WARSAW, Mo. – Depending on where you are in Missouri, you may have plenty of available pasture right now, or you might be feeding hay. Such is the plight of the Missouri cattle producer. At any rate, hay quality and winter feed costs are certainly topics that are, or soon will be, on the mind of beef cattle producers.

To illustrate important points about feeding beef cows during the winter, I have developed several examples of winter rations designed for either dry or lactating beef cows. These rations are based on good, fair, or poor quality hay, and use a variety of widely available feed ingredients to supplement nutrients lacking in the hay. Ingredient costs are based on current market values. The result is a range of feed costs for varying quality hay using several commonly available feed ingredients or combinations of ingredients. The data set consists of 19 rations for late gestation cows and 22 rations for late lactation cows.

I recently updated feed ingredient cost in these example rations to reflect current prices. For those of you who put up your own hay, poor quality hay required approximately 3.5 pounds more supplement than good quality hay for both dry and lactating cows. Since the cost of making your own hay is the same whether you end up with good or poor quality hay, feed cost differences between hay quality are based on the amount of supplement needed to meet the target animals nutrient requirements. Based on current pricing, total daily feed cost for dry cows ranges from $1.07 per head per day for good quality hay to $1.29 for poor quality hay, depending on supplement choice. The range in ration cost for late lactation cows is $1.15 to $1.39.

For a herd of 50 cows, the difference between the lowest and highest cost dry cow ration is $990 for a feeding period of 90 days, and $1,320 for a feeding period of 120 days. Hay quality and supplemental feed ingredient prices are main drivers in these cost differences.

Variation in hay quality is huge. To illustrate, every year I receive copies of hay test results. The sample results from 2016 have a range in crude protein from 6.3% to 21.1%. Total digestible nutrients (TDN) ranged from 48.9% to 64.0%. Minerals show
the same variation. Calcium ranged from 0.12% to 1.24% while phosphorus ranged from 0.08% to 0.35%. “Average” doesn’t mean much when such wide differences occur.

Spend $20 to get a hay test so an appropriate, cost-effective winter feeding program can be developed for your herd.

Hay testing is a simple process. Many MU Extension offices have hay sampling probes producers can borrow to collect samples. It is important to core enough bales to get a representative sample. Be sure to sample different lots of hay that come from different fields, different harvest dates, different forage bases, etc. More details on proper bale sampling techniques can be found by viewing the video, “University of Missouri Extension Hay School: Hay Testing.” This how-to video can be located by searching YouTube for “MU hay school hay testing.”

If you have additional questions on hay testing or ration formulation, contact me by e-mail at schmitze@missouri.edu, call the Benton County Extension Center at (660) 438-5012, or contact your local MU Extension Center.

##