



BEEF CATTLE TIME

Vol. 21 No. 1

Winter 2003

Get Breeding Soundness Examination Done on Herd Bulls Before Breeding Season

*James B. Neel, Professor
Animal Science*

A Breeding Soundness Examination (BSE) is an economical procedure to ensure a successful reproductive program for cow-calf operations.

The bull is the most neglected individual in the herd, and his contribution in a cow-calf operation is most often underestimated. "The bull is half the herd," has often been stated. A cow is responsible for half the genetic potential of one calf in a single year. Whereas, the bull is responsible for half the genetic material of 20 to 30 calves. Unless the bull is in top physical condition as well as reproductive ability, he cannot deliver the genetic potential at the appropriate time. The bull's capacity to locate cows in heat and successfully mate with them is important for a profitable operation. Actually, the herd bull is worth more than half the herd, and the statement really does not give his contribution adequate credit.

It has been reported that one out of five bulls running in herds is either sterile or subfertile. This means that 20 percent of these bulls are incapable of getting cows successfully bred. Ten percent to 15 percent of yearling bulls also are in the same category.

Breeding soundness exams should be done 45 to 60 days prior to the breeding season. Producers can't wait until half-way into the breeding season to discover problems with the bull. A poorly functioning bull will result in a large economic loss as well as a strung out calving season and reduced uniformity of calf crop.

A BSE does not guarantee that the bull will be reproductively sound during the breeding season, but it is the best technique available. Because of this, producers are encouraged to observe the cows and bulls during the breeding season. Be sure the bull is mating with the cows in heat. Check the cows in about 3 weeks to determine if they were settled.

Cow-calf producers should arrange for a qualified bovine veterinarian to conduct the BSE. A BSE includes an evaluation of the bull's reproductive tract, semen volume and quality, as well as the bull's structural soundness and overall physical condition.

A BSE is not a cost. It is an investment; it is insurance. Only one missed cycle of two to three cows will result in an economic loss equal to or greater than the cost of the BSE. An open cow will create a greater loss. A local producer recently related that he discovered 15 out of 40 open cows during pregnancy checking last fall. The bad news is that the losses will occur in the remaining years of the cows' productive life. A BSE will help to keep these losses at a minimum.

Winter Is an Important Time for Pasture Management

*Gary Bates, Associate Professor
Plant Sciences and Landscape Systems*

During this late winter, tall fescue pastures are producing limited growth and hay is still being fed to cow herds. Even though pastures are not growing, now is the time to do a few simple practices that will have a major impact on the profitability of your cattle operation.

1. Take a soil test and fertilize accordingly. Pastures are often shortchanged when it comes to fertilizer. If producers apply fertilizer at all, it may be something like 19-19-19 because they haven't determined the requirements for adequate pasture growth. Take a soil test now to determine the fertilizer requirements of the pasture. Use the results to get a fertilizer mixed that will provide optimum growth of the pasture when it needs to be fertilized in early March.

2. Control buttercup and thistle. These weeds have become a big problem across the state. The good thing is that they are both easy to control. The bad thing is that it is hard to remember to do it. Now through late March is the time to spray these weeds. After three days in which the high temperature reaches 60 F, apply two pints of 2,4-D ester per acre. This rate of 2,4-D will not

kill established white clover. If clover is not present and control of buckhorn or broadleaf plantain is needed, use four pints per acre. Read and follow all label instructions. Finally, be sure to spray the weeds before any blooms appear. Delaying until April will produce disappointing results.

3. Seed red and white clover into pastures. Adding clovers to pastures can help in several ways. They decrease the nitrogen fertilizer requirement for pastures, since they take nitrogen from the atmosphere and use it. Second, they improve the protein and energy content of the forage the cattle will be consuming. And finally, some clovers will lengthen the grazing season of a pasture.

Here are the steps for getting clovers into pastures:

1. Select the proper fields. Producers should want clovers in all the pastures, but only seed into fields where the forage has been grazed down to less than 2 inches. A high stubble height can reduce establishment. Also, don't seed into a field that has been sprayed with 2,4-D for buttercup control within the previous 6 weeks. The residual activity of the herbicide will decrease seed germination. Also, do not apply any nitrogen fertilizer to the fields that will be seeded with clovers.

2. Use the proper seeding rate. White clover, red clover and annual lespedeza are the best species to use. Seed 2 pounds per acre of white clover, 4 pounds per acre of red clover and on hillsides include 8 pounds per acre of annual lespedeza.

3. Plant the proper depth. Clover seed is very small, so placing the seed too deep can cause poor emergence and establishment. If planting is done the last two weeks of February, broadcast the seed and let the cattle trample it in for 3-4 days. The trampling, plus any freezing and thawing of the soil, will place the seed in contact with the soil without pushing it too deep. If the seeding is done in March after the tall fescue has begun to grow, a no-till drill should be used. Place the seed no more than 1/4 inch deep.

Following these recommendations will improve both the quality and production of pastures. This will improve the performance of grazing cattle. It is important to put these practices on the calendar as a reminder to do them this time of year.

Producers Need to Modify the Site for Intramuscular Injections

*Clyde Lane, Jr., Professor
Animal Science*

Beef producers need to modify the site used for intramuscular injections (IM). Recent findings indicate that the size of the "injection triangle" should be reduced. The new injection area starts approximately one hand's width forward of the shoulder, making the triangle several inches shorter than the previous one (see diagram). This is necessary because a greenish discoloration is being found in 15% to 20% of the chuck steaks

packaged in a modified-atmosphere environment. Although the lesions are not new, they were not observed before oxygen was introduced into the packaging. The new packaging uses 80% oxygen and 20% carbon dioxide to prolong bloom in the retail case.

One particular chuck muscle plays a major role in the discoloration problem. Retailers' use of this muscle in chuck roll steaks also adds to the problem. Previously, this muscle and the surrounding muscle were ground instead. The good news is that moving the IM site forward to avoid this muscle will significantly reduce the discoloration.

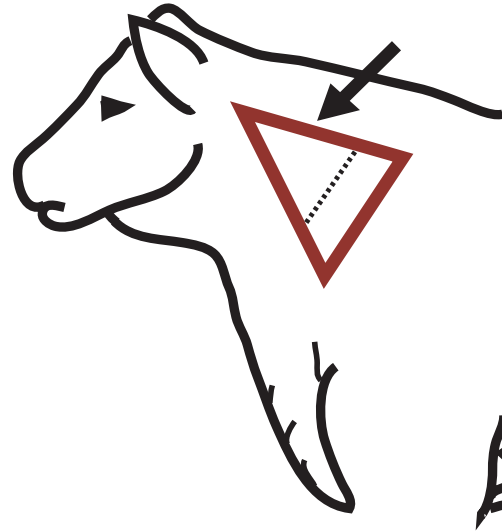


Figure 1. New Site for Intramuscular Injections

Giving injections subcutaneously (SQ) continues to be the preferred route of injection. The injection triangle for the subcutaneous injections has not changed. In those situations where IM injections must be given, the injection should be given at least one hand's width in front of the shoulder. Producers should remember to keep all injections at least three inches apart and to utilize both sides of the neck to maintain the distance between injections.

Producers are encouraged to make this one change and continue following all the other Beef Quality Assurance guidelines.

Observation Can Tell a Lot About Feed Quality

*Clyde Lane, Jr., Professor
Animal Science*

Beef producers can learn a lot from observing what goes in and out of their cows. By looking at the feed that animals consume and the manure they produce, a producer can get an indication of the expected performance.

Forage testing should be done, if possible, to determine the nutritive value of available forages. If this is not possible, visual appraisal of the feed can be used

to distinguish the “good from the bad.” Hay should be green and leafy with a minimum of stems. Hay that is brown, has a limited amount of leaves, or has a lot of stems will have a lower nutritive value.

While producers must use the hay that they have, hay management must be used to be sure that the hay is used to the best advantage. To utilize the hay efficiently, producers should group animals according to their nutrient needs (i.e. dry pregnant cows, cows with calves, stockers, etc.). Feeding a poor quality hay to young, growing animals will result in poor performance. The lower quality hays should be fed to dry, pregnant cows since their requirement will be the lowest of any group of animals on the farm assuming they are not thin and need to gain extra weight. The next best hay can be fed to the cows with calves, and the highest quality hay should be fed to the young, growing animals.

Observing the manure from animals can also provide information on the quality of the hay being fed. In short, the taller the manure piles, the lower quality the hay. Research conducted at the Noble Foundation has documented this relationship. Old-timers in the cattle business used to say, “you want splatters, not stackers.” The looser the manure pile, the greater will be the quality of the feed. Manure piles that are tall and hard are an indicator of low quality feed.

As forage matures, the fiber level increases and protein and energy levels decrease. These hays are less digestible and pass through the digestive tract at a reduced rate creating harder stools.

Being observant can assist producers in evaluating the quality of hay. Remember that green, leafy hay is the most desirable and the low, soft manure piles indicate higher quality feed.

Comparing Car Auctions with Cattle Auctions

*Emmit L. Rawls, Professor
Agricultural Economics*

I recently attended my first car auction. It was a real eye opener and brought to mind several contrasts with the way about 80 percent of our feeder cattle are marketed.

The dealer friend I attended with indicated that he always got burned when he bought at this auction because sellers performed temporary fixes — tricks of the trade — to hide defects in order to get higher prices. Above the auctioneer was a large sign which read “Any vehicle selling for less than \$1500 is sold on an as is basis.” I began to think of how feeder cattle are sold at weekly auctions. For the most part, the cattle are sold “as is” or what you see is what you get. Once in a while, the owner or auctioneer will tout some individual calf, or more rarely a group of calves, as having had all their shots; but for the most part it is up to the buyer to evaluate each animal on its merit, potential for resale to another customer, use in a stocker program, etc. Due

to the large number of small beef herds and the many year around calving and marketing practices, our feeder calves come to market and must be purchased and put into uniform groups for shipment to a customer. Some order buyers take the calves to a collection point where they are fed, watered and perhaps given vaccinations. Then, if not already sold, they are sold by negotiated price to the customer.

Another interesting aspect of the car auction had to do with warranty issues. If the car was sold as is, there was no warranty. If it was sold with a “ride to drive” warranty, the buyer could take a test drive after the auction and reject the car if found defective. There was another warranty in which the seller had to announce any defect in a car valued over \$1500. If another defect was found by the buyer, the seller had 24 hours to make it right with some adjustment in price. Except for the Merrial Sure Health program, I do not know of any such warranty program for feeder cattle. That program, which does require a veterinarian’s signature, agrees to pay for any pharmaceuticals needed for calves sick within 21 days of purchase.

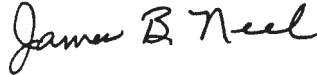
There is a great deal of trust involved in the buying and selling of feeder cattle. Cattle are sold on the phone by description to an individual hundreds of miles away with the assurance that payment will be made at the agreed price. The variety of health/management programs available now do not guarantee that cattle will not get sick but only give assurance of what practices have been performed. Todd Milton, feedlot consulting nutritionist, stated that a good double vaccination/weaning program 45 days in length would reduce morbidity (sickness) and death loss by one half compared to untreated calves. David May, former manager of Golden Belt Feeders, confirmed those figures. Texas Ranch-to-Rail data, over four years, indicated that calves that got sick in the feedlot lost an average of \$31.97 per head, while those which never got sick had a net return of \$61.23. This past year’s TCA steer test results indicated that calves requiring treatment in the feedlot made \$.64 per head, while those requiring no treatment made \$38.86 per head. Calves with a health/management program should bring a higher price and usually do. Each time a load of cattle is marketed, there is opportunity to establish a reputation for the cattle and for the owners of those cattle. On a commingled group of calves in a graded or other type of sale, taking shortcuts or not precisely following the program can hurt the reputation of the whole load and result in one less buyer for those cattle when sold again. That is not just hearsay, we have seen it happen.

Dr. Jim Mintert, livestock economist at Kansas State University and featured speaker at the recent West Tennessee Beef Conference spoke on “The Changing Beef Cattle Industry and What It Means To You.” He concluded by listing some things which will be required of participants in the beef industry in the future. They included: **Product Integrity**, which means unimpaired

condition; **Input supplier accountability**, or making good on what you sell; **Product safety assurances**, a tremendous responsibility/risk; **Production practice assurances** (including location?), you did what you said you did; **Traceability**, which means the ability to trace a product/animal back to point of origin (proposed requirement under Country-of-Origin Labeling); and **Consistent continuous supply**, which is tough with the diversity in the cattle business. Providing a continuous supply may assure a place for a stocker/backgrounder who can “store” cattle to even out supply to feedlots and subsequent buyers of cattle/beef.

The market will be moving to meet these requirements in the future. Will you be on the train? The market will continue to make a bigger difference in price between what it wants in beef and cattle and what it will take. Will it be as is – what you see is what you get, or

will you become part of a program designed to meet the market demand for some of the above requirements. The biggest obstacle may be some pride and independence for some producers because producers with less than 200 cows will need to work together. Contact the local University of Tennessee Agricultural Extension Service agent if you want to learn how to make some changes in your operation to be better prepared to meet the future of the beef business.



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Beef Cattle Time

From:

Leader/Agent

E12-4415-00-002-03

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