



# SHROPSHIRE FARM NEWS

## STRESSES ON THE TRANSITION COW

The sun is now shining, many cows have gone out to grass and although still being fed a fair proportion of their diet inside, it will soon be time when their diet will consist of entirely grass where management of the cow's nutrition and weight becomes harder with only green stuff in front of her.

If it becomes a common theme with us, it can never be over emphasised how important the 90 days around calving are. This is the most stressful time in the cow's year, and will impact heavily on the cow's health and wellbeing in the next lactation. So the important times are the two month period before calving and the first month post calving. In this time everything changes for the cow, from energy balance to immunity, with subsequent effects on fertility and post-calving diseases.

If the top causes of culling are fertility and mastitis, and only a small percentage is down to metabolic disease, the resultant impact of this is metritis and mastitis are a hidden cause of culling. 40% of cows may experience degrees of metritis within the first week of parturition, and 60% may have mastitis in the first eight weeks post-calving.

The challenge of the pregnant cow is that she is immune-suppressed in the later stages, but post-parturition the immune system switches on to decontaminate the uterine environment. (Although we know that this is a time that cows are vulnerable to infection.) Cows going into negative energy balance caused by extensive demand for energy to produce milk, and exacerbated by reduced DMI, causes **significant** stress on the cow.

Milk yield will increase over the first 100 days in milk regardless of the cow's energy intake; it is only after then that production will reduce in response to limited energy supply, so metabolic regulation is also an issue. The link between negative energy balance and reduced neutrophil (the cells that help clear up infection) function becomes more important in disease outcomes. Negative energy balance is also closely related to early embryonic death, anoestrus and fertility problems. This effect on the immune system also affects the incidence of metritis and retained placenta. Neutrophil function reduces in cows post-calving when cows suffer with fatty liver and negative energy balance. There is complex science as to how the effects of immune system suppression at this time can be linked with metabolic pathways caused by problems in the transition

*Continued overleaf*

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## SKILLS WEEK

Skills week is going to be held on Tuesday 23rd September – Friday 26th September. More details coming soon.

## AI COURSE

We will be running our next AI course in October. Please call the practice and speak to Sam P for more details.

## UPDATE: DRAGON BOAT RACE

By the time you read this, our date with destiny will be fast approaching and training will be well under way (wishful thinking). Our team is now completed by a couple of Walley's and Atlantic oarsman Tim Downes (though he is stopping at Ireland).

If you're passing the river on June 22nd in the Quarry, come and give us a wave or cheer, but hopefully don't throw anything at us, and your support in our efforts to raise money for Severn Hospice will be much appreciated.

Perhaps pictures in the next newsletter, ideally with us still on the "Dragon"



From front page

cow period. But the relationship between fat metabolism, inflammation and immunity is very important.

The effects of sub-clinical hypocalcaemia on production, LDAs etc. also have to be added into the problems of this crucial period.

Unexciting stuff, but if we keep banging on about the transition period it is because of the economical and welfare aspects of the cow production cycle.

Monitoring body condition score (BCS), feed (grass) availability and acting accordingly can help. Whether it being limiting grass availability and replacing it with straw in overweight late lactation cows, or having to supplement the early lactation cows, using a monensin bolus, or any number of management issues, it is essential to keep a handle on this group of cows in this stage of their year. Ask us for our opinion of their condition at Routines or TB tests, and then hopefully disease can be prevented and the cow can milk to the best of her potential.

I have every confidence we will keep coming back to this subject, but it really is so important.

Rod

## SUMMER MASTITIS – “AUGUST BAG”

**As the season for summer mastitis fast approaches, (we saw our first case in April) here’s a quick reminder from last year’s article on the best control methods.**

1. Antibiotic cover will significantly reduce the chances of infection, as will the use of Dry Cow therapy and good hygiene at administration.
2. Teat sealants – will offer good protection to the teat end to prevent infection, whether in conjunction with, or without Dry Cow therapy. The use in heifers is now showing benefits and I would refer you back to the article in last year’s newsletter on the use of teat sealants.
3. Fly control – regular treatments with pour-ons such as Swish will minimise exposure of the teats to flies. Keeping cattle away from fly-friendly environments, such as sandy soils, tree cover, and water where flies breed will also benefit.
4. Maintain good teat condition, regularly check animals and treat if necessary.

Little can be done to save the quarter once infected so prevention is better than cure.

Rod

## MEDICINES DELIVERIES AND OUT OF HOURS DISPENSING

We have recently reviewed our medicine delivery policy with a view to improving our service. As usual, we will drop off medicine orders as and when we can, in the way we have for the past 10 years. In addition, if a medicines order is over £450 (net price) then a free delivery will be offered that is guaranteed within 5 working days. That is to say, if an order is made on a Monday, we guarantee delivery by the end of the following Monday.

With regards to dispensing medicines at the weekend, please be mindful of the fact that our out of hours service is strictly for emergencies. If you urgently need a medicine out of hours or at a weekend, we do and will continue to dispense it for you.

Please be aware that if a vet has to make a special trip to the office to dispense medicines out of hours, then a minimum visit fee will apply. As there is no facility for payments at the weekend, the pay-at-the-time discount is also lost. Thank you for your understanding, if you would like assistance in drawing up a suitable medicine cupboard stock-list based on the requirements of your unit, please feel free to ask.

James

## CAPTION COMPETITION

**Send in your best captions for the picture below for a mention in next month’s newsletter!**





## SUMMER AND PIGS

As the days get warmer, and the sun shines more we will all be looking towards a nice summer for a change, getting a sun tan, and generally enjoying the season. However, for one of our animals, summer causes problems which need to be addressed to cater for their welfare needs.

For the pig, summer can be a period of stress, being far more sensitive to heat than other animals. Most animals transfer heat to the outside of the body by sweating and panting, these being the most important tools for the maintenance of body temperature. However, pigs do not sweat and have relatively small lungs. Due to these and their relatively thick subcutaneous fat, pigs are prone to heat stress. The modern pig also produces considerably more heat than its predecessor.

The two obvious symptoms observed when pigs are exposed to heat stress are increased respiration rate and loss of appetite (the latter reduces internal heat production). If heat stress continues pigs start to drink excessive amounts of water, increasing the loss of electrolytes, and they accumulate acids produced within the body (so an acid/base imbalance develops), which may ultimately result in diarrhoea or death in extreme cases. Prolonged exposure to high temperatures in the pig have also been shown to effect intestinal defence mechanisms therefore rendering the pig more susceptible to secondary infections.

The welfare problems of heat stress are serious, but from a production point of view, heat stress will also have a significant effect on growth performance, which is also affected by humidity. The higher the humidity, the critical temperature will be lower which becomes more of a problem the younger the pig is.

Other factors to consider in summer are seasonal infertility in the breeding herd, as discussed in an article last year, where temperature and increased daylight length can play a role, as well as those sub-fertile sows that may well be overweight as well.

Especially in the outdoors pig, Erysipelas may also have an increased incidence in the summer months, showing the typical diamond shaped blotches on the skin, in the sub-acute form. Erysipelas can be controlled well by vaccination, and responds well to treatment with Penicillin if treated early enough.

Water deprivation can also be more of an acute problem when the temperature rises, producing acute nervous signs especially in the growing pig, so always check water supply.

### WAYS TO HELP:

1. Increase ventilation and airflow, and regularly check cooling systems if fitted
2. Reduce stocking density if possible
3. Maintain drinking water temperature as low as possible
4. Avoid feeding between 10am and 4pm, the hottest times of the day
5. Minimise excess non-essential amino acids and fibre, therefore minimising intestinal fermentation and heat production
6. Make wallows available for outdoor pigs and of course good shade.

So, in conclusion, when heading off to the beach and your taking your pig (with appropriate movement license) just remember he may not be enjoying the heat as much as you, will require a higher factor sun cream and he gets first use of the sun umbrella.

**Rod**



# WATCH OUT ELIZABETH'S ABOUT!

So you watch the vet roll into your yard and a strange face pops out from the passenger side; a student has joined in on the visit. This is now my third placement at Shropshire Farm Vets and I'll be coming back later in August too. As a student, placements in practices with vets really help me put my taught skills from university into a more practical setting aiding with my learning. It also helps me to practice those essential skills that I will need once I graduate; from getting to grips with PD-ing to diagnosing that ping.

I just wanted to say a massive thank you to those farms I have already been warmly welcomed on to and in anticipation to those that are yet to meet me. Your patience and willingness to let me get stuck in is really appreciated and it really will make me better once I graduate.

*Elizabeth Hodges  
5th Year vet Student  
University of Glasgow*



# CALLING ALL SMALLHOLDERS

Following the success of our first quarter we are pleased to report that we are continuing with our smallholders club: Grunters, Grazers and Gobblers (GGG). Last quarter's meeting, "Veterinary Medicines: facts vs fiction and the fundamentals", was very well attended (we may have to find a bigger room!!) and some very positive feedback was received.

Now that the breeding season is calming down it is an excellent time to be focusing on how to improve the efficiency of your holding. This quarter's meeting will be based on the fundamental jobs carried out on farm: dehorning, castrating, tail docking, foot trimming etc. The Pasture Press (specific newsletter as a perk of membership) contains articles and advice relevant to the up-and-coming months.

Membership is aimed at producers with smaller holdings and affords its members financial, practical and literary benefits. GGG membership is £20 every quarter. For more information on the benefits of joining, or simply to sign up, please ring the office and ask to speak to one of the smallholder's team.

*Emily*



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