

Calf Link



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Calf Rearing Newsletter No.4

Monday 27th July, 2013

WELCOME!

It is week four of the newsletter already, and most people have now got a few cows calved or slipped. With the cow sheds starting to come back into life and the calf sheds soon to follow, spring is starting to feel like its here. While the weather is warming up, we still need to be prepared for those inevitable but unwanted cold snaps that come through. This newsletter will cover the topic of cold calves and revival techniques.

As always, if you have specific questions you would like answered on any calf rearing topic, please email your name and contact details to Elspeth -edunne@cluthavets.co.nz - and we will publish the answers in the next **newsletter**.



Photo Competition

Thanks to all who have sent photos in, its early day yet so keep them coming for your chance to win a FACE Body and Beauty Gift Voucher valued up to \$100, thanks to MSD Animal Health.



Cold Calves

We have all experienced battling with calves born in less than ideal weather, be it sleet, snow or a combination of both. These calves are wet and cold and have started life on the back foot. Like all newborns, all calves are poor at regulating body temperature, so it's not only the cold snap calves that can struggle but calves that haven't been fed for one reason or another and calves that have been through a difficult birth. All of these calves are in need of a bit of TLC and a bit of an energy boost.

What do cold calves look like?

The signs that calves show when they are cold are similar to what we would do

- Vigorous shaking or shivering – if severe can stop the calves from being able to stand and suckle
- Cold nose and ears, cold limbs
- Confusion and clumsiness – can sometimes be difficult to detect

Cold calves will often give up looking for a feed and can be rather stubborn and not want to drink. As the calf gets colder, it can go into coma-like state and may even appear to be dead but still breathe 3 or 4 times a minute. These calves are in a pretty dire state but active warming and feeding can often be quite rewarding.

The treatment of cold calves includes three things; feeding, warming and giving extra energy. How much of each you have to do will depend on how cold the calf is.

1) Feed Colostrum

As we have spoken about before, colostrum is critical for all newborn calves. Not only is it high in antibodies, very beneficial for compromised calves, but it is very high in energy and protein. This energy means that the calf isn't trying to use its own stores to stay warm but can use the energy it absorbs from the colostrum.

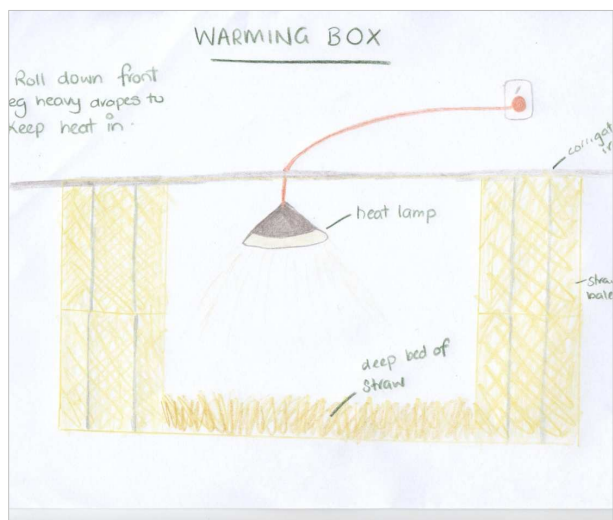
By feeding the calves warm colostrum you are also helping to warm the calf as well, just like a hot Milo does for us.

2) Warm Calves

If you were to take a temperature of any of these calves, you would expect some of them to be below 36°C. We expect the normal temperature of a calf to be between 38.5°C and 39.5°C, slightly higher than adult cattle. It takes a lot of energy for calves to warm themselves back up on their own so there are a few things that we can do to aid them.

When transporting calves, put a cover on them or have them inside the truck. All calf transport should have wind breaks around them in order to protect all calves during transport, not just the cold ones.

A calf incubator can be used to actively warm cold calves. The design shown below can be put together in a sheltered part of the shed using hay bales to form a warm microclimate for the calves. Hot water bottles can be placed under calves but have a layer of straw or blanket to avoid direct contact with the calf. In all incubator systems, think carefully about fire hazards of your heating systems. We want to warm, not cook the calves.



Calves that are only mildly hypothermic sometimes only need a warm feed, a calf cover and a deep bed of straw to nestle into and recover without much more intervention.

3) Give Extra Energy Boost.

Warming cold calves requires energy. The colder the calf, the more energy required. In some situations, the calves are so cold that the energy from giving colostrum is not enough to provide enough energy to the calf, forcing the calf to use the little fat it has stored. Metabolising fat to use as energy is a process that requires energy so, in essence, it's a vicious cycle.

Intra-peritoneal 20% Dextrose

20% dextrose can be injected into the abdominal cavity to provide the calf with a rapid source of energy. Just as intestines can absorb energy from the inside (where the food goes), they are also able to absorb simple molecules, like glucose from the outside of the intestines (the abdominal cavity).



In cold calves, this technique enables the calves to have a quick energy boost that requires minimal metabolism for their little bodies to do. It is relatively simple to do and step by step instructions are available from the clinic and can be collected when you collect the equipment needed for this procedure.

Giving dextrose into the abdomen is not only a recovery technique for cold calves but also for sick calves as well. Sick calves, as well as often being dehydrated, will be low in energy and need a bit of a boost as well.