

Cold Weather Management For Calves And Cows



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Cold weather can have a drastic impact on the performance of cattle. In fact, it can have as much of an effect on production as hot weather. Understanding how cattle deal with cold will help you understand how to bring cattle through winter without

losing performance or wasting resources.

First, understanding some terminology is important. The thermoneutral zone is the range of temperature where performance is at its peak. The lower critical temperature is where cattle begin to experience cold stress. In an ideal environment, that temperature is 32 degrees F. But other factors, such as wind and rain, make a higher air temperature seem colder to cattle. This is called the effective temperature. So, a 10 mph wind can create cold stress even when the air temperature is 40 degrees F and the cattle have a dry winter hair coat.

The most logical way to combat cold stress is to provide shelter from wind and rain. Building new wind breaks and shelters is likely cost-prohibitive. Planning pasture rotation so that cattle are in areas with shelter during winter months is often a better option. If cattle are not able to avoid cold, their metabolic rate will increase because the heat from normal body function is not adequate to maintain their body temperature. The increase in metabolism will make the cattle require more energy for maintenance. Simply stated, when cattle are cold stressed, they need to eat more just to stay warm. Energy intake requirements can increase up to 20 percent. That can translate into 3.5 to 4 extra pounds of hay intake or 2 to 2.5 extra pounds of supplement.

A good rule of thumb taken from several studies is that for every 1 degree below the critical temperature, a cow's energy requirement increases 1 percent. It is also very important to keep water available because decreased water intake can reduce feed intake. Be sure to break ice in waterers and on ponds so cattle have access at all times. Anticipating the increased nutritional need from prolonged cold stress can provide some flexibility. It is a good idea to maintain cows in a body condition score 5 and heifers in a body condition score 6 so that they have energy reserves to draw from if nutrition is lacking.

Mud also has an effect on nutrient requirements of cattle. Rotating feeding areas or improving rations for cattle that constantly have to deal with mud can improve performance.

For herds that calve late into the winter months, it will be important to check calves born in extremely cold weather. Especially when it is wet and muddy (the ground has not frozen yet). If calves are dropped in mud or water, they can experience fatal cold stress very quickly. Even if calves are not lost to cold stress, it can negatively affect their immune system. Make sure that they have colostrums in the first 12 hours after birth. Again, make sure that younger cattle have some type of shelter from driving wind.

The best ally for handling cold stress is to be prepared. Anticipating increased hay, winter forage and/or supplement needs will ensure the cattle do not go without. But, remember that cattle are made to live in inclement weather. Providing adequate nutrition and some simple shelter should ensure that they remain healthy and productive through the winter. Δ

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