

BY MICHEL DOSTIE Editor Translation by Nicole De Rouin



## Ferme Agrimatic

# Home to Starky

éonard Labbé, Clémence Bonneau's uncle, had no one to take over his farm in Saint-Charles-de-Bellechasse. In 1990, Clémence and her partner, Julien Pelletier, jumped on this the opportunity to make their start in agriculture. Confident in the young couple's capabilities, Mr. Labbé agreed to help them establish themselves, providing financial support in addition to occasional labour.

At that time the farm was a highly diversified operation comprising a 27-head herd registered at the percentage level, a one-hundred-year-old barn equipped for milk and swine production, and strawberry and potato crops, in addition to forage and cereals for the animals. The Bonneau-Pelletier couple began by abandoning crop production, preferring to devote their efforts to producing milk and breeding purebred Holsteins. Since the farm buildings were inadequate for modern dairy production, the owners opted to modernize the operation before giving free rein to their passion, namely, developing the genetic potential of their herd.

They carried out a number of projects, in particular, expanding the milkroom, raising the barn roof, refitting housing for their dairy cows to increase comfort, expanding housing to make room for replacement stock, improving lighting and ventilation, upgrading machinery, improving the land and renovating the house. Convinced that a comfortable environment plays a key role in getting the most out of their herd's genetics, these breeders say that it is only since the completion of their upgrade that they have been able to turn their passion for good dairy cows into reality.

#### The Agrimatic herd

The Agrimatic herd currently includes 85 animals, including 50 cows classified as follows: 1 EX, 25 VG and 22 GP. The cows produce an average of 9 732 kg of milk annually, with 4.11% fat and 3.27% protein, for BCAs of 201-231-214. The herd owes its reputation primarily to *Pinacle Starky Gold*, VG-88-3yr 2\*, a *Goldwyn* daughter with two

Julien Pelletier stands proudly with *Agrimatic Lavaman Starlette*, VG-2yr, in front of the barn
that he and his family refitted for their herd.

Superior Lactations, including one at 2 years, with a yield of 14 110 kg of milk (4.4% fat and 3.4% protein) and BCAs of 327-379-346.

A highly prolific embryo producer as well, *Starky* is the dam of 7 heifers as well as 6 daughters now in milk, 4 of which classified VG at 2 years. Among her descendants, *Agrimatic Lavaman Starlette*, VG-2yr, earned a Superior Lactation for her first lactation at 1 year and 11 months, with a yield of 15 737 kg of milk and 6.0% fat and 3.6% protein, giving her outstanding BCAs of 411-675-463.

The breeders liked this cow right from the start, so much so that the following year they acquired her first calf, *Leocel Duplex Star Choice*, VG-88. Following in her dam's footsteps, this cow now has two Superior Lactations, including one for her first lactation at 2 years and 1 month that yielded 11 139 kg of milk, with 5.1% fat and 3.4% protein, for BCAs of 273-370-288. One of her daughters, *Agrimatic Anton Stardiane*, born in September 2014, brought in the fourth highest price at the Expo-Poc Sale last April.



### **Embryos to ensure the farm's future**

Only *Starky* and her daughters are used as embryo donors. In 90 to 95 per cent of cases, the breeders use young genomic sires with a proof of at least +15 for conformation in addition to good health and fertility proofs and low somatic cell scores. Every four months, they buy semen from two or three young genomic bulls, always choosing the sires that best meet their breeding criteria. Thanks to that approach, they are now rearing two *Doorman* daughters, both due to freshen soon, that will be among the first of this bull's progeny to calve.

These embryos will then be transferred to other cows in the herd, thus ensuring that the heifers reared will benefit from the high potential of their parents. Should the breeders run short of embryos, since they only use embryos harvested on the farm, the more ordinary cows will be bred with semen from Angus bulls, to make sure these heifers won't be reared. "We want to make sure that the heifers we breed have a better genetic potential that the cows that are in the herd right now. And by limiting the number of heifers we rear, we avoid culling our cows prematurely, which increases the longevity of the herd," explains Jonathan, Julien and Clémence's son who is preparing to take over the farm.

#### **Animals that receive optimal care**

Today the farm covers 85 hectares, with 65 hectares under cultivation. Only forage crops are grown here, and the harvest is used to feed the herd. All the forage is harvested as haylage, in large wrapped bales. A mix of timothy, bromegrass and fescue is the favoured forage for the dairy cows. A mix of timothy and reed canary grass is grown especially for the dry cows and yearling heifers. Jonathan points out that this latter mix "is ideal for this category of animal because it is low in potassium and sufficiently high in protein."

According to the breeders, there are a number of advantages to planting grasses. First, says Julien, it is easier to maintain the quality of grasses at harvest. Moreover, adds Jonathan, with proper fertilization, grasses produce a high-protein, high-energy yield, with forage analyses often showing protein levels of 18 to 20 per cent. The plants are also very appetizing, which significantly lessens

## Preparing the farm transfer

Before becoming a full-time dairy farmer, Julien Pelletier earned a diploma in Farm Management from the Institut de technologie agroalimentaire (ITA), La Pocatière campus, and began working for what at the time was known as the PATLQ, now Valacta. He also had a great deal of on-farm experience since his family earned their living from farming and he had already worked for other Holstein breeders. But the transfer of the Pelletier family farm was already organized, so Julien and his partner, Clémence, decided to look elsewhere. Clémence, who works in data processing for La Financière agricole du Québec, also hails from an agricultural background.

The partners are joint owners of Ferme Agrimatic enr, and although Clémence is employed off the farm as well, she takes part in all the decisions, helps with the farm work and indulges her passion for landscape design. Her talent can be admired in the photographs of *Star Choice* and *Starlette* in front of the barn. It is largely thanks to her work, says Julien Pelletier, that they have been able to devote the farm revenue to improving the buildings, the farmland and the house, upgrades that made possible the birth of the Agrimatic herd.

Julien Pelletier and Clémence Bonneau have three sons. Like his mother, the eldest, Mathieu, works in data processing, while the youngest, Guillaume, now in Secondary V, plans to study industrial electronics. Jonathan, who has a diploma in Farm Management from the ITA, La Pocatière campus, is currently employed as a dairy production advisor for Valacta, in Rimouski. Nonetheless, he comes home to the farm every weekend. In November 2014, Jonathan attended the Holstein Québec breeding school and won a prize that allowed him to join other young leaders at the 2015 National Holstein Convention, in New Brunswick, an experience he much appreciated.

Jonathan's integration in his parents' farm operation will take place over a five-year period, starting with a transfer of knowledge, then power and lastly assets. It is with a view to a successful future that these dynamic people are engaged in the next phase of their life plan... developing the full potential of their herd.

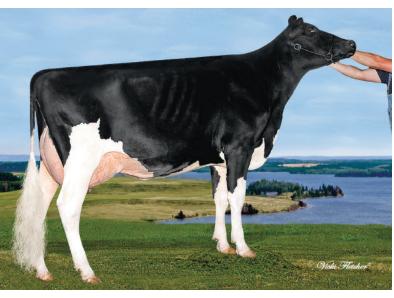


Julien Pelletier and his partner, Clémence Bonneau, with their son Jonathan, who intends to take over the farm.

sorting by the animals. And lastly, since the stems of these plants are more flexible than alfalfa stems, they are less likely to pierce the plastic wrapping, thus ensuring better conservation.

The ration is completed with a mixture of grains and supplements distributed by a robot. As Julien explains, the investment required to purchase this equipment, suggested by Jonathan, paid for itself in a single year. The robot enables them to feed

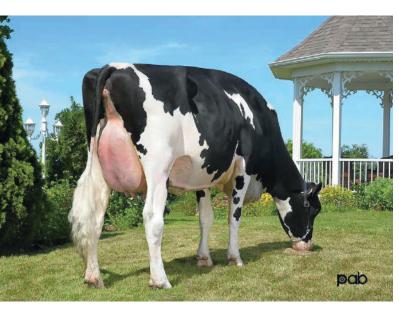
each cow exactly the right ration, which has a positive effect on production and also generates savings because the cows receive exactly the right amount of feed; both factors contribute to the cost-effectiveness of the investment.



Born in March 2012, *Agrimatic Lavaman Starlette*, VG-2yr, earned her first Superior Lactation for her first lactation at 1 year and 11 months, which yielded 15 737 kg of milk, with 6.0% fat and 3.6% protein, for remarkable BCAs of 411-675-463.



Pinacle Starky Gold, VG-88-3yr 2\*, has earned two Superior Lactation certificates, including one at 2 years with 14 110 kg of milk (4.4% fat and 3.4% protein) and BCAs of 327-379-346. The owners of Ferme Agrimatic are banking on this Goldwyn daughter.



Leocel Duplex Star Choice, VG-88, distinguished herself in her first lactation at 2 years and 1 month, producing 11 139 kg of milk, with 5.1% fat and 3.4% protein, for BCAs of 273-370-288. Now in her fourth lactation, she has already earned two Superior Lactations.



A fine line-up of first-calf heifers. The first two, both classified VG at 2 years, are daughters of *Pinacle Starky Gold* by *Lavaman*.

BY MICHEL DOSTIE Editor Translation by Nicole De Rouin



## Telework

# using mobile applications

pplications for mobile devices (telephones and tablets) are the latest addition in the world of new technologies, and many are available for use in agriculture. For breeders and dairy producers, however, the sector is a developing one, and availability remains limited. Nonetheless, these new tools can be extremely useful to those who wish to take advantage of them.

While these applications are not a replacement for computers, they do increase their efficiency by making information available whenever and wherever needed, thus eliminating many trips to the office and the long wait for an answer to a question. As Patrick Allen, from Ferme Jallen, in Saint-Anselme, explains, breeders can generally access data faster and more easily by computer than by smartphone, but being able to do so remotely saves a great deal of time.

Yvan Bastien, from Ferme Geobastien, in Sainte-Anne-des-Plaines, and co-owner of GeoLeclerc, équipements laitiers inc., a distributor of DeLaval products, says he uses mobile applications more often on a tablet than on a phone, mainly because he prefers the larger screen.

#### The dairy breeder

In the dairy sector, manufacturers and distributors of milking equipment offer a number of options of varying complexity, from basic herd management applications, which are often free and can be used for all dairy operations, to more elaborate functions that can take into account the different factors involved in managing a large-scale farm operation.

Breeders who have invested in a robotic milking system, for example, may want to use an application that enables them use their phone or tablet to monitor the real-time performance of their herd and even compare it with data from previous weeks. Data for individual cows is also accessible: milk production, feed intake, reproduction, and health.

These different applications are connected to the milking equipment, but are not restricted to robotic milking systems. In fact, highly



For the younger generation, the use of a smartphone or tablet has become indispensable.

sophisticated data-recording equipment also exists for use with milking parlours, carousels and even conventional tie-stall barns. Breeders can use these applications to monitor their herds remotely and at all times, even when they are away from the farm.

The devices are able to collect a vast amount of data on milk yield and quality, cow health, feeding and animal behaviour. According to Pierre Thibodeau, a representative for Beaudry équipements laitiers, a company that distributes a number of brands including Lely, these features are becoming increasingly popular with breeders, particularly applications for preventive medicine, heat detection, and alert systems for individual cows.

Obviously, when a breeder invests in new equipment or a robotic milking system, the distributor will provide staff training. After that, most of the adjustments will be done remotely by the breeder. In an emergency, however, the robot will not wait for input from the owners and will instead contact the breeder directly, wherever he or she may be. This application is not an option that breeders can acquire but rather basic equipment that

is an integral part of the robotic system. When the system detects an abnormality, it is programmed to dial the phone numbers listed, one by one, whether smartphones or old rotary dial phones, until it gets an answer. The aim is to return the situation to normal as soon as possible. If the breeder is unable to identify the source of the problem, he will contact the technician who may also intervene remotely, whether from within the country or from the manufacturer's head office on another continent, explains Yvan Bastien.

### **Dairy herd improvement**

Valacta also offers a mobile application that gives breeders a new way to consult their dairy herd improvement reports. Patrick Allen, one of the breeders who took part in the trial implementation of the application, says he finds it much faster and efficient to consult his phone than to work with the reports on paper or on the computer. The application provides both herd and individual cow data for the last test as well as aggregate results for the previous 15 months.

### Other useful applications

Yvan Bastien also likes to have access to the images from the cameras installed in his barn. No matter where he is, he can see what is going on, which is especially advantageous when a cow is on the point of calving. Another good reason to always have his tablet nearby, he says, even on the night table.

Breeders can also take advantage of remote control for various animal feeding devices, such as the automated TMR feeder. This function saves Patrick Allen from having to go to the control panel every time he wants to adjust one of the working parameters of the feeder. The same sort of applications can be



Production data are recorded on the computer and can be accessed remotely.

used with automated milk feeders for calves. There are even remote control systems available to guide automatic feed pushers or robotic scrapers.

To improve health and reproductive management, breeders can also use an activity monitor to identify cows in heat or cows that are less active than usual, which could indicate a health problem. The monitor, which is available from a number of manufacturers, is attached at the cow's neck or leg and transmits information, day and night, to the herd management computer. The breeder can access the data remotely with a smartphone or tablet.

# Putting one's computer in the hands of one's advisors

Teleworking also implies letting one's advisors take control of one's computer. With the breeder's permission, advisors can consult and even record information in the farm's computer remotely, and then recommend measures aimed at improving cow health, feeding and productivity or the efficiency of the milking system. TeamViewer is probably the software that is most often used for this function. On the other hand, if the breeder would rather not grant this type of access, no one will use TeamViewer or be able to control someone else's computer.

Pascal Allen, who works with his advisor this way for his automated milking system, points out that it means granting access to the herd computer but not to the computer the family uses for administrative purposes, such as banking transactions.

#### And there's more

There are other telephone and tablet functions that, while not mobile applications, can be used remotely by connecting the devices to the Internet. For breeding information, for instance, breeders can access CIAO's ProGen files and take note of the recommendations provided. But, adds Patrick Allen, it would be advantageous for CIAQ or the Canadian Dairy Network to offer a mobile application that would give breeders access to additional information, in particular about inbreeding.

Other software available to breeders, such as Lac-T or the software created by DSAHR, can also be consulted on a cellphone or tablet via the Internet.

The telephone can also be used as a second computer in the office. Working with both devices at the same time, says Patrick Allen, gives you two tools that complement one another. Doing research on the phone and compiling the information on the computer, without having to work with two programs on the same screen, is more efficient.

Many other mobile applications exist to address farmers' concerns: weather, soil and crop management, financial services or the grain market, as well as other aspects of daily life.

#### Social networks for teleworking...

Patrick Allen cannot talk about his smartphone without mentioning Facebook, which is playing an increasingly significant role in the lives of farmers. According to him, breeders are using Facebook not only to exchange information but also to sell and buy cows, hay, used tractors, etc. He even credits Facebook with helping him find a French student worker.

Ferme Geobastien is also on Facebook. Since the owners of this operation receive a large number of visitors, especially young people, the farm's news must be updated daily. Yvan Bastien is using Twitter as well, in particular with a group of farmers from different regions of Quebec who exchange questions and answers on agricultural topics.

### **Mainstream applications**

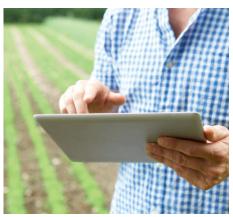
Yvan Bastien also uses an application called irangement, which is available to the general public but can also be useful to breeders. At Ferme Geobastien, three people do inseminations and this tool allows each of them to record the doses they use so that their inventory is always up to date. The application also provides a link to the Canadian Dairy Network (CDN) site that enables him to check, among other things, the level of inbreeding and the parental averages (PA) of heifers that could be born from a possible mating he is considering.

#### A word of caution

New products appear rapidly in this world of innovation, and it can be very tempting to acquire the latest gadget on the market. But every innovation has a cost. It is thus important to exercise self-control, underlines Patrick Allen, and to be able to assess the cost-effectiveness and usefulness of a new product to avoid making an impulse purchase.

It is also important that farmers interested in the different mobile applications understand that they will have to spend a certain amount of money to use them. Like other applications intended for professional use, agricultural applications have a limited number of users; because the cost is shared among fewer people, it will necessarily be higher than that of mainstream applications.

Lastly, breeders who wish to use the new technologies to benefit their farm would be well advised to choose a sturdy device, with a case or protective shield, despite the higher cost.



Tablet use is increasingly prevalent in crop production.