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**A LITTLE BIT COUNTRY  
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**Ranchers Analyze Forage Quality**

For as long as I can remember, livestock producers have recognized that not all forages are equal in their ability to produce animals. For decades the feedlot, dairy and swine industries have used laboratory analysis of available feeds to balance rations to obtain maximum economic returns. Beef cow-calf producers have been slow to incorporate this technology. However, I sense there is a growing trend among ranchers to analyze forages to be fed during the winter months.

Getting a representative sample of forage is as important as the technical expertise of the laboratory. All too often, forage testing consists of someone collecting a few handfuls of a single bale of hay, cramming it into a bag and throwing it in the mail. A one-pound sample sent to the lab at the beginning of the feeding season is a very small sample that must represent an enormous quantity of feed. Surely, expecting so much from so little should require a great deal of care when selecting the sample.

Hay probes are effective tools for sampling dry forages. It is important to use a core sampler specifically designed for hay. The cutting edges of the sampler should be sharp. This is extremely important when sampling alfalfa, as a dull blade tends to collect more leaves. Take multiple samples of a given type of hay to assure greater accuracy. When sampling, keep the hay probe parallel to the ground. Do not divide the sample. This causes separation of leaves and stems.

Two methods can be used to evaluate hay and haylage, wet chemistry or NIRS (near infrared reflectance spectroscopy). For common forages, NIRS can be used and

often is the method of choice due to speed and reliability of the procedure. For uncommon forages and forage mixtures always request wet chemistry. Once you have obtained a feed sample, immediately send it to the laboratory. Feed companies, elevators, and private laboratories analyze feeds.

Ranchers have a tendency to use forage testing during years when it is obvious hay quality is low. However, there is some real benefit of knowing how good the forage is during above average years. Those who find their feed supply to be above average can save money by reducing supplements or incorporating below average feed. Such practices can help to maximize economic farm returns.

When forage quality is low, testing is the most important investment you can make. This is a good time to consider a 'wet chemistry' lab analysis. When producers find no choice but to utilize inferior quality feeds, experience shows that it's prudent to discount the expected nutrient value. Even though you are trying to save on feed inputs, poor quality feeds generally do not elicit the animal performance expected. NIRS, although quick and inexpensive, should not be relied upon in these cases.