

BLOAT MANAGEMENT IN CATTLE

March 2012 Georgia Cattleman
Dennis Hancock, Forage Extension Specialist
The University of Georgia

Folks have all kinds of fears. Some folks are afraid of snakes, spiders, sharks or any number of things. Cattlemen are generally hardy folk and not afraid of much. But, there is one thing that many cattlemen fear: bloat.

Of course, the fear of bloat is not an irrational fear. Bloat can be a serious issue and even occasionally result in the loss of an animal. But, as my counterpart at Auburn University, Dr. Don Ball, is fond of saying “the fear of bloat has cost more than bloat ever did.”

The Reasons Animals Bloat

Bloat, or ruminal tympany, is a condition where gases buildup in the rumen. In most normal circumstances, these gases can be eructated (belched) by the animal. But, there are some situations where these gases cannot escape. Consequently, the gases buildup in the rumen and the rumen wall becomes distended. Outwardly, a bloated appearance is evident by a distention on the animal's left side. This distention also places pressure on the diaphragm of the animal, causing the animal to have difficulty in breathing. Symptoms may also include frequent urination and defecation, bellowing, or staggers. In the most severe cases, the distention prevents breathing and causes heart failure and death.

The reason that the gases cannot escape through eructation is usually because a frothy/foamy layer has built up on top of the digesta in the rumen. This froth can develop when the animal rapidly consumes forage that is high in soluble proteins and low in lignin. This is why bloat is frequently associated with high quality legumes like white clover, ball clover, red clover, and alfalfa. However, bloat can also occur when animals graze immature rye or wheat stands.

An animal's saliva contains protein called mucin that has many anti-foaming properties. When the animal is grazing at a normal rate, enough saliva mixes with the forage to prevent the production of the froth. However, some animals select the highest quality forage on offer, graze faster than others, and/or produce less saliva than others. Consequently, some animals are more prone to bloat than others.

Keys to Preventing Bloat

Bloat is best managed by preventing it. However, many cattlemen believe that they cannot use legumes if they want to avoid bloat. This is NOT TRUE. Yes, some legumes can increase the risk of bloat, but only rarely is there a problem if legumes consist of less than 50% of the stand. The majority of situations where a producer in the Southeast would use legumes would be as in a mixture with grass. So, on this basis alone, most cattlemen in our region are at low risk of having problems with bloat in their cattle.

Another critical management consideration is to avoid grazing risky pastures when the animals will consume the forage quickly or are hungry, especially when the pastures have dew on them or are wet from rainfall. Rapid consumption of forage prevents an adequate amount of saliva from being produced. When this is combined with excessive moisture on the forage, the highly soluble proteins dissolve more quickly and more rapidly build up the frothy layer. This issue can often be mitigated by allowing access to hay continually or during or prior to grazing.

When legumes are more than 50% of the stand and/or risky grazing management can't be avoided, other strategies can be used to prevent bloat. For example, a surfactant called proloxalene (Bloat Guard) or an ionophore called monensin (Rumensin) can be added to mineral mixes/blocks or used as feed additives. Both products are effective at minimizing the risk of bloat.

Curing Bloat

Despite all our efforts at prevention, animals will occasionally develop bloat symptoms. If bloat is suspected, immediately remove the animals from the pasture and offer dry hay. Be careful not to move the animals too quickly, as this may exacerbate their difficulty in breathing. Walking can sometimes help to release some of the gas and pressure on the rumen. However, a veterinarian should be quickly consulted. Animals can die from bloat in less than 1 hour. The veterinarian may be able to provide directions over the phone that can stabilize the animal until he or she arrives.

Confusion about Bloat

When an animal dies, we tend to focus on the most easily recognizable symptoms. But, it is easy to think an animal died of bloat when one finds the animal's bloated carcass some time after the animal died. The processes of fermentation in the animal's rumen continue for sometime after the animal dies. Since the animal is dead and no longer capable of eructating to release the gases, animals that have been dead for a few hours or more will frequently bloat. Consequently, bloat is sometimes assumed to be the cause of the animal's death. This may or may not be the case. So, one should learn the symptoms of other diseases, toxicities, and deficiencies so as to rule out and/or properly diagnosis the cause.

More Information

Additional information about bloat and grazing management can be found by visiting our website at www.georgiaforages.com. If you have additional forage management questions, visit our website or contact your local University of Georgia Cooperative Extension office by dialing 1-800-ASK-UGA1.

got questions?

Have a question or topic that you want Dr. Hancock to address? Email him at: questions@georgiaforages.com.

