



Bluetongue and AI

There are currently two regional confirmed disease outbreaks in the south of the country with Avian Influenza (AI) in Devon and Bluetongue in Kent. Both these diseases tend to seasonally affect the UK due to weather or migratory patterns. With AI we are in much better shape than last year and of course Bluetongue is impacting our exports whilst not local to us at this point. As livestock owners all we can do is remain vigilant to suspicious signs, prevent extra risks and get in touch to clarify any concerns.

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 alternating frost and wet weather has given youngstock a bit of a shock so we need to support them as best we can.

Adult cows tolerate between minus 15°C to + 25°C due to the vast amount of heat they produce when ruminating but they are happiest between minus 5°C to + 5°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?:

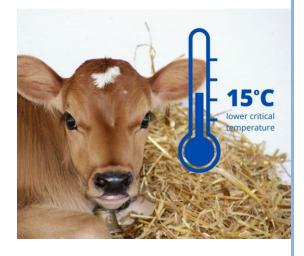
1) Feed more milk to compensate during winter months:

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 but not over 160g into a litre of water to avoid excess mineral intake. If already at maximum powder inclusion rates then increase volume but keep consistent for a week at a time rather than daily fluctuations:

For calves under 3 weeks old:

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 overnight 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!

AHDB

In October we were delighted to co-host the farm tour for the launch of Lydney Park as a new AHDB Strategic Dairy farm for Gloucestershire. The farm has appointed a Steering group made up of farmers, industry leads and their lead vet Tamsin to establish some key goals across the farming business and then help them achieve these goals. The farm will continue to run open days twice a year throughout this project over the next few years so watch out for these dates.



It's only just December but... CHRISTMAS MEDICINE ORDERS

Please ring ALL medicines orders in by

Wednesday 20th December to

ensure collection/delivery on visits over Christmas and New Year!

Festive Opening Times

Mon 18th to Fri 22nd Dec: Saturday 23rd December: Sunday 24th December: Christmas Day (25th): Boxing Day (26th): Wed 27th to Fri 29th Dec: Saturday 30th December: New Years Eve (31st): New Years Day (1st): Tuesday 2nd Jan Onward: Normal Hours
Emergencies Only
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