

THIS WEEK'S AG NEWS WINTER CALVING: A CHALLENGE IN EVEN THE BEST OF WEATHER CONDITIONS

Published: January 11, 2023

Cold stress and a lack of colostrum can be fatal.

At this time of year cold stress and a lack of colostrum are two of the leading causes of early calf loss, taking a toll on both the calves and the cowman.

When calves come all at once, as they often do, the calving process can be exhausting, making it difficult to stay on top of everything all the time.

Early intervention is the key to success when it comes to calves challenged by cold wet weather. It may be easy enough to tell when a calf is chilled but there can be uncertainty as to how long or how serious the condition is.

Some seasoned ranchers may be successful relying on experience, but a digital thermometer is a relatively inexpensive and very handy tool to accurately determine temperature variations in an ailing calf.

Most problems with hypothermia occur in newborn calves, since they do not have the ability to regulate body temperature efficiently when first born, especially in the first hours of life.

Mild hypothermia occurs when the beef calves' body temperature drops below normal, or below 37.8 degrees C (100 degrees F).

With a wet coat in cold temperatures, sometimes aggravated by a difficult birth, calves' may be unable to get up right away or do not have the strength to suckle, allowing cold stress to set in.

If a calf does not suckle then it will not get much needed colostrum, compounding the problem of cold stress and considerably reducing chances of survival.

Most cattle producers know that colostrum is a critical source of antibodies and specialized proteins that provide protection against infectious diseases.

This transfer of passive immunity should occur in the first hours of life as antibody absorption decreases over time with essentially no absorption possible after 24 hours following birth.

When considering frozen colostrum keep in mind that quality can vary considerably among cows, breeds and farms. The mother's colostrum is always the best option and the calf should receive at least one liter within four hours of birth and another liter within 12 hours of birth.

Colostrum not only provides 2 to 3 times more fat than mother's milk, but also warms the calf from the inside.

If a calves' temperature is between 35 and 38 degrees C then it is still possible to warm it up in a hot box, the truck cab, or a warm room. Tubing it immediately with warm colostrum provides additional warmth and helps to ensure passive transfer of antibodies and a greater chance of survival.

For calves with a temperature below 35 degrees C time is truly of the essence. The hot box or a warm environment will not effectively warm the calf as their core temperature is so low that a dry hair coat only acts as an insulator to keep them cold.



WINTER CALVING: A CHALLENGE IN EVEN THE BEST OF WEATHER CONDITIONS

In this instance the best method to enhance survival is to immerse the calf in warm water at 38 degrees C, or warm to the touch. As the water rapidly cools it will be necessary to continually add warm water to the bath. At the same time the calf should be tubed with warm colostrum.

The key to survival for high-risk calves having trouble getting up due to a difficult birth, low oxygen, or weakness, is quick action. Make sure they get adequate colostrum as soon as possible. They will suffer far less from cold stress and will quickly gain the strength to begin sucking on their own.

Using a thermometer helps to immediately determine the appropriate treatment so the calf gets what it needs as soon as possible. Given adequate colostrum, a dry coat and the strength to suck on their own it is amazing how well calves can do even in the coldest weather.



