

New Delivery of Genetic Herd Inventory Reports

Background

For several years now, the Canadian Dairy Network (CDN) has been mailing Genetic Herd Inventory reports to all producers following the release of the genetic evaluations published in February and August of each year. This method of providing the herd owners with the genetic indexes for the cows in their herd was carried over from the time period when the federal ministry of agriculture was responsible for calculating and publishing genetic evaluations for production traits in Canada. Since CDN became responsible for these activities for all traits in every dairy breed in 1995, some modifications have been made to the information provided on these reports, the most recent being an agreement reached between CDN and Canadian DHI.

New Agreement

Starting with the genetic evaluation release in August 2003, the Genetic Herd Inventory (GHI) reports previously mailed to herd owners directly by Canadian Dairy Network (CDN) will be delivered as part of the standard report options offered by each DHI agency to their clients across Canada. This agreement between CDN and Canadian DHI will result in a more cost-effective delivery with increased flexibility and added features to better suit the needs of today's dairy producer. Click here for an [example of the new GHI report](#), which includes the following key features of this new service provided by Canadian DHI:

- Following the official genetic evaluation release in February of each year, the Genetic Herd Inventory reports will automatically be delivered to all producers along with their next monthly DHI reports. Initially, this procedure will also be followed for the genetic indexes to be released on August 11, 2003. Herd owners wishing to receive their GHI report on a quarterly basis in February, May, August and November will be able to indicate this desire to their DHI customer service representative. There is no additional fee to producers for receiving their herd report either once a year or after each genetic evaluation release since it is a standard genetic tool that is a by-product of including the herd's data in genetic evaluations.
- DHI clients normally receiving their reports after each test day via the Internet service will also be able to receive the Genetic Herd Inventory report in the same way, otherwise the GHI will be delivered by mail. Producers should contact their DHI representative if they are interested in the Internet access to this report.
- The GHI reports have been customized for each herd to reflect the official language of preference as known by the DHI agency and producers have the option of selecting the preferred cow identification system such as their barn name or neck chain number.

- The criterion for sorting the cows on the report also has some flexibility to best meet the producer's needs including the cow's identification (i.e.: barn name or chain number) or by descending LPI within each breed.
- As before, only active cows in the herd on the test day indicated are listed and those meeting the criteria for an official, publishable production evaluation that can be used for promotion and advertising will be clearly indicated and listed separately from cows with genetic indexes that are for management purposes only.
- For each breed of cow in the herd, the average genetic level of all cows listed will be provided as well as separate averages for cows with "publishable" versus "management" genetic indexes. Traits listed include Milk, Fat and Protein yields, Fat and Protein Deviations, Somatic Cell Score, Conformation and Lifetime Profit Index (LPI). National and provincial benchmark statistics for each breed will be available on the CDN web site at www.cdn.ca. It is important to note that cow indexes for production traits are based on test day information from the first three lactations while the cow's latest classification is used for calculating her Conformation index.
- The percentage inbreeding of each cow in the herd will continue to be provided as a tool for improving the understanding of matings that result in higher inbreeding levels. In addition, for each breed of cow in the herd, the average inbreeding level will be provided and can be compared to national values available at CDN.

Understanding Genetic Indexes

The purpose of the Genetic Herd Inventory is to provide the herd owner with genetic information for each cow in the herd and allow for comparisons of the herd averages to provincial and/or national benchmarks. In general, the higher the genetic index the better it is, except for Somatic Cell Score since values below 3.00 are desired. Percentile rankings are provided for most traits to reflect the cows standing within the breed with a higher value being superior. For example, a percentile ranking of 95% means she is within the top 5% of the active cow population for that trait. For cows with a genetic index for production and type traits, a Lifetime Profit Index (LPI) is also provided, which is an overall genetic index for that cow. The LPI indicates which cows have the highest genetic potential for producing superior daughters and sons. In herds where embryo transfer is used, the highest LPI cows that show balanced genetics for production and type should be considered as donor cows. Due to the annual rate of genetic progress, averaging about 150 LPI points per year in Holsteins, it is natural for older cows to have lower, even negative, LPI values and still be profitable within the herd. Genetically, however, they are likely to have daughters that are superior that should instead be used to produce future replacement heifers.

Industry Cooperation

Over the past several years, industry organizations involved in dairy cattle improvement have worked together to develop and implement various new programs and services offered to Canadian dairy producers of all breeds. This new delivery of Genetic Herd Inventory reports, which are generated by Canadian DHI using genetic information calculated by Canadian Dairy Network, is another clear example of mutually beneficial industry collaboration that will ultimately provide an improved service at the farm level.