



# BEEF CATTLE TIME

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## Get Ready for Fall Plantings

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Even though it is July, the time to plant cool-season grasses will be here before you know it. Have you ever thought about the fact that anytime you plant something, there is only one good thing that can happen? You get a thick, competitive stand of whatever grass or legume you planted. This one good thing often gets overshadowed by all the bad things that can happen. Too little rain, too much rain, ground too soft, ground too hard, too hot, too cold, and on the list goes. The following steps will improve your chances of getting a good stand established.

**1. Fertilize and lime according to soil test results.** Don't have a stand failure because the pH was too low or adequate nutrients weren't available. Take a soil sample and have it tested well ahead of planting in case lime is required.

**2. Plant into a weed-free field.** Prior to planting, make sure that everything in the field is killed, either through disking or by using herbicides. Planting seed into a field with weeds present puts the new seedlings at a severe disadvantage and can result in establishment failure.

**3. Plant into moist seedbed.** Seed need to absorb water in order to germinate. Planting into a dry seedbed will mean that rainfall is needed before any germination begins. Hot, dry seedbeds can result in seed viability decreasing rapidly after planting. Be sure that moisture is adequate at planting, which keeps you from having to pray for rain and reduces the risk for planting failure.

**4. Plant the proper amount of seed.** Don't just assume that the seeder you are using is putting out the proper amount of seed. Spend a few minutes prior to seeding to calibrate your seeder, particularly if it is a drill

that you have rented. This step will save you time and money by preventing all your seed being put on half of the field, or having to run over the field two or three times because it wasn't putting out enough seed.

**5. Check planting depth.** One of the biggest mistakes that can be made is placing seed too deep at planting. Putting a tall fescue seed at 1 inch deep will cut seedling establishment in half compared to planting at ½ inch. No-till drills are generally heavy to help cutting through the sod. They can place seed too deep, so check the depth of seed placement when preparing for seeding.

**6. Control weeds after planting.** Monitor the field after planting. If weed pressure is becoming too great so that establishment is in jeopardy, consider using a herbicide to eliminate the weeds. Contact your local Extension office for specific herbicide recommendations.

## What Is Your Marketing Plan?

*Emmit L. Rawls, Professor  
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What is your marketing plan? When I ask that question as I teach the marketing section of the Master Beef Producer course, I get some blank looks. Those looks may be because producers do not know what I want to hear, or because they think their plan would not measure up to some recommended plan. A common response is to say where they take their cattle to transfer ownership.

A marketing plan should answer the questions of what, when, how and where you plan to market your cattle. I like the first habit from Steven Covey's book, *The 7 Habits of Highly Effective People*: begin with the end in mind. What is the end product you plan on producing? Is it a calf weaned on the way to market when some cash is needed? Is it a weaned, preconditioned calf to be sold in a

special sale? Is it a backgrounded short or long yearling? Is it one or more registered animals to be sold to other registered breeders or commercial producers?

The first step in your marketing plan is to decide what breed or combination of breeds you plan to use. Planned crossbreeding has proven that it will result in more pounds of calf marketed per cow exposed to the bull. If you plan to retain calves for a period of time following weaning, maximizing weaning weight may not be the best alternative. First of all, a live calf is of utmost importance. The resource base is a key for determining whether you are going to wean the calves and grow them for some extended period of time. Is extra forage available? Are supplemental feeds available and at what cost?

When do you plan to market the cattle? Historically, prices are highest in the spring and lowest in the fall. If you are producing cattle with added value, when are there special sales so you can capture that value? While the number of graded sales in the state is smaller than many years ago, there are more sale opportunities for preconditioned cattle in Middle and East Tennessee. In addition, there are more sales on a year-round basis. That flexibility can be a real asset when weather and volatile prices impact the marketing plan.

The “when” question is also determined by when the calves are born. Some calve their cows in the fall when weather is more predictable and the calves can make use of grass come spring, even though it may take additional hay to winter the cows and calves. Others prefer winter/spring calving so the flush grass is available when cows are milking and need to be bred. A few calve in the fall and spring to get double use of their bulls and spread their production and marketing risk over time. So the “when” question needs to consider what the end product will be, the cost of producing that product, sale or marketing opportunities and expected prices relative to other time periods.

How will the cattle be marketed? We now have weekly auctions, graded sales, preconditioned sales, alliance sales, video sales and direct-from-the-farm sales. In Tennessee, graded sales are available nearly every month in most locations, and about 35 weekly auctions keeps things competitive in terms of services and marketing alternatives. Remember, buyers grade the cattle at weekly auctions and bid accordingly. Numbers of cattle offered and the ability of buyers to acquire loads of 48,000 to 50,000 pounds are key to capturing added value. Small numbers of calves, regardless of the value that has been added, will not bring all they are worth when sold in a less than load marketing alternative. Evaluate your alternatives, considering price, lot size or ability to be part

of a load offering; distance to market and wait in line; weight and shrink before sale weight is determined; and commission and services offered by the marketing agency.

If you can answer some of the questions addressed here, then you should have a marketing plan that will allow you to capture the value of what you have produced. It is a have-it-your-way kind of business. Here is hoping your way is a profitable way.

## **Make Plans to Immunize Your Cattle This Fall**

*Dr. Clyde D. Lane Jr.*

*Professor and Beef Cattle Extension Specialist  
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As you formulate plans for the fall health program, it is important to include steps that will insure that cattle are immunized, not just vaccinated.

It may seem somewhat confusing to differentiate between vaccinating and immunizing. Producers spend a lot of money and time injecting vaccines into their animals. That is vaccinating. Immunizing is being sure that the animal responds to the vaccine and will build immunity to a disease. Too many times animals are just vaccinated. There are many factors that determine if a vaccine actually works after it is injected.

First, let's take a look at the vaccine. To get a good immune response the vaccine must have as high a potency as possible. The way that a vaccine is handled from the time of manufacture until use can determine effectiveness. When purchasing vaccine, always ask the retailer (supply store, veterinarian, etc.) if the refrigeration unit used to store the vaccine is working properly and has maintained it in the recommended range of 35 to 45 degrees. Also, ask how the vaccine was delivered and if it was maintained at the proper temperature during delivery. Check the expiration date, and do not purchase vaccines that will expire before you will use them.

Next, be sure that you take proper care of the vaccine. Bring a cooler to transport the vaccine as well as something to place in the cooler to keep the vaccine from coming in direct contact with ice. Make certain your refrigerator is working properly. A study in Arkansas showed that only 27 percent of refrigerators used to store vaccines on farms stayed between 35 and 45 degrees for 95 percent of the time.

Handle vaccines carefully the day they are to be used. Keep them in a cooler and do not allow the bottle of vaccine to come in contact with the ice. Only remove the vaccine bottle from the cooler when filling the syringe and return it to the cooler immediately after. Place the filled

syringe in the cooler if you are not ready to use it. Only mix the amount of modified live vaccine that can be used within 30 minutes.

Other factors can determine if a vaccine actually immunizes an animal. Animals that have a comprised immune system cannot make effective use of vaccines. Also, be sure to handle animals as calmly as possible, not only when working them, but when gathering them. Do not use a “hot stick” unless it is the only option available. Increased stress causes vaccines to work poorly. Use clean syringes and needles, administer the proper dosage, and do not inject into dirty animals and try to work cattle when they are dry.

Some things mentioned may seem very elementary; however, it is extremely important that vaccines administered to animals cause an immune response. Animals must have a good level of immunity developed if they are to resist diseases for which they are exposed.

## **Start Evaluating Your Hay Supply Now**

*Dr. Clyde D. Lane Jr.*

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It appears that every year has its own unique characteristics that affect the winter feed supply for the beef herd. For many producers in Middle and West Tennessee, the early May flood created some very unusual circumstances. For most producers, the rainfall that has occurred every two to three days has created some challenges.

Both situations have had a detrimental effect on the hay supply for winter of 2010-2011. The flood caused the complete loss of some hay crops. Many producers had their yields and quality of fescue hay lowered because it headed out before there was a lot of vegetative growth present. The rainfall made the harvesting of hay very difficult.

All of these factors have lowered the amount and quality of feed available, so make plans now to compensate. The first option is to stockpile some fescue this fall to shorten the winter feeding period. If summer grasses are present, then some extra fertilization may be needed to get extra quality and yield. Another option is to reduce the number of animals to be fed. Also, purchase extra feeds that may be required early in the fall before the seasonal prices start their upward climb.

The good news is that there is a lot more hay available than there was during the drought years. The bad news is that the supply is somewhat short for some

producers and the quality is not going to be very high. These factors support the idea that plans for the upcoming winter need to be developed now.

## **Heat Stress and Reproductive Efficiency**

*Dr. Justin Rhinehart*

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The breeding season for spring calving cows should be coming to a close in these late summer months. This might seem like a good time to relax concerns for reproductive efficiency. In reality, reproductive efficiency can be significantly altered at this point and result in considerable economic losses. Especially since late embryonic/early fetal development can coincide with extreme heat. Pregnancy failure at this time extends the return to estrus beyond bull removal in a tightly controlled calving season.

Often overlooked is the fact that, in normal situations, fertilization rates approach 100 percent. So, if a normally expected single-service conception rate is 60 to 80 percent, the difference comes from embryonic or fetal wastage. Most of this loss occurs in the first few days of development and the estrous cycle is not extended past the normal 19 to 24 days. For beef cows, relatively little pregnancy loss occurs beyond the normal return to estrous. However, heat stress can increase pregnancy loss well past that point. To compound the problem, spring calves are often weaned and the cows worked at the hottest time of the year.

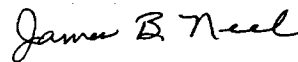
It is particularly important to remember that cattle have an upper critical temperature that is 20 degrees lower than humans. That means that when humans feel uncomfortable due to heat, cattle can be extremely stressed. Humidity adds to the problem by increasing the heat index and limiting the ability of cattle to dissipate heat. Fescue toxicosis is yet another factor in the Southeast that compounds the problem by limiting body heat dissipation.

When working cattle during the summer months, target days with a forecasted temperature between 80 and 85 degrees F and relative humidity between 30 and 40 percent. Begin working as early in the morning as possible and try to be done by 10 a.m. If there is no other alternative to working cattle during extended periods of extreme heat, schedule the work between the hours of midnight and 8 a.m. Working cattle in the evening can still be stressful because they have not had a chance to dissipate heat and reduce their core body temperature.

Also, remember that heat stress will increase water consumption. Increasing the ambient temperature from 70 to 90 degrees F can double water intake. So, it is important not to neglect the availability of a clean, fresh and cool water supply. Increased water intake leads to increased urine output that depletes mineral stores. Along with the water, make sure a balanced mineral supplement is provided.

Other ways to combat the negative effects of heat stress on reproductive efficiency include changing to a fall calving season or incorporating heat tolerant genetics. However, total pregnancy loss is not the only reproductive concern during heat stress. The efficiency

of the placenta can be reduced when heat stress coincides with late gestation, leading to decreased birth weights. More importantly, the seasonal nature of production means that weaning weights for fall calves are more often lower than their spring contemporaries. Altering genetics or the calving season should be considered in relation to how that will impact the value of the end product.



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## Beef Cattle Time

From:

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Leader/Agent

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