“Pasture Bloat”

A large number of cattle in Kentucky have recently been affected by Primary Ruminal Tympany (aka Frothy Bloat or Pasture Bloat). In fact, the problem has become so bad, and death loss so large, that their Agriculture Commissioner has asked the Governor to request a disaster declaration from the USDA. Bloat is a condition where gas gets trapped in the cow’s rumen (stomach) and cannot be belched out as normally occurs. This is due to the fact that the gas gets trapped in bubbles in the rumen. As the amount of gas in the rumen increases, the cow’s abdomen gets larger on the left side behind the last rib and fairly high up on the abdominal wall. Eventually, the pressure in the rumen can get high enough that the cow can suffocate and die. Bloat can be a serious problem but knowledge about its prevention and cure can keep it from becoming an economic disaster.

The culprit in most of these bloat cases appears to be pastures with excessive amounts of white clover. According to KY Agriculture Commissioner Richie Farmer, “Weather conditions that led to bloat began three summers ago, when back-to-back droughts in 2007 and 2008 weakened grass stands in pastures across Kentucky, then this spring, a dry April caused grass to lie dormant, followed by a wet May that caused white clover to grow higher and faster than grass.” Since TN has experienced these same weather conditions and has also seen an increase in clover in pastures, it may be useful to look at some ways to prevent pasture bloat.

Bloat occurs most often when cattle are grazed on rapidly growing, lush pastures, particularly in the spring and fall. It is particularly prevalent on pastures with more than 50% legume and on wheat pastures. If using pastures likely to cause bloat, watch the cattle closely and manage them to avoid bloat. It is best to not turn hungry cattle onto legume pastures but rather allow them to fill up on alternative pastures or hay. Also, avoid grazing immature legumes and if possible alternate between grazing legumes and grass. If you feel pasture bloat may be an issue, consider feeding a bloat preventative that has the active ingredient Poloxalene. This chemical prevents bloat by reducing foam which traps gases in the rumen and is sold under various trade names and is available in medicated blocks, as a top-dress feed or in a liquid drench or premix.

It is possible to treat bloat if symptoms are recognized early. A pint of vegetable oil, mineral oil or ½ cup of mild detergent can be used as a defoaming agent. It is preferable to administer these via a stomach tube, but drenching may work. It is a good idea to have some liquid poloxalene drench on hand to administer for bloat treatment as well. Other methods include tying a 1 ½ inch gag firmly into the animal’s mouth as you would place a bit in a horse’s mouth to induce belching, or using a stomach tube to release trapped air. If these treatments fail, call your veterinarian who may want to puncture the rumen to let gas out and then close the wound and administer antibiotics.

Legumes are a valuable component of a pasture or hay field because they result in improved animal performance and a decreased need for nitrogen. However, when environmental conditions lead to legumes taking over pastures, then problems such as pasture bloat can occur. Proper management of these pastures can help you avoid potential problems and get the most out of your clovers and other legumes. If you have any questions about pasture bloat, feel free to contact me at the University of Tennessee Extension office in Spencer at (931) 946-2435.