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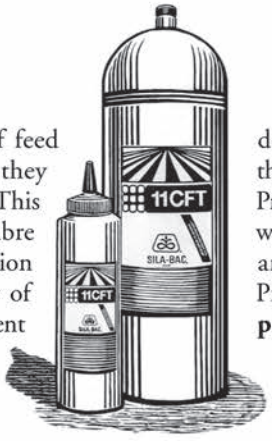

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TABLE OF

A MISSION THAT CONTINUES TO BE FOCUSED

Valacta has a new five-year strategic plan and I invite you to take a look at our new mission and orientations on this page. The consultations that were carried out with our clients, employees and partners helped us to take stock of 2014 and line up strategic projects to ensure that our services remain at the height of your expectations. This feedback also led us to modify Valacta's mission while still keeping our dairy farms at the centre of what we do.

One thing is for sure, the broad guidelines that we will need to follow definitely came through loud and clear in our many consultations. Valacta will therefore build on its strengths to bring you cutting edge knowledge, more technological tools and more services that are specifically centered on your needs. Dairy Knowledge at your Fingertips is relevant now more than ever!

A current trend, milk quality is of constant concern to us all. With the CQM program now established, we all continue on the road to milk quality and along the way, with the implementation of proAction, we will add and define other important criteria together. We are already off to a good start! Some of the trends in the next few years will likely touch on the various areas of proAction. Other trends will definitely involve technology so we will soon be talking about on-farm technological comfort in order to master them and make them indispensable allies. From the moment that a given technology becomes simple, practical and saves us time, we need to have it, right? Who, today, would choose to live without their smartphone?

Enjoy your reading!

Pierre Lampron,
Milk Producer and President

GUIDELINES FOR VALACTA'S FIVE-YEAR PLAN

1. **Our clients are satisfied and take full advantage of our services. Valacta will maintain its high satisfaction rate.**
2. **By building on its human capital, Valacta ensures that it can rely on the best possible human resources to fulfill its mission.**
3. **Valacta demonstrates leadership, expertise and innovation in its mastery and use of technology.**
4. **Valacta exerts a positive influence on the development of the dairy sector, working in synergy with multiple partners.**
5. **Valacta's strengths—laboratory, database, knowledge transfer—permit the company to develop and promote the services that are profitable to its clientele.**
6. **Valacta's sustainability is ensured by sound financial management.**

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A WORD

It has been an extremely busy year for the Valacta team in Atlantic. I had the opportunity to travel the region extensively and the message I am hearing is the same. The industry is changing and fast. With these changes, the objectives of dairy farmers are changing. We at Valacta recognize this. This is demonstrated in the title of this year's annual report, Trends. We are adjusting the sails to these winds of change so that we stay the course and help our customers reach their ultimate destination.

Milk recording is one of the fundamental services Valacta provides. I do not think anyone would argue that the progress of the Canadian dairy industry and the Canadian dairy cow are due, in large part, to AI, breed classification, registration and milk recording. There are new technologies and tools in our tool box like genomics and robots but we still need to measure and monitor (and ultimately validate) the effectiveness of these tools. We need only to look at the countries of the world where milk recording has a high penetration to see that these countries are also producing higher quality milk and more of it. For these reasons, we remain committed to demonstrating the value of the services that Valacta provides dairy farmers in the Atlantic region. The information gathered by our technicians is used by CDN and the breed associations for genetic evaluation and to develop important genetic indexes such as the Mastitis Resistant Index and the Pro$ index. Without the data collected from milk recording, these indexes would not appear on your sire proofs. We need to remember this.

Valacta also continues to provide powerful information on herd and individual cow performance. With the recent launch of the Valacta mobile app and the customer follow-up that our technicians provide after a test, we can offer timely, key information so that you our customers see value and a return on your investment. It is important to note that for a herd of 80 cows on a supervised service option with a milk fat average of 4.15% and an annual production of 9,600 kg per cow, the cost of Valacta services is approximately 50 cents per hl produced. Or put another way, you would only need to produce approximately 11kg per day TOTAL to pay for Valacta services! Given the information you receive back and the benefits the entire industry receives from the data collected (which ultimately benefits you back on your own farm), how can you go wrong with this investment?

As we look ahead, we will be offering more services to producers in Atlantic, including more testing on the individual milk samples. We will also be offering our next workshop series in the fall. The topic will be one that is receiving a great deal of interest right now, cow comfort. We receive very positive feedback from those who attend our workshops and I strongly encourage you to mark it in your calendar. I also encourage you to take the time to complete our survey in the fall. We take your feedback very seriously. It is the most important tool we have to monitor OUR performance and ensure we are providing valuable services.

Thank you to our customers, our industry partners, our technical team (that I am proud to be a part of), Customer Support, and to our Valacta Advisory Board here in Atlantic for your guidance and insight. I look forward to working with all of you in the year ahead in the best industry in the world.

Jeff Gunn
Regional Manager

A MESSAGE

Two thousand and fourteen could be noted as a year of planning. Valacta operates on a five-year plan that is built by both staff and directors. Valacta' s previous five year plan was running out so a process to develop a new one started in 2013. Denis Cyr, Valacta Atlantic Board observer, and I participated in a process to come up with a plan to bring Valacta into the next five years. One item that was identified in this process was the need for Valacta to be more involved in handheld technology. As a result, our mobile app was developed, and by the time you read this, many of you will be using this tool.

I was also involved in a planning session for the Canadian Dairy Network along with our Chairman, Mr Pierre Lampron, and General Manager, Daniel Lefebvre from Valacta. This session not only developed a new three-year plan for CDN but identified the need for the Industry to have larger conversations around working closer together. As a result, a half-day was spent on this topic at the CDN forum last September. A number of Valacta staff and board members participated in this event. There were some action items identified at this event and you will hear more as plans develop.

The Valacta Atlantic Advisory Committee met on two occasions during 2014. These committee meetings are very well attended and give the industry partners in Atlantic Canada the occasion to sit at one table to discuss many industry issues. The Valacta Atlantic Advisory Committee voted support for research projects at the Atlantic Vet College as well as support for the National Holstein Convention held in Atlantic Canada in the spring of 2015. The Committee supports, on a continual basis, the Atlantic Young Breeders School. This school is a great example of how all the industry partners in Atlantic Canada work together to make the dairy industry a great industry to be involved in.

All the best to our dairy farmers for the 2015 season.

Dannie MacKinnon
Atlantic Board Representative

«FAMILY»

anadian Dairy Network (CDN) celebrates its 20th anniversary this year following its creation in 1995. While the "raison d'être" for CDN's existence is the mandate as Canada's dairy cattle genetic evaluation centre, it also serves as an umbrella organization for the dairy cattle improvement industry in Canada. The member organizations of CDN include the Canadian DHI partners, namely Valacta and CanWest DHI, as well as all dairy cattle breed associations, the various A.I. organizations selling semen in Canada and Dairy Farmers of Canada.

There are various ways that one might define the success of the Canadian dairy cattle improvement industry. Some might say it's measured by the fact that Canada exported more than $168M worth of dairy cattle genetics in 2014, including live cattle, semen and embryos. Others might say it's measured by the high level of producer participation in the various breed improvement programs with (a) 75% of all herds in Canada being enrolled on milk recording, (b) nearly 90% of all milk recorded herds also type classify, and (c) over 70% of all dairy cattle in Canada are registered in the breed association herdbook. Perhaps the foundation of our success lies deeper than either of these... it's how the various industry organizations work together in the best interest of Canadian dairy producers in mind!

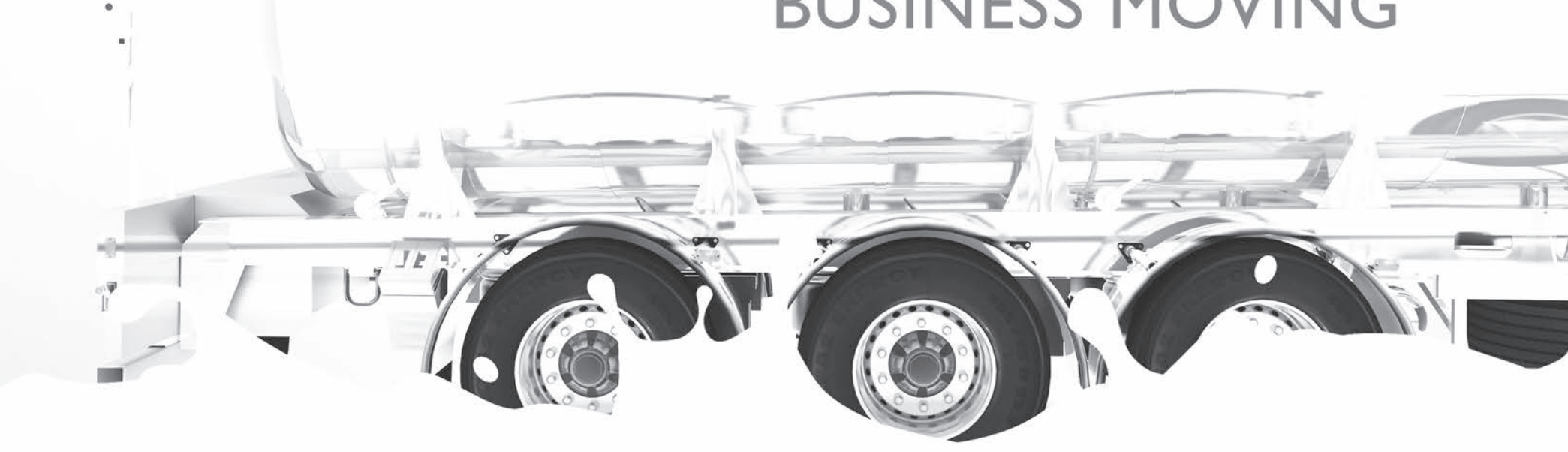
A clear example of the strong spirit of industry partnership and collaboration was the recent Industry Visioning meeting held in February 2015, which was organized by CDN. While it is normal for any business to hold its own strategic planning sessions every few years, it is very rare to see an industry of organizations gather together to define its vision for the next 5 to 10 years and set out a plan to achieve it! The ultimate goal of industry partners is to provide valuable programs and services to producers in the most cost effective way possible, which also means ensuring that the industry structure also maximizes efficiencies. In this way, the Canadian dairy cattle improvement industry resembles a family aimed at achieving the same goals by working closely together and planning each step along the way.

Industry Visioning meeting held in February 2015.

Réseau laitier canadien

Canadian Dairy Network

BUSINESS MOVING



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* Based on Canadian NSAID for cattle product label. [1] Based on Canadian ANAFEN product label.
[2] *Canadian Quality Milk On-Farm Food Safety Program Reference Manual*, June 2010.

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IMPORTANT ALLY

ÉTIENNE TREMBLAY, T.P.
DHI STANDARDS COORDINATOR

Is milk recording still a current tool? If we consider the example being set by Ontario and the Western provinces whose aim is to increase their dairy producer's participation to the level that we enjoy in Quebec (around 80%), the answer has to be a resounding YES. This is also true of robot farms where on-farm technology and milk recording combine to become a powerful herd management tool.

The mandate of the technicians from Canada's milk recording agencies is to ensure that the standards are respected and to guarantee the best possible quality of sampling and data entry. Their work is extremely important to producers as this information is key to their decision-making process. In order for quality information to be collected, validated and compiled on the farm, technicians must work accurately and precisely, in collaboration with the producer. This data, which is routed to the Vision2000 database, holds immensely diverse value as it is used for production management reports, research, genetics, genomics, comparative statistics, etc. Hence, the more accurate the data collected on the farm, the better the tools for all of our industry partners.

Since 2012, Valacta has been using a specialized technician training program in order to promote the best possible data quality. This program provides an update on knowledge about Canadian milk recording standards and procedures and a skills recognition process to recognize their mastery of the subject and the efforts that they invest. Newly-hired technicians undergo a four-week intensive training course program.

At the same time, a data quality task force has been put into place and given a mandate to analyze our business processes in order to continuously improve their effectiveness and efficiency. In June of 2014, this committee led an information campaign to try to improve sample preservation so that the milk recording samples arrive at the laboratory in good condition. Their efforts paid off, especially in the hot summer months, with a 60% decrease in the number of coagulated samples!

The 21st century will be an era in which we will see an increased need for precise information. This data will be the lifeblood of the industry! What do you think?

WHO ESTABLISHES THE MILK RECORDING STANDARDS?

The Industry Standards Committee, composed of representatives from all of the organizations in the industry, under the supervision of the Canadian Dairy Network, establishes the standards for supervised milk recording, genetic evaluations and the official publishable lactation records.

RESEARCHER —

Dr. Herman Barkema, of the University of Calgary, and world-renowned researcher is a big fan of DHI services and sees it as essential for the future success of the Canadian dairy industry. He states "It is really important for robotic herds to be on DHI. For herd management and milk quality, it's a must. I know that robotic systems provide a large amount of data right there on farm, but that data is not the full picture. Further, mastitis and disease testing available from DHI can really add value." Dr. Barkema concludes, "As an industry, we should not underestimate the value of a strong national records database. It has been at the core of research projects and advancements and it must continue strong."

Dr. Barkema's research program applies epidemiology to the prevention and control of mastitis and infectious diseases on dairy farms, with animal and public health perspectives. The overall goal of his research program is to ensure a safe and economical food supply with a reduced risk to transmission of zoonotic diseases to farm families and the general population. New prevention and control programs in The Netherlands, Canada and other countries have been introduced based on results of his research.

IMPROVEMENT

Brian Van Doormaal, General Manager of Canadian Dairy Network (CDN) concurs. "Many robotic herds receive official cow indexes from CDN and have publishable lactation records recognized by breed associations. A few adjustments have been made to accommodate the way robotic data is collected at the farm, but overall it is essentially the same programs and process as any other herds." As herds make a change towards robotic milking, they can rest assured that industry programs are evolving and continue to be available for their participation.

LIKES TO SEE YOU

MEETING

At the DFNB Annual Meeting in Fredericton in December 2014, there was a draw for «Free MUN for a Year». The winner was Marco Boonstoppel, producer, here with Emily Ingraham, Dairy Production Technician.

EXHIBITION

Jeff Gunn, Atlantic Regional Manager, showing a Jersey calf in a 4-H Alumni Showmanship class at the Pictou County Exhibition in September 2014.

MECHANIZATION SHOW

Julie Caron from Lactologic and Ed Frazee, Business Coach at the Valacta booth at the Atlantic Farm Mechanization Show, in Moncton, NB, March 5 -7, 2015

START

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ROBOT MILKERS,

s depicted by this graph, after getting off to a modest start in the early 90's, the use of robot milkers has literally exploded worldwide in the 2000's:

At the end of 2014, our estimates showed that almost 30,000 robots had been installed on the planet. In fact, since the early 2000's, the number of robots has doubled every 3 years. Practically every time producers plan to modify their milking system, they at least consider and often choose to use a milking robot.

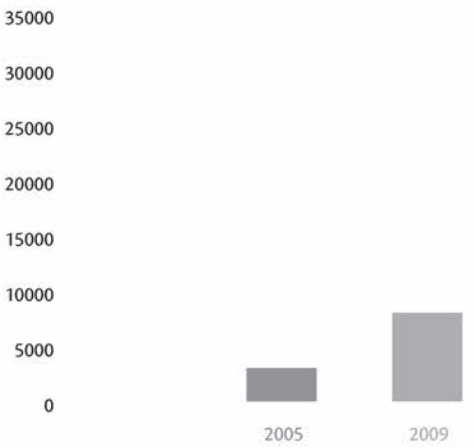
Dairy producers like to size up where they stand, as compared to others in their field, in order to validate their performance. So we have compiled some comparative statistics using a « robot group » that encompasses all of the robot manufacturers. In the table on the next page, the « robot group's » performance is compared to that of Holstein herds using other milking systems. The average milk value is higher for the robot group, but it is important to carefully consider how these statistics are interpreted. We cannot say whether this is simply true because the top herds have migrated toward using robots or whether it was actually robot milking itself that was responsible for improving their average. Although most of the other parameters are comparable between the two groups (cull rate, reasons for culling, SCC, etc.), the reproduction performance is better with the robot group, both for calving interval and number of days at first breeding. The easy access to movement detectors, no doubt, is responsible for this improvement in reproduction parameters.

The annual milk value per cow is $279 higher with robot milking systems, which is to be expected since productivity is higher. The same

can be said for the annual cost per cow which is $104 more with robot milkers. It is important to pay attention to margin since that is where a company's profitability lies. The annual feed margin per cow is $5,030 for robots milkers as compared to $4,855 for other milking systems.

Having support and guidance as you consider purchasing a robot, start up production with this new milking method and monitor the results will help you to validate the decisions that you have made. Valacta has brought together a team of robot milking specialists in order to help secure the investments of dairy producers who have opted to use robot milking systems. We are acting on this new trend!

Evolution of number of milking robots in the world 2001-2014 (Koning 2010)



	Robot	Total[1]	Robot	Total[1]	Robot	Total[1]
Number of herds	177	**3,996**	146	**2,672**	431	**7,901**
Annual milk (kg/cow/year)	9,810	**9,159**	9,918	**9,108**	9,895	**9,197**
Annual fat (kg/cow/year)	385	**365**	387	**358**	383	**363**
Annual fat (%)	3.92	**3.99**	3.91	**3.93**	3.88	**3.95**
Annual protein (kg/cow/year)	321	**300**	321	**293**	321	**298**
Annual protein (%)	3.27	**3.27**	3.24	**3.22**	3.25	**3.25**
305-day milk (kg)	9,825	**9,299**	9,930	**9,344**	9,955	**9,384**
305-day fat (kg)	379	**365**	384	**362**	380	**365**
305-day fat (%)	3.86	**3.93**	3.87	**3.88**	3.82	**3.90**
305-day protein (kg)	315	**300**	316	**295**	318	**300**
305-day protein (%)	3.21	**3.22**	3.19	**3.16**	3.19	**3.19**
Days at peak	46	**43**	48	**44**	49	**44**
Peak milk (kg)	40.0	**37.5**	40.6	**37.5**	40.4	**37.7**
Lactation persistency	96	**96**	97	**97**	97	**97**
Transition cow index	140	**103**			135	**95**
Longevity (% 3rd lactation plus)	38.0	**39.2**	34.1	**35.8**	35.6	**37.5**
Age at 1st calving (mo.)	25.8	**26.4**	25.6	**26.4**	25.9	**26.4**
Herd age at calving (mo.)	45.0	**47.1**	43.0	**45.1**	44.0	**46.1**
Herd turnover (%)	39.4	**38.1**	40.6	**40.2**	40.0	**39.0**
Mortality (%)	2.5	**3.0**	0.0	**0.0**	1.1	**1.6**
Disposal for feet/legs (%)	4.3	**3.4**	2.8	**2.3**	3.4	**2.9**
Disposal for reproduction (%)	6.2	**6.5**	7.8	**8.0**	7.0	**7.2**
Disposal for mastitis/high SCC (%)	5.4	**5.5**	3.8	**4.0**	4.6	**4.8**
Sold for milk production (%)	3.2	**4.2**	7.1	**7.6**	4.9	**5.6**
Calving interval (days)	414	**422**	417	**427**	418	**424**
Days to 1st breeding	77.3	**80.8**	83.2	**86.0**	82.9	**83.9**
Days dry	63.3	**64.5**	69.9	**70.5**	68.0	**68.1**
Annual SCC ('000/ml)	226	**223**	227	**230**	232	**224**
Milk value ($)	7,296	**7,017**	7,306	**6,805**	7,273	**6,949**
Herds with feed	46	**1,268**			48	**1,364**
Annual feed cost ($)	2,266	**2,162**			2,260	**2151**

1 Number of herds with a known milking system.

ANIMAL WELL-BEING,

STEVE ADAM, AGR.
DAIRY PRODUCTION EXPERT ON ANIMAL COMFORT, BEHAVIOR AND WELL-BEING

As little as 15 or 20 years ago, the consideration of animal well-being in dairy production was insignificant; more idealistic than realistic. In recent years, however, consumer pressure has driven the multinational food and restaurant corporations to include animal welfare in their purchasing policies. Consequently, the developed countries have seen various certification programs come to light.

The efforts of some Quebec researchers, notably Anne-Marie de Passillé and Jeff Rushen (pioneers in the study of dairy cattle behaviour in Canada), have helped us to better understand animal behavior and their preferences. This research has discredited the prejudices around the merits of animal welfare and demonstrated over the years that paying attention to animal comfort and well-being can be profitable to producers. These studies are also beginning to influence the agricultural building designers.

At first, animal welfare research was limited to tests and videotapes that were used to manually note animal preferences and behaviours. More recently, however, access to technological tools has revolutionized the possibilities for research and analysis. For example, the use of accelerometers attached to an animal's back legs has increased the amount of research on resting time. These tools can simplify the observation process by recording the time and frequency that an animal is standing and laying down.

Other research techniques and tools will eventually be commercialized on the farm such as geo-positioning, thermal cameras, the rumen bolus and the vaginal thermometer combined with radio telemetry. These tools can be used to take automatic body temperature measurements, measure body condition score, udder and leg temperature, jaw movement, rumen pH, rumen contraction, and cardiac and respiratory frequency. The results of these measurements can provide a general idea of an animal's level of comfort and well-being and guide the producer in his efforts to optimize productivity and profitability on the farm.

Consideration of animal comfort and well-being can increase cow longevity. The average cow age in Quebec herds is 4.25 years, whereas a cow's potential lifespan could reach as much as 15-20 years.

Dairy cows are often culled from the herd due to problems with reproduction, feet and legs or udder health. How many of these afflictions are directly related to animal comfort and housing? Some aspects of housing such as stall dimensions, softness, and space for movement as well as ventilation, lighting, exercise, feed bunk position, bedding condition, etc., can influence animal comfort and well-being. By gradually improving these aspects, we can also improve on behaviour, longevity and productivity.

Animal welfare shouldn't simply be a consumer expectation; it should be taken into consideration just as feeding and health are, as a part of the basic management of a dairy herd. With the help of the new tools that facilitate the measurement of animal comfort and well-being, improvements to animal productivity and longevity are most certainly on their way.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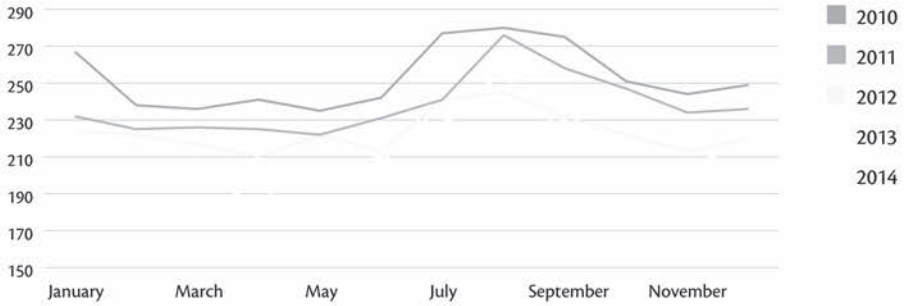
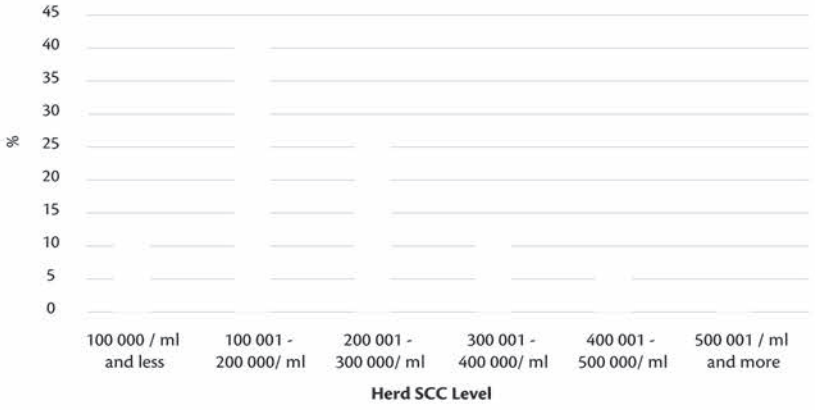
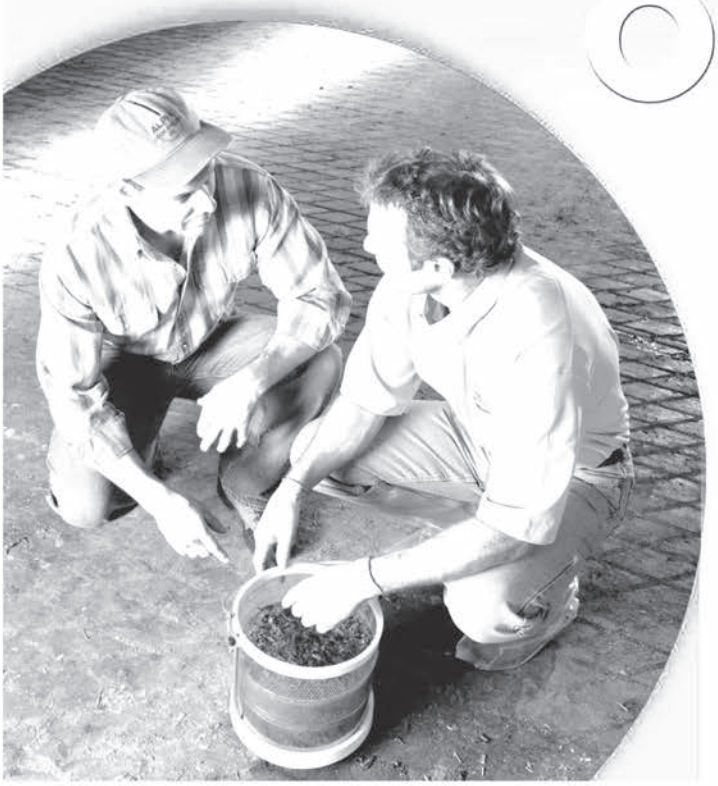
SOMATIC CELL COUNT







MANAGEMENT SYSTEM TYPE

	%
Automated Concentrate Distributor	17.2
Computerized Automated Concentrate Distributor	8.6
Automated Forage Distributor	5.2
Silage and Concentrate Distributor	3.4
Traditional	43.1
TMR	22.4

	%
Individual Stall Parlour	2.4
Rotary Parlour	1.2
Herringbone Parlour	27.1
Parallel or right angle Parlour	13.3
Parabone Parlour	1.2
Pipeline	47.3
Buckets	0.9
Step-Saver	0
Flat Barn Parlour	2.7
Robotic System	3.6

	%
Head to Head	14.1
Head to Tail	0.3
Single Row	0.3
Tail to Tail	33.3
Multiple Row	0.8
Free Stall	48.9
Loose Housing	2.3
Other	0

	%
DeLaval (Alfa-Laval)	40.3
Surge	17.8
Germania	0.3
BouMatic	25.0
Westfalia	1.9
Universal	6.3
Lely	2.2
Prolion	0
Gascoigne Melotte	0
Dairymaster	0
WestfaliaSurge	6.3
Insentec	0
Milkomax	0

MANURE SOLIDS FOR BEDDING:

MÉLISSA DUPLESSIS, PH.D., AGR.

STEVE ADAM, AGR.
DAIRY PRODUCTION EXPERT ON ANIMAL COMFORT, BEHAVIOR AND WELL-BEING

JULIE BAILLARGEON, AGR.
RESEARCH PROJECT TECHNOLOGY TRANSFER COORDINATOR, VALACTA

nimal comfort in the barn is very much in vogue these days. Valacta has even given the subject top billing in the training sessions that will be offered throughout the Atlantic region in the fall (see Box 2).

A comfortable cow is a cow that can go about her business with no worries. How does a comfortable cow spend most of her time? Resting, of course, which explains why the surface provided for cows to lie down on is such an important aspect of cow comfort.

Depending on barn type, budget, bedding availability, removal and numerous other factors, the choice of bedding is not always an easy one. For the cow, the crucial point is to provide a clean, dry, comfortable surface that is soft, stable and slip-resistant.

NON-TRADITIONAL MANURE-BASED OPTIONS FOR BEDDING

In both the United States and Ontario, more and more farms are doing things differently: they are using recycled or composted manure as bedding (Table 1).

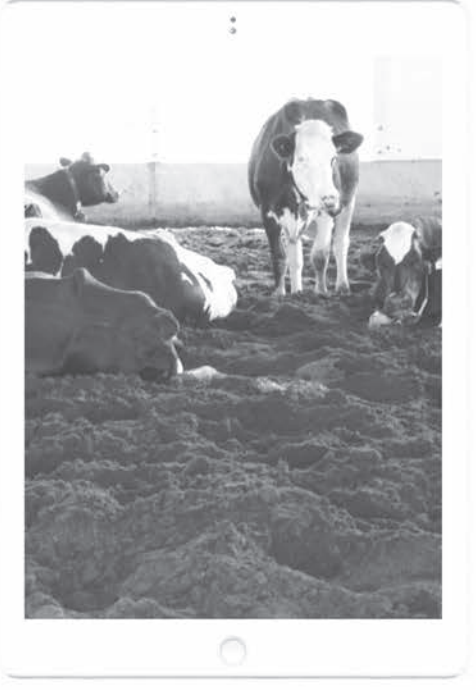
RECYCLED MANURE SOLIDS AS BEDDING

The solids separated in this process have a moisture content between 65 and 68 percent. If the manure has not been digested, it is recommended that the solids be composted to destroy any pathogens that may cause mastitis. The manure solids can be composted in piles (at least seven days) or using a composter (24 hours). The resulting substrate can be then be spread in the freestalls. If the material is too dry, the ventilation will blow up a dust storm in the barn; if it is too moist, it may start to heat up.

COMPOSTED BEDDING

Composted bedding is based on the same principle as deep-bedded packs, except that the compost-manure mixture needs to be aerated daily to add oxygen and continue the composting process. It is important to ensure that the temperature reaches between 55 and 65 °C in order to neutralize any pathogens in the bedding. Twice-daily tilling of the compost is recommended.

The material that is generally recommended, in particular because of its particle size, is sawdust. Other materials can also be used, but the chop length often makes it difficult to obtain a good carbon-nitrogen ratio. To build the composted pack base, a 30-40 cm layer of bedding material is initially spread over the floor. Fresh bedding is then added on a weekly basis. Twice a year, the compost is removed from the barn and can be spread in the fields. Each cow must have a resting area of 120 sq. ft. The larger the resting area, the less significant the microbial population. Adequate ventilation is also required to eliminate moisture and heat produced by the cows and the composted bedding.



Composted bedding is generally used in loose-housing facilities. In tie-stall barns, there is some worry that bacterial growth will escalate due to the heat generated by cows that are permanently in their stalls, in addition to reduced air circulation at floor level. Not to mention the complexity of adding and removing bedding in this type of facility.

IS IT COST-EFFECTIVE?

One of the aims of using these different techniques is, of course, to reduce bedding costs. Straw currently costs about $250 per tonne, which amounts to about $11,000 - $15,000 per year for a herd of 60 cows that use an average of two kilograms per day. Some farms may be able to cut these variable costs, but it is important to evaluate the initial investment that is required (substantial for the purchase of a digester or separator) before getting involved.

SO, IS IT AN ALTERNATIVE WORTH CONSIDERING?

When it comes to choosing bedding, animal comfort and well-being must take priority. The bedding must also be economical and easy to spread. Composted or recycled manure solids have the potential to meet all of these criteria, provided the technique is properly managed. At any rate, from the looks of this cow deep in slumber on a composted manure pack (see photo on p. 20), the option seems to be worth contemplating.

DOES THE PRESENCE OF BACTERIA FROM MANURE INCREASE THE RISK OF MASTITIS?

The question is indeed an important one, since we are talking about organic matter, and what's more, fecal matter. In short, an environment that already contains bacteria and is conducive to bacterial growth. None too reassuring when the objective is to maintain good udder health in the herd. An American study found that the number of cows with a somatic cell count over 200,000/ml was similar between farms using recycled manure solids and those using sand as bedding. Furthermore, the quantity of bacteria present in the unused bedding was not necessarily correlated to high SCC levels or the incidence of mastitis. Milking technique is therefore a key factor in preventing pathogens from entering the mammary gland.

THE BARN: A SOURCE OF COMFORT

Doing things differently doesn't always have to involve major changes like those mentioned in this article. Sometimes small, simple, low-cost adjustments are enough to reap substantial rewards. That is precisely what we will be discussing with you at the Valacta training session to be offered this fall in the Atlantic region.

Join us to explore some practical and cost-effective ways to improve cow comfort in your barn.

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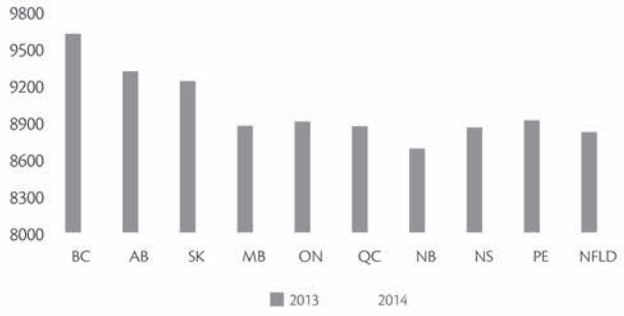
TYPE	Process	Advantages	Disadvantages
1- recycled manure solids	Separated solids: composted in windrows, piles or with a composter	• Little or no new bedding required	• Significant microbial load • Higher moisture level • High cost of separator • Dark colour
	Digested solids: dried or in piles	• Energy recovery • Microbial load is lower than in separated manure	• High cost of digester or separator • Significant microbial load • Dark colour
2- composted bedding	Aerated: material is tilled directly in the bedded pack resting area	• Requires less bedding than deep-bedded packs • Cost of equipment lower than for recycled manure	• Choice of bedding material is limited by particle size • Time required for tilling • Dark colour • Not easy to reach a temperature of 55-65 °C

NATIONAL

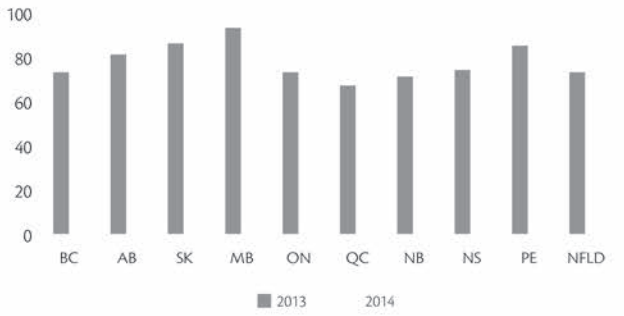
Newfoundland	5	6	711	872	142.20	145.33	83.33	17.65
PEI	113	106	8797	8503	77.85	80.22	19.81	58.10
Nova Scotia	146	138	12070	11557	82.67	83.75	23.19	62.39
New Brunswick	136	135	11536	11646	84.82	86.27	25.93	67.65
Quebec	4872	4731	289073	283134	59.33	59.85	8.58	78.40
Ontario	3056	2982	234401	233151	76.70	78.19	19.48	76.93
Manitoba	197	193	27203	27975	138.09	144.95	45.60	63.82
Saskatchewan	102	105	16995	18215	166.62	173.48	69.52	64.24
Alberta	433	422	57747	58606	133.36	138.88	64.69	77.31
British Columbia	310	307	45776	48639	147.66	158.43	60.59	62.45
CANADA	9370	9125	704309	702298	75.17	76.96	18.60	75.67

PER COW PER PROVINCE

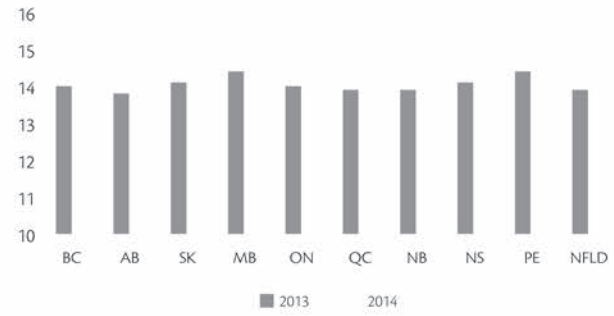


AVERAGE BY PROVINCE

DRY PERIOD (DAYS)



(MONTHS)



THE KUBOTA FARM

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179371

Milk Production (kg)			
Holstein	9018	7311	10701
Ayrshire	6931	6137	7532
Jersey	6242	5116	7459
All Breeds	8843	6986	10642

Age at First Calving (yy-mm)			
Holstein	2-3	2-6	2-0
Ayrshire	2-5	2-8	2-3
Jersey	2-2	2-5	2-0
All Breeds	2-3	2-7	2-0

Weight at First Calving (kg)			
Holstein	637	599	680
Ayrshire	592	567	621
Jersey	491	460	514
All Breeds	627	586	678

Longevity (% 3rd Lactation plus)			
Holstein	38.1	28.1	48.4
Ayrshire	45.3	36.5	54.0
Jersey	43.6	30.5	58.3
All Breeds	38.5	28.5	49.1

SCC ('000/ml)			
Holstein	213	332	117
Ayrshire	143	203	95
Jersey	212	284	159
All Breeds	212	330	117

Fat, kg (%)			
Holstein	353 (3.91)	276 (3.67)	424 (4.17)
Ayrshire	293 (4.23)	243 (4.11)	326 (4.40)
Jersey	308 (4.92)	253 (4.68)	361 (5.07)
All Breeds	349 (3.96)	274 (3.68)	423 (4.29)

Protein, kg (%)			
Holstein	288 (3.20)	232 (3.07)	343 (3.33)
Ayrshire	230 (3.32)	196 (3.19)	262 (3.47)
Jersey	232 (3.72)	194 (3.64)	272 (3.80)
All Breeds	284 (3.22)	228 (3.07)	342 (3.35)

Average Herd Weight including Cow-Heifers (kg)			
Holstein	611	571	635
Ayrshire	561	533	585
Jersey	466	421	504
All Breeds	601	547	635

Margin Over Feed Cost ($/cow/year) *			
Holstein	4747	3379	5884
Ayrshire	3910	3238	4486
Jersey	--	N/A**	--
All Breeds	4650	3353	5840

Other Parameters (All Breeds)			
Cows in Milk (%)	86	81	90
Replacement Rate (%)	36.7	50.7	23.5
Dry Period (days)	72	95	52
Calving Interval (days)	426	464	393
Linear Score	2.5	3.1	2.0

** Milk Value Minus Feed Cost*
*** A minimum of 5 herds is required to calculate an average, this minimum not met.*

New Brunswick								
Publishable	103	8958	351	286	204	207	202	204.4
All	139	8713	340	277	197	201	195	197.7
Nova Scotia								
Publishable	110	9337	361	298	207	213	206	208.9
All	143	9088	351	289	202	207	201	203.1
Prince Edward Island								
Publishable	84	9512	374	298	209	220	206	211.6
All	110	9259	364	290	203	214	199	205.4
Newfoundland								
Publishable	5	10046	399	315	218	234	215	222.5
All	6	9371	371	293	203	217	200	206.7

New Brunswick									
1-39	17.0	6.2	31	7427	307	4.20	245	3.34	211
40-79	43.7	30.0	58	8319	329	3.97	269	3.24	192
80-119	22.2	24.8	95	8969	353	3.94	291	3.25	224
120+	17.0	39.1	195	9619	380	3.95	305	3.17	195
Nova Scotia									
1-39	12.2	4.4	30	8062	311	3.88	260	3.24	259
40-79	49.6	33.4	56	8577	335	3.90	279	3.25	220
80-119	23.0	25.8	93	8916	352	3.95	286	3.22	243
120+	15.1	36.4	200	10059	398	3.95	324	3.22	216
Prince Edward Island									
1-39	9.4	3.5	30	8712	344	3.96	276	3.16	168
40-79	57.5	40.3	56	8775	348	3.97	279	3.17	210
80-119	20.8	24.6	94	8936	360	4.03	286	3.20	217
120+	12.3	31.6	204	9826	387	3.94	308	3.14	239

	25th	50th	75th	90th	25th	50th	75th	90th	25th	50th	75th	90th	25th	50th	75th	90th
Annual Milk Value ($)	5808	6480	7261	7929	5889	6725	7628	8052	6116	6756	7303	7873	6393	8096	8536	8870
Somatic Cell Count (000/ml)	306	237	193	149	353	268	211	156	338	253	194	157	279	243	201	158
Udder Health (SCC Linear Score)	3.0	2.7	2.5	2.2	3.1	2.8	2.5	2.2	3.1	2.8	2.5	2.2	2.9	2.6	2.4	2.2
Age at 1st calving (Year-Month)	2-7	2-4	2-3	2-1	2-7	2-4	2-3	2-1	2-6	2-5	2-3	2-2	2-4	2-3	2-3	2-1
Calving Interval (months)	14.7	14.2	13.6	13.1	15.2	14.5	13.7	13.2	15.7	14.7	14.0	13.4	13.1	13.4	14.2	14.8
Longevity (% of herd in 3+ lactation)	34	39	44	53	34	39	44	49	32	38	42	47	29	38	40	42
Herd Efficiency (% of herd in milk)	85	87	89	91	84	86	88	90	82	86	88	90	83	85	87	89
Herd Turnover (% of herd in removed)	50	42	34	28	51	41	34	26	50	43	37	29	47	40	33	26
Number of Cows	46	67	99	146	46	65	98	138	48	61	87	125	88	113	172	207
Management Milk (kg)*	27	30	34	37	28	32	35	38	30	33	35	37	25	34	37	38
Days Dry	81	71	64	57	98	66	80	59	101	86	73	60	83	76	70	63
Days to 1st Breeding	112	94	84	78	112	97	86	76	116	100	88	75	73	70	65	61

**Management Milk Measure : Brings age, stage of lactation and energy-corrected milk to a standard number for comparison purposes.*

New Brunswick

	Philson Toyota Eliza 677 P. Lawrence, Lawrence's Dairy	Morningview								
Holstein	Farm Ltd, Burtts Corner	Altatoyota	2/11	356.7	335	398	337	15175	665	485
	Bancourt Habit Celia Y Yves Banville, Ferme Bancourt									
Jersey	Ltee, Saint Quentin	Unique Vs Habit	4/1	306.0	326	285	307	10503	502	374
	Republique Urina Mario Lavoie, Ferme									
Ayrshire	Republique, St. Basile	Hautpre Kansas	5/8	273.7	276	273	272	11121	447	362

Guernsey

	Landslide 213 Ronald Hornbrook, Landslide	Oceanbrae Diamond								
Shorthorn	Ayrshires, Mount Middleton	Jack ET	2/3	249.0	263	244	240	6549	246	194
	Just Ducky Daniel Beatrix Philip F. Christie,	Gubelman Denmark								
Brown Swiss	Christie Farms Ltd, Lynnfield	Daniel	3/2	230.7	224	240	228	8323	363	297

Nova Scotia

Holstein

	Eloc Pingerly Crunk Sandy & Dean Cole, Eloc Farm,									
Shorthorn	Middle Musquodoboit	Treeton Pingerly ET	2/1	373.3	370	366	384	8975	362	303

Jersey

	Ridgewood Bianca Paul And Wendy Angus,									
	Ridgewood Ayrshire Ltd,									
Ayrshire	Amherst	Hautpre Monarck	3/6	294.7	302	286	296	10538	414	340

Brown Swiss

Animals highlighted in blue represent the top animal for that breed in all provinces

Prince Edward Island

Shorthorn										
Holstein	**Howardvale Lou Becky** Brenda Howard & Sons, Howardvale Holsteins, Breadalbane	Jenny-Lou Marshall P149-ET	4/4	356.7	360	362	348	17425	648	536
Ayrshire										
Jersey	**Oceanbrae Sultan Marsha** Barrett Holdings Ltd, Oceanbrae Farms, Fred Barrett, Miscouche	Shf Centurion Sultan	4/6	259.7	265	255	259	8964	466	332
Gurnsey	**Brown Eden Her Majesty Rosa** Randall Affleck, Auchinleck Farms Ltd, Bedeque	Sniders Option Aaron-ET	2/2	170.7	170	168	174	5142	253	188

Newfoundland

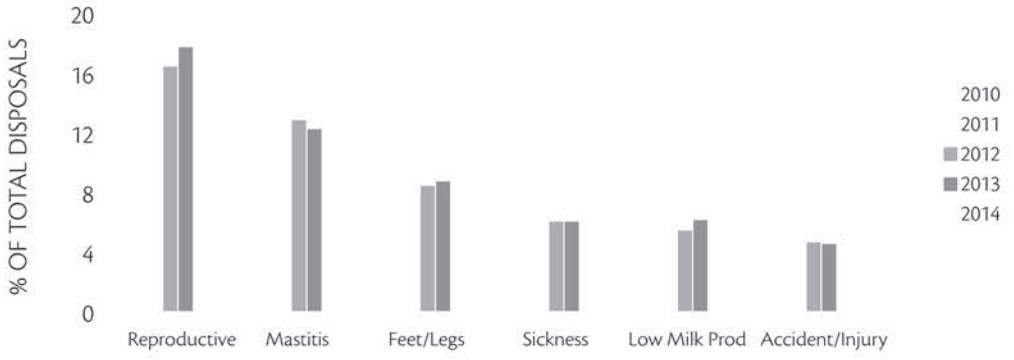
Holstein	**Scosim Lou Coco** David Simmons, Pure Holsteins Limited, Corner Brook	Jenny-Lou Marshall P149-ET	3/3	324.7	360	316	298	15982	527	432
Jersey	**Musqie Vincent Violet ET** Lee Noel, N And N Farm Ltd, Cormack	Bridon Vincent -ET	1/11	135.7	138	134	135	3520	183	131

Animals highlighted in blue represent the top animal for that breed in all provinces

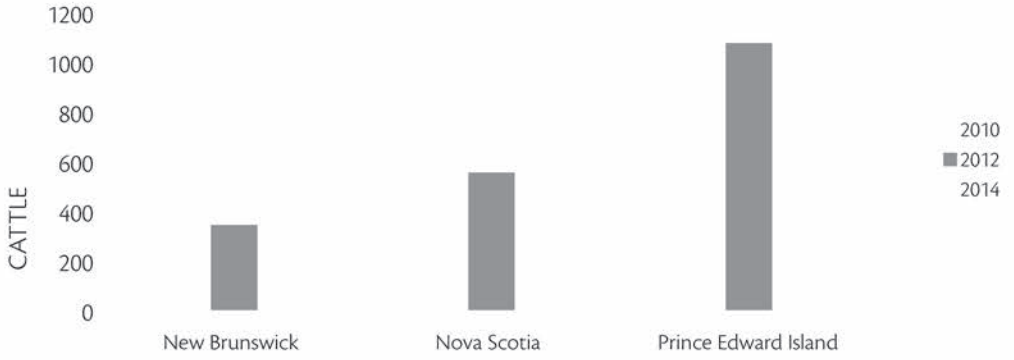
Small Herds (5-39 Records)	Oceanbrae Farms	Miscouche, PEI	36	297.3	MS	295	310	287	7913
	Roman Valley Holsteins	St, Andrews, NS	37	275.7	HO	272	277	278	12714
	Musqie Valley Farms	Middle Musquodoboit, NS	9	267.0	JE	269	263	269	7748
	Lindenright Holsteins	Antigonish, NS	75	267.7	HO	260	284	259	11623
Medium Herds (40-79 Records)	Black Avon Farms Ltd	Heatherton, NS	63	263.7	HO	260	268	263	11327
	Ravenwood Holsteins Ltd	Irishtown, NB	42	254.7	HO	255	249	260	12219
	Bekkers Farm Incorporated	Antigonish, NS	88	269.3	HO	269	276	263	12218
Large Herds (80-119 records)	MacBeath Farms Ltd	Marshfield, PEI	92	251.0	HO	249	258	246	11568
	Jewell Dale Farm Inc.	Meadowbank, PEI	84	247.7	HO	245	260	238	11173
	Lawrence's Dairy Farm Ltd.	Burtts Corner, NB	150	283.0	HO	278	296	275	12328
Very Large Herds (120+ records)	MacGregor Dairy Farm Ltd	Eureka, NS	291	281.3	HO	281	287	276	12507
	Sunny Point Farms Ltd	Hants County, NS	242	280.0	HO	274	298	268	12326

Ayrshire	Forever Schoon Farms	Vernon, PEI	69	232.7	222	235	241	7655	334	4.36	274	3.58
Brown Swiss	Phinneyval Farms	Bridgetown, NS	11	221.7	217	235	213	8437	367	4.35	291	3.45
Guernsey	Cedar Ridge Farms Ltd	Keswick Ridge, NB	41	198.7	202	198	196	6695	328	4.90	231	3.45
Holstein	Lawrence's Dairy Farm Ltd.	Burtts Corner, NB	150	283.0	278	296	275	12328	487	3.95	388	3.15
Jersey	Musqie Valley Farms	Middle Musquodoboit, NS	9	267.0	269	263	269	7748	410	5.29	294	3.79
Shorthorn	Oceanbrae Farms. Fred Barrett	Miscouche, PEI	36	297.3	295	310	287	7913	337	4.26	251	3.17

REASONS



MOVEMENT



NEW BRUNSWICK

1	**Lawrence's Dairy Farm Ltd.** 216 Mc Lean Settlement Rd., Burtts Corner, E6L 2W1	195	150	283.0	278	296	275	12328	487	388	HO	97554
2	**Schenkels Farms Inc.** Route 992 Hwy 425, Whitney, E1V 4K4	153	131	268.3	263	285	257	11892	478	369	HO	97375
3	**Ravenwood Holsteins Ltd** 753 Scotch Settlement Rd., Irishtown, E1H 1Y5	59	42	254.7	255	249	260	12219	443	396	HO	97509
4	**Walkerville Farms** 25 Bald Hill Road, Wards Creek, E4E 4M3	284	221	253.3	257	264	239	11632	443	343	HO	97516
5	**Jaba Holsteins Ltd.** 1497, Route 895, Elgin, E4Z 2M7	48	15	247.7	249	261	233	11516	448	344	HO	97763
6	**Bonnielm Farm Ltd** 2979 Rt 470, Ford Bank, E4W 3R5	98	70	247.7	240	246	257	10858	412	369	HO	97576
7	**Tobique Holsteins** 2653 Route 390, St Almo, E7G 3R5	75	66	246.7	247	246	247	11070	410	352	HO	97649
8	**Lonsview Farm** 6762 Route 111, New Line, E4E 4S6	148	123	246.0	238	255	245	10597	421	348	HO	97611
9	**Waldow Farms Ltd** 3084 Route 890, Cornhill, E4Z 1M5	357	242	245.0	248	252	235	10836	408	326	HO	97208
10	**Prime Valley Holsteins** 3441 Route 121, Apohaqui, E5P 1B2	141	112	244.7	245	251	238	10880	414	336	HO	97206
11	**Roy Chambers** 241 Waterford Road, Dutch Valley, E4E 3N4	33	30	238.7	226	253	237	10147	424	339	HO	97159
12	**Hazelhill Farms** Po Box 5068, Sussex, E4E 5L2	253	217	237.0	242	239	230	11212	409	339	HO	97548
13	**Christie Farms Ltd.** 30 Christy Rd., Lynnfield, E5A 1V9	46	37	233.0	229	244	226	10129	399	319	HO	97580
14	**Salisdairy Farm** 2800 Route 106, Boundary Creek, E1G 4N1	176	146	231.7	226	239	230	10316	405	335	HO	97292
15	**Presstein Holsteins** 333 Main Street, Sackville, E4L 3H2	129	101	230.7	225	243	224	10271	412	326	HO	97295
16	**Ferme Bancourt Ltee** 990 Route 260, Saint Quentin, E8A 2L3	30	21	230.7	240	222	230	7181	358	261	JE	97725
17	**Leighside Farms Ltd.** 3662 Route 132, Scoudouc, E4P 3M8	89	70	225.7	221	233	223	10460	409	335	HO	97233
18	**Northtay Farms Ltd.** 444 North Tay Road, North Tay, E6B 1R5	146	118	224.3	214	232	227	9919	399	335	HO	97328
19	**Graham Farms Ltd** 28 Good Corner Rd., Good Corner, E7K 1B9	91	68	223.0	218	236	215	10298	411	321	HO	97544
20	**Clarke Farms** 6052 Route 112, New Canaan, E4Z 6A6	76	65	223.0	227	230	212	10637	401	316	HO	97671
21	**Langelaans Holsteins Ltd** 3754 Route 112, Second North River, E4J 3X5	94	77	222.7	217	226	225	9691	376	321	HO	97505
22	**Ferme Republique** 628 Ch. Des Lavoie, St. Basile, E7C 2A3	68	56	222.3	221	222	224	7696	320	257	AY	97366
23	**Ferme Cyrror** 29 Ch. Siegas #1, Siegas, E7E 1T5	56	39	221.7	239	202	224	7380	339	262	JE	97664
24	**Ravenwood Holsteins Ltd** 753 Scotch Settlement Rd., Irishtown, E1H 1Y5	8	5	221.7	221	213	231	6562	339	260	JE	97509
25	**Sussex View Farm Ltd** 107 Roachville Rd., Roachville, E4G 2J2	59	50	220.3	218	228	215	10133	392	317	HO	97570

NOVA SCOTIA

1	**MacGregor Dairy Farm Ltd** R R #1, Eureka,B0K 1B0	377	291	281.3	281	287	276	12507	473	390	HO	98073
2	**Sunny Point Farms Ltd** 398 Point Road - East Noel, Hants County,B0N 1J0	298	242	280.0	274	298	268	12326	497	383	HO	98206
3	**Roman Valley Holsteins** Box 29, St. Andrews,B0H 1X0	46	37	275.7	272	277	278	12714	478	414	HO	98285
4	**Bekkers Farm Incorporated** R.R. # 4, Antigonish, B2G 2L2	122	88	269.3	269	276	263	12218	467	382	HO	98694
5	**Lindenright Holsteins** R R #2, Antigonish,B2G 2K9	101	75	267.7	260	284	259	11623	472	370	HO	98741
6	**Musqie Valley Farms** 215 Conrod Rd, Middle Musquodoboit,B0N 1X0	11	9	267.0	269	263	269	7748	410	294	JE	98719
7	**Black Avon Farms Ltd** 2362 Guysborough Road, Heatherton,B0H 1R0	70	63	263.7	260	268	263	11327	433	364	HO	98693
8	**Pine Haven Farms Ltd** Cumberland Co.,, Oxford,B0M 1P0	55	39	258.7	263	255	258	7748	404	287	JE	98611
9	**Springauff Farm** 1720 Rte 332, Lunenburg,B0J 2C0	30	21	253.7	263	241	257	12451	423	386	HO	98198
10	**Curry Knoll Farms Limited** 124 Wharf Rd, Wolfville,B4P 2R3	58	41	251.3	241	269	244	10607	438	342	HO	98187
11	**Bayview Dairy Farm Ltd.** P.O. Box 168, Mabou,B0E 1X0	74	59	247.3	250	232	260	11723	404	387	HO	98647
12	**Kingsmeadow** 5239 Chester Road, Windsor,B0N 2T0	47	37	246.0	237	262	239	10720	439	343	HO	98729
13	**Lone Willow Farm** 2377 Clarence Road, Bridgetown,B0S 1C0	61	50	244.0	242	250	240	10704	409	338	HO	98017
14	**A & J Bent Farms Ltd** R.R.#3, Lawrencetown,B0S 1M0	128	96	240.0	232	260	228	10655	443	333	HO	98195
15	**Cornwallis Farms Ltd** 1258 Belcher Street, Port Williams,B0P 1T0	84	68	239.7	234	256	229	10697	435	334	HO	98728
16	**Scothorn Farms Ltd** 8727 Hwy. 14, Hardwood Lands,B0N 1Y0	446	375	236.7	225	257	228	9961	422	322	HO	98752
17	**Biggs Farms Ltd** 229 Biggs Road, Wolfville,B4P 2R1	106	81	234.7	234	244	226	10295	399	317	HO	98738
18	**Pineriver Farms Ltd.** R.R.# 2, Inverness County,B0E 1X0	54	45	234.3	234	234	235	10603	394	339	HO	98698
19	**Dalhousie University Agr. Campus** 39 Farmstead Court, Truro,B2N 5E3	41	34	233.3	228	248	224	10470	418	326	HO	98000
20	**Bishop Farms Ltd** 553 Marsh Rd, Annapolis Royal,B0S 1A0	165	140	233.3	223	257	220	10247	437	320	HO	98126
21	**West River Holsteins** R.R.#4, Antigonish,B2G 2L2	148	113	233.3	228	241	231	10435	411	336	HO	98999
22	**Eloc Farm** 6686 Hwy # 357, Middle Musquodoboit, B0N 1X0	34	26	231.7	231	233	231	10337	388	331	HO	98219
23	**Phinneyval Farms** R.R.#4, 10079 Highway #1, Bridgetown, B0S 1C0	17	12	231.7	225	239	231	7804	340	262	AY	98820
24	**Marshcrest Farms Inc.** 661 East Long Island Road, North Grand Pre, B0P 1M0	108	78	231.3	223	248	223	10070	416	322	HO	98682
25	**Brookvilla Holsteins** R R # 2, Inverness County, B0E 3M0	89	82	231.0	226	239	228	10648	417	341	HO	98641

PRINCE EDWARD ISLAND

1	**Oceanbrae Farms, Fred Barrett** 1081 Belmont Road, R R #1, Miscouche,C0B 1T0	54	36	297.3	295	310	287	7913	337	251	MS	99513
2	**Pondsedge Holsteins** Little Pond, Souris,C0A 2B0	223	160	261.0	268	275	240	11735	448	336	HO	99092
3	**MacBeath Farms Ltd** 26 Goldenflo Way, Marshfield,C1C 0H4	109	92	251.0	249	258	246	11568	443	362	HO	99577
4	**Howardvale Holsteins** Veterans Hwy 22537, Breadalbane,C0A 1E0	181	150	251.0	244	267	242	10777	438	340	HO	99490
5	**Jewell Dale Farm Inc.** 298 Route 19, Meadowbank,C0A 1H1	109	84	247.7	245	260	238	11173	440	344	HO	99393
6	**Nordale Farm** 691 Sunnyside Rd, Route 131, Richmond,C0B 1Y0	94	77	246.0	235	253	250	10767	430	363	HO	99366
7	**Winterbay Farm Inc.** Bedford, Mt. Stewart,C0A 1T0	104	84	245.0	237	260	238	10705	436	342	HO	99100
8	**Tiny Acres Holsteins** 621 Belmont Road, Miscouche,C0B 1T0	208	115	243.7	243	255	233	10945	425	334	HO	99676
9	**Red Oak Farm** 1463, Oyster Bed Bridge,C1E 0X8	61	48	241.7	243	246	236	10819	405	333	HO	99540
10	**Colin MacNevin** Desable Route 19, Desable,C0A 1C0	52	7	241.7	240	261	224	11176	446	329	HO	99696
11	**Abelaine Farms Inc** 309 Rte.258, New Glasgow, Hunter River, C0A 1N0	38	31	239.7	231	249	239	10378	416	342	HO	99523
12	**Reeves Farm Inc.** R R 1, Freetown,C0B 1L0	72	62	238.7	228	258	230	10510	442	338	HO	99652
13	**Royalwater Holsteins** 1957, Rte #22, Mt. Stewart,C0A 1T0	143	111	236.3	232	253	224	11098	448	338	HO	99094
14	**Blue Diamond Farm** R R #1, Kinkora,C0B 1N0	93	68	235.7	230	246	231	10809	430	344	HO	99667
15	**Idee Holsteins** 5511 Rte 6, South Rustico, Hunter River,C0A 1N0	56	37	235.0	220	258	227	10060	438	330	HO	99570
16	**Sudview Holsteins Inc.** 594 Irishtown Road Route 101, Kensington,C0B 1M0	45	35	234.0	231	242	229	10939	427	345	HO	99598
17	**Forever Schoon Farms** 184 Monaghan Road, Vernon,C0A 2E0	90	69	232.7	222	235	241	7655	334	274	AY	99552
18	**Crasdale Farms** 995 Grand Feve Point Road, Hunter River,C0A 1N0	84	65	232.3	226	239	232	10533	411	342	HO	99543
19	**Newgreen Farms** R R 1, Breadalbane,C0A 1E0	64	48	232.3	239	226	232	11178	391	345	HO	99491
20	**Bernadale Holstein** 2473 Mac Isaac Road, Route 127, Richmond,C0B 1Y0	67	51	229.7	225	235	229	10304	398	332	HO	99536
21	**Newland Farms Inc.** 5078 Rte 13, Rennies Road, Hunter River,C0A 1N0	255	184	229.0	226	237	224	10276	399	323	HO	99075
22	**Oceanbrae Farms, Fred Barrett** 1081 Belmont Road, R R #1, Miscouche,C0B 1T0	11	8	228.7	231	224	231	7059	370	268	JE	99513
23	**Port Hill Milking Company** 177 Low Point Road, Tyne Valley,C0B 2C0	138	109	225.7	225	231	221	10204	389	318	HO	99311
24	**Golden Bay Dairy Inc.** St. Peters, St. Peters Bay,C0A 2A0	84	65	225.7	225	239	213	10028	396	303	HO	99009
25	**Bonzo Farms Ltd.** 1246, Kingston Road, Kingston,C0A 1H9	44	30	224.7	211	255	208	9946	449	311	HO	99565

NEWFOUNDLAND

1	**Larch Grove Farms** 405 Vetrans Drive, Cormack,A8A 2R7	144	99	243.3	236	260	234	10893	444	343	HO	99990
2	**N And N Farm Ltd** 410a Veterans Drive, Cormack	218	173	235.3	231	249	226	10447	418	325	HO	99905
3	**Pure Holsteins Limited** P.O. Box 2158, R.R.#1, Corner Brook	113	86	228.0	228	234	222	10269	392	319	HO	99984
4	**Brophy's Dairy Farm** P.O. Box 159, Daniel's Harbour, A0K 2C0	203	123	206.7	199	226	195	9190	388	287	HO	99989
5	**Cornerstone Farm** 14A Veterans Drive, Cormack,A8A 2P8	107	72	200.3	199	201	201	9473	355	303	HO	99903

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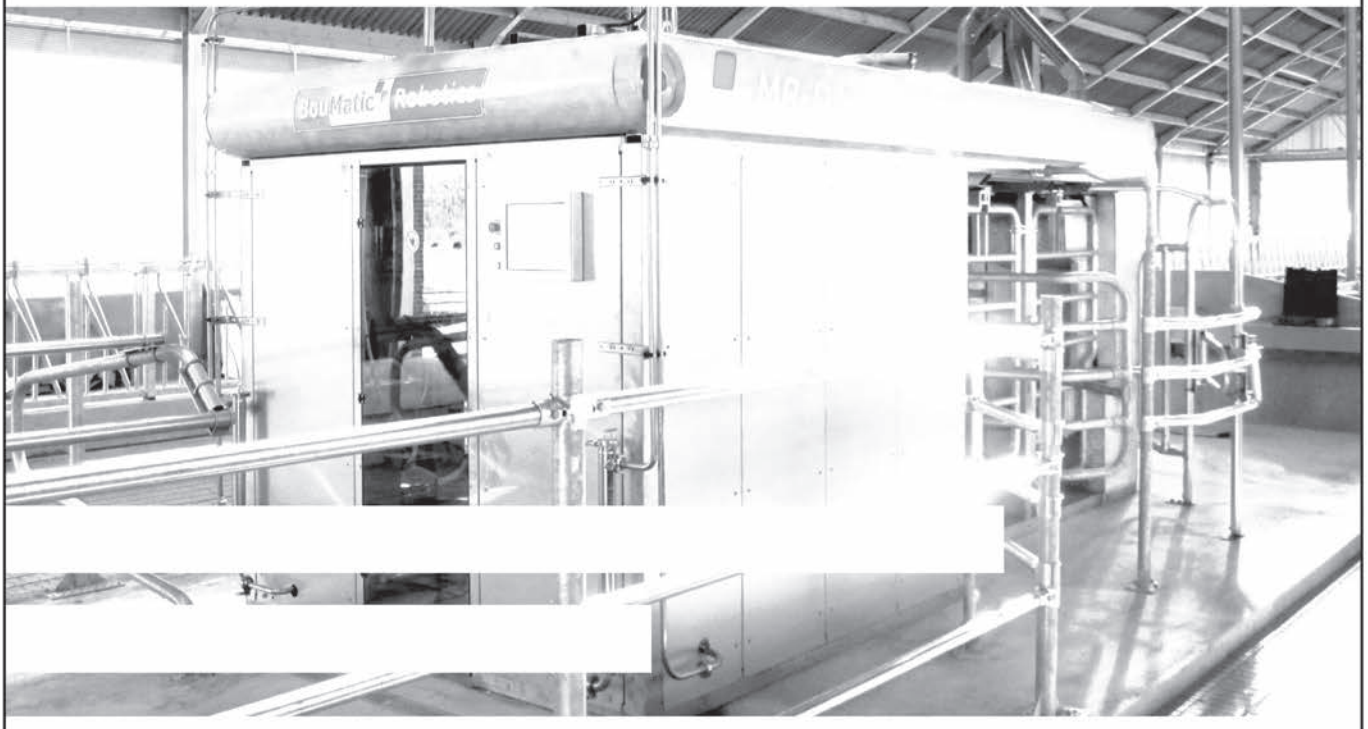

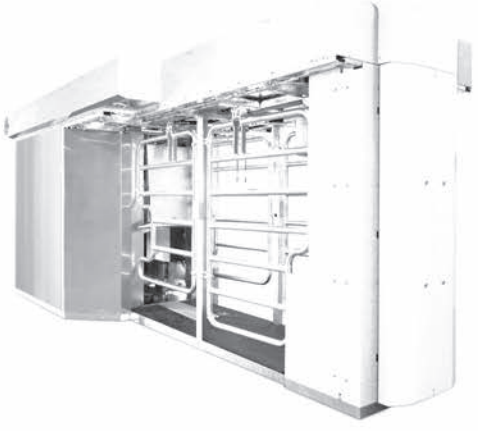

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