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Changes to Monthly Genomic Evaluations (May 2013)

Prepared by staff of USDA/CDCB

Release rules for young males were modified slightly in May. Nominators previously received monthly updates for males until the GPTA appeared on the 38 file, and updates after that only at full releases every 4 months (April, August, and December). Very young U.S. owned bulls were added to the 38 file in April, and nominators will continue to receive monthly updates for these until a semen release date is reported for the bull. Breed associations have received updates for all females every month, and the Jersey Association reloads their database with those GPTAs that change slightly every month and adds the new animals, whereas Holstein Association updates their database only at full releases and provides a separate monthly list containing only the GPTAs for newly genotyped animals (CURRENT='1' in xml). Breed associations will now receive a young_Pub file every month containing monthly updates for males, and may apply the same publication policy to males and females for simplicity.

Variables CURRENT and AI_Service_Fee have been added to the male distribution files. Also, files New_young_Pub containing evaluations for the newly genotyped males of each breed are available for download from the CDCB ftp site. Additional CDCB queries for the monthly update data may become available in the near future. Bulls over 15 months of age where the AI_Service_Fee has not been paid are not for public release. These bulls' evaluations are included in the files distributed to the nominators.

Genotypes were included in the May evaluation from version 2 of the GeneSeek Genomic Profiler (GP2) that has additional markers. For imputation to 50K or to 90K, the revised chip is almost no different than the previous GeneSeek Genomic Profiler (GGP) because most of the added markers are not from the Illumina 50K or GeneSeek HD (GHD), but are only from the Illumina HD (777K). Many dairy customers now refer to all chips by 3K, 6K, 8K, 50K, 77K, or 777K, but referring to the GP2 as 19K may be misleading because < 9K of the GP2 markers are useful except for imputation to Illumina HD, which is done in research but not yet routinely. The GP2 chip is missing 691 markers from the GGP, but only 305 of those were usable markers on the GGP. For each chip, number of usable and total markers in common with the GP2 are:

Chip	Usable	Present On Both
HD	11,358	19,491
GHD	8,824	9,218
50K	8,128	8,278
GGP	7,727	8,071
LD	6,835	6,907