

BLOATLICE aids in bloat control



Don't risk stock losses to bloat.

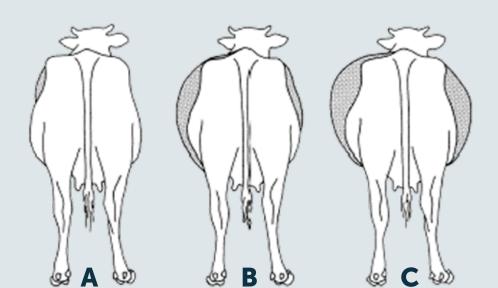
PROTECT YOUR LIVESTOCK
WITH BLOAT-LIQ.

Bloat- a complex metabolic condition

Ruminal tympany, commonly known as bloat, is a digestive disorder of ruminants that occurs when the gas produced during normal rumination is trapped and cannot be expelled by belching. Increased pressure in the rumen can compress the cardiovascular system so that when untreated, the condition can be fatal. In Australia the estimated average loss per year due to bloat is \$47 million (MLA Report Date: April 2006, ISBN: 1741910021.)

Gas is produced as a natural by-product of digestive fermentation in the rumen. This gas contains approximately 30% methane, 60% carbon dioxide, and trace amounts of other gases. Gas production in a hungry cow's rumen on good pasture can be up to 2 litres per minute and must be expelled quickly if the animal is to consume sufficient feed. In order to remove this gas, the animal belches about once a minute. If the gas release is disturbed, foam forms in the digesta and causes the belching mechanism to fail. Usually the foam is of low persistence and occurs only in small amounts. In contrast, the formation of large amounts of rigid foam of a high persistence is lethal. Gas that cannot be expelled by belching causes bloating, and if severe enough, internal pressure on the vital organs surrounding the rumen (i.e. heart and lungs) results in death.

The main problem of this complex metabolic disorder is its rapid progress and the difficulty of predicting its occurrence under field conditions. The complexity results from the interaction of plant, animal, and microbial factors which lead to foam formation. Pasture bloat predominates in animals grazing fresh forage legumes, especially in spring. Maximum foaminess of the rumen content occurs 1 to 2 hours after the cow begins eating bloat-causing forage and is reduced to the pre-feeding level 4 hours later.



- A. Mild bloat
- **B**. Moderate
- C. Severe

What causes bloat?

Pasture bloat is caused by grazing plants such as lucerne, wheat pasture, various clovers, succulent grasses, hay and crops such as brassicas. Plant proteins, saponins, pectins, hemicelluloses, bacterial polysaccharides, and peptide slimes produced by the rumen microbes - either solely or acting in combinations – can be responsible for stable foam formation. Bloat is also associated with high levels of potassium and low levels of sodium in the rumen, a characteristic of grazing oat and wheat crops in the winter.

Small plant particles and foam-stabilising polysaccharides appear to play a crucial role in the process of rumen foam formation. Fine plant particles originate from decomposed chloroplasts. These in rumen fluid facilitate gas bubble coalescence. The bloat potential of crops depends on their digestibility by rumen bacteria. Other compounds are also involved in the development of pasture bloat to varying degrees. Saponins, which occur in significant amounts in both lucerne and clover, are known to form stable foams at very low concentrations.

In addition to the plant characteristics, the animal's susceptibility to bloat plays a major role. In general, greedy cattle have a higher likelihood of developing bloat.

Symptoms of bloat:

- Distension of the left side.
- Laboured breathing, frequent urination, and defecation.
- In some cases, profuse salivation and protruding eyes.
- Eructation slows and stops along with rumen motility.
- Mucus membranes become cyanotic.
- Develops a staggering gait, animal collapses, and can not rise.

DEATH CAN OCCUR
WITHIN 30 MINUTES OF
THE FIRST SYMPTOMS
AND IS DUE TO
SUFFOCATION.



Bloat prevention

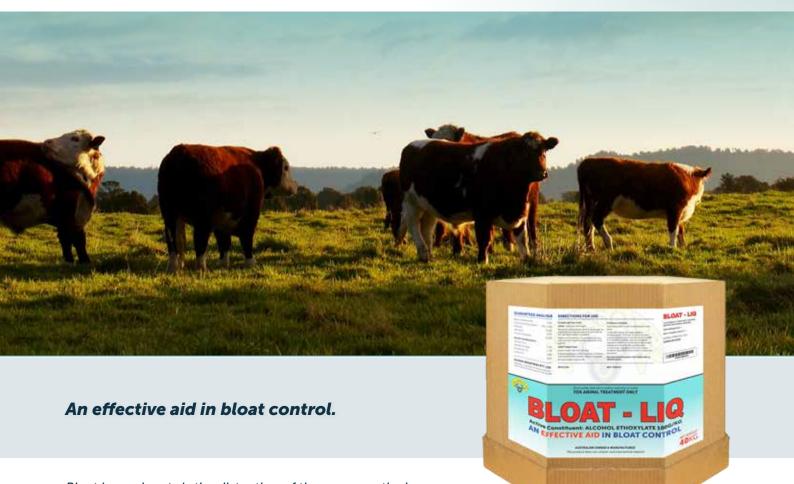
The most common methods of preventing pasture bloat include pasture management and grazing control, feeding of roughage supplements, and the administration of antibacterial and anti-foaming agents. Pasture management may involve using grass or silage-legume mixtures, considering crop maturity and choosing forage with low bloat potential. Feeding ruminants dry hay before or during grazing, as well as slowly adapting the animals to high risk pastures are some of the safest bloat prevention methods.

However, even with good pasture management bloat can still occur. When it does it is crucial to 'break the foam' as the animal starts to bloat. The best way of doing this is by providing the animal with a bloat block containing anti-foam forming materials, such as Olsson's Bloat Liq.



BLOAT LIQ

AVAILABLE IN 15 & 40KG BLOCKS



Bloat in ruminants is the distention of the rumen-reticulum, or paunch, with gas. This gas has been formed during rapid fermentation of the feed in the rumen. The distention is

usually seen on the left side as a tight ballooning of the underlying rumen from the ribs to the hip. The usual mechanism of "belching" and letting gas out through the animal's mouth has failed and so the gas accumulates. Distention can occur from pasture bloat and feedlot bloat.

Olsson's Bloat-Liq is a molasses-based, anti foaming block (10% Alcohol Ethoxylate Teric 12A 23) designed to relieve the symptoms of this annual killer. Bloat-Liq is rain resistant, easy to use, works 24 hours a day and is one of the best value bloat products on the market. **APVMA Approval No. 41900/15/0108.**

DIRECTIONS FOR USE	TYPICAL ANALYSIS	;		
Place out enough blocks to avoid overcrowding two weeks prior to suspected bloat season. Consumption: Feed on an ad-lib basis during bloat season. Consumption can be reduced when used in conjunction with Herd Health 365 or Ewe Beauty 365.	Bypass Protein Meal	2.8%	Calcium (Ca)	2.3%
	Total Protein Equivalents	1.0%	Magnesium (Mg)	2.7%
	Molasses	67.5%	Phosphorus (P)	0.6%
	Salt (NaCl)	3.2%	Sulphur (S)	0.1%
	Alcohol Ethoxylate	10.0%		
	Active Ingredient: 10% Alcohol Ethoxylate Teric 12A 23- 1g/10g of block.			



HOTLINE 1800 804 096 olssonsblocks.com.au