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AGRIVIEW

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When pasture growth is scarce, it is necessary to provide some type of stored feed for grazing animals. Hay offers a number of advantages. It can largely be mechanized; it stores well when adequately protected; and it can meet the nutritional requirements of most classes of livestock.

Hay fits well with a grazing program because accumulated forage can be cut for hay during periods of excess growth, thus minimizing waste. Harvesting excess growth also results in the subsequent production of young, tender forage regrowth for later grazing.

Perennial hayfields are normally in use for many years, and a poor start may have a negative impact for years to come. The goal should be a thick, vigorous stand of an adapted, productive forage variety. To achieve this, it is necessary to plant an adequate quantity of high quality, weed-free seed or vegetative material of an adapted variety.

Yield is important in obtaining economical hay production, so it is essential to lime and fertilize hayfields according to soil test recommendations. Weeds and insects should be controlled with management and/or pesticides as appropriate.

The two most important criteria used in evaluating hay quality are the CP content and the energy value. Though both are important, low digestible energy is usually the main

limiting factor in Southern livestock rations. Therefore, the emphasis with regard to forage quality of hay should generally be on improving the digestible or available energy value.

Factors that can influence hay quality include: plant species, plant variety, weeds, insect damage, diseases, weather at harvest, and harvesting techniques. However, once a hayfield has been established, hay quality is most likely to be affected by two other factors, both of which are under the control of the producer: fertilization and stage of maturity at harvest.

Nitrogen fertilization will, up to a point, increase the protein content of grass hay. Fertilization with other nutrients such as phosphorus, potassium, magnesium and sulfur, may also influence the amounts of these elements that are present in forage as well as other quality factors.

Periodic soil testing followed by applying the recommended nutrients will allow the levels of specific nutrients in forage tissue to be adequate for animals. Fertilization may also improve hay palatability to animals and thus influence animal performance by increasing intake. Although important in obtaining good hay yields, fertilization normally has little or no influence on the energy level of hay.

The single most important producer-controlled factor influencing hay quality is stage of maturity at harvest. This is where many livestock producers can most easily and dramatically improve hay quality.

The state of maturity at harvest influences the palatability, CP content, and especially the digestible energy level. In general, the best time to harvest for a good yield as well as high energy and CP levels is in the bud to early bloom stage for legumes and in the

boot stage (just before seedhead emergence) for grasses.

If a producer waits until past the recommended stage to cut hay, the fiber content increases, and palatability and digestibility decline. Waiting until later will increase the number of bales or tons of hay produced, but nutritive value decreases.

In addition to requiring more fuel, time and labor to store the hay, the further past the optimum stage that hay is harvested, the poorer animal performance will be because of low digestible energy and high fiber. Poor performance will be because of low digestible energy and high fiber. Poor quality hay passes more slowly through the animal's digestive system, causing lower intake of low quality hay, which further reduces animal performance.

Thousands of tons of hay have been harvested too late or rain damaged because of equipment problems. Before beginning the harvesting process, all hay equipment should be checked and serviced. This should include sharpening blades, checking belts and lubrication.

The Trinity Valley Forage Field Day will take place on Tuesday, May 13th at Partin & Partin Heart Bar Ranch located at 3159 FM 837 in Bradford.

The field day is being sponsored by Anderson and Henderson County Beef and Forage Committees and Texas A&M AgriLife Extension Service. Registration will begin at 4:45 p.m. with the program starting at 5:30 p.m. Forage production and harvesting demonstrations which will include hay equipment, baling, haylage, tractors, gopher baiting & machines, hay transport, weed control & fence line brush and farm & ranch ATV's. Tractor implement dealers will be on hand demonstrating their equipment. 1 continuing education unit will be provided towards the recertification of private, commercial and non-commercial applicators

license. Cost of the program is $15.00 per person which includes a barbecue dinner.

Directions to Partin & Partin Heart Bar Ranch from Athens, head south on Hwy. 19 to Bradford, in Bradford turn right on FM 837. The ranch is 3.2 miles on the left.

Working together is a proud heritage on the Partin Ranch, whether it's making hay or working cattle, family members do the work themselves. The Partin's run a registered Brahman ranch and commercial cattle operation that is still meeting the demands of the cattle industry after seventy years.

IMPORTANT DATES:

May 13th - Trinity Valley Forage Field Day - Partin & Partin Heart B Ranch - $15.00 - 5:30 p.m. - 1 C. E. U.

May 20th - Farm & Ranch Tour - Buses depart Cain Center 9:00 a.m. - $5.00 Lunch - Tour Free

Rick Hirsch is the Henderson County Extension Agent - Agriculture for the Texas A&M AgriLife Extension Service. Visit our web page at http://henderson.agrilife.org/.