

Good Data; Great improvement

Accurate data collection drives improvement on cattle operations.

by **Leoma Wells**

*“You can have data without information, but you cannot have information without data.”
Daniel Keys Moran*

Data is the lifeblood of any organization, including ranches. While it might seem easy to dismiss the true value of data, data collected from your cattle can propel your operation forward, if it’s used properly.

A seedstock breeder recently asked me to acknowledge that we’re asking more of registered breeders. Asking them to take on more risk by sampling younger sires and dams to decrease generational intervals. Asking them to invest more in genomic testing to improve expected progeny difference (EPD) accuracy. Even asking for more data — especially on the more elusive traits. And, this is true.

However, genomic service providers, associations and genetic evaluations are also being asked for more by producers. Genomic tools are expected to provide producers with accurate and validated predictions about the genetic potential of an animal. As industry-leading cattlemen and women, it is imperative that you embrace these genetic tools, track genetic progress and benchmark your herd’s improvement, so we can continue to use data to improve upon these tools in the future.

Before the latest cell phone is released, tech companies compile user data to determine what features are working well and which ones can be improved. Progress, with all technology, happens in stages and starts with assimilating relevant data.

With this in mind, focus on your operation’s genetics, collect data and submit it in a timely manner. Submit data after each collection point, such as calving season, weaning and yearling; this keeps the information accounted for and fresh in your mind when it is entered. The American Hereford Association’s (AHA) weekly evaluations allow producers to access their cow herd’s current data and monitor EPD accuracy levels before and after genomic testing.

The best genetic evaluations simply start by focusing on data at the operation level.

Getting good data

Good data starts with collecting and submitting measured data points from a contemporary group. How is a contemporary group defined? According to the Beef Improvement Federation (BIF) guidelines, a contemporary group is a set of same-sex calves that were born within a relatively short window of time and have been managed the same since birth. Each calf in the group has

stranded in an old filing cabinet or farm notebook. If you’ve invested in collecting weight records on your ranch, double-check to see that this data is connected to each animal’s registry records as well. This information not only impacts the individual animal, but it also affects any related animals, including, but not limited to, the sire, dam and half or full siblings. Weaning weight records can even increase the accuracy of the Maternal Milk (MM) EPD, due to the ability for the evaluation to better predict the difference in

Mature cow data

As the need for information on females grows, so does the need for mature cow herd data. As with calf data reporting, cow records on every female should be collected at similar life stages to form contemporary groups. For example, collecting weight measurements on a female at birth, weaning, yearling and then after she has weaned her first calf and each year thereafter provides a plethora of insight into your growth traits and mature cow size. These measurements allow the genetic evaluation to better account for environmental conditions and genetic differences.

Going one step further and measuring hip height and/or body condition scores each time a weight is taken is encouraged. At calving, contributing udder and teat scores for each female will ensure your cow herd has actual measurements represented in the genetic evaluation. By submitting this information each year, you’ll be able to track, monitor and compare different sire daughter groups using the data within your herd to aid in selection decisions.

Scrotal measurements

Scrotal measurements were once an afterthought and occasionally missed in yearling bull submissions. This is a critical piece of information, especially if you’re selling bulls or retaining replacement heifers. Scrotal measurements serve as a fertility indicator.

Data will continue to be a pivotal and integral piece of cattle operations across the country. You know your cow families and herd history, but others without the same insights rely on the data you report. Data submitted to genetic evaluations provides you with an unbiased view of your cow herd. This data combined with genomics gives you the highest EPD accuracy possible for young animals, allowing for faster genetic progress. **HW**

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Tips for data collection

It is vitally important that the data contributed to your herd’s evaluation is complete and correct. This ensures the accuracy of your herd’s genetic evaluations. Since data collection takes time, make sure your time is well spent with these tips for data collection.

- Look at your operation’s management and labor availability at key data collection points and assign tasks accordingly. This is especially important for more subjective data, such as body condition scores, which is more accurately reported when scored by one person.
- Review the data you currently collect and aim to add a measurement for one additional trait this year.
- Examine your AHA records for the past three years and note any missing data on the registry’s records that have been recorded on the farm but need to be reported. **HW**

received the same opportunity to express its genetic merit for traits of interest¹.

The ability to manage contemporary groups effectively and collect data points depends on resources, management and/or labor and timing. Contemporary groups never get larger — only smaller — as culling decisions are made throughout the first 18 months of these animals’ lives. It is critical to understand contemporary groups so a strategy can be implemented to collect data along the way. This data is reflected in the EPD profiles.

Collecting growth data

Birth, weaning and yearling weights are all fairly straightforward, but sometimes this valuable data isn’t submitted for registry records and is instead

average weaning weights between a sire’s daughters. Submitting weights in a timely manner allows the AHA to return the best possible evaluation of your herd and the progeny potential.

Ultrasound data

We are often asked if ultrasound is still needed after the advent of genomic testing. The short answer is yes. Ultrasound is particularly valuable when actual carcass data is not available. Ultrasound gives us insight into the carcass characteristics and allows genomics to be strengthened through validation. Contributing ultrasound records on all yearling animals, including heifers, will help improve accuracy for carcass EPDs within your herd.

Source:

¹Beef Improvement Federation (BIF) Guidelines Wiki