

Minimize Bloat Losses

Cattle deaths due to bloat are an economic loss, but the greater cost may come during the early stages of bloat, says a Texas Agricultural Experiment Station researcher at Vernon, Texas.

“What you don’t see will be the hidden loss of depressed animal gains ranging from one-third to a little more than one pound (lb.) per day over a 60-day bloat period in cattle with slight to moderate bloat,” says Bill Pinchak, Experiment Station range animal nutritionist. “The loss in average daily gain (ADG) may equal or exceed the total bloat death loss in most years.”

Wheat pasture bloat is the major

nonpathogenic cause of death in the Texas stocker cattle industry, accounting for a 1%-3% death loss in cattle grazing winter wheat pastures, he says.

The biggest costs of bloat may be in undiagnosed cattle.

But a bigger economic loss may be incurred because most producers don’t recognize the less severe bloating, where it begins to cost them, Pinchak says. At Level 1, with slight bloating or distension to the left side, cattle are already losing three-tenths of a pound of ADG per day.

Pinchak and a team of Experiment Station researchers are working to mitigate the effects of bloat. So far, their studies have shown it takes a weather change to prompt

severe bloat onset. Management can also affect the severity of occurrence.

Management aspects involved include land management [nitrogen (N) fertilization] and grazing management (forage allowance), as well as intervention strategies (ionophores and other supplements), he says.

Studies have shown maximum fertilization increases the amount of bloat, Pinchak says. Early winter grazing is generally not when bloat occurs. February through March, when the spring green-up begins, is a prime time for cattle to suffer from bloat.

Bloat is blamed for an estimated 2% death loss in the 2 million head of cattle in the stocker program in the Northern Plains, he says.

Bloat increases the pressure within the rumen and inhibits the nerves controlling belching, Pinchak explains. Chronic stress due to bloat changes animal behavior. Cattle spend more time idling. They are uncomfortable. Their jaw movement is less than if they were not bloated. They have fewer grazing bouts during the day.

Collectively, the time the cattle spend off feed or at a reduced grazing rate can add up to decreased animal performance, Pinchak says.

“They will graze less time and less often,” he says. “You will see their activity drop the greatest in the early morning, early evening and late night grazing.”

Mitigation supplements

Pinchak says studies have shown poloxalene, monensin, corn oil and condensed tannin supplementation can help reduce the effect of bloat. However, condensed tannin supplementation with plant tannin extracts is not currently approved by the Food and Drug Administration (FDA) as a feed supplement.

Poloxalene and corn oil are FDA-approved, but they only decrease bloat; they do not increase animal performance, he says. Monensin is an FDA-approved feed additive and decreases but does not eliminate bloat while increasing animal performance.

Some condensed tannin extracts have increased performance by 15% over 60 days and have controlled bloat, Pinchak says.

Bloat mitigation supplements have a varied history in stocker cattle grazing wheat pasture, he says. The variations in their effectiveness are most likely caused by consumption of the supplements at levels below what is needed to achieve an effective dose.

Stocker cattle should be adapted to the supplement they will receive on wheat pasture before being turned out to wheat and before bloat occurs, Pinchak says. This will decrease their natural aversion to novel food sources.



Editor's Note: *This article was written by Kay Ledbetter, assistant news editor and communications specialist for Texas A&M University Agricultural Communications, which provided this article.*