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BeefTalk: Buying Bulls by the Numbers



Knowing current average expected progeny difference values for bulls is critical.

By Kris Ringwall, Beef Specialist

NDSU Extension Service

The new year brings a new approach to bull buying because the tools involved in bull selection improve each year.

Two major improvements this year are ease of use and simplicity of use. Some repetition is involved, especially in going back to breeders one previously has purchased bulls from and the progeny performed up to expectation. The information available continues to gain depth and expands through the many breed databases.

For the sake of discussion and to help explain the data, I will utilize the Red Angus Association of America website and data, although the process is

Images

| Buying Bulls by the Numbers | | | |
|--|---------------|--------------|-------------------------------|
| Red Angus traits (EPDs) of interest for the NDSU Dickinson Research Extension Center | | | |
| | 50 Percentile | DREC Average | Current DREC Breed Percentile |
| Birth weight | -1.3 pounds | -1.6 pounds | 37% |
| Weaning weight | 59 pounds | 61 pounds | 35% |
| Yearling weight | 91 pounds | 96 pounds | 36% |
| Milk production | 20 pounds | 22 pounds | 41% |
| Marbling | 0.47 unit | 0.52 unit | 37% |
| Rib-eye area | .11 sq. in. | .28 sq. in. | 21% |

Buying Bulls by the Numbers

nd state fair



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very similar for the other breeds. The Dickinson Research Extension Center (DREC) has 10 Red Angus bulls in the bull pen.

“Are they any good?” That seems like an opinionated question expecting an opinionated answer, but not really. A quick check of the Red Angus website will verify how well the bulls stack up with other Red Angus bulls.

So let’s get the answer. Go to the Red Angus association’s website (<http://redangus.org>) and click on the word “Genetics” at the top of the website, then click on the words “EPD Percentiles” along the left-hand side of the box, then review the first box of numbers titled “Percentiles for Proven and Genetic Opportunity Sires.” This box of numbers gives a producer the EPD (expected progeny difference) values for bulls that rank in the top 1 percent of the breed, the top 5 percent of the breed or any percentage the producer decides to look up.

For simplicity and relevance to the commercial world of cattle, I look to cattle in the top 30 percent of the breed and cattle in the top 50 percent of the breed. The 50 percentile row for the Red Angus breed is as follows: The EPD value is minus 1.3 pounds for birth weight, 59 pounds for weaning weight, 91 pounds for yearling weight, 20 pounds for maternal milk, 0.48 unit for marbling and .12 square inch for rib-eye area.

problems. [FULL STORY](#)

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These values determine what level of performance one wants. For example, the center desires that the Red Angus bulls simply rank in the upper 50 percent of the breed for the desired traits. Reviewing the 50 percentile values allows the center to limit selection and purchase only those bulls that meet the criteria.

Simplify the process using colored highlighters and draw a line across a printed copy of the percentile table for proven and genetic opportunity sires at the 50 percent line. Wow! Now you have highlighted the EPD value needed to rank a bull at the desired 50th percentile within the breed, and by looking at the numbers above the line, one knows the EPD values of the bulls that exceed those values. This is performance unveiled, and that is what we are searching for.

“Why not just buy the bulls with the largest numbers?” That is a good question, and the answer starts with developing goals and objectives within the cattle operation. Not all producers need to simply purchase the largest bull.

In the center’s case, I do look at the 30 percentile values as well. To do so, simply repeat the same process as I did for the 50 percentile values and draw a highlighted line across the same table.

The percentile table really will help a producer select offspring from sires that possess the upper

desired value for those same traits. Using the Percentiles for Proven and Genetic Opportunity Sires table, I would look across the 30 percentile row and see that the EPD value is minus 2.7 pounds for birth weight, 67 pounds for weaning weight, 104 pounds for yearling weight, 24 pounds for maternal milk, 0.59 unit for marbling and .23 square inch for rib-eye area.

To keep the center's bull pen practical, I try to purchase bulls that have EPD values greater than the 50 percentile but less than the 30 percentile for most traits. The current DREC sires' average birth weight EPD is minus 1.6 pounds (37 percent, goal met), weaning weight is 61 pounds (35 percent, goal met), yearling weight is 96 pounds (36 percent, goal met), maternal milk is 22 pounds (41 percent, goal met), marbling score is 0.52 (37 percent, goal met) and rib-eye area is .28 square inch (21 percent, goal exceeded). So the center's mission is accomplished.

Prepare to move into the bull market. Knowing current average herd EPD values for current bulls in the bull pen is critical. Choosing the EPD traits of interest is key, and in this example, comes down to six numbers. For the center, minus 1.6, 61, 96, 22, 0.52 and .28 are those numbers. The center's goal is to purchase bulls between minus 1.3, 59, 91, 20, 0.48 and .12 (50 percentile) and minus 2.7, 67, 104, 24, 0.59 and .23 (30 percentile).

Numbers are never simple or easy, so seek help or

maybe arrange a help session at the center. Call (701) 456-1105 and ask for Lee.

May you find all your ear tags.

For more information, contact

<https://www.ag.ndsu.edu/news> or North Dakota State University Extension Service, NDSU Dept. 7000, 315 Morrill Hall, P.O. Box 6050, Fargo, ND 58108-6050.

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Attachments



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