



Power Outage Management Infosheet: Q/A: Beef Cattle Consuming Snow as a Source of Water

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1. What happens if Beef cows have to eat snow as a water source?

Pregnant beef cows can meet their water requirements by eating snow. However, cows prefer loose fluffy snow to hard packed snow, and quantity is important. An icy crust covering loose snow beneath must be broken by a tractor or other means. Traction should be provided on icy surfaces: Consider using straw, old hay, or sand if available. Provide ample area for snow intake and avoid restricting the cattle to small pens or fields. Given the likelihood that fences will be in rough shape, cattle may seek "whiter" pastures.....

2. Will Beef cows get sick from eating snow?

No! Although it is expected that eating snow would need more energy than drinking water, Western research demonstrated no evidence of this in weight gains of beef cows or calves. Of course, clean, loose snow is preferred over "snow", or locations close to manure piles, etc.

3. Will Beef cows eat enough snow?

Pregnant beef cows will consume enough snow, given that the snow is not hard packed or all ice. Lactating cows require water, or they may dry off. Hauling or pumping water is necessary in this case.

4. Will eating snow affect the calf crop?

Provided water is available to nursing cows, snow intake during pregnancy will have no appreciable effect on the weaning weights of calves. Many factors including cow body condition at the beginning of the crisis period; the period without feed and water all will have impact on calving and subsequent calf growth.

5. Is it worth melting snow for a small Beef herd?

No! If snow is deep and loose, pregnant beef cows will eat enough to meet their needs. Consider your individual resources: Adequate fencing? Enough space for "grazing" the snow? Labour available to chop ice/haul snow for melting? Heat source for melting the snow?

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Other:

- **Using streams or ponds as a water source.**

Under normal instances we would not recommend these water sources in winter, however, given the circumstances, these sources of water can be used with care. If cattle are short of water and only a limited space to drink is available, competition between cattle slipping on ice and cattle getting pushed into the water source are all risks. Even drowning may occur if the animal is

pushed or falls into the water source.

Ration types (energy and protein levels) , higher energy diets require more water. Feedlot cattle need one gallon of water per cwt. of liveweight. Can cattle be trucked to "foster" farms with power?

Use of a Field Sprayer to gather and transport Water. Suggestion from Dr. N.Anderson. Tank and pump should be well rinsed before use, but then should provide a emergency means of gathering and transporting water to livestock.

- **Use of succulent Feeds to provide additional water to livestock.**

Cull Carrots, Onions, Apples, and Potatoes are mostly water 80 to 90% water. These are good sources of water and are great to **stimulate** appetite. Other high moisture feeds as Brewers grains, Distillers grains, and wet corn Gluten also provide water to the diet. These feeds are 60 to 70% water.

- **Use of salts Sodium choride (Common salt) and Urea to lower the freezing point of water in a water tank.**

A 200 gallon water tank should provide enough water for 20 medium sized beef cows for a day .Mixing in one kilogram approx. 2 pounds of salt to the Tank will lower the freezing point about 2-4 Degrees F. or 1-3 degrees C. Half this amount of urea can be used and the same effect achieved. This is 220 grams or one pound. The tank needs to be thoroughly stirred to make sure the salts are mixed in. If urea is used caution not to give calves under 3 months access to this treated water.

- **Livestock should be kept as clean and dry as possible.**

Cattle which are in wet humid environments have much higher metabolic rates and require more feed and water.

- **Further - Grazing Snow**

If snow is going to be used as a water source and you don't want them to wander too far, then distribute large round bales out in the snow field , one bale for every 3-5 cows. The bales will provide both a source of feed as well as shelter. The cows will waste a fair bit 30 to 40% of the Hay but will stay close to home. Fences may or may not be necessary as long as they have adequate feed and water source. After two to four weeks they will spent all there time out and may not want to return to the barn. Suggestion adapted from J. McNally, Minnesota Winter Pastures for Better Flock Management.

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