Bloat survey summary

Bloat is a condition of cattle whereby gases of fermentation over inflate the rumen. If foam is present the condition is called frothy bloat, otherwise it is free gas bloat. Frothy bloat is thought to occur when cattle rapidly eat high protein, highly digestible feed that causes a layer of foam to develop in the rumen which disallows eructation (burping) leading to rumen distension. Whereas free gas bloat is caused by either physical obstruction or the rumen not contracting correctly.

In December 2020, researchers at Charles Sturt University conducted and online survey to assess the impact of frothy bloat on southern Australian beef production systems. Producers who own beef cattle in Southern Australia were asked to participate in this survey through an open call that was circulated by veterinary clinics and MLA's Friday Feedback. A total of 218 producers completed the survey. A summary of the findings of this survey are detailed below.

The number of cattle owned or managed by the producers that responded to this survey ranged from <20 to over 5000 with 48% of these producers owning or managing 501 cattle or more (figure 1).

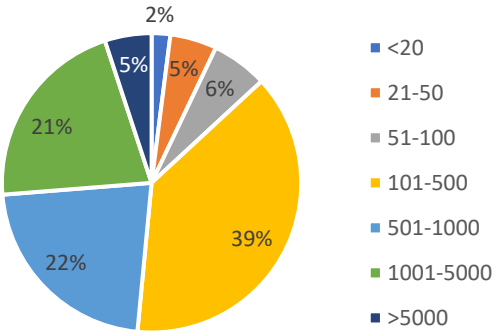

Figure 1: number of cattle owned or managed as a proportion of responses

70% of producers that responded to the survey had cattle on their property that had been affected by bloat in the previous 12 months. Of these producers, 35% said death was the main result, 33% said that cattle death and loss of production were the main results while 21% of the producers said they had rarely experienced bloat.

Certain risk factors are thought to be associated with bloat. These include certain pasture types and the time of year.

Producers in this survey felt that paddocks with a high clover and lucerne content were likely to be associated with bloat (54% and 22% respectively), with 48% of producers having cattle grazing clover based pastures at the time of a bloat incident.

Producers were asked what months of the year cattle were affected by bloat in the previous 12 months (figure 2). Winter and early spring were the highest risk seasons.

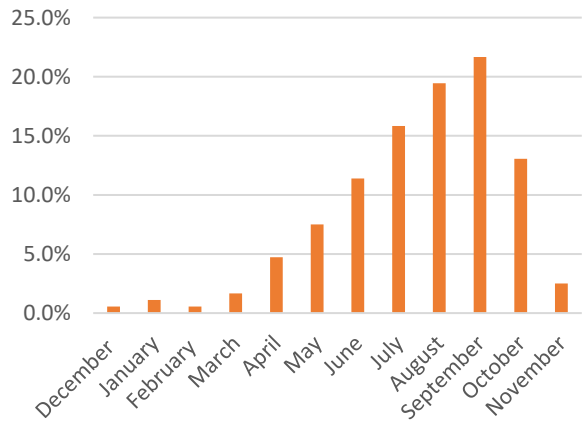

Figure 2: Months in which cattle were affected by bloat on producers' properties. Producers could select multiple

Yearling cattle were identified as the most likely to experience bloat (figure 3).

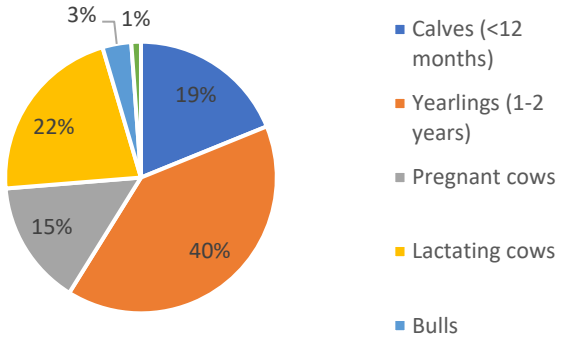

Figure 3: Types of cattle that died due to bloat in the previous 12 months as a proportion of responses

A high proportion of producers (70%) lost cattle to bloat even though preventative measure were in place. Preventative measures included roughage supplements, bloat blocks, loose licks or liquids and bloat oil applied to pasture or drinking water and preventing access to higher risk pastures or crops.

Most producers (79%) seek information regarding bloat. Of the producers who seek advice private veterinarians (77%) and from other beef cattle producers (73%) were the most frequent sources.

The majority (83%) of producers in this survey believe further research into bloat in cattle is necessary. Further research into the prevention, management and treatment of bloat and the efficacy of these measures is needed in Australia as well as further detail on the occurrence of the condition in Southern beef systems.

This survey highlighted that the risk of bloat was associated with legume predominant pastures, winter and early spring and yearling cattle as expected. However, the provision of current prevention methods does not appear to adequately prevent bloat from occurring.