by Jack Ward, chief operating officer and director of breed improvement

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NRSP Continues to Add Value

Jack Ward

The National Reference Sire Program (NRSP) or the young sire test, as it is referred to around the office, has become such a cornerstone for not only evaluating bulls but also providing a resource for National Cattle Evaluation (NCE) and also for many of the genomic programs in which the American Hereford Association (AHA) is currently involved.

The longest testing herds are obviously Olsen Ranch, Harrisburg, Neb., and Stahly Ranch, Cavour, S.D., but we have also collected data and tested sires at Lacey Livestock, Paso Robles, Calif.; Circle A Ranch, Iberia, Mo.; and Amana Farms, Amana, Iowa, and recently have started a testing program at Simplot Ranch, Grand View, Idaho.

In addition, we have either worked with or are setting up programs at various universities around the U.S., and we typically collect data on approximately 20-30 young sires each year that are used on more than 2,000 commercial cows.

All of these ranches are profit-minded, large commercial firms, and each of them have been recognized by either the Beef Improvement Federation (BIF) or other national organizations for the contribution they have made to the beef cattle industry in the U.S.

These herds have approached the AHA for various reasons, and each of them has a bit of a different goal for Hereford genetics within its breeding program yet there seems to be a common theme to each of them. That theme is that they want to increase fertility and longevity in their cows, decrease feed costs, and, yet, not hurt their end product."

So, how do we approach finding the bulls they need, and what do these ranches ask for in terms of proof?

1) Expected progeny differences (EPDs) are where it starts, and the fact that our evaluation is based from Whole Herd Total Performance Records (TPR™) reporting has gotten their attention. They want performance pedigrees on all of the candidates, and they are not interested in bulls that do not have data collected, in most cases, from generations of good performance data collection.

2) The next question: tell me about the program and have they been committed to performance reporting? These ranches are not concerned about the size of the operation or where it is located. I have not been asked to provide actual or adjusted weights. It is all about the EPD, and more is not always what they are asking. There have been questions concerning hair coats for shedding.

3) Most recently, the questions have been more direct about feed intake collection and do the bulls have genomic-enhanced EPDs (GE-EPDs)? There have been a lot of reference to our profit indexes and, in addition, some of the herds have really wanted to put some pressure on moderating mature cow size, so the mature cow weight (MCW) EPD has been a big topic.

It is all about data for these folks, and they have asked us to provide some details on what we have seen for breed trends. So, one of the best references for newer test herds is what we have seen over time for our oldest test herds, Olsen and Stahly.

We have done a lot of testing of young bulls compared to reference sires in both of these herds, and that is where I start when providing details on bulls. I would like to share a few reports with you from the Olsen Ranch, and you should understand that the biggest majority of the sires used are young, unproven sires that normally have generations of highly proven genetics behind them.

Here are some graphs that show the genetic

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Association updates

Just a reminder: The American Hereford Association (AHA) has approved two rule changes.

1) **Rule 17A: new embryo transfer policy**
For embryo transfer (ET) calves born after Jan. 1, 2014, there will no longer be an ET certificate required for registration. The new requirement for registering an ET calf will be the reporting of the recovery date of the embryo at the time of registry. ET calves will be charged an additional $15 per head over and above the normal registry rate.

2) **Steers need registration papers**
Starting in 2014, steers showing in AHA-sponsored shows including the Junior National Hereford Expo and regional shows will need an official registration paper. In the past a steer had to only be sired by a registered bull, and its dam needed to be either a registered or commercial Hereford cow. Note: A dam of a steer will need to be parent verified before a steer is registered. A steer will go through the same registration process as a heifer or bull. **HW**

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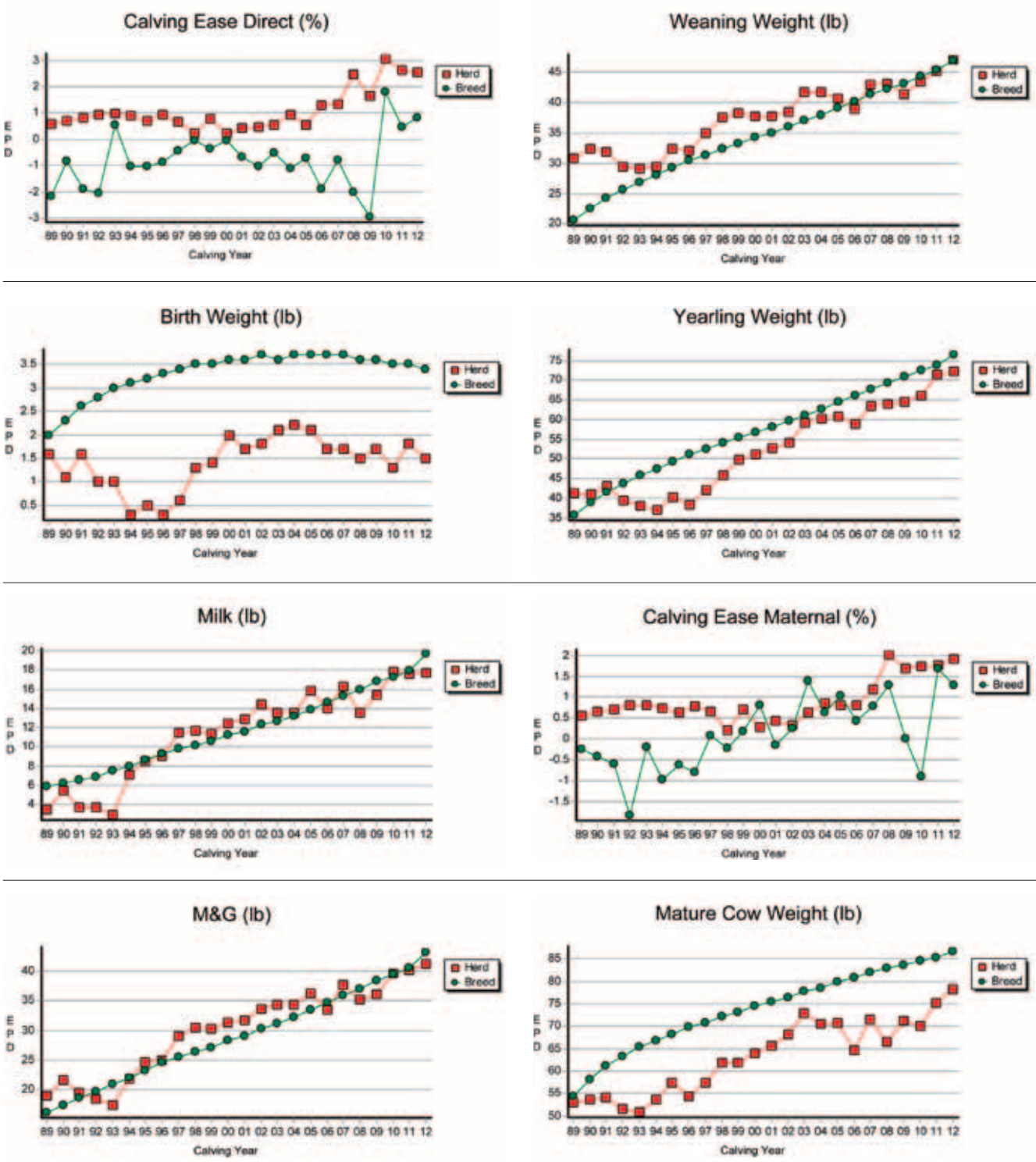
improvement made at Olsen Ranch. In addition, for those of you who like actual data, I have added a table that shows the carcass results at Olsen's.

In addition to data collection at all stages of production, through the efforts of Olsen Ranch, AHA and the Hereford Research Foundation, a GrowSafe system has been installed, and individual feed intake has been collected on the Olsen steers for the past three years and on the Stahly steers for two.

All of the sires used get an AHA GE-EPD run, and DNA is collected on all of the steers in order to be used for the training and validation of the genomic prediction panel that AHA has developed. These practices have also allowed the AHA to leverage this data to bigger projects including the U.S. Department of Agriculture (USDA) weight trait project and the USDA feed efficiency project. The results we are seeing are impressive and

Spring 2013 Hereford Pace EPDs — Graph of Olsen herd compared to breed genetic trends



the reason is that we have clean data from large contemporary groups and the basis starts with Whole Herd TPR.

Here are some take home messages:

1) Commercial cattlemen are interested in using Hereford genetics that come from programs that participate in Whole Herd TPR and use all of the tools available to provide them with as accurate information as possible.

2) EPDs and profit indexes are important and will provide customers with the information needed to make decisions to keep their operations profitable.

3) Genomics also play an important

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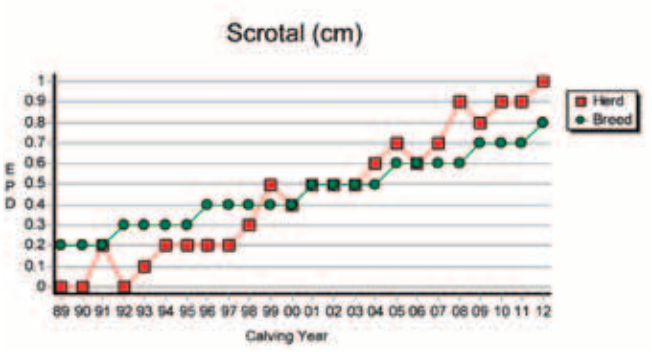
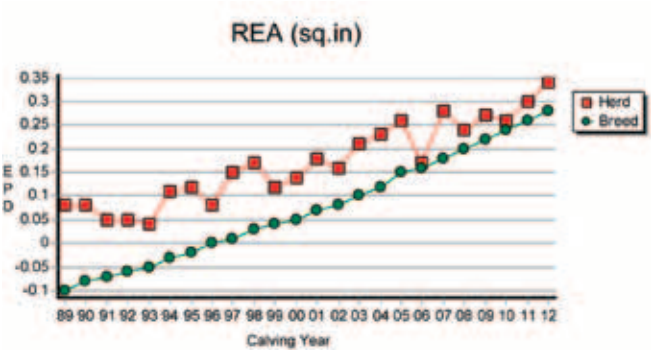
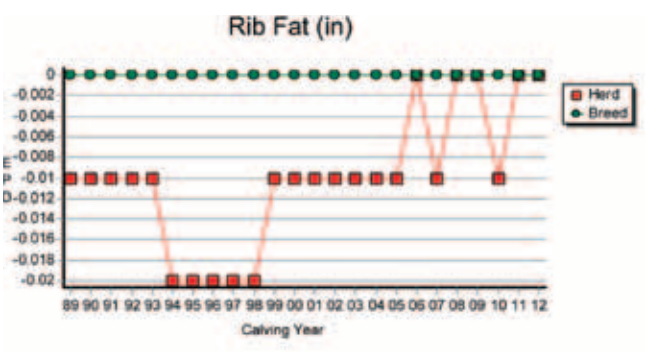
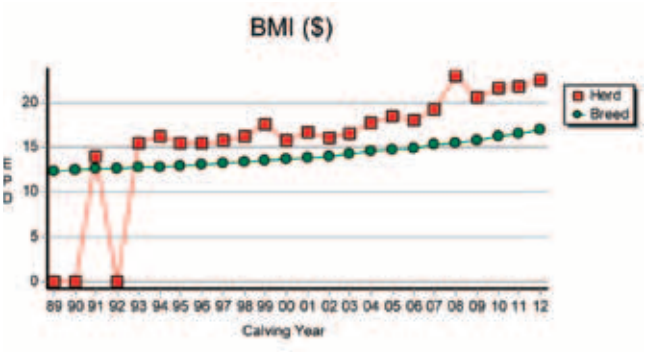
Olsen herd carcass results

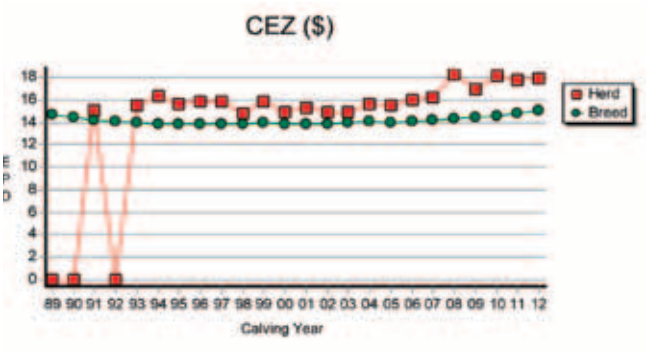
Year	Carcass weight	REA	% Choice
2011	899	13.10	90%
2010	894	13.50	81%
2009	882	13.65	78%
2008	862	12.97	90%
2007	897	12.82	71%
2006	905	12.99	53%
2005	833	12.79	51%
2004	925	12.89	53%
2003	861	14.00	46%
2002	810	13.00	55%

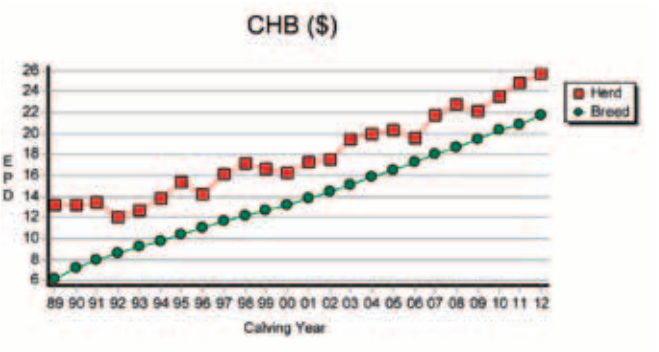












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role for commercial cattlemen to eliminate risk in buying decisions on non-parent bulls.

4) None of the tools are perfect, and not all commercial ranches want the same thing; however, they do make their selections based from these tools. These ranches we work with have no breeder bias; they just want good sound data, and they want to be comfortable that breeders are using performance information along with good culling practices on traits such as disposition, udder quality and structural soundness to provide them with the best possible product. **HW**

Price change for DNA testing

The American Hereford Association has worked closely with GeneSeek Inc. and the National Beef Cattle Evaluation Consortium (NBCEC) to adopt a new pricing structure for genomic-enhanced expected progeny difference (GE-EPD), parentage and abnormality testing.

The new cost will be $85 and will be inclusive of all of testing except horned/polled (H/P); that cost will still be an additional $48.

This $15 savings will allow breeders the opportunity to do more comprehensive herd testing. The basic panel for parentage and abnormality testing is still available for $30 or $20 if you do 50 animals or more. For more about Hereford DNA testing, download the "DNA Testing Procedures Fact Sheet" *at Hereford.org*. To request DNA kits or for more information, contact Toni Shapiro at 816-842-3757 or tshapiro@hereford.org. **HW**

BuyHereford.com auction to benefit HRF

A variety of unique items and opportunities will be up for bid July 25 on *BuyHereford.com* with all proceeds benefiting the Hereford Research Foundation (HRF). For the last three years *BuyHereford.com* has hosted this annual auction filled with unique lots to benefit the foundation, and each has garnered more than $20,000 to help fund Hereford research.

This year will be no exception, with exciting lots on which to bid. Plenty of premier Hereford genetics will be up for sale, whether it be top-quality cattle, semen or embryo packages. Also past sale highlights of hunting opportunities throughout the U.S. should draw plenty of attention.

Again this year, Gallagher has donated state-of-the-art fencing equipment and Sullivan Show Supply has donated one of its best items. Plus, this year Trans Ova Genetics and Viagen will offer reproductive service packages. For more lot information see Page 17 and for a complete list of lots and to bid visit *BuyHereford.com*.

"Thanks to the supporters of the Hereford Research Foundation we are able to continue and invest in industry leading research," says Jack Ward, American Hereford Association chief operating officer and director of breed improvement.

The Hereford Research Foundation was established in 2009 as a division of the Hereford Youth Foundation of America, a 501(c) 3 not-for-profit organization to support breed improvement projects outside the scope of the AHA budget.

The fund has already supported the heterosis research projects like the Harris Ranch study and helped set the groundwork for the GrowSafe system built at Olsen Ranch, Harrisburg, Neb. **HW**

Walking herd sire DNA testing

In November 2010, the American Hereford Association (AHA) Board implemented a new policy requiring DNA on all future walking herd sires. Therefore, any sire born after Jan. 1, 2011, must have DNA on file at the official AHA lab prior to registering calves out of that bull.

This policy was adopted to improve the quality control of pedigrees. Numerous times during the year, AHA staff identify pedigree mistakes, and the discovery comes at times when it is very difficult to make a determination of correct parentage of an animal. Genotyping walking herd sires will be very beneficial toward minimizing this issue in a cost-effective manner.

To find out if a bull has been DNA profiled, go to *Hereford.org* and click on "EPD/Animal Search" in the Favorites menu. Enter your AHA Internet account details and sign on. If you don't have an Internet account, you can log on as a guest by simply clicking the "sign on" button.

In the search form, enter the bull's registration number. Note that no prefixes such as P, X, etc. should be entered, only the number. When the search results are displayed, click on the animal's name. If your bull has been properly tested, you will see an item just above the table where the EPDs are reported titled "DNA Parentage Profile." If you see this and behind it says SNP Profile, Microsatellite Profile or SNP and Microsatellite Profile, then the bull has been tested as needed. Remember, this policy only applies to bulls born on or after Jan. 1, 2011.

To get your bull DNA profiled, order a DNA kit from the AHA. To order the kit, you need the registration number of the sire. The kit can be mailed, e-mailed or faxed to you.

You will then need to collect a DNA sample and send it with the kit to GeneSeek. The address is on the DNA kit. You can find an instructional video for proper hair collection on the Hereford YouTube Channel — *youtube.com/herefordvideos*.

If there is no DNA on file when you start registering calves out of a sire, a DNA error will be returned. For more about Hereford DNA testing, download the "DNA Testing Procedures Fact Sheet" posted in the *Hereford.org* Education Center.

To request DNA kits or for more information, contact Toni Shapiro at 816-842-3757 or tshapiro@hereford.org. **HW**