Feed Testing for Ranchers

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Cattlemen know that feed costs are a huge expense in cattle production. Controlling feed costs can be approached through purchasing lower cost feeds. However, lower cost feeds usually have lower nutrition value. These feeds can be used successfully as long as the ration is balanced for the desired performance. Improving performance involves using feeds in right combinations. Better cattle health and growth or reproduction results from well-balanced rations.

The foundation for good rations is identifying the actual feed value of the feed. During the past several years, feeds from area producers have been sampled and analyzed for nutrient content. These feeds have similar names but different feed values.

Hays that were harvested from fields that are in the conservation reserve program have varying degrees of crude protein and energy (TDN). Using an average value would result in cattle rations deficient in energy and protein (Table 1). Cows receiving less than the required 7.7 percent crude protein and 52.5 percent TDN will lose weight and manifest production problems associated with loss of body condition during pregnancy. These problems can include poor newborn survivability and decreased milk production.

Table 1. Feed analysis results for select feeds in Central North Dakota 2013, dry matter basis.

		Range	
	Average	Low	High
CRP Hay			
Crude Protein,%	6.8	5.5	8.2
ADF,%	47.4	44.4	50.4
Energy (TDN),%	48.3	45.3	51.9
Corn Screenings			
Crude Protein,%	9.2	8.8	9.5
ADF,%	5.8	4.8	7.1
Energy (TDN),%	83.3	81.3	84.7

Recently, corn screenings are being widely used for cattle feed. The increased availability of corn screenings are a result of the increase in regional corn production. Corn screening samples were acquired from regional suppliers and are reported in Table 1. As compared to corn grain, the screenings are lower in feed energy content by 7.4 percent. Consequently, the feed should be priced accordingly.

Feed tests can be used to better predict calf performance in backgrounding rations and develop effective cow wintering diets. Small changes in diet composition can decrease (or increase) calf or cow performance. The small cost of feed testing for nutritional content can easily be offset with improved cattle performance due to better rations.