

2017

WESTERN PROGRESS REPORT



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Cover Photo: Milky Way Dairy, 2017 Top Western Herd for DHI Herd Management Score



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A Word From Our General Manager

We are pleased to present our 2017 edition of the Western Progress Report to recognize the top dairy herds across the four Western provinces. This year we expanded our listing of the top ranking herds in the National Herd Management Score to include the top 25 herds in the country. This national recognition opportunity is made possible by working closely with our partners at Valacta – the organization providing milk recording services in eastern Canada.

We are proud to announce that Milkyway Dairy of Chilliwack, BC, operated by Frank and Debbie Les, is the top western herd with a Herd Management Score of 944 out of a possible 1,000. Inside you will find a profile of MilkyWay Dairy who have consistently ranked among the top herds in CanWest and the country. Congratulations to Frank, Debbie and their team on their achievement. Other provincial management score leaders included Sierra Colony of Shaunavon, SK with a score of 913, Boxrose Farms Ltd., of Lacombe, AB with a score of 909, and Rehoboth Farms of Grunthal, MB with a top provincial score of 892.

We also recognize other aspects of herd management excellence with our listing of the lowest SCC herds reflecting their outstanding udder health management skills and practices. Once again this year, Tom DeGroot of Rosedale, BC led the west with the lowest average SCC of 39,000. Congratulations to all the herds who made this list in 2017 as it is a true reflection of special effort and attention to detail.

In conclusion, I wish to thank our sponsors for their financial contribution to this annual publication. Their advertisements appear throughout this edition and I encourage you to view their messages.

Neil Petreny
CanWest DHI



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Butterfat: The Canadian Dairy Industry's Gold Medal

Barry Robinson, Ph.D., Great Northern Livestock Consulting Ltd., Westlock, AB

How can I increase butterfat? Given quota allocations and the recent changes in milk pricing, that is a very common question that I receive on farm calls. I have absolutely no idea.....just kidding. Fortunately, butterfat percent in milk is a component that can be manipulated to a certain extent unlike milk protein which is extremely difficult to alter. A more important metric relative to profitability are kilos of fat shipped per cow per day. This of course combines butterfat percentage with liters per cow per day of milk production. In this article I will briefly discuss two key factors relative to maximizing milk production and then suggest some techniques to alter percent butterfat.

Attention to detail separates average producers from high producers. This point may seem mundane but it is true.

Maximizing Milk Production

A key factor associated with high producing cows is growing, harvesting and storing high quality, high energy forages. In my experience, the first three limiting factors relative to milk production are energy, energy and energy. High quality forages allow for optimization of energy intake.

A second key factor relative to a high level of milk production is attention to detail. Attention to detail separates average producers from high producers. This point may seem mundane but it is true.

Ration Formulation

The first step to maximize butterfat production is to have a properly balanced ration with special emphasis placed on effective and theoretical

fibre. The minimum fibre that I formulate lactating dairy rations is 21% neutral detergent fibre (NDF) from forage. Typically the lactating rations contain 22-24% NDF from forage. When feeding a total mixed ration, the physical fibre should be evaluated with the Penn State forage particle sampler. The sampler comes in either 3 or 4 trays. I work the three tray separator. My goal for the upper tray is 5-15%, less than 50% in the bottom tray with the balance in the center tray.

Feed Additives

There are feed additives that influence butterfat. When adding a new feed additive, if possible, make one change at a time and then evaluate to see if the change met your expectations. If you make two changes at once, it is impossible to determine cause and effect and therefore profitability. Additionally, it is easier to boost butterfat from 3.6% to 3.7% as compared to 4.3% to 4.4%. Be realistic in your expectations.

Sodium bicarbonate fed at the rate 150 grams/cow/day may boost butterfat. In addition, there are about one zillion yeast products all with different feeding rates that may boost butterfat. Your nutritionist can fill you in on the yeast product that she or he has most success with. Rumensin boosts milk production efficiency and reduces the incidence of digestive issues such as bloat or acidosis. However, high levels of Rumensin may reduce butterfat. If you feed Rumensin and want to minimize the negative effect on butterfat, be sure to feed at a low level such as 12-13 ppm based on dry matter intake.

Palm fats are widely used in western Canada to boost butterfat. The feeding rate typically ranges from 200-600 grams/cow/day. Because



of the high cost of palm fats, I recommend starting out with 200 grams/cow/day and determine if the palm fat is cost effective relative to a boost in butterfat. If the first 200 grams are cost effective and you are still not meeting quota, consider feeding another 100-300 grams per cow per day.

At least once per year, communicate with your nutritionist about which feed additives you are feeding and the cost of each feed additive. Many times additives stay in formulations for years without a good reason.

The Canadian Dairy industry is going great guns right now with high demand for dairy products. Go for the GOLD, butterfat that is. ▼

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Robot In-Line Sensors Evaluated

Daniel Lefebvre,
General Manager, Valacta

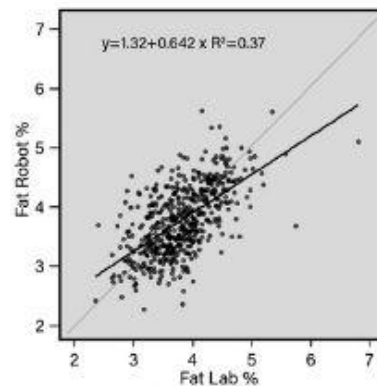
There are now more than 700 milk recorded herds using milking robots in Canada and this number continues to increase. Many of them are equipped with in-line sensors that provide estimates for milk components and somatic cells. The data provided by these sensors could have value for producers as well as for the industry, but it is important to assess the accuracy and precision of these sensors to determine appropriate use of the data. Valacta recently completed a project designed to characterise milk composition and somatic cell count estimates from automatic milking systems sensors.

For components (fat, protein and lactose), automatic samplers were installed on 10 farms to collect samples from all milkings over a 24hr period. These samples were analysed individually in the Valacta laboratory as normal DHI samples. Milk production from each milking was also retrieved from the robot, allowing to calculate weighted average milk composition for a 24hr period. This weighted average was compared to the daily milk composition estimate provided by the robot sensors for the corresponding day. For a truly representative comparison, we only retained weighted averages based on at least three milkings over the 24hr period, which left records from 501 cows.

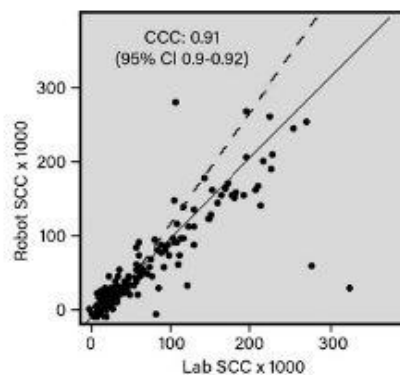
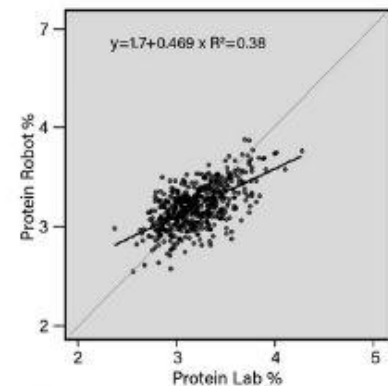
While the overall average of the sensor-generated estimates was in close agreement with the average of the laboratory analyses, the mean absolute error, a statistical measure of agreement between two values, indicated a

significant variation in the individual cow sensor estimates as compared to the corresponding laboratory values. Furthermore, linear regression analysis revealed a significant bias in the estimates showing a tendency to overestimate cows with lower than average and underestimate cows with high components as illustrated in the figure. For reference, in the absence of bias the regression line would be superimposed on the grey diagonal.

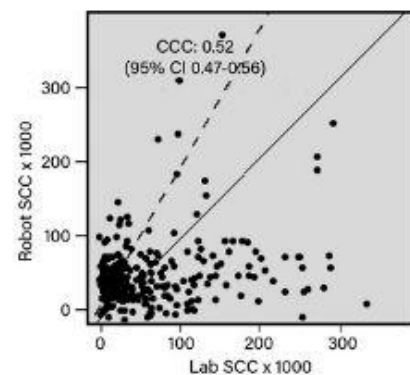
These results indicate that estimates of milk composition generated by robot in-line sensors can provide reasonable estimates for herd average trends but the bias and variation observed for individual cows should be taken into account when using these estimates for management. This information will also be useful to assess the potential value of this data for use in genetic evaluation.



The mean absolute error, a statistical measure of agreement between two values, indicated a significant variation in the individual cow sensor estimates as compared to the corresponding laboratory values for fat and protein.



Optical enumeration on-farm SCC system showed good agreement with corresponding laboratory results.



Automated on-farm CMT system showed potential to identify cows with very high (>1 million cells/ml) indicative of abnormal milk, but limited sensitivity to identify cows with subclinical mastitis.



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The Easy Way to do Traceability

Jeremy Ten Hag, Herd Management & Software Specialist, CanWest DHI

DairyComp herd management software provides dairy producers with a powerful management tool to track and analyze every aspect of their dairy. It is a complete and integrated solution making record-keeping easy and efficient.

Keeping with the theme of ease and efficiency, CanWest DHI has been proactive in ensuring DairyComp can support current industry requirements, including the Dairy Farmers of Canada proAction program. The Traceability element of proAction came into effect in 2017, and now producers have an increased need for an efficient system that can combine the regular day-to-day record-keeping along with the new requirements.

"In one simple step on one program, we can enter our animal movements and automatically send it to the database." Jan van de Brake, AB

How Does it Work?

Essentially, the Trace module in DairyComp allows to easily capture all of the mandatory information required for Traceability as part of the routine data entry when an animal is born or moves in or out of the herd. The data is then stored in an accessible file that can be viewed, printed or even transferred to a spreadsheet. From the Trace summary screen, you can



automatically send your information to the National Traceability Database and meet the reporting requirement of the program.

Jan van de Brake, a dairy producer in Lacombe, AB really enjoys this new feature of DairyComp because, "In one simple step on one program, we can enter our animal movements and automatically send it to the database."

After running the initial setup, which includes entering your Premises ID (PID), the Trace module will pull the necessary information from the data that you are already entering as part of your regular record keeping, and will automatically populate the Traceability required fields.

Dave Wagler, a DairyComp user from Ontario is a big fan and he states, "DairyComp's Trace module is great because you're not doing anything different than you were already doing — it's seamless."

For the mandatory Traceability event types, you are automatically prompted at different points to enter the necessary information. For example, when entering a purchased animal (i.e. animal move-in), you are prompted to enter the origin PID number, license plate of the delivery trailer and origin location description, which are all requirements of proAction.

Module Features

The Trace module then keeps an historical log of 'transactions' which are always accessible and maintained for easy reference later on. In this format, it is easy to pull up records and demonstrate compliance during your on-farm audit process. Additionally, all

of your vital Traceability records are automatically included in DairyComp backups meaning that lost information can easily be recovered if you have a hardware or software malfunction. The module also displays a current list of records which haven't been reported yet, so you can quickly distinguish between what has and hasn't been sent to the national database. To further your convenience, DairyComp has built in edits and prompts to ensure you are filling in the correct information and notifies you if otherwise. Wagler says, "I love that it gives you detailed notifications of errors if you're missing information or forgot to fill a field in." DairyComp will also save the last eight license plates, premises ID or descriptions entered so future entries can be even more efficient and save you time.

Seamless Integration

Overall, the goal of this new module was to make Traceability as easy as possible for producers to integrate into their daily routines.

Wagler adds, "The Trace module in DairyComp has made it so that meeting Traceability requirements has not increased my workload at all."

Key to DairyComp's success is the dedicated and highly competent software support team. All software users have access to our support team and they are ready to assist with the setup and any questions you may have regarding the Trace module.

Yes, as part of proAction, producers do have a few more records to maintain, but DairyComp can help make it all pretty easy and efficient. ▼



Is Selective Dry Cow Therapy In Our Future?

Diego Nobrega, PhD student, University of Calgary

Herman Barkema, NSERC Industrial Research Chair in Infectious Diseases of Dairy Cattle, University of Calgary

Dr. David Kelton, DFO Research Chair in Dairy Cattle Health, University of Guelph

Antimicrobial resistance (AMR) is emerging as a major threat to human and animal health globally. While there is a lack of evidence to definitively link AMR to increased antibiotic use in dairy cows, the dairy industry should still consider how it can decrease the use of antibiotics. This will help retain the industry's social license to use antibiotics, while ensuring that sick animals receive the antibiotic therapy that they need. Given that the prevention and treatment of mastitis accounts for more than half of the antibiotic use in dairy cattle, one opportunity for reduction is through the adoption of selective dry cow therapy (SDCT).

Producers must keep track of all clinical mastitis cases before and after the implementation of SDCT, since that is the easiest way to evaluate whether it has been implemented successfully or not.

Based on the responses of 1,134 Canadian producers who completed the 2015 National Dairy Study, 84% still follow the recommendation to treat every quarter of every cow at dry off, while 11% have adopted a SDCT approach. These are generally herds with low bulk tank somatic cell count (SCC), few clinical mastitis cases, meticulous dry-off programs, clean dry cows and housing areas, and a clean dry cow environment. Many also have an effective program to decrease individual cow milk yields prior to dry-off.

While much has been said about the benefits of SDCT, more discussion is warranted regarding its risks.

Selection of animals to be treated at drying off is not an easy task, and protocols for doing so need first to be validated. The optimal selection protocol for cows to be treated will depend on the current udder health situation, which can be estimated using the bulk tank SCC, individual cow SCC and frequency of clinical mastitis.

Producers must keep track of all clinical mastitis cases before and after the implementation of SDCT, since that is the easiest way to evaluate whether the method has been implemented successfully or not. It is expected that the number of clinical mastitis cases remain the same before and after implementation

of SDCT. There is little agreement in the global published literature about how to select cows for non-antibiotic treatment.

The most successful programs include some combination of the following cow

factors: low current SCC (last DHI test prior to dry-off), low historical SCC (the last 3 DHI tests prior to dry-off), few clinical cases (especially in late lactation), and negative pre-dry off milk culture. Cows which do not get antibiotic treatment might still receive other therapies including application of an internal teat sealant, vaccination against mastitis pathogens, and support for their immune system.

The reduced use of antimicrobials may help to reduce the emergence of antimicrobial resistance, and should save the dairy producer some money, as long as there is not a compensatory increase in clinical mastitis after calving that requires



treatment. Nevertheless, care should be taken to carefully monitor the udder health of the cows during the dry period and into the subsequent lactation to ensure that good dry-off are being maintained.

A final consideration in dry cow therapy, whether blanket or selective, is which antibiotics to use. Antibiotics differ in their efficacy in eliminating and preventing IMI, as well as their categorization with respect to importance for human use. When products are similar in efficacy, we should consider moving away from antimicrobials of high importance for use in human infections. This is a topic about which producers should consult their herd veterinarian.

Much effort has been put into identifying factors driving adoption of SDCT, its impacts on economics and udder health and, more recently, on antimicrobial resistance. Whereas it seems that SDCT is in our future, it is essential that animal welfare is not adversely affected, irrespective of the increasing pressure to reduce the use of antimicrobials. ▼



Rehoboth Farms

FARM PROFILE

Owner	Henry, Evelyn, Dave & Kristin Stam
Location	Grunthal, Manitoba
Herd Size	180
Facility	Free-stall
Herd Management Score	892

Q: What is your background?

A: Rehoboth Farms started in May 2012 when Henry and Evelyn, Dave and Kristin and kids, and the two youngest daughters moved out to Grunthal to begin dairy farming together. Today, Henry and Dave manage the farm. Chris Stam does most of the feeding. Jeff Vasallo is the herd manager. Rossel Funk, David Wiebe, and some students help with milking. Ev, Kristin and Sarah work together to care for the calves and young heifers.

Q: What changes have occurred?

A: Though the dairy barn has remained the same, the dry cow barn has been improved and doubled in size. A new heifer facility houses all the animals from age 5 months to calving. Both barns are ventilated naturally, and include manual curtains. This has improved the strength of our heifers and provided our transition cows with an optimal facility. Prior to taking ownership, the herd was mainly bull bred so we made the switch to A.I. We use sexed semen for the top 40% of the herd. The bottom 35% of the herd and anything with repro issues is bred using beef semen.

Our calf-feeding program changed over time as well. Instead of pail feeding at day 3 or 4, we now bottle feed until 4 weeks and wean by weeks 6 or 7. When calves are 7-10 days old, dividers are removed so that calves are paired until weaning when they move to group pens in sets of 4 or 6.

Q: What management tools do you use?

A: We use DairyComp 305 and Pocket CowCard enabled with read and write. Having that data at cow-side is very convenient and we can enter data right on the spot. We work closely with our nutrition team and veterinarian, both of whom have access to our DairyComp cow files. Parlour data is reviewed daily, especially fresh cow reports, combined with animal observation to catch issues before they become clinical cases.

Q: What practice is integral to your farms' success?

A: Protocols are constantly evolving and revised. This is our key to improvement — always be willing to make small changes that can have significant impact.

Q: What are some of the challenges you've faced?

A: Admittedly, we struggle with lameness.

Q: What has been your biggest success?

A: We increased our voluntary waiting period for high producing cows to 90 DIM and it has been very positive for us. It affects our Preg Rate, but also lowers our services per conception and cost per pregnancy, allowing us to justify using a higher value semen on those cows with improved results.

Q: If you could change one thing tomorrow, what would you do?

A: We would build a technology-driven, new VMS facility with robotic feeding, deep-bedded sand, preferably with slatted floors. We'd also include a designated care area with an easy-to-use trimming chute.

Q: What are your future plans?

A: We would like to increase our herd efficiency and milk fewer cows while producing more.



FARM PROFILE

Owner	Kevin & Denise Coghill
Location	McLean, Saskatchewan
Herd Size	200
Facility	Free-stall
Herd Management Score	831



Q: What is your background?

A: Vinoridge is a second-generation dairy farm. Originally a tie-stall, Kevin's father started this herd in 1997 and then expanded and renovated it to a free-stall facility in 1998. Kevin and Denise manage the farm full time. There are currently four full-time employees and several part-time staff.

Q: What changes have occurred?

A: Some major changes occurred in 1998 including switching to free-stall and a TMR feeding system. As of 2008, we have worked closely with Dairy Smart Nutrition to fine tune our feeding program. We have also improved our calf raising facilities so they now start in hutches and then move to group housing in a newly built heifer facility.

Q: What are your top 3 management goals?

A: Our top herd management goals are to boost production, increase longevity, focus on cow comfort and overall herd health.

Q: What management tools do you use?

A: One of our main tools is Dairy Smart Nutrition for all aspects of feed and nutrition. We also use DairyComp software, our herd reports and vet lists for herd health. We like to ensure staff are clear on management protocols so that we maintain consistency in all that we do.

Q: What practice is integral to your farms' success?

A: Consistency. We strive for it in everything, including the smaller details like vaccinations and dry-off protocols. We also try to be calm and quiet around the cattle and this has positively affected our herd by providing them with a low-stress environment.

Q: What are some of the challenges you've faced?

A: A few years ago, we experienced a fairly severe labour shortage on our farm. Since then, things have turned around and we have found great help. We also deal with dramatic weather changes that can have negative impacts on our cattle and feed production.

Q: What has been your biggest success?

A: We are very happy with our heifer program, and their resulting progress. We have reached a point where we are marketing heifers from our farm. We calve them between 22-24 months as strong and healthy first-calvers.

Q: If you could change one thing tomorrow, what would you do?

A: We would build a new transition facility for our close-ups.

Q: What are your future plans?

A: Over time, we'd like to continue to improve our overall herd standing. Also, we'd like to focus more on cow comfort and increase our herd efficiency.

Q: Any final comments?

A: We love being farmers, and it is a great way to raise our family. We are doing it because we love it.



FARM PROFILE

Owner	Jesse Bouwknecht & Eric Boeve
Location	Lacombe, Alberta
Herd Size	125
Facility	Free-stall
Herd Management Score	909

Boxrose Farms Ltd.

Q: What are some of the challenges you've faced?

A: Keeping part-time milker's to help cover night shifts on weekends has been a struggle in the past. Working with multiple custom farmers to assist in getting crops off has also proved to be inconvenient at times. We have slowly started purchasing some of our own equipment to help alleviate this problem.

Q: What has been your biggest success?

A: Switching to milking 3x a day was probably the best decision we have made. The herd production and overall performance has drastically improved. Udder health and SCC are easier to manage due to less stress on the udders.

Q: What is your background?

A: We moved to Lacombe from the Fraser Valley in B.C. in April 2015. We bought an existing dairy from Jacob and Coba Verburg. We completed a few renovations so far including added new calf pens and mats in the dairy barn, and installed headlocks in the heifer barn. The current team at Boxrose includes Jesse and Lisa Bouwknecht, Eric and Rebecca Boeve, 1 part-time milker, and 1 part-time after school helper.

Q: What changes have occurred?

A: During the first months at this farm, we started using calcium boluses post-calving to help manage milk fever. This was a simple yet very effective change. Calf raising has changed to include a homemade calf grain consisting of chopped straw, ground corn, wheat distillers and minerals. The calves start on this grain on day 3 and remain eating it free choice until 5-6 months. Switching to 3x/day milking in March 2016 was also an effective change for us.

Q: What are your top 3 management goals?

A: Our goal is to increase longevity and have a herd of 50% or higher 3+ lactation cows. We strive to sell 30% of all fresh heifers every year to other dairies. Thirdly, we would like to reach a herd production goal of 13,000kg 305 without feeding a lot of grain. We have been transitioning towards using more high quality forage and decreasing the amount of grain fed.

Q: What management tools do you use?

A: We use Vampp herd management software, to which we enter all our breeding and herd health data. We also value the daily management reports it provides. We use DHI reports such as SCC, Ketoscreen, and cow reports to help us with management and cull decisions.

Q: What practice is integral to your farms' success?

A: We strive to have everyone doing as consistent a job as possible. Everyone knowing what their job and expectations are is crucial to success.

Q: If you could change one thing tomorrow, what would you do?

A: Ideally, we would double the size of our dry cow facility to give all cows 200+ square feet each on a huge bedding pack inside.

Q: What are your future plans?

A: We would like to integrate a heat detection system into the heifer barn. Currently, we are doing all A.I. by sight and a small portion with ovsynch. Our long-term goal is to continue to ship a high quality product while enjoying what we do for a living.

Q: Any final comments?

A: We are blessed to be dairy farming in Canada, and are very thankful to the Lord and our family for this opportunity we have!



FARM PROFILE

Owner	Grant & Eugene Sache
Location	Rosedale, British Columbia
Herd Size	160
Facility	Robot
Herd Management Score	918

West River Farm Ltd.

Q: What is your background?

A: We are third generation BC dairy farmers. Our parents, Denis and Jill Sache, established their own farm at this location in 1974, building a new double four parlour and new loafing barn here in 1976. The parlour was expanded to a double five in 2003. Grant and Gene, and Gene's wife Sarah, have managed the farm together since 2009, and completed construction of a new six-row drive through robotic dairy barn to replace the existing facility in 2015. We renovated the former cow barn to a young stock facility housing heifers 0-10 months in late 2015.

Q: What changes have occurred?

A: The new facilities were a major breakthrough for us, switching to robotic milkers from 3x/day in a small parlour. Sand bedding in the cow barn has made a huge difference in animal health, and our new heifer facility has allowed for a significant improvement in the health and quality of our replacement animals.

Q: What are your top 3 management goals?

A: We are passionate and particular about a healthy start for calves — they're our

future cows! We also want to focus on smooth transitioning of fresh animals, and finally, manage milking heifers on separate robot and pen than the cows, allowing specialized management decisions for that group.

Q: What management tools do you use?

A: We use DairyComp, T4C, and our advisory team including vet and nutritionist. Rumination data is the most important to us.

Q: What practice is integral to your farms' success?

A: Calf raising, fresh cow protocols, and regular herd health visits are critical to our success. We have seen many benefits in the calf barn due to closely following care management protocols.

Q: What are some of the challenges you've faced?

A: We've had minimal challenges since moving to our new facility — it's really amazing what a big change that can make. We're very proactive about nutrition and rations, and constantly keeping an eye on things in the barn.

Q: What has been your biggest success?

A: Our success in the new barn has amazed us, especially in terms of the increase in production/kgs per cow. Additionally, we've made a lot of changes to our calf and heifer program in the last couple of years and it's great to see those paying off in the milking barn. We grow and harvest the majority of forages ourselves, allowing control over what we're putting into the bunkers and ultimately feeding to our animals.

Q: If you could change one thing tomorrow, what would you do?

A: We'd really like to make improvements to our breeding-age heifer barn to increase animal comfort, including alley scrapers, new stalls, brushes, etc.

Q: What are your future plans?

A: As we've been through a lot of transition lately, we are looking forward to settling into a period of less aggressive expansion and growth so that we can have more time with family, especially while the kids are young. Over time, we will continue to work to maintain a strong and viable business and industry for the next generation.



FARM PROFILE

Owner	Frank & Debbie Les
Location	Chilliwack, British Columbia
Herd Size	75
Facility	Free-stall
Herd Management Score	944

Milky Way Dairy

Top Western Herd for DHI Herd Management Score

Q: What is your background?

A: We started farming in 1991, with 40 cows on a rented farm. We purchased our current farm in 2001, which is next to the Fraser River in the beautiful Fraser Valley. Over the years, we've completed a variety of small renovations such as new comfort stalls, alley scraper system, a new manure pit and covered the existing pit.

Q: What changes have occurred?

A: We've made several changes over the years: switched from sawdust to sand-bedding, automatic alley scraping average 9 times per day, feed a single dry cow ration with increased straw content, and now give a calcium bolus to every fresh cow for milk fever prevention. Our calf-raising protocols now include feeding more milk, bottle-feeding longer, and trying to increase colostrum intake sooner (4L within 4 hours of birth).

Q: What are your top 3 management goals?

A: Our farms goals are to keep cows as comfortable as possible, increase production to 2kg butterfat/day, and to keep SCC under 100. Overall, we'd like to be as efficient as possible while producing a high quality product.

Q: What management tools do you use?

A: Collectively, we value the information from DHI reports, and trust the advice from our advisory team including our feed sales representative and veterinarian.

Q: What practice is integral to your farms' success?

A: Part of our farms' success is owed to making high quality local feed and including it in a well-balanced ration, which is provided to us by Ritchie Smith's feed representative, Iain Haig.

Q: What are some of the challenges you've faced?

A: Every day can be a new challenge, including getting up at 4:30 every morning! However, coli-form mastitis was a big challenge here before we made the switch from sawdust to sand bedding.

Q: What has been your biggest success?

A: Surviving 26 years in the industry!

Q: If you could change one thing tomorrow, what would you do?

We would add a 100ft extension to the barn to alleviate over-crowding and improve cow comfort.

Q: What are your future plans?

A: In the short term, we strive to be as efficient as possible. Further down the road, we aim to transition the farm to the next generation.

Q: Any final comments?

A: Dairy farming has been a good career choice for us to use our God-given talents. However, we also feel our dependence on God to provide from day-to-day. We have enjoyed raising our family of 9 with a farming lifestyle where hard work and dedication is imperative.

MANITOBA HERD MANAGEMENT SCORE

Rank	Farm Name	Owner	City	Region	Score	Herd Size	Breed
1	Rehoboth Farms	—	Grunthal	Eastern	892	196 *	HO
2	Readore Farms	Rheal Simon	Notre Dame	Central	880	132	HO
3	Sight Hill Farm Ltd	—	Austin	Central	864	66 R	BS
4	Fehr Farm	Jakob, Ana & Andreas Fehr	La Broquerie	Eastern	857	160 R	HO
5	Isaac Dairy Ltd	Brent & Victoria Isaac	Kleefeld	Eastern	841	97 *	HO
6	Labass Holsteins Ltd	Jan & Tracy Bassa	La Broquerie	Eastern	839	536 *	HO
7	Sturgeon Creek Colony	Samuel Waldner	Headingley	Interlake	824	66 *	HO
8	Holmestead Dairy	Russ & Crystal Holme	Anola	Eastern	814	78 R	HO
9	Four Oak Farms	Armin Dueck	Kleefeld	Eastern	809	52	BS
10	Noreydo Holsteins	Norbert, Kevin & Ryan Rey	St Claude	Central	806	101	HO
11	Optimist Holsteins	Hans Gorter & Nelleke Vandervliet	Otterburne	Eastern	795	153	HO
12	Muller Farms	Richard Muller	Notre Dame	Central	794	66 R	HO
13	Columbine Holsteins	Jacob & Annita Benthern	Elm Creek	Central	788	115 R	HO
14	Rosh Holsteins	Roger & Sherry Poirier	Beausejour	Eastern	787	61	HO
15	Plemark Holsteins	Matt & Tanya Plett	Blumenort	Eastern	777	80 *	HO
16	Friecrest Holsteins	Ed & Kathy Friesen	Kleefeld	Eastern	774	94	HO
17	CD Farms	Cornie Penner	Altona	Central	760	79	HO
18	Mageo Pouteau Farms Ltd	Chris & Carla Pouteau	Mariapolis	Central	753	81	HO
19	Streamline Dairy	Martin & Jennifer Hamming	Roseisle	Eastern	751	127	HO
20	Boonstra Farms Ltd	Brian & Rob Boonstra	Marquette	Interlake	745	752	HO

SASKATCHEWAN HERD MANAGEMENT SCORE

Rank	Farm Name	Owner	City	Region	Score	Herd Size	Breed
1	Sierra Colony Farms Ltd	—	Shaunavon	Swift Current	913	94 R	HO
2	Dept Animal & Poultry Sci	—	Saskatoon	Saskatoon East	907	120 *	HO
3	Alley Holsteins	Albert Leyenhorst	Dalmeny	Saskatoon East	884	183 *	HO
4	Fox Valley Farming Co Ltd	Jake Entz	Fox Valley	Swift Current	869	86	HO
5	Bench Farming Co Ltd	—	Shaunavon	Swift Current	856	92 R	HO
6	Elkrest Farms	Brad, Jason & Trevor Kornelius	Osler	Saskatoon East	844	767 *	HO
7	Vinoridge Farm	Kevin & Robert Coghill	McLean	Regina	831	198	HO
8	Quill Lake Colony	Robert Tschetter	Quill Lake	Saskatoon	816	115	HO
9	Ludwig Dairies	Terry & Bonnie Ludwig	Delisle	Saskatoon	805	190	HO
10	Star City Colony	Ruben Tschetter	Star City	Prince Albert/Melfort	795	198	HO
11	Dairy Barn	Clearspring Farming Company	Kenaston	Saskatoon	787	202	HO
12	Wallyway Holsteins	I & W Wiebe	Hague	Saskatoon East	786	139 R	HO
13	Marfay Farms Ltd	Mertis & Mark Wiebe	Osler	Saskatoon East	782	273 *	HO
14	Vandenbrink Dairy Farms	Henk Van Den Brink	Saskatoon	Saskatoon West	780	158 *	HO
15	Main Centre Dairy Colony	Andy Hofer	Rush Lake	Swift Current	777	189	HO
16	Rynview Holsteins	Michael Wesselingh	Saskatoon	Saskatoon East	767	58	HO
17	Cypress Colony	Darrell Entz	Maple Creek	Swift Current	766	95 R	HO
18	Foth Ventures Ltd	Melvin Foth	Hague	Saskatoon East	763	598 *	HO
19	Beechy Colony	George Hofer	Beechy	Saskatoon West	756	163	HO
20	Calvin & Diane Vaandrager	—	Langham	Saskatoon East	747	103 *	HO

* 3x Milking / R: Robotic

ALBERTA HERD MANAGEMENT SCORE

Rank	Farm Name	Owner	City	Region	Score	Herd Size	Breed
1	Boxrose Farms Ltd	—	Lacombe	Red Deer	909	131	* HO
2	Richards Farms Ltd	William Richards	Red Deer County	Red Deer	896	165	* HO
3	Houweling Farms Ltd	Pete Houweling	Coaldale	Lethbridge/Brooks	895	389	* HO
4	Sylvanside Dairy Ltd	Sipke & Margreet Dijkstra	Ponoka	Red Deer	886	177	HO
5	Nifera Holsteins	—	Nobleford	Lethbridge/Brooks	884	93	R HO
6	Vanden Dool Farms	Mike Vanden Dool	Picture Butte	Lethbridge/Brooks	879	292	* HO
7	Willam & Martine Huyssoon	—	Ponoka	Red Deer	878	156	HO
8	Deerfield Colony	Andy Waldner	Magrath	Lethbridge/Brooks	878	130	HO
9	Clover Prairie Farms	Brad Bredenhof	Calmar	Edmonton	878	65	JE
10	Edward Hofer	Leedale Colony	Rimbey	Red Deer	868	59	HO
11	Simmelink Farm	David Simmelink	Rocky Mtn House	Red Deer	867	106	* HO
12	Castor Farming Co Ltd	Jason Waldner	Castor	Red Deer	866	116	HO
13	High Field Farm Ltd	Jan & Marlen Steeneveld	Lacombe	Red Deer	865	252	HO
14	Roseglen Farming Co Ltd	Rueben Entz	Hilda	Lethbridge/Brooks	861	95	HO
15	Poly-C Farms	Cor & Cathy Haagsma	Ponoka	Red Deer	861	417	* HO
16	Hulleman Farms	Martijn Hulleman	Lacombe	Red Deer	860	88	HO
17	Verhoef Dairy	Herman Verhoef	Ponoka	Red Deer	858	129	R HO
18	Millford Colony Farming Ltd	Mike Wipf	Raymond	Lethbridge/Brooks	857	101	HO
19	E Holsteins-Dejong Bros Ltd	—	Lacombe	Red Deer	851	165	HO
20	Janna Dairy Ltd	John & Shanna Hulsman	Ponoka	Red Deer	850	177	* HO

BRITISH COLUMBIA HERD MANAGEMENT SCORE

Rank	Farm Name	Owner	City	Region	Score	Herd Size	Breed
1	Milky Way Dairy	Frank & Debbie Les	Chilliwack	Chilliwack	944	85	HO
2	West River Farm Ltd	Grant & Eugene Sache	Rosedale	Chilliwack	918	161	R HO
3	Kish Farms Ltd	Darren Kish	Abbotsford	Sumas	917	61	HO
4	Dale Farm	Robert & Dale	Mission	Dewdney-Deroche	890	116	R JE
5	Sytsma Dairy Farm Ltd	John Sytsma	Deroche	Dewdney-Deroche	885	196	* HO
6	Fraser Edge	Sid Stoker	Deroche	Dewdney-Deroche	877	152	R HO
7	Cliffview Farm Ltd	Henry Bremer	Enderby	Kamloops-Okanagan	875	180	* HO
8	Lavender Farms Ltd	Gerrit Vaandrager	Abbotsford	Matsqui	866	168	R HO
9	Country Charm Farms Ltd	Huizing Brothers	Matsqui	Matsqui	863	259	* HO
10	Triwest Farms	Vic & Terry Triemstra	Chilliwack	Chilliwack	862	138	* HO
11	Willswikk Holsteins	William Wikkerink	Mill Bay	Cowichan	862	57	R HO
12	Jennifer Veldhuisen	—	Grindrod	Kamloops-Okanagan	860	50	HO
13	Melinke Farms Ltd	Theo Stoker	Deroche	Dewdney-Deroche	858	134	HO
14	Kambro Farms Ltd	Doug, Tom & Will Kampman	Abbotsford	Matsqui	853	444	* HO
15	Rosegate Dairy Farms Ltd	Ted De Jong	Abbotsford	Matsqui	847	296	R HO
16	Trinity Holsteins	Paul Schmidt	Mission	Dewdney-Deroche	847	42	HO
17	Tekoa Dairy Inc	Harvey Haan	Chilliwack	Chilliwack	846	313	* HO
18	Neveridle Farms	Arthur Keulen	Delta	Delta-Richmond	845	157	HO
19	Picknick Dairy Farm Ltd	Harold, Ryan & Melissa Thibaudier	Delta	Delta-Richmond	838	348	HO
20	PIV Farms Ltd	Peter Vink	Chilliwack	Chilliwack	834	162	* HO

* 3x Milking / R: Robotic

LOW SCC HERDS

DHI congratulates the following producers for outstanding udder health management resulting in low SCC.

Farm Name	Owner	City	Cows (Avg)		Avg SCC (× 1000)
British Columbia					
Tolamika Farms/T & L Cattle	Tom Degroot	Rosedale	115		39
Wikksview Farm Ltd	Fred Wikkerink	Cobble Hill	75		46
Happy Cow Dairy	Kyle Durrance	Qualicum Beach	74		61
Willswikk Holsteins	William Wikkerink	Mill Bay	57	R	61
Gala Dairy	Matthew & Brandy Schmidt	Chilliwack	33		64
Viewfield Farms Ltd	Dave Taylor	Courtenay	160		65
Shenandoah Dairy	—	Armstrong	45		65
Dinn Farms Ltd	Erin Bell & Martin Dinn	Agassiz	120		69
Riverwater Farm Ltd	J Wikkerink	Duncan	139		72
Trinity Holsteins	Paul Schmidt	Mission	42		72
Neveridle Farms	Arthur Keulen	Delta	157		76
Kish Farms Ltd	Darren Kish	Abbotsford	61		77
Luttmerding Farms	T & G Luttmerding	Armstrong	125		84
Delmar Dairy Inc	Al Martens	Chilliwack	89		84
PIV Farms Ltd	Peter Vink	Chilliwack	162	*	85
West Coast Holsteins	Jeff Kooyman	Chilliwack	19		88
Suntasia Farm	John & Chris Sunder	Deroche	119		89
Coanwood Farms Ltd	Larry Wigham	Chilliwack	125		90
Natures Den	Gerrit Verwoert	Chilliwack	45		91
Kenmarank Farms Ltd	Gary Keis	Abbotsford	168		95
Alberta					
Houweling Farms Ltd	Pete Houweling	Coaldale	389	*	83
Sylvanside Dairy Ltd	Sipke & Margreet Dijkstra	Ponoka	177		83
Freedom Dairy	Marinus Helmus	Barrhead	83		83
Earnewald Holsteins-Dejong Bros Ltd	—	Lacombe	165		89
Roseglen Farming Co Ltd	Rueben Entz	Hilda	95		89
Hylac Holsteins	Ken & Donna Fenske	Ponoka	64		91
Deerhaven	Glenda Mutrie	Thorsby	43		92
Moo-Lait Farms Ltd	—	St Paul	60		95
Skylight Colony Farming Co	Jacob Decker	Vulcan	65	R	98
Edward Hofer	Leedale Colony	Rimbey	59		98
Myrin Glesman	—	Leduc	74		101
H & J Leusink Dairy	Harmen Leusink	Picture Butte	130		102
Clover Prairie Farms	Brad Bredenhof	Calmar	65		104
W Wyntjes & Sons	—	Red Deer County	432		105
K-Vet Holsteins	John & Karen Devet	Ponoka	201		105
West Coast Holstein Ltd	—	Ponoka	16		105
Boxrose Farms Ltd	—	Lacombe	131	*	108
Deerfield Colony	Andy Waldner	Magrath	130		111
Brant Farming Co Ltd	Tom Mandel Brant Colony	Brant	118		112
Plainview Colony	Tim Waldner	Warner	126	*	113

Continued

LOW SCC HERDS (Continued)

Farm Name	Owner	City	Cows (Avg)	Avg SCC (× 1000)
Saskatchewan				
Dierker Enterprises	Neil & Terry Dierker	Mistatim	59	86
Fox Valley Farming Co Ltd	Jake Entz	Fox Valley	86	97
Kessel Family Farm	Raymond Kessel	Balgonie	154	105
Downie Lake Colony	Josh Hofer	Maple Creek	104	106
Ronleen Holsteins	Ron & Cathy Schaeffer	Vibank	72	107
Daum Farms	Doug Daum	Dalmeny	44	113
Eatonia Farming Co Ltd	Dave Mandel	Eatonia	220	122
Kenbert Acres	Ken & Ryan Friesen	Drake	131	125
Balgonie Holsteins	Mike & Alfred Stiefel	Balgonie	194	126
Chris-Adie Holsteins Ltd	Matthew & Tricia Flaman	Vibank	83	133
Manitoba				
Mageo Pouteau Farms Ltd	Chris & Carla Pouteau	Mariapolis	81	86
Sturgeon Creek Colony	Samuel Waldner	Headingley	66 *	94
Four Oak Farms	Armin Dueck	Kleefeld	52	95
Fifi Holsteins	Gabriel Fifi	Bruxelles	31	101
U of Manitoba, Glenlea Research	Dr Tracy Gilson	Winnipeg	53	106
Park Dairies	Larry & Wilma Park	Lake Francis	86	107
Holmestead Dairy	Russ & Crystal Holme	Anola	78 R	111
Rosh Holsteins	Roger & Sherry Poirier	Beausejour	61	112
Readore Farms	Rheal Simon	Notre Dame	132	122
Wiebes Family Farm	Willie Wiebe	Riding Mountain	56	122

* 3x Milking / R: Robotic

PROVINCIAL STATISTICS

	Calving Interval (Months)		Dry Period (Days)		Age At 1st Calving (Months)		SCC (Avg)	
	2016	2017	2016	2017	2016	2017	2016	2017
British Columbia	14.0	14.0	68	67	26.0	25.8	184	190
Alberta	13.6	13.7	74	73	25.8	25.5	217	224
Saskatchewan	14.0	14.0	81	79	25.8	25.5	235	222
Manitoba	14.3	14.2	86	81	26.9	26.6	268	251
Ontario	13.9	13.9	69	68	26.2	25.9	241	248
Quebec	13.7	13.7	64	63	26.1	25.9	216	223
New Brunswick	13.9	13.7	68	66	27.5	26.8	221	225
Nova Scotia	14.0	13.9	70	69	27.2	27.0	240	239
Prince Edward Island	14.1	14.1	76	77	27.3	27.3	221	209
Newfoundland	13.7	13.7	71	68	26.6	25.9	276	247

PRODUCTION TRENDS (Kg's)

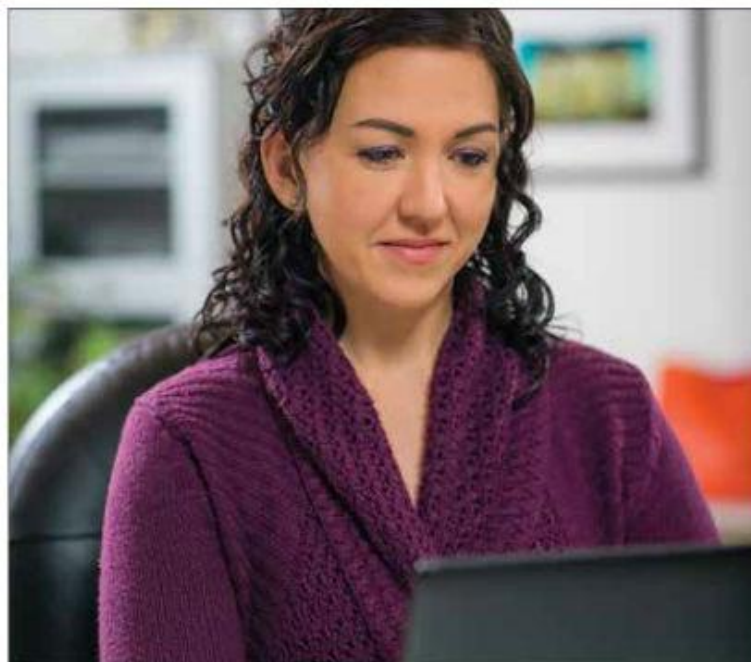
	British Columbia			Alberta			Saskatchewan			Manitoba		
	Milk	Fat	Protein	Milk	Fat	Protein	Milk	Fat	Protein	Milk	Fat	Protein
2017	10,161	405	329	10,417	406	333	10,686	415	345	10,057	383	322
2016	10,362	404	336	10,352	399	332	10,420	400	335	9,850	375	315
2015	10,071	386	323	10,015	386	319	9,964	383	320	9,633	365	308
2014	9,912	378	317	9,767	373	311	10,011	379	323	9,457	357	300

COMPLETE LACTATIONS (Kg's)

		2017				2016			
		Milk	Fat	Protein	Avg DIM	Milk	Fat	Protein	Avg DIM
British Columbia	All	10,358	413	338	308	10,440	408	341	311
	Publishable	10,885	438	356	319	10,750	424	351	314
	Management	9,556	376	311	290	9,951	383	325	306
Alberta	All	10,628	417	343	308	10,339	404	334	302
	Publishable	11,009	431	355	310	10,662	416	343	304
	Management	10,050	395	325	306	9,847	385	319	300
Saskatchewan	All	10,167	397	329	295	10,167	397	329	295
	Publishable	11,021	432	359	313	10,676	416	347	302
	Management	11,399	446	371	316	9,482	370	306	285
Manitoba	All	10,483	406	338	316	10,139	392	327	312
	Publishable	10,834	414	349	319	10,432	401	335	315
	Management	10,012	395	324	312	9,731	379	314	307

ENROLLMENT

	British Columbia	Alberta	Saskatchewan	Manitoba	2014	2015	2016	2017 (all)
DHI Herds	300	389	90	171	1,065	1,041	993	950
Percent Publishable	76%	59%	68%	70%	69%	67%	67%	67%
Percent Management	24%	41%	32%	30%	31%	33%	33%	33%
DHI Cows	52,218	59,222	15,549	29,230	155,207	158,626	157,158	156,219
Percent Publishable	66%	61%	67%	60%	68%	65%	63%	63%
Percent Management	34%	39%	33%	40%	32%	35%	37%	37%
Average Herd Size	174	152	173	171	146	152	158	164



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REGIONAL STATISTICS (generated throughout the year)

REGION	Herds	305 (Kg)			BCA			COMPOSITE BCA			
		Milk	Fat	Protein	Milk	Fat	Protein	2014	2015	2016	2017
British Columbia	300	10,161	405	329	231	243	234	225.0	229.2	238.2	236.2
Agassiz	21	10,149	409	327	225	244	228	220.5	221.6	235.4	232.3
Central B.C.	9	8,669	338	282	193	198	195	187.3	193.0	191.1	195.3
Chilliwack	58	10,395	415	335	238	250	239	233.4	236.2	246.1	242.5
Courtenay-Comox	7	9,652	395	321	221	238	229	208.4	214.8	230.0	229.3
Cowichan	23	10,413	423	336	231	252	235	219.6	229.3	239.9	239.1
Delta-Richmond	14	10,303	405	337	234	246	240	230.8	234.4	240.6	239.7
Dewdney-Deroche	29	10,155	408	330	240	248	240	231.2	234.2	244.4	242.5
Kamloops-Okanagan	52	10,324	413	338	233	245	238	225.7	229.5	238.8	238.8
Kootenay	5	8,963	351	290	204	206	204	194.1	203.8	205.5	204.7
Matsqui	20	10,583	416	339	239	252	240	220.8	230.1	244.7	243.7
Pitt Meadows-Maple Ridge	7	9,662	395	317	238	238	236	230.1	232.0	245.1	237.3
Sumas	30	10,121	402	327	232	244	234	229.7	233.6	237.2	236.5
Surrey-Langley	25	9,754	381	314	221	230	222	224.7	224.9	230.7	224.5
Alberta	389	10,417	406	333	235	244	235	219.1	225.9	234.6	237.8
Calgary	48	10,241	404	330	232	242	233	222.0	223.8	232.2	235.6
Edmonton	76	9,956	385	321	224	231	226	207.5	214.1	226.8	226.8
Lethbridge/Brooks	124	10,633	413	339	238	248	238	222.0	228.2	235.3	241.7
Peace River	2	10,780	425	342	245	260	244	230.8	240.5	241.3	249.7
Red Deer	129	10,607	413	338	238	248	238	223.0	231.6	239.5	241.5
Vermilion	10	9,540	392	309	231	243	231	217.4	226.0	234.3	235.1
Saskatchewan	90	10,686	415	345	238	248	241	223.4	224.4	235.8	242.3
Canora	2	10,189	388	330	222	228	226	205.1	215.8	225.3	225.0
Prince Albert/Melfort	4	10,016	372	327	223	223	229	219.8	221.7	224.3	224.8
Regina	14	11,090	425	357	241	250	245	226.6	225.1	238.4	245.2
Saskatoon	8	10,564	418	347	241	248	244	224.2	221.4	235.2	244.2
Saskatoon East	24	11,004	424	351	246	255	246	227.9	227.6	242.3	248.9
Saskatoon West	14	10,227	408	331	230	247	234	224.3	226.7	232.0	237.1
Swift Current	20	10,597	411	343	237	249	242	223.6	224.7	233.8	242.7
Weyburn	4	10,574	407	343	226	235	231	202.1	213.1	231.3	230.5
Manitoba	171	10,057	383	322	226	229	226	211.5	216.6	221.8	226.9
Central	51	10,277	387	331	231	232	232	216.1	221.8	227.5	231.5
Eastern	77	10,061	384	321	227	231	226	208.3	214.7	220.3	227.7
Interlake	31	9,823	374	309	215	220	213	211.6	213.9	213.6	216.0
South West	12	9,698	379	321	231	228	232	213.5	214.5	228.6	230.3

DEMOGRAPHICS

	Herd Size				Housing		Frequency		Robotic
	0-49	50-99	100-199	200+	Tie-Stall	Free-Stall	2x	3x	

British Columbia

Number of Herds	25	79	120	76	8	292	208	47	45
Percent of Herds	8.3	26.3	40.0	25.3	2.7	97.3	69.3	15.7	15
Percent of Cows	1.5	11.1	32.2	55.1	1.0	99.0	62.9	26.6	10.5
Average Herd Size	31.8	73.4	140.2	378.9	65.1	177.0	157.8	295.8	122
Average 305 Milk	9,049	9,733	10,468	10,486	8,864	10,196	9,731	11,164	11,101
Average 305 Fat	369	390	420	410	359	407	391	440	435
Average 305 Protein	297	317	339	338	295	330	317	358	357
BCA Milk	210	222	239	236	214	232	223	254	249
BCA Fat	224	231	253	248	214	244	235	267	259
BCA Protein	214	224	241	239	215	234	225	254	251
Average SCC	212	187	176	211	404	185	185	209	200

Alberta

Number of Herds	16	97	206	70	26	363	295	44	50
Percent of Herds	4.1	24.9	53.0	18.0	6.7	93.3	75.8	11.3	12.9
Percent of Cows	1.1	12.4	48.0	38.5	3.4	96.6	70.2	19.1	10.7
Average Herd Size	39.3	75.8	138.0	326.0	78.0	157.6	140.9	257.4	126.9
Average 305 Milk	8,408	10,124	10,636	10,637	9,872	10,456	10,191	11,427	10,856
Average 305 Fat	341	393	415	411	378	408	401	438	408
Average 305 Protein	282	325	339	339	319	334	327	360	349
BCA Milk	206	227	238	241	219	236	230	256	245
BCA Fat	209	235	249	249	224	246	241	264	245
BCA Protein	211	228	238	240	222	236	230	253	246
Average SCC	283	218	216	239	249	222	221	216	244



DEMOGRAPHICS


	Herd Size				Housing		Frequency		Robotic
	0-49	50-99	100-199	200+	Tie-Stall	Free-Stall	2x	3x	

Saskatchewan

Number of Herds	5	21	45	19	11	79	61	18	11
Percent of Herds	5.6	23.3	50.0	21.1	12.2	87.8	67.8	20.0	12.2
Percent of Cows	1.2	11.0	42.2	45.6	5.8	94.2	54.5	35.2	10.3
Average Herd Size	37.4	81.5	145.9	372.9	82.6	185.3	138.8	304.3	145.7
Average 305 Milk	9,252	10,879	10,781	10,625	10,502	10,711	10,389	11,288	11,347
Average 305 Fat	353	423	419	410	414	415	406	439	421
Average 305 Protein	291	353	348	343	339	346	336	361	370
BCA Milk	203	245	238	238	235	238	231	252	252
BCA Fat	210	254	250	248	244	249	243	264	253
BCA Protein	201	249	242	241	237	241	234	253	258
Average SCC	221	183	231	251	186	229	212	247	248


Manitoba

Number of Herds	10	74	58	29	49	122	107	26	38
Percent of Herds	5.8	43.3	33.9	17.0	28.7	71.3	62.6	15.2	22.2
Percent of Cows	1.2	18.6	26.0	54.2	13.6	86.4	56.0	26.5	17.6
Average Herd Size	35.5	73.5	131.1	545.8	81.2	207.0	152.9	297.5	135.1
Average 305 Milk	9,386	9,890	10,350	10,127	9,945	10,101	9,581	11,291	10,551
Average 305 Fat	354	376	394	389	385	382	371	428	387
Average 305 Protein	299	316	331	323	317	323	309	355	335
BCA Milk	203	224	231	229	223	227	216	253	235
BCA Fat	204	224	236	236	227	230	221	257	231
BCA Protein	203	223	232	229	221	228	217	249	234
Average SCC	271	231	268	272	252	254	252	250	259



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DISPOSAL REASONS								
Reason	British Columbia		Alberta		Saskatchewan		Manitoba	
Reproductive	2,815	27%	3,359	27%	621	20%	1,526	26%
Mastitis and/or High SCC	1,920	19%	2,117	17%	497	16%	1,031	17%
Low Milk Production	1,447	14%	1,931	15%	381	12%	970	16%
Feet & Leg Problems	1,273	12%	1,331	11%	265	9%	629	11%
Udder Breakdown	836	8%	1,104	9%	514	17%	643	11%
Sickness	768	7%	1,242	10%	312	10%	572	10%
Injury/Accident	694	7%	615	5%	281	9%	308	5%
Exported	324	3%	431	3%	86	3%	153	3%
Old Age	82	1%	337	3%	107	3%	60	1%
Slow Milker	94	1%	127	1%	37	1%	85	1%

DISTRIBUTION (all)	
Cows	Herds
0-19	9
20-29	6
30-39	14
40-49	27
50-59	49
60-69	48
70-79	70
80-89	52
90-99	52
100-109	62
110-119	67
120-129	64
130-139	62
140-149	36
150-159	35
160-169	33
170-179	22
180-189	23
190-199	25
200+	194



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BRITISH COLUMBIA PUBLISHABLE HERD LISTINGS

Farm	Owner	City	BCA				Records	305 M	Fat		Protein		Breed	
			Average	M	F	P			Kg	%	Kg	%		
Westar Holsteins	Robert Matzek	Rosedale	312.3	317	312	308	42	14,542	R	530	3.6%	447	3.1%	H
Triwest Farms	Vic & Terry Triemstra	Chilliwack	311.7	303	330	302	120	13,349	*	540	4.0%	422	3.2%	H
Romyn Hill Farm Ltd	Brad & Jodi Romyn	Sorrento	309.3	296	320	312	47	12,723	R	511	4.0%	427	3.4%	H
Wisselview Farms	Wayne & Judy Wisselink	Pitt Meadows	306.3	297	317	305	123	13,810	*	546	4.0%	449	3.3%	H
Tonesa Holsteins Ltd	Glenn De Groot	Chilliwack	300.0	288	324	288	97	12,780	*	534	4.2%	407	3.2%	H
Willswikk Holsteins	William Wikkerink	Mill Bay	299.3	282	324	292	43	13,167	R	561	4.3%	432	3.3%	H
Fraser Edge	Sid Stoker	Deroche	292.3	298	292	287	123	13,247	R	482	3.6%	407	3.1%	H
Malabar Farm	Norman Vander Wyk	Dewdney	288.0	288	289	287	115	12,764	*	474	3.7%	405	3.2%	H
Kambro Farms Ltd	Doug, Tom & Will Kampman	Abbotsford	286.7	281	303	276	362	11,298	*	495	4.4%	367	3.2%	H,J
Gordon & Angela Ferguson	—	Enderby	285.3	285	282	289	107	9,392		444	4.7%	340	3.6%	J,H,A
Kish Farms Ltd	Darren Kish	Abbotsford	285.0	269	311	275	50	12,107		520	4.3%	394	3.3%	H
Elkview Farms Ltd	Alan Krause	Grindrod	283.0	274	298	277	265	11,905	*	482	4.0%	384	3.2%	H
Country Charm Farms Ltd	Huizing Brothers	Matsqui	282.7	273	298	277	211	12,145	*	492	4.1%	393	3.2%	H
JMC Farms	Marc Dalton	Chilliwack	281.3	300	255	289	103	8,590	*	396	4.6%	315	3.7%	J
Lavender Farms Ltd	Gerrit Vaandrager	Abbotsford	280.0	274	292	274	135	12,191	R	482	4.0%	388	3.2%	H
Dale Farm	Robert Dale	Mission	278.0	281	271	282	94	8,251	R	430	5.2%	314	3.8%	J
Abbeyview Dairies Ltd	Theo Van Der Kooi	Rosedale	277.0	267	299	265	212	11,529	*	480	4.2%	365	3.2%	H
Neveridle Farms	Arthur Keulen	Delta	276.7	270	288	272	129	11,984		475	4.0%	386	3.2%	H
Trinity Holsteins	Paul Schmidt	Mission	276.7	269	290	271	34	11,966		478	4.0%	383	3.2%	H
Shadow Ridge Dairy	Kevin Mammel	Agassiz	276.0	263	289	276	121	11,210	*	457	4.1%	375	3.3%	H

ALBERTA PUBLISHABLE HERD LISTINGS

Farm	Owner	City	BCA				Records	305 M	Fat		Protein		Breed	
			Average	M	F	P			Kg	%	Kg	%		
New Mars Dairy	Henk Schrijver	Millet	320.3	321	324	316	261	14,609	*	546	3.7%	457	3.1%	H
Mars Dairy	Gert & Sonja Schrijver	Stettler	317.7	317	330	306	244	14,147	*	547	3.9%	436	3.1%	H
Vanden Pol Dairy	Gys & Silia Vanden Pol	Coaldale	306.7	308	310	302	69	13,604	*	507	3.7%	425	3.1%	H
Aspenridge Farms Ltd	Dick & Steve Tenhove	Blackfalds	306.0	301	314	303	48	13,822		532	3.8%	442	3.2%	H
Nifera Holsteins	—	Nobleford	301.0	298	304	301	85	13,469	R	507	3.8%	431	3.2%	H
Lucky Hill Dairy	—	Lacombe	299.0	288	326	283	184	13,182	*	556	4.2%	412	3.1%	H
New Rockport Colony	Simon Waldner	New Dayton	297.0	287	320	284	107	12,511		518	4.1%	395	3.2%	H
Chubanna Holsteins	—	Lacombe	292.3	281	308	288	90	13,035	R	533	4.1%	425	3.3%	H
William Huyssoon	—	Ponoka	289.0	288	292	287	135	12,839		484	3.8%	408	3.2%	H
Huntcliff Dairy	Martien & Tietsia Huyzer	Olds	288.7	288	288	290	115	10,826	R	464	4.3%	370	3.4%	H,J
Stamm Dairy	Heinrich & Beatrice Stamm	Ponoka	288.7	292	289	285	17	13,181	R	480	3.6%	407	3.1%	H
Deerfield Colony	Andy Waldner	Magrath	288.3	276	310	279	107	12,224		509	4.2%	393	3.2%	H
Thornspyc Dairy	Wim Van De Brake	Lacombe	284.7	283	298	273	169	12,758	*	499	3.9%	391	3.1%	H,J
Breevliet Ltd	JT De Goeij	Wetaskiwin	283.3	283	284	283	375	12,452	*	464	3.7%	398	3.2%	H
Vanden Dool Farms	Mike Vanden Dool	Picture Butte	283.0	280	293	276	245	12,510	*	487	3.9%	393	3.1%	H
Royal Hill Farm	—	Lacombe	281.7	277	297	271	225	12,188	*	486	4.0%	381	3.1%	H
Boxrose Farms Ltd	—	Lacombe	280.3	276	294	271	116	12,184	*	484	4.0%	381	3.1%	H
De Wildt Dairy	Kees De Wildt	Barrhead	280.3	283	278	280	112	12,622		461	3.7%	398	3.2%	H
Clover Prairie Farms	Brad Bredenhof	Calmar	279.0	277	286	274	38	8,860		446	5.0%	316	3.6%	J,H
Prairiehome Colony Farming Co Ltd	Jonathan Waldner	Wrentham	278.7	277	281	278	108	12,275	R	459	3.7%	392	3.2%	H

To be included, 50% or more of total records contributing to the herd's average must be Publishable. Minimum 8 records required / *3x milking / R: Robotic

SASKATCHEWAN PUBLISHABLE HERD LISTINGS

Farm	Owner	City	BCA				Records	305 M	Fat		Protein		Breed	
			Average	M	F	P			Kg	%	Kg	%		
Elkrest Farms	Brad Jason Trevor Kornelius	Osler	304.7	300	312	302	657	13,432	*	519	3.9%	431	3.2%	H
Rynview Holsteins	Michael Wesselingh	Saskatoon	300.3	305	303	293	40	13,549		496	3.7%	414	3.1%	H
Alley Holsteins	Albert Leyenhorst	Dalmeny	289.0	292	288	287	146	13,220	*	485	3.7%	414	3.1%	H
Foth Ventures Ltd	Melvin Foth	Hague	281.7	276	287	282	505	12,159	*	471	3.9%	396	3.3%	H
Robella Holsteins	Reg & Juliann Lindenbach	Balgonie	280.0	271	299	270	73	12,458		507	4.1%	393	3.2%	H
Dept Animal & Poultry Sci	—	Saskatoon	276.7	280	273	277	99	12,425	*	450	3.6%	392	3.2%	H
Calvin & Diane Vaandrager	—	Langham	271.3	267	281	266	58	11,848	*	462	3.9%	377	3.2%	H
Kessel Family Farm	Raymond Kessel	Balgonie	267.7	266	273	264	124	11,961		453	3.8%	377	3.2%	H
Broyhill Holsteins	B, L & A Lindenbach	Balgonie	267.0	255	285	261	87	11,862		491	4.1%	384	3.2%	H
De'tippe Dairy	Hendrikus Zomer	Laird	264.3	261	264	268	61	11,529	*	433	3.8%	378	3.3%	H
Baumann Holsteins	Emanuel Baumann	Kipling	264.3	261	265	267	49	12,771		478	3.7%	411	3.2%	H
Ludwig Dairies	Terry & Bonnie Ludwig	Delisle	263.7	259	269	263	161	11,849		456	3.8%	383	3.2%	H
Benbie Holsteins	Neil Crosbie	Caron	263.3	251	281	258	124	11,460	*	477	4.2%	376	3.3%	H
Star City Colony	Ruben Tschetter	Star City	262.0	253	271	262	165	11,311		451	4.0%	373	3.3%	H
Wallyway Holsteins	I & W Wiebe	Hague	261.3	260	255	269	112	11,886	R	432	3.6%	391	3.3%	H
Quill Lake Colony	Robert Tschetter	Quill Lake	261.0	256	276	251	95	11,633		463	4.0%	362	3.1%	H
Vandenbrink Dairy Farms	Henk Van Den Brink	Saskatoon	260.0	252	279	249	130	10,849	*	447	4.1%	343	3.2%	H
Kenbert Acres	Ken & Ryan Friesen	Drake	259.7	257	261	261	97	11,555		435	3.8%	373	3.2%	H,J
Postma Dairy Ltd	Jent Postma	Saskatoon	255.0	244	272	249	143	11,330		469	4.1%	368	3.2%	H
Marfay Farms Ltd	Merlis & Mark Wiebe	Osler	254.7	253	265	246	249	11,341	*	443	3.9%	352	3.1%	H

MANITOBA PUBLISHABLE HERD LISTINGS

Farm	Owner	City	BCA				Records	305 M	Fat		Protein		Breed	
			Average	M	F	P			Kg	%	Kg	%		
Hueging Dairies	Hermann & Curtis Hueging	Woodlands	305.3	301	317	298	121	14,080	*	546	3.9%	441	3.1%	H
Holmestead Dairy	Russ & Crystal Holme	Anola	304.7	316	291	307	62	14,265	R	488	3.4%	442	3.1%	H
Isaac Dairy Ltd	Brent & Victoria Isaac	Kleefeld	301.3	298	325	281	88	13,143	*	532	4.0%	395	3.0%	H
Readore Farms	Rheal Simon	Notre Dame	295.7	292	295	300	111	13,561		506	3.7%	442	3.3%	H
Current Holsteins	Darren & Allison Hueging	Woodlands	295.3	291	306	289	72	13,746		534	3.9%	432	3.1%	H
Plemark Holsteins	Matt & Tanya Plett	Blumenort	287.7	290	296	277	67	12,943	*	492	3.8%	394	3.0%	H,J
Sturgeon Creek Colony	Samuel Waldner	Headingley	282.0	288	287	271	57	12,664	*	468	3.7%	382	3.0%	H
Friecrest Holsteins	Ed & Kathy Friesen	Kleefeld	276.0	276	282	270	84	12,442		470	3.8%	388	3.1%	H
Fehr Farm	Jakob, Ana & Andreas Fehr	La broquerie	275.7	276	278	273	132	12,371	R	461	3.7%	389	3.1%	H
Clearvale Farm	Jonathan & Judy Hocking	Steinbach	274.3	270	281	272	25	11,212	R	431	3.8%	359	3.2%	H
Labass Holsteins Ltd	Jan & Tracy Bassa	La broquerie	273.3	266	287	267	452	11,741	*	471	4.0%	377	3.2%	H
Noreydo Holsteins	Norbert, Kevin & Ryan Rey	St Claude	270.0	266	272	272	90	11,839		448	3.8%	385	3.3%	H
Tri Lea Farm	Richard Boonstoppel	Grunthal	269.3	273	262	273	82	11,933	R	426	3.6%	380	3.2%	H
Lifewind Holsteins	Christophe Roulin	Stonewall	266.3	259	281	259	83	11,954	*	481	4.0%	379	3.2%	H
Delichte Farms Ltd	Henry & Meredith Delichte	St Alphonse	265.0	279	242	274	46	10,651		395	3.7%	354	3.3%	H,J
James Valley Colony	Tim Wurtz	Elie	264.3	262	267	264	72	12,216	*	460	3.8%	390	3.2%	H
Streamline Dairy	Martin & Jennifer Hamming	Roseisle	264.0	261	270	261	102	11,734		451	3.8%	373	3.2%	H,J
Rehoboth Farms	—	Grunthal	263.0	266	267	256	118	11,779	*	441	3.7%	362	3.1%	H
Lampada Aldee	6728473 Manitoba Ltd	Brandon	263.0	259	266	264	71	12,109		471	3.9%	394	3.3%	H,J,B
Optimist Holsteins	Hans Gorter & Nelleke Vandervliet	Otterburne	261.0	256	274	253	136	11,465		453	4.0%	360	3.1%	H

*To be included, 50% or more of total records contributing to the herd's average must be Publishable. Minimum 8 records required / *3x milking / R: Robotic*

2017 MANAGEMENT CENTRE BENCHMARKS (All western DHI herds based on herd averages)

MANAGEMENT CENTRE	BRITISH COLUMBIA				ALBERTA				SASKATCHEWAN				MANITOBA			
	25th	50th	75th	90th	25th	50th	75th	90th	25th	50th	75th	90th	25th	50th	75th	90th
Number of Cows	78	124	194	319	95	126	172	293	92	134	194	279	72	101	142	293
Standard Milk (Kgs)	33.4	36.8	391	41.4	34.9	37.5	40.2	42.1	35.7	38.3	40.7	42.4	32.7	36.0	38.9	41.8
Annual Milk Value (\$)	6,829	7,530	8,099	8,546	6,780	7,468	8,045	8,572	6,818	7,399	8,070	8,336	5,975	6,986	7,642	8,210
Udder Health (Linear Score)	2.6	2.3	2.0	1.7	2.8	2.5	2.3	2.0	2.9	2.5	2.2	2.0	3.1	2.8	2.5	2.3
Age at 1st Calving (Months)	26.5	25.2	24.3	23.6	26.3	25.0	24.2	23.5	26.4	24.8	24.1	23.3	27.9	26.1	24.8	24.0
Calving Interval (Months)	14.3	13.8	13.3	13.0	14.2	13.4	12.9	12.7	14.5	13.6	13.2	12.9	14.8	13.9	13.2	12.8
% of herd in 3+ Lactation	30.4	34.9	39.9	45.3	30.6	34.6	39.8	43.7	30.3	34.8	39.8	43.0	30.2	36.3	40.8	46.7
Efficiency (% of herd in milk)	85.5	87.4	88.8	90.4	82.6	85.7	87.7	89.6	80.4	83.6	86.4	88.1	79.2	84.5	87.5	89.8
Turnover (% of herd removed)	38.4	31.7	26.5	22.2	42.3	35.2	28.5	23.6	42.4	36.6	30.9	26.5	40.3	34.1	27.9	19.8
Days Dry	72	64	57	52	79	68	61	53	89	75	66	57	94	72	62	55
Days to 1st Breeding	102	91	82	74	95	83	75	70	96	83	78	72	102	86	76	70

HOW PERCENTILES WORK: If all the herds (animals could be substituted for herds) were arranged in order from lowest to highest, the 75th percentile would be the value of the herd that is better than 75% of all the other herds. The 99th percentile value is that which is better than 99% of all the other herds.



LOOKING FORWARD

Farming in the Age of Machine Learning & Artificial Intelligence

Karen J Hand, PhD - Precision Strategic Solutions

ROSALIE grew up on a farm in Leduc, Alberta that was purchased in 1924. The farm was home to a half-dozen cows, milked twice a day by hand into a pail. Within a few years, the farm grew to twelve cows, and two vacuum devices with attached milk pails were purchased. In the latter half of the 20th century the family farms transitioned to milk pipelines, and the years that followed brought wide spread adoption of further innovation, especially in the milking parlour. By the end of the 20th century — robots were milking cows.

This is just one example that innovation is not new to the Canadian farm. In the 21st century we are experiencing unprecedented acceleration in technological advances. We live in a data-driven world in which terms such as big data, analytics, artificial intelligence and machine learning are making their way into our everyday vocabulary.

Artificial Intelligence (AI, first coined in 1956) is broad in scope and refers to the ability of a computer system to perform tasks in an intelligent manner. A simple example is a computer program that solves a Sudoku puzzle. A more complicated example would be the program required to attach teat cups to a cow using laser guidance technologies. Even more complex examples of AI are programs that are Self-Learning, for example a program to play the game Go (often considered one of the hardest games to master) that changes strategy based on the opponent's game plan and style. Self-Learning programs are examples of Machine Learning AI. Machine Learning is an approach to AI where

an program starts with a basic understanding of a system or problem and uses large amounts of data or experience to learn and adjust itself to solve more complex problems in an intelligent manner.

Machine Learning is an approach to Artificial Intelligence where a program starts with a basic understanding of a system or problem and uses large amounts of data and experience to learn and adjust itself to solve more complex problems in an intelligent manner.

With Machine Learning AI, we will witness significant advancements in automation. On a global scale, numerous research and industry initiatives are exploring commercial opportunities for machine learning applications in agriculture. For dairy farmers, it is no longer a matter of 'if' but 'when' commercial applications will be knocking at the barn door.

Today, there is no lack of data to feed Machine Learning programs in large part due to the explosion of the Internet of Things (IoT) — physical devices connected to the internet such as environmental sensors, automated systems (robots and machinery) and even cell phones. Data is being generated at unprecedented rates and when linked to AI/Machine Learning technologies we have seen remarkable advances in areas as diverse as human health and autonomous vehicles.

Of course, with the advent of any new technology, there is risk. Automation anxiety in today's society is very real. However, farmers have always been resourceful, creative problem solvers — skills not easily replaced with

technology. AI and Machine Learning technologies will become just another tool in the toolbox.

It is easy to imagine a not-so-distant future where every dairy cow is uniquely managed. Veterinarians and producers might be alerted to a health issue and (using virtual reality technologies) step into the barn, viewing all biometrics and diagnostics on a floating monitor as they walk around and examine the animal. A course of action is recommended by a Deep Learning-driven AI (e.g., a change in feed, a novel gene therapy or pharmaceutical) that can be reviewed and approved by a veterinarian and promptly administered by a drone. Cow comfort, movement, feeding, milking will all be overseen by a complex dance of robots, sensors and computers.

That being said, this dance, cannot replace human-cow contact. Machines are far from being able to mimic humans in every regard. This highlights how these technologies will show their true value, by allowing the farmer to focus on the well-being of their animals instead of routine chores. Technology will ensure a better quality of life for the farmer, healthier animals and high-quality products for the consumer — a win/win/win all the way from the farm to the table. ▼

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Rosemont Dairy Ltd.
Chilliwack BC



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Next, use SiresWatch to rank and select sires to correct weaknesses and achieve your goals. Identify outcross sires to your specific herd to control inbreeding.



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