

A IPL Changes to Evaluation System - May 2001

Interbull SCS evaluations

Somatic cell score (SCS) evaluations from Interbull are scheduled for the first routine release in May. National evaluations from 12 countries were included in the March test run for Holsteins: Canada, Denmark, Estonia, Finland, France, Germany, Great Britain, Netherlands, Norway, Sweden, Switzerland, and United States. Procedures are described in Interbull Bulletin 26 ([Mark et al, 2001](#)). Net Merit, Cheese Merit, and Fluid Merit for foreign bulls will include their multiple-trait across country (MACE) SCS evaluations instead of the parent averages and unknown parent groups included previously. Formats 31 and 38 previously included only SCS evaluations from domestic data. In May a code that shows SCS evaluation source will be added in byte position 233 of format 31 and position 362 of format 38:

Codes for Somatic Cell Score evaluation

- 0. Domestic evaluation
- 1. Interbull, not official because domestic is official
- 2. Interbull and official

Variance adjustments for Jersey type traits

A method to account for heterogeneous variance will be implemented for Jersey conformation evaluations ([Gengler et al, 2001](#)). The method estimates the variances during the iteration to solve for breeding values, so the adjustment is more accurate than if a preadjustment was used. For each contemporary group (parity-herd-appraisal date), the variance calculated from the observations is regressed towards a population variance which is estimated with a model that includes mean final score, group size, month of appraisal and 6 month time period. The degree of the regression depends on the amount of information. Similar variance preadjustments were implemented for Holstein final score in 1993 and variance adjustments are planned for type traits of other breeds later this year.

Interbull conformation evaluations

Jersey type trait evaluations from the new programs were submitted for the March Interbull test run, which included data from Australia, Canada, Denmark, Great Britain, New Zealand, South Africa, and the United States. Interbull has scheduled the first routine release of Jersey conformation evaluations for May ([Klei and Lawlor, 2001](#)). For bulls without a domestic US evaluation, these Interbull MACE evaluations will be used to calculate the composites used in Net Merit, Cheese Merit, and Fluid Merit, however, the May Interbull Jersey type evaluations will not be released. The Jersey Association requested a delay to allow time for them to integrate the Interbull evaluations into their program. Beginning in August, Interbull evaluations are scheduled to become official based on udder depth reliability because that trait is most likely to be reported across countries. Udder depth also will be used to determine number of countries and percentage US daughters.

Both Holstein and Jersey conformation evaluations from Interbull will use the effective number of daughters instead of the actual number of daughters in May. This change was introduced for yield traits in November 2000 and causes Interbull and national reliabilities to be more directly comparable.

Officiality rules changed

Interbull evaluations will be official for a larger portion of bulls. The Interbull evaluation will be official if 1) it includes data from an additional country or, 2) the US has no evaluation, or 3) Interbull excludes US data but its reliability is higher than the US reliability. The same rules will be applied to each trait (yield, SCS, and linear type composites).

Official foreign sire information from the prior run has been used to update parent averages and yield evaluations. The new rules for officiality would cause a large increase in the number of evaluations updated. The Interbull evaluation from the previous run will be used only where it would have been official and its reliability is higher than the reliability of the current US evaluation. This requirement will reduce the number of evaluations changed from over 2 million to about 120,000. Note that since foreign sire evaluations are from the prior run, affected animals will have parent averages that do not agree with current official evaluations. This is not a new situation, but more animals will be affected.
