

COW/CALF CORNER

The Newsletter
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Grass tetany, caused by magnesium deficiency, does not seem to be a major problem in Oklahoma although occasional cases are reported. It typically occurs in beef cows during early lactation and is more prevalent in older cows. The reason is thought to be that older cows are less able to mobilize magnesium reserves from the bones than are younger cows. Grass tetany most frequently occurs when cattle are grazing lush immature grasses or small grains pastures and tends to be more prevalent during periods of cloudy weather. Symptoms include lack of coordination, salivation, excitability (aggressive behavior towards humans) and, in final stages, tetany, convulsions and death. If you see these symptoms contact your local veterinarian immediately. Afflicted cows can recover if treated soon enough.

It is known that factors other than simply the magnesium content of the forage can increase the probability of grass tetany. High levels of potassium in forages can decrease absorption of magnesium and most lush, immature forages are high in potassium. High levels of nitrogen fertilization have also been shown to increase the incidence of tetany although feeding protein supplements has not. Other factors such as the presence of certain organic acids in tetany-causing forages have been linked with tetany. It is likely that a combination of factors, all related to characteristics of lush forage are involved.

When conditions for occurrence of tetany are suspected, cows should be provided mineral mixes containing 8 to 15 percent magnesium and be consumed at 3 to 4 ounces per day. It is best for the supplements to be started at least a month ahead of the period of tetany danger so that proper intake can be established. Because tetany can also occur when calcium is low, calcium supplementation should also be included. Symptoms of tetany from deficiencies of both minerals are indistinguishable without blood tests and the treatment consists of intravenous injections of calcium and magnesium gluconate, which supplies both minerals.

Selection for Scrotal Circumference Should Not Influence Carcass Traits

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Several segments of the cattle industry are interested in finding management techniques that will increase the percentage of cattle that grade Choice. Cattle breeders have recently questioned whether selection for scrotal circumference of bulls has an adverse impact on carcass traits of the calves they sired. A Kansas State University study specifically looked at relationships between scrotal circumference of Angus sires with ultrasound predictions of important carcass traits in the calves that these bulls sired. The American Angus Association provided expected progeny differences (EPD) for 290 Angus sires and performance records from 332,162 progeny of these sires and their contemporaries. The Kansas State University scientists calculated the correlations between ultrasound intramuscular fat EPD, carcass marbling score EPD, and yearling scrotal circumference EPD in Angus cattle.

Correlations of scrotal circumference EPD with intramuscular fat EPD and marbling score EPD were not significant. However, there were significant correlations between scrotal circumference EPD and EPD's for birth weight, weaning weight, yearling weight, yearling height, mature height, and body weight at ultrasound scan. Intramuscular fat EPD was highly significant in predicting marbling score EPD. These authors concluded that selection for scrotal circumference should not influence carcass traits such as intramuscular fat and carcass grade. (Source: Arnett and co-workers. 2007. J. Anim. Sci. 85 (Suppl. 1). Abstract 221).

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