

AIPL Changes to Evaluation and Editing System - February 2000

Foreign evaluations requested for more cow dams

By George Wiggans

The procedure used to update cow evaluations with foreign evaluations of parents has been improved. All cows with a foreign country code are considered when developing the list of dams for which evaluations are requested. Evaluations are not requested for potential dams with a first lactation because the U.S.-only evaluation will have adequate accuracy; evaluations also are not requested for cows that do not have a daughter with a lactation record because an evaluation is not needed. Evaluations for over 21,000 cows were requested for the February 2000 USDA-DHIA genetic evaluations. Previously, evaluations had been requested for < 1,000 bull dams. A foreign parent evaluation is used only if its reliability is .08 higher than the reliability of the U.S.-only evaluation for that parent to ensure that the reliability of the parent average is increased by at least .02 and that evaluations for all progeny of a parent are updated.

Inbreeding sample

By Paul VanRaden

More complete pedigrees were required for the sample population used to compute expected inbreeding. Previously, any milk-recorded, sire-identified female born three calendar years earlier (1996) could be included in the breed sample. For the year 2000 sample, only females born in 1997 with three generations of maternal ancestry (dam, maternal granddam, and maternal maternal great granddam) were included. About half of the sire-identified Holstein females had three generations of female ancestry recorded. Cows with fewer generations of recorded ancestors are related to the other cows in the breed by unknown amounts and thus are not as useful for predicting inbreeding. Expected inbreeding for Holsteins rose from an average of 4.1% +/-1.1% for the 1999 sample to 4.6% +/-1.3% in 2000. These increases in mean and standard deviation of expected inbreeding resulted from the more complete pedigrees required and also the natural increase in inbreeding that occurs when last year's popular bulls become today's common ancestors.

Editing improved for test-day data

By Jill Philpot

Test-day data in the Animal Improvement Programs Laboratory (AIPL) national test-day database are automatically deleted if the associated test date is not included in the latest incoming record and also is within 15 days before the first test to 15 days following the last test included in the record. If more than one test fails to match, the data are confirmed with the dairy records processing center (DRPC) before deletion. This process removes erroneously reported test-day data and makes the AIPL database more accurately reflect data at the DRPC's.

Error detection improved for country codes in identification (ID) numbers

By Lillian Bacheller

Any ID number with a "CAN" country code that has a letter in the same positions as do traditional eartags now has the country code set to "USA." When a new sire ID number with a "USA" or "CAN" country code is submitted to AIPL, the numeric portion is checked to determine if the same number but with the other country code already has been submitted. If so, the country code in the incoming record is changed to match the country code in the AIPL pedigree database. Bull pedigree data routinely are received from Canada so that ID information for Canadian bulls is available when records for their progeny arrive.