



# BEEF CATTLE TIME

Vol. 29 No. 1

Winter 2011

## Reducing the Potential for Injury on the Beef Operation

*Clyde Lane Jr.*

*Professor and Extension Beef Cattle Specialist  
Department of Animal Science*

Every beef producer has heard the statistics about how dangerous it is to farm. After receiving the encouragement to be more careful, it is generally back to business as usual. Accidents always happen to someone else, or so we think.

How many times have you had the skin knocked off your knuckles? Surprise! An accident has just happened. Could it have been worse? You bet!

As beef producers the danger comes not only from the animals, but the equipment that is used to support the beef operation. Let's look at a just a few of areas where we need to be more careful.

Let's start with the animals. Any time that animals are approached there is danger. A cow with a new calf is dangerous. She was calm with her last calf, but will she be calm with this one? When working cattle, always be sure to have a good functional handling facility available. Always position yourself where animals will not run over you, kick you, or otherwise cause injury. Be careful when filling syringes and giving injections. Do not accidentally inject yourself. Be extra careful when applying pour on, dewormers and lice control products. Dispose of all medical wastes properly.

Focus for a moment on the bull, the most dangerous animal on the farm. Do not trust him under any circumstances. Don't fall into the trap of saying he has never caused a problem so he is safe. Many things can trigger a bull to react adversely; always have an escape route.

Now think about hauling animals. Forcing an animal into an unfamiliar trailer may cause a negative response.

Use low-stress handling techniques to keep you out of harm's way while making the loading process easier. Load only the number of animals that the trailer is designed to haul. Overloading or even under-loading can cause animals to get down in the trailer. Trying to assist an animal that has fallen is very dangerous.

Don't forget about all the equipment that is being used on the farm. Tractors overturn relatively easily. Hauling hay on the front or back of the tractor changes the center of gravity and thus increases the possibility of turning over. Be sure that all shields are in good repair and in place. An unprotected PTO shaft is an accident waiting to happen. Always stop equipment before working on it; moving parts provide an excellent place for fingers to be caught. While making adjustments or repairs, be sure to use the proper tools. Do you have a fire extinguisher mounted on the equipment where it is easily accessible? Do you have one in the truck also? Fires do not occur very often, but do happen.

Another area of concern is the working around gasoline, lubricants and other flammable liquids. Smoking around these products is extremely dangerous. Welders and heaters provide a place where fires can start. Don't forget that there is a fire hazard when hay is present. Not only are flames from an external source a problem, hay that was baled too wet can cause a fire from internal combustion. Remember that a hot exhaust can ignite the hay.

I hope that you realize the risk that you face each day. Should you get out of the cattle business and stop farming? Absolutely not! The intent of this article is to help you work safely. Accidents, even very minor ones, are a part of farming. Please do not think that all of this is "fine and dandy" and accidents always happen to someone else. Reduce the odds that you will be one of the beef producers that have an accident in the future.

## Don't Forget the Red Clover

Dr. Gary Bates, UT Extension Forage Specialist  
Department of Plant Sciences

This is the time of the year we need to get ready to seed clovers in pastures and hayfields. When most people think about clovers, white clover is usually what comes to mind. Don't forget to include red clover in the seeding mix. There are advantages to using red clover.

1. Improved yield. Red clover will generally yield more than white clover. It has a more upright growth habit and is better able to compete with tall fescue and orchardgrass.
2. More summer production. Red clover will grow longer into the summer than white clover. It initially has a taproot, which allows the plant to get more subsoil moisture. It is better able to grow during limited rainfall conditions than is white clover. Expect red clover to grow until late June or early July.

Several varieties are available. "Cinnamon Plus" is a standard variety that has been around for several years. "Renegade" is another variety that many people have not heard of, but has yielded well in UT variety trials. To see the full list of red clover varieties in our tests, go to <http://forages.tennessee.edu> and click on "variety trials and research."

To get the best stand of clover, leave the stubble height at 2 inches or less. Plant 2 lbs. of white clover and 4 lbs. of red clover per acre the last two weeks of February. You can broadcast or drill the seed. If you drill, the seed should be placed NO MORE than 1/4 inch deep. Be sure

to calibrate the seeder you are using so you do not put out too much seed per acre.

If you have sprayed 2,4-D or some other broadleaf herbicide within the last few weeks, you may need to delay seeding the clover due to herbicide residual. Contact your local Extension office for more information about planting clover into these situations.

Clover will improve the quality of the forage produced, as well as replace some of the nitrogen that we need to apply as fertilizer. It is a key part of any good forage program. Red and white clover are two of the best plants that you can have in your tall fescue pastures and hayfields.

## Financial Integrity in the Beef Cattle Business

Emmit L. Rawls, Professor Emeritus  
Agricultural and Resource Economics

Fresh on many producers' minds is the folding of Eastern Livestock, which left many in the industry holding bad checks. This event is a painful reminder of what can happen in the business.

I have been teaching different marketing methods for many years, and financial risk and integrity have been keys parts of that instruction. My experiences in working with groups of producers who want to market their cattle together oftentimes includes a discussion of how to minimize the cost of the marketing process i.e., commission or charge by a marketing agency for services provided. Those services may include facilities; personnel to unload, load

and weigh the cattle; and writing a check backed by a shipper's proceeds account. The producer must be paid within 24 hours of sale and that account covers the payment either from the marketing agency's own funds or a line of credit at a lending institution. The Grain Inspection Packers and Stockyards Administration (GIPSA) periodically inspects an auction market's records to make sure that account is in order. They also periodically check the records of livestock dealers for prompt payment, etc., but a shipper's proceeds account is not required of dealers.

In addition to the shipper's proceeds account, a market is required to be bonded. The amount of the bond is based on the average dollar volume of business for two sales. The bond represents a cost to the marketing agency and in some cases is in-

Variety	Yield (ton DM/acre)			
	Springfield		Knoxville	
	2008	2009	2008	2009
Cinnamon Plus	1.28	3.88*	1.95	5.29*
CW202	1.45*	3.70*	2.01	5.23*
CW40040	1.57*	3.57*	2.05	5.44*
Freedom	1.46*	3.07	N/A	N/A
FLMD	1.37*	2.89	2.26*	4.67
Plus II	1.47*	3.37	1.85	4.98*
Red Gold	1.32*	3.29	1.61	4.87*
Renegade	1.70*	3.61*	2.66*	4.97*
Starfire II	1.35*	3.40	1.63	4.58
LSD P=.05	0.35	0.33	0.50	0.72
CV %	14	5	16	9
* yielded statistically the same as the top-yielding variety				
Planted in September 2007				

sufficient to cover all checks if the market agency fails.

Buyers of cattle at the weekly auction or video sale are expected to pay for the cattle within 24 hours, though some large volume buyers may not pay for a week or two during the heavy fall runs of cattle. Since the Eastern Livestock experience, that is likely to change. The market is caught between needing the buyer there and needing payment for cattle, which they have already paid out to sellers of the cattle.

There is a packer's trust provision in the GIPSA law that requires all who sold the packer livestock to be paid from assets before other creditors if the company folds. Efforts to obtain a similar provision for livestock dealers have not been successful in the past. The safest thing for livestock sellers to do is to sell their cattle to a bonded market that is regulated by (GIPSA) or know who they are doing business with and hope the check is good.

## Managing Dry Cows to Breed Back Quickly

*Justin Rhinehart, Assistant Professor and Extension Beef Cattle Specialist, Department of Animal Science*

The postpartum interval is the time from when a cow calves until she begins to have normal heat cycles. The length of this period plays a large role in determining whether a cow will rebreed in time to have another calf within a 12-month period. Even if a controlled breeding season is not in place, cows that do not calve at least once per year are less profitable. So, managing cows for a short postpartum interval directly impacts profitability. Late winter is an important time to consider these issues in spring calving (January – April) cow herds.

Nutrition during the last two months of gestation has a tremendous effect on how quickly a cow begins cycling following calving. Body condition score (BCS) at calving

### Relationship of Body Condition of Brood Cows at Calving on Postpartum Interval

Body Condition of Cows at Calving	Postpartum Interval (days)
Thin	89
Moderate (-)	70
Moderate	59
Moderate (+)	52
Fat	31

From: Funston, 2009 ([www.eXtension.org](http://www.eXtension.org))

is directly related to the postpartum interval. Dr. Rick Funston, Extension beef cattle specialist with Montana State University, illustrated this relationship in the following table:

Limiting nutrition to below a cow's requirements during this important time will extend the postpartum interval even if that cow does not fall below a body condition score 5. In fact, a cow in marginal body condition but increasing plane of nutrition will usually have a shorter postpartum interval than a "fleshy" cow that loses weight just prior to calving. Remember that a cow's nutritional requirements increase in the third trimester of gestation and continue to increase through peak lactation (about 60 days after calving). Adding body condition to dry cows is less costly than trying to add it while lactation demand on nutrition peaks. This peak occurs at about the time a cow needs to re-breed.

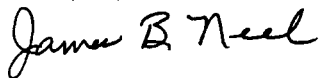
Fortunately, this critical period in late gestation usually comes after the previous calf has been weaned. But, for most spring calving herds in Tennessee, it also comes at a time in the year when forage is limited and hay quality requires supplementation. Make sure that hay has been tested for quality and, if needed, appropriate supplementation is provided even for dry cows in late gestation. Other strategies to improve dry cow nutrition include improving stockpiled forages with legumes, planting winter annuals and including an ionophore (such as Bovatec or Rumensin) in the supplement.

It takes diligence to maintain cattle in the proper condition throughout the year. Get cows to a BCS of 5+ earlier in the non-lactating period, which provides an insurance policy for things like the dry or cold weather experienced this year. Late gestation also has a lot of impact on the future of that calf. Cattle have to be given the ability to express their genetics and "fetal programming" throughout gestation can be affected by the dam's nutrition. In other words, poor cow nutrition can lead to an unthrifty calf that otherwise has the genetic potential to perform well.

Another issue to consider in reducing the postpartum interval is calving difficulties. Research has established that cows having difficulties during calving take longer to re-breed. Genetic selection for calving ease bulls and cows can help avoid difficulties, but some cows and heifer will still require assistance. Identifying and assisting the animals that need it will help them re-breed sooner. Calving in a pasture near the house, or where the cows are seen several times a day, will make it easier to provide calving assistance as soon as it is needed.

Providing adequate nutrition in late gestation and limiting calving difficulties are major management issues that

will help cows re-breed as soon as possible after calving.  
And having cows bred to calve early will result in heavier  
calves at weaning and higher pregnancy rates down the  
road.



James B. Neel, Professor  
Animal Science

## Beef Cattle Time

**From:**

---

**Leader/Agent**

Visit the UT Extension Web site at  
<http://utextension.tennessee.edu>

THE UNIVERSITY of TENNESSEE   
INSTITUTE of AGRICULTURE

E12-4415-00-002-11 20M 2/11 11-0104

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.  
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.  
UT Extension provides equal opportunities in programs and employment.