

Info Holstein

A Holstein Canada publication providing informative, challenging, and topical news.



Cedarwal Sizzle Storm

Cedarwal Sparkle Spirte



Record 3 Excellents in One Visit

For the first time ever, three maternal sisters were classified Excellent during the same visit—Cedarwal Sassy Champion (EX-91), Cedarwal Sparkle Spirte (EX-91), and Cedarwal Sassy Allen (EX-90).

Owner John Vanderwal of *Rockledge Farms* Ltd. is obviously extremely pleased about this achievement.

Five years ago, John and wife Thelma, with son Shawn, decided to go-it-alone after farming with his brothers, Richard and David. He moved about four hours north to Enderby, BC in North Okanagan.

Dividing up the herd, some of John's selections to re-locate included Cedarwal Sizzle Storm (EX 10*) and seven daughters. Another six remained at Master Breeder Cedarwal Farms Ltd., Abbotsford.

John relays, "Overall, *Sizzle Storm's* many progeny are tall and strong, displaying dairy strength, deep rear rib, and good udders. They all milk very well and are trouble-free individuals." Other maternal sisters at *Rockledge* to bloom include one more Excellent and three Very Goods.

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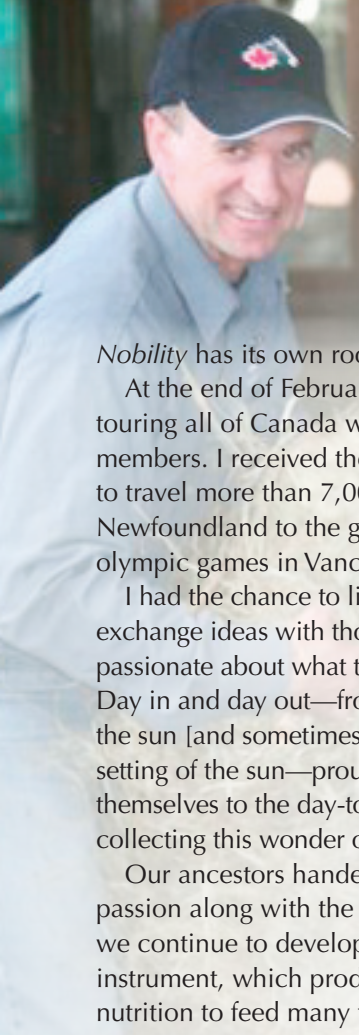
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The Excellence of Masters

by Holstein Canada President, Germain Lehoux, Saint-Elzéar, Qc

Nobility has its own roots.

At the end of February, I finished touring all of Canada where I met many members. I received the opportunity to travel more than 7,000 km—Newfoundland to the gateway of the olympic games in Vancouver.

I had the chance to listen and to exchange ideas with those who are passionate about what they work at. Day in and day out—from the rising of the sun [and sometimes earlier] until the setting of the sun—proud breeders apply themselves to the day-to-day work of collecting this wonder of nature ... milk.

Our ancestors handed down this passion along with the mandate that we continue to develop this superb instrument, which produces enough nutrition to feed many families.

Some have become *masters* of this passion for breeding. Twenty-one breeders from all across Canada have succeeded in attaining Master Breeder status in 2009. If science unveils certain secrets, pure common sense and intuition of Holstein enthusiasts establishes them as *masters*. Congratulations to all those who have received their diplomas from Holstein Canada's University—former and recent.

The title of *nobility* is now shared outside of our great country. In fact, this year, the Swiss Holstein Association introduced the title of Master Breeder with five breeders recognized as *masters*.

The leadership of Canadian milk production is once again envied around the world. As with our milk production supply and management system, we can be proud of the accomplishments of our producers and breeders who

chart the course regarding profitability and the well-being of those who nourish the Canadian population.

In conclusion, with traceability being established across Canada, it is important to once again show the world our leadership. Traceability must be used to help producers, as well as consumers. Screening programs to better control the health of our herds will guarantee an even healthier product for consumers. A vast program using (DNA) tissue collection will be a great resource for data used in research, will help us to better control genetically-transmitted diseases and, will most certainly make our genomic evaluation predictions more reliable.

All the best!

I look forward to seeing many of you at the National Annual Meeting in Saint-Hyacinthe, Qc.

You Ask Why?

If my animal is genomic tested using SNP technology, why do I have to test the animal again for parentage using DNA micro-satellites?

Currently, two samples—hair or tissue—are required from an animal when both genomic and parentage verification are needed.

Firstly, the tests are conducted at two *separate* laboratories and using two *different* technologies. One laboratory reports results regarding genetic evaluation; the other validates parentage.

Furthermore, the International Society of Animal Genetics has not yet approved the SNP panel for parentage testing. Results are, therefore, not used at the international, official, Herdbook level.

Years ago, the transition from red cell (blood) to the more exacting

DNA (micro-satellite) for parentage verification involved a period of transition, precipitating extra testing for AI and ET. It is expected this latest conversion will be much shorter given its genomics' value, volume of existing male SNP profiles, and recent inclusion of females.

Holstein Canada and Holstein USA are co-ordinating parentage protocol to advance SNP technology in an efficient and harmonized manner.

Herdbooks may be expected to exchange both DNA and SNP genotypes to support exports of semen, embryos, and live animals. This encourages all countries to adapt to SNP parentage control.

Holstein Canada remains diligent in moving toward the goal of acquiring only one sample for both genomic and parentage verification. This would simplify the process for both breeders and the Association.

Contact the Data Integrity team at Holstein Canada for further answers to your questions.

Micro-satellite markers are genome regions where short sections of the genetic code (letter combinations) are repeated many times, e.g. ACTTGAGAGACTGA.

Micro-satellite markers are highly variable (polymorphic) in length and composition.

These markers are passed on from generation to generation, making them a method of choice for parentage evaluations.

Because of their length, micro-satellite markers are susceptible to mutations that may affect test results.

SNP (Single Nucleotide Polymorphism) markers are single-letter differences, e.g. GTCA/TCGTT in the genome.

It is estimated there are approximately 30 to 100 times more SNPs in the bovine genome than there are micro-satellite markers.

They are generally more stable than micro-satellite markers, meaning lower mutation rates.

SNPs, however, are less informative. It takes approximately 80-100 SNPs to provide the same information as 10-15 micro-satellite markers.

DNA is the abbreviation for **deoxyribonucleic acid**, the self-replicating material, which is present in nearly all living organisms, especially as a constituent of chromosomes. It is the carrier of genetic information.

Preserving a Controlled-Risk Canada

Dairy producers encouraged to continue BSE surveillance

The Canadian Food Inspection Agency reminds cattle producers to continue to present eligible animals for testing under the National Bovine Spongiform Encephalopathy program.

This surveillance initiative has been highly successful in managing and demonstrating the low level of BSE in this country. It provides the cornerstone of domestic and international confidence in Canadian beef products.

Canada had a National BSE surveillance program in 1992, based on internationally-recognized science. It was delivered through the collaborative efforts of federal and provincial governments, universities, and private veterinary practitioners.

The level of testing exceeded international requirements recommended by the Office International des Epizooties and was appropriate for a country with no cases of BSE. Over 10,500 animals had tested *negative*.

However, the Government of Canada enhanced its BSE surveillance testing in May 2003 after a cow, born and raised in Canada, confirmed the prevalence of the disease.

Maintaining surveillance levels aids Canada in maintaining its status as a controlled-risk country, as recognized by OIE. As of Dec. 2009, 278,341 animals have been tested to calculate the prevalence of BSE in Canadian adult animals.

Canada's BSE-related Actions

To protect food safety and animal health, the following measures—based on internationally-accepted science—continue.

Food safety

At slaughter for human consumption, all Specified Risk

Material is removed. SRMs involve the skull, brain, trigeminal ganglia, eyes, tonsils, vertebral column, spinal cord, and dorsal root ganglia of cattle older than 30 months. The small intestine of *all* cattle is also eliminated.

This measure is internationally recognized as the most effective means to protect public health from BSE.

Animal Health

Research suggests that the route of BSE transmission is through the ingestion of feed contaminated with the BSE agent.

In 1997, Canada implemented feed ban recommendations endorsed by the World Health Organization. The ban aims to prevent the spread of BSE through feed. It prohibits the feeding of certain mammalian protein by-products to ruminants.

The ban also requires feed containing prohibited materials to be properly labelled so it is not fed to cattle or other ruminants. In addition, renderers, feed mills, feed retailers, and producers must keep detailed records of how feed is used, produced, and sold.

Through further enhancements in 2007, SRMs have been banned from all animal feeds, pet foods, and fertilizers.

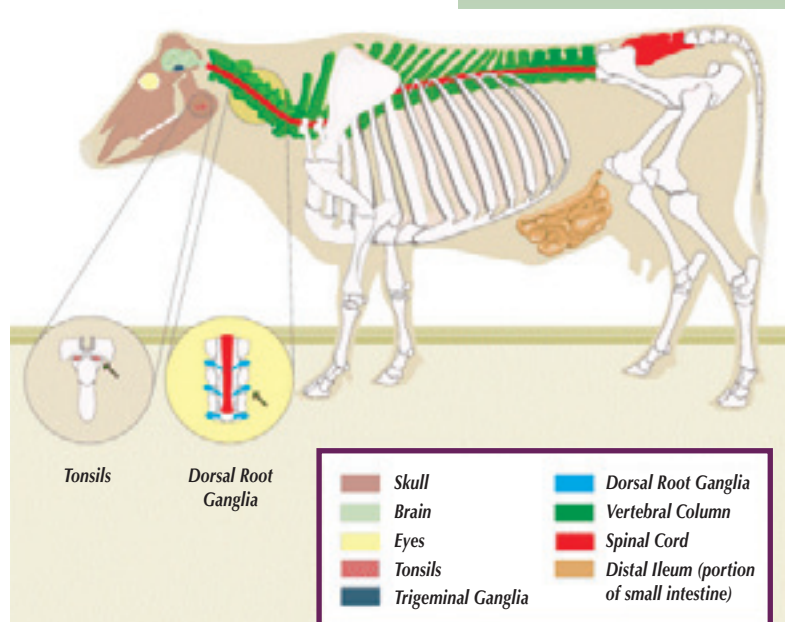
These measures accelerate Canada's progress toward eradicating BSE from the national cattle herd. These prevent over 99% of potential BSE infectivity from entering the feed system.

The BSE surveillance program targets animals at most risk for BSE. These include cattle 30+ months that are dead, down, dying, or diseased.

Cattle exhibiting clinical signs should also be tested. These animals are nervous or aggressive, display abnormal posture, lack co-ordination, and have difficulty rising from a lying position.

Contact the nearest CFIA office or your veterinarian to make arrangements for testing. You can also call the BSE hotline at 1-800-400-4244.

You will then be visited by a vet or CFIA inspector who assesses the animal. A brain tissue sample may be collected. Moreover, reimbursement will be discussed.



Specified risk material and associated tissues must be removed from cattle.

2010 Enrolment Program

Participation for Profit

Did you know that 64% of Canadian dairy producers enjoy the benefits of classification?

While this percentage is commendable, we continually strive to make further improvements to this important service, resulting in steady gains in market share.

For 2010, a new Enrolment Program has been introduced to increase the number of herds taking advantage of classification. The more herds, the better, as this helps to ensure a **cost-effective service for all producers!**

2010 Enrolment Program

- is available to all herds who have not classified for at least two years
- provides an initial herd consultation with an experienced classifier where benefits of classification are discussed and how information can be used on-farm
- covers herd visit fee for first classification (value \$75)
- offers classification to non-registered herds to demonstrate the value of this service. The score will be applied to registered animals at a later date.
- presents additional savings for registration, which are available for herds with no registration activity

for three or more years. Registration fees are discounted by 50% for all animals (excluding base) for first six months and no charge to transfer ownership of animals resident in herd.

Holstein Canada classifiers provide unbiased, expert knowledge to aid dairy producers in making informed mating and management decisions.

Highly-trained classifiers score, on average, 32,000 cows on 1,000+ dairy operations per year.

The intent of this trial program is to give producers a chance to experience the benefits of classification in their individual herds.

Increasing the number of registered and classified herds will continue to support efficient Holstein services and strengthen the entire Canadian dairy industry.

If you know of anyone who can take advantage of this opportunity, let us know in the Breed Improvement Department at 519-756-8300 or e-mail BI@holstein.ca.

The following 2008 data compares Canadian herds on milk recording and whether they classify, or not. Classified cows produce an extra 994 kg milk per lactation and last 0.3 lactations longer. This translates into an additional net profit of more than \$350/cow/year. This excludes extra marketing value brought by most registered animals.

Classified Herds Make More Milk from Longer-Lasting Cows

Trait	Classifying Herds	Non-Classifying Herds	Advantage
# Herds	6,471	2,981	
Milk (kg) 305 days	9,435	8,441	+994
Fat (kg) 305 days	355	316	+39
Protein (kg) 305 days	302	269	+33
Ave. # Lacts.	3.1	2.8	+0.3

2009 Annual Report

For your direct link to Holstein Canada's 2009 Annual Report go to:

- > www.holstein.ca
- > Company
- > Holstein Association
- > Related docs (top right corner)
- > Annual Report

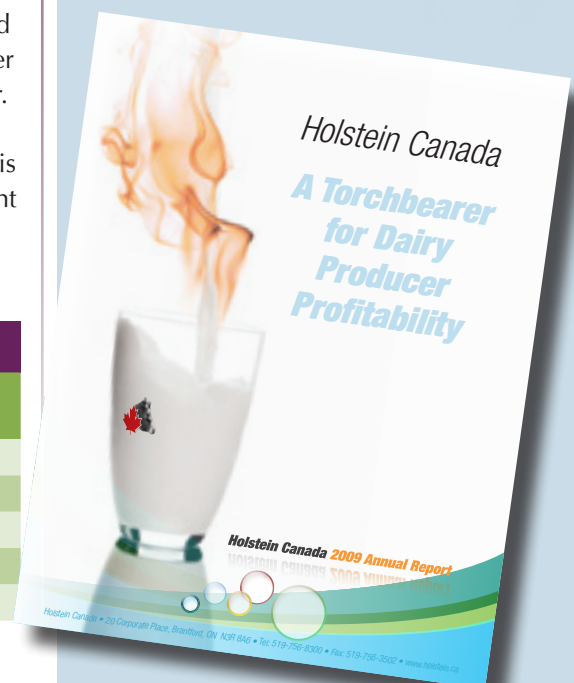
Read it online or print it easily from your home computer.

Alternatively, if you wish to receive the bilingual booklet by mail, contact Nicole Faubert by e-mail nfaubert@holstein.ca, phone 519-756-8300, or fax 519-756-9982.

The Association's Annual Report offers interesting reading from President Germain Lehoux, Board Chairman Glen McNeil, and Secretary-Manager Keith Flaman.

Year-end stats and top achievers regarding people and animals are also provided in this attractive publication.

The financials convey a clear picture of how Holstein Canada fared in 2009. Interesting photos, scattered throughout, add *spice* to the reading.



Proactive Dairy Farmers of Canada

Rick Phillips, DFC's Director of Policy and Government Relations recently addressed a Holstein Canada Board of Director's meeting.

Canadian Quality Milk (CQM) is an ongoing and important initiative of DFC. It uses the HACCP (**H**azard **A**nalysis **C**ritical **C**ontrol **P**oints) approach, which is a science-based, preventative tactic for food safety.

Across Canada, 65% of milk producers have been trained in CQM, with 12% fully registered. Moreover, several provinces are well on their way toward counting 100% of their producers on the program. DFC's national goal is to have all dairymen registered by December 31, 2010.

DFC is collaborating with the **Canadian Food Inspection Agency (CFIA)** to develop national **biosecurity standards**. A working group is in place



Rick Phillips

cow cleanliness and that the design of a barn and stalls allows cows to rise and lie down with ease to prevent injuries. Producers are encouraged to work with herd veterinarians to manage health and biosecurity.

DFC, **Agri-Traçabilité International (ATI)**, and the **Canadian Cattle Identification Agency (CCIA)** are prepared to collaborate on the delivery of a national **traceability** program. The issue to be resolved is the federal government's commitment to long-term delivery of the program. A producer's financial contribution is his cost related to ear tags and his time to transfer information.

Holstein Canada was acknowledged by DFC for its active involvement working with industry partners to develop a comprehensive, traceability vision for dairy producers. Canadian dairymen are well positioned because they have conquered the first pillar of traceability—animal identification—in place on most farms. The other two pillars include premise identification and animal movement.

Regarding the **World Trade Organization (WTO)** Doha round, the negotiation process has stalled with not much achieved. Unfortunately, the current deal is not positive for dairy producers. The proposal calls for a reduction of tariffs by 23% and increasing the amount of imports allowed into Canada.

DFC strongly affirms that it does not support these proposed changes. It also acknowledges the Canadian government has been consistent in defending this country's supply management system.

An **International Farm Comparison Network (IFCN)** report illustrates that 98% of all global milk produced in early 2009 was sold at below the cost of production.

Fortunately, the Canadian system has removed market volatility and allowed dairy producers to invest in creating a consistent quality and wholesome product.

Dairy production **research** aims to improve animal well-being and learn about the nutritional value of milk products. DFC invests up to \$1.7 million per year in health and nutrition research. This is funded in partnership with **Agriculture and Agri-Food Canada (AAFC)** and the **National Sciences and Engineering Research Council (NSERC)**.

DFC is a national policy, lobbying, and promotional organization representing Canada's 13,000+ dairy farms. DFC strives to create stable conditions for the Canadian dairy industry—today and in future. It works to maintain policies that foster the viability of Canadian dairy producers and promote dairy products and their health benefits.

New management practices

- **include pain control for disbudding and dehorning calves**
- **ban tail-docking**
- **recommend cow cleanliness with barns and stalls designed to allow animals to rise and lie down without injury**

with efforts initiated in early February 2010. Some of the basic biosecurity principles for the dairy sector include isolation, sanitation, traffic control, herd health management, and program maintenance.

The Code of Practice for the Care and Handling of Dairy Cattle has been enhanced. This outlines regulations and industry requirements that go beyond recommended best management practices. It includes the need to use pain control when disbudding or dehorning a calf. Tail-docking is now banned. Noted practices also ensure

**Dairy Farmers
of Canada**

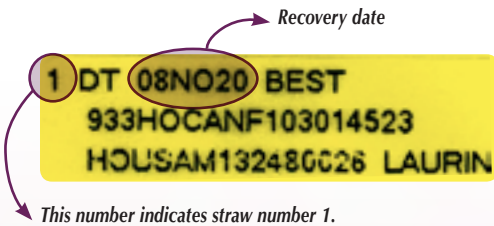


Smooth Registration of ET Calves



The straw number is part of the frozen embryo ID.

Straw numbers are unique for each embryo within a flush and generally sequential.



In 2009, 12,444 ET calves were registered. The five-year average is 11,756 ET registrations.

Missing information impacts ET ideal

With no exceptions, ERA registrations can be registered, invoiced, and mailed within one work day.

Unfortunately, missing data creates processing delays in Brantford and verification interruptions on-farm.

Frequently, Holstein's data editors must contact owners for missing embryo transfer information—one or more of the four key pieces of linking data.

Every time an embryo is frozen, it is assigned an identification number based on international protocol. This is printed on both the straw and a corresponding Individual Embryo

Certificate.

When transplanted, this number is cross-referenced to the recipient's ID. The cycle is completed when the resulting calf is submitted to Holstein Canada for registration by ERA or the traditional, yellow Application for Registry.

In addition to basic information for regular calves, the four key pieces of data required to register an ET calf include 1) individual straw/frozen embryo ID number, 2) date of recovery, 3) date of transplant/implant, and 4) recipient dam ID. The same requirements apply for a fresh, implanted embryo, except there may

This Holstein Canada database interactive record includes all activity related to a single flush (recovery to transplant to registration.)

LN#	ETSno	M#	StrawNo	EType	C	W	S	Q	Z	Rdam	Call	Owner	Flag
1	E933		933HO103014523-08NO20	1	R	S	12	5	1	Y	933	F JACOBS	N
2	E933		933HO103014523-08NO20	2	R	S	12	5	1	Y		* 93023	N
3	E933		933HO103014523-08NO20	3	R	S	12	5	1	Y	9334-JACOBS	* JACOBS	N
4	E933		933HO103014523-08NO20	4	R	S	12	5	1	Y		* 93023	N
5	E933		933HO103014523-08NO20	5	R	S	12	5	1	Y	937-JACOBS	* JACOBS	N
6					R					N	CARLEY-JACOBS	* JACOBS	N
7					R					N	9321-JACOBS	F JACOBS	N
8					R					N	9311-JACOBS	F JACOBS	N
9					R					N	9331-JACOBS	* JACOBS	N

These are frozen embryo IDs (lines 1-5).

Within this ID number is the straw number.

Fresh embryos have been implanted - date and recipient dam ID (lines 6-9).

Embryo transferred calves are registered at Holstein Canada. (lines 1, 7, 8).

CAN F 105794485

CAN F 105794474

CAN F 105794476

Standardized Method of Labelling Frozen Embryos

1DT 933 HO 103014523 BEST HO 132480026 08NO20

1DT	933	HO	103014523	BEST	HO	132480026	08NO20
Straw No.	Practitioner's Code	Breed	Registration No. of donor dam	Mgt. No./Barn Name/Tattoo/Donor	Breed code	Sire Abbreviated Name/ Stud Code Reg. No.	Year Month Day Freeze Date (recovery date)

An in-house study at Holstein Canada revealed that, on average, 12 ET calves per day require phone verification prior to registration. This involves submissions from the herd owner (25%), as well as DHI (75%).

The all-inclusive Certificate of Embryo Recovery is left at the farm and can be electronically forwarded to Holstein Canada.

This individual Embryo Certificate stays/moves with the embryo, which facilitates registration through four key pieces of information.

not be straw information.

Data can be obtained from herd records and the Certificates of Individual Embryo, Recovery and, Frozen Implant/Transplant.

Processing can be expedited by ensuring that corresponding particulars— from Certificates of Embryo Identification and Herd Event records (issued by ET practitioners)—are readily available to individuals completing and submitting calf registrations.

If a calf is ET, then it is important to note this in herd event records, which should trigger the proper filing of calf registration particulars.

Certificate of Embryo Recovery/
Certificat de récolte d'embryons

Form with fields for Name, Address, Telephone, and a table for embryo data.

No.	Sex	Embryo ID	Recovery Date	Embryo ID	Recovery Date	Embryo ID	Recovery Date	Embryo ID	Recovery Date
1	M	100	2009	101	2009	102	2009	103	2009

Certificate of Individual Embryo/
Certificat d'embryon individuel

Form with fields for Embryo ID, Recovery Date, and Transplant/Implant Date.

- If the embryo is frozen, the following data is required:
- 1) individual straw/frozen embryo ID number,
 - 2) date of recovery,
 - 3) date of transplant/implant, and
 - 4) recipient dam ID.

This calf application is filed electronically for straw/embryo 1.

This yellow calf application is filed by mail for straw/embryo 10.

ORIGINAL APPLICATION

Order Number: 1694447 EZEIR No: 105794485 File Source: INTERNET
File: JACOBS_05 JAN 2010 14:59:59.A

CUSTOMER: EZEIR prefix: JACOBS, Submit prefix: JACOBS, Rush service: No, Require cert: Yes, Reg date: [blank]

ANIMAL: Name: JACOBS LAURIN BERNARDE, Eartag1: 4485, Eartag2: [blank], EZEIR No: 105794485, Sex: F, ET Calf: Yes, Multiple birth: Single, Reg type: Purebred, Comment: [blank]

DAM: Breed: HO, Name: JACOBS JASPER BEST, Ear tag: 4523, EZEIR No: [blank], Birth date: 2005 Apr 17, Country code: CAN, Regno: 103014523, Herd No: [blank], RFID: [blank]

EMBRYO: Recovery date: 2008 Nov 20, Frozen embryo id: 01, Manip. type: R, Transplant date: 2009 Jan 02, Recipient dam: 9363

SIRE: Breed: HO, Name: DEN-K MARSHALL LL LAURIN, Semen code: 0007H007596, Birth date: 2001 Dec 02, Country code: USA, Regno: 132480026

BREEDER: Prefix: JACOBS, OWNER: Prefix: JACOBS, CHRY No: [blank]

APPLICATION FOR REGISTRY

FOR OFFICE USE ONLY

REGULAR MANIPULATED CLONED

Embryo ID: 10, Dam ID: 135, Date of Transfer: Feb 25, 2009

PLE BIRTH: YES NO COLOURS: BLACK & WHITE RED & WHITE

OF CALF: Talonasprings Outside Vivian, BREED: H

Female DATE OF BIRTH: 2009 Nov 29, Small Average Large

Comestar Outside 73 H2479, BREED: H No. 6026721, BIRTHDATE OF DAM: 1997 Feb 25

Continental Brocker Valentine, BREED: H No. 0040743

OFFICIAL 4-GEN PEDIGREE WITH REGISTRATION - YES POLLED (naturally hornless) - YES NO

REPORT BREEDING INFORMATION ON REVERSE SIDE OF THIS FORM

Illustration of a cow and a calf.

ORIGIN OF CALF: Talonasprings Hol, PREFIX CLIENT ID: Talonasprings

Consumers Welcome Food Traceability and Safety Guards

McDonald's supports the Canadian government and its efforts to implement mandatory, livestock traceability by 2011.

In Canada, 2.8 million people eat at McDonald's daily—almost 10% of the population.

While an extra cost, McDonald's believes a robust, national traceability system is critical to ensuring consumer confidence and building brand trust in the beef industry. In fact, since BSE in 2003, this restaurant has purchased 100% Canadian beef for Canadian customers.

Growing consumer awareness about food production and demand for greater food safety has caused the world's largest restaurant chain to emphasize traceability for all menu items.

In 2009, the company purchased 64 million pounds of Canadian beef, 44 million pounds of chicken, and 62 million eggs.

Beef supplier Cargill must be able to provide McDonald's with specific farms and lots of origin for every shipment.

McDonald's is willing to pay for this increased traceability. It also justifies a premium for quality, food safety, and animal welfare. Added costs to customers do not pose a problem when food safety is involved!

Temple Grandin, a professor of animal science at Colorado State University, is an expert on livestock handling practices. She has fashioned humane livestock handling practices that must be followed by all McDonald's meat suppliers.



Leadership 101

by Secretary-Manager Keith Flaman

Leaders do not believe they must have all the answers. They know an answer is somewhere and they need to seek it out.

The term *leadership* is bandied about incessantly and often takes on a definition fitting the speaker, listener, or situation.

Leadership is essential for any organization and expected by members and owners. Leadership is not something to talk about, but, rather something to be demonstrated. There is an old saying, "I can't hear what you are saying because your actions are deafening."

Boards are responsible for directing an organization through policies; administrators are accountable for execution. In both functions, the objective is to meet the needs and expectations of the common good, both in the present and the future.

How to get a sense for the common good is the challenge. Everyone brings to the table their persona, education, and experiences—both good and bad. While these are important elements in the discussion, biases (baggage) also come with the package. Depending on personalities or the impact of certain experiences, these biases can have a major impact on decisions to move forward.

Objective communication is the key. Obtaining differing opinions may be more constructive than from those inside. Asking open-ended questions can be most productive. Questions that are slanted to produce a desired answer serve only to reinforce a narrow point of view.

Seeking input from a broad community is more likely to provide information that will produce the best solutions. Embracing differences and encouraging diverse thinking and approaches will foster an environment that excels in meeting the needs of most.

When soliciting input, it is critical that a balance of all available information is presented and that adequate time is given for analysis. To expect an informed opinion without providing the tools and time demonstrates a lack of integrity and ethics.

Leaders are open, sharing, flexible, visionary, objective rather than subjective and, always empathetic. Leaders say *yes* more often than they say *no*. Leaders smile, recognize, cajole and, are polite and courteous. Leaders don't always need to be out in front and they would never bully or intimidate to get agreement. They take themselves out of the picture.

Leaders provide a venue for people to grow in all circumstances. If they make the right decision for the common good of everyone, they benefit too. If they make the decision for themselves, then everyone may not benefit.

Encourage good leaders to step forward.

Walk the talk!

Sizing Up Sexed Semen

by CDN General Manager, Brian Van Doormaal

While sexed semen has real potential for virgin heifers in well-managed herds, it is not recommended for cows, embryo transfer donor inseminations, or timed-breedings.

Decades of research on gender sorting bovine semen is now receiving broad commercial application.

Today, all major North American AI organizations offer sexed semen produced by selected sires—progeny-proven and young.

The *flow cytometry* method is applied, which sorts sperm with the X chromosome (female) from those with the Y chromosome (male). Since the X and Y chromosomes are not the same size and weight, the technology separates semen based on the DNA content of each sperm cell.

the sex ratio of live calves from the standard 50:50 to an average of 90% females and 10% males for most products offered (see chart). Recent analysis at Canadian Dairy Network (CDN) actually found a sex ratio of 93% females on 969 Holstein calvings from using sexed semen.

There are definite advantages for adopting sexed semen in Canada.

With females, there are fewer problems at calving and associated reductions in costs for labour, medical treatment, and death loss, since females are usually born easier than males.

The selection of best virgin heifers for breeding with sexed semen increases the likelihood of replacement heifers with superior genetic merit. This results in faster genetic progress in the herd and the opportunity to sell or export excess heifers.

Heifer calves, born from 90% of all virgin-heifer calvings, reduces the need to purchase additional replacements from outside the herd, when expanding.

The use of sexed semen to obtain the required number of replacement heifers annually is produced from within the herd. This provides advantages in biosecurity and controlling the presence/spread of various diseases.

However, utilizing sexed versus traditional semen has some disadvantages.

Reduced conception rates (by 80%) lead to extended rearing costs

for virgin heifers or extended days open for lactating cows (not recommended).

There is lack of access for all elite progeny-proven sires due to their already high demand. For an average ejaculate, only a fraction of sexed semen is produced, compared to conventional semen.

Data was analyzed to determine the impact of sexed semen on the rate of

genetic gain in a herd. This yielded a 4.4% increase for LPI each year when used on virgin heifers. As sexed semen becomes increasingly available for all progeny-proven sires (including elite LPI), its application on these heifers is expected to increase to a rate of genetic gain for LPI of 7% per year.

Because of extra costs associated with sexed semen, e.g. extra semen and rearing costs, heifer calf prices must be at least \$150 more than bull calf prices before sexed semen starts to provide an economic advantage.

While sexed semen on virgin heifers makes economic sense because of strong, female calf prices [versus male], this technology requires extra attention and quality herd management. Otherwise, havoc could occur in the reproductive performance and profitability of the herd.

Only herds with excellent heifer-rearing programs, quality feed rations, general nutrition, and effective overall management skills should add the complexities associated with sexed semen.

Improper treatment of sexed semen, re storage, handling, thawing, and insemination can significantly reduce conception rates to levels much lower than the average loss to 80% of the conception rates achieved with conventional semen.

Additionally, virgin heifers must be healthy and have normal cycles with observed heat signs. They must be well-grown with moderate or better body condition and stress free—as much as possible.

Sexed semen is not recommended with timed-breeding protocols or for insemination of ET donor heifers or cows. However, using estrus synchronization programs with observed heat is acceptable.

While the average conception rate for cows using conventional semen is 35-40%, it is significantly reduced to 30% or below with sexed semen.

The complete article is available from CDN or Holstein Canada.

Sexed Semen Products from Major AI Companies

Organization	Sexed Semen Product Label/Name	Stated % Females
ABS	ABS Sexation™	90%
Accelerated	ACC-SS® (ACCESS Sexed Semen)	90%
Alta Genetics	Alta511	90%
Genex/CRI	Gen Choice 90™	90%
	Gen Choice 75™*	75%
Select Sires	gender SELECTed™	90%
Semex Alliance	Semexx™	90%

*reduced accuracy, likely due to sorting, e.g. speed

The major argument for using sexed semen is the expected shift in

Top Conformation Herds— 40-75 Cows

In the last two *Info Holsteins*, we included charts with data on varying size herds. This time we feature information on herds with 40-75 milkers.

The first table shows cows based on the average final score of active first-lactation animals from rounds 72 to 77.

In table 2, the top 20 improvement herds are presented. These illustrate the greatest progress in average first-lactation, final score from the same rounds. The only other criterion applied was the average final score for the herd in rounds 76/77; it had to be at, or above, the national average score for first-lactation animals.

At every classification visit since August 2005, Holstein Canada has calculated herd averages for all traits based on all active cows and all active first-lactation cows.

Using the accumulated history on these herd averages, a report is generated at each visit. This shows the herd trend for all scorecard categories and final score for first-lactation animals and all active milking cows.

The analysis included conformation averages for herds classifying in rounds 72-77—spanning August 2005 to July 2009.

For comparison purposes, we studied first-lactation averages as they are more comparable figures across herds. This reduces the impact of re-classification and culling practices.

Top 20 Conformation Herds 40-75 Cows

by average final score for active 1st-lactation cows, which includes rounds 72 to 77 (August 2005 to July 2009)

Herd	Avg. Score - All 1st lactation cows rounds 72 to 77
KARONA - Pierre Caron, Plessisville, Qc	85.3
ROTALY- Rock Hébert et Nathalie Dumais, Sainte-Hélène-de-Kamouraska, Qc	85.2
JOLIBOIS - Ferme Rolandale enr., Saint-Flavien, Qc	85.1
CHERRY CREST - Cherry Crest Holsteins, Martintown, ON	84.3
ROYALTY - John Beerwort Jr., Joyceville, ON	84.3
OURIVER - Ouriver Holsteins, Kincardine, ON	83.9
KAWARTHA - Kawartha Holsteins, Osler, SK	83.9
RONBETH - Ronbeth Holsteins, Hastings, ON	83.8
DESNETTE - Desnette Holstein, Warwick, Qc	83.8
HIGH POINT - High Point Farms, Port Perry, ON	83.7
WENDON - Don and Wendy Chalack, Innisfail, AB	83.7
HOLTBYHOLME - Holtbyholme Holsteins, Port Perry, ON	83.7
EBYHOLME - Ebyholme Farms Ltd., Ayr, ON	83.6
GLENVUE - Glenvue Holsteins, Rockwood, ON	83.6
DELABERGE - Ferme Bergelait inc., Saint-Louis-de-Gonzague, Qc	83.6
RODVEIL - Rodveil Holstein, Saint-Simon-les-Mines, Qc	83.6
COACHSIDE - David G. Fawcett, Winchester, ON	83.5
SICY - Ferme Yvon Sicard, Saint-Justin, Qc	83.5
CRAIGCREST - Craigcrest Holsteins, Arthur, ON	83.5
GLENNHOLME - Glennholme Holsteins, Carp, ON	83.5

Top 20 Improvement Herds 40-75 Cows

by greatest improvement in average final score for active 1st lactation cows from rounds 72/73 to rounds 76/77 (August 2005 to July 2009)

Herd	Avg. Score - 1st lactations in rounds 76/77	Avg. Score Improvement - 1st lactations from rounds 72/73 to 76/77
CASSIE-GLEN - Cassie Glen Holsteins, Winsloe, PE	81.0	+4.8
MILFORD - Milford Holsteins, Winchester, ON	82.3	+4.7
LARE - Ferme Lare Holstein inc., Saint-François, Qc	80.6	+4.4
AN'UDDER - The Udder Farm, Hazel Grove, PE	82.0	+3.9
LESPERSEUX - Oswald Merz, Sainte-Agnès-de-Dundee, Qc	80.4	+3.8
CAMPO - Ferme Campo et frères enrg., Saint-Télesphore, Qc	81.2	+3.8
ALTOFARM - Alto Farm, Tillsonburg, ON	80.7	+3.7
BELKY - Frédéric Gagné, Saint-Isidore, Qc	80.8	+3.7
BELFONTAINE - Belfontaine Holstein, Saint-Marc-sur-Richelieu, Qc	83.4	+3.5
MICHETTE - Ferme Michette, Warwick, Qc	79.9	+3.5
MORINNAL - Ferme Morinnal 2005 inc., Saint-Anselme, Qc	80.1	+3.4
AU RELAIN - Germain Marc-Aurèle, Saint-Valérien, Qc	80.2	+3.4
JOFAMIGO - Ferme Jofamigo enr., Sainte-Perpétue, Qc	81.7	+3.4
POPLARVALE - Poplarvale Holsteins, Millbank, ON	80.8	+3.4
VALEPIERRE - Ferme Valepierre inc., Saint-Valérien, Qc	80.0	+3.4
CHANTEMERLE - André Verly, Saint-Félix-de-Kingsey, Qc	80.0	+3.4
NORIK - Ferme Holstein Norik, Salaberry-de-Valleyfield, Qc	79.9	+3.4
SYMA - Ferme Syma Holstein enrg., Sainte-Élisabeth, Qc	82.2	+3.3
JUSTINA - Ferme Justina enr., La Visitation, Qc	81.7	+3.3
SIXN - Réjean Laplante, Ormstown, Qc	81.9	+3.3

Canadian Champions 2009

Dardel Gibson Orié (EX-94-3E-CAN)

- 8-Year-Old for Fat
- 1 Super 3; 3 Superior Lactations
- Breeder and Owner: Dardel Holsteins, Edmonton, AB
- Sire: Silky Gibson (EX-96 ST'99)

	Production (kg) 08-03 305	BCA (Deviation)
Milk	17,611	320 (+81)
Fat	1,247 7.1%	620 (+402)
Protein	581 3.3%	342 (+91)
Total		1,282 (+574)

Karona Storm Alfa (EX-91-4E-CAN)

- 9-Year-Old for Fat
- 3 Superior Lactations
- Breeder and Owner: Pierre Caron, Plessisville, Qc
- Sire: Maughlin Storm (EX-EXTRA'96)

	Production (kg) 09-08 305	BCA (Deviation)
Milk	19,970	408 (+110)
Fat	979 4.9%	544 (+233)
Protein	596 3.0%	385 (+77)
Total		1,337 (+420)



Classification Schedule

mid-round

ON - Leeds, Grenville
 Qc - Montmagny
 Qc - Labelle, Papineau, Gatineau, Argenteuil, Pontiac
 AB - South/Central

Early

ON - Grey, Huron
 Qc - L'Islet, Kamouraska
 Qc - L'Assomption, Montcalm, Joliette, Berthier, Maskinongé, Saint-Maurice, Champlain, Laviolette, Portneuf
 AB - Northern
 MB

Mid

April

ON - Bruce, Simcoe, Dufferin, Ontario
 Qc - Rivière-du-Loup
 Qc - Lac Saint-Jean, Roberval, Lapointe, Dubuc, Charlevoix, Chicoutimi

Late

ON - Halton, York & Peel
 Qc - Témiscouata, Rimouski, Matapédia, Matane, Bonaventure
 Qc - Vaudreuil, Soulanges, Huntingdon, Châteauguay, Beauharnois
 PE, NB, NS, NL

Early

ON - Lambton, Middlesex, Essex, Kent, Elgin
 Qc - Laprairie, Napierville, Saint-Jean, Iberville, Shefford

Mid

May

ON - Northumberland, Peterborough, Victoria, Durham, Waterloo
 Qc - Arthabaska, Mégantic
 Qc - Richmond, Missisquoi, Sherbrooke, Stanstead

Late

ON - Oxford
 ON - Lennox & Addington, Frontenac, Hastings, Prince Edward, Wellington
 Qc - Wolfe, Lotbinière, Nicolet
 Qc - Compton, Brome

Early

Qc - Yamaska

Mid

June

ON - Thunder Bay, Northern Ontario
 Qc - Frontenac, Beauce, Levis, Québec, Montmorency
 SK

Late

Top Sires According to Average Final Score of 1st Lactation Daughters

Based on 1st Lactation Classifications from January/February 2010

Top 10 Sires with 120+ Daughters Classified in Two-Month Period				Top 10 Sires with 30-120 Daughters Classified in Two-Month Period			
Sire	Daughters Classified [▲]	Avg. Daus. Score	Avg. Dam Score	Sire	Daughters Classified [▲]	Avg. Daus. Score	Avg. Dam Score
Goldwyn	766	81.8	81.3	Damion	62	82.6	81.7
Bolton	211	81.4	81.3	Shottle	58	82.2	81.9
Carisma	148	81.3	81.5	Allen	43	81.7	82.1
Stormatic	130	81.3	81.4	Starfire	36	81.7	81.9
Talent	203	81.1	80.2	Roy	87	81.5	81.9
Blitz	138	80.9	80.4	Boss Iron	47	81.5	80.2
Lheros	144	80.9	81.0	Mr Sam	79	81.2	80.6
Fortune	285	80.9	81.0	Re Design	111	81.2	80.6
Samuelo	134	80.8	80.3	Baxter	94	81.0	80.3
Final Cut	512	80.7	80.4	Fbi	69	80.9	79.9

Note: [▲] Daughters are included in the statistics only if both the daughter and her dam calved for the first time before 30 months and were both first classified within the first six months of lactation. Sires listed must have ≥ 50% of daughters that improve in score over the dam.

Be Razor Sharp in Showmanship

Holstein Canada's new showmanship manual—**Leading to Win**—is now available!

This major undertaking comprises 15 pages of basic, helpful guidelines for both competitors and judges. Easily-comprehensible text is enhanced by 38 full-colour photos, compliments of Patty Jones, Canadian Livestock Photography.

A core committee, including Bert Stewart, Roger Turner, Brian Carscadden, Murray Reissner, Brent Walker, Jason French, and Jane Whaley, directed the project. Numerous official and aspiring judges from all across Canada provided advice on proposed practices.

Providing endless patience and co-operation during a long day of leading and posing for the camera were Ontario's Shea O'Neill, Kleinburg; Cindy Hill, Ilderton; Davina MacKay, Embro; Ellen Hargreaves, Beachville; Becky Quickfall, Belmont; and Matt Van Osch, Lucknow.

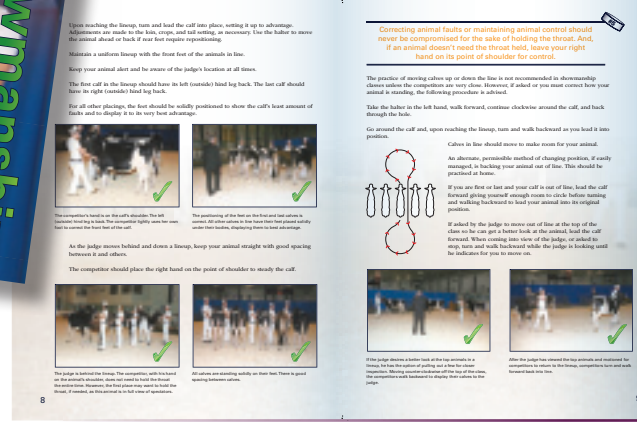
One of the key recommendations for competitors in the new booklet is to *set up the calf, with faults minimized, as quickly as possible*. The topline should be straightened, the tail set between the pins, the feet placed properly, and the loin (or other appropriate spot) pinched

quickly. Making the calf look its very best should be completed prior to other actions, like holding the throat—if required.

For the first time ever, guidance is provided for showmanship judges. In fact, individuals are requested to *decline showmanship assignments if they do not agree to follow the recommended procedures*.

Video footage was shot at the same time as photos, making it a perfect match to the text. DVDs will be available late summer.

For any Canadian competitor, 4-H leader, and judge, this manual is a *must* if you want to *be in the know* on showmanship. Order your complimentary copy from Nicole Faubert 1-519-756-8300 or nfaubert@holstein.ca.



Judges Share Secrets for Success

Competitors:

- remain professional at all times, regardless of the situation, in and out of the ring. They inspect other peers, participants, spectators, and judges.
- use the time for every class.
- set relaxed and confident, but look like they want to win.
- request the ring control, as well as ring coordination.
- work the ring well and allow adequate spacing between animals to show an individual animal in its best advantage.
- ideally, spend as much time as possible walking the animal. It always looks better on the spot.
- ensure the animal looks comfortable when standing, with its feet solidly underneath its body.
- position the animal so the judge can see it at all times.
- walk the animal into the ideal position in line. After adjusting the topline, front feet, etc., they don't fidget with a rubber in excess and walk expeditiously.
- refuse from talking to the judge, unless asked a specific question. However, it is all right should there be some age, and that of the judge.
- never give up! Be courteous in giving watching, show that animals are their best advantage for the entire time in the ring.
- always take time for photography requests, world-wide exposure is great for competitors!

Don't become discouraged if you are not pulled first. Every moment is a second chance to turn it all around.

Look natural and remain relaxed. Don't move like a robot!

The Ideal Showmanship Judge

You are judging showmanship—not conformation!

The Canadian showmanship judge... Leading to Win manual and DVD prior to each showmanship judging assignment (competitors and parents have also made the judging guidelines available).

- be able to define all showmanship guidelines as presented in the manual and DVD. If a judge does not agree with any guidelines, he is requested to decline the showmanship assignment or competitor and parent follow their own choice.
- is courteous about accepting showmanship duties that include close family members and friends. A judge should always be viewed as unbiased.
- prepare mentally for showmanship—come on the conformation. Competition takes showmanship very seriously.

Competitors should be placed on their abilities, not mistakes. If a competitor can recover from a minor mistake, he shouldn't be penalized too heavily.

- use the call phone number of a contact person at the show in case of travel or other problems. For the entire show, the judge turns off all electronic devices and does not take or make calls between classes.
- arrive at the show at least 30 minutes prior to a morning time.
- discuss with show management prior to the show 10 total number of animals, 20 total number of showmanship classes, 30 allocated time and conclusion time for all showmanship classes, and 40 maximum number of animals to ensure from each best 10 final (showmanship) group to meet time to manage effectively.
- show only proceed only to 1) ensure competitors get into the class, 2) indicate when to start (bumps), and 3) when competitors should exit ring.
- never converse with the ring control about judging.
- display confidence and professionalism, without arrogance.
- maintain composure in any performance at the time of showing, dismounting, penning, performance. Competitors may perform differently from show to show.
- discuss performance to the judge. Give your own, or open judge and parent, with the animals, and walk of show pens and judge view. Judge do not give the pins or medals in the ring. Showmanship judges are professionals, which provide an opportunity for young people to look up to in the show business.
- use the term competitor to describe such competitors, whether male or female. However, showman or showwoman can be used for variety.



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