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Feature

Antibiotics: a sensitive issue

Ferme Bochatay et fils

Focused on animal well-being

Ferme Cerpolait

A young herd forging a place for itself!

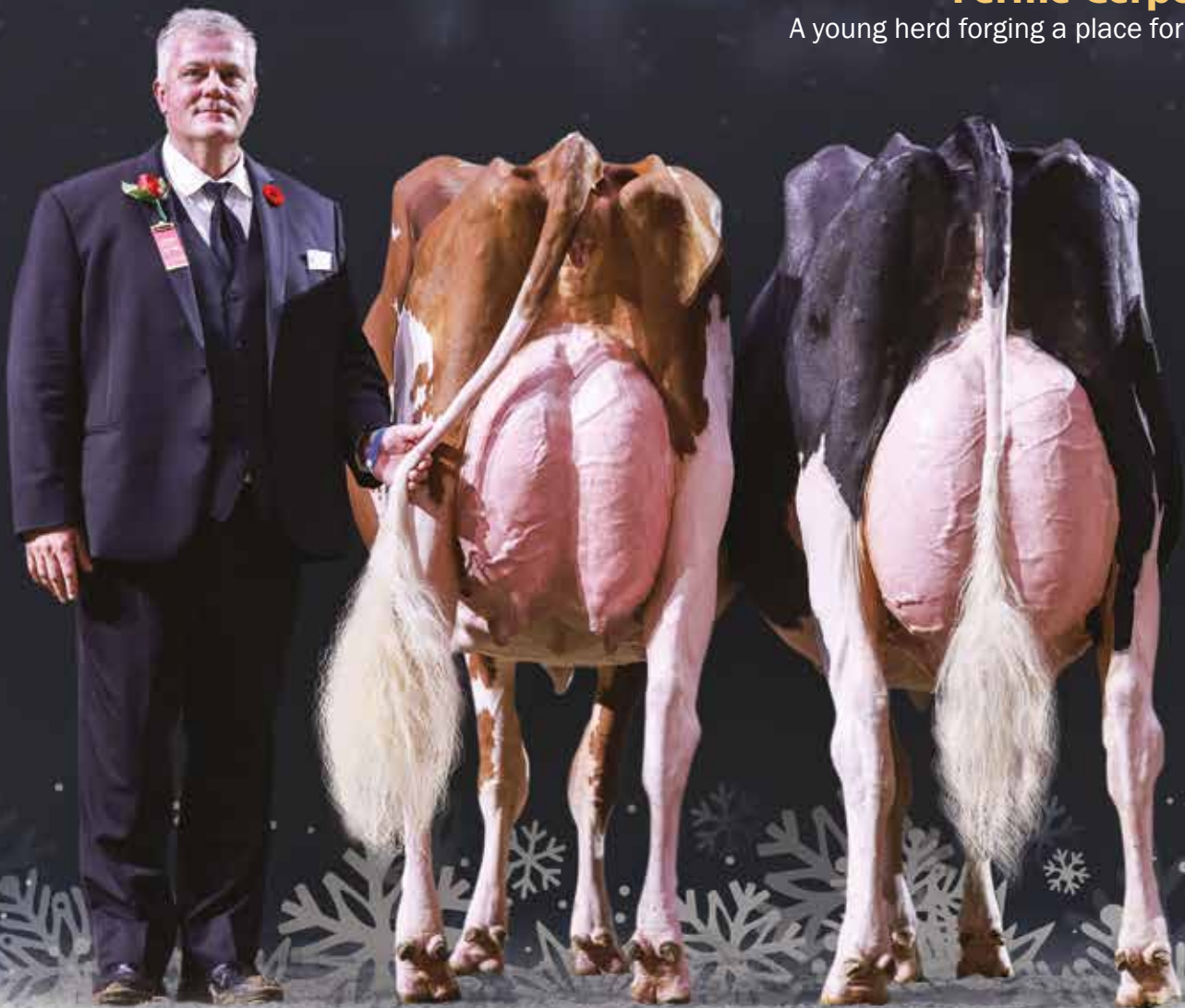


Photo : Ella Wright

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The Royal
AGRICULTURAL WINTER FAIR



BY
VÉRONIQUE
LEMONDE

Editor
in chief



Ferme Bochatay et fils inc. A strong and thoughtful focus on animal well-being

With its obvious charm and carefully thought-out facilities, the Bochatay farm in Saint-Théodore d'Acton is a haven of tranquillity and family support nestled in an agricultural setting. Composed, and keenly aware of everything she holds in her hands with this dairy operation, Virginie Bochatay is a third-generation producer on this family farm, where she has been working alongside her father, Jean-Paul, since 2019. Jean-Paul, his brother Henri, and their parents, Alfred and Georgette Bochatay, moved here from Switzerland, and founded the Bochatay farm in 1977.

Ferme Bochatay et fils inc.

HERD: 160 head, including 77 lactating cows

PRODUCTION: 10 943 kg of milk, with 4.34% fat and 3.7% protein

BCA: 230-244-242

CLASSIFICATION: 4 M EX - 2 EX - 37 VG - 42 GP

QUOTA: 98 kg BF/day

CROPS: The farm owns 100 ha under cultivation and rents an additional 30 ha, of which 45 are devoted to hay and 60 to corn production, among other crops, in addition to the pasturelands. The cows are fed a TMR composed of silage corn, haylage, high moisture corn, supplements, and minerals.

The Bochatay herd stems from the animals initially chosen and bred by Virginie's uncle Henri, now retired from the operation. "We've always bred all our animals here, since the farm's beginning," says Virginie Bochatay, adding that the purebred Holstein herd began to take shape in the 1980s, under the ownership of the brothers and their parents. Today, Henri, who works as an inseminator, continues to be of valuable assistance to the operation, for breeding and all kinds of advice. Virginie's partner, Antoine Chariatte, also from Switzerland, is largely responsible for managing the fields and the herd. Formerly an electrician in Switzerland, he also has a diploma in farm management from the ITA, Saint-Hyacinthe campus, and a DVS in agricultural mechanics, an added resource for Virginie, who has a degree in agronomy.

Uniformity is the priority!

The farm has bred a number of remarkable

and noteworthy animals, among them *Bochatay Barlyne Silver*, EX-94 2E, owned by Ferme Beaudry et fils inc. (Monbriant) since 2019. In four publishable lactations, *Barlyne* produced 45 921 kg of milk, with 4.6% fat and 3.4% protein. She also took first place in the open class at the Shefford-Brome Holstein Club's Breeders' Cup in 2021.

Ferme Bochatay et fils inc. has indeed sold many highly promising cows over the years. One such example is *Bochatay Camaria Sanchez*, EX-93 2*, a cow that produced 50 112 kg of milk in three lactations, with 4% fat and 3.4% protein. *Camaria* was initially sold to Ferme M.C.F. inc. but has since returned to the Bochatay herd, now co-owned with Ferme Beldavid, in Saint-David. "Every year,



Virginie Bochatay and Antoine Chariatte have a view of dairy farming that is very much rooted in nature.

we sell about 15-20 animals for production, often first-or second-born calves, but not



Bochatay Barlyne Silver, EX-94 2E, is a remarkable animal bred by the Bochatay family.



HERD PROFILE



The team behind Ferme Bochatay et fils inc., including two valuable employees and partners, Julien Dalpé and Marie-Ange Vachon (at each end of the row). Antoine and Virginie, with Mireille and Jean-Paul Bochatay, and the youngest family members: Laure, Roman and Arnaud.

from one particular cow family,” Antoine Chariatte explains.

If they believe strongly in their herd, it is because they are trying to develop it in the most uniform manner possible. “We favour semen from proven bulls and whatever is the best in each insemination centre at the time. We develop four or five families that way, without putting extra emphasis on one in particular. We want our herd to stand out for its uniformity, as much for classification, feet and legs, as for udder quality,” Mr. Chariatte adds.

The longevity of their animals is another important feature. For example, a solid line like that of *Bochatay Caryssa Lauthority, EX*, aged 8, is the type of cow the farm is aiming for, as much for her longtime production as for the desirable traits she transmits to her descendants. In seven publishable lactations, *Caryssa* has produced 77 083 kg of milk, with 4.3% fat and 3.5% protein. In 2021, she received a Longtime Production award for 60 000 kg +.

Pasture: the farm’s philosophy

What really distinguishes Ferme Bochatay et fils inc., however, is the way they manage milking and their pastures. With a natural view of animal husbandry and wanting to feel even closer to nature, the couple has always wanted their animals to spend most of their time outdoors. Accordingly, the herd, housed in a tie-stall barn and milked with a carrier rail system, spends a good part of the year outdoors, on pasture from May to October, only coming back to the barn for milking.

“It’s just a different way of managing our herd, and it’s not really any more demanding. It takes about 15 minutes to get the cows inside for milking, and then they go back outside and we have all the room and peace and quiet we need to clean the cow barn and do our work. It’s really quite advantageous,” Antoine Chariatte points out. When *La Revue* visited the farm, all the yearling heifers were serenely enjoying the outdoor life, with access to a shelter as needed. “We saw the new standards for animal well-being coming into place, and here, in spite of our tie-stalls, our cows are very active and don’t spend all their time in the barn. Those are some very good points in our favour,” Mme Bochatay notes.

“The important thing for us is to have good balance in everything, in our family life, on the farm, working with good cows, with no pressure. We’re trying to expand, but step by step, gradually, because, yes, we have the capacity to increase our quota to 120 kg. But also, seeing the animals outside, this landscape, this life, it’s very important to us as well. And that philosophy extends beyond simple production numbers. Our animals can be loose or tied, so our cows are very versatile and productive too,” Virginie Bochatay explains, a note of pride in her voice. A philosophy and quiet strength certainly worthy of praise!



The perfect look!

The Bochatays’ perspective on dairy farming, combined with their close-knit family ties, has made their farm a beautiful and exceptional site. All in natural wood, designed entirely by Jean-Paul Bochatay, the farm buildings have a warm and rustic look. The brush that stands outside is characteristic of the importance these farmers attach to the well-being of their animals.



BY
VÉRONIQUE
LEMONDE

Editor
in chief



Ferme Cerpolaït SENC A growing herd forging a place for itself!

*I*n the early 2000s, the three Cartier brothers, Simon, Martin and Serge, decided to turn to breeding exclusively purebred Holsteins, a decision that would enable them to improve the genetics of their then-60-head Cerpolaït herd. A well-conceived strategy that they have had no cause to regret, as it continues to produce results for this young herd today.

Ferme Cerpolaït SENC

HERD: 160 head, including 70 lactating cows

PRODUCTION: 10 900 kg of milk, with 4.25% fat and 3.21% protein

BCA: 248-270-253

CLASSIFICATION: 18 EX – 44 VG – 16 GP

QUOTA: 98 kg BF/day

CROPS: The farm grows grain corn, silage corn, soybeans, and hay on a number of sites.

OTHER PRODUCTION: The farm also runs a farrow-to-finish hog operation.

Established on the same site in Saint-Aimé since 1762 (!), the Cartier family represents a line of determined farmers. Martin, Simon and Serge's parents, Yvon and Nicole Cartier, raised crossbred Holsteins for many years before their sons joined them as shareholders in the operation in 1996. "Today we still have a very young herd and I can't really say that we have a brood family or cow right now. We started to flush some of the cows in the herd around 2010. We can't say there's a line that dominates right now, but we're developing a number of families," explains Simon Cartier, in charge of managing and developing the genetics of the Cerpolaït herd.

"Most of the time, what I'm trying to do is to put everything into the same calf. For example, when making mating decisions, I look for



A major award!

Just back from the 100th edition of the RAWF when *La Revue* visited Saint-Aimé, Simon Cartier was especially proud to share the news that he had come home with the Premier Herdsman Award, all breeds combined. "It's a wonderful prize, and I'm really proud for the farm. In fact, it rewards and highlights our whole outfit: appearance, exhibits, reception by our team, etc."

the best, as much for type, fat, show performance, as for milk production. I go with my observations and I don't have a problem with buying animals with other prefixes. I often buy Pierstein or Jacobs animals; they're models for our herd," Simon Cartier explains. A case in point is *Jacobs Seaver Jozzy*, EX-93, a cow Ferme Cerpolaït has co-owned with Ferme Jacobs inc. since 2017. *Jozzy* won Honourable Mention Grand Champion, Best Bred and Owned, first Senior Three-Year-Old, and Reserve Intermediate Champion at the Saint-Hyacinthe agricultural show in 2021. A remarkable achievement!



Jacobs Seaver Jozzy, EX-93, co-owned with Ferme Jacobs inc. since 2017, won Honourable Mention Grand Champion, Best Bred and Owned, first Senior Three-year-Old, and Reserve Intermediate Champion at the Saint-Hyacinthe agricultural show in 2021. A wise purchase!

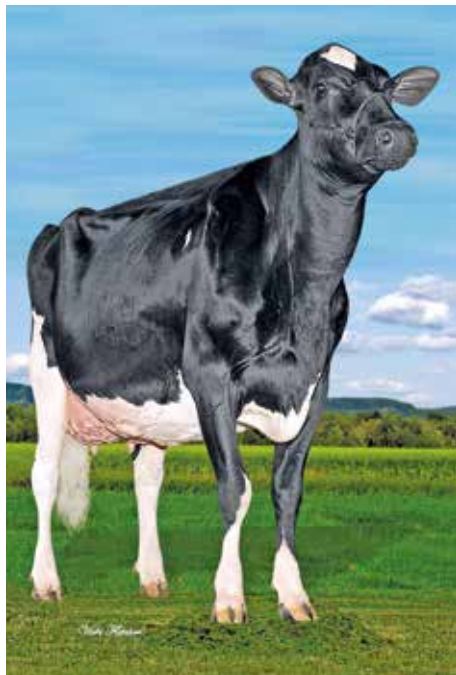


HERD PROFILE

Simon Cartier also aims for longevity in his animals, as evidenced by 13-year-old *Morsan Gold Taffy*, EX-93 4E, who unfortunately died earlier this year. This matriarch of the herd earned a Longtime Production award for over 80,000 kg, and won the titles of Reserve Grand Champion in Saint-Hyacinthe in 2014, Grand Champion in Portneuf in 2014, first Mature Cow in Trois-Rivières in 2016, and Honourable Mention Tout-Québec Mature Cow and Longtime Production in 2015 and 2016, respectively. "Cows like *Taffy*, we'd like them all to be like that! We want them all to be healthy and live long and produce lots of calves. It's much better for us as producers," says Mr. Cartier, recalling this particular cow that contributed 12 daughters to the herd, 3 of which classified VG-86-2yr.

The show ring as a herd development tool!

But more than any other criteria used for breeding decisions, Ferme Cerpolaït SENC takes part in shows to develop their herd's genetics and compare themselves with other producers and observe. Since he began taking part in shows, including the Royal Agricultural Winter Fair, around 2014, Simon Cartier has developed a real passion for the show ring!



Morsan Gold Taffy, EX-93 4E, lived to the age of 13 and, in six publishable lactations, produced 93 711 kg of milk, with 4.1% fat and 3.3% protein. A matriarch that had a tremendous influence on the Cartier herd.

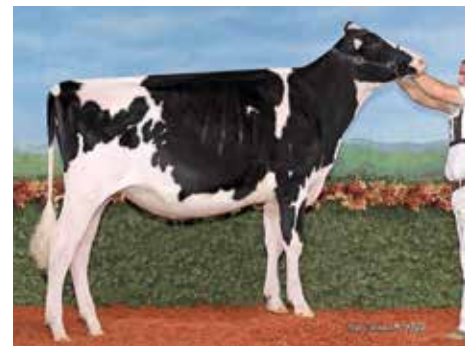


At the Saint-Hyacinthe show, *Cerpolaït Haniko Volt* won first Winter Heifer and placed among the top 5 for the day in the Junior Championship. Pictured here at the RAWF, *Volt* finished 11th in the Winter Heifer class.

"It's really important for me to see what others are doing so I can compare myself and then improve. I see exactly the type of cow that's popular, for example, what the sought-after traits are, and then I can focus on the right animals in the herd or make sound genetic decisions for the future." By targeting animals in other herds, at shows, Ferme Cerpolaït also manages to find two or three special heifers every year to develop their herd.

At the RAWF last November, Ferme Cerpolaït SENC exhibited five animals, including *Hodglynn Alongside Healer*, a heifer born last March that placed third in the Spring Heifer class. The breeders acquired the promising animal last June, from an Ontario farm, in co-ownership with Ferme Duhibou inc. and Ferme Fortale Holstein inc. "We also sold two heifers in Toronto. These are always opportunities to help each other out, to network and to look at what others are doing. I really love shows!" Simon Cartier affirms.

With 85 per cent of the herd now bearing the Cerpolaït prefix, Simon Cartier and his fellow team members clearly know how to make profitable and rewarding choices for the family operation. A young herd, certainly, but one that is brimming with potential!



Acquired in co-ownership by Ferme Cerpolaït SENC and Ferme Vert d'Or inc. at the Ferme Jacobs sale in November 2021, *Jacobs Chief Lisana*, proved a judicious choice. From a world renowned family, *Lisana* won first Summer Yearling at the Kamouraska show in 2022, in addition to first Summer Yearling and Junior Grand Champion at the Saint-Hyacinthe show.



BY
VÉRONIQUE
LEMONDE

Editor
in chief



Saint-Hyacinthe Holstein Club Good fun on the programme in the Saint-Hyacinthe region!

In the heart of the Montérégie region, the 190-member Saint-Hyacinthe Holstein Club encompasses the counties of Bagot, Chambly, Richelieu, Saint-Hyacinthe, and Verchères, a territory where the agricultural industry is ubiquitous. Home to the ITA (Saint-Hyacinthe campus), the Faculté de médecine vétérinaire, the property belonging to the Société d'agriculture de Saint-Hyacinthe, many agri-food businesses, and even the Holstein Association's offices, this Club is without doubt a vibrant organization, offering a full programme of activities.

Founded in 1933, the Saint-Hyacinthe Holstein Club proudly perpetuates a number of activities around one core passion: improving and promoting the Holstein breed and Holstein breeding. The Quebec International Holstein Show (QIHS), held in the region every fall for 20 years, is one such example. In 2014, that show passed the torch to the Supreme Dairy Show, which continues to provide business and networking opportunities to all the dairy sector stakeholders.

The Club's long history has been marked by some distinctive events over the years, such as the 1954 Holstein Québec Picnic hosted by Donat Giard, one of the Club's founders, at Ferme R. Giard et fils inc. (Quatuor), then in Sainte-Rosalie. The Picnic's 1957 edition was held at La Métairie Saint-Joseph, where the community of the Sœurs de la Charité de Saint-Hyacinthe and its small farm were tasked with feeding the beneficiaries of this institution dedicated to serving the sick and poor. Following a fire in 1961, the religious community's dairy herd was acquired by a farmer in Beloeil.



2022 Breeders' Cup

Other venues for the Association's summer flagship event have included Ferme Mibelson inc., in La Présentation, in 1968, Ferme Giard (Giard), in Saint-Simon, in 1994, and Ferme Maskita, the ITA's Saint-Hyacinthe campus' school farm, in 2003. Under the theme: *The Holstein comes to town!*, this latter event drew over 7000 visitors, there to admire the 110 high-calibre Holsteins then owned by the ITA, the Ciaq, the Faculté de médecine vétérinaire, and the Salon de l'agriculture.

A programme jam-packed with activities!

To bring its members together, the board of directors of the Saint-Hyacinthe Holstein Club has long organized a series of regular annual activities. These include a golf tournament that has been held at the end of the summer for the past 30 years, a winter social evening, winter and summer barn twilight parties, Club trips, and, of course, the Saint-Hyacinthe agricultural expo in July.

The Club also publishes a directory of breeders and sponsors, updated annually. Copies are available upon request to the Club's publicist or secretary-treasurer.

Master Breeders

The breeders and herds of the Saint-Hyacinthe Holstein Club have made their mark in the dairy world, with many Master Breeders among them. William Bousquet (Grand Rang prefix), of La Présentation, became the Club's first Master Breeder in 1949, followed by Lucien Blanchette (La Présentation) in 1955. The La Présentation prefix went on to earn



In 2003, the Maskita school farm hosted the Holstein Québec Picnic on the ITA grounds in Saint-Hyacinthe.

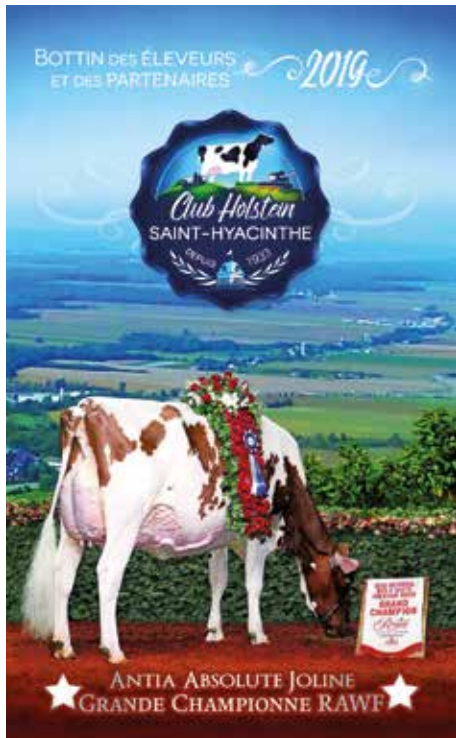


The Club's golf tournament in 2022.



DISCOVER A CLUB

two more Master Breeders shields, in 1993 and 2005, under the name of Ferme Richard Blanchette et fils inc., also in La Présentation.



H.L. Guilbert (Églantiers), in Verchères, became a Master Breeder in 1956. Then, Donat Giard, who received a first title in 1953, for the Quatuor prefix on his farm in Sainte-Rosalie, was awarded a second title in 2008, this time for the Giard prefix on his farm in Saint-Simon. In 2010, the honours went to Ferme Gilson inc. (Gilson), in Upton, and Ferme Vinbert inc. (Vinbert), in Acton Vale. Ferme Maskita (Maskita) and Ferme Gourin-Ricstar (Ricstar), both in Saint-Hyacinthe, joined the ranks as Master Breeders in 2014, as did Ferme Raymond Pelletier et fils inc. (Raypel), in Saint-Simon, in 2020.

In show mode!

With so many outstanding dairy operations, it's no surprise that the region also boasts some animals that have distinguished themselves in the show ring as well! Last April, the Saint-Hyacinthe Holstein Club held its second Breeders' Cup event, much appreciated by members, where *Valrick Control Lilwenn*, EX-93, was crowned Grand Champion. Ferme Gérard Lavallée et fils (Valrick), in Saint-Louis-de-Richelieu, is also home to another very impressive cow, *Valrick Charlie Melodie*, EX-95 4E, with an incredible record as four-time Champion Bred and Owned (2017-2018-2019-2021) and five-time Grand Champion (2015 to 2021) at the Saint-Hyacinthe expo!



Families to honour

At the Saint-Hyacinthe expo in 2022, two important farm families were honoured for their long-time participation at this show that has been held annually for the past 180 years. Hence the Giard family, of Ferme Giard (Giard) in Saint-Simon, and the Lagacé family, of Ferme Lagacé et fils inc. in Saint-Hyacinthe, both celebrated 100 years as exhibitors at the Exposition agricole de Saint-Hyacinthe. Ferme Giard also took home the Premier Breeder banner in the Holstein Show on July 31.

At the 2022 Breeders' Cup, the Belgarde prefix topped the ranking with 32 points, followed by Valrick (31 points) and Maskita (30 points), all sure value for the region!

"There are many successful breeders here. Just look at *Croteau Lesperron Unix*, bred by Ferme Yves Croteau et fils inc. in Upton, in collaboration with Lesperron, a bull that won Premier Sire in Madison this year. Also this year, *Vinbert Kingboy Birdy*, EX-95 3E, of Ferme Vinbert inc. in Acton Vale, won Grand Champion at the Saint-Hyacinthe expo, Reserve Champion Bred and Owned at the RAWF, and first Production Cow at the Supreme Dairy Show. A superb champion!" affirms Club president Yannick Lapointe (Antia prefix).

Likewise, we couldn't conclude this tour of the Saint-Hyacinthe Holstein Club without mentioning the recent achievements of *Antia Absolute Joline-Red*, VG-88 CAN and EX-94 USA, a cow bred by Ferme Gilles Lapointe et fils SENC that won first Mature Cow at the Red & White Holstein Show at the RAWF and Reserve Grand Champion Red & White at the World Dairy Expo this past fall.

And the Saint-Hyacinthe Holstein Club no doubt has many more surprises for us in the pipeline! To this end, the club will host the Holstein Quebec Picnic, in 2024, at Ferme Gilles Laporte et fils SENC, in Upton.



Social evening

BY
VALÉRIE
GIARD, AGR.

Advisor for
Southern Quebec



Whitemilk Where passion and accomplishment abound

The unique history of the Whitemilk prefix is a fascinating one. Olivier Chagnon and his father, Lucien, are the pair of passionate breeders behind the top-notch herd that inhabits this farm on Rang 8, in Saint-Théodore-d'Acton, a member of the Saint-Hyacinthe Holstein Club.

Whitemilk

OWNERS: Lucien and Olivier Chagnon

HERD: 140 head, including 70 lactating cows

QUOTA: 77 kg BF/day

AVERAGE ANNUAL PRODUCTION PER COW:
12 141 kg

CLASSIFICATION: 17 EX - 36 VG - 13 GP
(88-point average)

BCA: 266-290-286

Described by his son as the mainstay of the operation, Lucien Chagnon, has been working as a veterinarian at the Clinique Vétérinaire de Richmond for more than 30 years. Coming from a family of well-known dairy producers in the area, he specializes as a bovine practitioner. His son Olivier grew up to take on a number of jobs in agriculture. Whether on the family dairy farm, MR Chagnon, in Acton Vale, at the Fontaine auction on his mother's side of the family, or at Ferme Bochatay on the next road over, he has always gravitated around dairy farming. Despite that keen interest, he nonetheless went to Sherbrooke to complete a bachelor of administration degree at the Université de Sherbrooke.

But when all is said and done, Olivier's career path has clearly been guided by his affection for animals. In 2010, with the help of the Dairy Farm Startup Assistance Program (12/12), he went into business with his first prefix, Olistar, on a farm that he and Lucien set up not far from the current site. But buying 0.1 kg of quota at a time made it difficult to expand the herd as they had planned. Then, in 2013, an operation located on the same road, Ferme Dubosson inc., came up for sale, with a 41-kg quota and 150 acres of farmland. The Dubosson herd was already genetically sound, with its owners aspiring to become Master Breeders. That goal remains attainable, given that for the

past four years the herd has ranked in the top 10 in the 25-to-30 registrations per year category. The Chagnons officially acquired Ferme Dubosson inc. in 2014, and have since united the Olistar and Dubosson prefixes under the new Whitemilk prefix. A merger that holds promise for the future!

For the Chagnons, setting goals is both important and motivating. Conformation and production have improved steadily over the years, and they have managed to achieve their ambitious goals by applying some concrete strategies. Embryo transfer, for example, played a major role in the early years, with embryos from their top cows transplanted in all their replacement cows. Their goal was to ensure that every Whitemilk heifer born would be the daughter of a VG or EX dam.

Another of the Chagnons' goals was to ensure that all their cows with three or more calves classified EX, a mission they have accomplished. Their next objective is to have the entire herd classified VG or better. With the latest classification round adding eight new EX, it's clear that it's just a question of time before that goal is realized.

A number of other projects have focussed on improving the comfort of their herd. New mattresses added to the stalls for lactating cows, a refit for heifer housing, the construction of a silo in addition to a cold barn for yearling



Olivier Chagnon and Stéphanie Beaulieu's three daughters, Gabriella and Amanda Chagnon and their younger sister Camila, on the farm.

heifers are among the recent improvements. At the same time, they have a more modern and natural view for the future, with free-stall housing to enhance the cows' environment and improve the quality of life of the people who work with them. The well-being the Whitemilk herd is a priority for these breeders.

Olivier Chagnon is more than grateful to his father, who manages the herd's health and welfare with expertise. Olivier makes the breeding decisions and takes care of the farm's day-to-day operations. Together, father and son strive to give their all to what they do, most certainly key to the operation's success. With the spotlight on its inspiring story, the Whitemilk prefix can now shine brighter than ever!



The free-stall barn built in 2020 houses the farm's yearling heifers.

BY
VÉRONIQUE
LEMONDE

Editor
in chief



Antibiotics: a sensitive issue

Because the health and well-being of their herds is top priority for Quebec dairy producers, they have every reason to be worried about the availability of antibiotics in this province and across the country. But what has happened to antibiotic use since the 2019 regulation prohibiting the preventative use of Category I antibiotics? Can antibiotics be used responsibly in dairy herds without a negative financial impact, or harm to the health of humans or livestock?

Prior to the 2019 regulation, Category I antibiotics were often the first choice of producers seeking to treat their animals, whether preventatively or curatively. Then Health Canada classified Category I antibiotics as being of very high importance in human medicine. These antimicrobials are sometimes the very last defence against serious infections requiring treatment in humans. Moreover, there are few alternative treatments available to replace this type of antibiotics. "The emergence of bacterial resistance to antibiotics is of great concern

and could lead to public health problems in the future. Which is why, since 2019, we are required to draw from other sources and only use Category I antibiotics as a last resort," explains Dr. Antoine Bourgeois, veterinarian and co-owner of the Hôpital vétérinaire de Sherbrooke.

"So of course that means we have fewer options to treat our animals," says Yannick Lapointe, co-owner of Ferme Gilles Lapointe et fils inc., in Upton. "We need to adapt, and it's not always easy. We have to live with the

fact that some medications may be out of stock or that the formulas change. This can cause significant delays for producers." And when a cow needs treatment, every minute counts!

"The regulation doesn't prohibit the use of a Category I, but it needs to be justified. And it's the justification that's complicated. For severe cases of mastitis, for example, there are only a few products for intramammary treatment, two of which are Category I antibiotics. Among the others, one is out of stock," explains Hélène Lardé, a doctoral student at the Faculté de médecine vétérinaire and author of a study conducted in 2019 (Source: *Le Bulletin de l'agriculteur*, November 2019) that confirmed that the options are limited in cases of acute mastitis. For example, with Pirsue (pirlimycin) no longer available, there are only two other antibiotics available, namely, Cefa-Lak (cefapirin) and Spectramast (a cephalosporin), products that act differently on a variety of mammary gland infections.

Countering antibiotic resistance

"The idea is not to ban Category I antibiotics, but to rationalize all antibiotic use, regardless of category. In certain circumstances, it may be more thorough to treat with a Category I rather than another molecule. It's important to avoid making the discussion around antibiotic resistance solely about restricting the use of Category I antibiotics," emphasizes Dr. Frédéric Tremblay, veterinarian at the Bureau vétérinaire de Sainte-Marie.

Speaking at the Symposium sur les bovins laitiers in November 2022, Dr. Tremblay stressed that habits still need to change. "Judicious use of antibiotics means using the right product for the right bacteria, at the



right dose and for the right amount of time. In dairy production, the first approach to consider, in my opinion, is to avoid treating with antibiotics conditions that don't require their use," he explains. We shouldn't let our emotions take control of our decisions!

It's clear that producers have adjusted fairly well to the new regulation, since Category I antibiotic use has decreased by almost 100 per cent in Dr. Tremblay's practice in Sainte-Marie. Dr. Antoine Bourgeois concurs: "The regulation has required and still requires a great deal of adjustment from producers, because Category I antibiotics must be the last line of defence for the health of an animal, used only as a last resort. I would say that sales of Category I antibiotics have dropped by 50 to 80 per cent since 2019."

"What is important to understand is that antibiotics don't all act in the same way and are not all effective against the same pathogens. Depending on a herd's clinical situation, a veterinarian could prescribe a different product from one farm to the next," points out Dr. Anne Lemay, of CEVA Santé animale. This is why prevention is so important for the health of dairy cattle, so as to avoid hitting a wall when confronted with a serious problem.

Because producers have an enormous impact on animal health through their actions, they also need to be concerned about human health and the health of their environment. "Increasingly, we think that human medicine may—and I emphasize the word *may* here—be responsible for resistance to certain drugs. Putting all the responsibility on the shoulders of producers and breeders doesn't help us move forward," Dr. Bourgeois stresses. The actions of one can't be substituted for or subtracted from those of another.

Prevent rather than cure!

Rational and judicious use of antibiotics is possible when the focus is on prevention and rigorous herd management. "Health management in the barn and in the cows' environment is really the heart of the issue, because it's key to **preventing bacteria from entering the cows' teats**. Proper sanitation for milking, teat dips and a clean and well-organized milking system often make a big difference in preventing mastitis, for example," says Dr. Bourgeois. Likewise, a **dry environment** and good ventilation help prevent neonatal diarrhea as well as respiratory and mobility problems. In fact, less than 50 per cent of

cases of clinical mastitis require antibiotic treatment. In the case of subclinical mastitis, a viable option in many herds is a selective antibiotic treatment at dry off, with the aim of eliminating any infections that are present and preventing new infections.

It is also important to pay attention to the calves, which are far more fragile. In this case, **vaccination** is one of the most effective ways to protect heifers against infection. **Rigorous colostrum management** is also very important in avoiding infection in calves. Meticulous biosecurity measures are key as well, as is—and why not?—**an infirmary** to isolate animals that fall sick.

"The important thing is to **establish a good animal care protocol in collaboration with a veterinarian**. I say to producers: Consult with us, because we can help you avoid curative treatment and, sometimes, being forced to make difficult decisions. There's still a great deal of discussion to be had in moving towards a preventative approach. It takes more than a few years to change attitudes and the way things are done," Dr. Antoine Bourgeois affirms.

"Protocols are set up to optimize antibiotic use. By following those protocols, you not only ensure that your animals receive consistent treatment, you also use the appropriate medication to fight a specific infection. That also means **administering the medication according to the prescribed dose**, based on the animal's live weight or an estimate thereof, and **at the right moment**," explains Dr. Anne Lemay. "One of the main causes of treatment failure is directly related to improper drug use: the wrong antibiotic for the disease in question, too much of the medication per injection site, the wrong dose, the wrong administration route, insufficient length or frequency of treatment, a product out of date or stored improperly or contaminated. To evaluate effectiveness and avoid errors, **keep accurate records of the treatments** administered to your animals," she underlines. Using an antibiotic when there is no infection is a fast track to antibiotic resistance.

A look at the shortage

In addition to the sensitive issue of their use, the availability of antibiotics, which is sometimes—and often—limited, is also a concern. Last fall, Holstein Québec presented a resolution on antibiotic availability received from various members, including Les Pro-

ducteurs de lait du Québec, the UPA and the Ordre des médecins vétérinaires du Québec, thus representing a membership concerned about the level of insecurity regarding the availability of certain medications and wanting to draw attention to the matter. "We've been discussing the issue for at least two years now at our club AGMs, with our members submitting their concerns about the problem. There is a real difficulty with antibiotics," says Louis St-Aubin, a director at Holstein Québec. Julie Gagnon, a farmer in Saint-Pierre-de-Lamy, was among those who presented a resolution to Holstein Québec on behalf of the Bas-St-Laurent Holstein Club. "Often there aren't a lot of antibiotic options for pathologies that affect the udder and yet those are the most frequent in dairy herds," points out the co-owner of Ferme Ciboulette inc. "Animal well-being is now a major issue, so what can we do when the drug that would be the most effective isn't available?"

The problem related to the supply and distribution of certain drugs has been a forefront issue since the Covid-19 pandemic. Moreover, the problem has been amplified by the labour shortage in Quebec, the moving of the Centre de distribution de médicaments vétérinaires (CDMV), and a number of supplier inventory shortages. "Yes, in 2019, with the new regulation on antibiotics, many producers were alarmed, because we were losing a tool for the health of our dairy herds. And yes, certain molecules were unavailable and sometimes still are, but we've never had a shortage of many medications for the same use at the same time. There's always been a plan B and C. And all that insecurity hasn't led to any dramatic outcomes for the health of our cows in Quebec. On the contrary, we can see that since the 2019 regulation, the use of Category I antibiotics has decreased drastically, and we haven't noticed a negative impact on animal health and well-being," maintains Dr. Frédéric Tremblay, in Sainte-Marie.

"The weak link right now is really transportation and distribution," Dr. Bourgeois says. According to the UPA, in a response to Holstein Québec, the supply of dry-off medications is more fragile right now, but the "CDMV was able to direct its customers to other equivalent drugs."

Most dairy producers, however, see the situation differently and don't share the views of some veterinarians. "It's a shortage that seems to come in cycles. It varies a lot from region to region, from one herd to



another. Sometimes, for a small herd, we're offered dose sizes that are too big for our herds, because these are the only sizes they have. For our cows' health, we need to have the right tool to work with and that means having appropriate doses of vaccines or antibiotics to be able to treat at the right time," Julie Gagnon explains. Obviously, producers don't want to pay for products that will be out of date before they get used in cases where they can only get a drug in large dose sizes.

And yet it will always be the producer who has to pay the price, be it for unavailability, a delay in certain steps of the process, or an antibiotic that cannot be used in the herd. In addition to the uncertainty of antibiotic availability, producers often come up against **a delay in receiving the results of the bacteriological cultures**, which are needed to justify a given treatment, including the use of a Category I antibiotic. Milk culture tests are essential, however, as pathogens vary widely between herds. Unfortunately, it may take several days before the results of milk analyses are conveyed to the producer, which means that an animal is suffering and not receiving treatment for a significant

period of time. Obviously this runs counter to the principles of animal well-being and can compromise the efficacy of a treatment.

For Holstein breeders who have invested a great deal of time and money in improving their herds and developing their genetics, a waiting period and a case of untreated mastitis in a specific quarter, for example, can become dramatic if the infection changes the appearance of the quarter. Indeed, the loss of a quarter has a direct impact on a cow's classification, in turn affecting the pedigree of her descendants, with a consequent reduction in their value.

"An unavailable drug could delay the growth of my calf, reduce my cow's milk production, and affect the quality of the animal's milk, with major economic consequences for my herd. What's more, the scarcity of certain antibiotics puts enormous pressure on the other medications that are available. We hope to give our herd preventative care, not just curative," concludes Ms. Gagnon, who hopes the matter will be monitored very closely by the various agencies.

In your tool kit, just in case...

Even if drugs and antibiotics must be prescribed by your veterinarian, it is always possible to keep a small supply in stock for contingencies, such as cases arising on weekends or in the evening. Dr. Antoine Bourgeois suggests that producers have on hand a few basic injectable and intramammary medications, whether for a sudden case of mastitis or anti-inflammatories for foot and leg problems, for example. It is important, however, to make sure you don't keep out-of-date medications or—even worse—drugs that are now prohibited in Canada. So **keep the veterinary prescriptions** for the medications you have on the farm, and the justification required for any Category I antibiotics. Store everything in a safe place and, ideally, designate one person to be responsible for administering medicines on the farm.

