Great Plains Livestock Consulting, Inc.
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The Great Plains News Feed

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July/August 2009

The Latest across the Plains

Fair Season!

Now that summer is in full swing, fair season is right around the corner, and before you know it, the school year will begin! We know that this can be one of the busiest times of the year, as summer projects seem to keep popping up. As far as all of your livestock projects are concerned, we would like to remind you that *Great Plains Livestock Consulting, Inc*. can help you with all of your nutritional needs, including show stock.

GPLC Online

Please be sure to check out our website at www.GPLC-Inc.com. We have many different pages that you may find interesting and useful. On our *Markets* page we have teamed up with Agricharts™ to off you current market information including Livestock & Market Overviews, Cash Grain Bids, Futures, Daily Market Charts, Historical Data, Ag News, and Weather. All of our past newsletters can be viewed on our *Newsletter* link. Our July/August 2008 newsletter has some information concerning heat stress that me be helpful considering the recent weather and possible weather to come.

New FREE Service

Great Plains Livestock Consulting, Inc. is proud to introduce its new feedlot monitoring program. This new service will be offered **FREE** until September 2010. As the old adage goes "you can't manage what you don't measure" and our staff has made a collaborative effort to design a program to help producers measure the performance of their feedlot cattle. For more information contact our office or your nutritionist.

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"Turning Science into Money"

Calendar of Events

- **July 14-18** NCBA Summer Conference, Denver, CO
- **July 23-25** Oklahoma Cattlemen's Assoc. Annual Convention & Trade Show, Midwest City, OK
- **July 24-26** Rocky Mountain Horse Expo, Eagle, CO
- **July 24-Aug.1** North Dakota State Fair, Minot, ND
- **Aug. 6** Kansas Cattlemen's Assoc. Summer Conference and Trade Show, Dodge City, KS
- **Aug. 6-16** Wisconsin State Fair, West Allis, WI
- **Aug. 7-23** Indiana State Fair, Indianapolis, IN
- **Aug. 13** K-State Beef Conference, Manhattan, KS
- **Aug. 13-23** Iowa State Fair, Des Moines, IA
- **Aug. 13-23** Missouri State Fair, Sedalia, MO
- **Aug. 14-16** Flint Hills Beef Fest, Emporia, KS
- **Aug. 14-23** Illinois State Fair, Springfield, IL
- **Aug. 18-20** Dakotafest Farm Show, Mitchell, SD
- **Aug. 28-Sep. 4** Colorado State Fair, Pueblo, CO
- **Aug. 28-Sep. 7** Nebraska State Fair, Lincoln, NE
- **Sep. 1-3** Farm Progress Show, Decatur, IL

The Great Plains News Feed

Timely Reminders

General
- ✓ Clean water sources on a weekly basis.

Beef
- ✓ Start thinking about pre-weaning calf diets.
- ✓ Contact your nutritionist for creep feeding options
- ✓ Spring calving herds should be pulling bulls soon

Swine
- ✓ Evaluate optimum slaughter weights.

Equine
- ✓ Keep an eye on hay/forage quality.

Unused Feed
- ✓ Timing has a lot to do with the outcome of a raindance

Acidosis

by Dr. Ki Fanning, Ph.D., PAS, Ruminant Nutritionist

Acidosis is one of the most costly problems in the feedlot. Acidosis is also known as bloat, founder, or sticking an animal. Acute acidosis is easily identifiable in the feedlot whereas subacute acidosis normally goes unnoticed. Hallmarks of acute acidosis are a high left side, long toes, poor doing calves, and sudden death. The immediate symptoms are watery stools with white residue after it dries, increased rate of respiration, standing in water, rocking back and forth due to sore feet, kicking the belly, going off feed, and in extreme cases, death.

Subacute acidosis is usually not pen wide, so the pen of cattle will continue to eat. However, there will be individuals that are off feed or have lower intakes resulting in low pen intakes, causing gains to be less than expected. Subacute acidosis symptoms are slightly depressed pen intakes, loose stools and a tight left side. Subacute acidosis is quite common in the feedlot industry because ruminants are not adapted to consuming high-grain finishing diets. Rather, calves must learn how much, how fast, and how often to eat without becoming acidotic. The biggest challenge associated with subacute acidosis is that it is not easily detectable, yet it is quite costly due to performance losses.

There are several different causes of acidosis. The first is changing from a high roughage diet to a high concentrate diet too quickly. This is the reason why we use a series of step-up diets consisting of a *Starter, Grower 1, Grower 2, Finisher 1,* and *Finisher 2*. Each diet is to be fed three to five days at minimum. This gives the rumen bacteria (bugs) time to adapt to the higher concentrate diet and prevents the bacteria from producing too much lactic acid during fermentation (digestion) of the feed.

The amount of concentrate fed can also be a problem. A recent example would be cattle that went through the heat and humidity the last week of June. The excessive heat depressed intakes and was followed by a cool down that promoted normal intakes. The cattle may have dropped to about 30% of the previous intakes for several days (nothing anyone could do about that) and if intakes were not managed correctly, the subsequent increase in intake could have caused acidosis. The increase in intake needs to be controlled to about 1.5 pounds of dry matter or approximately 3.0 pounds of feed as fed per day.

The rate of fermentation or digestion can also be a problem. A feedstuff with a fast rate of fermentation is commonly referred to as a "hot" feed and may contribute to acidosis. A good example of this is feeding by-products, which ferment slower than rolled corn, which ferments slower than ground corn, wheat, or barley. **For this reason, never feed fine ground corn to ruminants, especially not in a self-feeder**. This is also the reason that we use only a limited amount of wheat in a ration.

Acidosis, both acute and subacute, can be prevented by feeding within 15 minutes of the same time every day, by having at least 12 inches of bunk space for finishing cattle or 24 inches for cows, receiving calves, and cattle that are being limit fed. When transitioning from one ration to another make sure that the cattle have been on the previous ration for at least three days. It is also critical there is not a storm or weather change predicted for the immediate future, and that the rations are blended for one to three days. For example, feed the new ration in the afternoon for two days when the cattle are not as aggressive and the previous ration in the morning prior to going completely to the next consecutive ration. The cattle should have feed in front of them no less than 16 hours per day and no more than 20 hours per day, unless otherwise specified. Make sure the cattle are not sorting feed. This does not mean that the bunks are slick, however; it does mean the cattle are not moving feed back and forth in the bunks, creating bare spots in the bottom of the bunk. This is one of the more common problems we see, due to the longer length of hay in the bunk.

By practicing good bunk management, observing the cattle and their stools, watching the weather, and moving the cattle through the diets according to the proper protocol then acidosis can be minimized. This will translate into improved performance and additional dollars for you and/or your customer.

Deworming

In the United States, one of the most economically draining problems we face is the affect of parasites on cattle. It is estimated to cost the industry over $100 million annually. Many of us have seen the prototypical "wormy calf". The animal that is long haired, unthrifty, and thin. Unfortunately these may not be the animals that are costing us most dearly. Much of the loss is due to subclinical infestations. These are animals that have a worm burden and are not performing as they should, but do not look obviously ill. It has been estimated that not deworming cattle, on average, will cost the cow calf producer greater than $25/hd.

The most common and most economically important internal parasite of cattle is the Ostertagia. The Ostertagia life cycle is direct, meaning cattle pass eggs in the manure then eggs hatch and develop into third-stage infective larvae. This usually takes about 14 days. The larvae migrate up a moist grass blade from the manure pile they were living in and are then eaten by the next cow. Two to four weeks later these larvae are egg laying adults. You can see how the cycle can build rapidly. There are times when Mother Nature slows the process down. In extreme conditions (heat, cold, drought) the worm will hibernate. There is another stage of Ostertagia that for simplicity sake we will not go into. It is able to go dormant in the stomach for months before being triggered to leave.

By having a basic understanding of this life cycle we can increase the effectiveness of our deworming program.

Inhibited Ostertagia sometimes show severe symptoms in the feedlot and should be treated with an effective dewormer. The dry lot can be very effective immediately after treatment to prevent recontamination before placing treated cattle on clean or safe pastures. According to the life cycle where infective larvae are being picked up on blades of grass in moisture drops, infection should be impossible. If infected cattle are not treated before being placed in feed lots infection should not increase. The performance of these cattle can still be reduced and they should be treated on entry.

We can also use strategic deworming on grass cattle to get the most bang for our buck. Using the knowledge that the worm must have lush, growing grass to pass between animals we can deworm at times when the animals will stay worm free for the longest. If you live in a part of the United States that receives killing frost you can wait until then to deworm. A cow dewormed at this time should be parasite free throughout the winter; she will also not start to shed again until after lush grass returns and she is reinfected. If cattle are held off pastures in the spring we can use turnout as a time to eliminate worms and keep the burden on the pasture at a minimum. My preference in northern Missouri is to deworm in the fall and then deworm again early summer. This gives us a worm free cow going onto grass and then allows us to decrease the burden at the period of peak contamination.

Many effective dewormers are approved and available for treating internal parasites in cattle. They vary as to their effectiveness against adult and immature stages.

When cattle are dewormed accurate weight determinations are critical to proper dosage. It is not necessary to weigh every animal, but spot weighing takes the guesswork away. If weight estimates are being used, be sure to use the heaviest weight if there is not a big difference in the weight of the cows.

Equipment to administer the individual dewormers should be accurate and in good working order. Carefully check settings and calibrations before starting and periodically check while treating the cattle.

Time should be taken when using pour on dewormers to put the product on properly. It should be applied midline with as much skin contact as possible. Care should be taken to not pour it on patches of mud/manure. Most injectable dewormers are given subcutaneously (S/Q). Use a short needle 3/4 inch long or shorter and no more than 16 gauge. Check these needles every few animals for burrs or dullness, which may cause abscesses. Changing needles often will help prevent this and also lessen the chance of passing infections between animals.

Overdosing is not necessary. Today's dewormers have a good safety margin, but overdosing will only add to the expense of the deworming treatment.

Adequate care and storage of dewormers should receive close attention. Some dewormers must be refrigerated, while others need kept out of sunlight. All dewormers have an expiration date -- check this when buying the product and when using it.

This is an over simplified version of parasite control and it can vary greatly from region to region. Please talk to your animal health professional to see what is right for your area.

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