



This newsletter is a joint effort from the following organizations:



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Never too Early to Plan for Conservation

By: John Zinn & Dean Thomas

Even though the snow is covering the ground, this is actually the best time to start the planning process for future conservation projects with your local NRCS office. You know your land and what it needs to be more productive to preserve its production potential. Your local NRCS office wants to work with you to develop a technical assistance plan, which takes time.

Typically the planning process starts with a visit to your local office where you will sit down and discuss your existing production methods with recommended conservation practices. NRCS staff will then visit your farm to make an on field evaluation, suggest alternatives. At a later meeting, NRCS will provide you with your plan and ideas for you to utilize. Taking time to plan pays because you get what you need to be successful in addressing your concerns. Some of the benefits of having a completed plan is that you will know the areas identified to reduce soil erosion, improving your soil health and water quality, and it will also help with eligibility ranking for NRCS programs EQIP and CSP.

While winter is not "down time" for most farms, there may be more time available to start planning. Feel free to call or visit your local NRCS now to discuss your ideas. Remember planning assistance is free and you may be eligible for financial assistance.



Cow Calf Days

2017 Seminar Tour & Trade Show

Oronoco, MN

January 26 ~ 5:30 pm

Tony Rossman Farm, 7000 - 70th St NW, Oronoco MN

Topics:

Managing Scours in Calves, Dr. Tim Goldsmith, U of M

Hay Raking Study, Abby Neu, U of M

Grazing, Eric Mousel, U of M Beef Team

Minimizing Hay Waste, Nicole Rambo, U of M Beef Team

Registration: \$10 per person at the door.

Contact Dean Thomas @ 507.774.9610 dean.thomas@mn.nacdnet.net

Being Vigilant About Calf Scours

By: Eric Mousel, University of Minnesota Extension Cow Calf Educator

A couple of years ago the Minnesota Extension Beef Team conducted a study to identify the primary inefficiencies in cow calf operations around the state. We looked at data from about 1,500 cow calf operations from all over the state over a nine-year period (2005-2013) and compared pregnancy, calving, and weaning percentages from these operations. The results have given some pretty good insights into things that Minnesota cow-calf producers do well; and some things we certainly could improve upon to make our operations more fruitful, satisfying and ultimately more profitable.

What became very evident during the course of this analysis was that Minnesota cow calf producers do a very good job of getting cows pregnant (mean pregnancy percentage = 96%) and getting live calves on the ground (mean calving percentage = 94%). As group, cow calf operators in this state should be proud of these numbers as they rank right up there with South Dakota, North Dakota, and Nebraska. Unfortunately, as group, we seem to have a more difficult time keeping calves alive between calving and weaning (mean weaning percentage = 88%). What this tells us is that the average Minnesota cow calf operation loses about 6% of our live calf crop after calving but before weaning. In comparison, the bigger cow states in our region like the Dakotas and Nebraska will wean 93% of those calves that were born alive.

The bad news is that this is primarily a management issue; the good news is that this is primarily a management issue. Management snags generally can be corrected or at least improved by changing a few of the ways we handle specific problems. The point here is not to compare the western states with Minnesota in terms of cow calf production; the point is that we can be more efficient if we can identify and correct some specific issues that are resulting in this undesirable outcome. Through the presentation and discussions of this study around the state over the last couple of years, one of the main things producers agree on is that they tend lose some calves to calf scours fairly frequently. This in and of itself is not that surprising, but what ultimately results from these discussions is that many producers feel they could do a better job of preventing and treating scours. Furthermore, they feel that their personal knowledge of prevention and treatment protocols may not be as good as it could be.

So, let's talk a little about scours. Calf scours is a term for diarrhea or is sometimes referred to as "enteritis"; which means inflammation of the intestinal tract. Cattle of any age can develop diarrhea, most cases of calf scours occur under one month of age; usually between the first 3 to 16 days of the calf's life. Older calves that are 1-6 months of age also can develop a case of scours, but it is much less common than in young calves.

Probable causes

There are many possible causes of scours in baby calves and most are infectious agents. The most common things are 1) Viruses – rotavirus and coronavirus are a couple of the more common viruses, 2) Parasites – *Cryptosporidium* and coccidia are relatively common in certain areas, and 3) Bacteria – *Escherichia coli* (*E. coli*), *Salmonella*, and *Clostridium perfringens* are quite common. Calf scours may be caused by one or more than one of these infectious agents acting together.

Physical symptoms to look for

The first sign you will probably see is a tough-looking calf that looks depressed, is not nursing like it should; or not at all, and probably has a messy rear-end. Watery stools that may be brown, green, yellow, or grey in color, flecks of blood (not a lot), and mucus usually are observed in the stool. This is usually indicative of a viral infection. Rust colored or very bloody stools usually are a sign of a bacterial or parasitic infection such as *Salmonella* or *E. coli* (bacterial) or coccidiosis (parasitic). A few days after the onset of the infection,

calves will develop a sunken-eyed appearance. This is a classic sign of dehydration. As a test for dehydration, you can pinch the skin of the calf and if it doesn't immediately flatten out, the calf is pretty dehydrated. Ultimately, if calf scours are not treated quickly and/or properly, the calf will actually die from dehydration, rather than from the actual infection.

Suggested treatments

Treating calf scours should really fall under the direct supervision of your veterinarian, especially when it comes to determining if you are going to need an antibiotic or parasite control. The following is simply a guide to help you start fluid therapy and to know what questions to ask your veterinarian.

Once you have identified calf scours as the possible cause of ailment, the first thing should be to isolate the cow and calf where they have little to no contact with other calves, are dry and are out of the wind. This may be 2 weeks in a worst case scenario, but you want to avoid spreading the problem to the rest of the herd. Regardless of the ultimate cause of the scour problem, the single most important thing you can do is start treating the calf with electrolyte fluids using an esophageal drench tube and a powder electrolyte product you mix with warm water. You should run about 4-6 quarts through the calf each day divided among 2-3 feedings. If you work off the farm during the day, a feeding in the morning, one after supper, and one late in the evening is a good schedule to follow. You will need to continue hydration therapy until the signs of scours have completely cleared up or the calf is up and nursing normally and won't take any more fluid. The next thing you need to do is try to identify the cause of the infection. You will need the help of a vet to definitively identify the cause; but here are a few guidelines to get started. If the calf is exhibiting a viral infection (watery stools that may be brown, green, yellow, or grey in color, flecks of blood (not a lot), and mucus usually are observed in the stool), about all you can do at this point is keep the calf hydrated and wait for the infection to run its course. Antibiotics will not clear up the infection and administering them without instruction from a vet may actually cause problems for the calf. Maintain the fluid therapy and the infection will likely clear up in a week or so.

However, if the calf is exhibiting signs of a viral infection for the first 3-5 days and then the signs of a bacterial infection develop (rust colored or very bloody stools usually are a sign), chances are that a secondary infection has developed (it is unlikely that a parasitic infection would show up at this point) and you are going to need a vet-directed broad-spectrum antibiotic treatment in addition to the on-going fluid therapy. If the initial scours are rust colored or very bloody, then the infection is likely either bacterial induced or a parasitic infection that will require a vet-directed identification of the problem and treatment such as a broad spectrum antibiotic and/or a coccidiostat (there are no real effective treatments for *cryptosporidiosis*) as well as extensive fluid therapy until the symptoms have cleared up.

Preventative measures

It is unlikely that you will ever completely eradicate calf scours from your farm, however, you should be able to consistently maintain an infection rate below 1% over the long term by working towards prevention as well as improving your treatment methods and skills. The following prevention methods are a few things to consider if you don't do them already:

1. Vaccinate cows before calving for calf scour-causing agents. Vaccination will provide some passive immunity through colostrum to the calves.
2. Provide wind breaks for cattle in open country. Keep these breaks bedded and cleaned properly.
3. Keep cows and calves out of the mud and manure as best as you can. Scrape calving lots before the frost goes out if possible and put down fresh bedding.
4. Spread cows out during and after calving.
5. Keep bedding fresh to keep mama clean. Cows that lay in mud/manure and get muddy bags will be a point-source for sucking calves to pick up scours.
6. Provide properly maintained calf huts to keep calves out of the mud and wind; preferably huts that keep mama out.



32nd Annual

Private Treaty Bull Sale

~ selling 60 Balancer & Gelbvieh Bulls ~

Saturday, February 25th

11:00 a.m. - 3:00 p.m.

At the farm, Goodhue, MN

25765 Cty. 3 Blvd. www.schaferfarm.com

Goodhue MN 55027 brian@schaferfarm.com



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