

Straight to the Bottom Line – August 1, 2011

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### Navigating the Waters of Limited Forages

In 2006, we experienced a wheat crop that suffered from weather so dry and winds so high that irrigation could not keep up. Now in 2011, not only did we have the same experience with the wheat crop, but even more so now with the corn and sorghum crops. Huge investments in irrigation pivots and multiple wells all tied together were no match for the weather of 2011. One certain result of this terrible situation is a shortage of roughage. And, this shortage is not only affecting the large commercial dairy producer. It is also impacting the beef industry and all the way down to the person who owns one horse! Dairy quality alfalfa approaching or exceeding \$300/ton and a bale of horse hay at a feed store fetching \$12.50 has gotten everyone's attention. I knew we were in uncharted waters when I was recently offered Switch grass pellets for a price exceeding \$200/ton. Another unusual site is seeing lonely fields of 2010 crop CRP type fields being swathed and baled in the summer of 2011.

The dairyman and brood cow producer probably have the most to lose in this situation. Both of these sectors are so heavily dependent on forage as a big part of their diets. The feedlot industry, though not unaffected, has less to fear based on many of their diets being much lower in roughage. So what is a dairy producer to do when hay and silage are very expensive and very hard to get? We have to always remember the fact that cows were created to consume roughage and it was our idea to pump the extra energy from grain into them to increase milk output. But, we do have enough concern for cow health and longevity that we know how much forage needs to be included in the diet to be safe. The question though, relates to what that level is and are there things we can do from a formulation standpoint to bend that rule a little.

I want to offer a few ideas and general principles that might help as you wrestle with these issues. The first is that cows do not have a requirement for a certain percent forage in the diet. It depends on so many things including the type and quality of forage as well as how it is processed. What

cows do have is a requirement for roughage that keeps the rumen healthy and efficient. The key issues that drive the answer as to how much roughage is needed to keep the rumen healthy are related to the physical length of the forage particle and the amount of indigestible fiber that is in the forage. I suppose you could say that cows do have a requirement that is related to the length of and indigestible fiber level in the forage in their diet.

As forage supplies become limited, dairy producers always look for ways to feed less. If you think about the two principles above, it is possible to feed less total forage and still have enough length and fiber in the forage fraction to be successful. You do have to be careful going down this path because if you cut too much, you will first have poor conversions of feed to milk and then cow health problems are possible. The other issue that can't be ignored relates to what will you fill the space with that used to be forage. You can't just keep adding starchy grains. So, numerous byproducts come into the discussion. Some of these are better than others and some even offer some "roughage" value.

So, as you navigate the waters of limited forage, remember to be smart. As you reduce forage a little, mixing issues related to particle length in the bunk become more important. You would want to employ a shaker box to be sure you are in the safe zone. Approach this whole subject with great respect for what the cow was designed to eat. Do the best you can to manage the short forage supplies while remembering cow health. A good balance of those two principles should get you down the road far enough until it starts to rain again!