



PHOTO BY SHELLY PATTON

Keeping 'Em Alive

Strategies for cold weather calving.

by Sara Gugelmeyer

Trying to do as much as he can with as little as he can is what Bob Monahan, Monahan Cattle Co., Hyannis, Neb., says it takes to manage his family's large commercial cow-calf operation in the Nebraska Sandhills.

For him this means choosing a later calving season for his commercial cows to avoid the bad winter weather. However, in order for many producers to best manage their operation, they choose to take the risk to have larger, heavier calves at weaning time. For those who use a winter calving season, you know it's sometimes all you can do just to keep the calves alive in harsh weather conditions. University experts share their strategies for improving calf survival rate in cold weather.

First, it's important to understand why the calf is in danger. When the calf is born, it is very wet, so if the calf is unable to dry off relatively quickly, it will become chilled. Dave Hawkins, retired Michigan State University (MSU) animal science professor and coordinator of MSU's beef cattle teaching center, says it is important once the calf is born to get the calf dried off as early as possible and get colostrum in it as quickly as possible. "So the really critical time is getting them dry and up and nursing," he explains.

Making a choice

Depending on the time of year and the temperatures you are calving in, this can be much easier said than done. If there is wet snow or rain combined with cold temperatures, calves can easily become chilled, often resulting in death. Because losing a calf is so economically devastating, producers in these cold climates must make a decision. Calve inside and possibly face extra cost and labor but have larger calves at weaning time or reduce management

expense but have a smaller calf to sell at weaning?

The first option is primarily for seedstock producers with smaller numbers but ultimately more expensive calves. Winter calving is necessary for purebred producers who are interested in selling larger bulls as yearlings. In order to make this work for those living in areas with severe winter weather, it's important to have the proper facilities to accommodate cows and newborn calves.

From the barn to the hut

The cows at the MSU facility calve in January. Because of the cold, snowy January temperatures around E. Lansing, Hawkins says MSU is forced to calve inside. "We typically bring the cows up to the barn and calving facilities about two to three weeks prior to the start of calving season, and then, as we see signs approaching parturition, we bring the cows into calving stalls," he says.

However, they do not leave the newborn calves inside long. "As soon as the calf is born, up and nursing, we move them out again into more of a pasture setting," Hawkins explains.

When the cows are moved outside, the calves are placed into a "calf hut." This is a small shelter that only the calves can fit inside. Hawkins says it is primarily used to prevent wind chill, so it's typically a three-sided structure with the open side placed toward the south and east to protect from cold winds. This placement also allows sun to come into the shelter. It is usually bedded with straw, but any bedding material would work to keep the calf from losing its body heat to the cold ground.

"Calves get accustomed to these pretty quick," Hawkins says. "The calf knows where it is and will go out and nurse, then rest in the protected area."

An advantage to the calf hut is that it allows the producer to move the newborn calf outside as soon as it dries off. This timing is important when the disease risk of keeping calves in an enclosed area is considered. MSU's barn is no different from most producers' barns — it has been around for decades. "Even if you disinfect, clean the manure out and provide fresh bedding, there are still bacteria and viruses in the facility," Hawkins says.

He explains that MSU's calves remain much healthier if they are moved outside as soon as possible. Being outside helps break the cycle; even if one calf gets sick, usually they all won't.

Another option for producers dealing with chilled calves is a "warming box," according to Hawkins. MSU's facility has one near the calving pens in case a calf becomes chilled and needs immediate attention. It is a plywood box about 5 ft. by 3 ft. with a heater inside. "We



Keeping your cows in a pasture with plenty of natural shelter, such as the trees pictured here, is a simple way of increasing calf survival during harsh winter weather.



PHOTO COURTESY OF MSU

Calf huts, like these at Michigan State University, are relatively easy and inexpensive to assemble.

keep it close by so that we can get chilled calves dried off and warmed up before returning them to their mothers,” Hawkins says. There are several different styles of warming boxes, but it is best that you follow a plan, such as the one published by the Midwest Plan Service agricultural engineers.

Although moving cows and calves in and out and maintaining these facilities may seem like a lot of added cost, it is necessary if you plan to calve in the winter in these types of climates, according to Hawkins. He says no matter whether you are a commercial or seedstock producer, it's in your best interest to have a similar program because survival of the calf is key.

Although it may seem unnecessary to calve in January when it has been as low as 20 degrees below zero, Hawkins explains the bigger calves at weaning make it worth the extra effort. When it comes to selling feeder calves in September or October, a calf that was born in January is going to have more pounds to sell than one that was born in May.

Tips for calving outside

But, if you are in Bob Monahan's situation, calving 4,500 head of heifers and cows inside is just not an option. For this reason, larger producers must consider other options. First of all, Monahan says a later calving season is a must for his operation. Their heifers calve in March and cows calve in April. They do have a barn they can bring cattle into, but only if absolutely necessary. The Monahans try to watch their heifers closely and keep them nearby so they can bring them in for a short period of time to get the calf warmed up if it's a life or death situation.

Their cows, however, are basically on their own. Monahan says they are unable to watch that many 24 hours a day, and it is impossible to keep them all close enough to the barn to bring them in quickly. So they must rely on natural shelter. Their location in the Nebraska Sandhills gives the cows a place to get out of the wind, but those in other areas can use natural windbreak options as well.

North Dakota State University Beef Cattle Extension Specialist Greg Lardy says if you are unable to calve inside, keeping your cows in a pasture where there is natural shelter can help. A wooded area is helpful or a manmade windbreak of any type will be useful in case of a spring storm. The problem, he explains, is usually a springtime blizzard produces heavy, wet snow, which can be a blanket of death to newborn calves.

In these situations, even though the temperature isn't that cold, the calves can easily become hypothermic. “Providing bedding or trying to get them somewhere where it's dry is important,” Lardy explains. Placing bedding on the south side of the windbreak can give the calves a place to stay out of the wind, and the bedding acts as insulation between the calf and the cold ground.

Healthy cows = healthy calves

A management consideration Lardy stresses is to make sure your cows are healthy and in good condition well before calving season. A healthy cow sets the calf up to be as vigorous as possible. “Having a cow in good condition going into winter and having the right nutrition program during the second and third trimester of pregnancy is important to having a healthy, vigorous calf when it's born,” Lardy says. A less vigorous calf born into a cold environment is less likely to get up and nurse, a situation which results in continued problems down the road.

Anything you can do to modulate the microenvironment the calf is born into is going to increase its chance of survival. Lardy stresses, “Keeping them out of the wind, keeping them somewhere dry and ensuring adequate nutrition prior to calving is really important.” He continues, “Having cows in good condition and having healthy thriving calves is a management strategy that pays dividends no matter the weather.” **HW**



PHOTO BY KAYLA HARROVER

If you choose to calve inside it is critical to get the pair outside into a more natural setting as soon as possible to prevent disease.

Calving Management



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