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Headline: Does your hay have enough nutrition to meet your cattle's needs this winter?

STOCKTON, Mo.-What is the quality of your hay and will it meet your cattle's nutritional needs this winter? "These are important questions as we enter the winter hay-feeding season," says Patrick Davis MU Extension Regional Livestock Field Specialist. Conducting a forage test helps answer these questions. Proper forage testing protocol is important to get accurate results. Furthermore, understanding forage test results and how to incorporate them into a winter-feeding program allows the most benefit out of the results.

"For proper hay sample collection with large rounds a bale probe needs to be drilled or pushed into the round side of the bale," says Davis. He urges cattle producers to subsample 10% of their winterfeeding hay resources. After collection, mix these subsamples in a plastic bucket and then take a sample to send off to the forage testing lab to determine hay quality. Davis reminds producers that a representative sample is key to accurate hay quality determination. Since hay quality can vary by barn, purchase, or baling location, multiple tests of winter-feeding hay resources may be needed for a representative sample and accurate hay quality determination.

"Sample management from collection to testing lab is important for accurate results," says Davis. Wet forage samples should be frozen after collection and kept cool during the transport process to the testing lab for reduced deterioration leading to inaccurate results. Also, send samples early in the week for speedy lab analysis and results. For questions about lab sample transport, contact your preferred forage testing lab.

"Cows consume pounds of forage dry matter (DM) and not bales of hay," says Davis. As more baleage is produced, a forage test is important to determine the forage DM. Forage DM information is used in proper forage allocation to cattle.

"In addition to forage DM, understanding forage fiber content allows prediction of cattle forage intake and utilization," says Davis. Neutral detergent fiber (NDF) and acid detergent fiber (ADF) are forage test measurements used to predict forage intake and digestibility, respectively. Given a cow consumes 1.2% of their body weight in NDF DM daily; forage NDF measurements can be used to predict daily forage DM intake.

Total digestible nutrients (TDN) and crude protein (CP), which represent forage energy and protein content, respectively. "These two measurements help to determine if forage resources have enough quality to satisfy a cow's energy and protein needs," says Davis. If deficiencies are found, economical supplement strategies can be developed for optimum cattle performance and profitability.

Contact your local MU Extension Livestock Field Specialist for suggestions on supplement strategies of low quality forages.

"Lots of hay was baled late this year, which may lead to lower than usual hay quality depicted by high NDF and ADF levels as well as low TDN and CP content," says Davis. Hay testing is useful in determining how to get the best hay utilization. With poorer quality hay potential, identifying and economically supplementing cattle, results in optimum cattle performance and profitability. For questions on subjects discussed or for feeding and supplementation strategies, contact your local MU Extension Livestock Field Specialist.