE OVERALL BREEDING STRATEGY FOR YOUR HERD?

Yes, a little. In recent years we have been looking a lot more at health traits. Our cows have always gone to pasture, but we realized how important good feet & legs are in a free-stall environment. Hoof health is a priority. A daily foot bath and hoof trimming for the whole herd at least twice a year are a must, as well as two to three additional visits of the hoof trimmer for cows with recurring problems.

#### WHAT DOES YOUR HERD LOOK LIKE 10 YEARS FROM NOW?

A uniform and healthy herd!

#### AND, OF COURSE, WHAT DOES THE IDEAL COW LOOK LIKE ON YOUR FARM?

A healthy cow with functional conformation, good feet & legs and yearly calving! 🇨🇦

# Holstein Canada Holiday Hours

**FAMILY** is incredibly important to both Holstein Canada members and staff. With this in mind, the Holstein Canada office will be closed on Tuesday, December 27 and Monday, January 2 in celebration of the holiday season.

The following are the hours of operations that will be in effect at Holstein Canada's head office during the holidays.

From our family to yours, the Holstein Canada team wishes you a wonderful holiday season and a happy, healthy and prosperous New Year. We look forward to continuing to serve you, our valued members and clients, in 2017! Happy Holidays! 🇨🇦

Friday, December 23	Open 8 a.m. – 5 p.m.
Monday, December 26	Closed
Tuesday, December 27	Closed
Friday, December 30	Open 8 a.m. – 5 p.m.
Monday, January 2	Closed
Tuesday, January 3	Open 8 a.m. – 5 p.m.

## European Young Breeders School 2016

**HOLSTEIN CANADA WAS PROUD** to send a team of six young leaders to represent Canada at the European Young Breeders School (EYBS) again this year. EYBS is held annually in Battice, Belgium, and Team Canada was joined in Battice by teams from across Europe for the 2016 edition of EYBS held August 31st to September 4th.

This year's team included winners of provincial competitions and/or successful candidates from an interview process held within their respective provinces. Holstein Canada along with its provincial branches congratulates the following six Young Leaders who represented Canada at the competition and earned a respectable eighth place finish: Katelyn Crest (Alberta), Ava Doner (Ontario), Cameron Stockdale (Ontario), Julie MacFarlane (Quebec), Maxime Montplaisir (Quebec), and Kathryn McCully (New Brunswick).

Providing practical learning opportunities is one of the pillars of Holstein Canada's Young Leader Program. EYBS offers both the practical learning and an international component, providing an opportunity to experience how the dairy industry functions in Europe. The EYBS program is designed to teach young breeders how to judge; prepare their animals for shows; and market their animals' genetics. This is the fourth consecutive year, Holstein Canada, in partnership with its provincial branches, has sent a Team Canada to take part in the week-long competition.

"What an amazing experience! I really enjoyed this competition and all it stood for," says Quebec participant, Julie MacFarlane. "I am very involved with my local dairy 4-H club and my aim is to bring the information and skills that I have gained back to my club and help the younger members to improve their showmanship, clipping, teamwork, pack making and feeding skills."

In addition to the actual competition portion of the EYBS, Team Canada representatives have the opportunity to stay with local dairy farm families in the Battice area, and travel throughout the Belgian countryside.

"I loved meeting people from so many European countries as well as the rest of my teammates from Canada, who I had not met before this event," says MacFarlane.

The EYBS, and Canada's participation in the program, is a great opportunity for youth to meet other young dairy enthusiasts with

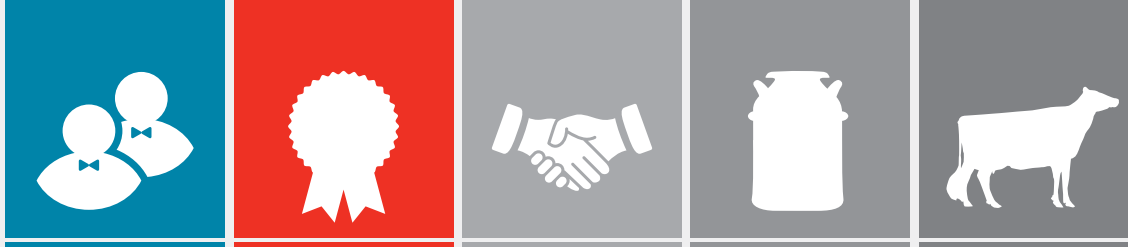


the same passion and dedication, and helps participants begin to build a network of contacts both across our great nation and around the world.

"EYBS was a great experience," says Alberta participant Katelyn Crest. "I feel privileged to have been able to be a part of Team Canada and participate in the competition."

Young Leaders interested in becoming members of future EYBS teams are encouraged to contact their provincial Holstein Branch for more information.





## 2017 Young Leader Convention

The annual Young Leader Convention program is the pinnacle event of the year for the Holstein Canada Young Leader Program. Falling under the pillar of "Formal Gatherings", the convention programming is designed with the Young Leader program mission in mind: "To cultivate a group of passionate and unified young leaders who are knowledgeable and well-trained about Holstein Canada, and enthusiastic advocates and ambassadors for the dairy industry; so they remain profitable members committed to breed advancement and industry sustainability."

The 2017 Young Leader Convention program will be no exception, and will be held in conjunction with the 2017 National Holstein Convention. This year's event will be held in the York Region of Ontario April 5 – 8, 2017.



**Interested in applying for the opportunity to attend the National Holstein Convention Young Leader Program?** For more information on the 2017 program, as well as application forms, please visit: [Holstein.ca](http://Holstein.ca) > Membership-Programs > Young Leader Program > Formal Gatherings

Applications are due to your provincial branch by Monday, **January 11, 2017.** 🇨🇦



# If I had \$1,000...

Apply for the 2016 Education Awards today.

**Deadline: November 25, 2016**



### What would YOU do if you had a \$1,000?

Holstein Canada recognizes six outstanding students from across Canada with \$1,000 to assist with their post-secondary studies. These awards are dispersed nationwide with one in both Atlantic and Western Canada, and two in each Ontario and Quebec respectively. Winners are chosen by the Young Leader Advisory Committee who selects the six successful applicants based on farm involvement, work experience, youth program involvement, career choice and scholastic record.

Applications are now available online and should be sent to Kelly Velthuis at [kvelthuis@holstein.ca](mailto:kvelthuis@holstein.ca); or mailed to Holstein Canada to the attention of Kelly Velthuis, Bilingual Programs Coordinator.

# #FrameTheHerd Photo Contest – Theme #8

Great photos are still rolling in for the #FrameTheHerd Photo contest! Thank you to everyone for your submissions!

Check out our Top four finalists from Theme #6 – Youth!



Proud young dairy farmer and future Holstein breeder loves his cows and his milk! – Submitted by Christie Prins, Pryme Farms Inc., Brighton, Ont



Her 4-H achievement day was a long day of hard work for this little showperson and her calf! – submitted by Sheri Jack, MacTalla Farms, Bonshaw, PEI



Nicole Frey helps her daddy, Merle, with chores at Sandyland. The Holstein Canada pin on her hat was given to her by classifier Tom Byers in July! – submitted by Merle & Elaine Frey, Sandyland Holsteins, Mount Forest, Ont.



Amelia Lydan with her calf Groniger Isla Doorman and Anastasia Pool-Bouwman with Groniger Double Liberia – submitted by Sabrina Lydan, Nathan Creek Farms Ltd., Matsqui, BC

## THEME #8: SCREEN TIME

In today's technology age, we spend a lot of time looking at computers. If we are going to have to look at the screen anyway, it might as well have a great photo as the screen saver or desktop background! In the spirit of "screen time", we want to see the great cow photos worthy of a home on your computer screen! Fire up your cameras and smart phones and send us your best photos – the ones you could look at all day! As always, bonus points if you can sneak a Holstein Canada logo in the photos somehow (hats, jackets, etc.), and we also don't discriminate against colour, so send us those all-breed photos as well!

### DEADLINE DECEMBER 31, 2016

## THE DETAILS:

- Photos should be high-res digital images (300 dpi is preferred)
- There is no limit to the number of entries per person
- Any visible animals **MUST** be properly tagged to be considered

Entries are to be emailed to [socialmedia@holstein.ca](mailto:socialmedia@holstein.ca) and should include the names of any people and animals, as well as the prefix when possible. \*If you do not have access to email, but wish to participate, call Jennifer at 1-855-756-8300 ext. 234 to make alternate arrangements.

## FOLLOW US ON SOCIAL MEDIA & JOIN THE CONVERSATION



**FACEBOOK:**  
[FACEBOOK.COM/HOLSTEINCANADA](https://www.facebook.com/holsteincanada)



**FLICKR:**  
[FLICKR.COM/PHOTOS/HOLSTEINCANADA/](https://www.flickr.com/photos/holsteincanada/)



**SNAPCHAT:**  
HOLSTEINCANADA



**TWITTER:**  
[@HOLSTEINCANADA](https://twitter.com/holsteincanada)



**LINKED IN:**  
SEARCH "HOLSTEIN CANADA"



**INSTAGRAM:**  
[HOLSTEIN\\_CANADA](https://www.instagram.com/holstein_canada)



**YOUTUBE:**  
[YOUTUBE.COM/USER/HOLSTEINCANADAVIDEO](https://www.youtube.com/user/holsteincanadavideo)

You don't have to be on social media to follow the conversation! Simply click the links at the top of the Holstein Canada website to link directly to the channels!





## Did you know...

Your herd's Master Breeder report can be found in your online web account. Need a web account? Visit [holstein.ca](http://holstein.ca) or contact customer service.

# Call for National Director Nominations

THERE IS AN OPEN CALL for nominations for National Directors in the Electoral Districts listed below. Clubs located in these districts will have received official notification of the call in September, and nominations will close December 8th, 2016. Ballots will be mailed out to all voting members in the districts with more than one candidate by

## Electoral Districts 2017

Alberta & Northwest Territories

Saskatchewan & Manitoba

Western Ontario

Quebec at Large

Eastern Quebec (Director Retiring)

January 8th, 2017 and voting closes on **February 8th, 2017**.

The criteria for National Director Eligibility can be found in the Association By-laws on [Holstein.ca](http://Holstein.ca) and nomination forms can be obtained from your local Holstein Club, Provincial Branch, the Holstein Canada website or by contacting Nicole Faubert at [nfaubert@holstein.ca](mailto:nfaubert@holstein.ca) or 1-855-756-8300 ext. 241. 🇨🇦

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

Based on 1<sup>st</sup> Lactation Classifications from July/August 2016

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

Top 10 Sires with 30-100 Daughters Classified in Two-Month Period

Sire	Daughters Classified	Avg. Daus Score	Avg. Dam Score	Sire	Daughters Classified	Avg. Daus Score	Avg. Dam Score
SID	116	82.31	82.56	BROKAW	42	83.14	83.74
AFTERSHOCK	242	82.16	82.67	SHADOW	56	81.95	81.52
MCCUTCHEN	127	81.88	82.30	GOLD CHIP	71	81.86	82.75
REGINALD	119	81.72	81.55	BRADNICK	46	81.67	82.09
DOORMAN	206	81.66	81.60	WINDHAMMER	42	81.36	81.88
DEMPSEY	198	81.46	81.27	SANCHEZ	93	81.32	81.96
NUMERO UNO	240	81.26	81.17	GUTHRIE	73	81.27	80.82
LAUTHORITY	112	80.99	81.41	EPIC	84	80.94	80.02
CHELIOS	303	80.87	80.53	CHIPPER-P	42	80.71	80.90
IMPRESSION	143	80.83	80.17	FORK	84	80.71	80.51

**NOTE:** Daughters are included in the statistics only if both the daughter and her dam calved for the first time before 30 months and were both first classified within the first six months of lactation. Sires listed must have >=50% of daughters that improve in score over the dam.

# CLASSIFICATION SCHEDULE

MID-ROUND **MR** FIELD SERVICE **FS**

## NOVEMBER

ON **MR** Bruce

**FS** PEI

EARLY

ON **MR** Huron, Grey, Ontario Central, Victoria, Durham

QC Kamouraska

QC **MR** Lac Saint-Jean, Roberval, Portneuf, Lapointe, Chicoutimi

AB, MB

**FS** Northern Ontario, NB

MID

ON **MR** Ontario, Waterloo, Peterborough

QC Rivière Du Loup

**FS** BC, NS

LATE

## DECEMBER

ON Oxford

ON **MR** Waterloo

QC Rimouski, Matapedia, Bonaventure, Temiscouata, Matane

QC **MR** Vaudreuil, Huntingdon, Chateaugay, Beauharnois, Richmond, Missisquoi

PEI, NS, NB, NFLD **MR**

**FS** MB

EARLY

ON **MR** Simcoe, Dufferin

QC Iberville, Saint-Jean, Shefford, Compton, Brome

MID

## JANUARY

ON Perth

ON **MR** Wellington, Northern Ontario, Thunder Bay

QC Arthabaska, Wolfe


QC **MR** Sherbrooke, Stanstead

SK **MR**

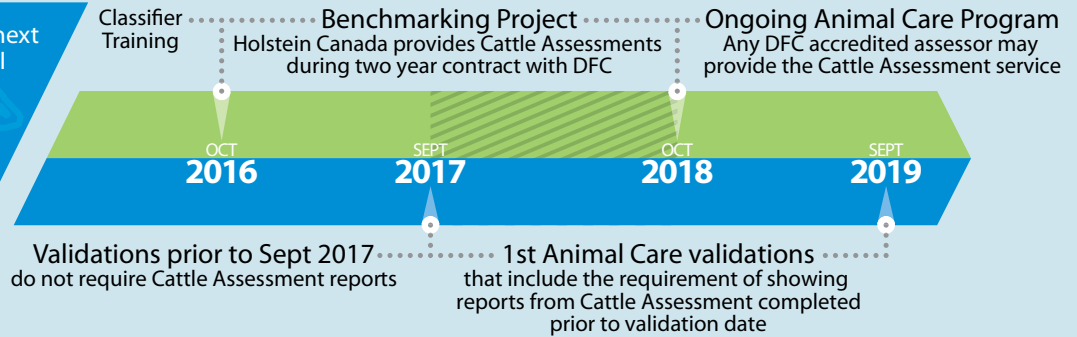
**FS** AB

EARLY

# Longterm Animal Care Timeline

 Period in which producers undergoing validation will only be offered Cattle Assessments from Holstein Canada

"Hi it's George Smith calling. My next validation is November 2016 and I hear that Animal Care requires a Cattle Assessment before my validation. I need an assessment done right away!"



Rest easy; the first validations that will require Cattle Assessment reports start in September 2017.

For those early producers, they have until then to receive a Cattle Assessment and "George" actually has until November 2018 to have his Cattle Assessment completed.

**For more information:**

holstein.ca > Services > proAction Animal Care  
 animalcare@holstein.ca | 1-855-756-8300 ext 275



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