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Changes in USDA-DHIA genetic evaluations (January 1996)

P.M. VanRaden, R.L. Powell, G.R. Wiggins, and H.D. Norman
Animal Improvement Programs Laboratory
USDA-ARS, Beltsville, MD 20705-2350

Net merit for all cows

Productive life (PL) and somatic cell score (SCS) evaluations and net merit indexes (NM\$) are now computed for all cows. A parent average is substituted if the cow has no data or progeny. Formerly, PL and NM\$ were released only for cows 3 years of age or older. Percentiles continue to be computed only from the economic values of milk, fat, and protein (MFP\$). Breeders who have switched to NM\$ for bull selection now also can choose the best cows based on NM\$.

New summary tables

Summary tables of means and standard deviations that accompany the evaluation list for bulls in active artificial insemination (AI) service were restructured. The tables still have five sections but also have some new definitions and different sequencing. This information should be much more useful, especially for Canadian and grade bulls, because of program improvements to include more complete data for those categories.

Means and standard deviations for PL, SCS, and NM\$ now are included in the summary tables. The format of the active AI bull list also has been changed to include these new traits directly rather than separately. The complete evaluation list on microfiche uses this same new format and includes the new traits for the first time.

INTERBULL update

The release date for International Bull Evaluation Service (INTERBULL) evaluations is February 25. The INTERBULL evaluations on the U.S. scale are official for any bull that does not have a USDA-DHIA evaluation. Holstein data from the United Kingdom and Switzerland and Brown Swiss data from Italy and Switzerland are expected to be included in addition to data from previous participants. Italian Holstein data possibly may not be included; if they are not included, INTERBULL conversion equations from August 1995 would be applied to Italian evaluations from December 1995.

Converted reliability

With the adoption of INTERBULL evaluations for many foreign bulls, the use of conversion equations has lessened dramatically. However, if a bull has neither a USDA nor an INTERBULL evaluation, conversion is still needed. The reliability of the converted evaluation [REL(c)] now considers the square of the genetic correlation between the United States and the other country. Values for these correlations are provided by INTERBULL and range from .87 to .96. Special procedures are used to obtain REL(c) for French evaluations because reliability is defined differently there.

Data exchange with Canada

Since July 1993, Agriculture Canada has provided its bull evaluations to USDA before the general Canadian release date so that information from Canadian bulls could be included in USDA-DHIA bull evaluations. In January 1996, bull evaluations were sent by USDA to Agriculture Canada before the general U.S. release date for use in Canada's multitrait across-country evaluation (MACE). This cooperation may allow earlier availability in Canada of evaluations for U.S. bulls and act as a model for rapid data exchange within INTERBULL.

Agriculture Canada also released evaluations early for Canadian dams of U.S. bulls so that current evaluations could be used in calculating their sons' USDA-DHIA evaluations. The procedure for replacing a Canadian dam's contribution to her U.S. son's evaluation also was revised. The dam's evaluation now is given more weight by considering the feedback that occurs in simultaneous solutions from the animal model.

The Genetic Evaluation Board of Canada has announced that SCS and herd life evaluations and a total economic value analogous to NM\$ will be released in January. Conversion formulas are not yet available, and information on these new traits from Canada are not included in USDA-DHIA bull evaluations.