



Farm Vet News

Bi-Monthly Newsletter of Endell Farm Vets

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Hottest June Since 1976

Welcome to the EVG Farm July Newsletter - I am sitting finishing the Newsletter during the last weekend in June and the weather is stunning and looks set to continue this way for the last few days of June. The temperature is currently 23°C and looks to rise to 26-29°C for most of next week, which is great for me because I love hot sunny weather, but is not so good for our cows.

The optimal temperature range for a dairy cow is 12-18°C (when they are at their happiest and most productive), but their comfort zone is 5-25°C. Anything above 25°C and they will start to suffer from heat stress. This affects health and production in many different ways; decreased dry matter intake (DMI), decreased milk yield, decreased fertility, increased lameness and other health issues, for example mastitis and an increased risk of acidosis because cows will select concentrates over forage where they can and will ruminate less. The same is true for our calves and youngstock who also feel heat stress at temperatures over 25°C.

So, how can we help our cows feel more comfortable in these hotter days to come? There are a number of things we can do, here are some ideas that you can hopefully adapt to your own farms and situations:

1. **Shade** – Consider keeping your cows in during the hottest part of the day. Most good housing is cool and provides shade – if not, perhaps we could use our team of students for a free investigation into the ventilation and housing for your cows? Shade in fields is nice, but beware of cows “camping” in the same spots as this can lead to increased mastitis levels.

2. **Ventilation** – For housed cows good natural ventilation is important in both summer and winter and for cows at grass, where possible, use fields with a breezy aspect.
3. **Cooling** – Fans and sprinkler systems are great but expensive. Having some leaky water pipes spraying water over the collecting yard has produced excellent, if accidental, cooling systems on some farms. But do not “Mist” the cows as this will increase humidity which will make the heat stress worse – see below.
4. **Change Feeding Patterns** - Feed when the weather is cooler and provide easy access as they will eat less during the day and have more frequent meals.
5. **Water Access** – Cows can drink up to twice as much water when the temperatures rise, so have good availability and ensure it is always fresh and clean.

In periods of high humidity, the temperature at which a cow exhibits signs of heat stress falls. For example if humidity is up to 80% then a temperature of 28°C will produce severe debilitating effects. This is known as the temperature humidity index.

For people like me who relish the heat and for those with solar panels, enjoy this unusual weather as by the time the newsletter reaches you all in July, knowing the British summer and upcoming school holidays, the weather will change and autumn will have started.

I hope you enjoy reading,
Sally Baker

Challenge Sheep

Challenge Sheep is a new AHDB beef and lamb funded project which aims to understand how the rearing phase of replacement ewes impacts lifetime productivity. Covering both sheep bred as ewe lambs and as shearlings, the project will track 9,000 replacements from a range of English sheep farms over seven years to understand how flock performance can be improved. The project aims to generate new knowledge and highlight existing information on managing ewe replacements. Producers who take part in Challenge Sheep will be required to collect data via EID, weights, BCS, lambing data and lamb performance.

The Challenge Sheep project meeting at Didling Farm, West Sussex, this month looked at eight week weights from the shearlings which ranged from 10 to 30kg and targets for the shearlings themselves rearing lambs. We discussed shearling weights vs BCS, average LWT dropped from 65kg at tupping to 59kg at eight weeks post lambing and BCS dropped from 3.75 to 2.75 (1 BCS = 10kg roughly). What was interesting was that the heavier shearlings that lost the least weight during this period produced the heaviest lambs at eight weeks. Not surprising, but are we taking advantage of this knowledge? Was it the shearlings that were heavier and larger at tupping that performed best or was it those that lost the least weight? These are some of the questions hoping to be answered by the project. What targets should we set ourselves, can we improve the longevity of our replacements, is it the shearlings that are responsible for the lightest lambs at weaning and can we alter this?

For more information on the Challenge Sheep Meetings, please contact Sally Baker at EVG, we are hoping to encourage more sheep farmers to join this Discussion Group.



Making the Most from your Grass

I attended a very interesting meeting this week as part of the Dairying for Profit Discussion Group, although as a co-founder of the group (with John Proctor of South Stoke Farm, Winchester), I am possibly slightly biased. However, it was a very interesting meeting, helped by the variety of people who attended. Farmers (owners and tenants), herdsman, managers, industry, advisors, vets, and students with an age range from 16 to... a lot older. This encouraged lots of questions and a lively discussion.

Our kind hosts, Kathi and Tim Knapman, talked us through the background to their farm and offered us a walk around the milking herd, but by unanimous consent the group, surprisingly, opted to look at machinery instead of cows. This shouldn't have been a surprise as we were there to discuss alternative ways to use grass and to see Tim's zero grazing machine in action.

Tim and Kathi farm a Hampshire county council smallholding of 80 acres with their 250 cow, high yielding Holstein herd. With only a 40 acre grazing platform, making the most from grass is difficult so two years ago they bought a zero grazing machine and it has improved the way they feed their cows and boosted milk yields. They had grass growing too far from the dairy for the cows to graze and it seemed a waste to silage it when they needed fresh grass to feed to the cows. As fresh grass can yield 18-20 litres compared to 11 litres from good silage, it made sense for Tim and Kathi to invest in the zero grazing machine. It isn't a piece of kit that will fit every system, but for their 9-10,000 litre cows on TMR with very limited grazing it made perfect sense. The cows do graze all summer but with regrowth as low as it is at the moment it helps to have some extra elsewhere that can be fed. The zero grazer is in use from February to November and can make much better use of the whole field compared to grazing cows, so there will be less waste. The grass is cut once a day, which takes about an hour, is chopped and added to the TMR which helps to bind the ration together reducing sorting and the grass keeps the ration moist and rumen friendly. This is key to the Knapmans' feeding regime as well as keeping it simple. The milking cows and youngstock are all fed one TMR ration and this only changes when the transition group is created prior to calving when there will be two mixes; one for the milkers and another for the dry and transition groups. Both TMRs are simple, low protein (no soya), no extra ingredients, no buffers and plenty of chopped straw for the transition cows.

We did get to see some cows on our walk through the farm, the dry cows, although not necessarily representative of their Holstein herd.



A big thank you to Kathi And Tim Knapman for the meeting and to Boehringer Ingelheim for sponsoring our delicious lunch. If you would like more information on future Discussion Group meetings please contact me at the practice. Sally

Transition Cow Management: Keeping it Simple



I am writing this article on the longest day of the year, 19 hours of daylight and so far all of them have been filled with sunshine. So is now really the time to be planning for our transition cows? Well I think so, as a good transition for our dairy cows is all in the planning and it needn't be complicated. But before they enter the transition period they need to be in the right condition, BCS 2.5-3, which can only really be altered in late lactation, if we leave it any later to put our cows on a diet or try to put weight on we are likely to cause more problems than we reduce.

How long should the dry period be? 35-70 days – any longer or shorter and there will be lower milk production in subsequent lactations. When is the transition period? We generally think of it as the three weeks pre-calving but in reality it is from three weeks pre-calving to three weeks post calving. What are we trying to achieve in this period? Prevent Metabolic Disease, promote good fertility, condition the rumen for the milking diet and keep it as full as possible (maximise dry matter intake (DMI)) and keep the udder healthy.

Cows have a very low energy requirement during the dry period, especially the far off dry cows who should never be allowed to see maize. Feed 5-7kg of straw and grass silage or just low quality grass silage or bare grazing and straw (to keep the rumens full). And even in the transition period a low energy, low protein high fibre diet is best. Keep the rumen full and active and don't allow the liver to become fat and lazy. As was pointed out to me recently, we should learn from the cows – high fibre low sugar diets – they promote good health and slim figures.



So how much should our cows eat? DMI for dry cows should be 2.0% of body weight but if they are too fat, >3.5, this drops to 1.5% BW which is a reduction from a DMI of 14kg to only 10.5 kg for a 700kg cow. Fatter cows have poor appetites, are more likely to suffer from metabolic disease including DAs and will lose more condition than a cow that calves in at the correct BCS

The key points for good transition cow management are comfort, space and low stress:

1. Allow enough feed space – at least 75cm per cow and ideally 1m per cow.
2. Cow comfort and space for the transition cows. At least 1m² lying space per 1000 litres of milk production plus a third again loafing and feeding area. Avoid overcrowding.
3. Plenty of fresh water ideally 10cm per cow water trough space.
4. Avoid too many group changes. Cows hate change and stress leads to reduced DMI.
5. Correct BCS and prevent metabolic disease.
6. Low energy high fibre diet to encourage DMI, rumen fill and appetite.

| FAR OFF DIET | TRANSITION DIET |
|--|--|
| 8-9MJ/Kg DM | 10-10.5MJ/Kg DM |
| 9-10% Protein | 13-15% Protein |
| DC Minerals | DC Minerals |
| Aim for 16kg DMI | Aim for 12kg DMI |
| ie Poor quality silage/haylage and straw | Low DCAB forages (to condition rumen for milking diet) |
| Exercise – keep them outside as long as possible | Straw 2-5kg of chopped straw ideally |

Targets
 BCS 2.5 – 3 for dry period
 DA rate – 0% if <8,500 litres
 <2% if 8,500 - 10,000 litres
 <3% if >10,000 litres
 Milk fever <5%
 RFM <5%
 Endometritis/Whites <10%
 Mastitis in the first 30 days <1 in 12 cases



Newton Wood Barns

EVG plants its feet firmly in Hampshire

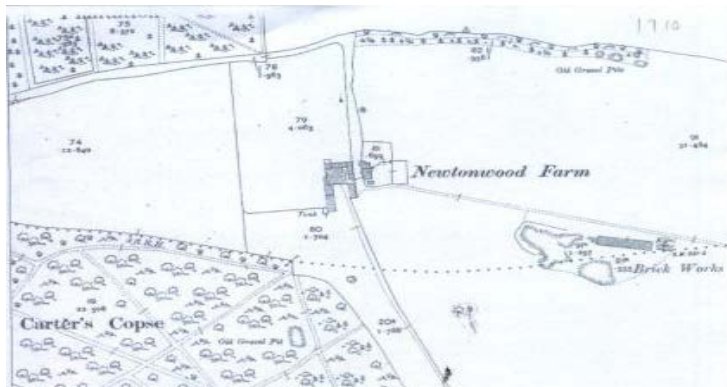
Newton Wood Barns (NWB), the new branch of Endell Veterinary Group in Hampshire, is now officially open. As well as a firm base for the practice in Hampshire, NWB combines office, laboratory and a fabulous purpose-built teaching centre, with accommodation, seminar room and practical suite for Veterinary Students from the Royal Veterinary College (RVC) in London. EVG promised their clients in West Sussex, Hampshire and Surrey a more local office and it has been many years in the planning to get it just right for everyone; the aim was to provide a dedicated office for local clients to pop in and chat and collect medicines, as well as a centre for client meetings and farmer training events.

Newton Wood Barns are part of the Rotherfield Estate and currently consist of two buildings, both of which are converted from the original barns. South Barn, which houses the office as well as student accommodation, was originally an asbestos barn and has been transformed into an energy efficient, thermo-dynamic building made of thermalite blocks (80% recycled content and thermal properties) and clad in Cor-Ten, a weathering steel with more than 100 years' lifespan. West Barn, the main teaching and residential facility, is a brick building built using all the original bricks. The old barns were taken down brick by brick and the bricks were then cleaned and reused to create the magnificent barn we see standing today.

Newtonwood Farm (as it was originally known) was once a stock farm and dates from mid to late nineteenth century, and was made up of a farmhouse and adjoining cottage, two outhouses, an earth closet and four agricultural buildings/barns. West Barn was originally built post 1942, whereas the other buildings are thought to be late 1800s and their uses were as follows:

- North East and North West Barn (now a set of walls and the practical suite) were once a hay shed, stable, potato store, cattle shed and a covered yard.
- The West Barn, now the teaching facility and accommodation, was originally built of brick and flintstone with a small part of timber. It had a tiled and corrugated iron roof and was two storeys. The ground floor was used as the Granary and housed a Bamford's Patent Rapid Grinding mill and oat crusher. This barn was a cart shed, tractor shed and contained two large drums of oil. The first floor of this barn was used a corn loft.
- The South Barn, now office and further accommodation, was originally a one story cart shed and stand for the combine harvester.
- The central car park, as we now know it, was once a brick, flintstone and timber open fronted hay shed and tractor stand with a slate roof. It had one storey and a loft for further storage.

It is assumed that the bricks used to build these barns were likely to have been made a short distance away (see plan below), in the three brick kilns at "The Brick Works".



As a base for EVG it offers a great centre for client meetings, one to one client discussions, informal discussions, drug ordering as well as laboratory services such as worm egg count monitoring for all species.

The collaboration between the RVC and EVG began in February 2017 with the first of the final year vet students originally at Empshott Grange, moving to NWB in April of this year. All RVC students will spend two weeks with us at some point during their last year at the university and we have a set timetable so they all have the same high quality of teaching and receive a good grounding in farm animal medicine and develop a set of decent day one skills to equip them for their first years in practice.

Comments from the students on the new accommodation have been full of praise – comfortable, amazing, home away from home, peaceful, great space, it healed my mind and body during my two week stay – sounds more like a spa than a teaching institution.

The facilities for the students are split between the two buildings with three twin bedrooms and two shower rooms upstairs in South Barn and a kitchen diner downstairs and a large open TV area with French windows looking out onto the countryside. South Barn has four twin bedrooms downstairs, three shower rooms (two are en suite), a utility room with washing machine and tumble drier and upstairs is a large open plan kitchen diner – sitting area and seminar space. This area in particular is light and airy with multiple skylights and windows round the whole room and French windows onto a terrace that has wonderful views over the Hampshire Downs. As well as this we have an outdoor teaching area, our wet suite where we teach practical classes that always involve wellingtons and waterproofs.

We are thrilled to be in our new office and welcome all clients to drop by to see us and have a tour of the new facilities. We are very proud to show what we have built and achieved with the help of a dedicated team from Rotherfield, EVG and the RVC. Sally



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