

One of the most important things you can do as a producer is to strive to have an efficient operation. Efficiency is described as “performing or functioning in the best possible manner with the least waste of time and effort.” That is, it is the ability to make the most of something with the resources available. Because each operation is different and has different resources than the other, no two producers will achieve the same level of efficiency in every area. However, a recent research project reveals that there *is* an area of efficiency that can be measured and achieved in each operation. This week we will explore this type of efficiency, and learn how it has a direct impact on the animal’s performance and net worth.

Gordon Carstens and Dan Hale, two professors at Texas A&M University in College Station, recently conducted a study to illustrate the importance of feed efficiency when evaluating progeny from your herd. Their study was also used as a way to demonstrate the way that difference in performance and feed efficiency between animals can directly affect the profitability of feedlot cattle. In the project, Carstens and Hale used residual feed intake, or RFI, to sort the cattle into two groups. RFI measures an animal’s feed intake that is beyond what that animal actually needs in order to support maintenance and growth energy requirements. It is the difference between the animal’s actual dry matter intake, and its expected dry matter intake based on the animal’s level of production and body weight. Twelve steers were used in the study- six with negative RFI (efficient), and six with positive RFI (inefficient). Steers with negative RFI were classified as efficient because they eat *less* feed than expected based on their performance and body weight. Likewise, steers with positive RFI were classified “inefficient”, as they ate *more* feed than expected based on their performance and body weight.

Carstens and Hale tracked each individual steer’s performance for 250 days through the feedlot period to harvesting at a processing plant. At the end of the study, they found that steers in the low RFI group ate an average of 1,636 pounds/steer less feed over the 250 day period, and had an average daily gain of 3.05 pounds per steer per day gain compared to steers in the high RFI group, which had an average 3.21 pound average daily gain per steer. Although the steers in the high RFI group averaged a higher initial value per calf, management expenses for that group were several hundred dollars more per calf. The average cost of gain for high RFI steers was \$0.15 higher than low RFI steers. This equates to an average \$172 per steer more profit on low RFI steers compared to steers in the high RFI group.

These figures indicate that cost of gain is significant in creating an operation that will produce cattle that will return a greater profit. This project by Carstens and Hale shows that feed efficiency can play an important role in the future profitability of an operation. In the coming weeks we will continue this discussion and present methods to apply this knowledge to your operation. Until then, we encourage you to read the full article on this project by referring to the link below:

<http://beefmagazine.com/efficiency-contest/what-do-results-2014-beef-efficiency-profitability-contest-teach-us>

Prices for feeder steers medium and large 1 sold through the Oklahoma National Stockyards on Monday, November 17, 2014 are as follows: 476lb- \$319.39, 577lb- \$295.99, 672lb- \$249.05, and 767lb- \$237.29. The price for January 2015 feeder steers on the Chicago Mercantile Exchange was \$236.85 on closing Monday, November 17, 2014.

Please note that we will not be sending an article the week of Thanksgiving.

Thanks,

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