

SIU Bull Gains 7.54 lbs. Per Day On 5.17 lbs. Of Feed Per Pound Of Gain!



From left to right: Dr. Monty Kerley, Ruminant Nutritionist – University of Missouri; Joe Huebner, student employee and Dr. Rebecca Atkinson, Professor SIU – Carbondale, Illinois.

CARBONDALE, Ill.

A registered Angus bull owned by Tom Perjak gained 7.54 lbs. per day on a feed conversion ratio of 5.17. A second bull owned by Glenn Brammeier has an ADG of 6.91 lbs. and a F:G ratio of 4.48 lbs. A third bull owned by Betzold Farms has an ADG of 6.55 and a F:G ratio of 4.53. A few other bulls have gained in the upper five pound range to the low six pounds per day level. Dr. Rebecca Atkinson, Professor of Animal Science and Mr. George Wiedlocher have teamed up to provide an excellent environment for outstanding animal performance over this initial 56 day test period.

A unique feature of many bulls on test and to be offered for sale on March 8th at 6:30 p.m. is that average daily gain has been a greater number than feed to gain. Feed efficiency was found to be a moderately heritable trait, meaning that as much progress can be made on feed efficiency as has been made for growth and carcass traits. Efficiency doesn't only occur in the feedlot, heifers retained as cows will also have greater efficiency on pasture and hay diets. Beef producers interested in selecting genetics for feed efficiency should consider bulls that have performance tested above average for this trait at the SIU bull sale. However, it is important to select for efficiency in a balanced trait selection program and not single trait select for feed efficiency alone.

The Southern Illinois University bull test station has been collecting feed intake data longer than most bull test stations in this country. Beef seed stock producers that have been performance testing bulls at SIU have used this information to calculate feed efficiency and select for animals that are superior in this trait. This year's test was formulated to maximize feed efficiency. As a result several bulls have had feed to gain ratios below 5 to 1 through 56 days on test. When this is considered with feedlot close-out data that has steers finishing at feed to gains of 6 to 1 or greater, significant feed cost savings can be achieved by selecting for improved efficiency. As an example if two calves are compared, one with a 5 to 1 feed to gain ratio and the other with a 6 to 1 feed to gain ratio and diet costs are \$400 per ton, the calf with a 5 to 1 feed to gain ratio would require

\$120 less feed. The potential cost savings from selection for feed efficiency can often times be greater than the profit potential of feeding the calf. Dr. Atkinson worked with the Buchheit Feed Mill in Biehle, MO, Dr. Monty Kerley and New Age Beef Feeds to develop the test diet. The diet is unique in that it was formulated for degradable protein requirements of the rumen microbiota and absorbable amino acid requirements of the bull based upon growth potential. Also the diets contained no roughage.

Bull Test History: The SIU bull test station has been serving seed stock beef producers for 38 years and provides a venue for beef producers to evaluate and show-case genetics, educate producers and students, and serve as a locale for beef producers in Southern Illinois to purchase performance-tested bulls for herd improvement. It began and still is a service function for the college's farms within the Animal Science Department. The station can house up to 72 bulls and now offers two different age testing divisions. Bulls can be tested in the senior division (12 – 15 months of age at time of arrival) or within the junior division (7 – 9 months of age at time of arrival). The evaluation program follows uniform/established Beef Improvement Federation guidelines and relies upon Breed Associations for current genetic information for EPD calculations. The results of the evaluations can be used as a marketing tool for consignors. This year all bulls will be tested for 84 days, which conforms to the Beef Improvement Federation guidelines.

Objectives

- evaluate the ability of bulls to gain rapidly
- measure true feed intake to determine feed efficiency and residual feed intake
- provide a location where cattle breeders can purchase superior performance-tested bulls with excellent genetics

Other measurements collected and calculated are:

RFI – residual feed intake, Carcass Ultrasound data, Frame Score, Pelvic Area, EPD's and a Breeding Soundness Exam.

Questions or concerns can be addressed to Dr. Rebecca Atkinson at 618-453-5000 (ratkinsn@siu.edu) or George Wiedlocher at 618-201-6838 (bullman@siu.edu). Δ