



BEEF CATTLE TIME

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Identification/Traceability of Beef Cattle Revisited, Part II

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In 2002, the U.S. exported 9 percent of its beef production. That may be higher in 2003 due to selling beef and by-products to former customers of Canada who stopped buying following the May 20 announcement of a case of Bovine Spongiform Encephalopathy (BSE), commonly known as mad cow disease. On December 23 the USDA announced that a cow harvested on December 9 had a presumptive positive diagnosis for BSE. That diagnosis was confirmed by further testing in the United Kingdom. Additional news is breaking daily regarding the origin of the cow (presumably from Canada), additional countries banning our exported beef, recall of beef from the infected cow, etc.

My previous Beef Cattle Time article stated, "In the U.S., traceability is more of a market issue, a private good and a private marketing chain decision."

As a result of the current situation, animal identification has become more of a public-health and food-safety issue. This is expected to cause more interest from Congress in financially supporting an animal identification system. That support will be needed because the current budget for the United States Animal Identification Plan (USAIP) is more than \$500 million over a six year period. The goal of that system is to be able to identify all premises having direct contact with a foreign animal disease within 48 hours of discovery. Premise identification is set to begin July 2004 with animal identification by July 2005. While that is ambitious, recent events may bring about a faster timetable. In addition to assuring our U.S. consumers that disease problems can be quickly traced and resolved, identification/traceability will be critical to restoration of export markets on a long-term basis. The move to adopt an animal identification system is expected to ignore the value of such a system in transferring information. However, if the radio frequency identification (RFID) system is used, it should

lend itself to use by those who wish to track animals and production/marketing information up and down the production and marketing system. This would require some added cost as well as willing partners.

The economic impact of the current BSE crisis will have a ripple effect across the industry. It began with limit-down days in fed cattle and feeder cattle futures as prices sought levels where the hedgers and speculators believed they could trade. Speculators who had bought futures wanted to sell and take profits, but for awhile no one wanted to buy for fear of further market declines. In the first four days of trading following the announcement of BSE, the April fed cattle futures declined about \$12 per hundredweight. On a 1200-pound fed steer or heifer, this amounted to a decrease in value of \$144 per head. As a result of that decline, a 600-pound steer would have to be bought at a price \$24 per hundredweight lower than before the futures dropped in order to break even. We can blame speculators for the decline, but they also need to be given some credit for the record high prices in 2003. Another approach in looking at the economic impact is to estimate the effect of the loss of export markets. With the countries receiving 90 percent of our export beef shutting the door, we must find alternate markets or absorb the additional 10 percent increase in beef in our domestic consumption. An increase of 1 percent in production normally causes a 1.6 percent decline in fed cattle prices. A 10 percent increase would bring a 16 percent decrease in the price of fed cattle. That would take fed cattle prices from the \$90 pre-BSE level to about \$75 per hundredweight. A few cattle traded at that level late the week of the announcement. The demand for our exports of by-products will also be hurt. Recently, values were \$10 per hundred pounds of live steer, but these could decline by one-third to one-half if the ban on our exports continues. This would take prices still lower.

Research by Nick Piggott of North Carolina State University and Tom Marsh of Kansas State University suggest that the impact on domestic beef demand could be limited if there are no additional BSE cases. Jim Mintert's (Kansas State University Livestock Economist)

evaluation of their research indicates that only repeated food safety problems, which keep the issue in front of consumers for an extended period of time, lead to ongoing demand loss. So, whether the BSE case in Washington state turns out to be an isolated incident or the first of several will be key in determining how much impact BSE will have on American consumers' demand for beef. Canada's experience of the past summer lends credibility to the research of Piggott and Marsh. There was only one case of BSE, and the Canadian consumer did not back away from beef. Hopefully, such will be the case in the U.S. In the meantime, prepare to start identifying and documenting your cattle if you are not already doing so.

What Happened During Calving Season?

*James B. Neel, Professor
Animal Science*

The calving season for late-winter- to early-spring-calving herds should be finishing in March. How have things gone? Now would be a good time to evaluate what happened during the calving period. Losses during calving, or the days following, are the second leading cause of reduced calf crop percentage weaned and profit. Producers need to make the effort to save every calf. A Montana study, which included more than 12,000 beef cows during a 14-year period, reported that 4 to 5 percent of the total calf losses took place at calving. From two weeks of age to weaning, losses amounted to about 1 percent. A 1997 survey of 2,700 cow-calf producers across 23 states also revealed losses at birth of 4.3 percent.

The economic losses from calf deaths are quickly recognized. What is not known is that calves born via difficult births are slow to stand and nurse. These calves, which do not consume adequate colostrum shortly after birth, are more susceptible to diseases such as scours and pneumonia. These calves also lag behind their peers in performance through the feedlot.

Take some time and think about the calving season. When did the cows start calving? How many calves were lost? Why were they lost? Were those difficult births? Were cows and/or heifers lost? Were there any patterns or causes that can be identified?

Did more deaths and problems occur with first-calf heifers? Were the heifers large enough to give birth easily? Were they bred to "calving ease bulls?"

What was the body condition of the heifers and mature cows at calving? Females thin at calving will likely produce calves small and weak at birth as well as having reduced colostrum production. Either of these can result in illness and deaths. And, if the calves survive, reduced performance. Another problem that occurs in a small percentage of cows is udder-related. Some females have teats that are too large, following calving, for the young calves to suckle. What is the length of the calving period? When did calving start? When will it end? A strung-out calving is not really a calving season and creates

problems that contribute to calf losses. The 1997 survey also revealed that 56 percent of the producers observed calving heifers fewer than three times per day. In addition, 60 percent of the cows were calved in pastures that did not allow for ease of observation and improved management. A large number of producers do not check their cow herds during the calving season, and most check the cows only once during a 24-hour period.

What was the death loss after the calves were 10 days to 2 weeks old? At this age, scours will be the major cause of death. Again, calves from "thin" females will have lower immunity and be more susceptible to disease.

Was the same pasture used each year for calving? Bacteria or viruses that contribute to calf scours may build up in the pasture. As soon as possible, place animals with newborn calves out on pasture away from the calving area.

Were adequate facilities available for use in reducing calving problems? A calving lot should provide easy observation. The calving area should not be so large that the entire area cannot be seen quickly.

Reducing losses during the calving season is critical for profitability. Producers should evaluate calf losses and, if needed, initiate a management program to improve calf survival.

Surviving the Winter of 2003-2004

*Clyde Lane, Jr., Professor
Animal Science*

Entering the winter of 2003 – 2004, beef producers were faced with some good news and bad news. The good news was that there was a good supply of hay in most areas of the state. The bad news was that a lot of this hay was of poor quality. Rainfall in the spring resulted in hay being harvested at a mature stage, and a lot of hay received rainfall before the curing process could be completed.

To illustrate the magnitude of the problem, let's look at 53 forage samples taken from a local county last fall. Twenty-five percent of the samples had protein levels at 8 percent or less. Looking at relative feeding value, approximately 62% of the samples were not adequate to meet the needs of dry beef pregnant cows. Since this classification of animals has the lowest nutrient requirements of all classes of beef animals on the farm, the hay quality poses a serious problem. Supplementation will need to include energy as well as protein. Just providing a protein supplement will not be adequate to maintain body condition and production.

To determine the amount and type of supplementation needed, each batch of hay should be sampled. It is not possible to determine nutritive content of a hay sample by looking at it. For a fee of \$10.00, a producer can have a sample analyzed. In addition, ration recommendations will be given if information is provided about the animals to be fed. Following these recommendations will prevent costly over- or under-feeding of animals.

Be sure to get a representative sample of the hay. The best way to get a good sample is to borrow a forage sampling tube from your local Extension office. Take samples from several representative bales and then combine these to make one composite sample for each cutting or batch of hay.

In addition to sampling hay for nutritive content, producers need to score cows for body condition. Cows should be maintained at a body condition score of 5 while replacement heifers need to have a body condition score of 6 as they approach breeding. A scale of one to nine is used to evaluate the condition of cows. A condition score of one is a very thin cow and a score of 9 is a very fat cow. Ask your local Extension agent for a copy of the fact sheet BSH-B152 Body Condition Scoring Beef Cattle.

By scoring animals for body condition now, you can determine if additional supplementation will be needed to have cows ready for breeding. Failure to have animals in the desired body condition will result in cows being slower to breed. The delayed breeding can be costly since late breeding results in a younger, lighter-weight calf at weaning.

High Cattle Prices Can Cause Lax Management

*Clyde Lane, Jr., Professor
Animal Science*

Higher cattle prices have a tendency to cause management to become lax in some operations. The "I'll get a good price even if I don't do everything I should" attitude can creep into an operation if a producer is not careful. The few extra cents per pound that can be achieved by following recommended practices can result in several extra dollars per calf. These extra funds can be used to upgrade facilities or equipment, purchase better breeding animals or buy other items that will make for a better beef operation. Based on history, cattle prices will take a down turn sometime. Changes and improvements need to be made when funds are available.

What are some of the critical practices? Castration of bull calves heads the list. Other practices include implanting, herd health programs that include vaccination and deworming, fly control, and others. Each of the practices results in a more valuable calf at marketing.

Performing recommended practices will put more money in producers' pockets when cattle prices are high or low. Don't backslide and leave money on the table.

Plan Ahead for High Quality Feeds

*Clyde Lane, Jr., Professor
Animal Science*

After evaluating the current hay situation, what can a producer do to prevent a repeat of low-quality hay next year? The first step is to evaluate the fields to be cut for hay and determine the amount of clover present.

If clovers are absent or represent a small percentage of the forage, then seeding of additional clover in February would be advisable. Contact your local Extension agent regarding varieties and seeding rates.

The next step would be to make plans for timely harvest of the hay. Have haying equipment serviced and ready when hay is ready to harvest. Do not wait until the hay has already headed out before starting to harvest. Starting late and then being delayed by rain can result in low-quality hay.

Make plans to store the hay inside or outside with a cover. Losses from hay being stored outside without cover can be significant. If it is not possible to store all of the hay under cover or inside, then be sure that the highest-quality hay is stored inside or under the cover. Leave the poorest-quality hay outside and feed it first so the length of storage is kept to a minimum.

An Important Time for Pasture Management

*Gary Bates, Associate Professor
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Even though very little growth is now occurring in pastures and hayfields, the next couple of months are critical times for these forages. If proper practices are followed, problems can be avoided, and forage production can be increased. Here are a few practices.

1. **Take a soil test and fertilize accordingly.** Pastures are often shortchanged when it comes to fertilizer. If fertilizer is applied, it may be something like 19-19-19, which may not meet the requirements for adequate forage growth. Take time to do a soil test now in order to determine fertilizer requirements. Use the results to get a fertilizer mixed to provide optimum forage growth when it needs to be fertilized in early March.

2. **Control buttercup and thistle.** These two weeds have become a big problem. The good thing is that both are relatively 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 consecutive days in which the high temperature reaches 60 degrees, apply 2 pints of 2,4-D ester per acre. This rate will not kill established white clover. If clover is not present and buckhorn or broadleaf plantain are, use 4 pints per acre. Read and follow all label instructions. Finally, be sure to spray the weeds before any blooms appear. If treatment is delayed until April, the results will be disappointing.

3. **Seed red and white clover into pastures.** This helps in several ways. They decrease the nitrogen fertilizer requirement for pastures. Second, they improve the protein and energy content of the forage, and finally, some clovers will lengthen the grazing season of a pasture. Here are the steps for getting clovers into pastures:

- **Select the proper fields.** Clover should be present in all pastures, but only seed into fields where the pasture has been grazed down to less than 2 inches. A high stubble height can reduce establishment.

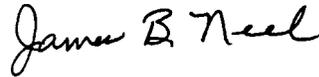
Also, don't seed into a field that has been sprayed with 2,4-D for buttercup control within the previous 6 weeks. The residual activity of the herbicide will decrease seed germination. Also, do not apply any nitrogen fertilizer to fields that will be seeded with clovers.

• **Use the proper seeding rate.** White clover, red clover and annual lespedeza are the best. Seed 2 pounds of white clover, 4 pounds of red clover, and on hillsides include 8 pounds per acre of annual lespedeza. With white clover, ladino white clover varieties have worked well. A couple of new intermediate white clover varieties named Durana and Patriot are available. These varieties are more persistent in pastures than the ladino varieties.

• **Plant clover at the proper depth.** Clover seed is very small, so placing the seed too deep can cause poor emergence and establishment. If planting the

last two weeks of February, broadcast the seed and let the cattle trample it in for 3 to 4 days. The trampling, plus any freezing and thawing, will place the seed in contact with the soil without putting 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 quality and production from your pastures, which will improve the performance of grazing cattle.



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