



BEEF CATTLE TIME

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Observe Bull During Breeding Season

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The number of calves born is an important factor in the profitability of a beef operation. Since the bull is the major contributing factor to a large calf crop, every effort must be made to ensure that he settles as many cows as possible.

First, the bull should have a breeding soundness examination performed prior to the breeding season. If this has not been done, consider doing it now. It is important for the bull to be physically fit, have the potential to produce an ample supply of viable sperm and have the ability to deliver it at the first estrus cycle of the brood cow herd.

Next, observe the bull to be sure he is settling cows. Is the bull active and actually mating with cows? If not the problem needs to be addressed immediately. Many times a bull with an injury to the reproductive tract will follow cows but will not mate.

Do not forget that there are other reasons why bulls do not get cows settled. A bull with an eye injury, or even pinkeye, will be in so much pain that he will lose interest in the cows. Be sure the bull does not have a skeletal injury that prevents or reduces his movement. A bull with foot rot, an injured foot or a stifle injury will not have a desire to breed.

Many producers do not consider whether the bull might be overworked. Placing a bull with too many cows that cover a large area can cause him to be overworked. Sometimes, an overworked bull will simply lose the desire to mate with the remaining cows.

If a young bull is being used for the first time, observe whether he has the desire to mate. Sometimes bulls that have no desire to mate with cows are found. Also observe the young bull to see that he does not spend all his time with one female while ignoring the remaining cows.

Keep a close watch during the breeding season. Remove any bulls that are not settling cows and replace

them with ones that can settle cows. This is the best way to salvage a calf crop when problems occur.

Monitor Beef Herd's Mineral Consumption

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How much mineral is your cattle herd consuming? Is the amount within the range recommended on the mineral tag? These are two questions that all beef producers must answer to get optimum production.

Monitoring consumption is quite easy. Just record how much mineral was added to the mineral feeder and the date it was added. When the added mineral is almost all eaten, add additional mineral and record the amount and date. Estimate how much was left when the new mineral was added. Subtract this from the amount previously added to the feeder and divide the answer by the number of animals eating from the feeder. Next divide by the number of days animals were consuming the mineral. This will give the consumption rate per head per day. To convert the consumption from pounds to ounces, multiply by 16. In most situations, the consumption should be between two and four ounces per animal per day. Check the feed tag to see whether your amount is in the recommended range of consumption.

If consumption is relatively close to the recommended amount, do not worry or make adjustments. Consumption will vary from week to week. Give the animals time to adjust after a new mineral mixture is offered. Consumption is generally higher than recommended when a new mineral is placed in the feeder.

Location of the feeder can affect consumption. If the rate is too high, consider moving the mineral feeder farther from the source of water. If the rate is too low, move the mineral feeder closer to the water supply.

If moving the mineral feeder does not change consumption, contact the dealer who supplied the mineral to get a different formulation. Another way to decrease consumption is to add additional white salt. Dry molasses

ses or meal (cottonseed or soybean) can be added to make the mineral more palatable.

When low consumption is a problem, it may be because a high-magnesium mineral is being fed to prevent grass tetany. Magnesium is bitter and mineral manufacturers usually add something to improve consumption so the producer won't have to.

Cattle require a mineral supplement if they are to perform at the desired level. Monitor mineral consumption to be sure the animals are consuming the correct amount.

Improve Pasture Use Through Rotational Grazing

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Abundant forage growth is always a wonderful thing to see in pastures. Following basic recommendations like fertilizing based on a soil test, controlling weeds and planting clovers will help provide this growth. But don't follow good forage production practices with poor harvest procedures. One of the mistakes occurring in Tennessee pastures every year is the poor utilization of excess pasture growth.

The initial growth of a tall fescue plant in the spring is very good quality forage. The plant grows new leaves that are high in protein and energy. But as the spring progresses, the plant produces a seedhead. The main goal of that tall fescue plant changes from trying to grow leaves to filling the seeds in order to reproduce itself. The amount of leaf growth drops because the plant's energy is going to the seedhead instead of the leaves. The quality of the forage also drops. As the leaves age, the protein and energy levels decrease while the fiber level increases, which results in lower quality forage.

The problem of lower quality and reduced leaf growth in the late spring and early summer is caused by excess forage growth. The plants are growing faster than the cattle can eat them. But, the problem can be minimized by using good grazing management principles.

Many times articles written about controlled or rotational grazing are confusing and make the topic seem difficult. Controlled grazing is simple if you understand one basic concept: the purpose is to force the cattle to eat all the forage available in the pasture without overgrazing the plants.

If cattle are given a large area to graze, the majority of their grazing will occur close to water and shade. The other areas of the pasture will not be grazed, resulting in waste in these portions of the pasture. Forage farther away from the water and shade will get mature, drop in quality and go to waste.

In a good grazing management program, pasture size is reduced. Cattle are concentrated on a smaller area and are not allowed the opportunity to be selective as to where they graze. They are forced to graze over the entire pasture and remove all the forage. Little forage is wasted. After eating the forage in this smaller pasture

(or paddock), the cattle are moved into a new paddock and the process starts over again.

This practice helps in two basic ways. First, as mentioned earlier, it decreases the amount of forage wasted. In the spring, when excess forage is produced, some of the acreage can be cut for hay because not as many acres are needed for grazing. As the season progresses and temperatures increase, forage growth will decrease. The acres that were used for hay can then be put into the grazing rotation. Early forage growth that was wasted because it was on the edges of the pasture has been put up as hay instead.

Second, this helps by allowing a rest period for the plants. Once the paddock is grazed down, cattle are moved to a new paddock. The plants in the previous paddock are given a chance to regrow. This is especially important during the summer when high temperatures and drought stress tall fescue plants. Instead of cattle grazing the young regrowth, the plants have the opportunity to fully regrow, restore depleted root energy reserves and recover from the grazing. This result will be quicker regrowth and a healthier stand.

Decreasing pasture size and concentrating cattle on a smaller area of land will improve forage utilization, decrease stand loss from overgrazing and improve per acre production.

Corn Gluten Feed for Beef Cattle

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Corn gluten feed is a byproduct of the wet milling of corn to produce cornstarch, sweeteners, oil and other products. The growth of this industry in recent years has resulted in a relative abundance of a feed which deserves careful evaluation for use in beef rations.

Corn gluten feed (CGF) is typically a combination of corn bran, corn germ and steep liquor. It is available in either wet or dry forms. Dry CGF is available as meal or pellets. It is generally palatable and readily digested by cattle.

While corn gluten feed is derived from corn, the nutrient levels are generally higher than for corn since the ingredients remaining after processing have been concentrated. The crude protein content of CGF is somewhat variable, as would be expected, since the protein content of corn itself is variable. Crude protein values range from 16 to 23 percent, with the lower numbers most common in Tennessee.

The most-used term to describe the energy level in a diet is "TDN," which stands for total digestible nutrients. The TDN value of CGF is generally around 80 to 83 percent. This is lower than corn (88% TDN), but the form of energy is different. Corn is high in starch while CGF is low in starch. Since starch decreases the activity of the rumen microbes which digest fiber, feedstuffs like CGF, which are moderately high in energy from digestible fiber, are a good "match" for high forage diets.

Corn gluten feed can be an economical source of

nutrients. The protein and energy provided by a hundred pounds of dry CGF (90 percent DM) is roughly equivalent to 75 pounds of corn grain plus 25 pounds of Soybean meal (48 percent CP). The best method to get a fair comparison between CGF and other feeds is to incorporate these in rations formulated on a “least cost” basis. Computer programs are available for this.

Storage facilities also need to be considered. Dry CGF can be stored in grain bins; however, wet feeds require storage in a trench, bunker, bag or wet commodity storage pit. Wet CGF should be used as quickly as possible and stored in a manner that reduces spoilage, especially during the summer. Mold will grow quickly when ambient temperatures reach or exceed 63 degrees F. This will result in about 6 inches of spoiled feed within four to six days. The application of propionic acid at .5 to 1 percent wt./wt. will reduce spoilage for up to 14 days.

Check the mineral content to avoid mineral imbalances due to high levels of phosphorus, potassium and sulfur. Of these, possibly the most serious problem is with sulfur, which routinely reaches 0.5 to 0.6 percent and sometimes higher, particularly in the wet product. This may limit the amount which can be used to about 0.5 percent of body weight (dry matter basis). Sulfur content is a particularly worrisome problem in Tennessee because the Tennessee Forage Mineral Survey has shown that sulfur levels typically run at levels high enough to cause problems with cow-calf and forage-based stocker operations. These problems include rough hair coats, depressed growth rate, compromised immune systems (they get sick more easily) and decreased breeding efficiency.

The high phosphorus but relatively low calcium content could result in a calcium to phosphorus imbalance, particularly if CGF is fed above the recommended level of 0.5 percent of body weight. These limitations have often led producers to blend CGF with other feedstuffs, like corn and soybean hulls.

Several reports of problems with “scorched” CGF pellets have raised some questions. If using pelleted CGF, break open a few pellets and check for discoloration or a “burned” smell. If these are evident, the pelleting pressure may have been too high.

Will It Pay?

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When it is suggested that calves be vaccinated, weaned, taught to eat from a trough and drink from a tank/trough, age and source verified, etc., one common question is, will it pay? I am sure McDonald’s and others in the food business ask themselves that question and do extensive research and analysis before introducing a new product.

We believe the management practices we recommend will pay for themselves and more. I recently heard a producer say that he would not wean and precondition

calves unless there was a \$10 per hundred price premium over what non-preconditioned calves were bringing in the market. While there may have been instances of that high a premium, don’t count on it. Much of the money made preconditioning by calves has been made on the gain in weight of 100 pounds or more during a 45 to 60 day post-weaning period.

When feed costs were lower, that return was more assured; but a cost-conscious producer can still reap a positive return. Once calves are preconditioned, the ability to market them in uniform truckloads is the key to making them bring something above cattle that were not preconditioned.

One very common mistake is to compare a special sale of preconditioned cattle to some other sale held several days or weeks before or after the special sale. With the current volatility in the corn and cattle markets, the only valid comparison is for sales held the same day or at least the same week as the special sale. We have excellent market news available that reports weekly auctions, graded sales and video sales. Volume is the key. A partial load of most any cattle will usually not bring the price of a full load of fairly comparable cattle. Buyers need to know what they are bidding on, and it most always takes at least two equally informed buyers to make the cattle bring top price.

I have not reached the point of saying “there are no premiums, there are only discounts for cattle that have not been preconditioned.” I recall that Paul Jolly made feeder pigs with their tails docked bring several dollars more than pigs with tails. It did not take long before tail-docked pigs were the norm and pigs with tails were discounted. In my opinion we may be headed there, but we are not there yet in the cattle business. Beef producers think in terms of “how much more will I get” when considering preconditioning, graded sales or other such marketing efforts. Part of the reason is that the majority of feeder cattle are not preconditioned.

The Tennessee Beef Evaluation is a program in which beef producers can send a minimum of five head of steers or heifers to a custom feedlot in Southwest Iowa and obtain feedlot performance data as well as detailed carcass information on their cattle. The program, in one form or another, has been operating since 1991. One requirement is that all calves be preconditioned at least 30 days, preferably 45 days, before shipment. Preconditioning is no guarantee that calves will not get sick.

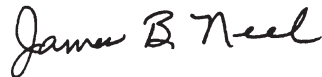
Death loss and morbidity (sickness) have been minimal. However, the data indicates calves which had to be treated for a health problem at the feedlot returned about \$100 less per head. They also gained slower by at least two tenths of a pound, had fewer in the Choice grade, and more in the Select and Standard grades. This data confirms what the Texas Ranch-to-Rail program has reported for years.

Calves which have had a preconditioning program perform better in the feedlot or in a stocker program. They gain faster, have lower death loss, reduced

sickness and treatment costs, require less feed (which lowers feed costs), and have fewer days on feed (which lowers feed, yardage and interest costs). All of these factors contribute to a lower cost of gain. Buyers who are confident of a preconditioning program will step up and pay more for preconditioned calves. However, they must have confidence in the program. Simply saying the calves are preconditioned may mean little more than saying they've had all their shots. Programs without some documentation of what was done can work, but buyers will only pay up based on their experience with those programs.

The Tennessee Department of Agriculture's Ag Enhancement program for the first time is making a significant contribution to add value to Tennessee feeder cattle. If the cattle are age and source verified with the producer properly enrolled in the Process Verification

Program (PVP) and are sold through a TDA approved preconditioned sale, the producer will be paid \$10 per head up to \$500. That should about cover the cost of the animal health products. We don't know how long the program will be around, but it is time for Tennessee beef producers to step up if they want to be a part of delivering the product the market is asking for and become a player in the future. Otherwise, we may see only discounts rather than get premiums for providing what the market wants.



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Beef Cattle Time

From:

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Visit the UT Extension Web site at
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