



Cold Weather Calf Management

With temperatures now falling fast as we head towards the shortest day, calves will need extra support to deal with colder weather.

Adult cows are happiest between minus 15°C to + 25°C due to the vast amount of heat they produce when ruminating. This is their Thermoneutral zone. This is the temperature at which there is no effect on metabolic temperature regulation where no energy is used to regulate body temperature. It is also how adult cows contribute to the movement of stale air out of sheds drawing in fresh air also known as the "stack effect". The bottom of this range is known as the **Lower Critical Temperature or LCT** at which animals use up energy to keep warm rather than growing. Calves unfortunately are not ruminants yet and have a proportionately large surface area from which to lose heat and so have a very different LCT as in the table here:

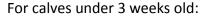
Calf age	LCT ^o C
< 3 weeks old	15 °C
> 3 weeks old	10 °C
Added moisture or wind	Raises LCT

When calves are cold or below their LCT, they attempt to maintain body temperature using up energy normally preserved for growth and immunity. So how can we combat the fact that calves born in any English winter (and summer!) will be using most of their nutrition to maintain body temperature and are therefore susceptible to disease (little nutritional protein left for immune function) and are unlikely to be growing well?:

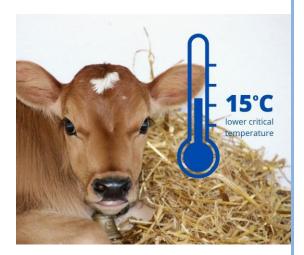
1) Feed more milk to compensate during winter months:

Milk is very quickly digested, and calves are very capable of ingesting the extra volumes suggested when temperatures drop. As with all calf management, gradually increase and decrease feed allowances. By over 6 weeks old they can tolerate 0 °C but not sub-zero temperatures.

Mix extra powder with water allocation as normal and not over 160g/litre of water to avoid excess mineral intake.



Feed 50g more powder/0.4L whole milk at 10 °C Feed 100g more powder/0.6L whole milk at 5 °C Feed 150g more powder/1.6L whole milk at 0 °C



2) Nesting Scores



Straw is a very good way to stop drafts, prevent wind chill and stop calves from being damp and losing that valuable heat to the atmosphere. It also helps drainage to remove moisture from the calf environment. Bedding should completely cover the legs when lying down to get a nesting score of 3 like the photo here. In score 1 or 2 beds you can see lots of the calf and its legs when lying down and the straw won't provide any protection from the cold. Score 3 beds are linked to significantly lower rates of respiratory disease and scour – using straw is a lot cheaper than sick calves!

3) Extra TLC

Heating devices can be used such as forced air, fixed radiant or heat lamps but some of these can often pose significant fire hazards so not always a good option.

Calf coats can be useful if poor housing means that calves are constantly below their LCT and in draughts, especially if they are sick or small. Use coats that are breathable to stop sweating and can be machine washed between each calf. Once the temperature starts to rise or the calf is of an age to cope with the



current ambient temperature, start by taking coats off in the morning, replacing them at night for a week as these calves won't have a good hair coat or subcutaneous fat reserves.

Get a maximum/minimum thermometer up in your calf sheds to know what needs to be done and when!

Farming Investment Fund

Two new government grants were launched last week as part of the Farming Investment Fund by the Rural Payments Agency.

The Farming Equipment and Technology Fund is available for grants between £2000 and £25,000 towards equipment and technology to improve productivity of farms in a sustainable way. There is a huge variety of items available for all livestock and arable sectors. This closes on 7th January.

The Farming Transformation Fund is larger grants of between £35,000 and £500,000 towards large capital items to help improve productivity, profitability, and environmental sustainability. It is being launched in three parts of with the first part open now for Water Management. This phase closes on 12th January. Visit https://www.gov.uk/guidance/farming-investment-fund to find out more information on what is eligible and how to apply to make the most of this funding.

New Arrival

Katie and Kev's new baby boy Ben arrived safely at the end of last month. Katie and baby Ben are home and trying to settle into life as a new family of five. We are so looking forward to meeting the newest addition to the Woods family!

Save the Children Christmas Jumper Day

The farm team and the whole practice will be joining in with Save the Children Christmas Jumper Day on **Friday 10th December** – you may see some questionable taste in festive outfits but it's all for a good cause!

You can join in the fun with a festive jumper and text TEAMWOODVETS to 70050 to donate £2



Please ring ALL medicines orders in

Friday 17th December to ensure collection/delivery on visits over Christmas and New Year!





