

MESSENGER-INQUIRER



June 10, 2023

Take Time to Test

Hay production is one of the most expensive activities related to livestock. Machinery, land opportunity cost, labor, fertilizer, and fuel all add up quickly. Good management is required to ensure hay cost is not preventing profit in your grazing animal enterprises. Because of the expense, why not gain as much information as possible about your harvested forage crop by testing for nutrition and digestibility? Accurate estimation of hay quality starts with obtaining a representative sample of the forage to be fed.

Proper sampling technique is critical. A representative sample starts with cores taken with a properly designed hay probe. Collecting grab samples or bale flakes does not provide a representative sample. Bale probes should have an internal diameter of at least $\frac{3}{8}$ inch. A more narrow diameter may move between flakes or layers of hay and may not provide an adequate representation of the leaf-to-stem ratio of the forage. The probe should have a tube length of at least 14 inches, and ideally 15 to 18 inches. The deeper into the bale the sample is collected provides better data.

Hay should always be sampled in lots consisting of hay made from the same field and cutting. A lot should not represent more than 200 tons of dry matter. In the event that a lot exceeds 200 tons of dry matter, multiple samples should be taken, and forage quality results

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should be averaged to represent the overall lot. Delay sampling until three to four weeks after baling for hay stored out of the weather. During this period bales undergo the heating or sweating process and forage quality can decline. For hay stored outside, it is best to delay sampling until three to four weeks prior to feeding to account for weathering that occurs after harvest.

For round bales, remove weathered exterior hay from the area to be probed. Weathered hay is unlikely to be consumed and should not be included in the sample. After the lot has been sampled, the entire sample should be placed into a labeled plastic bag and sealed. The sample should be sent immediately to the lab for analysis. In cases where the sample is not immediately submitted, store the sample in a cool, dry place that is not in direct sunlight. Complete the sample submission form for the lab that you are using. There are several labs that provide testing services. Local - Waters Agricultural Labs, state - Kentucky Department of Agriculture, national - Dairy One Labs, all provide hay testing services used by farms in our area.

Sample baled silage in the same manner as hay. Delay sampling until at least four to six weeks after harvest to allow the fermentation process to finish. Samples should be placed into labeled plastic bags as previously described and any air should be pressed out before sealing. Submit the samples immediately or refrigerate until shipped. Remember to immediately repair holes in plastic wrap caused by coring using UV-resistant tape designed for silage film.

The key points are to always collect hay samples by coring hay bales with a sampling probe designed for hay. Always sample hay in lots. A lot consists of a harvest-field combination. Delay sampling for dry hay stored inside for three to four weeks after harvest. Delay sampling for hay stored outside until three to four weeks before feeding. Collect 20 cores

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per hay lot. Core square bales from the end and round bales from the side. Delay sampling baleage for four to six weeks after baling to allow fermentation to finish. Refrigerate baleage samples prior to shipping. Repair holes in silage film with UV-stabilized tape designed for silage wrap.

Grain Market Update Meeting

Dr. Grant Gardner, the new Extension Grain Marketing Specialist will be at the Daviess County Extension office Wednesday, June 14 at 7:00 p.m. to discuss the profit outlook for this year given the decline in new crop prices from the winter. He will discuss the fundamentals of the grain markets and what we may expect from the upcoming USDA reports. He will also explain the effect increasing interest rates will have on storage costs for the 2023 harvest.

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