

Educational Forum Features

Performance Program Updates

The 2012 American Hereford Association (AHA) Annual Meeting weekend was kicked off with the educational forum Friday afternoon.

A nice crowd joined us at the Argosy for an afternoon of education and updates related to AHA performance programs. It is our hope to have copies of the presentations available for members to download or order. Watch *Hereford eNews* and the January *Hereford World* for an announcement when they will be available.

During the AHA Board meeting the Board discussed its continued commitment to DNA testing more high accuracy sires. If you have a bull that does not have a genomic-enhanced expected progeny difference (GE-EPD), has a weaning weight accuracy of better than .50 and was born in 2001 or after, contact Toni Shapiro at the AHA office, and the AHA will pay \$40 of the total to have your bull tested. If you have a bull that is slightly less than .50 accuracy for WW and has seen very heavy use, contact me at jward@hereford.org or at 816-842-3757, and I will see if we can help you with that cost share.

DNA testing update

A big portion of the educational forum did focus on DNA testing and GE-EPDs. The transition to GeneSeek for DNA testing continues to be a learning experience for staff and our members.



Jack Ward

One of the questions during the forum was about the amount of hair needed for testing. The bottom line is the lab needs a minimum of 80 hairs with the follicles, and the best place to pull is right above the switch on the tail. This technology is also very sensitive to contamination from pour-ons and other insecticides, so please keep that in mind.

As you have questions about the DNA testing process, don't forget to check the "DNA Testing Procedures" document that is posted to the "Educational Center" on Hereford.org. GeneSeek had the document printed in brochure format and distributed copies at the Annual Meeting.

Here are a few of the recent questions we have received in the office regarding DNA testing:

What is the basic panel?

The AHA basic panel allows you to:

- 1) AI (artificial insemination) permit a sire — This requires parent verification. If the parents were originally tested using microsatellite technology, they may need to be redone using SNP technology. This test qualifies them for the legacy animal retest pricing, if they were previously tested.

- 2) ET (embryo transfer) permit a dam — Only a profile is required on the ET dam for this permit.

- 3) Genetic abnormality testing — idiopathic epilepsy (IE), dilutor (DL) and hypotrichosis (HY).

4) Parentage verification — This is used when parents may be unknown or when breeders use multiple sire pastures. Note: parentage verification must be requested; it is not included unless specifically requested.

How much time should I allow for DNA testing to be performed on my animals prior to a production sale? It is appropriate to begin testing three months in advance of any sale if you intend to include the DNA results or abnormality information in your sale catalog.

How will GE-EPDs on parent animals affect progeny pedigree estimates?

The current method of calculating blended GE-EPDs only enhances the EPDs of the subject animal. All resulting progeny will have a pedigree estimate that is calculated from the parents' base EPDs. GE-EPDs will not affect pedigree estimates of progeny. AHA is currently working to build a full genetic evaluation that includes the GE-EPDs.

If I do DNA testing but have not kept compliant with Whole Herd Total Performance Records (TPR) will my animals have EPDs? GE-EPDs are another selection tool that will be used as a correlated trait. So, the pedigree is important, the phenotypes are important and the genomics component is important and, in tandem, all will be used to calculate EPDs and corresponding accuracies. It will be imperative to continue to collect phenotypes, and you

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will not get EPDs on animals if you are not compliant for Whole Herd TPR or if you are simply a pedigree breeder.

I have received multiple result statements for the same animal. What does this mean? The lab is currently processing information

through multiple channels. This approach creates multiple result statements that are sent to the breeder separately because individual pieces of data are processed faster than others. Breeders may receive parentage information separate from abnormalities. **HW**

Benchmark reports available

The American Hereford Association (AHA) released another herd management tool available to its progressive-minded members this fall. The herd benchmark report is a summary of genetic trends within a herd and compared to the entire Hereford breed.

"This report will confirm for some breeders what they know about their herds," explains Stacy Sanders, AHA director of records. "For others it may be a real eye-opening experience to help visualize where their selection decisions have taken their herd."

The graphs, generated through a breeder's online Whole Herd Total Performance Records database, depict the trends for weight, carcass, fertility and selection index trends for the herd. There are graphs displaying breed genetic trends as well as graphs comparing the herd's genetic trends to the breed's overall genetic trends.

At the end of the report, a table is provided that shows the genetic trend for all animals as well as for dams only.

This report contains expected progeny differences (EPDs) for sires and dams in the herd that have contributed progeny to the herd. It is important to know that this report reflects only the animals that have contributed genetically to the herd.

It also contains a list of heifers and bulls that are progeny of the herd but have not yet reached breeding age or produced progeny of their own. A chart and graph show the herd's average EPDs over several years, if applicable. The report also includes a table showing adjusted average values for phenotypic traits (weights and scanning).

This report will be created for members with the release of each new set of EPDs (spring and fall) as a download that can be retrieved from a member's enhanced Internet account. Just click on the button in the right-hand column labeled "Herd Benchmark Report."

To set up an AHA online account, please contact the AHA. If members do not have Internet access or are unable to download a copy of the report for their herd, they can call the AHA at 816-842-3757 and request the report. Downloads online are available at no cost, but copies that are printed and mailed from the AHA cost \$10.

Note: Some Mac users are having a problem viewing graphs in the new benchmark reports. Mac computers use a built-in, non-Adobe piece of software to open and view PDF files, which doesn't always work well with files created with non-Adobe applications. Mac users are encouraged to download a free version of Adobe Reader, which will allow them to view the graphs.

Benchmark reports are a useful tool for breeders trying to build an economically efficient herd through genetic selection. **HW**