



# BEEF CATTLE TIME

Vol. 26, No. 3

Summer 2008

## Preparing for New Seedings

*Gary Bates, Professor  
Plant Sciences*

The first step in successful pasture management is to have a good stand of grass. If the stand is thin, management will be much more difficult, due to decreased forage production and increased weed pressure. Since having a thick stand of grass is so important, establishment of a new stand is a critical part of pasture management. The first few months after seeding will determine the type of stand the pasture will start with. If attention is paid to a few details, a lot of time and money can be saved and considerable frustration avoided. Following are suggested pasture management practices that should aid in pasture establishment.

**1. Fertilize according to soil test.** Conditions in the field should be managed to favor the forage to be seeded. The first step in creating a favorable environment is to provide the nutrients needed for seed germination and seedling growth. An optimum pH, plus adequate nitrogen, potash and phosphate are required by the plant. The more acid the soil, the less these nutrients are available and the more conditions favor weeds over forage. Lime and fertilizer applications should be based on soil test results. For no-till seeding, if pH of a soil is below 5.5, apply lime at least six months prior to seeding to ensure adequate time for pH improvement, or conventionally establish the field, which will allow the lime to be mixed with the soil during disking.

**2. Plant August 15 to October 15.** Seeding date is very important for successful establishment of forages. Tall fescue is the most productive during the spring and fall, when temperatures are relatively cool and moisture is plentiful. Hot, dry conditions during the summer cause a somewhat dormant period for tall fescue. The response of a plant to environmental conditions will be even more dramatic when it is a seedling. Plants need to be seeded when temperature, day length and moisture favor the young seedlings.

**3. Plant 15-20 pounds of seed per acre.** The maximum production from a hay field or pasture can only be achieved if enough plants are present to produce the yield. If only half a stand of grass is present, no amount of fertilizer can be added to produce the maximum yield. It is important to plant enough seed to ensure a full stand. Take a few minutes before planting and check the seed flow rate through the seeder. With both broadcast seeders and no-till drills, mistakes can be made by planting too little seed, resulting in a poor stand due to a lack of seed, or planting too much seed, and having to buy more seed to finish the remainder of a field, resulting in wasted time and money. Calibrating the drill or seeder ensures that the proper amount of seed is placed in the field. Do not always depend on the seeding charts shown in the owner's manuals of drills, whether it is a rented or owned drill. As seeders get used, seed flow rates may change. It is useful to determine the seed put out over an acre, and then adjust the seed flow rate to meet the seeding recommendations.

**4. Plant when moisture is available.** Water is the most critical nutrient for plant survival. Without nitrogen, potash or phosphate, a plant might not be very productive, but it should still be able to survive. A lack of water will result in the plant's death. When using a no-till drill to plant forage, you must have adequate soil moisture. You are depending on the drill to slice open a furrow in the soil, drop the seed and then press the soil together for good soil-to-seed contact. If the soil is dry, it may be too hard for the disc openers to get into the soil, and soil-to-seed contact will be poor. A poor stand may result because seed was dropped on top of the ground instead of being placed in the ground.

A second reason adequate moisture is needed for successful stand establishment is because seeds need moisture to germinate. Often there is just enough moisture for the seed to germinate and begin to grow, but before the root system can get established, the seedling dries up and dies from moisture stress. Don't be lulled into thinking that just because you are able to drill or disk a

field, all problems are solved. Without adequate moisture, seedlings have no hope of getting established.

**5. Plant ¼ - ½ inch deep.** The first few weeks of a seedling's life are the most difficult. When a seed germinates, it must push its way through the soil to the surface so it can receive sunlight. Once in the sun, it can produce its own energy. Until that happens, it must depend on energy stored in the seed to grow. Tall fescue and orchardgrass should be planted between ¼ and ½ inch deep.

Following the steps listed above can help you start out with a thick grass stand, allowing it to be productive and profitable over the years.

## **Start Making Plans for Winter Feeding Now**

*Clyde Lane, Jr., Professor  
Animal Science*

Now is the time to start making plans for feeding the beef herd this winter. According to the USDA Agricultural Statistics Service on May 1, hay stocks were down 54 percent from last year and the lowest since 1962. Beef producers have cut lots of acres for hay since May 1; however, yields were down. The forage plants appeared to head out early before the normal amount of forage was produced. This reduced harvest yields.

Another problem was the wet weather during the normal harvest time. This resulted in a significant amount of hay getting wet before it could be baled, reducing the hay quality. In addition, many producers waited until the weather was more favorable, so the forage plants were mature at harvest and had a lower quality.

The question now is, what should be done next? First, make an inventory of the hay that has been harvested. Next, make an estimate of what will be needed next winter. Be sure to take into consideration animals that will be removed from the herd due to culling. The difference in the two amounts is what should be of concern. How can the deficit be made up?

At the time this article being written in early June, the prospect of limited rainfall during the summer seems a strong possibility. What are some ways to produce the remainder of the needed hay? First, look at dividing the existing pastures into smaller units. Start a rotational grazing program. If it turns extremely dry, it may be necessary to use all of the forage for grazing. If there is excess, then it can be harvested as hay. Next, consider planting a summer annual such as millet, Sudan sorghum or other grasses if there is enough available moisture.

Plan to stockpile some fescue if there is moisture available in August. Adding 60 units of nitrogen per acre and keeping the cattle off the pasture can delay the start of winter feeding. Don't forget to use any available crop residues, even if this requires some extra fencing to be constructed. Later in the fall, it may be desirable to plant some wheat, rye or ryegrass for winter grazing.

The idea is to reduce as much as possible the amount of stored feed that must be utilized.

After going through a dry year in 2007 and not knowing what will happen the last half of 2008, it is critical that plans are made early for winter feeding. Most operations cannot afford to purchase expensive hay and grain again this year.

## **Add Value to Cull Animals**

*Clyde Lane, Jr., Professor  
Animal Science*

The decision to cull animals from the beef herd is always difficult. The potential for a short supply of feed for the upcoming winter adds another dimension to the culling decision. It appears that the culling decisions will result in only the most productive animals being kept in the herd. How can a producer get the greatest value for these cull animals?

Animals being culled should be in good physical condition at the time of marketing. Cows should be in a body condition score of at least 5 (1= very thin, 9 = very fat). "Thin" cows should be kept long enough to add some weight before marketing time. Cows with physical problems should be culled early enough to prevent marketing problems. Animals with cancer eye, arthritis or other health conditions should be culled when the condition first appears rather than waiting until the value of the animal starts to decline.

Downer cows will not be accepted at markets. With the change in inspection rules that prevent cows that become downers at the slaughter plant from being used for human consumption, buyers are going to be less willing to pay a reasonable price for cows that they feel may not be able to go through the marketing channel. Many times, just keeping these potential downers around for a little while to gain weight and strength may be a good option. This is extremely important as it relates to culling dairy cows.

Don't forget that transportation to market is critical in getting "a top dollar" at the market. Culls that are packed too tight on the trailer run the risk of an animal getting down or suffering an injury that will reduce market value. Also the tight packing may result in the animals getting more manure on them, thus making them less attractive.

Animal welfare is something that most beef producers do not think about unless there is a story on the news. Practicing good management and animal care contributes to good animal welfare. Cull animals that are handled properly will not cause animal welfare issues at the market and will add to their value.

## What Do You Mean the Highest-Price Feed May Be the Most Economical?

*James B. Neel, Professor  
Animal Science*

This was a question that came up at a recent cattle producers' get-together. "I can buy 20 percent cubes at \$275 per ton and that high-priced stuff will cost me \$350 per ton. That's \$75 per ton less for the 20 percent cubes."

The "high-priced" protein supplement contained 48 percent crude protein. My reply was, "You will get more crude protein per ton of feed and it may actually be more economical with the 'high-priced' supplement."

In purchasing any supplement, producers should determine the cost per pound of nutrient delivered to the farm. For example, the 48 percent protein supplement would contain 960 pounds of crude protein per ton. With a cost of \$350 per ton, a pound of crude protein would cost 36 cents per pound.

The 20 percent cube would contain 400 pounds of crude protein per ton and the actual cost per pound of crude protein would be 69 cents per pound.

If a producer needed to provide an extra 1.0 of crude protein supplement to a hay ration for beef cows, it would take about 2.0 pounds of the 48 percent supplement to meet the needs. This amounts to 35 cents per day to provide the needed supplement. To meet the needed protein with the 20 percent supplement, 5 pounds of this feed would be needed and would cost 69 cents per day.

The total cost for a protein supplement for a 100-day feeding period would be about \$36 with the high-priced supplement (48 percent) and \$69 with the low-priced supplement, a savings of \$33 per cow.

With an average Tennessee beef cow herd of 23 cows, this amounts to a total savings of \$759 per herd. The cow herd could be wintered on less cost with the higher-priced protein cube.

After going through the illustration, the producer left the discussion talking about what he could save, "Heck, I can save a lot more than that. I got nearly a hundred cows." Well, then feeding the "high-priced" protein supplement would be quite a savings. Remember, when purchasing feeds, always calculate the cost of the nutrient to the cow.

## Managing Price Risk in Your Cattle Operation

*Emmit L. Rawls, Professor  
Agricultural Economics*

Many beef producers give little thought to price risk, at least in the cow-calf business. However, all areas of the cattle business were hit with either lower prices than expected or higher prices for purchased inputs than usual. Most cow-calf producers remember what their

calves brought last year, or what they brought in the last sale. Price risk for calves and yearlings alike has reared its head frequently over the past three years. The first awakening occurred in the fall of 2006, when feeder cattle prices plummeted from August to November due to a dramatic rise in the price of corn. At least at that time, we thought it was dramatic.

Cow-calf producers often do not suffer the financial impact of a price decline as severely as stocker operators or those finishing cattle. Since these latter groups buy cattle, add weight and later sell the cattle, a significant price decline can hit them hard in the wallet. The past two years, calves bought in the fall for sale in the first quarter have taken a real price hit due to a significant rise in the price of corn early in the following year. Higher corn prices, other things being equal, most always mean higher cost of feedlot gain and lower feeder prices. Another aspect of price risk for feeder cattle has come from higher trucking rates. They mean lower prices in Tennessee and other points distant from feedlots, and there is little beef producers can do about it.

Price risk for feeder cattle can be managed in several ways. For larger producers, the feeder cattle futures and options markets can be used. The contract is for 50,000 pounds, so it is too large for many producers. Do not try to use the futures market with less than 50,000 pounds of expected production, as it will only increase risk should the market increase. Futures involve margin or earnest money and can be very disruptive of cash flow, if one is not financially prepared. Feeder cattle options are also for 50,000 pounds, but do offer protection from lower prices at a known cost while leaving the top open for higher prices. Option premiums can seem high, but there are different levels of protection with different costs. Basis, the difference in Tennessee prices and the 12-state feeder cattle index, is very important for those using futures, options or even the new Livestock Risk Protection insurance. The risk of missing the basis is less than the risk of the cattle price itself, but one needs to look at the history of basis and the recent basis. The higher trucking rates have caused the basis or price difference to nearly double in recent months. The latest basis information is available on the Internet at this address: [www.tnbeefcattleinitiative.org](http://www.tnbeefcattleinitiative.org) or by calling 1-800-345-0561.

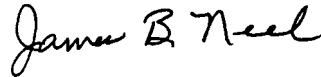
Livestock risk protection insurance is available through crop insurance agents. It can be bought for any number of feeder cattle, up to 2,000 in one crop year (July 1–June 30) or 1,000 per policy. There are different levels of insurance or coverage prices that can be purchased with higher coverage prices having higher premiums. There is a 13 percent government subsidy on the premium cost and the Risk Management Agency pays the commission to the insurance agent. Basis must still be considered to know which level of price protection one has purchased. The insurance payoff occurs if the feeder cattle price index is less than the coverage price on the ending date of the policy. Another important

feature is that the cattle cannot be sold more than 30 days before the ending date of the policy. There are several crop insurance agents in Tennessee selling LRP insurance, but beef producers are encouraged to become very familiar with the program before using it.

One other alternative for managing price risk is to forward-contract the cattle with a buyer. This can be done directly with a feedlot or cattle buyer or through a video board sale, which offers the opportunity to sell at auction for future delivery. Producers are also encouraged to do all they can to market their calves through some type of group marketing method. We have several graded sales, process-verified program (PVP) sales and alliance sales, all of which help one receive a better price for calves. Buyers will also be more selective on cattle, paying more for those with lower health risk and more predictable performance. Age and source verification will continue to be a part of a value-added package

as long as Japan wants beef from cattle under 21 months of age and perhaps beyond. Some believe that it adds credence to various value attributes of cattle as they move through the marketing system.

When it comes to managing price risk for feed, either growing it or forward-pricing with a feed supplier is probably the best alternative. While futures can be used to lock in prices and options can be used to protect against higher prices, the contracts are too large for most producers (5,000 bushels for grains and 100 tons for soybean meal).



James B. Neel, Professor  
Animal Science

## Beef Cattle Time

From:

---

Leader/Agent

Visit the UT Extension Web site at  
<http://www.utextension.utk.edu/>

THE UNIVERSITY of TENNESSEE

21M E12-4415-00-001-09 08-0175

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.  
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.  
UT Extension provides equal opportunities in programs and employment.