

Data Management Services with Weekly Genomic Evaluations

Canadian Dairy Network (CDN) celebrates its 20th anniversary this year. This means that CDN has been providing genetic evaluation services for dairy cattle breeds in Canada for the past twenty years. In the beginning, genetic evaluation services were provided twice a year, every six months. This eventually transitioned to three or four official publications per year, which is still the case with the current releases in April, August and December. For many years, however, CDN has calculated and delivered interim bull proofs to its member A.I. organizations as part of the portfolio of services included in the fees paid to CDN. Since the arrival of genomic evaluations in 2009, CDN has been providing monthly genomic evaluation updates for newly genotyped animals. The pressure to deliver genetic evaluation results recently reached an all-time high and CDN is moving to weekly genomic evaluation updates starting April 2015!

Weekly Releases = Information Management

It is understandable that producers what genomic evaluation results as soon as possible after submitting the DNA sample for genotyping. The same is true for A.I. organizations genotyping young bulls that are of potential interest for purchase and semen collection. In both cases, the goal is to know more about the genetic merit of an animal as soon as possible after birth, which then affects various decisions including whether the animal should be kept or culled.

With the target of weekly genomic evaluation updates in mind, CDN has developed internal systems to provide the best quality service while maintaining high standards of accuracy. CDN is now ready to calculate and publish genomic evaluations for newly genotyped animals on a weekly basis, but what about those people on the receiving end? It is with the user's interests in mind that the CDN Board of Directors approved the introduction of new "data management" services to be available through an annual subscription directly with CDN. These new services do not take away any existing access to publicly available genetic and genomic evaluations for bulls, cows or heifers but, rather, serve to help manage the results as new animals receive genomic evaluations each week.

Data Management Services

Starting April 2015, CDN will offer the following four new "Data Management" services:

- <u>Top Genomic Heifers</u>: Includes the Top 5000 genomic heifers by GPA LPI that can be accessed and sorted using a web-based tool on the CDN web site. The complete file that is updated each week can also be downloaded from the CDN web site for importing into any spreadsheet program such as Excel, Open Office Calc, Numbers (for Mac), etc. The cost is \$450 for a yearly subscription, which includes automatic updates for each of the expected 44 or 45 weekly releases during the year.
- 2. Evaluations by Owner Prefix: Includes the current genetic or genomic evaluations for all females (i.e.: cows and heifers) for which the breeder's prefix is included as one of the known owners of the animal within the CDN database. A web-based tool on the CDN web site allows for sorting and filtering based on various criteria and the user can also download a complete data file for importing into any spreadsheet program. The cost for this service is \$100 for breeders in Canada and \$500 for breeders outside of Canada, for which the data file will be based on the Breeder Prefix in the animal's name instead of the Owner Prefix.

- 3. <u>Female Genomic Details by Requester</u>: This service targets foreign organizations that are genotyping females in North America and want to receive a data file that includes the resulting Canadian genomic evaluation details. For each weekly publication, an updated file is provided by CDN including all animals for which the organization submitted the DNA sample for genotyping. The cost is \$2000 for an annual subscription.
- 4. <u>Male Genomic Details by Requester</u>: This service targets organizations that are not members of CDN but are genotyping young bulls and want to receive a data file that includes the resulting unofficial Canadian genomic evaluation details. For each weekly publication, an updated file is provided by CDN including bulls under a year of age for which the organization submitted the DNA sample for genotyping. The cost is \$2000 for an annual subscription.

Procedures and Policies

For those interested in subscribing to one or more of these new services, the CDN web site will be updated in the latter part of March to allow for the creation of a personal account with a specific username and password. When creating the CDN web account, you will be required to enter specific information such as your name, address, email, etc. In a new area to be developed on the web site, you will be able to select the "Data Management" service(s) of interest and add them to your shopping cart. Once all is completed you will be able to purchase the selected service(s) and pay directly online by Visa or MasterCard including the applicable taxes. The process for subscribing to these annual services will also require you to "agree" to the CDN policies restricting any distribution of the resulting information to people outside your farm or company as well as prohibiting the publication of any ordered/ranked lists from the "Top Genomic Heifer" service.

Summary

As the frequency of genomic evaluation publications moves to a weekly basis in April 2015, CDN will be introducing new services to help producers and other interested users manage the new information effectively. The CDN Board of Directors has approved the four new "Data Management" services to be offered and has set the associated fees, which are all for 12-month annual subscriptions. During the course of a calendar year, CDN expects to be issuing approximately 45 genetic and genomic evaluation releases, at 12:00 noon on Tuesdays. No updates will be provided during the 2-week period in advance of each of the official genetic evaluation publications each year that fall on April 7th, August 11th and December 1st in 2015.

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