

# Watch For Cold Stress In Cattle This Winter

DR. TERESA L. STECKLER



DIXON SPRINGS, ILL.

**W**hile temperatures may be cold for us, cattle are enjoying the lower humidity and cooler temperatures. But now is not the time to forget that wintertime can bring numerous challenges for beef cattle producers and cattle. Cattle perform optimally when the temperature

is between approximately 59 to 77 degrees F; cattle are neither too hot nor too cold. This temperature range is called the thermo-neutral zone. It is the temperature range where the fewest nutrients are needed to maintain bodily functions.

Before the winter extremes arrive, it is time to assess the body condition of each cow. Heading into the winter months, cows should have a body condition scoring (BCS) of 5 to 6 (where 1 is emaciated and 9 is obese). Optimally, this body condition should be maintained throughout winter, regardless of their diet. Increasing the cow's body condition prior to winter can provide a valuable "cushion" for times of increased energy needs. Loss of too much body condition can significantly impact the following: calves may be born weak; colostrum production may be inadequate in amount and/or quality, which can compromise calf survival; and the postpartum interval may be lengthened.

There are numerous factors that can create additional stress on cattle during winter. These factors – cold, wind, snow, ice, rain, and mud – will alter the maintenance energy requirements and intake of beef cows. Maintenance requirements can be defined as the nutrients required for keeping a beef cow so that body condition is neither gained nor lost. Remember that thin cows will be affected by winter stress factors more than cows of moderate to good body con-

dition.

It is estimated that for every one degree below the critical temperature, a cow's energy requirement increases 1 percent. It is also estimated that for every ten degrees below the critical temperature, the digestibility of the ration decreases by 1 percent. This means that when the temperature drops below the critical temperature cattle need to be better fed.

Thus cattle require more energy (not protein) to make it through the winter months. More energy means additional high-quality forages and grains. It is a myth that grain rations are hotter rations. High-quality forage rations actually provide more heat for livestock. The extreme weather this past spring and summer definitely impacted the quality of forages available for this winter. To ensure that your cattle's nutritional requirements are met, consider having the forage tested to better understand what your forage contains.

Use body condition scores as a tool to help determine if what they are being fed is adequate. If a cow is going down in body condition, then the ration is inadequate and should be improved.

Not only do cattle need adequate feed during the winter, but it is vital that they have plenty of water available, whether they are drinking from a fountain-type waterer or a pond. The biggest thing for producers to remember is that livestock need water, or they won't eat. However, the water may still be too cold for some cattle to drink. You may want to consider supplying water that has been warmed slightly.

Closely monitor your cows throughout winter. If some start to lose weight, you can quickly intervene by providing supplemental feed. Frequent monitoring, common sense and practical animal husbandry will bring your cattle through the winter in fine shape.  $\Delta$

DR. TERESA L. STECKLER: *Extension Specialist, Animal Systems/Beef, University of Illinois*



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