



## **Lessening the Threat of Fall Tetany**

By Jackie Nix

Cool wet conditions and fall calving drastically increase the risks of fall tetany or grass tetany (also called grass staggers, wheat pasture poisoning, and hypomagnesia). Grass tetany is a metabolic disorder and happens most frequently when cattle graze lush, immature grass and often strikes the best cows in the herd. This disorder often results in death. Cattle producers collectively lose several million dollars to grass tetany every year.

### **What are the Symptoms?**

Symptoms of grass tetany include: grazing away from the herd, irritability, muscular twitching in the flank, wide-eyed staring, uncoordinated gait, convulsions, coma, and death. It is not uncommon for these symptoms to occur in a span of as little as 2 to 3 hours, making early detection extremely difficult. Often the first observed symptom is a dead cow. If a cow has died of grass tetany evidence of thrashing is usually apparent in the sod around the cow.

### **What Causes Grass Tetany?**

Grass tetany is a metabolic disorder characterized by low blood magnesium levels. The causes of low blood magnesium levels are varied and usually include one or more of the following factors: low dietary magnesium, nutrient imbalances that interfere with magnesium metabolism and high milk production.

Environmental conditions and management factors combine to result in pasture forages with low magnesium levels. Immature grasses and cereal grains have lower magnesium levels than more mature forages. Additionally, cool, wet soil conditions reduce the plant's ability to utilize available magnesium.

Dietary imbalances also affect susceptibility to grass tetany. Studies have shown that inadequate salt intake may increase susceptibility to grass tetany. Consumption of salt and magnesium simultaneously may be critical to increasing magnesium absorption.

Also, feeding high levels of potassium result in reduced magnesium absorption.

Mature cows are more susceptible to grass tetany because the ability to mobilize magnesium from body stores (to correct low magnesium blood levels) decreases with age. Also, mature cows tend to produce more milk, thus increasing their magnesium requirements. The animals hardest hit are mature cows nursing calves less than two months old, particularly heavy milkers. Young cattle, steers and bulls rarely get grass tetany.

### **When is the Risk of Grass Tetany the Greatest?**

The exact time grass tetany strikes will vary from year to year depending upon available moisture and temperature. Grass tetany occurs in the fall with new growth of cool season grasses (Fescue, Orchard grass, etc.) or wheat pastures. Symptoms are often seen 5 to 10 days after the onset of cold (temperatures between 45 and 60°F), wet weather.

### **Prevention of Grass Tetany**

Because an outbreak of grass tetany can be so costly, prevention is the best course of action. Some prevention tactics include: Graze steers, heifers, dry cows and cows with calves over 4 months old on higher risk pastures because these groups are less likely to develop grass tetany. Another option is to feed hay to cattle prior to turning out onto lush pastures for the first 10 to 14 days. In areas where the grass tetany risk is high, provide brood cattle with free choice high magnesium supplements to maintain adequate blood magnesium levels.

When using free choice high magnesium supplements it is important to remember that palatability is key. Adequate levels of magnesium must be consumed on a daily basis in order to protect cattle. Magnesium is naturally unpalatable to cattle so it is important that supplements contain highly palatable ingredients to stimulate consumption. Typically, beef cows require 15 to 20 mg magnesium per head per day. Blood magnesium levels may fall as quickly as 48 hours after supplementation is stopped so consistent consumption of the supplement is critical. For this reason, it is vitally important that you use a supplement that you can trust.

### **Sweetlix Supplements Available**

Sweetlix offers a wide variety of highly palatable, high magnesium supplement products with proven consistent intake that can help protect your brood cows from grass tetany. Here are a few of the Sweetlix high magnesium cattle supplements available through your local Sweetlix dealer.

#### **Sweetlix 16% & 20% Poured Tubs**

- All natural protein supplements ideal for young, growing cattle & pastures containing horses
- Deliver same amount of magnesium as high-mag minerals to help prevent grass tetany
- 50 to 60% TDN – up to 15% more than other chemical block formulas
- Predictable feed costs (regular and consistent consumption of 1-2 lbs per head per day)
- Convenient, self-feed tubs – no labor supplementation option
- Deliver twice as much protein daily as comparable all-natural low moisture tubs
- Recommended that you provide an additional complete Sweetlix loose mineral supplement

#### **Sweetlix 24% & 25% Poured Tub**

- Ideal for mature cattle on low quality forages
- Added non-protein-nitrogen for optimal forage utilization and economical feed conversion
- Higher protein delivery than comparable low-moisture tubs

- Deliver same amount of magnesium as high-mag minerals to help prevent grass tetany
- Predictable feed costs (regular and consistent consumption of 1-2 lbs per head per day)
- Convenient, self-fed supplement
- Should not be used with horses or young cattle with immature rumen function
- Recommended that you provide an additional complete Sweetlix loose mineral supplement

#### **Sweetlix CopperHead Max 12:4:14 with RainBloc**

- Highly palatable, high magnesium loose mineral supplement with consistent intake
- 4% phosphorus levels ideal for maintaining brood cows
- Enhanced copper nutrition (2500 ppm Cu) in addition to balanced levels of other minerals & vitamins
- Ideal in situations where cattle exhibit multiple signs of copper deficiency
- High quality mineral package ideal for reproductive performance
- Contains proteinated organic trace minerals for enhanced bioavailability
- Added RainBloc for improved resistance to moisture

#### **Sweetlix CopperHead Hi Mag with RainBloc**

- Highly palatable, high magnesium loose mineral supplement with consistent intake
- High quality enhanced copper mineral package (1800 ppm Cu)
- Ideal in situations where cattle exhibit multiple signs of copper deficiency
- High quality mineral package ideal for reproductive performance
- Contains proteinated organic trace minerals for enhanced bioavailability
- Added RainBloc for improved resistance to moisture

#### **Sweetlix Mol-Mag Pressed Block**

- Very palatable, high magnesium block with consistent intake
- Convenient 40 lb block – no mineral feeders required
- Weather-resistant blocks can be placed out in the pasture with cattle
- Ideal for producers with small numbers of cattle

In summary, grass tetany outbreaks can be very costly. A palatable high magnesium supplement is one of the cheapest forms of insurance you can buy for your brood cows. For more information about the Sweetlix line of supplement products for cattle and information to help you decide how they will fit into your own management situation, call your local Sweetlix dealer or **Sweetlix** at 1-87SWEETLIX.

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