



With cold and wet weather recently and forecasted into the winter months, attention is starting to turn towards housing grazed cattle before they poach large areas of pasture and getting youngstock settled into the winter routine. As the ambient temperature drops, it is a great time to check on your young calf management before we get pneumonia outbreaks spreading in youngstock housing.

### Calves – When do they feel the cold?

Historically cattle sheds were built to keep cows warm but in reality, we were making them uncomfortably warm – adult cows are happiest between minus 15°C to + 20°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 and also has a large impact of the movement of stale air out of sheds drawing in fresh air or 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:

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?:

Calf age	LCT °C
< 3 weeks old	20 °C
> 3 weeks old	10 °C
+ moisture/wind	Raises LCT

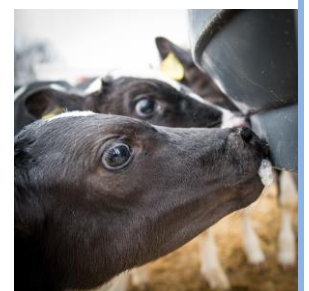
#### 1) Feed more milk to compensate during winter months:

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 are capable of tolerating 0 °C but not below:

**Feed 30% more milk at 10 °C    Feed 40% more milk at 5 °C    Feed 50% more milk at 0 °C**

#### 2) Calf coats

Calf coats are an ideal way to help calves in danger of being below their LCT especially if they are sick or premature calves. Use coats that are breathable to stop sweating and machine washable (must be washed and dried between each calf!). Once the temperature starts to rise or the calf is of an age to cope with the ambient temperature, start by taking coats off in the day, replacing them at night for a week as these calves won't have a good hair coat or subcutaneous fat reserves.



#### 3) 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. Bedding should completely cover the legs when lying down to get a nesting score of 3 like the photo here. Score 1 or 2 you can see lots of the calf when lying down. Score 3 beds are linked to significantly lower rates of respiratory disease – using straw is definitely cheaper than sick calves even in a year when there is a shortage!

Do you know how cold or damp it is in your calf accommodation?

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

## Planning for Housing

Last month we discussed boosting immunity by vaccinating cattle pre housing to reduce pneumonia incidence over the winter. Housing also offers the ideal time to target known internal and external parasites including fluke by manipulating normal parasitic lifecycles once animals are no longer grazing.

### Parasitic Diseases at Housing

When cattle have been grazing wet pastures, they can come into the housing period with large parasite burden of worms or fluke. Whilst wormer products often have an extended action and give some cover against lice (Macrocyclic lactone wormers i.e. Avermectin types), fluke products have no persistence (working only on that day) and so timing is key. Use wormers at the start of housing to remove gastrointestinal worms giving maximum benefit to growth rates and lice. **Do not use worm and fluke combination products at housing** as one of the products is being used at completely the wrong time, wasting money, and risking major disease impacts. As you can see from the table below, you need to **wait a number of weeks after housing** before treating for fluke to ensure that it removes all of

the life stages i.e. wait for all fluke to be the minimum age of kill according to the active ingredient of the product you are using. Correct product timing stops adult fluke being overwintered in the liver causing chronic damage. When fluke are overwintered they mature into adults and are ready to shed masses of eggs onto pasture in the spring. By preventing this maturation of fluke during housing it reduces the fluke risk for the following grazing season. Dairy units are limited to using products within the dry period due to lengthy milk withdrawals but there are ways to target the peak fluke burden with correct product selection. Please speak to us about product selection for exact cases but use the below table of active ingredients for a starting guide:



Active Ingredient	Minimum Age of Fluke Killed
Triclabendazole (Oral)	2 weeks
Triclabendazole (Pour On)	6-8 weeks
Closantel (Injection/Pour On)	7 weeks
Nitroxynil (Injection)	8 weeks
Albendazole (Oral)	10 weeks
Clorsulon (Injection)	
Oxyclosanide (Oral)	

### Get in touch...

We are experiencing a huge number of calls during peak times especially to the small animal department due to restrictions and appointments changing frequently. We are committed to ensuring that you can always get hold of the farm animal team when you need us. You will notice that you receive calls from the small animal number (ending 990) so please make sure you have both numbers saved and ring in on our dedicated farm line. As a reminder the number to ring is:

**Large Animal Office 01452 543 999** Small Animal Office 01452 543 990

If you ever struggle to contact the office team then please use the vets as your next line of contact leaving a voicemail if we are on farm:

- Graham Stephens 07768 747737
- Paul Cunliffe 07741 052502
- Tamsin Thorn 07715 062413
- Louise White 07720 087190
- Katie Kipling 07720 087189
- Richard Jones (Foot Trimmer) 07713 395356

During the impending next stage of lockdown we will remain open as usual and providing you will all of our farm veterinary services.