Increasing Weaning Weights

For most cattlemen, herd productivity is measured by pounds of calves weaned. After all, in most cases, pounds equate to more revenue from the calf crop. We can increase our total pounds in several ways. 1.) Increase the calf crop percent; 2) Improve genetics that impact pre-weaning gain; and 3) improve the "environment" so that calves can reach their genetic potential.

As farmers and ranchers, we feel the responsibility of being good managers and stewards of our stock. When it comes to achieving a 100% calf crop year after year, the task is next to impossible. Just when we think things are going great, a heifer decides to calve in the pond or black vultures make a meal of a new calf. My grandpa used to say the only way to not lose some of them is to not own them! Nonetheless, it is always aggravating. Good news is there are many best management practices that can help improve the percent calf crop, such as: identifying calves at birth, keeping detailed records, and vaccination programs.

Weaning weight is a trait that is controlled by many genes in beef cattle. Therefore, you will not find a *homozygous* high weaning weight bull. EPDs are genetic predictions that can allow us to compare animals within a breed for their genetic merits. With that said, producers can make genetic improvement in weaning weight by selecting bulls with higher predictions. For example, Bull A has a Weaning Weight EPD (WW) of +60 and Bull B has a WW EPD of +55. We would expect the calves sired by bull A to average 5 lbs heavier at weaning than calves sired by bull B.

If a producer retains their own heifers, Milk EPD should be considered in selection as it is a measurement of the expected differences in pre-weaning growth based on the milk production of the sire's daughters. For example, Bull A has a Milk EPD of +20 and Bull B has a Milk EPD of +25. We would expect the daughters of bull B to wean calves that average 5 lbs heavier at weaning than the calves of dams sired by bull B. Milking ability in beef cows is a tricky trait to select for. If we have too little milk, we may lose some performance in our calves. Contrastingly, too much milk will cause increase the nutritional needs of our cows substantially. We often find ourselves throwing around the word 'optimum' when describing how we select for milking ability. The last thing we want as beef producers is a herd of extremely heavy milking dams that our environment cannot sustain.

For decades, animal breeders have preached the concept of P=G+E, where P is a measurable phenotype; G is the genetic contribution to the phenotype; and E is the non-genetic or environmental factors. In the seedstock industry, breed associations account for environmental effects by contemporary grouping – with the assumption that animals in a contemporary group share a common rearing. There are countless aspects of the 'environments' including: nutrient availability, nutrition availability of the dam during gestation, weather, climate, etc. A common management practice used to increase weaning weight is creep feeding. There are many pros AND cons for and against creepfeeding, but that's another article.

While increasing total weaning weight may be a tangible goal for many producers, we must realize that it comes with a cost. Whether it is an increase of management/labor or more costly herd bulls, producers need to keep their costs of production and breakevens in mind.

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