

# Full Blending of Genomic Information Now Implemented



Jack Ward

The American Hereford Association (AHA) released its first genomic-enhanced expected progeny differences (GE-EPDs) last fall. The prediction panel was developed using approximately 1,100 high accuracy Hereford sires.

After the first few months of implementation, it was clear that we needed to continue to genotype more animals in order to build a stronger panel with more prediction power. So, with breeders' help, more than 2,500 additional high accuracy sires were added to the discovery population, and a new set of correlations was released this spring.

This increase in numbers has added so much prediction power to animals and has obviously identified non-parent animals that can be used to make changes within both Hereford and commercial herds and make generational turns much more quickly with much more precision to the traits of interest.

With the release of the new fall 2013 EPDs, the AHA implemented full blending of genomic information. This blending of information means that the genomic component will move up and down pedigrees and affect animals that have not been genotyped but have animals in the pedigrees that have a GE-EPD.

This is why, when you see EPDs of young animals without any information other than parents or grandparents with a GE-EPD, the interim number or even the parentage average may be a bit different from just taking the parents' numbers and dividing by two.

This is important, as it shows the real importance of continuing to add genomic information to the analysis and the power this tool can have to identify cattle and also the importance in having as many cattle in the training population as possible.

All breeders need to consider doing all herd

sires, at least all artificial insemination (AI) sires, and as many dams as possible.

Today, Dorian Garrick, Iowa State University professor of animal science and Jay Lush Endowed Chair in animal breeding and genetics, reports that he has more than 5,000 Hereford animals with high-density genotypes. This number will continue to add real strength to this genetic improvement tool.

## HRF supports research

A great deal of the genomic work has been supported directly by breeders, but another large component has been the development of the Hereford Research Foundation (HRF).

One of the largest HRF fundraisers is the online auction held each July. The 2013 auction was the best to date and raised more than \$40,000. I want to thank each of the buyers and consignors.

Finally, this issue focuses on the Junior National Hereford Expo (JNHE). Congratulations to all of the exhibitors and thank you those who supported the event. The JNHE would not be possible without corporate and breeder support.

What a great event! Seeing those juniors compete, work hard and have fun is really a treat. Congratulations to all who participated in "Show Me the Herefords." **HW**

## Online auction raises \$43,948 for HRF

More than \$43,000 was raised for Hereford research during the *BuyHereford.com* auction July 25. The 40 donated lots generated plenty of excitement from charitable bidders for the benefit of the Hereford Research Foundation (HRF).

The top seller was Lot 7, a frozen embryo package donated by Knoll Crest Farms, Red House, Va. Drummond Sparks Beef, Hanceville, Ala., bought the lot for \$12,400. That price purchased four embryos sired by KCF Bennett Revolution X51. A full sibling was the high seller in the 2013 Knoll Crest Farms sale.

The second high-selling lot was the always a popular Lot 1 – Rausch Hereford's pheasant hunting trip in South Dakota. Jerry Deiker, Louisville, Ky., purchased the three-day pheasant hunt for five hunters for \$5,500.

Another embryo package was the third high seller. Lot 5 – four frozen embryos and a guarantee for two pregnancies — brought \$4,200 from Express Ranches, Yukon, Okla. Mark and Cristy Cooper, Cooper Hereford Ranch, Willow Creek, Mont., donated the package, which is a mating between CL 1 Domino 144Y and CL 1 Dominette 617S.

There were 40 lots total, averaging \$1,099. Thank you to all those who donated items and bid online. **HW**