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# Hay: Weigh, test and sample before you buy

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MOUNT VERNON, Mo. – Weigh, test and sample hay before buying or selling, says University of Missouri Extension livestock specialist Eldon Cole.

Beef producers rely on good-quality hay to boost profits. “Unfortunately, our hay production is not always the greatest quality,” Cole says. “The category we excel in is ‘other grass hay’ – specifically, cool-season grass or mostly fescue. Missouri growers often harvest hay past its peak. As far as high-quality hay, such as alfalfa, we end up around 20th place most of the time.”

On top of that, Missouri ranks second in the nation in 2019 carryover stock that may have been stored poorly.

Cattle producers face uncertainty in buying hay because there are no uniform standards for Missouri’s No. 1 grass, fescue.

Cole says his search for fescue hay prices in various farm magazines turned up empty. “The closest I found was fair-quality mixed-grass hay at \$40 to \$50 per large round, or \$20 to \$40 per 4-by-5 round bale. Those reports were from the Missouri Weekly Hay Report.” A late-July report shows fair-quality mixed hay per “large” round bale sold for \$20-\$50.

There is a grading system for alfalfa that helps buyers make better decisions. A recent report from Kansas showed that buyers were paying \$1 per relative feed value (RFV) point in alfalfa hay. For example, buyers paid \$142 per ton for alfalfa with an RFV score of 142.

When buying hay, Cole says you should check three things:

- 1. Weigh a few bales on a scale.** Not all big round bales weigh 1,000 pounds. Most weigh less than that, so you could be paying more per bale than you should. Bale size and density matter.
- 2. Core sample 10-15 bales.** Send samples to a lab for analysis of moisture, fiber, energy and protein. The test will show the RFQ (relative forage quality) and help with ration balancing. Knowing these numbers will help you arrive at a fair price. Cost is about \$25.

**3. Look for hay that has been stored properly.** Buy hay that has been stored in a barn as a first choice and hay that has been wrapped as second. Whatever you choose, store hay that you buy in a covered location. Locate your feeding area in a well-drained open area with easy access for feeding to reduce waste.

“The greatest expense cattle producers face each year is forage cost, whether it’s pasture, hay or haylage,” Cole says. “Use a sharp pencil to evaluate whether to raise your own hay or to buy it.”

### **Inventory hay pastures, stockpiles now**

MU Extension beef nutritionist Eric Bailey says now is a good time to inventory pastures and hay stockpiles to determine how much hay you need for winter feeding. Keep enough bales on hand to create a balanced ration to your herd’s nutritional needs.

Consider the size of the cow, its lactation status and forage quality to calculate your per-cow daily hay needs.

“Allow yourself flexibility,” Bailey says. “If you plan on feeding for 90 days, plan for 120 days.”

### **Cheap feed may not be cheap in long run**

Not all bales are created equal, Bailey says. Weights and nutritive values vary. The lower the nutritive quality, the more supplementation will be needed, and this adds to winter feed costs.

“Overestimating bale density is a common mistake,” he says. “Assume your bale weight is 10% less than indicated.”

He uses guidelines offered by Kansas State Extension agronomist Keith Martin. Most round bales will contain 9-12 pounds of dry matter (DM) per cubic foot. Loose, spongy bales will likely have a density of 9 pounds DM per cubic foot or less. Bales that deform slightly when pressed or spiked will likely have 10 pounds DM or less. Rigid bales that deform when pressed hard will likely have 11 pounds DM per cubic foot. Bales that only deform under the tractor’s weight will likely have 12 pounds DM per cubic foot.

Feed costs account for 60% of a beef cow enterprise. Knowing the quantity and quality of hay you buy or grow directly affects the bottom line, says Bailey.

The Missouri Department of Agriculture offers a directory that lists hay availability by county at [apps.mda.mo.gov/HayDirectory](https://apps.mda.mo.gov/HayDirectory).

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