



OCTOBER 2021 DAIRY NEWSLETTER

Calf Care in the Winter - Take Home Messages

- Below 5°C calves have to work to keep warm
- When the temp drops, calves need more nutrition to prevent losses in ADG
- Nesting scores of 3 and calf coats can help prevent calves from getting too cold
- Never compromise air quality to keep calves warm

Newborn Calves in the Winter

On really severe days with strong wind chill warnings, calves need to be removed from the calving area almost immediately. Cases of frostbite are seen every year, and it's not always just a mild case involving the ears. Calves have had to be euthanized before if their legs have been badly frozen, as the tissue sloughs off 2 -3 weeks later. After birth, calves need to be dried asap. A warm room, warming box with a heat lamp and fan, or calf coat can be used to get the calf dry. If using coats on a newborn, be sure to remove the wet coat in < 1 hour and replace it with a new dry one.

A warming box can be purchased, or homemade from a tote, barrel, or hutch. If making your own, ensure there is adequate ventilation to allow for the moist air to leave, and consider how easily it can be cleaned between uses. These areas can quickly become sources of disease if they are never cleaned out. An alternative to small domes is a warming shed. The larger space is easier to clean out and multiple calves can be dried at once.

Pre-weaned Calves in the Winter

Calves comfort zone is somewhere between 15 and 25°C. What exactly does that mean? It means that between these temps, calves are easily able to regulate their body temp and they can direct their resources to growing. When the temperature falls outside a calf's comfort zone, they require more nutrition to meet their additional maintenance requirements. Obviously winter temperatures are very much outside of this zone, so what can we do?

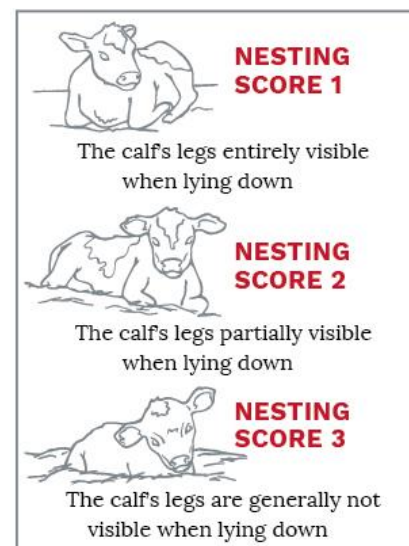
Bumping up the quality and quantity of your milk or milk replacer, providing extra bedding and using calf coats will all help the calf during the cold winter days ahead.

Winter Feeding

There is a rule of thumb that for every degree below 5°C, the volume of milk replacer fed needs to increase by 2%. This would translate into an additional 3L at -10°C if feeding a 20:20 milk replacer. If you've ever heard someone talk about "not having good luck on milk replacer," odds are they were using a 20:20 milk replacer. This is now an outdated formulation, and there are much better options that have protein and fat ratios that come closer to whole milk. Either way, maintenance requirements are higher in the winter, so calves will require more groceries. Whether your winter feeding plan is to increase the volume fed per meal, switch to a higher quality milk replacer, or move to 3x a day feeding, you should monitor growth rates through the winter to ensure the plan is working. If your calves are losing condition, your feeding plan or their environment needs further adjustment.

Nesting Scores

Perhaps the most important thing you can provide to calves reared in the winter is deep straw bedding. Calves housed in barns with nesting scores of 3 have been shown to have improved respiratory scores compared to calves who were not deeply bedded. While it is sometimes easier said than done, as calves have a natural talent for making the straw "disappear", just add more. More than you think should be necessary, and then add some more. Your calves will thank you for it, and you should have fewer sick ones to treat.



Calf Coats

Calf coats are like a nesting score bonus card. If calves are bedded up to a nesting score of 2 but have calf coats on, you get to add a nesting score and now you've just achieved a nesting score of 3. This is assuming that the coats are not wet and aren't too tight. Especially in a group setting, slip your hand in between the calf and her coat to make sure it isn't wet from other calves either sucking or peeing on it. Just like a winter jacket, calf coats work best by trapping a layer of air. If the coat is too tight, the hair gets flattened down and loses its ability to trap air. Try to have enough inventory so that you won't need to take coats off of calves who are less than 3 weeks of age.

Air quality can often suffer when barns are closed up for the winter. It's important to remember that calves don't need to be warm, they just need to be dry and have good protection from drafts with nesting scores of 3 and calf coats. Don't compromise air quality to keep calves warm, it's far better to have a cold barn than one with high ammonia levels.