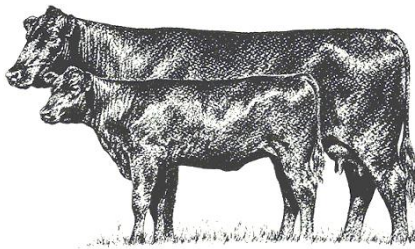


# Large Animal Newsletter

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## Calving Season 2006

At the time this article was written, the staff at Twin Forks Clinic has seen 74 calving calls. Looking at previous years data, we should be about 85% done with the calving season.

Since the year 2000, the staff at Twin Forks Clinic has collected data on the calving calls that we received. Information collected included... date, dystocia score, cow age, calf sex, calf vigor score, colostrum score, total IgG supplied, and treatments.

### Dystocia Score

Calving calls were categorized by dystocia (calving difficulty) scores. These dystocia scores are as follows...

1. Unassisted
2. Easy Pull
3. Hard Pull
4. C-Section
5. Malpresentation

About 60% of the calving calls were the result of a mal-presentation (dystocia score 5). The majority of these calves were coming backwards. Other malpositions that we saw included calves that had legs back, there were also a couple calves that were breech.

About 28% of the calving calls resulted in C-sections. Not surprisingly, 2/3<sup>rd</sup>s of these c-sections came from 1<sup>st</sup> calf heifers. These were cases where the calf was just too big to come through the pelvis.

We had about the same percentage of "easy" and "hard" pulls. About 17% of the calls were classified as easy and 18% of the calls classified as hard. The "hard" pulls usually required the use of a calf puller.

### Calf Vigor

Calf vigor was used to describe calf health and aggressiveness after birth. A calf vigor score of 1 can be a good indicator that assistance was given in a timely manner. Calf vigor scores and % occurrences are as follows...

- |                    |     |
|--------------------|-----|
| 1. Looking Good    | 52% |
| 2. Big Head/Vigor+ | 8%  |
| 3. Slow            | 9%  |
| 4. Needs Treatment | 1%  |
| 5. Dead            | 29% |

As you can see, about half of the calving calls received assistance in a timely manner. However, in about 29% of the calls that came in, the calf was dead. In some cases, the calf may have been born dead anyway, yet in other cases the calf had been malpositioned or too big and had been dead a while,

About 18% of the calving calls either had big heads, were slow, or needed treatment upon birth. This suggests that they needed to come in for assistance a little bit earlier.

## Calf Sex

Of the calving calls assisted at the vet clinic, 75% of calves born were bull calves. This is the highest percentage of bulls that we've seen for a while.

<u>Year</u>	<u>% Bull Calves</u>
2000	64%
2001	65%
2002	68%
2003	64%
2004	71%
2005	68%
2006	75%

We also saw some key differences between the sexes. On average, the bull calves weighed more at birth than the heifers (92 pounds vs. 78 pounds). Only 7% of the heifers born at the clinic were born as a result of a c-section, while 48% of the bull calves were born by c-section. Also heifer calves were about 10% more likely to have a calf vigor score of 1 or 2.

## Birth Weight

Weights were taken with a CalfScale™ hoof tape. Research has shown these tapes have about a .85 correlation with weights that were taken with a scale. The hoof tape measures the hoof circumference in centimeters and correlates that measurement to an estimated birth weight. We have found these tapes to be fairly accurate except in the cases of longer bodied calves, in these cases we verified the weights with a hanging scale.

Birth weights averaged 92 pounds with a range of 60 to 150 pounds. As mentioned earlier in this article, bull calves averaged about 14 pounds heavier than the heifers.

Not surprisingly, it seemed liked the heavier the calf was, the more problems there were going to be with the delivery. For instance, calves that weighed more than 92 pounds were about 3 times more likely to require a c-section than those that weighed less than 92 pounds.

We also noticed that the calves that weighed less than 93 pounds were about 12% more likely to have a calf vigor score of 1.

## Cow Age

Over half of all calving calls that were assisted at Twin Forks Clinic involved 1<sup>st</sup> calf heifers. About 8% involved 2<sup>nd</sup> calf heifers, with the balance distributed fairly evenly among older cows.

## Colostrum Score

For the last several years the staff at Twin Forks Clinic has measured colostrum score with the use of a colostrometer. A colostrometer measures the specific gravity of the colostrum, giving us an idea of the density of immunoglobulins and other solids in the colostrum. The higher the colostrum score, the better the colostrum quality.

Colostrum scores give us a rough idea of IgGs contained per quart of colostrum. For instance a colostrum score of 100 means there are 100 grams of IgGs per quart. Our goal is to provide the calf with 200 grams of IgGs before 24 hours of age. In this example, this calf would have to get 2 quarts of colostrum before 24 hours of age in order to get adequate passive transfer.

Colostrum scores ranged from 0 to 140. We had one sample that did not even register on the colostrometer. The average colostrum score was 85, with the second calf heifers having a lower average score than all other classes.

<u>Class</u>	<u>Average Colostrum Score</u>
1 <sup>st</sup> Calf Heifers	93
2 <sup>nd</sup> Calf Heifers	45
Mature Cows	69

There are several factors that affect colostrum quality and quantity. These include cow age, cow nutrition, cow health and vaccination history and udder confirmation.

When we assist live calves at Twin Forks Clinic, we tube feed them their first feeding of colostrum. On the average calves received 85 grams of IgG from their mother's colostrum before they left the clinic. That is almost half of what they need in the first 24 hours. When colostrum scores and quantities were low, the calf was supplemented with a colostrum supplement called Lifeline.

Since cows concentrate IgGs from their own serum when they produce colostrum, their own immune response becomes a very important factor in determining the quality of colostrum produced. Therefore, everything that affects the cow's immune response also affects the passive transfer of immunity that the calf receives from the cow. From this year's information, it would appear that the 1<sup>st</sup> calf heifers were managed fairly well prior to calving.

For the most part reports have been coming in that calving season has gone well for most producers. There have been relatively few sick calves from pneumonia or scours come into to clinic, and most people are winding down to their stragglers and getting ready for branding.

Kevin Cawthra, Animal Scientist, Twin Forks Clinic

## Spring Horse Care

Spring is fast approaching and it is time to think about your horse's routine healthcare. All horses should receive a combination vaccine containing Sleeping Sickness, West Nile & Tetanus. Infected mosquitoes transmit the Sleeping Sickness and West Nile viruses. Horses should be vaccinated in April or May to provide ample time for active immunity to develop prior to the mosquito season. If your horse has not been vaccinated in the past, an initial vaccination is administered followed by a booster vaccination in 3 to 4 weeks. Horses that travel to events or are exposed to horses that travel to events, breeding farms or salebarns are at high risk for exposure to other respiratory

diseases and are good candidates for flu, rhino, & strangles vaccines 10-14 days prior to exposure.

The minimum de-worming program that all horses should receive would be an ivermectin dewormer in late fall, to control bots. Then an anthelmintic dewormer administered in the middle of the grazing season will help control roundworms. Young horses, working horses, old horses and thin horses benefit from more frequent deworming. Consult your veterinarian to create a custom program for your situation.

Dental care is a commonly overlooked aspect of your horses' health. Routine dental evaluation is crucial to good health and longevity. Simple dental maintenance such as point & hook reduction prevent the occurrence of serious dental conditions such as wavemouth later in life. Serious dental abnormalities can result in pain, weight loss, and colic, which could be fatal.

Stop in at Twin Forks Clinic to get your vaccines and dewormer, or give us a call to setup an appointment for vaccinating and floating.

## Tri-Merit

There has been a growing concern in the cattle business recently regarding animal identification and tracking, and future requirements for age, source and process verification of cattle. This can be a very difficult and overwhelming subject for many of us. We at Twin Forks Clinic have taken a very large step to simplify these processes for our local area.

Recently we have stepped forward and started an individual animal certification program in cooperation with Schering-Plough Animal Health Corporation and Global Animal Management. This new program is called Tri-Merit™ and offers you the following benefits:

- Your health and management processes are dated and verified.
- Your calves' birth dates are certified for evolving market opportunities.
- You can choose paper or electronic record keeping.
- Your records are secured with us through a Personalized File Protection Number.
- You are prepared for growing National Animal Identification System (NAIS) needs.

The costs and effort involved in this program are small compared to the potential marketing benefits for your cattle. We are planning to hold a producer meeting to introduce this program to you in the upcoming weeks. In the meantime, please keep accurate records for birth date and processing procedures, including product brand name and lot number. This will allow us to set you up and get you started on verifying age, source, and processing for this year's calf crop.

We are excited about the additional service this opportunity allows us to offer you, and we thank you for your continued business with us.

**Tri▲Merit™**  
PROFIT • CONFIDENCE • VALUE

## 8 Key Facts About Animal ID

The industry has announced the formation of the U.S. Animal Identification Organization (USAIO). This is an independent, private group that petitioned USDA to be the entity to manage the database required for the National Animal Identification System (NAIS) and to house and maintain the database repository.

The impetus behind USAIO was the National Cattlemen's Beef Association, but the new group held its own election for board members

and will add new board members as other industry organizations join the consortium.

There's likely no issue with more misinformation and misunderstanding surrounding it than national ID. The following is what I consider to be the key facts about national ID

1. It's coming. Some still debate its need, or an alternate system, but the decision to implement a national ID system was made five years ago. Any lingering doubt by government evaporated with the Sept. 11, 2001, terrorism attacks on the East Coast. The Dec. 23, 2003, discovery of BSE in Washington state nailed it down for good. The only remaining questions were who would implement and control it?

2. The industry was only given one significant choice relative to national ID—take control of the initiative, develop your own plan and create the entities to house the data; or let the government do it for you. This decision was huge as it would affect whether the data could be safeguarded, and if the program's guidelines would be practical and cost-effective to implement with the goal of 48-hour traceback. Some chose to take the initiative and lead; others chose to believe Fact No. 1 was still undecided.

3. The importance of an industry-held data repository is more than simply ensuring others can't access the data. The value of national ID to producers is in the creation of an infrastructure to allow producers to control their own data, and the industry to more effectively share information up and down the system. If industry hadn't led the effort, such capabilities would have been lost.

4. A workable system must uniquely ID individual animals. We all love our ear tags, brands, freeze brands, tattoos, etc., which are effective in proving ownership and facilitating collection of management data to varying degrees. Unfortunately,

they're not unique individual animal ID, and aren't adaptable to the demands of the new system.

5. It's a mistake to think of national ID as strictly a government-mandated program. The world leader in so many areas, it's embarrassing for the U.S. to trail the world in livestock traceability. But it isn't just the government demanding it, so are our customers—be they Wal-Mart, McDonald's or the Japanese. Nearly every value-chain today requires source and age-verification. Others demand process and genetic-verification as well. There are \$30-\$40 premiums for such cattle today; in six months, it may be \$10-\$20/head. In 12- 18 months, it may be a \$10-\$20 discount for unidentified cattle, and that's before national ID is even implemented.

6. It's not that complicated for cow-calf producers. You simply register your operation and receive a premise ID. When your calves change ownership, they must be ID'd and that individual ID tied to their proper premise in the database.

It's more complicated for those further up the production chain but most of the major beef producing countries have already implemented the system. Thus, it obviously can and will be done.

7. Producers now have but one choice. That's to participate and shape the program, and leverage the value that can be created through the exchange of info and the creation of knowledge a national ID system makes possible. Or, you can elect to complain about and just let it happen to you.

8. The details aren't that important. Can there be more than one animal ID database? Sure, the technology to network them is simple and USDA, for once, seems to prefer allowing the free market to work. That simply means the flexibility to improve the system and evolve it.

Will we be using radio-frequency ID tags in 10 years? If the tag and ID companies are doing their job, likely we'll have something far superior. The national ID system certainly isn't perfect but the industry has taken a leadership role to create something workable.

Troy Marshall, Seedstock Digest, January 13, 2006

### **Cattle Perception of the Environment**

According to the publication Facilities and Cattle Handling, cattle really do see the world differently. For instance, cattle have panoramic

vision in excess of 300 degrees, compared to humans who have less than 180 degrees. Conversely, cattle have limited depth perception and vertical vision compared to humans.

Cattle also hear differently than humans. They can hear both lower and higher frequency sounds. For instance, it may be the sound of your truck bringing feed to them rather than the sight of the truck that attracts the cattle. Although they have acute hearing they have less ability to locate the source of the sound  
**Simmtalk, Volume 14, No. 2, March 2006**

### **For Sale**

Twin Forks Clinic has a hydraulic tilt table available for sale. Would be perfect for hoof trimming. Call Kevin at 308-423-2895

The Dundy County 4-H Council has 4 used Central City scale cells for sale call 308-423-2021 for more information.

**Twin Forks Clinic**  
**Drs. Downey, Auffet, and Gdanitz**  
**P.O. Box 449 Hwys 61&34**  
**Benkelman, NE 69021**

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