

# FARM NEWSLETTER DECEMBER 2022

# **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. The recent fog and wet has given young stock a bit of a shock so we need to support them as best we can.

Adult cows tolerate between minus  $15^{\circ}$ C to  $+25^{\circ}$ C due to the vast amount of heat they produce when ruminating but happiest between minus  $5^{\circ}$ C to  $+5^{\circ}$ C. This is their Thermoneutral zone. This is the temperature at which there is no effect on metabolic temperature regulation or 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 °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?:

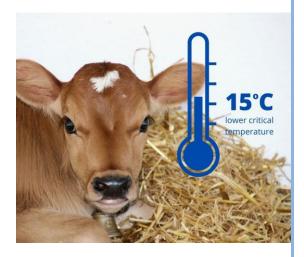
### 1) Feed more milk to compensate during winter months:

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.

Older cattle will start to sweat in foggy and still days in sheds, so clipping out the central back hair can be really advantageous when it comes to pneumonia. By removing the hair we avoid cattle staying damp as the air cools over night and it reduces the amount of straw that sticks to them as well. You just need to spend a day as a hairdresser a few times through the winter months.

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

### **A New Face**

Paul Slinger has joined the farm team this month as a trainee Approved TB tester. Many of you will already know Paul from his time as an AI technician in the area so not really a new face but just a change of role. He is really looking forward to a new challenge but very much excited to still be working with farmers and cattle. Give him a warm welcome to the Woods team when you see him next on farm.

### Flockdown continues...

As the Avian Influenza outbreak continues, we must be vigilant of any clinical signs as well as maintaining strict biosecurity and housing measures for all our poultry. There have been cases at Birdlip and Worcester, so it is now in our area of the country again.

Keep up to date with the latest advice and guidance on https://www.gov.uk/guidance/avian-influenza-bird-flu



### 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 **Thursday 8<sup>th</sup> December** – you may see some questionable taste in festive outfits but it's all for a good cause! We would love you to join in the fun with a festive jumper on farm and text VPSAVE2 to 70050 to donate £2

