

# St David's Farm Newsletter

April 2010

St David's Farm Practice Ltd,  
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## Fertility and calving spread.

How was fertility last year as evidenced by the tightness of calving pattern this spring? Cows calving early are much more productive on dairy and beef units and also more likely to get back in calf. Therefore when we think about fertility we need to consider this rather than just empty rates.

The graph below compares the calving spread resulting from 60% conception rates (blue) versus 40% conception rates (red). You can see that the higher conception rates result in many more cows calving early in a calving period which ends with fewer late less profitable calvings. Also the barren rates for these 12 week mating periods would be 2 barren cows for the blue group versus 13 for the red.

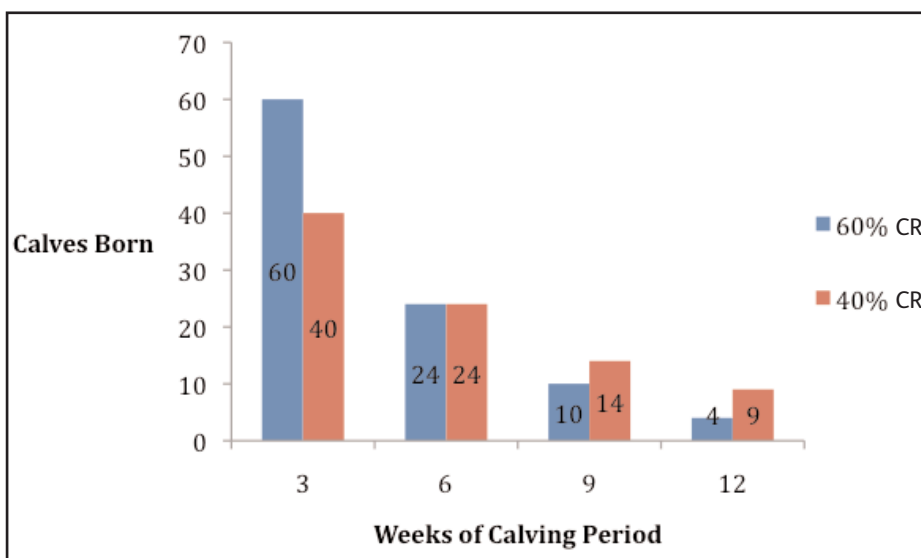
How do we get conception rates up to the 60%? Getting things right with cow nutrition and cow comfort will have a major effect as will controlling any infectious disease present in the herd. A good veterinary health plan is an excellent way of identifying and improving any of these issues. For this we charge £85/hour for the farm time to identify issues and take necessary samples plus £50/hour office time to prepare the health plan – £250 spent on this is a good investment. The other major factor not to be left to chance is bull fertility.

Research shows 20% of bulls are subfertile and these bulls often go unnoticed since the fact that they get some cows in calf tends to 'prove' their fertility and so apportion blame to the



cows for high barren rates! They tend to only get detected if used in fixed single sire mating groups or if they go totally infertile. However as you can see from the graph below their effect is costly (a 30% conception rate would give an even flatter graph). Bull Fertility testing identifies these subfertile bulls and allows only the best bulls to be used so maximising fertility and tightening calving patterns. Our charge for this is £95 for one bull, £150 for two and £55 for each additional bull.

Often there seems a 'make do' attitude toward bulls and breeding, only reacting when barren cow rates rise. Why not be proactive and take more control of the fertility on your farm by involving us in fertility health planning, including bull examinations and fertility disease prevention. This approach is much more likely to give high conception rates leading to early calves and low barren rates.



# Clostridal disease this grazing season

Last grazing season the practice again diagnosed significant losses to the Clostridial diseases – these are Blackleg, Tetanus and several more in sheep and lambs. Farms which lose animals to Clostridial disease often have done so before as the bacterial spores survive in the soil on these premises.

Therefore it is frustrating that vaccine has not been used effectively given the knowledge of the risk. Even on farms where Clostridial disease has not been confirmed in the past Clostridial bacteria are ubiquitous in the soil and so vaccination is to be strongly advised if sporadic losses are to be avoided.

As well as the seasonal peak in Blackleg cases we have recently had an outbreak of Tetanus on one farm in the practice. Although a rare disease in cattle it does occur.

**Tetanus Outbreak** – 37 store heifers and bullocks were bought at market to fatten on silage and barley. When they arrived back on the farm they were wormed with an injectable wormer

subcutaneously behind the shoulder – several animals developed reactions in the form of swellings/abscesses. 1 week after this two animals were found suddenly dead. The next day another animal developed bloat and stiffness, walking with a shuffling gait. These signs worsened through a rigid muscle stage with extended neck, tail and legs, before progressing to generalised tetanic spasms – the classic symptoms of Tetanus. These symptoms are shown in the picture, this animal was unable to stand and so was euthanased. A further two days later 3 more animals developed bloat and stiffness – two of these responded to treatment but one worsened as the previous case had done and so required euthanasia. In total 6 animals were affected with 4 deaths.

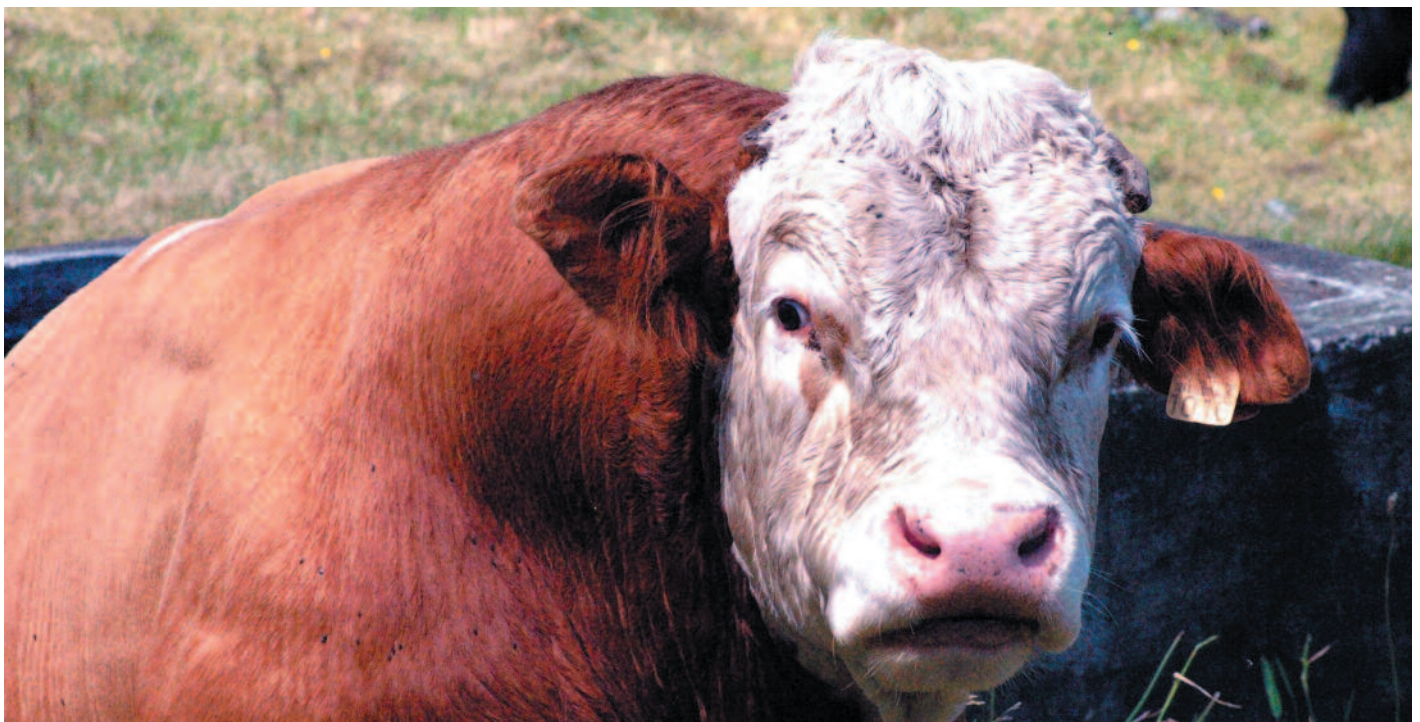
The most likely source of the tetanus toxin in this outbreak is contamination from a dirty needle used for the wormer injection. The tetanus bacteria only needs a puncture wound entry and would readily contaminate a needle accidentally dropped on the ground. Therefore two lessons we can take from this case;

1. Use clean, sharp needles for injections. Vaccination guns should

be fitted with a sterimatic needle disinfection device – ask for one of these when you order vaccine. For wormers etc use surgical spirit to disinfect the needle between animals and change it often. For antibiotic injections a new, clean, sterile needle should be used every time. Needles are not expensive.

2. Vaccinate all young stock with Clostridial vaccine. Covexin 10 protects against all the major Clostridial diseases and is not expensive – it costs 32p/dose. If you currently use blackleg vaccine it would be advisable to upgrade to Covexin 10 to give your stock much broader protection against the range of Clostridial diseases for little extra expense (10p/dose). Start vaccination at 4 – 6 months with a 2 dose course 4-6weeks apart. Follow this with a final booster one year later; this should be enough protection as adult stocks are rarely affected.

Not protecting your stock against Clostridial disease is foolhardy, yet too many farms are still taking the chance. Vaccinate your stock so we diagnose less Clostridial disease deaths this grazing season.



## Parasites control – FEC's

Every year internal parasites such as Fluke, Lungworm, Gut worms and Coccidia cause a huge economic loss to the cattle sector through reduced performance and the cost of treatment. It is likely that this year will be worse than most, with long periods of warm, wet weather.

The true costs of reduced performance are often hidden. The animal that is obviously scouring or appears poor and unthrifty is only the tip of the iceberg. The rest of the group will almost certainly be showing poorer weight gain and a worse feed conversion ratio due to the burden of parasites. This may seem fairly obvious and is the reason that most farmers will treat the whole group of animals routinely when one or more animals are seen to be affected. However, by the time that an animal is showing signs of disease money has already been lost. For this reason some farmers moved to dosing their cattle routinely and frequently with one or more of the common wormers. This

strategy may well reduce the number of worms and improve the performance of the cattle but frequently farmers treat animals far more often than is actually necessary. This has several disadvantages; most obviously it is a waste of wormer, time and effort. Furthermore, cattle which are treated too frequently in their first grazing season do not develop any natural immunity to gut worms. Immunity develops following exposure to small numbers of parasites, too few to cause disease but enough to stimulate the immune system. Without any immunity cattle are still susceptible to disease in their second grazing season when the cost of disease and treatment is even greater. Inappropriate or badly timed use of wormers to control gut worms can inadvertently cause other treatments to fail, such as Lungworm vaccination. Finally, overusing the drugs we have available increases the risk of resistant strains of parasites emerging, as has already happened, with disastrous effects in sheep.

So what is the answer? We need to treat cattle at the optimum time to achieve the greatest efficiency. Faecal Egg Counts (FEC's) are the cheapest

and easiest way to find out the extent of infection. A pooled sample FEC gives the vet and farmer a snapshot of what is going on inside a group of cattle at a particular time. In order to be of any real value other factors need to be taken into account in the interpretation such as the age of the cattle, the lifecycle of the particular parasite, the weather conditions and the grazing history of the group. FEC's allow cattle to be treated more effectively and economically by determining when a treatment is needed and how successful it has been afterwards.

We carry out the test at the practice which means the turn-around time for results is kept to a minimum (usually that day or the following day) and the cost is also as low as possible.

The service has huge scope across all sectors from beef and sheep to dairy and pigs. The greatest benefit will be seen where FEC's are used routinely as part of a farm's herd health plan to prevent problems before they occur.

### How and When?

How??? Pooled samples – To be accurate 10 individual, fresh samples need to be taken from a group of stock and sent to us for analysis. The easiest way to do this is in separate plastic gloves. Do not mix up samples yourself if possible as this may distort the final result.

When? This really depends what type of system you run, for example organic systems will need to sample far more frequently than conventional and spring calving herds will need to sample at different points to autumn calving herds. Early lambing flocks similarly will need to sample at different points compared to spring lambing ones. Call me to discuss when to take samples which will fit with your system.

For further information on this or any other subject speak to one of us at the practice or when we are on farm.



Peers Davies MRCVS

# Raw material update

## March 24-03-10

**Soya** – Whilst prices have remained relatively stagnant for next winter, the price of Soya for the summer has increased and looks as though it might begin to approach spot values, certainly material for May has gathered momentum and is now in the region of £260/t at the ports. Short-term positions are now suffering a technical situation that is being compounded by strike action in Argentina. This looks likely to extend into much of April, bringing values toward the same peaks we have experienced periodically from the start of this winter. Nevertheless the trade expectation is for slight reductions again going forward once the current situation is resolved.

**Rapemeal** – Thankfully the normal supply of Rapemeal has been resumed and prices are now reducing back toward what are considered reasonable levels after the intense problems of January and February. This is also reflected in values of material extending into the summer and also the autumn, with August looking a particularly good buy. The remaining months of the summer have experienced slight gains, although the expectation is that these will ease back in line with expectations for Soya values.

**Beans** – The value of beans has declined over the winter in tandem with falling cereal values, but they still carry a reasonable premium over wheat as one would expect. Rolled beans are a highly favoured raw material in TCF rations because of the dual supply of protein and starch they contain. However, with cheaper distillers available going forward, it is debatable whether beans will be worth the premium they carry and so it is likely their inclusions will be reduced in many rations because of this.

**Soya hulls** – The cost of Soya hulls has been adversely affected by currency values and continuing supply problems which mirror the scenario for Soya.

As such prices at the ports have risen to beyond £100/t and consequently made Soya hulls uncompetitive against other digestible fibre products such as Sugarbeet. Both spot and forward values look unattractive at their present levels and so many rations throughout the summer may well have their inclusions reduced or removed altogether.

**Distillers** – Continuing supply problems have led to and maintained upward pressure on the value of distillers regardless of their origin. This seems to be extending into the summer months and has firmed values slightly. Nevertheless, forward values are still cheaper than recent spot values and so rations relying on distillers throughout the summer will be able to take advantage of lower cost distillers. The situation further forward for the next winter period is looking even more favourable with imported Distillers having to compete with domestic supplies.

**Wheat and barley** – Both wheat and barley have firmed very slightly over the last few weeks, although there are few sellers and buyers seem hesitant with the expectation that prices will weaken further as we get closer to harvest. Again this is going to be reflected in the falling cost of energy dense livestock rations with significant cereal inclusions, and this is expected to extend into the larger part of next winter.

Ollie Mayo – 01884 256256  
and 07825 331751

### Raw material prices

|                     | Latest spot prices | Summer May10 – Sept10 |
|---------------------|--------------------|-----------------------|
| Hipro Soya          | £280               | £232                  |
| Imported Sugar Beet | £POA               | £POA                  |
| Supaflo Sugar Beet  | £128               | £POA                  |
| Soya Hull Pellets   | £105               | £89                   |
| Maize Gluten        | £135               | £125                  |
| Rapemeal            | £POA               | £POA                  |
| Wheat               | £104               | £POA                  |
| Barley              | £89                | £POA                  |
| Wheatfeed Pellets   | £101               | £90                   |
| Wheat Distillers    | £POA               | £137                  |
| Whole Maize         | £152               | £157                  |
| Feed Beans          | £140               | £POA                  |
| Prairie Meal        | £POA               | £POA                  |
| Citrus Pulp         | £105               | £108                  |
| Sunflower 29%       | £149               | £120                  |
| Palm Kernal         | £84                | £86                   |