

# Beef Business



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## Performance Ratios 101

At the time of writing, weaning data is coming in at a quick rate on those spring calves across Shorthorn nation. By the time this issue hits your mailbox, yearling and carcass ultrasound data collection time will be nearing on the horizon. Then bull sale season will start and the season of studying all the top prospects in Digital Beef will begin for the serious, number-driven shopper.

When looking at the weaning data (or any data point) for a group of calves, you might notice that each animal has a “ratio” listed next to the measurement. If you are not familiar with the concept of ratios, this article is the perfect place for you to be. If you are well-versed in the role of performance ratios in your herd, hopefully this isn’t too elementary reading for you. Simply put, ratios are a handy way to measure the performance of a calf with the rest of its contemporaries. Here are some important pieces of info to know about performance ratios:

1. When talking about ratios, the number 100 is our base point. The average value of all animals in a contemporary group is considered to be the 100 ratio. If a group of bull calves have an average weaning weight of 600 pounds, ratios will be based off their relation to that 600 lb. weight. If a calf in the group weighed 600 lb. himself, then he will ratio as a 100.

2. Ratios measure the differences in performance from the group average. An individual’s ratio number tells us his percent variation from the average of his contemporaries. If a bull calf ratios

110 for WW, he weighed in ten percent heavier than the average. If his WW ratio is a 90, then he was ten percent less than the average. Using the figures from point 1 above, the 110 ratioing calf would have weighed 660 lb., while the 90 ratio calf would hit the scales at 540 lb.

3. For all measured traits, a higher value will yield a higher calculated ratio. This is logical for weaning, yearling, and ultrasound data, but admittedly takes some getting used to for birth weight data. If you are looking for a bull calf that came into the world as a small calf but grew quickly, then you would want to find one with a birth ratio below 100 and then above 100 for other weights traits. Ratios for birth weight are similar thinking to golf scoring; lower numbers mean a smaller birth weight.

4. Ratios that you see in Digital Beef will be based on adjusted weights and measures. While you can calculate your own ratios at home based off raw weight, what you will find in the registry system will be based on adjusted data. Since adjusted data is what goes into the EPD calculations, that is the information we will display.

5. Single animals always ratio as a 100. When a bull calf is a one-man show in his contemporary group, there is no one to compare his performance to. He is the best, the worst, and the average all in one package! Since ratios are a measure of comparison, there’s no way to compare a single animal to anything else. Even if he weighed 1,500 lb. as a yearling, he is still a 100 ratio.

6. I’ve been asked several times if performance ratios are a good method of comparing animals across herds. Personally, I rarely use individual ratios to compare bulls from one herd to another. I think EPDs are more valuable to make those types of comparisons. There might be a situation where the highest ratio bull calf at Farm A just happened to be the “least poor” in a group of slow growers. His ratio may look great, but how would he compare if he were in a pen of high-performing stock at Farm B? Differences in genetics and management from place to place make it difficult to find much value in comparing ratios across herds. Thankfully, EPD calculations do a better job removing all the outside noise to give us a better way to analyze our livestock’s genetic potential.

Hopefully this shed some more light on performance ratios and answers some of the questions you might have. If you have other questions on performance ratios, please don’t hesitate to reach out ([matt@shorthorn.org](mailto:matt@shorthorn.org)).

Best of luck to all our Shorthorn exhibitors heading to Oklahoma City, Denver, and Fort Worth this month. I’m disappointed that I won’t be able to make any of those shows this year, but it’s important to stay close to home this January. Enjoy your time on the show road! 📍

**Find more details on the new ASA Commercial Data Program that Kicks Off in 2022 on page 20.**