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Developing the female potential An idea worth exploring

Ferme Dupotier An interest in good cows with good indexes

Préross Herd A well-trained team



BY MICHEL DOSTIE Editor

Translation by Nicole De Rouin



Préross herd Building a winning team

A source of the sports fan, Réjean Ross compares his herd to a hockey club, where the breeder is the "coach" who trains the recruits and acquires new players to improve the group's overall performance. Réjean tackles that challenge with his partner, Solange Lebel, and their two daughters, Amélie and Julie. In keeping with the allegory, it's safe to say that the team has enough talent to "make the playoffs"!

FERME PRÉROSS

Number of head: 240, including 118 cows in milk

Production: 10 029 kg of milk, with 4.23% fat and 3.32% protein

BCA: 219-242-231

Quota: 155 kg BF/day with the margins

Classification: 6 M EX, 1 EX, 65 VG and 37 GP

Cropland: 202.5 hectares under cultivation, 14 of which are rented. Overall, 24 ha are seeded to wheat, 6.5 ha to barley, and 16 ha to silage corn; the remaining 156 ha are devoted to grassland, with the first cut harvested in round bales and the second stored in silage tubes.

The showring was the motivating factor that first prompted the purchase of purebred animals. As a teenager, Réjean Ross took part in young farmers' competitions, where he developed a passion for that aspect of breeding. It was in fact on the fairgrounds that he met Solange, who would later become his partner. Réjean was also the founding president of the young farmers group in his region. After acquiring the family farm at the age of 20, he made buying one purebred animal per year a part of his plan. But, as he explains, "that required choosing the animal and being ready to pay the price."

In 1987, one of their first key decisions was to acquire *Chacook Jenny*, VG-86 8*. Her 23 daughters, 7 of which are sired by *Starbuck*, are classified 91.5 per cent GP or better. One of them is *Preross Starbuck Jenny*, VG-3yr, a cow that produced 106 332 kg of milk in 12 lactations. Overall, 11 of *Chacook Jenny's* descendants have been classified EX. Among that group, her granddaughter *Preross Counselor Johel*, EX 2E 3*, first Senior Two-Year-Old in 1994 and Grand Champion in 1995, in Rimouski, is the dam of 18 daughters, classified 94 per cent GP or better.

The Préross herd is also founded on *Markani Leader Roxy*, EX 2E 5*, an animal purchased as a six-month-old calf. Réjean Ross was familiar with her dam, *Yvenoit Yvonne Volcan*, VG-87-3yr 17*, a cow that won Reserve Grand Champion in Rimouski in 1989, and had two Superior Lactation certificates to her name. *Roxy* went on to do well at the Rimouski exposition, in particular as second Senior Two-Year-Old in 2000, and proved to be a good milker, with a yield of over 70 000 kg of milk in six lactations. Although she produced only two daughters, both are classified EX, and *Preross Terasson Roxanne*, EX-94 8E 2*, has certainly lived up to the family's reputation. Named first Senior Three-Year-Old and first Mature Cow in Rimouski in 2007 and 2011, *Roxanne* produced over 118 000 kg of milk in 10 lactations. At 16, she is still in the barn and has just given birth to her eleventh calf. With due respect, *Roxanne* is housed in a bed-pack pen.

Firstview Talent Michele, EX-92 2E 1*, coowned with Ferme Claude St-Pierre et fils, is another purchase that proved decisive. *Michele's* granddaughter, *Preross Artes Maya*, EX-91 3E, is now upholding the family tradition



Preross Artes Maya, EX-91 3E, a granddaughter of Firstview Talent Michele, EX-92 2E 1*, produced 14 772 kg of milk (277-234-271) in her fourth lactation. Her first daughters, from an embryo transfer by Doorman, will soon be calving.





with a yield of 14 772 kg of milk in her fourth lactation. Her first daughters, from an embryo transfer sired by *Doorman*, will soon be calving.

Last but not least, the breeders are also counting on *Preross Gold Chip Canelle*, VG-87-3yr, third Senior Three-Year-Old in Rimouski in 2019, now in her second lactation, and on *Jacobs Doorman Army*, VG-87-3yr, first Junior Yearling in Rimouski in 2016.



Preross Gold Chip Canelle, VG-87-3yr, third Senior Three-Year-Old in Rimouski in 2019, is currently in her second lactation.

This buying strategy that consists of carefully choosing the animals they need is still applied today. Looking to increase the size of the herd following the construction of the new barn, the breeders have acquired 29 cows over the past year, many of which are classified VG. The animals were all selected for their specific attributes, says Julie, of the group that includes *Blondin Doorman Limbra*, VG-86-2yr, a descendant of *Lylehaven Lila Z*, EX-94 24*, and *Cotopierre Doorman Élodise*, VG-2yr, a descendant of *Cotopierre Lindy Bertha* and of the eleventh generation of VG or EX cows.

Knowing how to meet one's needs

For these breeders, whose prefix already includes 23 EX Holsteins and 3 EX Jerseys (the herd has 10 Jerseys), good conformation continues to be a priority. Now that the animals are housed in a free-stall barn, however, and milking is done with a robotic milking system, they not only insist on at least +10, but they also pay close attention to health traits, feet and legs, and teat placement. As for production, a milk proof of + 1000 is the minimum they accept. LPI is not really a selection criterion, says Réjean Ross, but he affirms "it's a given." The most important thing, he adds, is to have wellbalanced sires. The breeders use genomic young sires for 60 per cent of their matings, and buy around 20 doses of sexed semen each year.

Embryo transfers were used extensively in the early years when they needed to develop the herd. Nowadays however, their use of the procedure is more limited, with three embryo flushes planned for the coming months. Cows from well-known families will be used as embryo donors.

Dairy shows

For Réjean Ross and his family, dairy shows remain an important activity, particularly because they afford them the opportunity to meet and talk with other breeders who share their passion.

In addition to the various individual ribbons won by Préross cows, the three Breeder Banners and four Exhibitor Banners the breeders have brought home from Rimouski over the past few years are a source of great pride.

The daughters' undertaking

Because the old barn made it impossible to attain an acceptable level of productivity, a decision needed to be made. They could either decrease the size of the herd to ensure that the remaining cows would be able to deliver their full potential, or they could build a new barn, which would also make room to expand the herd. They chose the latter plan, and since February the milking cows have been housed in a free-stall barn equipped with two robotic milkers. As Réjean and Solange explain, the construction project addressed the needs of Amélie and Julie, who, since 2006, are co-owners of the farm, with 25.5 per cent of the shares each, while the remaining 49 per cent is shared equally between their parents. In 2016, the operation was one of the three finalists for the Establishment and Farm Transfer Award offered by the Coop fédérée.

The transfer went smoothly, say the daughters, and the 86 cows have all adapted well to the new barn and milking technology. Average production did drop slightly at the outset, but the situation quickly corrected itself. The barn also houses a temperaturecontrolled nursery, where heifer calves are fed with an automatic milk feeder.

The basic ration includes two types of silage along with barley and a supplement. In addition to that, all the cows receive feed at the robot, but the high-producing cows and those that have just calved also receive a supplement that is specially formulated to meet the needs of each group.



Réjean Ross and Solange Lebel, centre, with their two daughters, Amélie (left) and Julie, in the room adjacent to the two robotic milkers.

Everyone takes part in all aspects of the farm work, but Réjean is mainly responsible for feeding the cows and maintaining the equipment, in addition to backing Solange in taking care of the replacement animals, which are housed in the old barn. Amélie manages the automatic milking system and sees to preventive medicine, while Julie does the accounting on the computer. Réjean and his daughters work together to select the sires. Andy Pelletier, Julie's partner, works full time on the farm as well. Réjean and Solange also have two sons, Jean-René and Simon.



BY MICHEL DOSTIE Editor

Translation by Nicole De Rouin



The Dupotier cows Good production, conformation and indexes

he recent history of the Dupotier herd began in 2007, when Frédéric Pelletier acquired *La Presentation Diplomate*, EX-91 14*. Two years earlier, during a training session at the Ciaq, Frédéric had had the opportunity to visit Ferme La Présentation, where Serge Blanchette showed him three daughters of *La Presentation Daurel*, EX 64*. Frédéric didn't make a purchase at the time, but in July 2007, at the Holstein Québec Picnic at Ferme Cotopierre, Serge informed him that one of those heifers, *Diplomate*, was still at the farm, had given birth to her third calf, and was classified VG-86. Moreover, she was pregnant by *Bolton*. Frédéric immediately concluded the transaction.

FERME DUPOTIER INC.

Number of head: 300, including 120 cows in milk

Production: 11 500 kg of milk, with 4.1% fat and 3.2% protein

BCA: 251-248-270

Quota: 180 kg BF/day

Classification: 5 EX, 45 VG and 72 GP

Cropland: 243 hectares, 48.5 of which are devoted to silage corn and 194.5 to alfalfa and grasses that are harvested for silage.

A daughter of Comestar Lee, Diplomate has greatly influenced the development of the Dupotier herd. As a high-producing cow, she recorded two Superior Lactations. She is also dam to 18 daughters, a group that includes 4 EX and 8 VG, one of which is La Presentation Diplomatie, EX-91 2E 4*, a daughter by Bolton that won second Junior Heifer Calf in Rimouski in 2008, has since earned three Superior Lactations and is the dam of four daughters, two of which are classified EX. Of them, Dupotier Dempsey Diamond, EX 3*, won second Junior Heifer Calf, second Junior Yearling and third Junior Two-Year-Old in Rimouski in 2012, 2013 and 2014.

Diamond also gained recognition through her daughter *Dupotier Doorman Diademe*, EX, sold at the Sale of Stars in 2017. Representing the family's sixth generation of EX cows, *Diademe*, who in December 2016 was ranked first in a three-way tie on Canada's list of top cows for conformation with +19, has a GLPI of 3084. Before leaving for Ontario, she left the farm with nine heifers. The eldest, *Dupotier Denim Diametre*, VG-86-2yr, is currently in her first lactation, with a projected yield of 10 695 kg of milk. Born last May, *Diademe's* youngest daughter, *Dupotier Chief Dicoco*, has a GPA LPI of 3377 and a DGV LPI de 3510, making her the highest indexing female in the herd.

Dupotier Shaquille Dipy, EX-93 3E 1*, is another of Diplomate's daughters that has marked the herd. First Five-Year-Old in 2015 and third Mature Cow in 2016 in Rimouski, she has recorded three Superior Lactations, has a lifetime production of more than 95 000 kg and is the dam of eight daughters, three of which classified VG at two years.

The herd has also been influenced by *Dupotier Goldwyn Fee*, EX-92 3E 1*, third Five-Year-Old in Rimouski in 2011. Well-known for her high milk yields, Fee earned three Superior Lactation certificates and produced over 80 000 kg of milk in five lactations. Two of her three daughters have recorded Superior Lactations and several of her descendants remain in the herd. And like their predecessor, says Frédéric, they all have excellent mammary systems.

Looking to the future, the breeders are also counting on *Pierstein Sultan Tibiscuit*, VG-2yr, a cow acquired at the National Sale in 2017 that won second Senior Two-Year-Old in Rimouski in 2019. Her granddam,



Representing a sixth generation of EX cows, Dupotier Doorman Diademe, EX, has a GLPI of 3084. Before being sold, she left nine on the farm. The youngest, Dupotier Chief Dicoco, born last May, has a GPA LPI of 3327 and a DGV LPI of 3510, making her the highest indexing female in the herd.

Pineland Goldwyn Tinbit, EX-91 6*, is the dam of *Pierstein Cicero Time Out*, EX-95, currently a popular family in Quebec. *Tibiscuit's* first daughter, *Dupotier Contender Timbit*, born in November 2018, has a GPA LPI of 3262.

More recently, the Pelletiers purchased *Jacobs Capital Gain Briday*, a daughter of the well-known *Jacobs Goldwyn Britany*, EX-96 2E 15*, Reserve All-Canadian Four-Year-Old in 2011, and dam to 42 daughters, including 2 EX and 32 VG.



Photo : Compliments of family Pelletier

Following in the footsteps of the herd's founders

Frédéric's parents, Gaétan Pelletier and Odette Drapeau, are at the origin of the Dupotier herd in Saint-Donat, near Rimouski. Focussing primarily on production, Gaétan used artificial insemination to continually increase milk yield. With the purchase of a few purebred animals, the herd was launched.

As for conformation, it was Frédéric who first became interested in that aspect after his experience in the showring with the young farmers group. Later, the genetics courses he took while studying at the ITA drew his attention to genetic evaluations, particularly the LPI. Remaining true to his roots while incorporating this new knowledge, he now centres the selection process on breeding high-producing cows, since, as he puts it, "milk is what pays." Nonetheless, he accords equal importance to good conformation.

Proof positive, in 2018, the herd brought home two honorary plaques in the same category from the Bas-Saint-Laurent Holstein Club, an unusual occurrence. Indeed, *Dupotier Reginald Melimelo*, VG-87, and *Dupotier Dempsey Diamond*, mentioned above, tied for first place in the Five-Year-Old Female class, with a total BCA of 1026.

The farm is now equally owned by brothers Nicolas and Frédéric Pelletier. Frédéric and his partner, Mélanie Claveau, manage the herd while Nicolas takes care of the field work and machinery. Their father, Gaétan, and a permanent employee round out the team. In addition to his responsibilities on the farm, Frédéric has also been



Three generations of the Pelletier family and the team behind the Dupotier herd. In the centre, the founding couple, Odette Drapeau and Gaétan Pelletier. Behind, from left: Ghislain Bérubé, employee, Annie Cimon, student in training, Nicolas, William and Frédéric Pelletier, Mélanie Claveau and Nathan Pelletier. Front, from left: Antonin, Éloise, Marianne and Gabriel Pelletier.

president of the Bas-Saint-Laurent Holstein Club and vice-president of the Purdel cooperative, while Mélanie has been president of the Syndicat des agricultrices du Bas-Saint-Laurent (Bas Saint-Laurent farm women's union)



The udder of *Dupotier Manifold Fiona*, VG-2yr 1*, a cow that has earned two Superior Lactation certificates. *Fiona* is a daughter of *Dupotier Goldwyn Fee*, the head of a family whose members are known for the quality of their mammary systems.

Knowing how to choose

Because the Pelletier operation is equipped with an automatic milking system, milking speed is an important selection criterion, and a proof of 100 is considered the minimum for that trait. For production, they look for bulls with a LPI of at least 3000 and a milk proof of 1200. For conformation, they only select sires with proofs of at least +10 to +12 and high positives for feet and legs. The breeders then use the personalized bull selection service and prefer to use sexed semen.



Dupotier Shaquille Dipy, EX-93 3E 1*, a daughter of Diplomate, was first Five-Year-Old in 2015 and third Mature Cow in 2016 in Rimouski. Dipy has three Superior Lactations, a lifetime production of more than 95 000 kg of milk, and is the dam of eight daughters, three of which classified VG at two years.

Genomics are playing an increasingly predominant role and nearly all services are done with young sire semen. Only those that are proven and particularly outstanding – think of the showring here – may be selected. The breeders also rely on this new technology for the females. A third of the herd has already been genotyped, and in the past year, all the heifers have been tested.

From three milkings a day to robotic milkers

In 2015, the Dupotier herd included 90 lactating cows, and the owners were milking three times a day. The desire to modernize their facilities and improve their quality of life, in particular by eliminating the third milking, motivated the owners to consider building a new free-stall barn, equipped with an automatic milking system. But Frédéric needed some reassurance. "So I visited Master Breeders who had robotic milking systems," he says, "and I was convinced."

In November 2017, the animals were moved into the new facility, a building equipped with three milking robots (and room for a fourth), waterbeds and a pen for show cows. Milking cows were also added to the herd, all carefully selected, functional animals, explains Mélanie Claveau, Frédéric's partner. The couple acknowledges that an adjustment period was necessary, but all is well now. In Frédéric's view, "robotic milkers don't just protect udder health, they make the cows talk." Production is now back up to its previous level and the breeders want to re-establish the standing of their herd, get back to marketing, and parade their animals in the showring.



BY MICHEL DOSTIE Editor

Translation by Nicole De Rouin



A look at the females, a highly recommended approach

Olstein Québec has long been committed to disseminating information on genetic improvement. More than ten years ago, Holstein Québec advisors were already giving what was then called Practical Training in Genetics. But breeders wanted more; they were looking for a more personalized approach, and it is that need that gave rise to the Holstein Québec Advisory Service.

Newly implemented in 2009, this service relies on in-depth knowledge of the genetic potential of each cow in a herd. Without minimizing the influence of sires, reproduction necessarily requires cows as well. So even if bulls do play a major role in genetic improvement, owing to the large number of daughters they can beget, they are not the only factor that counts.

An approach applicable to all herds

Every herd inevitably has its strengths and weaknesses, and Holstein advisors work with breeders to clearly identify them. This analysis necessarily takes into account the breeding goals of each member. So the aim is not to sell a particular method, but rather to respect each producer's viewpoint. For example, an advisor's suggestions could be adapted to the needs of a breeder whose animals are currently housed in a conventional barn, but who has plans to build a free-stall barn.

The first step consists in charting the trends in a herd. This means using herd data for the past few years to provide a graphic indication of where the herd is heading. This procedure can be done for different aspects of production, such as milk and components or conformation and functional traits, highlighting the changes in each of these traits (Figure 1 and 2).

If a herd is not classifying, those trends cannot be reported. Nonetheless, the advisor will be able to observe the animals and convey useful information to the breeder in relation to his or her goals.

Photo : Istock



Regardless of a herd's performance level, there are always cows that stand out from the others. Genetic improvement should be centred on these cows.



Trend report for dairy production indexes

This graph presents the changes a herd's milk production indexes in relation to birth years. It can also be used for comparisons with the breed average as well as the top 10 per cent and lowest 10 per cent.



Trend report for mammary system conformation

This graph presents the changes in the indexes for mammary system conformation in relation to birth years for the cows in the herd. A similar trend report can be generated for each conformation trait. The graph can also be used to compare the herd with the breed average as well as with the top 10 per cent and lowest 10 per cent.



This approach is based on gaining thorough knowledge of the herd in order to analyse its potential and performance. It also provides a clear picture of the genotype of the animals under observation, which can be related to what is being observed in the barn. The advisor is thus able to see if the animals' potential differs from their actual production levels and classification scores. If an animal's performance is better than expected based on its potential, then herd management is undoubtedly exemplary. If not, it may be advantageous to look for ways to improve the situation.

The analysis serves to identify cows that outperform the others in the herd. It is important to remember that even in less productive herds, there are always a few cows that stand out from the others. Efforts to improve the herd should begin with them.

By examining a breeder's specific needs and comparing them with the herd's actual performance and the analysis of its trends, the advisor will be able to predict how much time will be required to achieve the breeder's goals. It may take 5 or 10 years, or even 15 in some cases. If the time frame is not to the breeder's liking, the advisor may suggest implementing a more aggressive strategy, or purchasing animals or embryos to speed up the process. In that case, however, the suggested approach still needs to take into account the available budget, and the analysis will highlight the pros and cons of the different options.

Pedigrees, genetic potential and performance

The animals in a herd can be categorized individually or by family, if particular families stand out. Studying pedigrees can thus be a part of the process as well.

Whether on an individual basis or by family, the animals, both yearling heifers and cows, are categorized into three levels in order to focus on matings. The first group consists of the cows or families that are worth developing, those that will really help achieve the goals for the herd. This group is usually made up of cows that show good genetic potential (genotype) and good performance (phenotype). The second group includes the milking cows that can be counted on to ensure production, but which are not part of the herd's elite animals. Lastly, the third group comprises cows that will be culled or are of no interest for the herd.

Capitalizing on genetic potential

Next comes the analysis of the measures that can be implemented to develop the best cows. In some cases, the recommendation may be to use some of the cows for embryo production. It may also be appropriate to consider using sexed semen, even if it requires a greater investment. For the best cows, purchasing semen from top sires, generally a more costly option, may also be considered.

It is important to keep in mind that there is no preferred school of thought. The breeder's goals form the framework of the analysis. Moreover, a herd does not have to classify to take advantage of this service.

Neutrality

The aim of the Holstein Québec Advisory Service is to further genetic improvement in dairy herds. It is likely that the analysis will also uncover some weaknesses in herd management. It is not, however,

Advisory Service The options available

The Advisory Service proposes three service packages. The first is the three-hour option, which begins with an initial visit to gather information and ascertain the breeder's goals. Back in the office, the advisor analyses the information and weighs it against the desired results. Once that work is done, a second meeting with the breeder is scheduled to discuss the results of the analysis. The producer can then use that information to pursue his or her objectives.

The second option includes five hours of service. In addition to the three elements mentioned above, one or two follow-up meetings are also provided.

The third option, a 12-hour package, involves greater participation from the advisor, who takes the genetic improvement of the herd in hand. The service can be spread over a year. Depending on the breeder's wishes, follow-up may include one or some of the following elements: specialized training, sire selection and the appropriateness of using sexed semen, selection of embryo donors, and even help with buying or selling animals.

Once an agreement for this type of service has been signed, breeders still have the possibility of increasing the number of hours of service. Only the time devoted to meeting with the breeder and doing the analysis is considered in the calculation. Travel time is not taken into account.

within the employees' mandate to offer advice in that regard. Instead, the breeder will be encouraged to call on an expert in the area of concern, such as an animal nutrition representative or a veterinarian, to find a solution to such a problem. Likewise, it is quite possible that a specialist employed by a third party, for example an artificial

Photo : Carl Saucier



Five advisors, all genetics enthusiasts, are at the service of Holstein breeders.

A good understanding of proof sheets is essential to making informed genetic decisions.



insemination centre or a feed mill, will be invited to take part in the discussion with the Holstein advisor should the breeder so wish.

Autonomy

The work of the Holstein advisors essentially aims to make breeders as autonomous as possible. To that end, advisors provide thorough explanations so that breeders are fully informed before they make the decisions that will influence the future of their herds. The tools used include trend reports, information published by Lactanet (a partnership that includes the Canadian Dairy Network [CDN]

Photos : Carl Saucier

and milk recording agencies), the new Compass service offered by Holstein Canada, and the analysis of proof sheets.

So breeders are the decision makers. They can inform their suppliers of the findings of their Holstein advisor's work and the measures that will be implemented to improve herd profitability, which may relate to production, conformation, health and fertility, or any combination there of.

Herd monitoring includes taking into account changes in heifer growth.



