Interbull longevity evaluations

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Longevity evaluations from Interbull are scheduled for the first routine release in November 2004 for Holsteins and in February 2005 for the other breeds. National evaluations from 15 countries were included in the August test run for Holsteins: Australia, Canada, Denmark, Finland, France, Germany, Great Britain, Ireland, Israel, Italy, Netherlands, Spain, Sweden, Switzerland, and United States. Evaluations from Netherlands and Sweden will not be included in the November release. The multiple-trait across country evaluation (MACE) for longevity was developed in the Netherlands by van der Linde and de Jong (2003 Interbull Bulletin 30:3-9) using Holstein data and was extended to the other breeds by Jakobsen et al (2004 Interbull Bulletin 32:59-64). Net Merit, Cheese Merit, and Fluid Merit for foreign bulls will include their MACE longevity evaluations instead of predicting PL only from correlated traits and from domestic PL parent averages. For recent foreign bulls (born since 1995), reliability of PL increased to 46% from 38%, which is still much lower than the 65% for domestic bulls because genetic correlations among countries are low for PL. Net Merit reliability increased about 1% (to 71.9% from 70.8%) for foreign bulls, but is still lower than the 82.4% average for domestic bulls.

Interbull computes MACE for direct longevity (single-trait PL) but not for combined longevity (multi-trait PL). Information from correlated traits is combined with the foreign longevity data at AIPL using the <u>multi-trait PL</u> procedures used since 2000. MACE evaluations of PL are included if they have higher REL than the domestic single-trait PL evaluation and the bull has foreign daughters measured for longevity. In November, a code that shows PL evaluation source will be added in byte position 364 of <u>format 38</u>. Codes for source of PL evaluation are:

- 0. Domestic evaluation (combines direct longevity and correlated traits measured in USA)
- 1. Evaluation includes correlated traits from Interbull but no direct longevity from Interbull
- 2. Evaluation combines direct longevity from Interbull and correlated traits from Interbull

Upcoming Changes - February 2005

Information regarding the February 2005 base change and proposed changes to the evaluation system scheduled for implementation at that time are described in a <u>separate document</u>.