

Changes in USDA-DHIA genetic evaluations (November 1998)

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Earlier release of Interbull evaluations

Release day for U.S. genetic evaluations occurs on Mondays four times each year (<u>http://aipl.arsusda.gov/reference/sched.htm</u>). The password for files of bull evaluations based only on U.S. daughters is available at 7 a.m. Unfortunately, information from the International Bull Evaluation Service (Interbull) is not ready for release at that time. Because some of the evaluations from Interbull are considered to be the official evaluations for the United States, the earlier U.S.-only information must be updated with the new Interbull values for a number of artificial-insemination (AI) bulls. In the past, the Interbull replacement evaluations were posted on the same day at 5 p.m.

Starting with the November 1998 evaluation, Interbull evaluations are posted on the Animal Improvement Programs Laboratory's (AIPL's) file transfer protocol (ftp) server as soon after noon on release day as they can be made ready and before 2 p.m. if possible. Official Interbull replacement evaluations in format 38 are provided both in an update file (38UPDT) and in a complete file of official U.S. bull evaluations (38OFF). The other format-38 files (38ALL, 38S, 38AI, and 38COL), which are available for download on the Friday that precedes release day, do not contain Interbull information. All files of Interbull evaluations in format 31 will continue to be posted at the AIPL web site except for the update file (031UPDT).

Bull evaluation format 38 revised

The bull evaluation <u>format 38</u> has been extended to include 1) percentage of daughters from the United States, 2) usability code (which designates the evaluation source), 3) registered Holstein herdbook identifier (North American or International), and 4) a list of recessive codes. Two of these new fields make it possible to integrate the Interbull evaluations into the same format as the domestic evaluations and to simplify the use of evaluation information in the field. The new data fields were added to the end of the format, which increased the length from 478 to 500 bytes.

Release of cow evaluations based on owner-sampler records

The Council on Dairy Cattle Breeding has continued to encourage the additional use of owner-sampler records. The Council has endorsed the use of records from management test plans coded 40 to 77 in genetic evaluations, and the records have been included since February 1997. However, cow evaluations based on records from those plans were not released because of concern that the records were collected without technician supervision. Because these cow evaluations could be of value for within-herd management, the Council recommended the release of the evaluations to the dairy records processing centers (**DRPC**'s) for distribution to herd owners. Starting with the November 1998, evaluations of cows with a first-lactation record from an owner-sampler test plan are included in the format-105 file. However, many cows in owner-sampler herds will not have evaluations because owner-sample records are subjected to a number of additional edit requirements before being used in national genetic evaluations (http://aipl.arsusda.gov/reference/useos.html).

Cow evaluations based on owner-sampler records should be labeled and referred to as owner-sampler predicted transmitting ability (OS-PTA) so that users can make their own determinations about the credibility of the

values. The OS-PTA evaluations are provided to the AI organizations for the daughters of their bulls, and the evaluations can be accessed through the AIPL web site. The elite and high 5% lists do not include cows with OS-PTA's.

Daughters of cows with an OS-PTA are included in any appropriate lists or files, but a code or footnote indicates that their dams had lactation records that were predominantly from owner-sampler testing. This situation occurred for the first time during the November 1998 evaluation as sufficient time had elapsed to allow daughters of cows with an OS-PTA to have their own lactation records.

Lactation records for breed associations in format 4T

Following the implementation of processing of format 4T records from all DRPC's, lactation records now are distributed in format 4T. Completed records that have passed all edits for registered cows are forwarded to the breed associations. For cows with American ID, the registry status field is used to determine if a cow is registered. Both Holstein Association USA and the Red and White Dairy Cattle Association will receive records of dual-registered cows. The format-4T files will be distributed quarterly and will contain the test-day information provided by the DRPC's for completed lactation records. The records will not be augmented by test-day information accumulated in the AIPL database.

Distribution of error records

Rejected and modified records are returned to the provider (breed associations, DRPC's, or the National Association of Animal Breeders) in formats 4TE and 1NE. A recent enhancement of the AIPL web site also allows cooperators to view rejected records for individual cows through a query based either on the cow's identification number or on the herd code plus the cow's control number. Options also are available to obtain all errors for daughters of a bull or for all cows in a herd for up to the last 9 months. To facilitate error requests, cooperators also can submit queries for multiple animals by uploading a file of animal identification numbers.