
Livestock Care in Winter Storms

You can always learn something new about caring for livestock. In preparing this column, I learned that one of the most significant cattle losses I have been associated with may have more than one cause. After a major snowstorm northwest of Curtis, Nebraska, the rancher fed some high nitrate feed to 300 cows who had not had feed in three days. After the first signs of trouble arose he got the water opened up and the cows started dropping. The vet treated and saved about 100 of the 300 cows from a snowmobile. A clear case of dramatic nitrate poisoning. It certainly was a factor, but water deprivation is also a likely problem.

The vet explains it this way. Cows need about 10 gallons of water a day, 5 gallons for basic function. These cows in snow covered pastures could eat some snow, but not near enough to meet even the basic needs. Just like starving cows, dehydrated cows need small sips of 2 gallons or less every few hours. Cows without water for 3 days followed up by a big drink could drive the saline solution in the blood stream into tissues including the nervous system resulting in a saline toxicity. Likely a part of the problem in a case like I described.

Most local nitrate deaths in cattle in our area are far less dramatic. Nitrates in the bloodstream block the oxygen-carrying ability of the blood. There are several parts to the situation. High nitrate feed, no transition in feeds, no blending in feeds, lack of water in summer then rain or water leak in a manure laden lot and no portion size control. Start by always introducing new feeds slowly over a 2-3 day period. Pay particular attention to feeds which are nitrate accumulators. These would be sudex, millet, sudangrass, corn, weeds, etc. especially when grown in less than ideal conditions like drought. Testing suspect feeds to help give guidance to blending and transition needs is helpful.

In the event of a major storm where feed and water are an issue for several days, reintroduce feeds and water slowly. Using portion control in feeding and watering every few hours. Quite a few producers like to keep a supply of sledged small square bales of prairie or brome for times like this. They make portion control easier. Use hay sources which are not likely to have elevated nitrate levels like prairie hay, brome hay or alfalfa.

In sampling feeds for nitrate the test results are as good as the sample. Take a lot of time and care to be sure the small sample is a well blended mixture of the entire lot of hay. Nitrate levels are likely to be highest in lower stem tissue. As a matter of fact we can lower nitrate levels in drought damaged feed, like corn just by raising the chopper a few inches.

Caring for animals is not a simple matter. It requires a lot of time, and thought and an interest to keep learning new things. Mother Nature can make it an all day job.

Paul C Hay, Extension Educator

University of Nebraska-Lincoln Extension in Gage County • 1115 West Scott Street, Beatrice NE 68310

(402) 223-1384 • FAX: (402) 223-1370 • email: phay1@unl.edu

