

## BeefTalk: Are Those Bulls Gaining Weight?



### Selected Nutrient Requirements

Bulls should have a condition score of at least 6 in the spring and continue to gain body weight through the winter.

Feeding bulls is a science because we can look up their requirements and calculate the appropriate ration. In fact, if one has not had that discussion with his or her nutritional adviser, now would be a good time to give that individual a call.

Feeding bulls also is an art. The balance between science and art is what producers should try to achieve. In the case of a bull, the question is not simply rate of gain, protein or muscle gain and fat deposition. Bulls also need to pass on the genetic traits for which they were purchased.

However, once purchased and evaluated, they no longer are managed to express the traits they were genetically designed to deliver. The entourage of hairdressers, feeders and royal pamperers have been dismissed. If one wants to engage in a lively discussion among those who raise and sell bulls, the degree of conditioning certainly would be a topic. However, we will save that for coffee talk.

The point being, it is time to go to work. For most bulls, those lazy days of being a yearling are just memories. They have survived another year in the wintering pen. If the winter was reasonable, with sufficient bedding and a little windbreak, their male anatomical appendages should be there and functional.

The Dickinson Research Extension Center purchases yearling bulls and generally maintains the bulls for three breeding seasons. The first breeding season, they are yearlings fresh from spring bull sales. If the bulls are needed after that, they are overwintered as coming 2- and 3-year-olds.

The bulls are not pampered and run on grass from late summer through fall after they are pulled from the breeding herds. Last fall, the yearling bulls weighed in at 1,283 pounds and the older bulls at 1,747 pounds. The 464-pound difference is a function of age. Although the bulls did not seem as heavy, their condition scores ranged from 5 to 7. However, one bull was thinner and scored a 4.

Once the bulls were culled, the remaining 2-year-old bulls weighed in at 1,659 pounds. The yearlings that were kept weighed in at 1,342 pounds, for a difference of 317 pounds. Although these numbers seemed a little light, the numbers were not that different than some of the historical numbers for the center.

Pulling up some of the previous year's numbers, the coming 3-year-old bulls averaged 1,895 pounds and had condition scores ranging from 5 to 7. The younger set of coming 2-year-old bulls averaged 1,376 pounds. This year, the bulls seem to be slightly lighter than previous evaluations, but not significantly, and the trends are the same.

Just like the cows, bulls should have a condition score of at least 6 in the spring and continue to gain body weight through the winter. By next spring, the coming 3-year-olds bulls should weigh 2,000-plus pounds and be on track to reaching their mature weight at 4 to 6 years of age. Last year's yearlings should be gaining 300 pounds during the course of a year and weigh in at 1,800-plus pounds.

Searching the nutrient requirements of beef cattle on the Web, the Oklahoma State University publication, "Nutrient Requirements of Beef Cattle," written by David Lalman, notes the nutrient requirements for a bull that is predicted to weigh 2,000 pounds as a mature bull. To get to that weight, a bull that weighs 1,400 pounds and is gaining 0.5 pound a day needs a daily intake of 31 pounds of dry matter (hay or grass) that is 7 percent protein and 50 percent total digestible nutrients (TDN).

If those same bulls were to gain 1.7 pounds a day, their daily intake would need to increase to 32 pounds of a higher-quality ration. It would contain the same crude protein level, but the energy content of the ration would need to increase to 60 percent TDN. A grain-based supplement would need to be added or some very high-quality forage would need to be found.

More on that subject later. In the meantime, check on those bulls and make sure they are in the condition you expect.

May you find all your ear tags.