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Tips for High Quality Hay Production

This is the time of year when most of us yearn for something new and have a restlessness that is itching to get outside and do something. Some call this seasonal restlessness "spring fever." Particularly for people in the livestock business, this is a real malady. Not only are we eager to see things green up and grow, our livestock are equally eager to enjoy those juicy green morsels. Soon there will be ample forage with surplus available, and that surplus is what savvy producers preserve for future use. How is it preserved? Through drying.



Rebekah Norman, Extension Agent III

Hay is, simply put, dried forage. Hay is the way we save extra grass for later feeding when grass is in short supply, typically through the winter months. Saving forages for later use by making hay is a good practice, but keep in mind that anything fed is only as good as the nutrients it supplies. All hay is not the same in nutrient quality, although most of it looks similar.

What can the forage/hay producer do to maximize the quality and value of the hay produced?

There are three R's to Consider:

#1 Cut hay at the RIGHT maturity

The biggest single factor in determining initial quality of hay is cutting the hay when grass is at its best nutrient quality. Remember that hay cannot be better than the grass that was cut. Any forage is at peak quality (think maximum nutrient content) before its reproductive phase of life. Once you begin to see seedheads forming, quality is declining. Bottom line: cut forage in late boot or early seedhead development. "Boot" is forage lingo describing when the seed head is fully developed within the leaf sheath just before it emerges.

#2 Cut hay at the RIGHT time

Remember that moisture is the enemy to drying forages. The quicker the forage can dry down to approximately 90% dry matter, the better for hay quality. Typical time from cutting forage to baling with Tennessee's humidity is around three to four days. The right time to cut, or the best time to cut, is a window of time that will allow maximum drying in the shortest amount of time. Keep in mind that in Tennessee with our usual ample rainfall, this is easier said than done.

Particularly in the spring and early summer months, it is common to have a difficult time finding a three to four- day window of time in which dry weather is forecasted. Remember also that as a producer is waiting for this window of time, forage maturity is not conveniently stopped and waiting for the cutting window. Plants continue to mature—which is why making hay in Tennessee is not for the faint-hearted!

#3 Store hay in the RIGHT way. Remember that moisture is the enemy to quality hay. This rule does not only apply while making hay, it applies to keeping hay. Anytime dried hay gets wet, nutrients are washed out of the hay. Much of the nutrient content of hay is within cells. When grass is dried to stabilize its quality, cell walls crack. Because of this, if hay gets wet, there are many open sluices in the cell walls to permit the water to wash those valuable nutrients right out of the hay. One of Extension's specialists, long retired, used to say that "many have paid for a hay barn that they never built." What he meant was that so much hay had been lost due to getting wet, that the value of that lost hay could have easily covered the cost of building a shed in which to place hay and keep it in the dry.

There is considerable investment in growing forages and in owning, maintaining, and running the equipment necessary to make hay. It just makes sense to maximize that investment, as much as mother nature allows, by remembering the three R's: Right Maturity, Right Time, and Right Way.

For more information on backyard bird biosecurity, please call your UT/TSU Extension office at 615-898-7710 office or visit our website at rutherford.tennessee.edu.

