

# **COW/CALF CORNER**

## **The Newsletter**

**From the Oklahoma Cooperative Extension Service**

**December 19, 2011**

### **In this Issue:**

#### **Night Time versus Day Time Feeding Influences Time of Calving**

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

#### **Better Wheat Pasture Conditions May Moderate Oklahoma Cattle Losses**

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

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

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

## **Night Time versus Day Time Feeding Influences Time of Calving**

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

It is generally accepted that adequate supervision at calving has a significant impact on reducing calf mortality. Adequate supervision has been of increasing importance with the use of larger beef breeds and cattle with larger birth weights. On most ranching operations, supervision of the first calf heifers will be best accomplished in daylight hours and the poorest observation takes place in the middle of the night.

The easiest and most practical method of inhibiting nighttime calving at present is by feeding cows at night; the physiological mechanism is unknown, but some hormonal effect may be involved. Rumen motility studies indicate the frequency of rumen contractions falls a few hours before parturition. Intraruminal pressure begins to fall in the last 2 weeks of gestation, with a more rapid decline during calving. It has been suggested that night feeding causes intraruminal pressures to rise at night and decline in the daytime.

In a Canadian study of 104 Hereford cows 38.4% of a group fed at 8:00 am and again at 3:00 pm delivered calves during the day, 79.6% of a group fed at 11:00 am and 9:00 pm. A British study utilizing 162 cattle on 4 farms compared the percentages of calves born from 5:00 am to 10:00 pm to cows fed at different times. When cattle were fed at 9:00 am, 57% of the calves were born during the day, vs 79% with feeding at 10:00 pm. In field trials by cattlemen utilizing night feeding when 35 cows and heifers were fed once daily between 5:00 pm and 7:00 pm, 74.5% of the calves were born between 5:00 am and 5:00 pm. In the most convincing study to date, 1331 cows on 15 farms in Iowa were fed once daily at dusk, 85% of the calves were born between

6:00 am and 6:00 pm. Whether cows were started on the night feeding the week before calving started in the herd or 2 to 3 weeks earlier made no apparent difference in calving time.

Various means have been employed to effectively reduce animal loss at calving time. Skilled personnel should be available to render obstetric assistance and neonatal care to maximize percentage calf crop weaned in the cattle operation. Currently, evening feeding of cattle seems to be the most effective method of scheduling parturition so assistance can be available during daylight hours.

The percentage of adult mature cows that need assistance at calving is extremely low compared to the percentage of first calf heifers. Therefore, the heifers, of course, are the group of females that are of greatest need of observation during the calving season. On many large ranches, it is physically impossible to feed all of the cows after 5:00 pm. In those instances, the ranch manager should plan to feed the mature cows earlier in the day, then feed the first calf heifers at dusk.

What about the situation where large round bales of hay are being fed to the cows and heifers? If the cows have unrestricted access to the hay around the clock, then the best method of influencing the time of calving is via the time of day that the supplement is being fed. At Oklahoma State University, the switch from supplement feeding in daytime to late afternoon/early evening feeding encouraged 72% of the cows to calve between 6 AM and 6 PM. These cows had 24/7 access to large round bales of grass hay. Before the change was made, when supplement was fed during the morning hours, the ratio of night time versus day time calving was nearly even, with half of the calves born at night and half during the day.

Some ranchers (usually with small herds) have reported success controlling access to the large round bales. The hay is fed within a small enclosed pasture or lot near a larger pasture where the cows graze during the day. In the evening, the gate to the area where the hay is placed is opened and the cows are allowed to enter and consume hay during the night. The next morning, they are moved back to the daytime pasture to graze until the following evening. In this manner, the nighttime feeding is accomplished with hay or silage only.

Whatever method fits your operation should be utilized. The advantages of heifers/cows being observed with daylight during calving is obvious. Also during winter months, baby calves born in the warmer part of the day with radiant heat from the sun to reduce cold stress, have a better chance for early colostrum consumption and therefore survival.

## **Better Wheat Pasture Conditions May Moderate Oklahoma Cattle Losses**

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

The current climate forecast is for drought conditions to persist this winter across central and western Oklahoma. Though future conditions are uncertain, widespread and persistent rain in November was ideal for establishment and growth on winter wheat. The result has been more winter wheat than anyone thought possible at the end of October. However, it must be

remembered that the amount of wheat pasture is still below normal. Many pastures have a minimal amount of forage for grazing and look more like what they would a month earlier in a more typical year. Depending on winter weather these pastures may or may not see much additional forage growth before February.

Nevertheless, the available wheat pasture fueled a brief feeder cattle market boom after Thanksgiving that saw prices in Oklahoma jump \$10-\$12/cwt for stocker cattle as local demand pushed against smaller than normal volumes. The boom lasted about two weeks as producers picked up a few stockers to take advantage of the unexpected wheat pasture. Prices have dropped this last week but are still \$8-\$10/cwt. higher than November for light stockers while heavy feeders are \$1-\$3/cwt. higher than a month ago. In other situations, the wheat pasture is being used to provide forage for cows and replacement heifers. Many producers have minimal supplies of forage, often of marginal quality and the high quality wheat pasture provides critical nutritional supplies for cow-calf operations.

The availability of some wheat pasture may moderate the change in Oklahoma cattle inventories as measured on January 1. My estimates for beef cow inventory has not changed and I still expect about a 12 percent decline in beef cows compared to January 1, 2011. However, reductions in stocker numbers will not be quite as severe as earlier projected and overall cattle numbers in Oklahoma may be down in the range of 20-25 percent compared to the earlier projections of a 25-30 percent drop in total cattle numbers.

## **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 get 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 2012!**

basis of race, color, national origin, sex, age, religion, disability, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services. References within this publication to any specific commercial product, process, or service by trade name, trademark, service mark, manufacturer, or otherwise does not constitute or imply endorsement by Oklahoma Cooperative Extension Service.