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Forage Sampling and Analysis

Once a month I sit in on a Zoom meeting with Extension agents across the state and we discuss the current issues surrounding livestock production. Expanding drought across Kansas and the reduced inventory of forage resources continues to be a hot topic (*no pun intended*)! Meadowlark District continues to generally sit much better than the rest of the state, but the topic discussed today doesn't become less important, it may be even more so important, if you plan to market harvested forages to those in need of feed.

The old saying, "you can't manage what you don't measure" is especially true when it comes to forage sampling. There are generalities and average forage quality numbers from sources such as NRC; but the best way to formulate rations and/or sell forage is based on a representative forage analysis of the forage you have. Quality can vary widely, based upon fertility, timing of harvest, weather conditions, storage, to name a few. Collecting samples from similar "lots" of forage type, managed in the same way, is an important first step. Timing of sampling can create variability, but generally the closer sampling and testing is done to feeding or marketing, the more reflective it will be to the "lot".

Representative samples, taken from across the forage lot, will be important to increase accuracy of results. A minimum of 10-20 samples, mixed and then sub-sampled, is a baseline. Baled hay is bested sampled with a forage probe, coring directly perpendicular to the surface of the bale. Many different types of probes are available, with our Extension offices offering probes for check-out. Loose or hand samples can be taken for silage and standing forages, with the same sample/sub-sample process used. These higher moisture samples need to be processed quickly to get accurate results, without spoiling. Results can take several days to weeks to get back; depending on the testing service, delivery options and time of year.

So, what should a producer be looking at testing for? The major items are protein and energy content, but a wide array of testing options exist. Relative Feed Value (RFV) is a good test to run that gives a snapshot view of forage quality and is often a standard value used to market forage. Testing for toxic issues such as nitrates and/or prussic acid, are also popular test options. If checking for these issues, nutrient analysis should be conducted as well, since the fixed cost of postage is already involved. Again, our offices can help you with determining what test to run, laboratories to use, help with interpreting results and balancing rations.

A couple good resources to learn more about forage sampling and analysis are: [K-State Forage Facts Notebook](#), [Oklahoma State Publication](#) and [National Forage Testing Association](#) which can be found on the Meadowlark Extension District website, under Livestock and Natural Resources. Another resource or two that might be helpful on the marketing side are: the [Kansas Direct Hay Report](#) and [The Kansas Hay Exchange](#).

UPCOMING EVENTS: Something new I'd like to include in this news column is a listing of upcoming events. Registration links will be updated on the website mentioned above. Please reach out if you need additional information or have questions.

August 16-17: KSU Risk & Profit Conference, Manhattan. August 22-26 Virtual.
Registration by August 12 is \$175/day, \$225 two days, \$55 virtual.

August 18: Forage Field Day, Salina, 8:00 am. No registration fee.

August 25: KLA/KSU Ranch Management Field Day, 3:00 pm, Westmoreland.
No registration fee.

September 29: KSU Beef Stocker Field Day, 9:30 am, Manhattan. Registration is \$25 by September 15, late registration \$35. Visit with me if you need a ride!