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AHA Releases More Frequent Genetic Evaluations

Shane Bedwell

February marked the first of more frequent runs of the genetic evaluation for the American Hereford Association (AHA) — the genetic evaluation will now be run 10 times a year.

The Pan-American Cattle Evaluation (PACE) is a bi-continental evaluation that includes data from the AHA, the Canadian Hereford Association (CHA), Uruguay and Argentina. The PACE program has proved to be very beneficial, promoting Hereford genetics worldwide, and has strengthened our relationships with other countries involved.

Traditionally, PACE is run twice a year, better known as "the spring and fall runs." Through this evaluation, expected progeny differences (EPDs) are derived from pedigree, phenotype and genomic information. Many breeders are now taking advantage of genomics to build proof on young or unproven sires because of the increased accuracy of evaluated traits.

So it should make sense, as more animals continue to get genomic enhanced EPDs (GE-EPDs), that PACE provides the most up-to-date data and accurate information on animals evaluated. With the addition of more frequent evaluations, this information should allow breeders to make the best and most informed decisions throughout the spring and fall breeding seasons.

A question you might have is "Then why not have 12 runs a year?" And I would tell you that before you walk, you must crawl.

The AHA will have 10 runs a year, CHA will have six runs a year and South America will stick with the two traditional runs a year. To accommodate South American data, the months of July and November will be the only two months the AHA will not have updated evaluations.

Another question you might have is "Will data from Canada, Uruguay and Argentina be included in the AHA runs they are not participating in?" And the answer is "Yes," but understand it will be the same data from their most previous run. To the left you will find a table outlining when data will be released as well as a publish deadline.

The take-home message is that breeders will need to have data turned in to the AHA by the 15th of the month prior to the month that it will be released. For example, for the April 2016 run, data will need to be turned in by the 15th of March. The only exception to this publishing deadline will be for July and December runs, when data will need to be submitted by June 1 and Nov. 1, respectively. This is no different from what is currently being done.

To summarize, the AHA trait evaluation will be handled using BREEDPLAN software, a program used by the Agricultural Business Research Institute (ABRI) from Australia. ABRI has and will continue to be the service provider for the AHA genetic evaluation. So at this point, no changes will be made to trait calculation; the only change that will be made is when data will need to be turned in. Finally, take advantage of more frequent runs for genetic progression this spring.

Looking ahead

As we move forward with more frequent runs, the AHA will also be looking at a new genetic evaluation program called BOLT, developed by Dorian Garrick, Iowa State University Lush Chair in animal breeding and genetics and NBCEC executive director, and Bruce Golden, California Polytechnic State University department head and professor of dairy science. Later this spring and into summer, the AHA will be conducting simultaneous runs to help test the new system and to make comparisons with the current one.

Essentially, BOLT will be able to conduct a single step approach to genomic evaluation and combine with pedigree information and phenotypes. This method will significantly reduce the time needed for an analysis and allow for runs to be conducted twice a month or potentially once a week, which is quite amazing when you think about going from two runs a year to runs potentially once a week.

The bottom line is the technology that is available to evaluate genomics is improving rapidly, and in order to stay positioned for continued growth in this area, we must take advantage of these opportunities. **HW**

Data publish and release deadlines

Published deadline	Release date
03/15/16	04/15/16
04/15/16	05/15/16*
06/01/16	07/15/16**
07/15/16	08/15/16*
08/15/16	09/15/16
09/15/16	10/15/16
11/01/16	12/15/16**
12/15/16	01/15/17*
01/15/17	02/15/17
02/15/17	03/15/17*

** CHA participating*

*** Traditional runs include: AHA, CHA, URY, ARG*