

## NEWSLETTER

**April 2017** 

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Agriculture et

Agroalimentaire Canada

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25 Limousin CCIA tags \$78 plus shipping & taxes



### **Genotyping Funding** Now Available

The Government of Canada through Agriculture and Agri-Food Canada's Canadian Agricultural Adaptation Program (CAAP) has invested \$1 million to increase adoption of genomic technologies in Canada's cattle sector. The financial

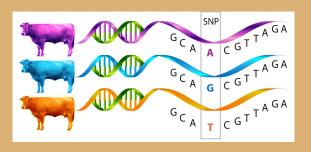
investment has enabled the Canadian Beef



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Breeds Council to allocate funds to beef breed associations to offset the cost of genotyping to increase adoption by producers and aid in the improvement of beef herds. Canadian Limousin producers will benefit by having access to GGP-LD (low-density) and GGP-HD (high density) at a 50% discount as long as funding is available in 2017.



Sire or parentage verification is typically performed on a basic 95-120 SNP assay however, beginning April 1, 2017, while funds are available, all sire and parentage verification requested through the Canadian Limousin Association will be performed

on a GGP-LD (low density) 26,000 SNP assay at the same rate (\$30) that parentage testing has previously been performed using only the basic 95-120 SNP assay (unless otherwise specified by member to NOT genotype on a GGP-LD assay). Members also have the option of choosing to do a GGP-HD (high density, 50,000 SNP assay) at a 50% discount (\$50). Additionally, all GGP-LD and GGP-HD will include molecular breeding values (MBVs) which are required in order to generate gEPDs. Read on for more information about these technologies that will benefits the entire Limousin breed and our membership. Testing may be done from a new sample or a sample already on file at the lab. Testing must be requested through the CLA.

### **CLA Office Closed Fridays April - August**

The CLA office will be closed on Fridays from the beginning of April to the end of August.

The CLA staff are available and happy to assist you Monday to Thursday 8:30 am to 4:30 pm MDT throughout the spring and summer.

Please note the CLA office will also be closed Easter Monday - April 17th

### **Upcoming Events**

The Western Gateway Bull And Female Sale Jaymarandy and Guests April 4 St. Rose Du Lac, MB

Peace Country Limousin Bull Sale April 4 Dawson Creek, BC

6th Annual Windy Gables Open House & Private Treaty Bull & Heifer Sale April 8 Warkworth, ON

Bee Zee Acres 3rd Annual Open House Bull & Heifer Private Treaty Sale April 17 Glencoe, ON

Livestock Markets Association of Canada 2017 Convention, Annual Meeting and the Canadian Livestock Auctioneering Championships May 11-14 Lethbridge, AB

Beef Improvement Federation Annual Convention May 31-June 3 Athens, Georgia, USA

#### Performance Data Submission Deadline for Fall 2017 EPDs June 1

10th Annual T Bar Invitational Golf Tournament June 27-30 Saskatoon, SK

CJLA Impact Show & CLA AGM July 27-30 Portage la Prairie, MB

Canadian Beef Industry Conference August 15-17 Calgary, AB

### What are gEPDs and What Test Should I Choose?

DNA testing can allow you to verify parentage, develop Molecular Breeding Values, and contribute to genomically enhanced Expected Progeny Differences (gEPDs). gEPDs are very similar to traditional EPDs and are used in the same manner. The primary difference is that gEPDs are much more accurate early in an animal's life than traditional EPDs. This gives breeders the opportunity to make better breeding and selection decisions when an animal is young as opposed to when it already has many offspring, which may also be breeding at this time.

In order to generate gEPDs, two things are needed:

- 1. The traditional EPDs. Proper measurements of the traditional EPDs leads to increased accuracy, which contributes significantly to the accuracy of the prediction equations used to generate gEPDs for a breed.
- 2. Low or High Density SNP genotypes. The SNP genotypes are transformed into Molecular Breeding Values (MBVs). MBVs are then blended with the traditional EPDs to create gEPDs. In the Canadian Limousin Association's DigitalBeef system, gEPDs are highlighted yellow.

SNP testing in cattle can be broadly classified into three categories based on the number of SNPs that are assayed: basic parentage, low density, and high density SNP genotyping.

- 1. Basic SNP Parentage (95-120 SNPs)
- The Basic SNP Parentage assay is a very good tool for parentage verification and has approximately the same accuracy as a microsatellite parentage test.
- This assay does not collect enough information to be used for the generation of MBVs or gEPDs.
- 2. Low Density SNP Genotyping (GGP-LD; 26,000 SNPs)
- The GGP-LD assay is an excellent tool for conducting SNP parentage verification and is highly accurate.
- The main advantage of the GGP-LD assay is that this information can be applied to the prediction equations for a specific breed to generate gEPDs at the lowest cost to the breeder.
- 3. High Density SNP Genotyping (GGP-HD also called the Bovine 50K; 50,000 SNPs)
- The Bovine 50K assay is also an excellent tool for conducting SNP parentage verification and is highly accurate.
- Bovine 50K genotyping is used on highly prolific animals (i.e., AI sires, ET dams, and prolific herd sires) that contribute a great deal of genetic material to the entire herd through their many offspring. The Bovine 50K genotypes are used to develop the prediction equations for a specific breed's gEPD calculation. Furthermore, by including animals from their herd, the prediction equations become that much more accurate for the breeder since their animals are contributing to the development of the calculations.

Choose the test that reflects your needs as a producer. If you simply wish to sire or parent verify a basic SNP parenatge might be all you need. If you want to start incorporating genomics in your breeding plan, then a low-density test such as the GGP-LD is a good choice. If your business is breeding highly prolific animals, the Bovine 50K might do you the best service in terms of complete and accurate information. Which test you use depends on your on-farm breeding objective – this should help you meet your herd performance targets, and ultimately be based on profitability for the success and sustainability of your operation.

### Contemporary Groups and the Importance of Entering All of Your Data at Once and in Birth Order

EPDs were designed to predict an animal's genetic value after environmental effects have been removed. Therefore, it is essential for producers to distinguish contemporaries that group together animals that have been managed similarly in order to have accurate EPDs. A common technical definition of a contemporary group is "a group of the same breed (not required in multi-breed systems such as the IGS multi-breed system in which CLA participates), born within a specified age range, raised at the same location or in the same herd, of the same sex and managed alike from birth until time of measurement." It is more advantageous to have large contemporary groups that compare many animals against each other versus small contemporary groups.

The DigitalBeef software used by the CLA helps breeders to define correct contemporary groups automatically according to the premise (breeder number), calving season or period, calf gender, service type (natural service and artificial insemination grouped together, embryo transfer forced to separate subgroup), a multiple birth code (more than a single birth forced to subgroup), and performance record date (records made after birth). Producers can then further define the group by reporting a management code. Management codes for each record type are used by producers to sub-divide animals into smaller groups based on differences in management and/or nutrition.

DigitalBeef automatically determines a calving season by carefully inspecting each birth record including the animal's birthdate, gender and breeder number. The software then looks at the season's already in use in the database including groups that overlap forward or backward 90 days. It chooses the one with the earliest birthdate. This enables the construction of the largest possible contemporary groups that start with the beginning of the herd's calving season. Once this assignment is made, a contemporary group (CG) number is recorded. If no CG number exists that meets the testing criteria, then a new CG number is generated and recorded. This CG number is used for all subsequent performance records for a calf. Subsequent phenotypes such as weaning weight, yearling weight and ultrasound data form subgroups if animals in the original birth CG group are measured on different days. In this way, measurement date becomes part of the contemporary group definition.

The birth CG group assignment aggregates calves born in a 90 day window as a calving group or season. Care should be taken to select appropriate dates for the collection of weaning, yearling and ultrasound data as this 90 age window is enforced around adjustment points of 205 and 365 days for weaning and yearling data, respectively. Animals with weaning performance records younger than 100 or greater than 310 days of age at measurement are not adjusted. Likewise, animals with yearling weights collected younger than 260 days and older than 470 days don't get adjusted performance records computed in DigitalBeef. Ultrasound records must be collected between 270 and 500 days of age. Weaning and yearling weights must be at least 60 days apart. These wide age windows provide considerable flexibility to producers for cow herd and grazing management, including early weaning, without eliminating performance recording of calves. When adjusted performance records are not computed, interim EPDs, calculated between national cattle evaluation runs, are not computed, only pedigree estimates are provided. Pedigree estimate EPDs are just the average of the individuals parents EPD.

All this being said there are two basic principles the CLA asks you to keep in mind when you go to enter your calving data.

- 1) In order to create proper contemporary groups it is highly recommended that you enter your calving data in birth order. In some cases, if you enter younger calves first and then go back and record/register older calves you can end up segmenting your calves into smaller contemporary groups which is negative.
- 2) It is recommended that you do not register calves one at a time, do them all as one big group. This will benefit you in terms of contemporary groups and will also prevent issues and unnecessary printing and mailing from the CLA office. If you wish to record calves as they are born you may do so, just un-check the Register button. You can easily upgrade them to registered at a later time as a single group. Call the office if you need help or further explanation.



### **NEWS RELEASE:**

## Canadian Beef Breeds Council holds its 23rd Annual General Meeting in Calgary, March 23, 2016

Canadian Beef Breeds Council's 23nd Annual General Meeting was held in the Best Western Port O' Call Hotel and was well attended by members, associates and guests. CBBC is pleased that Garner Deobald was re-elected as the President, Roger Peters as the Vice President, and Jay Cross, David Sibbald, Reed Rigney and Tessa Verbeek as new directors. The newly elected Board of Directors are:

Garner Deobald, President, Roger Peters, Vice President, David Sibbald, Director, Bruce Holmquist, Director, Mel Reekie, Director, Rod Remin, Director, Stephen Scott, Director, Rob Smith, Director, Jay Cross, Director, Reed Rigney, Director and Tessa Verbeek, Director.

Present Garner Deobald indicated "CBBC is fully engaged in moving our sector forward with renewed optimism in advancing our goals of producing the world's best purebred cattle and increasing market share in sales of purebred cattle, semen and embryos, both domestically and internationally."

CBBC's vision is to provide a unified voice in support of the purebred genetics provided within the Canadian beef cattle industry. Its mission is to ensure the continuity, growth and prosperity of the Canadian purebred cattle sector as an integral component of the Canadian beef cattle industry.

Its mandate is to support Canadian purebred cattle producers through service provision aimed at genetic improvement, animal health, extension services and information dissemination; promote Canadian beef cattle genetics both domestically and internationally by identifying market opportunities, facilitating access through timely intelligence and informing the commercial industry of the attributes of the Canadian beef advantage both at home and abroad; represent the purebred cattle sector to government by advocating effective policy, ensuring market access and enhancing competitiveness.

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For information please contact Michael Latimer, Executive Director

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# **CANADIAN BEEF INDUSTRY CWNFERENCE**



Register at www.canadian beefindustry conference.com

**AUG 15 - 17** 

at the BMO Centre on Stampede Park, Calgary, Alberta

#### WITH KEYNOTE SPEAKER JON MONTGOMERY

Olympic athlete, gold-medalist, host of The Amazing Race Canada, and coast-to-coast Canadian folk hero

Interactive workshops for producers on production innovations, a tradeshow, market outlooks, and presentations about how we can work together to advance connectivity, productivity, beef demand and competitiveness in the industry PLUS excellent networking opportunities

including a golf tournament and tour









The Beef Magazine Cattlemen

#### **Sale Results**

If you would like for your sale results to be posted in an upcoming CLA newsletter please complete the "Sale Report Form" which can be found on the CLA website under Resources - Forms or contact Tessa Verbeek at tverbeek@limousin.com to request a copy.

16th Annual Anchor B / B Bar / Carpenter
Limousin Sale
Friday, March 17, 2017 Saskatoon, SK
Auctioneer: Michael Fleury
Sales Management: Bohrson Marketing
Services

### Limousin Bulls

26 bulls grossed \$180,750 to average \$6,952 5 Heifers Grossed \$24,750 to average \$4,950

Limousin Heifers
5 heifers grossed \$24,750 to average \$4,950

High Selling Bulls
Lot 1 - B Bar Bentley 8D sold for \$32,000
to Pinnacle View Limousin, BC and Andrew
Ranches, AB

Lot 2 - B Bar Austin Healy 4D ET sold for \$15,000 to Anchor B Limousin, SK and Cochrane Stock Farms, MB

Lot 16 - Anchor B Donaldson 34D sold for \$13,000 to Stewart Limousin, AB

Lot 3 - B Bar Duesenberg 3D sold for \$10,000 to Hawkeye Land & Cattle, ON and Roslin Cattle, ON

Lot 30 - B Bar Cassidy 13D sold for \$8,500 to Clark Cattle Co, ON and KS Limousin, NY 14th Annual Highland Bull Sale
Saturday, March 18, 2017 Bragg Creek, AB
Auctioneer: Ryan Dorran
Sales Management: KK Seedstock – Keith
Kissee

3 Limousin 2 year old bulls grossed \$18,750 to average \$6,250
23 Limousin yearling bulls grossed \$130,750 to average \$5,685
9 Black Angus yearling bulls grossed \$47,750 to average \$5,306

### **High Sellers**

Lot 5 - Highland Domino RAM 8D sold for \$30,000 to Nordal Limousin, SK

Lot 15 - Highland Dynamite AGM 36D sold for \$7,500 to Karson Legault, SK

Lot 27 - Highland Calgary AGM 50C sold for \$7,000 to Kosick Farms, BC

Lot 14 - Highland Doing It Right AGM 26D sold for \$7,000 to Karson Legault, SK

Lot 2 - Highland Distance RAM 3D sold for \$6,250 to Mark Liddle, MT, USA

Lot 1 - Highland Deacon RAM 35D sold for \$6,000 to Rob Dahm, AB

15th Annual Northwest's Bull Sale Monday, March 20, 2017 North Battleford, SK Auctioneer: Neil Kramer

4 Limousin bulls averaged \$3,725

High Seller
Lot 20 - Lazy A Cairo LAZ 35D sold for \$4,400
to Delmar Ventures