Forage Testing During Dry Conditions

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Although 2018 may not have been the driest year on record, there is no argument that it has been dry enough to have a major affect on forage quantity.

Producers across Manitoba are scrambling to acquire adequate amounts of feed to meet their needs from now till next spring when pastures and hay fields will once again have enough grass to feed their livestock.

As you start to source feed from other areas, or increase your dependence on some non-traditional feed, knowing what you are feeding becomes even more important so that you don't cause any train wrecks that will have a future impact on your herd and or livelihood.

Forage testing should be done so that you know what your hay quality actually is and if adjustments need to be made. Just because there is forage in front of the cows for them to eat does not mean she can eat enough, or that there are enough nutrients in the hay, for her to function properly. Extended periods of poor nutrition can lead to calving problems, weak newborns, poor quality milk, rebreeding problems and many other costly complications. The multiple costs associated with feeding poor quality forage for an extended period of time are hard to put a dollar amount on but they certainly are there!

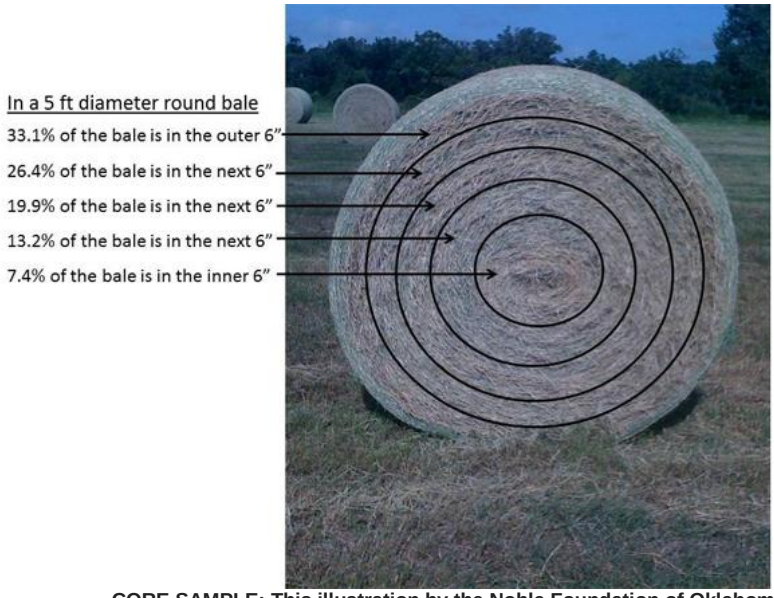
Many farmers question why they should spend money on the analysis of a sample when they are just feeding the cows. Sampling feeds and feedstuffs gives you a benchmark or starting point to adequately meet the nutrient requirements of the animal you intend to feed. All livestock classes have differing nutrient requirements to meet the potential of their genetic ability to grow and reproduce.

When it comes to taking a forage sample here are some key points:

1. Use a hay probe. Farmers need a hay probe that will take a core sample at least 14 to 20 inches in depth. The diameter of the core should be approximately one inch to provide a proper amount of both leaf material and stem or stalk. Hay probes are available from most Mb Ag offices or from your feed representative.

2. Consider your hay bale type.
The core should be taken on the rounded side of the bale at a 90-degree angle to the flat side for a large round, or at a 90-degree angle to the cut end of the bale for a large square.

The illustration shows the proportion of bale contained within five 6-inch sections of a large round bale. The density of the bale and forage type has an impact on the amount of hay within each 6-inch section; however, the percentage of hay within each section should remain relatively the same.



CORE SAMPLE: This illustration by the Noble Foundation of Oklahoma shows the density of the bale. Hay samples should be taken that includes adequate amounts of both stem and leaf material. (Photo illustration by Matt Hersom, University of Florida

3. Don't skimp on sampling. One thing to remember, forage analysis results are only as good as the samples taken. Sample multiple bales out of a hay lot. Core samples should be taken with a forage sampler from 12-15 bales for each lot of hay being sampled. Place all of the core samples in a sealable plastic bag, taking care that fine material in the sample is not lost, which can skew the results.

4. Keep each lot separate. If sampling from multiple fields, keep all hay samples separate.

So, what is the quality of the hay you made or bought? As we have discussed, a forage test is the best starting point to know how to feed the forage you have. Sampling multiple lots of hay would provide the best picture of your overall situation and provide information for you to make the best use of the forages. Different production dates, variation in the amount of grass vs. amount of legume composition in the fields or different forage types could all be reasons for sampling multiple lots of hay. One thing to note is that there is plenty of information with guidelines as to what might be in the forage you are planning to feed, unfortunately this information usually provides a range and when feedstuffs are in short supply, guesstimating what you are feeding can lead to loss of body condition, small calves, failure to re-breed or a number of other sins. **Best advice is to test don't guess.**