

Winter Extremes Especially Hard On Cattle This Year



DR. JEREMY POWELL

FAYETTEVILLE, ARK.

The extreme weather we have experienced during the past year has affected our forage production in Arkansas. Many parts of Arkansas have been exceedingly dry during the summer and fall months, and some producers have been feeding hay since midsummer. So, not only was hay scarce going into winter, but also the hay that was cut last year may have been cut late and at a more mature stage due to the flooding and heavy rains we received last spring. More mature hay will have less nutritional value and more stem than hay cut during average years. These factors have led to cattle entering the winter in poor body condition just when her nutritional requirements will begin to increase.

Many cows will be dealing with increased nutritional requirements due to heavy gestation and colder temperatures, and some cows will begin calving. Because of poor pasture conditions and prolonged hay feeding, cows will be facing these increased nutritional demands in poorer body condition compared to an average year. This can lead to health problems such as protein and energy malnutrition, where a cow's energy demands exceed her daily intake. Cows may appear to have a good appetite and exhibit rumen fill but not necessarily exhibit good body condition and are in a negative energy balance. Eating poor-quality hay may not provide adequate energy to a cow in this situation, and the cow will continue to lose body weight. This issue generally occurs during late gestation in cattle exhibiting poor body condition, and pregnant heifers are particularly susceptible. Affected cows may tremble and stumble, eventually going down and being unable to get up. This most commonly occurs in combination with a cold snap, and once animals go down, treatment is usually unsuccessful. Preventing the issue with adequate nutrition is the best approach.

Also, winter tetany could be an issue this year. This is similar to grass tetany, which often occurs in the spring with new forage growth. With winter tetany, cows develop a combination of low blood magnesium and calcium. It occurs most commonly when mineral supplementation has been neglected during a long period of hay feeding, and lactating cows are most susceptible. Stress related to factors such as severe winter weather or from hauling and handling can

induce clinical signs of winter tetany. Clinical signs associated with winter tetany include nervousness, stumbling, muscle twitching, and finally a cow that goes down cannot rise. A veterinarian should treat cows immediately; otherwise, death can occur.

Lastly, parasite burdens may be abnormally high this winter. With poor pasture and low forage height during summer and fall, cows were grazing closer to the ground and nearer to fecal pats, allowing more parasite larvae to infect them. Intestinal parasites may be robbing what little nutrition the cow is receiving from her daily intake. Internal parasites in the gastrointestinal tract may cause loss of body condition, diarrhea, and weakness, exacerbating the other issues mentioned above. Also, winter is the most common time to see lice and mite infestations, which cause loss of body condition and anemia. Control of both internal and external parasites with dewormers and insecticides is critical this winter.

Problems observed this winter will likely carry into spring. Cows will be calving in below normal body condition. Colostrum quality may be inferior compared to normal years, leading to decreased calf immunity and calf health problems. Also, thin cows can be expected to have fertility issues during the following breeding season, resulting in lower pregnancy rates.

To prevent potential problems, producers should take an inventory of body condition scores on the cows in their herd. Sort cows based on body condition, and supplement the animals that are in need of better nutrition. When calculating and planning for supplementation, it is important to first have a nutritional analysis performed on your hay. Producers can utilize their county Extension agent to assist them with developing a supplementation plan. It is much easier to increase body condition in cows before rather than after they calve. High nutrition after calving is directed first toward milk production, and feeding cows to gain condition after calving has little effect on increasing body condition. An ideal body condition score for cows prior to calving is a 5 to 6.

Winter is never easy, but this one may be even harder. Be aware that potential problems exist this winter due to the shortage of pasture and poor hay production we experienced. Plan now to prevent future losses in production or death losses, which can have a permanent impact on the sustainability your operation. △

DR. JEREMY POWELL: Assistant Professor/Veterinarian, University of Arkansas