



## **FARM NEWSLETTER JULY 2023**

## **British Weather!**

Dropped yield? Reduced DMI? Conception rate suffering?

More and more we are seeing extremes of temperature replacing the more familiar reliable seasons we hope for. Whilst each month seems to be record breaking, be it for rain fall or high temperatures, one thing is guaranteed. We must adjust to the trends and start being less reactive and more proactive.

Our buildings and daily routine are not really suited to these different extremes in weather. Unfortunately,

it is this unsettled weather that seems to provide the biggest challenge for our livestock whether housed or grazing. Those of you with newer cattle sheds with very high pitches and little or no sides will notice how much better the cows perform compared to older. less ventilated sheds.

A cow's comfort zone is 5 to 20<sup>o</sup>C with UK humidity around 50-55%, but they are very happy down to minus 5°C. Heat



Livestock Conservation Institute (Whittier, 1993, Armstrong 1994)

stress occurs when temperatures rise over 20 °C but can be as low as 16 °C in high humidity!

Calf sheds can be the most difficult to keep cool. Dehydration in calves will occur rapidly especially when calves have scour or pneumonia, more so than in normal temperatures. Make sure to adjust sheds to keep ventilation consistent. Bales and sheet doors will need to be removed to stop calf accommodation becoming damp with condensation and stuffy.

Cows in late pregnancy and very early lactation are most at risk due to the additional heat from the metabolic processes of production – this makes these groups a priority.

Short periods of high heat and humidity impacts cow performance because:



- Cows panting with tongues out and sweating use up to 20% more energy
- To keep cool, standing times increase in preference to lying down. They also crowd areas with more breeze (which actually lifts temperature but it's hard to explain this to cows!).
- Increased ration sorting and reduced DMI can drop yields by 10% to 30%.
- Depressed/no signs of oestrus and lower conception rate Heat stress will compromise egg quality. These sub fertile eggs are then ovulated over the following 100 days, which will impact fertility performance well after the temperature has dropped. This is true for beef and dairy cattle alike.
- Cases of mastitis rise due to crowding under shaded areas in fields or in sheds. This can also be linked to damp cubicle beds from humid sheds and condensation. Monitor beds for irregularities

What can we do?:

- Increase air movement in sheds: install fans and increase ventilation by opening solid doors and lift blinds to promote air movement:
  - High Volume Low Speed fans (pictured) seem to be the best fan type for both cows and energy efficiency. They are also relatively quiet compared to the vertical High-Speed versions and require less fans per shed overall.
  - Whatever fan type you have make sure they are all working. Putting fans on at lower temperatures (around 10-12°C) makes fans more efficient, not needing to drop temperature just maintaining it. Thermostat controlled fans tend to work the best so that nobody needs to remember to turn them on or off. Fans need to be running from 17 °C as this is when we start to see issues around 50-60% humidity. One fan will cause crowding in the breeze so make sure to ventilate the entire housing area all at once to make a true difference. Think about 2024 now get prepped well ahead of time
- Ensure cattle have adequate shade and fly repellent especially when at grazing
- Sprinkler systems can be useful in high pressure areas such as collecting yard and parlour but beware increased mastitis risk if too much water aerosolised over animals
- Reduce stocking density of sheds and limit handling in the heat (middle) of the day – better for all!
- Split cows into small groups for milking so the collecting yard isn't full and don't use the backing gate.
- Consider grazing cows at night, instead of during the day
- Ensure water troughs are:



- 1. **Clean** with fresh water supply tip-over-troughs are not used to their full potential tip them over and give them a scrub weekly to avoid it becoming a big job.
  - 2. **Constantly full**/filling water should always be available so adjust water pressure accordingly.
  - **3.** Enough troughs to avoid competition/dominance and ensure their placement doesn't cause bullying or block access to feed, water or cubicles ask us about how to measure requirements.
- Mix rations just before feeding out and feed twice a day to avoid spoilage/heating
- Feed 60% of ration overnight when intakes will be at their highest
- Cows will sort out the long fibre trying to reduce heat from rumen fermentation. Make sure if sorting
  happens that the ration is adjusted to be more nutrient and energy dense to compensate.
- Observe cows for bulling in the early morning and evening to increase chance of seeing cows in heat.
- Transport cattle in the coolest part of the day to avoid extreme heat stress.

Don't forget beef cattle and suckler cows. When shade and consistent water supply are not available, we will see poor calf growth rates, susceptibility to infectious diseases, mastitis from poor milk supply and increased stress behaviours none of which we want. Make sure cattle have access to plentiful, potable water and aren't reliant on dried up brooks or streams and have access to shade at all times. Use paddocks without shade for hay instead and graze later into early autumn.

Put a thermometer and a hygrometer (measures humidity) in the sheds and parlour. This can help you trigger management changes before we see long term impacts on health and production.

## Congratulations

Both Hannah Coles and Sarah Trenchard have both recently passed their TB validation exams with flying colours. We are delighted that they have both done so well and are now fully qualified Approved TB Testers as part of the Woods TB testing team.





