



BEEF CATTLE TIME

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What Do I Do With the Bull?

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Animal Science*

“What do I do with the bull?” This is a frequent question from cow-calf producers following a presentation on the importance of a definite breeding and calving season. In order to develop and maintain a short, definite calving season, producers must come up with an answer to this question as well as a plan to accomplish it.

In order to have a short, definite calving season of 60 to 90 days, the herd bull(s) must be isolated and managed separately from the cow herd for 275 to 305 days of the year.

Although it is a challenge, developing and maintaining a 60 to 90 day calving season is the first step and is essential for a profitable cow-calf operation. This is not “new,” it is basic. It’s not glamorous, does not require use of high technology and does not require any type of computer driven management program. In fact, it is essential to improving profits.

A short calving season is an integral part of breeding, management, herd health, heifer development, marketing and other programs that are essential for reducing cost and adding value to the calf crop. It just has to be done and producers are beginning to realize its importance.

The big reason why many cow-calf producers cannot take advantage of the “profit-producing practices” that come with a short calving season is that they do not have a pen or lot that will confine the bull from the cow herd for 9 to 10 months.

A pasture to maintain the bull should be at least 2 acres, well sodded and well drained. Fescue or Bermuda grass would work well. Fescue would probably provide more forage during the off-season than Bermudagrass. The forage should receive the appropriate management to maintain adequate nutrition. Shelter from the environment should also be provided as well as a clean water source.

“Have you ever tried to keep a bull fenced out from the cows? “Those bulls can sure tear up a fence.” These

are some additional comments from cow-calf producers on the challenge of keeping bulls isolated from the cow herd. An electric fence is normally required.

Clemson University beef cattle specialists have developed a method of fencing to maintain bulls separate from the cows. They suggest a 5-strand-high tensile fence with the first strand 10 inches above the ground and subsequent strands 10 inches apart, resulting in a fence that is 50 inches tall. The second, third and fifth strands are electrically charged. The first and fourth wires are attached to the ground. The Clemson specialists indicated that this has worked well.

Establishing a definite calving season starts with keeping the bull(s) away from the cows for 9 to 10 months of the year. Yes, it is a challenge, but it is essential for a more profitable cow-calf operation. It starts with a lot that will “hold” the bull.

Fall Fertilization of Pastures and Hayfields

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One of the key components of a successful forage production program is a solid fertilization plan. To produce the forage for grazing or hay, it is essential to provide the nutrients needed by the plants in adequate quantities. Usually, fertilization is considered a spring-time procedure. However, there are many reasons to consider making fertilizer applications in the fall.

- 1. Stockpiling of tall fescue.** Applying fall nitrogen to tall fescue can increase the growth for grazing during the winter. This can reduce hay feeding by one or two months.
- 2. Fertilizer is cheaper during fall.** Often fertilizer is cheaper at this time of year compared to spring. Also, since it is not the busy season, it may be easier to get it done.
- 3. If clovers are used, only one application is needed.** If clovers are utilized in tall fescue, no nitrogen is

needed during the spring. Since all the potash and phosphate required for a year can be applied at one time, applying both of these plus the nitrogen for stockpiling can mean that only one fertilizer application is needed each year. This can also reduce cost.

4. Improve cold tolerance of bermudagrass. Since Tennessee is on the northern border of the adaptation of bermudagrass, there is potential for winterkill for most of the bermudagrass in the state. A fall application of potash and phosphate will improve the cold tolerance of bermudagrass.

The following are points to pay attention to when fertilizing in the fall.

When to fertilize? For stockpiling tall fescue, fertilize after the fall rains begin, when the fescue has begun to regrow after the summer heat and drought. It is best to have the pasture grazed or clipped to remove all summer growth from the field

How much to fertilize? For stockpiling tall fescue, use approximately 60 pounds of nitrogen per acre. There is no way to know how much phosphate and potash to apply without current soil test results. The fall is also a good time to soil sample to determine the fertility status of pastures. Soil test results tell what nutrients are needed and how much to apply. No soil test means you are guessing at the amount of fertilizer needed. You may be spending more money than you need or not putting on enough of some needed nutrients. Take a soil test to be sure.

What to fertilize with? When trying to determine the best fertilizer to use, the biggest consideration is the form of nitrogen. The two main types of nitrogen fertilizer used in Tennessee are urea and ammonium nitrate. Urea is 46% nitrogen, while ammonium nitrate is 34% nitrogen. For fall fertilization, it is best to use ammonium nitrate because of the greater potential for nitrogen loss with urea during the fall. Nitrogen from urea can be lost to the atmosphere as ammonia when conditions are hot with moderate moisture. Temperatures 75 F or above, with high soil pH and moisture, can result in the loss of 20-30 percent of the nitrogen from urea when it is applied to the soil surface and not incorporated by rainfall. If urea is used for fall fertilization, apply it when rain is expected within 2-3 days. Otherwise, use a urease inhibitor to delay conversion of the urea to the ammonium form.

Fall fertilization is a management practice that should be utilized on most cattle farms in Tennessee. Because phosphate and potash are stable in the soil, a once-a-year application is adequate. Fall applying these nutrients fits nicely with a stockpiling program since nitrogen can be added with the potash and phosphate to make a balanced fertilizer application. Consider putting on your fertilizer this fall and using clovers next spring to provide the nitrogen you need for a solid forage production program. Be sure to fertilize according to soil test results.

Beef Producers Need to Start Preparations for Marketing of Calves

*Clyde Lane, Jr., Professor
Animal Science*

Adding value to feeder calves is always a topic of conversation among producers. The question is whether a producer can do things that will increase the value of calves. There are a number of things that can be done. These include implanting, deworming, fly control, creep grazing, preconditioning and weaning, and marketing.

First, every calf should have those practices performed that will optimize the marketing weight. One of the most obvious is implanting. Research and demonstrations have shown that a single implant can add an additional 15 to 25 pounds in approximately 100 days. Heifers being kept for replacements should not be implanted.

Deworming of calves should also be considered. Younger animals in the herd are more severely impacted by worms than older animals. Research has shown that deworming along with implanting works well to improve weight gains.

Controlling flies is not a practice to ignore when looking at things that will increase the value of calves. Animals with pinkeye, which is spread by flies, will have lowered gains. Research conducted at the University of Kentucky several years ago showed a 36-pound reduction in weaning weight for steers and a 40-pound reduction in heifers. In addition to the lower weights, animals with spots caused by pinkeye may yield a lower market price. The size of the spot will greatly influence the amount buyers are willing to pay. Calves with active cases of pinkeye will be severely discounted. If a producer has calves with active pinkeye, marketing should be delayed until the eyes have dried up. Keeping pastures clipped so grass seeds do not irritate eyes is also beneficial in reducing the spread of pinkeye since the irritated areas are ideal for introduction of the pinkeye organism.

Creep feeding will result in a heavier weaning weight. The question is whether the value of the extra weight will be more than the cost of the feed required to put on that weight. Creep grazing is a relatively inexpensive way to get the benefits of creep feeding. In this situation, a creep gate or other device is used to allow calves into a higher quality pasture without allowing the cows access. If a rotational grazing program is in use, the calves are allowed access to a pasture before the cows. The calves get the opportunity to select the best forage. When cows are rotated to these pastures, they get the remaining forage. This may seem bad for the cows; however, the remaining forage is more than adequate. Also the calves have not harvested all of the best feed. The real advantage of this program is the cost. Once the initial investment in constructing creep gates is made, the only cost is a little labor for opening up the next creep gate when cows are rotated.

Another way to add value to feeder calves is a 45-day preconditioning program. Buyers are generally willing to pay more for calves that have been weaned, have received “shots” for “shipping fever” and Clostridials, and taught to eat. A program of this type is neither inexpensive nor easy. Facilities to hold the animals during weaning plus feed and water troughs are required. Additional labor for administering the vaccines, treating animals that get sick and feeding is also needed. Additional high quality hay and grain mixtures are also required. Research and demonstrations have shown that animals will gain weight during this 45-day period.

Many producers are unwilling to attempt a preconditioning program because they have the perception that animals will lose weight. The program needs to run for at least 45 days to be profitable. This amount of time allows the calves to get over the stress of weaning and gain sufficient weight to cover the costs of the program.

Marketing preconditioned calves one at a time at the local livestock auction with buyers not knowing the animal’s history will not make the process profitable. Animals need to be presented to buyers in such a way that they know the calves’ histories. Special arrangements with the local market or special preconditioned sales should be used. The greater the number of preconditioned calves marketed at one time, the more buyer interest can be achieved and the greater the price received.

Even if calves cannot be preconditioned, producers can have an influence on the market price of their calves. Grouping similar type calves together will have a positive impact on price compared to selling singles. Producers should also contact their local market operator before sale day so buyers can be contacted. An extra buyer at the market on the day you sell your calves could mean several extra dollars.

Being profitable in a beef operation is more than just providing pasture and water to the animals. Performing recommended management practices, weaning and preconditioning, and aggressively marketing animals can add returns to the beef operation.

To Wean or Not to Wean?

*Emmit L. Rawls, Professor
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Feeder calf marketing season is approaching and may already be completed for some fall-born calves. All Tennessee calves get weaned either before or during the marketing process. There are no official figures, but probably half or more of the calves produced get weaned the day they go to market. If you doubt this estimate, just walk through a sale barn and look and listen to the bawling calves. Since cattle feeders and stocker operators prefer weaned calves that have had the “bawl” taken out of them, many folks in Tennessee and elsewhere make their livings buying single animals at the weekly markets and later marketing them as loads of uniform, vaccinated calves at somewhat heavier weights. The

calves have had a round of appropriate vaccinations and are generally grown to heavier weights for a period of 60 to 90 days, or perhaps longer, on mostly forage-based programs.

Why do producers sell unweaned calves? They offer many reasons including adequate fences and pens are not available, calves lose weight and can not make it up, and buyers will not pay for it. The bottom line is that producers believe they will not be paid for their efforts.

Several programs and special sales in the state now offer producers the opportunity to market calves that have been weaned, vaccinated and fed for 30 to 45 days. The feeding period teaches calves how to eat from a trough and drink from a water trough and, if adequately fed, allows them to gain enough weight to pay for the feed and vaccination materials. If properly marketed, their value will be increased. Ask your county Agricultural Extension agent for additional information on programs and special sales in your area. Over the past few years, these sales have sold specially prepared calves at good premiums over other market-run calves.

Before you start to count up the extra dollars, a couple of things need to be pointed out. First of all, about \$4 per hundred of any premium from calves sold in loads or near-load lots comes from the fact that there is a load. University of Tennessee data on 55,000 head collected by Tennessee Department of Agriculture market news reporters and analyzed by McLemore and Rawls demonstrated this in the mid ’90s. Similar studies in Kansas, Oklahoma and Arkansas confirm it. So, if some groups of specially prepared calves are sold in the same sale with other groups of graded feeder calves, do not expect as large a “premium” as would exist in a weekly auction where 80 percent of the calves sell as singles. Buyers tell us that calves with this special preparation for market have about one half the morbidity (sickness) and death loss as calves not vaccinated or properly weaned. These buyers are willing to pay some premium for these prepared calves relative to market run unweaned, unvaccinated calves. Furthermore, Tennessee Cattleman’s Association steer test data indicate that the calves which do not have to be treated for health problems in the feedlot have higher rates of daily gain, lower cost of gain, higher quality grade and higher returns. The Texas A&M Ranch to Rail program has shown similar results.

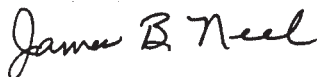
So, does weaning pay? Weaning demonstrations were conducted on five Sweetwater Valley farms and one in Dyer County in the late summer and fall of 2002. All calves were weaned for 45 days and fed a high-fiber ration produced by Tennessee Farmers Cooperative. All calves were double vaccinated and dewormed using Pfizer products. The calves netted from \$23 to \$70 per head over feed and pharmaceutical cost. The demonstrations were conducted to determine if and how calves could pay these costs with the gain made during the 45-day period. No costs were included for pens, troughs or handling facilities, which are essential for weaning and vaccination, since all of these farms already had them.

Cost estimates are available for a wide variety of facility arrangements.

These demonstrations did not attempt to examine how much these calves gained compared to calves left on the cow. Gains of calves left on the cow can vary greatly depending on the quantity and quality of pasture available. If weaned calves are getting 1 to 2 percent of body weight as feed and the pasture calves are getting adequate grass, the gain difference is usually about 1 pound of additional gain per day. When evaluated on that basis, it is hard to justify the added expense for feed and pharmaceuticals. However, when viewed in the context of adding value to feeder cattle, a weaning and vaccination program can make economic sense as a way to meet market demand, generate additional buyers and create a more marketable group of feeder cattle.

Buyers are becoming more discriminating in that

the difference between the price paid for “what they want” and for “what they will take” is and will be getting larger. Even when prices are quoted in increments of 50 pounds, there is a \$15 to \$20 per hundred spread in price for the same weight, grade and sex. Give weaning serious consideration; but allow time for sufficient gain to pay for feed and pharmaceuticals and market through a program that captures the benefit of the value added.



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Beef Cattle Time

From:

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