

Where Are We Going with Calving Ease?

Opinions of Angus breeders and others who work within the breed are as varied as the operations and segments they represent.

by Janet Mayer

At one time or another, most cattle breeders have had the unfortunate experience of finding a cow standing guard over a stillborn calf. Even worse is finding both cow and calf dead because she was unable to deliver.

Dystocia (calving difficulties) can cause an economic nightmare for producers. A Nebraska study estimated that calving difficulty results in annual losses of \$25 million in that state alone. Data collected from various areas of the United States indicate that, due to dystocia, only 70%-85% of beef females wean a calf.

Obvious losses include cows or calves that die at birth or within the following 24 hours. Other, less obvious, economic losses are caused by delayed estrus, lower conception rates, an extended calving season, and increased labor and veterinary expense.

Over the years, the industry has spent considerable time and effort researching dystocia and the factors involved — the calf's birth weight, shape, sex, and presentation; the length of gestation; cow age, pelvic area, weight, body condition and nutrition level; the season of the year and temperature; the breed of the sire; and heterosis.

Those studies indicate birth weight is the major problem. And, although occasional dystocia is unavoidable, producers can minimize calving problems by



managing calf birth weights, selecting bulls for birth weight and calving ease.

Since birth weight is easily measured and relatively high in heritability, studies suggest that selection for lower birth weight is a viable means of reducing dystocia. For Angus producers, the most valuable tool in achieving this goal is the expected progeny difference (EPD) for birth weight (BW).

But how much is too much when it comes to using calving-ease bulls? What will happen if a breeder selects for minus birth weights generation after generation?

One Virginia Angus breeder voiced concern some 11 years ago: "Breeders had better watch where they are going with the use of calving-ease bulls (those with minus BW EPDs). If they don't, they just might end up with a bunch of calves that are nothing but little old knots, and then where do they go from there?"

Where have we gone in the past decade? Have some breeders really gone to extremes in calving ease, or are they using good judgment in their choice of calving-ease bulls?

The following thoughts and comments of a cross section of Angus breeders and others who work within the industry are as varied as the operations and segments they represent.

**"You can feed a calf's birth weight plus or minus 10 pounds."
— Glenn Eberly**

Glenn Eberly

As director of the Pennsylvania Bull Test Station at University Park, Pa., and owner of Eberly Angus, Glenn Eberly sees many facets of the beef industry and is well-acquainted with the necessity for calving-ease bulls. He says use of the term *calving ease* is somewhat misleading, especially in the Angus breed where there is not a specific calving-ease EPD.

"We all need to remember that since birth weight is not an absolute parallel with calving ease, it refers to a measure of other traits besides birth weight. This would include pelvic shape and size, calf shape and sex," Eberly says. "Also, variables such as environment and nutrition influence birth weight, and feeding prior to calving can decrease the accuracy of birth weight EPDs. I firmly believe that you can feed a calf's birth weight plus or minus 10 pounds."

Another concern arises when you keep the heifers out of those calving-ease matings, Eberly says. "If you keep any of those minus-birth-weight heifers, where do you go to get that same degree of calving ease? Do you go more minus on birth weight?"

Eberly says he has always tried to practice moderation in his own herd of 50 registered Angus brood cows and has rarely used minus-BW bulls. Instead, he tries to choose easy-calving bulls identified through BW EPDs and known past experience of calving difficulties.

"I would sooner use a bull that has a birth weight EPD of +2.5, but with a known consistency factor built in on my first-calf heifers, than I would a -0.5 EPD bull that is relatively new on the scene," Eberly explains. "In my situation, the female has to be able to do it on her own. I can't always be around when they are calving, and getting a live calf on the ground is more important than the very front-line genetics."

At the bull test, Eberly says low-BW EPDs are a big selling point, but he notes that bulls can't look the part of the stereotypical low-BW bull — meaning they can't be lighter-boned and less thick than the other bulls, or buyers won't bid on them.

"I am somewhat amazed every year that we do not have a real abundance of lighter-birth-weight-EPD bulls," he says, adding he's not sure if breeders don't feel those bulls will perform as well or if the bulls aren't available. "I am especially surprised in the Angus, because if we are breeding to some of the more popular bulls right now, quite a few of them would be classified as calving-ease bulls."

Hank Maxey

At Maxey Farms, Chatham, Va., Hank Maxey and his father, Henry, run a herd of 300 commercial Angus cows in addition to growing a crop of tobacco. They chose Angus because of the extensive database available to breeders and because the cattle brought better prices.

“We do a lot of AI (artificial insemination) breeding, using proven sires on both the cows and heifers,” Hank says. “We like to hit below

2.5 pounds in birth weight and, depending on the heifer, we may use a bull a little lower than that. Our primary, No. 1, objective is to get a live calf on the ground.”

During the past three years, Hank says, they haven’t had any calves that were too big, and the only calving difficulties experienced were from a few cows that went beyond calving dates or malpresentations. He attributes much of their calving success to the calving ease bred into the females in the herd.

“The cattle we have now have three or four generations of calving ease, 3.0 pounds and down,” Hank says. “Truthfully, I don’t think it would be that critical whether it was a 2.5-pound bull or a 0.0-pound bull on those heifers.

“Our bull choices used to be a lot different on the heifers and the cows, but now they are not. That is because there is enough spread in birth to yearling growth on the bulls now that we can basically almost use the same bull on heifers as we do on cows. If the data is true to what it is supposed to be, a 1.0-pound [BW EPD] bull with 85 pounds of yearling weight should be just as good a yearling as a 5.0-pound [BW EPD] bull with 85 pounds of yearling weight, so why would you use that 5.0 bull?” he asks.

Ron Bolze

As the former director of genetic programs for Certified Angus Beef LLC (CAB) and the current director of Smithfield Foods commercial cow-calf operations, Ron Bolze says the use of minimum-BW EPDs in regard to calving ease is being oversold.

“This is another example of using an EPD as a merchandising tool instead of for its intended purpose as a selection tool,” he says. “Birth weight is an indicator trait; it is highly correlated to calving ease, but it is not a

perfect correlation. In calving ease there are issues, like pelvic relaxation and maternal desire to calve, which are measured in a calving-ease complex. I would contend that the Angus breed needs to have a direct and maternal calving-ease EPD.

“I have been a longtime believer and user of EPDs, but sometimes I think our industry doesn’t evaluate the cattle enough anymore, and we have lost focus on the right ‘type and kind;’” Bolze continues. “The right type and kind to me means frame 5, extremely deep, boldly sprung, wedgy, perfect-uddered, easy-fleshing females that exude maternal function and are more apt to function in a lower-input commercial environment. The right ‘type and kind’ can calve easily, sometimes with larger birth weights.”

In his travels to evaluate Angus seedstock in commercial settings, Bolze says he finds that the cattle that really come to the surface are +0.0 to +4.0 on BW EPD and +40 to +60 pounds (lb.) on yearling weight EPD, which doesn’t fit the spread concept at all.

“Curve-bender bulls are not the answer for future commercial application for the Angus breed,” he says. “I see the curve-bending concept as more of a merchandising effort than it is a true selection application.” The result, he adds, is the loss of other important traits that contribute greatly to maternal function and cow longevity but either can’t be or aren’t measured.

“To me, the optimum spread could be up to 3 to 4 pounds of birth weight EPD and 50 to 60 pounds of yearling weight EPD, but that is difficult to merchandise in today’s

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market,” Bolze says. “Many proven, high-accuracy Angus bulls produce daughters that excel in maternal function and would contribute greatly to a commercial producer’s profitability, but are not currently being used because their birth-to-yearling spread is viewed as insufficient.

“The future staying power of Angus genetics within the commercial sector lies with lower-input maternal function, not excessive growth,” he says.

Jim Kast

The bywords for the herd of 450 registered Angus cows at the family-owned 101 Ranch, King Hill, Idaho, are ease of calving, growth and marbling.

“When we bought our first Angus cattle in 1990, we did not anticipate breeding for calving ease,” Jim Kast recalls. “But, the cattle we bought were loaded with calving ease and great maternal traits, and it seemed the natural way to go.”

Eleven years later the breeding program for the medium-frame females is planned around calving ease in heifers and ease of calving in cows. Kast says he likes to keep BW EPDs below +2.5, but would really like BW EPDs of 0.0 or below on the calves that he sells for calving ease. He says the advantage of the extra weaning weight achieved by bigger birth weights is negated by calving losses, poorer reproduction and larger mature animals.

“We don’t like to have to check our heifers at night, and I don’t feel like our commercial customers should have to check theirs at night either,” he comments. “Selling seedstock that have calving ease in the genetics has really been a big selling point for most of our commercial buyers, and most of them are repeat customers.”

To achieve his goals, Kast uses curve-bender bulls with low BW, good growth and sound carcass EPDs, emphasizing marbling. He says he feels that his program doesn’t need bulls with more than a +4 BW EPD to get growth when there are many bulls out there with EPDs that are negative or under +2 that have explosive growth without

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CONTINUED ON PAGE 92

adding too much frame and other antagonisms to calving ease.

"I know we have a good set of functional cattle," Kast says. "In fact, I had enough faith in our genetics last year that we put our calving-ease bull in with 15 spring replacement heifers. Eight of them bred and calved in the fall at 18 months old, unassisted, with the calves weighing about 60 pounds." He says he intends to do it again this year.

"But everyone is not that fortunate because I have heard of other breeders who have decreased pelvic size in their herd through calving ease, making it necessary to breed for even more calving ease to avoid calving problems," he says. He recommends producers measure pelvic areas and make sure there is balance in their programs.

"Have we gone too far with calving ease in the Angus breed? I don't think so, because in my opinion I think calving ease and marbling are the two things that have made the Angus breed No. 1," Kast says.

Erskine Cash I

As professor of animal science at Pennsylvania State University and as a registered Angus breeder, Erskine Cash says breeders should take advantage of tools to breed cattle for specific purposes, like calving ease, but he cautions them to use common sense.

At Windcrest Farm, he practices what he teaches by selecting bulls for calving ease, especially when breeding first-calf heifers.

"It is the most important factor in the bull-selection process," he says. "There are many bulls available today that offer calving ease and a balance

of other traits; thus it is possible to use the same bulls across the entire herd. There have been several studies that conclude that reproduction is many times more important than all other selection criteria.

One of the biggest disadvantages of stacking calving-ease bulls is that cattle tend to lose muscle (REA) and that can affect carcass value.

— Erskine Cash

"Personally, I like curve-bender bulls that are balanced or excel in the other economically important traits, but breeders must evaluate other traits, not just birth weight, weaning and yearling weight. They need to know maternal value, carcass EPDs, and mature size EPD."

One of the biggest disadvantages of stacking calving-ease bulls, Cash points out, is that cattle tend to lose muscle (REA) and some of these carcasses may fall into the Holstein carcass classification. This results in a significant reduction in carcass value with a loss of income.

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Ted Katsigianis

"We don't breed strictly for calving ease, but we haven't pulled a calf from a 2-year-old in several years," says Ted Katsigianis, vice president of agriculture at Biltmore Estate, Asheville, N.C., which has a herd of 250 registered Angus females.

"We pay close attention to using calving-ease bulls when breeding the first-calf heifers as well as the 2-year-olds, breeding [by] AI using premier calving-ease bulls in the breed," Katsigianis says. "We don't worry too much about the mature cows unless a cow has an enormously high birth-weight EPD, which will definitely affect the calf's birth weight."

"With females contributing 50% of the genetics, including pelvic shape and size, which are heritable and have a direct influence on calving ease, I am not so sure that the female's genetics aren't more important than the bull's in determining calving ease."

When using calving-ease bulls, he says breeders need to keep in mind that aside from spread bulls, research has shown a positive correlation between birth weight and yearling weight — meaning, in general, the bigger the calf at birth the heavier it is as a yearling and vice versa.

"You have to balance things," he says. "I don't think the breed is going too small, but you have to look at it like every other trait. Breeding calving ease to calving ease to calving ease to calving ease, you are going to end up with an undesirable calf. But, by all means, if you are breeding a yearling heifer or 2-year-old, then breed her to a calving-ease bull."

