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What Makes a Good Bull?

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What makes a good bull?

This question can keep the boys in the coffee shop busy for half the morning. Is it total size? Is it a good hind end, a small head, long back, or nice color? The debate goes on.

I actually helped a family brand once that made the decision to keep a male calf intact to use as a future sire just because he was spotted. I thought to myself, "And ranchers wonder why they're not making any money?"

How many times, during branding season, has someone said, "Man, that's a nice calf, let's keep him a bull." Eventually that can be genetic suicide in a herd.
In order to make money, you have to spend money, and sire selection is not the place to cut corners.

How important is a good sire?

According to research information, the use of one sire line over another can make a difference of $100 to $150 in return per animal on feed. It becomes easy to see why buyers would be willing to offer more money for calves depending on their sires.

In many commercial beef herds, replacement females are selected from the herd's annual calf crop. Bulls, to which those females will be bred, are purchased from outside seed stock growers.

If you take the average calf from within a herd and look at it genetically, the sire provides half the genetics and the dam the other half.

This means that the dam's father provides 25 percent of that calf's genetic material, and the dam's grandfather provides another 12.5 percent.

Simple mathematics illustrates that 87.5 percent of that calf's total genetic makeup comes from three bulls that have been selected by the beef producer to work in the herd.

Those three bulls have a huge effect on how that calf will perform while on its mother, in the feedlot, hanging on the rail, and eventually, in the hands of the consumer. It becomes clear that sire selection is the main tool available to a rancher to continually improve the genetic performance of a herd.

Selecting sires

In order to make the right choice when buying bulls, a beef producer needs to know what genetic traits are important.

To the cow /calf operator, weaning weight is always very important, especially if calves are being sold directly off their mothers. Even at that, traits such as yearling weight and carcass measurements, are also important because if the calves don't perform well when they leave the home ranch , chances are buyers won't come back.

Expected Progeny Differences (EPDs)

An Expected Progeny Difference is the differences in performance expected from the offspring of one individual compared to the offspring of another individual, within the same breed.

With the introduction of Expected Progeny Differences (EPDs) selecting bulls has been moved from an art to a science. EPDs can accurately predict how a bull's calves will perform. The problem is sometimes as ranchers we don't know how to read EPDs or even understand what they mean when we see them.
EPDs provide a tool for genetic comparisons of bulls (or females) within a breed. Lately, adjustments have been developed to help compare cattle from different breeds.

For example, a particular sire might have an EPD of +1.5 for birth weight. This means that he is expected to produce calves 1.5 pounds heavier on average than the theoretical bull with a zero EPD for birth weight. More meaningfully, this sire is expected to produce calves 4.5 pounds lighter than a sire with an EPD of +6.0 (6.0-1.5=4.5) or 4.0 pounds heavier than a sire with an EPD of –2.5 [1.5-(-2.5)=4.0]. As you can see, EPDs are designed to compare animals, nothing more.

Whether an EPD value is above average depends on what the breed average EPD value is. The breed average EPD value is not always zero. For most breeds, a fixed base is used. This means that the breed average EPD changes from year to year. If the breed average EPD for weaning weight is +20, a bull with a +15 EPD is expected to sire calves that weigh 5 lbs less than calves sired by a breed average bull. Put simply, a positive EPD doesn't always mean above average. Be aware of what the current breed average EPD is for each trait. Most breeds also now have EPDs for milk production, calving ease, marbling, rib eye area, and many other genetic traits.

EPDs are far better statistics than the indexes and ratios that are still occasionally used to describe bulls. Generally, these ratios only indicate how a bull did, compared to his herd mates. This information may be important, but not always an accurate predictor of a bull's genetic abilities.

What about appearance?

Cutting edge bull buyers will tell you that they would much rather buy a bull using his EPDs than making a judgment on how good he looks. EPDs are a much better indicator of how a bull will perform than a visual appraisal. Just because a bull looks good doesn't necessarily mean that his calves will.

Being accurate

The important thing with EPDs is to pay attention to the accuracies that are given with each trait. A young bull with few calves will have a much lower accuracy than a seasoned sire with thousands of calves on the ground. Accuracies are expressed as numbers between 0 and 1.00. A bull with .23 accuracy has an extremely good chance of producing just as his EPDs say he will. A bull with .98 accuracy is as close to a sure bet as you can get.

Bottom line

An old time cowman, who spent a lifetime building his operation, said, "Buying bulls is one of the most important things that a rancher does because it's the foundation of your whole business. If you think about it, he was right.

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