Winter is a Good Time to Evaluate Hay
Storing and Feeding Management
James B. Neel
Professor and Extension Beef Cattle Specialist
Department of Animal Science

Hay is the winter feed for 92 percent of Tennessee cow-calf producers. Hay is also one of the most expensive items in a cow-calf operation. Lots of the hay that is harvested is lost during storing and feeding. During winter feeding, producers should be able to see the losses that occurred during storing and feeding. Bales stored outside on the ground and uncovered can lose up to 40 percent of the harvested hay. Losses occur by water getting into the bales. Water takes nutrients from the hay as well as creates mold.

A large number of bales are still fed with cattle having unlimited access. This can result up to another 40 percent loss. Feeding bales in rings can reduce losses to 2-6 percent. Provide adequate rings so that all cattle can have access to the hay. When not enough rings and spaces are provided, the old and young cattle stand in line for their time to get to the hay. When they do get to the hay, they find that the higher quality forage has been consumed and the “stems and sticks” are left. Poor hay management in storing and feeding is amplified during the winter and should be a teachable moment. Producers should always remember that hay losses are also profit losses.

1. **Maintain good bale density.** Tightening the bales is one of the most important ways to reduce losses. If the bale is not tight enough, microbes are going to use oxygen to break down the bale along with moisture damages.

2. **Cover the bales or store under sheds.** Round bales stored outside and covered with either plastic or canvas generally have fewer losses than bales unprotected. Bales exposed to the weather can experience reduced forage quality, particularly digestibility.

3. **Select a good storage site.** The storage site should not be shaded or under trees. It should also be well-drained to reduce moisture absorption into the bales. Rocks, railroad ties, pallets, tires, or a layer of crushed stone about 4 to 6 inches deep will enormously aid in reducing moisture absorption. Contact with the ground can result in up to 50 percent of the dry matter loss.

4. **Place the rows of bales to allow good drying.** Rows and bales should have 3 feet between them. Also, orient the rows north and south to allow optimum drying.

5. **Feed the hay stored outside first.**

---

Limit Feeding Hay Can Stretch
Supply and Cut Cost
James B. Neel
Professor and Extension Beef Cattle specialist
Department of Animal Science

Cow-calf producers with limited feed resources may be able to stretch their winter feed supply and meet the nutrient needs of their cattle by limit feeding hay. Compared to allowing access to hay fed in rings intake may be reduced 20-25 percent. Cows that have free access to hay in rings can consume up to 30 pounds of hay. Whereas, if limit fed, the volume can be managed by the producer. Hay can be unrolled and feeding bales on the ground. The advantage in this situation is to feed only what the cows need and can be consumed in a short period of time.
If producers are unable to unroll, feeding in hay rings is a way of reducing waste. However, some of the rings can waste up to 20 percent of the hay. Cone feeders are more expensive, but the waste is reduced to 4-5 percent. Was it Ben Franklin that stated, “A penny saved is a penny earned”? The same principle applies here, but with $80 per ton hay, a 20 percent waste would add up to having to feed an extra 400 pounds of hay with an added cost of $14-$16 per cow. Wonder what old Ben would say about the money lost?

**Have Your Cake and Eat It Too: The Decision to Background**

*Andrew P. Griffith*

*Assistant Professor in Extension and Livestock Marketing Specialist*

*Department of Agricultural and Resource Economics*

Should I sell my calves at weaning to capitalize on the currently high prices, or should I wean and background calves? This has been the question of the year. For the past 12-15 months, producers could have increased returns by weaning calves, adding weight, and providing a health program. The reason adding weight has been profitable since fall 2013 is because cattle prices have only increased since that time period. As cattle markets head into the fall marketing period, producers should be asking themselves the same question.

The first question to answer is if the land, feed, and capital resources are available to wean calves and if a health program can be instituted. Assuming the answer is yes, the next question is if weaning and adding weight to steers and heifers this fall and winter is a profitable decision. The profitability question hinges on feed cost, animal performance, current cattle prices, and future cattle prices.

Feed cost and animal performance are tied closely together. Underperforming cattle can get expensive, so it will require a producer’s experience to know if the cattle grow efficiently. Feed cost should be in cattle producers’ favor for at least the next 12 months as record corn production and relatively low corn prices are expected this fall. Most cattle producers who are able to wean cattle on pasture with grain supplementation should probably experience a cost of gain between $50 and $70 per hundredweight. Based on Kansas State’s “Focus on Feedlots,” the average cost of gain for steers is about $90 per hundredweight while heifers are closer to $98 per hundredweight. Thus, cow-calf producers with forage should be able to grow cattle at a lower cost than a feedlot.

The major factor encouraging cattle producers to market calves at weaning is the strong price for lightweight calves relative to previous years. It can be difficult for producers to forgo a paycheck of $1,200 to $1,300 per head for 550-pound steers when it is $400 to $500 more per head than they have ever received. However, 750-pound steers are bringing about $1,500 per head. That means there is at least a value of gain of $1 per pound for the 200 pounds of gain from 550 to 750 pounds. The key uncertainty in this equation lies with what feeder cattle prices will do during the time period in which cattle are being grown from 550 to 750 pounds. Producers should take this uncertainty into account when making the decision to wean and background calves. Additionally, there is a top to the market price in the short-run, and if that mark has been met then risk increases even more.

This is where a producer can have their cake and eat it too! Producers have tools available to capitalize on high prices as well as additional weight gain. One option is a forward contract. A forward contract allows a producer to forward price cattle prior to weaning or delivery and is commonly done on farm or through video and Internet sales. The use of forward contracts decreases price risk, but it often increases production risk because it can be difficult to estimate the number of head available for sale and even more difficult to estimate the weight for a specific date in the future. Producers also need a strong understanding of how shrink, weighing conditions and price slides can impact the value of cattle priced using a forward cash contract.

A second option is the use of Livestock Risk Protection insurance (LRP). LRP provides a method to establish a floor selling price for cattle and protects against catastrophic price declines for a given premium payment. On the last day of August, feeder cattle producers could have established a floor price $6 per hundredweight below the expected cash price for about $24 per head for a 750-pound steer to be marketed at the end of November. Similarly, a producer could have established a floor price $6 per hundredweight below the expected cash price for about $30 per head for 750 pound steers to be marketed the last week of January. Thus, producers can grow calves to heavier weights this fall and winter and still achieve strong prices if prices were to decline. That is how cattle producers can have their cake and eat it too!
Scout Fields for Weeds This Winter

Gary Bates
Director, UT Beef and Forage Center

Weeds are often one of the major problems facing cattle producers across Tennessee and the Southeast. Not only do weeds reduce the quality of the forage available to grazing animals, but they can dramatically decrease forage production by competing for light, water and nutrients. Controlling weeds is a primary step in a profitable forage program. To develop an effective weed control strategy, incorporate the following steps:

1. **Fertilize and lime according to soil test.** Many of the weeds found in pastures begin to dominate due to a lack of competition from the existing forage plants. Increasing the pH or providing adequate nutrients will increase the vigor of forages such as tall fescue and clover. This in turn will decrease the ability of weeds to totally dominate a field.

2. **Scout the field to determine weed pressure.** The cool-season weeds that become such a problem during spring actually germinate and begin to grow during the fall. November is a great time to walk across a pasture or field and determine how much weed pressure you will have next spring. If you wait until May, you will be too late. Late fall is the best time to scout your fields.

3. **Determine which herbicide you need.** The correct herbicide to spray will depend on the weeds that are present. Some weeds, such as buttercup and thistle, are controlled easily with an application of 2,4-D. Other weeds may be difficult to control and need stronger herbicides such as Grazon Next or PastureGard. The only way to know is to identify the weed and select the appropriate herbicide. If you aren’t the best at weed identification, contact your local Extension agent for help. An agent can also provide the current herbicide recommendations.

4. **Apply herbicide during warm weather in winter.** There is a relatively long window to apply herbicides to kill winter weeds. December to early April is the timeframe. The only limitation is temperature. Prior to spraying, there needs to be three days of at least 60 F high temperature. This will ensure that the weed is actively growing and will have adequate herbicide uptake to kill the weed. If a week of warm weather comes through in December, then go ahead and spray. If not, wait until sometime later in the winter. Just make sure to spray before the weeds begin to bloom. If you wait that late, weed control will be dramatically reduced.

Following these simple steps will help keep weeds under control in your pastures and hay fields. It is safe to say that everyone wishes weed control was a one-time thing. Reality is that to keep weeds under control, you have to be vigilant and keep an eye on how the pasture is growing and the level of weed pressure.

Add Clover to Fescue Pastures and Hay Fields for Improved Cattle Performance

James B. Neel
Professor and Extension Beef Cattle specialist
Department of Animal Science

It is not too early to make plans to renovate fescue pastures and hay fields. Establishing and maintaining clover and legumes in fescue pastures is the most significant practice to result from more than a half-century of research to improve cattle performance of cattle consuming the fescue. This practice is essential for both cow-calf and stocker cattle producers. Under Tennessee’s environment, adding clover to fescue pastures should be done between February 15 and March 15. Following are some positive forage and cattle production practices as to why renovating fescue pastures should be carried out on an annual basis.

- Improves quality of hay or pasture.
- Improves yield or volume of forage available for either grazing or harvesting.
- Reduces the amount of nitrogen fertilizer that needs to be purchased.
- Reduces the amount of protein supplement that would need to be purchased.
- Improves the brood cows’ reproductive performance.
- Improves milk production of the dams.
- Calves gain faster and produce greater market weight.
- Calves will have an improved appearance and market price.
- Stocker cattle will make rapid gain during the spring and summer when running on pasture.
Renovating fescue pastures and adding legumes is basic practice for cattle production in Tennessee and the upper Mid-South. If needed, renovate about one-third of your pasture and or hay fields this winter and early spring. Start the planning now in order to be ready for mid-February.

**When Will Master Beef Production Be Taught in My County?**

This is a question that is frequently asked by Tennessee cattle producers. Information regarding the schedule can be secured from the county UT Extension office. Other sources include the Department of Animal Science website at ag.tennessee.edu/animalscience or the UT Beef and Forage Center site at utbfc.utk.edu (click on the Advanced Master Beef tab).