The Power of Genomically Enhanced EPDs

The American Hereford Association (AHA) has embraced the use of genomics into their genetic evaluation by launching a first of its kind single step analysis that utilizes the marker effects of specific traits. Likewise, AHA is directly estimating accuracy values rather than approximating. The direct estimation of accuracy results in a more conservative value but a more accurate value than previous methodologies. The AHA is producing the most reliable genetic evaluation that is supported by Whole Herd TPR™ and genomics, which will give prospective buyers added confidence in purchasing young and unproven animals.

Buying animals that have a genomic profile incorporated into their Expected Progeny Difference (EPD) offers many advantages that allow for quicker breed and herd improvement. Below is a table showing the average increase in accuracy when buying a young animal with a Genomic Enhanced EPD (GE-EPD) versus an animal without a GE-EPD. Similarly, an effective progeny number increase is listed by trait that shows how many progeny equate to a genomic enhancement of a young animal (e.g. yearling). That's right, buying a young animal that has been genotyped is like having 2-17 progeny, depending on the trait. The proof gained on young, non-parent animals, through a genomic enhancement is valuable and greatly mitigates the risk and allows for more directed selection.

 Each animal tested is recognized with the AHA GE-EPD logo.

AHA Trait	Accuracy Improvement	Effective Progeny Number Increase*
Calving Ease	0.09	17
Birth Weight	0.12	8
Weaning Weight	0.14	12
Yearling Weight	0.16	9
Scrotal Circumference	0.17	6
Mature Cow Weight	0.12	4
Udder Suspension	0.17	7
Teat Size	0.17	7
Carcass Weight	0.11	3
Fat	0.08	2
Rib-Eye Area	0.07	2
Marbling	0.10	3

* Effective Progeny Number Increase (EPNI)- EPNI is the difference gained for genotyped animals versus non-genotyped animals.