

**A LITTLE BIT COUNTRY  
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**Wintering of Beef Cows**

The cost of feed is the highest line item of all costs incurred to produce a beef calf. Some say it is around 50 percent of the total cost while others report it can get as high as 70 percent. We do not know what next spring will be like but the weather so far this winter sure points to lower feed dollars which will be applied to the 2012 calf crop.

Although daily temperatures and lack of snow, so far, can be described as "beautiful" by North Dakota standards, cattle managers realize these conditions can change to a big-time blizzard and a prolonged cold spell in just a few hours. When this happens the nutrient needs can change just as drastically. Our modern day cattle can still deal with the cold itself, but the additive effects of cold, wind, and moisture can be devastating. Producers who don't mitigate these conditions with some form of windbreak, increasing the amount of feed or providing higher quality feed simply will experience lower productivity sometime in the future.

Cattle do adjust or acclimate to colder weather by growing a longer, thicker hair coat. This provides additional insulation against cold weather. The coat must be clean and dry to provide maximum protection to the cow. Dust or moisture on the coat reduces its insulation value dramatically. I remember the times our family showed cattle in the fall season. Soon after wetting them down they would begin to shiver. This would stop just as soon as they were dried. The young calves would react more violently than the cattle that were one year older.

Part of a cow's ability to adjust to cold weather is the capacity to increase her metabolic rate which increases heat production enabling the maintenance of body temperature. As the metabolic rate increases so does the need for dietary energy and her appetite.

If a survey of cattlemen was conducted regarding when they feed cows, I suspect a majority would tell us they feed in the morning. However, some believe late afternoon-early

evening feeding promotes more births during daylight hours. There is another advantage for late afternoon feeding. Research shows the cow producing the greatest amount of heat about four to six hours after feeding while digesting her early evening supper. This added heat is well-timed for the cooler night time temperatures.

So, how much more feed should a cow receive during cold weather? Years ago Mel Kirkeide, a longtime and respected animal husbandman with the North Dakota State University Extension Service, shared his rule-of-thumb. That was to increase the amount of feed by one percent for each degree drop in atmospheric temperature.

There is a limit to feed intake which is usually measured in pounds of dry matter. If the cow is not fed additional feed or the quality does not allow them to eat enough to meet their additional energy requirements, body mass will be "burned" to produce metabolic heat. The cow then loses weight as both energy and stored fat are diverted to maintain body temperatures and vital functions. Cows in this situation soon enter a downward spiral. The more weight (body fat) she loses means less insulation and greater susceptibility to further cold stresses and increasing weight loss which leads into another energy demanding period-lactation.

If you are one of those fortunate cattlemen whose cows are still in the pasture with plenty of grass to eat, give them a Christmas gift-that being a close inspection. I am sure you will find some of them, particularly the younger ones and maybe exceptional producers, starting to show some weight loss. Even though the market is at record levels, this is not the time to drop the level of good management. These are the days when good management receives its best rewards.