Caring for cattle in cold conditions

All of us got a taste of cold weather during last week’s polar vortex. Farmers still have to take care of their livestock even during a vortex. Fortunately, most area farmers have the ability to move their cattle into barns and sheds during winter. However, cattle do have the ability to stay warm in outside yards and open buildings with the right management.

Warren Urschel of South Dakota State University Extension encourages beef producers to look at bedding, feed intake, and pen maintenance to maintain cattle health and performance in outdoor feedlots and open buildings during cold weather.

I have adapted his recommendations for Ohio conditions in the following discussion:

Bedding: Providing bedding is the most useful tool to improve cattle comfort, especially in outside yards. Bedding helps cattle preserve body heat and mitigate the negative effects of cold stress on maintenance energy requirements.

Producers with feeder cattle should consider bedding sooner rather than later when extreme cold weather is expected. Feeders are large cattle that have been weaned and are mature enough to be placed in a feedlot where they will be fattened until market. Feeder calves are less than 1 year old; feeder yearlings are between 1 and 2 years old.

Waiting until cattle are exhausted before providing bedding results in calves simply "resting up" on the bed pack instead of maintaining dietary intake. This could result in diminished performance and increase the risk of digestive upset when cattle resume eating.

In extreme cold conditions, the priority pens for bedding should be the lightest calves, less than 750 pounds, and cattle that are within 45 days of being shipped to market.

The lightest cattle would lose the most body heat to the environment and be the most susceptible to sickness.

Bedding the almost finished cattle helps avoid negative impacts on carcass quality and can also reduce the chances for injury or mobility problems late in the feeding period caused by cold or icy conditions. Finishing cattle are those that will soon go to market.

Cattle that are not in the lightest group and not expected to finish until late winter or spring have time to compensate for any performance losses they might experience during cold conditions.

Managing feed intake:

Keeping feed intake consistent is a challenge during extreme weather conditions. Some days, keeping machinery running simply to get the cattle fed on time is a major accomplishment.

Inconsistencies in feed intake lead to poorer conversions and in extreme cases, acidosis. Acidosis is a stomach disorder that occurs when pH levels drop rapidly in the rumen of cattle and sheep, often seen when animal diets are quickly switched from forage to grain diets.

Adding additional roughage to a finishing diet (feeding 12 to 13 percent instead of 10 percent forage, for instance) could reduce the impacts of any inconsistencies in feed consumption.

Beef producers generally want a certain average daily gain in weight for cattle that are primarily being fed a forage diet. Extended periods of cold conditions can cause cattle to fall short, especially if the cold temperatures last.

Producers may try to keep the average daily gain from dropping by increasing the energy content of the hay or forage by another 2 to 4 Mcal NEg, or increasing the amount fed by an additional 0.2 percent of body weight.

Lot conditions, particularly ice, can affect feed consumption. Slick areas on the feed bunk apron and around waterers can reduce the willingness of calves to come to eat or drink, not to mention the increased risk of injury.

Pen maintenance: Keep in mind that when snow melts it can easily create muddy conditions. Muddy conditions in the feedlot can be one of the biggest issues in getting cattle to perform during the winter and early spring.

It has been observed that cattle in muddy yards can weigh 100 pounds less compared to cattle in dry yards.

Removing snow and scraping outside pens can be incredibly difficult to accomplish, especially during extreme weather conditions. However, anything that can be done to remove snow and improve lot conditions will pay off later as the lot surface starts to thaw.

Using structures that will break the wind around a feedlot will also keep cattle warmer and cause them to use less energy. All of us saw the effects of wind chill during the vortex.

Keeping cattle dry in cold conditions will conserve animal heat. Hides of cattle will adjust to the temperature and allow them to better withstand cold conditions. Consider the winter coats of bison on the Great Plains.

The ability to hold in heat is greatly diminished if cattle become wet. Wet winter hides are generally no better than the lighter hides of summer for holding in heat. Management practices that will keep animals dry during cold weather will improve animal health and vigor.

Hopefully we will not have another vortex this winter. Cattle are tough animals, but beef producers can change management practices to better prepare cattle for cold conditions.

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