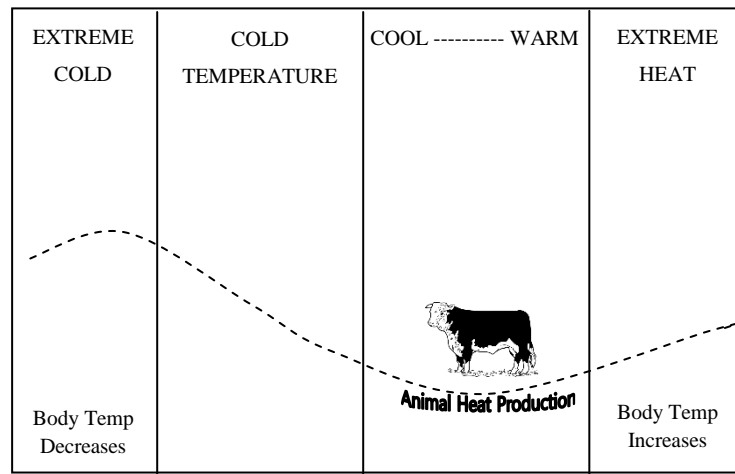


## CALVING IN THE COLD

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For many Colorado cattle producers, spring calving season has arrived. Those who select early spring calving often do so in order to match forage availability with animal nutrient requirements. Cow and heifer requirements are highest at 45-60 days after calving, which is generally when forage quality and availability is also high. Timing calving so that these two factors coincide can help reduce the amount of stored feed a producer may need.

Colorado is home to cold and unpredictable weather during the spring. Temperatures during late February and early March are slowly on the rise, but inclement weather is always a possibility. Cold temperatures and precipitation during calving can be a challenge. Efficiency is maximized at temperatures where cattle do not have to burn a lot of energy to heat themselves up nor expend lots of energy to cool themselves down. When cattle need to compensate for cold weather they often require more food.



Calves undergo several major body changes following birth. One of the more important changes for calves is that they must begin to start generating their own heat. Prior to birth, the uterine environment provided everything for the calf, including heat. As evidenced by successful cattle operations around the world, new calves can survive a great deal of cold weather, but several things need to happen to ensure the calf is ready to combat the cold.

A wet calf is a cold calf. Calves are born covered in fluid which will decrease the calf's temperature as it evaporates. Ideally, a good mother will lick the calf and remove most of this fluid. Licking the calf is also important in stimulating blood flow and getting the calf to stand up. Be mindful that not all heifers are diligent in "mothering up". A wet calf uses more energy for heat production than it does for standing and finding the teat. Thermogenesis, heat production, requires metabolic fuel. Calves need colostrum - the sooner the better. Milk replacer can provide some energy for a couple of hours, but colostrum is best.

How can you tell if your calf is suffering from cold stress? One of the best tools is a digital thermometer. A thermometer, used rectally, can give a quick and accurate internal temperature to assess calf condition. Calf temperatures should be between 101° F to 103° F. Calves with cold stress will start dropping below 101° F, and they should be warmed immediately. Cold calves may not shiver. Caution - remember to wash the thermometer between use. This will help to prevent scours and disease transmission. Pay special attention to calves that have had a hard delivery. Calves that have suffered a difficult delivery have a higher risk of neonatal death, decreased colostrum intake, and trauma.

What do I do if a calf has cold stress? There are several methods for warming a calf. Methods include using warm water bottles, warm water baths, heating pads, heating crates, calf jackets, or the cab of a truck. If a warm bath is used, be sure to dry off the calf afterwards. Some producers will warm the face, mouth, and neck areas first. The neck and throat area of the animal carries the jugular veins and carotid arteries fairly close to the surface of the skin. By warming these areas, it may be possible to increase core temperature faster. Figure out which method works best for your operation, and be mindful of sanitation and the spread of disease.

Cold weather accompanied with precipitation can really devastate your calf crop. Wind breaks and areas protected from precipitation become very important in reducing the exposure of your herd. Examine your calving area with the following ideas in mind:

- Find out which way the wind generally blows during your calving season and construct wind breaks accordingly ([see this link for more on windbreaks](#)).
- If snow or ice is covering the ground, it can cool down calves very quickly. Bedding, such as straw or old hay, can be excellent insulators from the cold.
- It can be helpful to separate heifers from older cows as heifers generally have a higher incidence of calving difficulty and may require more calf care.

For any further information or questions about calving, contact your local Extension office. Additionally, Colorado State University has an excellent calving resource for Dairy Producers at <http://www.cvmbs.colostate.edu/ilm/proinfo/calving/notes/home.htm> and the Calving Management Manual for Cow/Calf Operations is available at the CSU bookstore. During extreme calving complications, it is always best to consult your veterinarian.