

# 1. Hay Quality

Hay quality is critically important, especially for animals having high nutritional requirements, and the ultimate test of hay quality is animal performance. Hay quality is considered satisfactory when animals consuming it perform as desired. For anyone who is producing, feeding, buying, or selling hay, forage quality should be a major consideration.

Factors which affect hay quality include: growing conditions, fertility, species, varieties, pests, presence of weeds, harvesting, curing, handling, and storage. However, the stage of maturity when harvested is the most important factor and the one where management can have the greatest impact.

As plants advance from the vegetative to the reproductive stages, fiber and lignin increase, while protein, digestibility, metabolizable energy, and acceptability to livestock decrease. Early cut hay makes a more desirable feed because it contains more nutrients. Hay cut at an early stage of maturity is also more palatable and is more readily consumed by livestock. <sup>1</sup>

## 2. Evaluating Hay Quality

Several methods exist for evaluating hay quality: visual, chemical, near infrared reflectance spectroscopy (NIRS), and animal performance. Visual estimates can help, but vary considerably. Descriptions based on the estimates show high quality hay to be early cut, leafy, soft, free of mold and foreign material, and having a pleasant odor. Color can be misleading, because hay having a bright green color may be mature and fibrous, while faded hay may often have excellent nutritional value.

The most precise way to determine the nutrient content of hay is through laboratory analysis.

If a representative sample is taken and analyzed for nutritive content, the results can help determine how much and what type of supplementation, if any, is needed in order to meet the nutrient requirements of the animals being fed, and to obtain the level of performance desired. This leads to efficient and economical feeding programs. <sup>2</sup>

### 3. Quality vs. Price

When purchasing hay, quality should be your #1 concern. A detailed analysis of the hay helps evaluate quality, such as the RFV factor, giving you a quick reference to compare one seller's hay to another. Many people opt to buy a cheaper, lower quality hay at \$3.50 per bale instead of spending a little more on a higher quality hay at \$5.00 or \$6.00 per bale. These buyers don't realize that, for example, they would have to feed 4 to 6 flakes of cheap hay to an animal to meet the nutrient requirements that could be found in only 2 to 3 flakes of a higher quality hay. In addition, feeding a higher quality hay results in more efficient conversion of nutrition for your livestock and also greatly reduces the amount of grain needed to supplement an animal's forage intake. With cheap hay, your animal converts less nutrition, and you feed more hay and more grain, which results in more dollars out of your pocket.

#### Reference

1. Minimizing Losses in Hay Storage and Feeding, National Forage Information Circular 98-1
2. *ibid.*