

Poor Quality Forages Pose Life-Threatening Risk to GA Cow Herds

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WHAT IS HAPPENING

A large number of beef cattle producers in the Southeastern US are reporting that their cows are experiencing diarrhea, dying soon after calving, or dying unexpectedly. Some producers have also reported an increase in the number of cows aborting or giving birth to weak or stillborn calves.

WHY

Although the exact causes can vary, the most likely culprit is poor nutrition, primarily as a result of feeding low-quality hay (overly mature hay caused by the unusually wet summer in 2013). This issue has been exacerbated by the feeding of supplemental feed sources that do not provide adequate energy, protein, or other nutrients and/or poorly-chosen supplements that contain high concentrations of starch or simple sugars (e.g., corn, “lick tanks”, etc.) that cause the bacteria to become less efficient at digesting the forage that is provided. This insufficient diet, combined with the exceptionally cold winter, has resulted in numerous cases of malnutrition and/or impacted gastrointestinal tracts that have resulted in death.

WHAT SHOULD CATTLEMEN DO?

- 1) **Understand your resources!** Sample and test your hay and know the ingredient inventory and pricing schedule of your local feed provider.
- 2) **Understand the body condition score (BCS) of your cow herd**, and have a sense of what that means. Cows should be maintained at a BCS of 5 or greater. If the BCS drops below this level, it will drastically reduce conception/calving rates (BCS 5 = conception rates of >85%) and stretch the calving interval (BCS 5 = calving interval every 360 to 370 days, whereas BCS 4 or lower = calving intervals > 380 days). Given the difficulty of this winter season and the poor quality forage serving as the basis of the diet, producers who have consistently maintained their brood cows at a BCS of 5 or greater will be better able to withstand extreme weather shifts or short-term nutritional deficits. Keep in mind that it requires a ration that is 9% higher in TDN above requirement for about 70 days to recover a cow's BCS from a 4 to a 5.

- 3) ***Avoid additives that are applied to poor quality hay designed to increase intake. Cattle can starve to death with a full belly.*** As the digestibility of a forage decreases, cows are forced to consume more to sustain sufficient energy intake. When forage quality is exceptionally low (such as this year), increased intake of hay that is largely indigestible will increase the risk of impaction within the digestive tract.
- 4) ***Consider a grain or byproduct-based feed to supplement low quality forage.*** Although more labor intensive, supplemental feeds instead of liquid feeds or protein blocks may help alleviate some of the performance and health issues associated with feeding low quality forages. From the standpoint of trying to maintain a healthy rumen environment, fiber based energy supplements such as: soybean hulls, corn gluten feed, distillers grains, citrus pulp and whole cottonseed are recommended over those that contain high levels of starch (e.g., ground corn, oats, etc.) and simple sugars (e.g., molasses). In most cases, two or more of these fiber based energy sources may be the most economical way of meeting nutrient requirements. The table below illustrates some potential rations that can be used for cows at different stages of production using different commodity feeds or blends.
- 5) ***Use winter annuals with caution.*** If winter grazing is available, then use it, but use it carefully. Winter forage production has been extraordinarily slow this winter because of the cold weather and dry conditions at planting. So, if you have some winter grazing available but not enough to sustain the herd, consider limit grazing the winter annuals for only a few hours per day. While you may not be able to completely meet nutrient requirements, the addition of winter grazing to the diet should help to prevent impaction issues and will improve ruminal fermentation of both annuals and hay.
- 6) ***Do NOT attempt to background calves on low quality hay.*** Feeder calf prices are currently at record highs and with nutrient availability in jeopardy, taking calves to market at weaning is a win-win. Not only are you likely to increase return on investment from the calves themselves, but you simultaneously alleviate nutritional stress on the cow allowing her to begin rebuilding body reserves.

TAKE HOME CONCLUSIONS

It is important to realize that forage quality is extremely low this year, and traditional supplementation methods may not be adequate to prevent loss of body condition or even loss of life in some herds. Supplements should contain quality protein and metabolizable energy that will work together to maintain a healthy and productive rumen environment. It is essential to know where you stand in terms of BCS and forage quality on your farm, and it is important to market calves as soon as possible in order to preserve resources and reap the benefits of an extremely healthy feeder calf market. Infectious diseases or parasites can also cause similar problems in cow herds so it is important to determine if the reason is inadequate nutrition or other cause.

For more information contact your local Extension office (1-800-ASK-UGA-1), and visit www.secattleadvisor.com, www.georgiaforages.com, or www.ugabeef.com

Table1. Supplemental Rations for 1200 lb Brood Cows Consuming Bermudagrass Hay During Various Stages of Production

Cow Stage of Production: Nutrient Requirement	Forage Quality of Free Choice Hay		
	Poor Forage, 7% CP, 48% TDN	Average Forage, 10% CP, 50% TDN	Good Forage, 13% CP, 56% TDN
	-----lb / head / day-----		
50:50 CGF and SH¹			
Dry Pregnant: <i>7% CP, 48% TDN</i>	0	0	0
Peak Lactation: <i>12% CP, 60% TDN</i>	17	12	6
Late Lactation: <i>9% CP, 55% TDN</i>	10	6	0
50:50 DDGS² and SH			
Dry Pregnant: <i>7% CP, 48% TDN</i>	0	0	0
Peak Lactation: <i>12% CP, 60% TDN</i>	16	11	5
Late Lactation: <i>9% CP, 55% TDN</i>	10	5	0
60:20:20 SH: CGF: Corn			
Dry Pregnant: <i>7% CP, 48% TDN</i>	0	0	0
Peak Lactation: <i>12% CP, 60% TDN</i>	N/A ³	11	5
Late Lactation: <i>9% CP, 55% TDN</i>	11	5	0
Whole Cottonseed			
Dry Pregnant: <i>7% CP, 48% TDN</i>	0	0	0
Peak Lactation: <i>12% CP, 60% TDN</i>	N/A ⁴	N/A ⁴	4
Late Lactation: <i>9% CP, 55% TDN</i>	6	4	0

¹CGF = Corn Gluten Feed; SH = soybean hulls

²DDGS = Distillers Dried Grains plus Solubles

³Deficient in CP

⁴Above the recommended feeding rate of 0.5% of body weight (6 lb for a 1200 lb brood cow)

