COW/CALF CORNER

The Newsletter

From the Oklahoma Cooperative Extension Service

December 24, 2012

In this Issue:

Forage Use in the Beef Industry

Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

Higher grain prices, led by sharply increased demand for corn, have provoked a variety of adjustments in agricultural markets to restore a relative balance in crop and forage prices. Higher prices for all crops are needed to simultaneously ration demand and attract resources to maintain supply in the various markets. The beef industry has considerable flexibility to adjust production

systems and substitute forage for grain. These adjustments have several implications for forage use that are already occurring or may occur to a greater or lesser extent.

Use more forage. The beef industry responds initially to high grain prices by increasing feedlot placement weights. This is reflected in feeder markets with less discounts on feeder cattle up to heavier weights. The ability to respond to this incentive has been hampered by limited cattle numbers and the drought which has reduced forage availability and forced early placements of smaller cattle into feedlots the past two years. Over time and with increased feeder supplies, the beef industry may push average feedlot placement weights higher, not only in the range of current feedlot production practices, but potentially to levels that cut days on feed enough to force changes in feedlot production systems to maintain carcass quality.

Use forage more efficiently. Cheap grain kept forage values low for many years. Forage values are now record high, in part due to the drought, but will stay higher along with other crop values. Forage use can and will be better managed with higher value. In a great many situations, grazing management can be improved to increase animal production or extend grazing seasons. Improved hay production, storage and feeding can significantly reduce hay wastage. Low value forage led to rather sloppy forage use for many years and the industry can ill afford such inefficiency in the future.

Produce more forage, more efficiently. In addition to using forage more efficiently, there are increased incentives to manage forage better for increased forage production. For example, higher value forage makes weed and brush control more valuable. Many forested areas can be opened up to allow or increase grazing access. Better grazing management, including use of proper stocking rates and grazing plans can significantly increase forage production over time.

Use different forages. Changes in forage and input values may change the optimal selection of forages, particularly for introduced forages. For example, Bermuda grass, which is very productive and popular in the southern U.S., also requires large amounts of fertilizer and weed control to realize its production potential. Bermuda grass may be less economical than some lower productivity introduced grasses that require even less inputs. In general, when inputs are cheap, technical efficiency tends to equal economic efficiency. However, when inputs are expensive, technical efficiency is often a poor indicator of economic efficiency. Expensive inputs and the desire to extend grazing seasons may also favor use of more mixed forage production and less monoculture production. More diverse pasture mixes including more legumes may be desirable in more production situations.

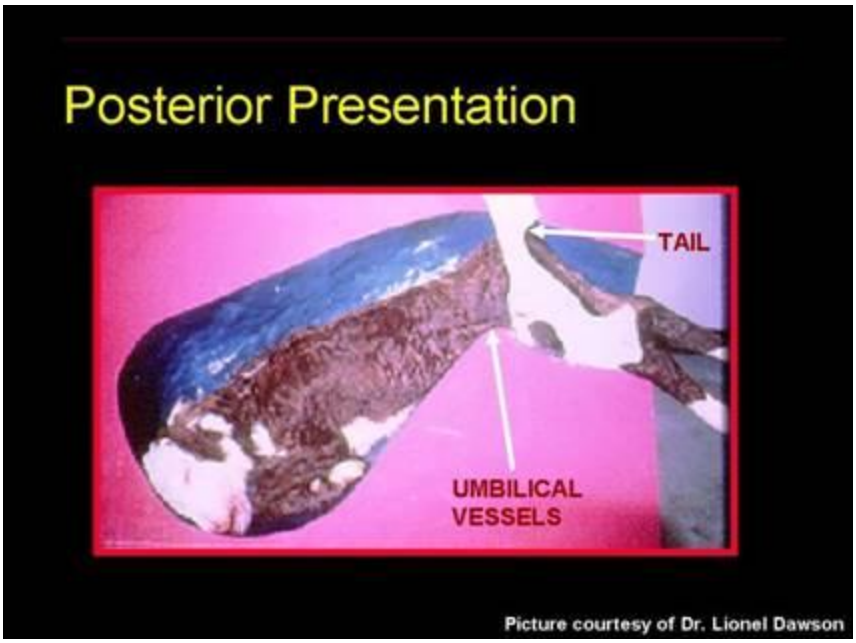
Use forages differently. The way forages are used could change as well. Currently forage use is almost exclusively for stocker or growing programs with a sharp demarcation between stocker and finishing programs. High grain prices could result in the development of semi-intensive cattle finishing programs that use more forage in the early stages of finishing. A more diverse set of cattle finishing programs may develop that blur the lines between stocker and finishing.

Higher grain prices and changes in relative grain and forage values may result in many changes in forage production and use. The extent and exact nature of these changes is unknown at this time. What is important is that producers be aware of expanded forage potential and be willing to consider and evaluate a much wider range of forage production possibilities in the future.

Assisting the Posterior Presentation (Backwards Calf)

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

Although officially winter has just begun, the spring calving season in the Southern Plains is only 4 to 6 weeks away. Any cow calf producer that has spent several years in the cattle business has had the experience of assisting a cow or heifer deliver a calf that was coming backwards. Understanding the physiology and anatomy of the calf and mother will improve the likelihood of a successful outcome. Study the diagram of the “posterior presentation” shown below.



Note the relative positions of the tailhead of the baby calf and the umbilical cord that connects the calf to the mother's blood supply. As the calf's hips are pulled through the pelvic opening, the baby calf's tail will reach the outer areas of the mother's vaginal opening. Once a person can see the baby calf's tailhead, the umbilical vessels are being compressed against the rim of the mother's pelvic bone. The blood flow, exchanging oxygen and carbon dioxide, between calf and mother is greatly impaired, if not completely clamped off.

Research, many years ago, conducted in Europe illustrates how little time it takes to compromise the calf's survivability when the umbilical cord is clamped. These scientists studied the impact of clamping the umbilical cord for 0, 4, 6, or 8 minutes.

Table 1. Impact of clamping of umbilical vessels on calf survivability

Duration of Clamping	Number of Calves	Fate of Calves
0 minutes	5 calves	All of the 5 calves lived
4 minutes	5 calves	4 lived; 1 died
6 minutes	3 calves	3 died
8 minutes	3 calves	3 died

Certainly, if a producer does not feel confident in their abilities to deliver the backward calf, call your veterinarian immediately. Time is of the essence. As producers examine heifers or cows at calving and find a situation where the calf is coming backward, they need to keep this European data in mind. If the calf's hips are not yet through the pelvic opening, they have a little time to locate help and have someone else to aid in the assistance process. Once the cow and the producer in concert have pushed and pulled the calf's hips through the pelvic opening and the tailhead is apparent, the calf needs to be completely delivered as quickly as possible. The remainder of the delivery should go with less resistance as the hips are usually the toughest part to get through the pelvic opening. The shoulders may provide some resistance. However, some calf rotation and traction being applied as the cow strains will usually produce significant progress. Remember, the completion of the delivery is to be accomplished in about 4 minutes or less. The calf's head and nostrils are in the uterine fluids and cannot breathe until completely delivered. The calf must get oxygen rapidly to offset the hypoxia that it is been subjected to during the delivery. After the calf is delivered, tickle it's nostrils with a straw to cause snorting and inhalation of air to get it started to breathing.

Just How Do Santa's Reindeer Get the Job Done?

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

Have you ever wondered how Santa's reindeer can make that monumental journey on Christmas Eve? Let's look into some key facts about reindeer that may help us understand how they transport Ole St. Nick on his appointed rounds over the world.

First of all, historians report that reindeer have been domesticated by humans for over 5000 years. Since Santa himself is no spring chicken, we can assume that they have worked together for quite awhile. They should not have any trouble finding their way around. There is no need to worry about them getting lost.

We do know that reindeer are like ruminants. They are like cattle in this regard. They have four compartments to their stomach. Of course Santa gets them filled up with hay before he leaves the North Pole, so they should have plenty of feed stored in the four compartments to make it all around the globe. Also, cattle nutritionists have known for years that hay digests more slowly than grain, therefore the big meal that the reindeer eat before the journey should last even longer. Or just like your mom says "It'll stick to their ribs!".

As for drinking water, that should be no problem whatsoever. In their homeland the water is all frozen so they are used to getting the moisture they need by eating snow. So as the sleigh is parked on snowy rooftops in cold weather cities, the reindeer can take on the moisture they need if they get thirsty.

How do they keep warm while flying around on Christmas Eve? The fur that they have is very thick and can hold a lot of air. The "blanket" of insulation combining fur and air helps keep them warm in even the coldest of climates. Plus flying around Christmas night in many areas of the world that are warmer than they have at home should not be a problem.

How do they fly? Well that's a tougher question, and we really do not have that one completely answered. However, let's look at what we do know about them. Reindeer are amazingly fast runners on the ground. A newborn baby reindeer at one day of age can out run the fastest person on earth. By the time that they are fully grown it is hard to tell what speeds that they could reach. Next remember those huge antlers. Antlers of adult male reindeer can be as much as 4 feet long! Just think about it. Each reindeer has 2 sets; that's 8 feet of antlers and with eight reindeer (or nine if we count Rudolph on foggy nights) that is 64 to 72 feet of total antler span. A typical small airplane only has about 20 - 30 feet of wingspan. Certainly it seems feasible those eight reindeer running that fast with all that antler span could get off the ground.

There are a couple of myths about reindeer that we should clear up. You have probably heard the poem that says that they have tiny reindeer feet. Actually they have a very wide large hoof that they use at home to dig through the snow to find grass and moss to eat. You've got to think that those wide hooves would come in handy for sliding to rather sudden stops on the small landing sites that Santa has to work with on Christmas Eve.

And you've probably heard the song about "up on the house top click, click, click". Well it is true that reindeer do make a clicking sound as they walk. They have a tendon that snaps over a bone joint and makes a clicking sound on every step.

These are just a few facts about Santa's Reindeer. Maybe this will help us understand that age-old mystery that occurs every Christmas Eve.

Merry Christmas to all and to all a Great 2013!

Watch for the next Cow Calf Corner Newsletter on Friday December 28.