



CDCB Update

January 12, 2017

2017 Budget

The 2017 budget developed by the CEO and as recommended by the Finance Committee (Neal Smith, Treasurer; John Clay, Chuck Sattler; Dan Sheldon) was adopted by the CDCB Board of Directors.

Priorities for 2017

- Promote the efficient use of existing resources and the optimization of the existing processes
 - Improve documentation
 - Review existing business rules
 - Streamline data management
 - Improve communications
- Position the CDCB to enable new types of data to flow into the cooperator database and to develop new types of services for the cooperator herds
 - Establish new pipelines for management and performance data that currently do not flow into the cooperator database
 - Develop new editing system focused on data quality and benchmarking services, in addition to the existing edits for genetic evaluation purposes
 - Create a user-friendly interface to deliver services to collaborator herds on behalf of the CDCB members

In order to address the elected priorities, the CDCB is committed to

- Develop three additional staff positions: Chief Data Officer (CDO) and two full time software developers
- Contract a part time public relations consultant to develop and implement a communications plan for the CDCB
- Increase investments on remunerating external services associated to new data pipelines

Net Merit Review

A revised of the CDCB Net Merit (NM\$) selection index will be implemented for the April 2017 official evaluation. The new NM\$ incorporates the recently introduced cow livability (LIV) and the revised body weight composite updated by the Holstein USA (both in August 2016). Relative emphasis on LIV in NM\$ will be 7%, and the relative emphasis on productive life (PL) will decrease from 19% to 13%.

This revision will not reduce the expected genetic progress for PL but will increase progress for LIV, producing healthier cows. Body size composite formula ($BSC = 0.50 * \text{stature} + 0.25 * \text{strength} + 0.15 * \text{body depth} + 0.10 * \text{rump width}$) will be replaced by body weight composite ($BWC = 0.23 * \text{stature} + 0.72 * \text{strength} + 0.08 * \text{body depth} + 0.17 * \text{rump width} - 0.47 * \text{dairy form}$) in the NM\$ calculation. Major differences are that BWC is estimated from more recent data, each unit of BWC is associated with larger differences in body weight than those of BSC, and BWC uses dairy form to account for the presence or absence of fat (in addition to skeletal size). Composites for other breeds will be updated with this same formula but because Jerseys and Brown Swiss are not scored for body depth, the remaining 0.08 will be added to the 0.72 already assigned to strength in those breeds. The standard deviation of predicted body weight has increased, and this causes more negative emphasis in NM\$ (-6% on BWC vs. -5% previously on BSC). Genetic correlations of BWC with other traits also differ from those previously used for BSC. Updating economic values for other traits since 2014 resulted in small reductions in milk price, a shift in value of fat relative to protein, and less emphasis on somatic cell score. For recent bulls, the 2016 and 2014 NM\$ indexes were correlated by 0.99.

CDCB Working Groups

Duane Norman has been designated to coordinate the CDCB working groups. Three groups are starting their activities in January 2017: the Dairy Evaluation Review Team (DERT), which provides independent expert advice on dairy genetic evaluation results, the Pursuing Data Quality Team (PDQ), which provides advice and strategic guidance on the area of dairy data quality, and the Genomic Laboratory Guidelines Task Force (GENLAB), which will develop quality certification guidelines to be used for laboratories generating genomic data on behalf of CDCB genomic nominators.

Genomic Nominators Quality Certification

Starting in 2017, the CDCB staff will establish a routinely review of genomic nominators performance according to the Quality Certification Requirements for Genomic Nominators. All nominators will be invited to a meeting where the review process will be explained and experiences will be exchanged. Date and venue to be announced soon.