



PHOTO BY SHAUNA HERMEL

birth weights over time, and could lead to calf survival issues if taken to the extreme,” Weaber said.

He cited an example: “A bull with a calving ease EPD of 20 will typically sire calves with a shorter gestation and lighter birth weight than a bull with a calving ease EPD of 7. However, there are other potential problems to think about, such as a light-birth-weight calf born in a snowstorm. The hypothermia issue is a much greater concern than the two assists a producer might have with a less extreme EPD.”

Speaking about Angus sires, Weaber said bulls in the 7-9 range for calving ease EPD (breed average) matched with heifers will have an expected dystocia rate in the single digits. In other words, the risk for calving difficulty is low.

BALANCING ACT

K-State beef experts weigh calving ease with other priorities in heifer mating decisions.

by Lisa Moser, Kansas State University

One of the most exciting times of the year on cow-calf operations is when the calves are born and producers can see the results of their breeding decisions.

Experts from the Beef Cattle Institute (BCI) at Kansas State University say it can also be stressful and costly if those mating decisions lead to calving difficulties, which is why much care needs to be taken when planning those matings.

As bull-buying season approaches, selecting the right bull to match with the heifers was a discussion topic during a recent podcast with the team at the Beef Cattle Institute.

Beef Extension Specialist Bob Weaber advised producers to begin by evaluating the type of breeding

system they need to be successful.

“Think about what types of bulls you are going to turn out on what groups of females to define what the calving-ease need really is,” Weaber said.

One evaluation tool producers can use in making that decision is the expected progeny difference, or EPD, for calving ease. EPDs are estimates of the genetic value of the parents to project the calf’s performance. EPDs are estimated on a variety of traits among the beef breeds. The direct calving ease (CE or CED) and maternal calving ease (CEM or MCE) EPDs

are often a consideration in heifer matings. The greater the number, the lower the risk for calving difficulty, Weaber said.

Calving ease EPDs are expressed in percentage units of unassisted births. For example, a bull with a calving ease EPD of 12 is expected to have 7% more unassisted births from first-calf heifers than a bull with a CE EPD of 5.

More to it than that

“Calving ease is one of the first things to think about when selecting the types of bulls to breed heifers,” said veterinarian Bob Larson. However, he cautioned that producers shouldn’t just isolate their decision to that one criterion.

“Selecting for very high levels of calving ease will lead to lighter calf

Finding balance

The experts agreed it is important for producers to find a balance in the traits.

“A small breeder who is going to use the same bull on the heifers and mature cows shouldn’t base the breeding decision solely on calving ease or they’ll be disappointed in the performance of the offspring from those matings,” Weaber said, noting that when speaking about performance, he is referring to the growth traits in the calves.

If females born to first-calf heifers bred to calving-ease sires will be retained in the herd, Larson and Weaber advised cow-calf producers to include the maternal calving ease EPD in their decision. This EPD provides a prediction of the ease with which a sire’s daughters will calve as first-calf heifers when compared to daughters of other sires.

Another factor to consider is the time of year the calves will be born.

“Calves born in the summer or fall tend to be lighter calves than calves born in the winter due to the seasonality affect,” Larson said.

Weaber encouraged producers to use all their mating evaluation tools when planning for optimum herd performance.

“There has been enough advancement with genomics and selection that we can have really acceptable levels of calving ease with outstanding levels of performance,” he said. “Don’t immediately discount when buying a calving-ease bull the performance of the calves coming from that mating. We can have both pieces today.”

For more on this topic, you can listen to the podcast produced by the Beef Cattle Institute (<https://bit.ly/36UgQHM>). ■

Editor’s note: Lisa Moser is a communications strategist and instructor in the Department of Communications and Agricultural Education at Kansas State University.

Comparing breed to breed

Researchers at the Roman L. Hruska U.S. Meat Animal Research Center (USMARC) in Clay Center, Neb., develop breed adjustment factors annually so that expected progeny difference (EPD) values can be compared across breeds. This process allows the estimation of across-breed EPDs, or AB-EPDs.

To calculate an AB-EPD, the adjustment factor needs to be added to the EPD reported by the respective breed association to provide an AB-EPD that is comparable across breeds.

Not every association reports a calving ease EPD, but most calculate a birth weight (BW) EPD, so USMARC reports adjustment factors for BW EPDs. In the Angus National Cattle Evaluation (NCE), the BW EPD has a -0.65 correlation to CED.

Adjustment factors released most recently for BW EPDs are as follows:

Angus	0.0
Hereford	1.4
Red Angus	2.6
Shorthorn	4.5
South Devon	2.6
Beefmaster	4.0
Brahman	10.3
Brangus	3.1
Santa Gertrudis	5.2
Braunvieh	2.2
Charolais	6.6
Chiangus	2.8
Gelbvieh	2.9
Limousin	2.5
Maine-Anjou	2.4
Salers	0.9
Simmental	2.8
Tarentaise	2.7

If you are comparing bulls of two different breeds, add the adjustment factor for the respective breed to each bull’s reported EPDs to make them comparable.

For example, compare an Angus

bull with an Angus BW EPD of 2.8 to a Simmental bull with a Simmental BW EPD of 1.8.

The adjustment factor for Angus is 0.0, so his AB-EPD is 2.8 (2.8 + 0.0).

The adjustment factor for Simmental is 2.8, so his AB-EPD is 4.6 (1.8 + 2.8).

USMARC also reports adjustment factors for weaning weight, yearling weight, milk and carcass traits. As Bob Weaber and Robert Larson encourage in the main article, informed buyers will want to balance calving ease and birth weight with growth and carcass traits. You can find the complete list of adjustment factors for AB-EPDs online at www.angus.org/Nce/AcrossBreedEpdAdjFactors.aspx.

— by Shauna Hermel, editor