

# Dry Summer Makes It Important For Farmers To Know Best Way To Meet Protein Needs Of Their Cattle

**MT. VERNON, MO.** Normally, energy for livestock is more critical than protein according to Eldon Cole, livestock specialist with University of Missouri Extension.

“Most years, when I’m asked about the need for protein tubs, blocks, cubes, by-product feeds or high protein hay, I stress that energy is more critical than protein,” said Cole. “This year I’m more concerned about protein knowing the types of hay, silage or balage many are feeding.”

Cole has seen several laboratory tests at the Lawrence County Extension Center which lends reinforcement to the potential need for crude protein.

Farmers in southwest Missouri had an unusually early spring with decent haying weather. Many harvested early, high quality hay in April and early May. That grass hay likely contains 12 percent protein which should take care of most classes of cattle on protein.

Cole says for wintering calves or yearlings, the 12 percent should cover their needs unless farmers are aiming for gains over two pounds per day on the calves weighing under 600 pounds.

“The dry summer forced many to use up that better quality hay and now they are left with hay or silage with protein values well below eight percent on a dry matter basis,” said Cole.

As cattle producers review the nutrient requirements for both dry and lactating cows as well as for wintering calves, eight percent crude protein on a dry basis is required as a minimum. Lactating cows may have needs as high as 10.5 percent if their milk production levels are above average. Cole says young, lightweight calves will be even higher.

Protein supplementation may be provided in many forms and price ranges. Managers of beef farms are challenged to find the most economical, yet adequate, protein for their herds.

“One of the rules of thumb when price comparing is the higher the level of protein in a feed, the less the cost is per pound of protein,” said Cole.

For example, a 20 percent protein feed contains 400 lbs. of protein. If it costs \$450 per ton divide the cost by the pound of protein ( $\$450/400 = 11.25$  cents) to arrive at the cost per pound of protein.

“Determining the cost of a protein feed becomes more difficult when you try to assign a value to the convenience factor. This often results in the farmer paying more than necessary for protein,” said Cole.

Some proteins may have other valuable nutri-

ents or additives in them which will enhance its value. An example would be additional fat for energy, an ionophore to improve efficiency or additional minerals like magnesium for winter tetany protection on older beef cows around calving and early lactation.

“Stockpiled fescue can even be considered a source of added protein so long as it remains green and has adequate height to meet the cattle’s daily dry matter requirements. A mild winter makes this an even better protein source,” said Cole.

Turnips seem to be everywhere this year and protein values are listed in references as 18 percent on the tops and 12 percent on the roots on a dry matter basis. They could serve to reduce supplemental protein needs.

“The surest way to properly supplement the forage you’re feeding is to test it and know the needs of the class of animal you’re feeding,” said Cole.



**Protein Supplement Feeding**  
Photo by Eldon Cole, livestock specialist with University of Missouri Extension.