



St Davids Farm Newsletter

March 2007



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BREAKING NEWS: INTERHERD REPORTING UP AND RUNNING!

Last month, Emily Simcock discussed the exciting implications of our soon-to-be-launched monthly reporting service designed to help those of our farming clients whose herds are NMR recorded.

We are very pleased to be able to tell you that this service is now available.

What are the benefits to you, the farmer?

Once registered with our new system you will receive:

- A monthly report of the current status of your herd's fertility and cell counts
- Tailored comments on progress made since the previous month
- Highlighted indications of any problems or potential future difficulties
- Advice on how to avoid these issues

This report is delivered using a program designed by St David's IT Ltd. The aim of the report is to be simple and concise

yet delivering quality information. Each report will be written by the vet responsible for your farm.

And if you have any problems – we're only here... let us know and we'll help.

How much will this new service cost?

We think that you will be surprised at how little all this will cost – we are offering it at what we think is the amazingly-low price of £15 per month. The aim of the report is to highlight any problems that need attention and to make obvious any long-term trends that often go un-noticed and therefore can go unresolved. We could therefore identify areas where you could potentially make huge savings for a small monthly fee.

Free trial period

As you can probably tell, we are very excited about the possibilities that this service will open up – and to give you just a taster of the benefits you will receive (the full benefits will, by their cumulative nature, become more obvious over a longer period of time) we would like to offer all of our NMR-recorded herds their own report on both fertility and cell count during March – free of charge!

Don't worry – you will not be automatically charged if you forget to "de-register". We will, during the first week in April, ring all takers of our March free offer to check that they wish to continue.

How do you register?

The only qualifications required for the free trial are:

- Your herd must be NMR-recorded
- You must be a St David's client.

As long as you qualify on these two points, simply ring Jayne on **01392 872934** or email **jayne@stdavids-vets.co.uk** and say that you would like to take advantage of the free trial offer. Jayne will organise your registration and you will be sent full instructions on how to use the service.

Three Counties clients

If you are a client of Three Counties Feeds Ltd you are also very welcome to register for this service, even if you are not a client of St David's – provided, of course that your herd is NMR-recorded. Simply contact your Nutritional Advisor, say that you are interested and he will organise the rest for you. If you should have any questions which he can't answer he will put you in touch with one of our vets who will be pleased to help.

We regret, however, that the free trial period is available to St David's clients only.

Have you put in your order yet?

We recently sent out letters to all our farm clients reminding you that it is time to think about boosting vaccinations against Lepto and BVD.

If you haven't yet ordered your supplies of vaccine – or if you are thinking that you would save money by not ordering at all – it might be worth considering the risks involved if you allow your herd's protection to lapse.

Lepto

- Turnout is a high-risk time
- Spreads extremely easily from one holding to another over long distances via watercourses contaminated by infected urine
- Thrives in the alkaline conditions found in the grassland grazed by your cattle

- Spreads by drinking contaminated water, skin contact with contaminated water or by ingesting contaminated feedstuffs

Infected cattle rarely appear ill. Signs that your cows have become infected include:

- Abortion
- Sudden drop in milk-yield
- Birth of weak calves
- Infertility

As if that wasn't enough – Lepto is one of the few diseases that can pass directly from cattle to man. So vaccinating your herd does more than protect your cattle.

BVD

- Major cause of bovine abortion
- Virus can pass to fetus causing reabsorption (presenting as infertility) and still-birth as well as abortion

- Some infected fetuses go to full term and some of these grow into apparently healthy heifers – showing no signs of illness. However, they will carry and excrete the virus for the rest of their lives (as will any calves that they produce) – potential time-bombs for the rest of your herd.

Bulling heifers and any cows not previously vaccinated should have **the full course of vaccinations** (two injections three weeks apart) before they go to the bull or are served by AI in order to ensure high levels of immunity during the crucial first half of pregnancy. Thereafter the normal booster will be sufficient.

If you have not yet ordered your vaccines, ring Jayne on **01392 872934** with your order or email jayne@stdavids-vets.co.uk

Lameness workshops

How much do you know about lameness and foot trimming?

St Davids Farm Practice are pleased to be hosting free lameness workshops on March 16th at Bicton College and March 19th at Cannington College. They are being run by the Kingshay Trust and previous workshops all over the country have been extremely well attended and appreciated by farmers.

The speakers are David Pettit – a lameness consultant, and Steve Paul – a professional foot trimmer. They are being funded by the MDC.

The workshop will examine:

- The physical and nutritional causes of lameness



- Look at the impact of lameness on fertility and profitability
- Teach lameness assessment and locomotor scoring
- Show a practical foot trimming demonstration on lame cows
- Discuss housing design on a farm walk
- Discuss the use and siting of footbaths and foot crushes

The course will run from 10.15am to 3.15pm and lunch will be provided. Everyone attending will leave with a handbook, MDC footbathing guide and a free foot block.

These courses have had excellent reviews and we expect them to be very popular. Please contact **Jayne** on **01392 872934** or email jayne@stdavids-vets.co.uk to book your place as soon as possible.

Feeding for fertility

Poor fertility is a major problem in many herds in the UK, with data from a number of sources indicating pregnancy rate to first service to be only 40%. This has a major impact on farm profitability, with estimates suggesting a cost to the farmer of £3 per cow per day for every day's delay in getting the cow back in calf.

One of the key factors determining successful fertility is the energy status of the cow. In early lactation dry matter intake, and hence metabolisable energy (ME) intake is low and increases slowly over the first few weeks of lactation. During this period cows 'milk off their backs' to supply the energy required for milk production and cow condition decreases. This scenario of 'negative energy balance' can have major detrimental effects on fertility and research has demonstrated that the onset of ovulation after calving is strongly influenced by both the extent and duration of negative energy balance.

To reduce negative energy balance in early lactation at a time when intake is low, a high energy density diet must be

offered. This is best achieved by inclusion of protected fat, such as Megalac®, in the ration. Megalac® contains 2.5 times the energy concentration of cereals and does not lead to an accumulation of acidosis-causing acids in the rumen as is the risk when feeding high levels of cereals. Incorporating Megalac® in the ration to supply 0.5 kg per cow per day typically increases total ration energy density by 0.5 MJ ME / kg dry matter. Furthermore, Megalac® is highly digestible and efficiently used for milk production, and has the highest measured net energy value for lactation of any fat supplement.

A recent study at the University of Edinburgh recorded significant improvements in fertility due to inclusion of Megalac® in the diet (see Table 1). Cows were offered a control diet or the control diet supplemented with Megalac®.

Over twice as many cows in the Megalac® group were back in calf at 100 days after calving than in the control group, and only 15% were not in calf at 200 days, compared to more than 45% of the control group. Cows fed the rumen protected fat also recorded a numerical reduction in calving to conception interval of 19 days, worth £57 per cow. Furthermore, the improvements in fertility recorded in this study were not achieved at the expense of milk yield, with Megalac®-fed cows tending to have higher yields, averaging close to 1 kg per day, throughout the duration of the study.

Improving fertility in dairy herds is complex, involving a range of management and nutritional factors. However, research clearly demonstrates the significant benefits that can be achieved by targeted dietary supplementation with appropriate ingredients.

Richard Kirkland – Volac

Herd fertility	Diet	
	Control	Control + Megalac®
100 day in-calf rate (%)	21.4	45
200 day not-in-calf rate (%)	45.2	15
Calving to conception (days)	118	99

Table 1: Fertility of cows offered control and Megalac®-supplemented diets



Achieving genetic potential

I attended an industry conference recently, with speakers offering an interesting and possibly frightening insight into the future.

It is now possible, via blood sample, to track upturns and downturns in specific genes of an animal. So what? Well, this means that it is possible to monitor what a change in nutrition for example is doing to the animals genes – and thus make sense of what we are seeing on farm – be it more milk, better health, better fertility, less stress etc.

This is quite groundbreaking stuff when you consider that you can see changes you might not otherwise see, i.e. Say you want to try feeding some selenium to try and improve immunity and reduce general stress on the cow. It's going to be one of those situations where you won't really know if it's going to work or not. Why? Because how do you currently measure if a cow is less stressed? Very difficult.

Cell count may be a good, but not exclusive indicator. With this technique it is possible to look at specific gene reactions, so you can actually see whether the genes that govern stress have been “turned on or off” as it were. The importance of this is that you can tell if a difference has been made, even though there may be no outward signs from the animal to distinguish between success and failure.

The same principle applies to fertility. It is possible to measure “turning on” of genes that regulate ovulation for example. Currently, the first we would know of whether this has (or hasn't) happened will be likely to be after the event. i.e. “She hasn't been bulling for three months, but we don't know why.”



This whole principle is quite exciting because it will allow us to make sense of things we think are happening but as nutritionists can't prove because we can't easily measure them. It is easy enough to measure lifts in yield and milk solids for example, but not so much the things people are increasingly trying to achieve, like better health and fertility.

This will enable the mystery to be taken out of the “hidden nutrition” benefits of things we think have a positive impact. Take Megalac for example. There is

some trial data now to suggest fertility improvements (see Richard Kirkland's article) and logic says that extra energy should help with fertility, but how can you actually tell? Only initially by a gut feeling that cows are bulling stronger, holding condition better etc. With this technique, you could prove that via an upturn in specific fertility regulating

genes, there will be a positive impact, whether visible to us or otherwise.

The science is still in its infancy but progressing fast – to the point that, “within five years, this could be the new way to blood profile cows” as the technology becomes cheaper with mass production of the “blueprint chip” required. This new ability will place a whole new meaning on the term “achieving genetic potential” going forward and I for one will look forward to embracing it.

Charlie King – 07917 203790

Autoworm First Grazer

One of the most popular wormers for heifers is Autoworm First Grazer. This is a bolus that releases a pulse of wormer every three weeks after administration.

There are seven pulses so the bolus provides 27 weeks cover against worms after turnout. We are able to sell these at £9.20/bolus. There is discount for large quantities. Please contact Jayne on 01392872934 or email jayne@stdavids-vets.co.uk – for more information.

**SPECIAL
OFFER
NOW ON!!**