INDICATORS OF HAY QUALITY
Katie Mason, Ph.D., Extension Beef Cattle Specialist
University of Tennessee Institute of Agriculture

You may be familiar with the phrase, “if you don’t test, it’s just a guess.” This applies directly to hay quality. The only way to know the exact nutrient content of hay is to conduct a test. A forage analysis is a relatively inexpensive way to ensure hay quality and develop a subsequent supplementation strategy, which in the long run can save money on your feeding program. While a test is the only sure way to know the nutrient content of a forage, there are some visual indicators of hay quality as well. These are not to be relied on as true “measures” of nutrient content, but may provide some clues as to what “good” hay might look like and whether your cattle will benefit from eating it.

- **Leafiness:** The most digestible portion of a plant is the leaf. Plentiful leaves attached to stems will provide greater nutrients to the animal.

- **Maturity:** This is the number one determinant of nutritive value! Plants that are more mature have greater fiber content, meaning less digestible energy. Over-mature hay will contain many stems and seed heads.

- **Odor:** Sour or musty odors may indicate spoilage or the presence of mold. If it smells bad to you, it’s likely your cows won’t like it either.

- **Color:** Not a reliable indicator of quality! High-quality hay isn’t always “greener.” Color has more to do with the curing process than quality itself.

- **Softness:** Hay texture can influence intake. If the hay is brittle or “pokey,” cattle may consume less. This can also be an indicator maturity.

- **Purity:** Pure hay, meaning little to no weeds are present, is more consistent in terms of quality, making it easier to feed and market. However, there is a place for mixed hay in livestock feeding. As long as toxic weeds are not prevalent in the hay, species is less of a concern when it comes to quality.

- **Bale Condition:** Uniform size and shape makes for easier storage. Hay that has been properly stored will have less loss/wastage compared with hay that has been stored improperly.

- **Contaminants:** Look for toxic weeds, trash, dirt, and mold. These reduce feeding and economic value of hay.

Why is all of this important in the first place? Matching hay nutrient content to the nutritional needs of cattle can be helpful in ensuring the most effective and economical supplementation strategy from a nutritional value standpoint. You know what they say about assuming… don’t guess, test!