



In Excellent Health

Summer 2007



XLVets

Excellence in Practice

XLVets is a novel and exciting initiative, conceived from within the veterinary profession aimed at supporting UK agriculture as it faces challenges in the 21st century.

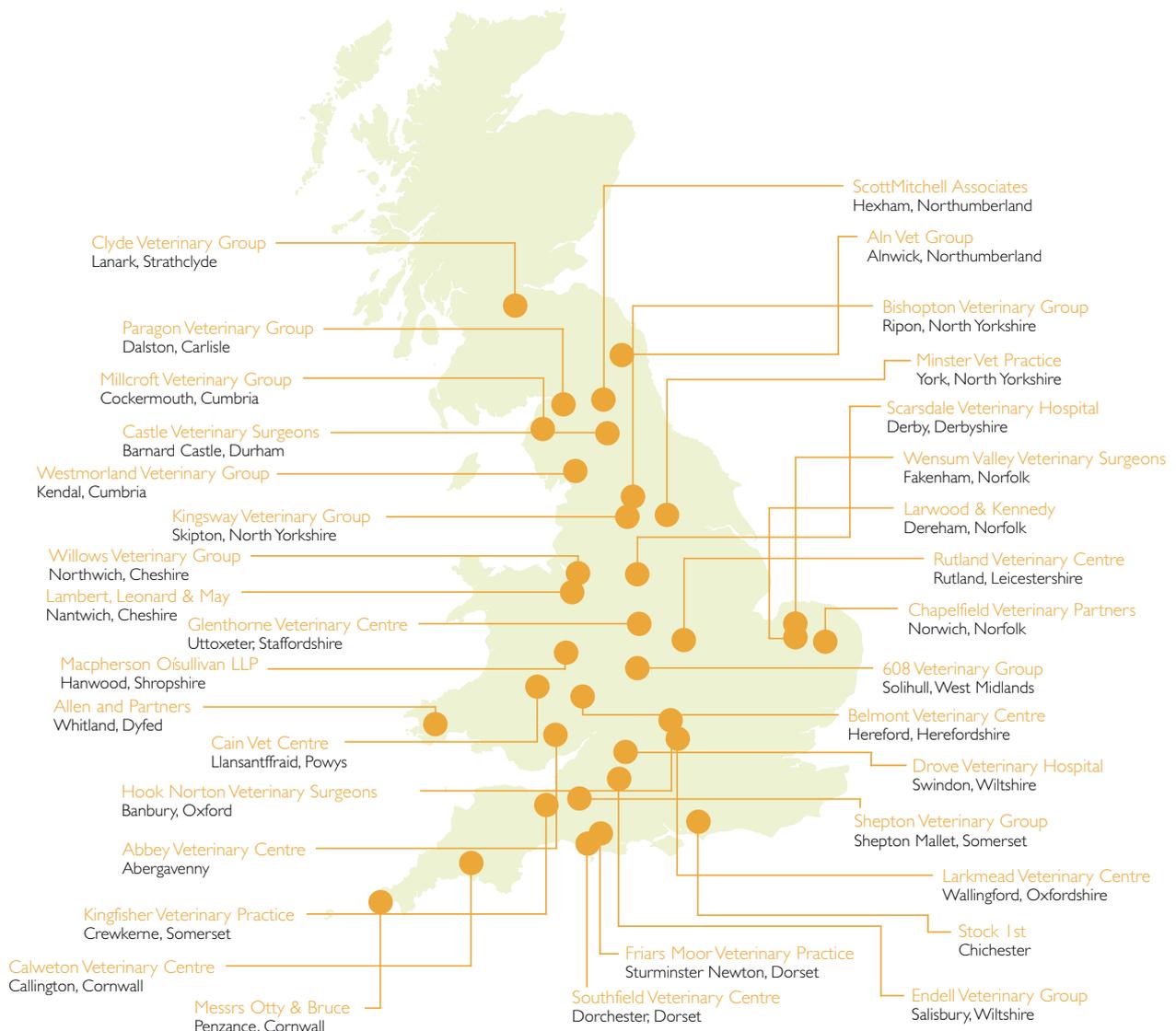
We are a group of farm animal veterinary practices committed to work together to share knowledge, experience and skills.

We strive to be at the heart of our clients' farming enterprises, providing an excellent service as the first point of call for

independent and high quality advice on health management and disease prevention.

We work with all those who are interested in the development and creation of markets for the economic advantage of our farming clients' long term future and prosperity.

Invest in health. Don't pay for disease.



The future of Agriculture needs a Healthy Industry which needs Healthy Animals. XLVets is committed to the future of British Agriculture.



**Farm
Health
Planning**

**Healthy Animals
Healthy Profits**

Look again at Farm Health Planning

Farm Health Plans have been around for a while. But some have turned from action plans into tick-box exercises to meet the requirements of a farm assurance scheme. No surprise then that they are viewed by some farmers as yet more red tape, hassle and bureaucracy. Somewhere along the way, their true value has been lost.

But the fact is, a good farm health plan will improve the health status of the livestock on your farm and this will boost their performance. This will cut the vet bill, save you time, reduce livestock losses and improve profitability.

The first step is to enlist the help and advice of your vet. This is because health plans need to be specific to the farm concerned – it is not a blanket prescription for all. By working as a team with your vet and taking a proactive approach, you really can improve the success of your business.

Farm Health Planning is very topical at the moment. This is because Defra are spending around £1.6M on 27 cattle health plan initiatives throughout England this year. In addition, other projects are running in Scotland and Wales. XLVets practices are involved with these and information on some of these projects is provided in this newsletter.

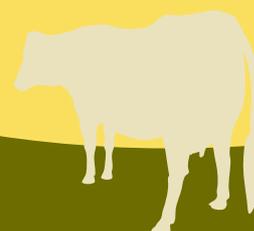
In addition, XLVets has been awarded funding to lead to farm health plan (fhp) initiative projects involving 16 farms (8 dairy and 8 beef). These 'Champion' or 'Advocate' farms have now all been selected and information on two of them are provided on the following pages.

Read on and take part

This newsletter summarises just some of the fhp initiatives that have started – already financial and performance benefits have been demonstrated on some farms.

To find out more on how XLVets is working to improve herd health, or where farm walks and talks will be held, talk to your vet.

All information, including a map of all the projects and the dates of farm walks and meetings can be found on the Defra website.



Three areas of farm health planning

- 1) *Measuring*: identifying the impact of disease on the performance of your stock
- 2) *Managing*: prioritising control measures for these issues
- 3) *Monitoring*: Reviewing the plan regularly.

Measure

With any health management plan, the starting point is always to assess the current health status of animals on the farm.

This may involve sampling to provide evidence of disease or deficiency. For instance, blood sampling helps identify disease such as leptospirosis, IBR (infectious bovine rhinotracheitis), Johne's disease and neospora and allows investigation of abortion outbreaks. Blood is also useful for some mineral and vitamin monitoring. Faeces sampling can be used for worm, fluke and coccidial egg counts and for lungworm larvae. Milk sampling is useful for cell counts, bacterial isolation and antibiotic sensitivity testing. Milk can also be used to monitor herd levels of BVD (bovine virus diarrhoea), leptospirosis and Johne's disease.

Managing

Then it's a case of prioritising – what are the problem areas? Where can performance be improved? What are the timescales, potential return on investment and payback?

Monitoring

The plans need to be reviewed and updated at regular intervals – and altered to adapt to changing circumstances.

XLVets Beef Project

Case Study Richard Maundrell and Steve Borsberry, Warwickshire

One of the Champion farms in the DEFRA-funded Farm Health Planning Project is Gattax Farm, near Redditch in Warwickshire.

Here, beef farmer Richard Maundrell runs 100 spring-calving single suckler cows, mainly Blonde d'Aquitaine and Simmental crosses. All progeny are finished between 20 -26 months of age and sold deadweight.

XLVets' Steve Borsberry from the 608 Vet Group in Solihull has been working together with Richard for a number of years, actively helping to improve herd health and welfare. He is keen to stress: *"It's all about health planning not health plans. We need to be vigilant and monitor the situation – and we also need to be able to react to the circumstances that present themselves."*

Ongoing disease prevention

Richard built the herd up to its current number around nine years ago. So these days, apart from new bulls, it is a closed herd. However some of Richard's land borders other livestock farms.

"When it comes to biosecurity, herds are only as clean as the closest neighbouring herd," says Steve. *"So as an insurance policy, all cattle are vaccinated against BVD and leptospirosis. We did see an improvement in fertility after this was first introduced. But whether to also vaccinate against IBR is still under consideration."*

A strategic worming programme is also in place for the youngstock, so calves do not need vaccinating against lungworm.

However, Richard keeps a careful look-out for any calves that start coughing late in the season.

Nor are calves vaccinated against pneumonia, Richard has buildings with good ventilation and, again, a watchful eye means it is rarely a problem.

Whilst herd health is well under control in a number of areas, there's still scope to improve things further. By paying attention to detail, further improvements in health and management could be made which would ultimately result in improved profitability.

Calving period

One key area to focus on now is the calving pattern. Over time, the calving period has extended to the point that some calves are born in the autumn. As a benchmark - just looking at the last two years of farm production figures – 80 calves had been born by April last year, but this year it has fallen to 75.

The resultant wide age range means that not all calves can be weaned at the same time. Eighteen months later this complicates calf selection for slaughter: In the short term, it means dams still suckling calves once indoors will require extra feed.

More seriously, and aside from the management hassles, the extended calving period has resulted in pregnancies occurring in very young heifers. This is not only potentially detrimental to their health and welfare, but requires additional veterinary intervention and treatment.

Steve explains: *"Richard's herd is not alone in having a problem with the stock bull getting both the cows and their young heifer calves in-calf. It stems from an earlier onset of puberty in heifers, thanks to breeding and hybrid vigour and the fact that the extended calving period means 5-month old calves are coming into season whilst in the same field as a bull."*

Three years ago this resulted in one calving death as the pregnancy was unknown and not monitored, plus Steve had to perform Caesareans on several other young heifers. So in the winter of 2005/6 all calves of 4-10 months of age were given an injection of prostaglandin to abort any possible embryos. Last winter, as an alternative, Steve PDed all the calves, found one pregnancy and aborted it.

So what exactly is the best solution, for both herd health and farm profitability? A tighter calving pattern, so that the stock bull can be removed from the herd before heifers reach puberty? What would this cost? How easy would it be to achieve?

Richard admits it's the older cows in the herd that have slipped to autumn calving – should they be culled? Or let slip for 6 months to bring them back into spring calving pattern? And what's the cost of doing this?

Bulls

Richard has three stock bulls – two Blondes and a Charolais - deliberately bought off-farm rather than through a sale.



"It's all about health planning not health plans."

Richard explains: "We were able to assess these bulls under genuine farm conditions, especially their temperament. This is important for the health and safety of both humans and the animals themselves."

Steve adds: "Richard also knows the farms that these animals have come from and knows there is a good track record of health. This is especially important in keeping Johnes' disease out of his herd, because you can't test whether an animal is infected or not. You may only find out three or four years later when the animal becomes ill and dies. But by then it will have been in contact with the whole herd spreading the disease."

As part of the ongoing commitment to biosecurity, both bulls were vaccinated for leptospirosis and BVD on arrival at Gattax Farm.

Nutrition

Richard's system is relatively extensive – calves are kept on the dams for the first summer, then in the winter, weaned and fed indoors and onto a store ration of grass and maize silage only. After a second summer of grazing, steers are finished on a maize silage-based ration, and heifers on a maize/grass silage-based ration.

The body condition of cows is assessed at weaning in October/November. They are

split into two groups, and silage is fed accordingly to bring them into the right fitness by Christmas. "I don't want to be having to feed them up in late pregnancy as it only results in difficult calvings and large calves - which can be a bit dopey," says Richard.

Richard takes a first cut of silage from 100 acres of his grassland and, along with 32 acres of maize, this is sufficient forage to feed his cattle through the winter. Providing the forthcoming maize harvest is successful, the bad summer weather should not have affected his feed plans. However, some livestock farmers may not be so fortunate this year.



Farm open day

The first farm open day at Gattax Farm will be held in September. It will be an opportunity for visiting farmers to compare their own herd's performance, and learn more about what to measure and what to monitor:

Topics for discussion include:

Benchmarking performance – measurements, monitoring, meaning, financial impact

Winter feeding – forage availability and quality. Options to supplement shortfalls.

Tightening the calving block – how? And how much is it worth to do?

Disease – prevention or control? Diagnosis and monitoring.

Bull – selection, health, biosecurity

Health and safety – animal temperament, handling facilities

XLVets Dairy Project



"Andy and Tim are working together looking at herd health as a whole and focusing on some key areas which affect performance and profitability"

Case Study Andrew Dale and Tim O'Sullivan, Shropshire

One of the eight dairy farms in the XLVets FHP project is Newnham Farm near Shrewsbury in Shropshire. Here, XLVets' Tim O'Sullivan will be working with Andy Dale to improve his herd's fertility and nutrition and reduce the number of mastitis cases. Already the potential to boost milk price and raise yields is clear to see.

Health planning in the past has focused on controlling some of the more common infectious cattle diseases - the herd is vaccinated against leptospirosis and BVD, and eighteen months ago, following some suspicious cases, vaccinations against IBR were also started.

Now Andy and Tim are working together looking at herd health as a whole and focusing on some key areas which affect performance and profitability.

The pedigree Newdale herd numbers 280 milking cows, and has averaged 8,500 litres/year for the past two years. Andy explains: "Technically we have been making a

steady climb to reach this yield but now seem to have reached a plateau. Yet I believe the cows have the capability to produce another 500 litres and that is our aim. However, we also want to get to 9000 litres in a system in which everything comes more easily."

Andy refers to the erratic cell counts which affect his milk price, and also the fact that he has had 'more than a fair share' of milk fevers and displaced abomasums (DAs), particularly in heifers.

Tim explains: "On average every DA costs £250 – that includes cost of surgery, lost milk and the delay in conception. But with attention to nutrition and management, the number of cases can be reduced. Andy has certainly had fewer cases since putting a new shed up in which heifers could reach the feed more easily."

Andy and Tim both have access to performance data on the Newdale herd and those of other NMR milk-recorded herds, through the software package NMR Herd Companion. Looking at the statistics,

the Newdale herd has a fertility which is above average but Andy still wants to improve it further.

The calving indices in the NMR recorded herds, of comparable size, range from 370 to 480 days. The Newdale herd has a calving interval of 418 days, with 44% of cows calving within 385 days.

Tim adds: "Using the BCVA's Disease Cost Calculator, every extra day in the calving interval is costing £2/cow. So if Andy can improve fertility and reduce calving index from 418 to 400, then that's a potential saving of £30,000."

According to the NMR statistics, Andy is well on track with his heifer calving dates – the average age at calving is on target at around two years of age. However, they struggle to achieve their potential once they have entered the main herd. So Tim has sent information on Andy's rations along with silage analyses to an independent nutritionist, to assess whether in fact there are any nutrient shortfalls in the diet.

Tim adds: "It might be that they need better nutrition earlier on in their lives so that they are bigger and stronger at calving. But another area we are going to look at is the worming strategy as they seem a bit vulnerable to lungworm and gastro-intestinal worms both of which depress appetites."

"We have also had plenty of 'mastitis incidents,'" says Andy. "We are currently averaging 250,000. But with our milk contract, if cell counts are over 200,000 then we lose 0.3p/litre, and if they are over 250,000, then we lose another 0.3p/litre."

For the size of herd and its yield, Tim has calculated there is potentially £15,000 per year to be gained from bringing counts down to less than 200,000.

"Aside from a higher milk price, by reducing mastitis cases there'd also be savings in drug costs and less lost milk – in fact, there's probably scope to save a further £9,000."

Problem bacteria in the past have been *Streptococcus uberis* and *Staphylococcus aureus*. Andy thinks he may need to look at culling some of the cows. Another area is to re-assess the success of the dry cow tubes in bringing cell counts down – a teat sealant is currently used in conjunction with a long acting dry cow tube but Tim thinks that the choice of tube may need to be changed.

Longer term, Tim believes changes are also needed to the milking routine.

Cows are milked in a rotary parlour operated by one person. Due to time pressure, pre-milking preparation is poor and Andy accepts that post-milking teat spraying could be improved. Solutions under consideration are automatic cluster disinfection, which would require some capital investment. Or should there be two people milking instead? But the herd size does not justify this. An independent milking parlour specialist will be visiting the farm in August, funded by the project, to help Andy find the best solution for his situation.

The plan during the length of the project is that Tim will make monthly visits. To tackle the cell count problem he will be taking a bulk milk sample to check for bacteria and then compare the milk samples from individual cows which are taken at the monthly NMR milk recordings.

For these monthly visits, Andy will also select out problem cows for Tim to see. For instance, any with post-calving metritis and those that are failing to conceive.

For the Newdale herd, thanks to a proactive approach to farm health planning by Tim and Andy and the help of specialist advisers, financial gains should be made through reducing mastitis and improving herd nutrition and fertility.

A farm walk to which local farmers and advisers will be invited, is planned for September.



Farm Health Planning in Cornwall

Duncan Bruce and Matthew Berriman from Otty and Bruce in Penzance are participating in the NADIS coordinated cattle initiative project.

They are undertaking active farm health planning on 5 dairy herds and 5 beef herds, whereby they visit the farm, in discussion with the farmer identify areas for development and then design an action plan to be carried out over the course of the year.

"There are a number of beef farmers who have traditionally had very little contact with vets, and have certainly been far from convinced of the benefits of health plans," reports Duncan Bruce. "In many cases these farmers just simply hadn't considered farm health planning. We have been delighted to find how many of the farmers involved have described it as really useful experience that they would recommend to other farmers."

Duncan and Matthew will be monitoring the progress on the farms to demonstrate areas of improvement and return. During the year there will be two beef and two dairy farmer meetings.

The first meeting for beef farmers has been held on the topic of worm and fluke control – which given the rainfall that has been experienced this year was extremely topical!



Yorkshire Project

Four veterinary practices in Yorkshire have joined forces to help local farmers compare the performance of their dairy and beef enterprises and evaluate how active farm health planning can improve herd health.

The Yorkshire dairy and beef farm health planning group (Yorkshire FHP group) has initiated a 'no nonsense farm health' project. Eight focus farms have been selected, 4 dairy herd and 4 suckler herds throughout the county – in Northallerton, Goole, Skipton Ripon and Richmond.

XLVets' Phil Alcock of Bishopton Veterinary Group in Ripon is the project leader; he explains: "Farm Health Planning should provide a practical framework on which to monitor the incidence and impact of disease on the farm, as well as evaluate production and parameters and see how to improve them."

"On some farms, performance is already very good in some areas, so we don't need to change

anything there – just keep monitoring. But other areas may need some focus to bring them in line. Different farms have different strengths and weaknesses."

The project is well underway. Launch meetings have been held to explain to the local farming community what the project is about and how it can help them improve the health and profitability of Yorkshire herds.

"At one of our launch meetings we found that only 5% of beef farmers had ever had their bulls' fertility examined, and only 10% knew the disease status of their herd for IBR, BVD, leptospirosis and Johnes' disease – all of which have a significant impact on animal performance," says Phil. "In fact, many farmers viewed herd health plans as just a lot of red tape to satisfy farm assurance schemes. We hope to show through this project that there's far more to gain, with better animal health leading to better performance."

"At each of the eight Focus Farms, we have already gathered data to benchmark the health status and performance of the herds. Good farm data is very important but if record-keeping isn't a farm's strength, there is lots of practical on-farm information to work with. For example, on-farm cow assessments have recorded body condition scores, locomotion scores and metabolic profiles."

Already, differences between herds are clearly apparent.

For instance, across the four dairy herds, all of which have fairly good control of cell counts, mastitis cases range from 25% (25 cases per 100 cows per year) to 140% in herd B (see figure 1). Yet this herd also has the lowest cell count.

"This information gives us a valuable insight into the likely cause of this mastitis problem and lets us target investigation more effectively" says Phil.

Figure 1:

	Target	Herd A	Herd B	Herd C	Herd D
Mastitis case rate	50%	55%	140%	63%	25%
Somatic Cell Count (SCC)	200	212	161	176	179

"Accurate recording of farm data is a critical first step to ensure future health and profitability"

Beef Herds

On the beef units, amongst the fertility parameters being monitored are calving pattern and calf losses. In the Beef Herd B, there is excellent fertility – 55% of cows are back in-calf within 42 days. Yet over 32% of calves are lost before weaning. "So farm health planning on this farm will be focussing not on aspects of fertility, but on calf mortality," adds Phil.

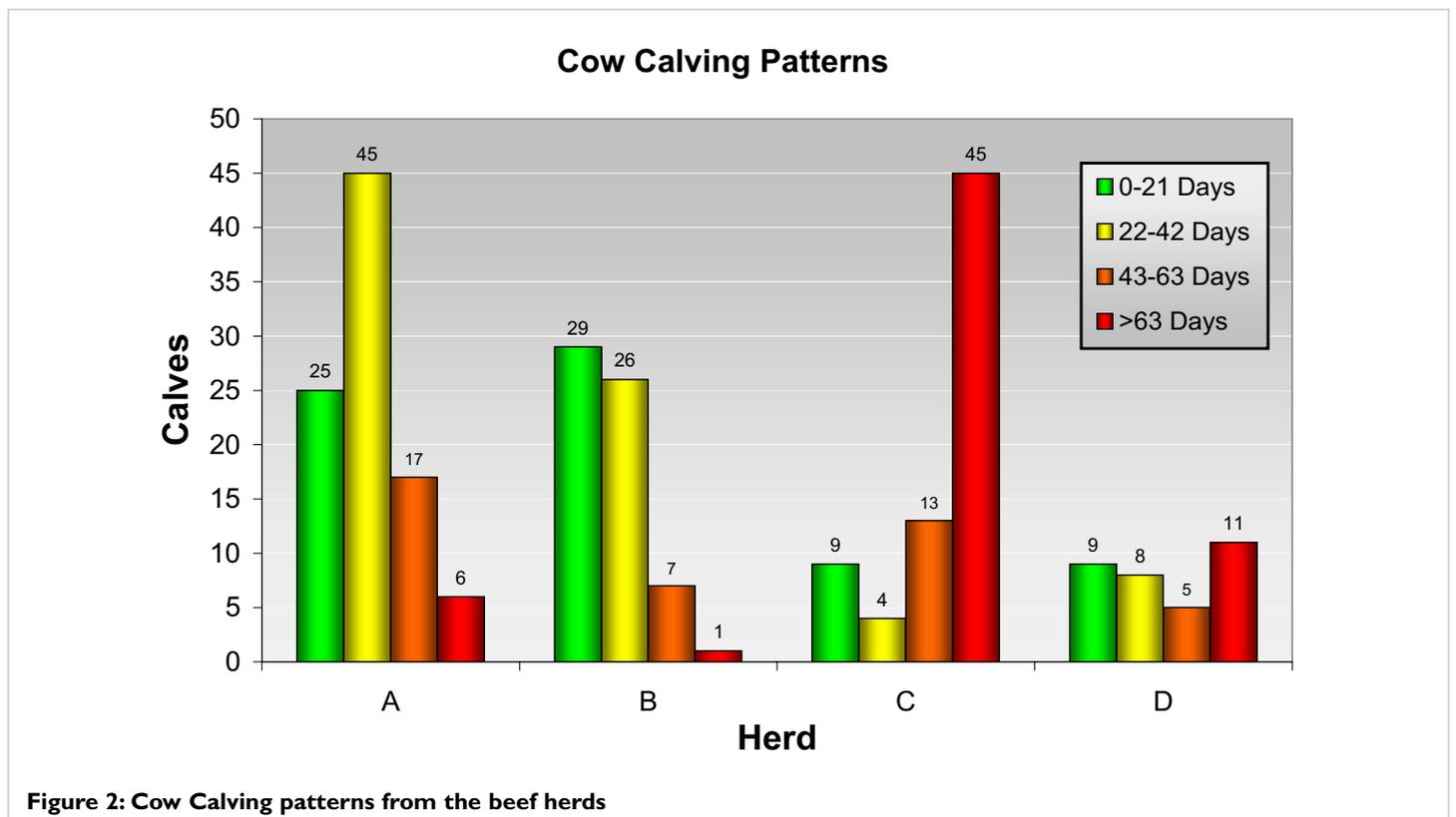


Figure 2: Cow Calving patterns from the beef herds

Calf losses per 100 cows mated

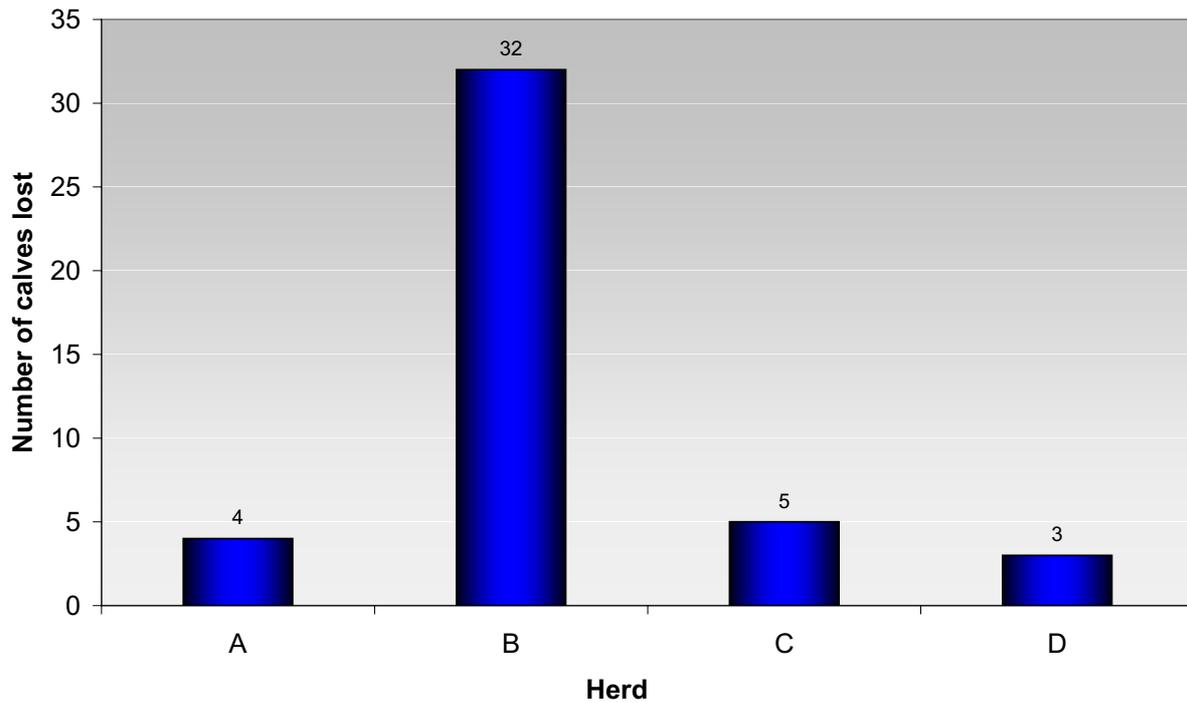


Figure 3: Calf losses in the four beef herds

Workshops

On-farm workshops are also planned. These will start in August and guest speakers will be invited to share their knowledge and expertise. At the Dairy Focus Farms, a series of workshops will cover mastitis, lameness, fertility and nutrition. Speakers include Roger Blowey (on lameness) and Ian Ohnstad and Chris Savery from the Dairy Group Consultancy.

And for the beef units, workshops topics include fertility, nutrition, infectious diseases, and practical modifications to buildings. Richard Vecqueray from the Evidence Based Veterinary Consultancy will be discussing nutrition and EBLEX will be giving hands-on advice on selecting cattle for slaughter:

Phil adds: "Then in the spring, we will hold another round of evening meetings to discuss the herd health improvements that have been made on the farms, explain how they were achieved, and put some economic value to these improvements."

"What makes this project unique and of especial value to the farmers attending the meetings and workshops, is that the benchmarking data we are gathering is from Yorkshire farms, under Yorkshire weather and environmental conditions, rather than being a UK national average. So farmers can see how their own cattle unit compares to other farms in their own region."

"Herd health plans should be used as an everyday, practical management tool. They should certainly not make additional work or add expense. Much of the information required to get started is already present on farm just waiting to be used. Anyone who attends these events will soon see how simple it is to work proactively with their vet and benefit from improved animal performance."

For information on the beef and dairy workshops, contact Phil Alcock, Bishopton Veterinary Group, Ripon on tel: 01765 602396.



The four practices participating in the project are: the Bishopton Vet Group at Ripon, Swale Vet Group at Richmond, Kingsway Vet Group at Skipton and the Vermuyden Vet Practice at Goole. However, all veterinary practices in Yorkshire will be involved in delivering the project across the county.

North of England Veterinary Association Beef Project

More calves and more kilogrammes

Increasing the numbers of calves and improving growth rates on beef suckler farms are the key targets in the FHP initiative underway by the North of England Veterinary Association (NEVA).

In one of the biggest Defra-funded FHP projects, seven veterinary practices have formed a co-operative and each recruited 12 beef farmers making a total of around 80 beef farms throughout the north east of England.

XLVet's John Macfarlane, from Alnorthumbria Vet Group in Alnwick explains: *"Herd health plans have been around for a long time, but their value has not always been appreciated by farmers. However, good health plans, those which are simple and target driven, should ultimately result in tangible economic benefits for the farm."*

"For beef suckler herds, the key factors affecting profit are calves and kilogrammes – that is, the number of calves born per year and their weight at weaning."

"If cows aren't getting back into calf quick enough, or at all, then that is affecting the number of calves born and affects profitability directly. So on all the farms we have assessed the current situation and then set targets for conception and calving rates. The second focus is on the growth of those calves – by improving liveweight gains and consequently final weights, extra returns can be made."

All cull cows are tested for Johnes' disease and any abortions are being investigated to assess whether the cause is linked to BVD, leptospirosis, IBR or Neospora.

In the autumn, a series of further tests will be carried out. These include pregnancy testing and also taking of blood samples to assess disease status for fluke, BVD and leptospirosis. Trace element levels in cows and youngstock will be measured too.

"We are also grateful to some of the pharmaceutical companies for making some of the diagnostic tests for these diseases, available free of charge," says John.

Bull fertility is also key to productivity in suckler herds - bulls in Autumn calving herds will be checked this Autumn and in early Spring for Spring calving herds. John believes that, on some farms, disease is affecting the performance of bulls, whilst on others he suspects inadequate nutrition particularly in relation to the supply of trace minerals, may be a problem.

John is keen to stress the importance of keeping records on-farm: *"It enables us to compare the year on year impact of any changes made to management and herd health and assess the financial benefits."*

Now that the vet practices involved in the NEVA initiative have set up farm health plans on the individual farms, the process of monitoring and collecting health and performance data is underway. Next spring, having fed the data into a benchmarking scheme, the progress made on the farms and the impact on profitability will be reported.

For more information on this project please contact John Macfarlane on 01665 510999.



The Dairy Herd Performance Project

Stock 1st

Stock 1st Ltd is a dedicated farm animal veterinary practice and member of XLVets, based in the south of England. Its core activities place a strong emphasis on partnership working, preventive medicine and health planning in response to the demand for farm veterinary services suited to the needs of modern agriculture.

The Dairy Herd Performance Project being undertaken by Stock 1st as a part of the DEFRA-funded Cattle Initiative will develop and expand the principles and benefits of the Farm Profile.

The Farm profile, developed by Stock 1st Veterinary Services, is a simple but extremely thorough method of data collection. It involves an appraisal of all aspects of the dairy farm business that are likely to influence the health, production and welfare of stock on the farm. Although a meeting on farm with the management team forms a significant initial part of this appraisal, an analysis of farm records (gathered directly from the farm and via the internet), an inspection of the farm environment and the livestock, and a written report setting out the Key Performance Indicators and specific advice for that farm all make up the Farm Profile. Once written, this document becomes a tool to allow programmes of improvement to occur which themselves can be monitored and recorded in future reviews of the initial Farm Profile. All members of the practice's farm team (veterinary and non-veterinary) have a role to play, enabling them to formulate plans and prioritise actions to improve production and profitability on farm through the identification of negative influences on health, welfare and production.

The project will be delivering on-farm dairy herd health profiling supplemented by a series of farmer training days and seminars. These will demonstrate the benefits of health planning at farm level and create a heightened awareness of farm solutions through targeted communications and training.

For more information about the **'The Dairy Herd Performance Project'** please contact Dennis Bull or Jonathan Harwood at Stock 1st Ltd Tel: 01243 784345

The Stock 1st Veterinary Services Farm Profile:

- Provides a consistent baseline of information on the physical characteristics of the farm, including the management structure and staffing as well as production, performance and levels of disease.
- Identifies factors which influence productivity and profitability on individual farms.
- Provides the essential STARTING POINT for a programme for the improvement in health and management for each farm.
- Records what IS known and also establishes what IS NOT known, but nevertheless is still of importance.
- Incorporates an analysis of the short and long-term business goals (e.g. father to semi-retire and son take over management in 5 years or the need to increase herd size within the existing farm structure).
- Enables long and short term targets to be set and to identify those improvements that are likely to provide the maximum benefit.
- Demonstrates a whole-hearted interest in the farm by the profiler. This builds trust, provides a rapid overview of the business and instils immediate team-building skills to ensure a co-ordinated approach to farm problems with all parties aware of their roles.
- Allows the veterinary surgeon to demonstrate his or her potential value to the farm business - especially through identifying the cost of diseases and sub-optimal management practices that the farmer may not have fully appreciated.
- Identifies constraints on production and quantifies them wherever possible, for example a mastitis rate over-target costing £3000 pa, poor growth of young stock, or poor submission rates at service in the cows costing up to £3 per cow per day.
- Enables information to be compared and bench marked between farms, in particular between the top performers and those identified as under-performing through the use of universally-recognised Key Performance Indicators.
- Provides a written report which then becomes the basis for informed discussion and decision-making. Future achievements and improvements can be compared with the original advice to demonstrate real improvement.
- Minimises the risk that one disease problem can replace another since the unique overview that a Farm Profile provides ensures that all aspects of farm management are considered.
- Has produced savings of 0.5-2.0p per litre of milk on farms where a Farm Profile has already been carried out in delivering the highest standards of animal health and welfare and in developing a more sustainable livestock industry.

Wessex Project: Positive Partnerships

Another project funded by the DEFRA cattle health initiative is the Wessex Positive Health Partnership. Led by XLVets' Paddy Gordon, this is a group of nine veterinary practices across Somerset, Dorset, Wiltshire and Gloucestershire who are working together to provide health planning advice to 44 beacon dairy farms, over an 18 month period.

The project aims are to provide measurable improvements in herd health, providing benefits to both farmers and their cattle. Successful approaches will be promoted through on-farm events open to farmers and vets in a region where there are around 2000 dairy farms.

For more information contact Paddy Gordon on tel: 01749 341761 or email vet@sheptonvet.com.



The Wessex Project Team

Welsh Dairy Herd Health Project

XLVets' Paddy Gordon, from Shepton Veterinary Group, Shepton Mallet, is running a health planning project funded by the Welsh Assembly. The project has the aim of providing measurable improvements in herd health over a 12-month period, and will demonstrate to Welsh dairy farmers the benefits and opportunities that occur following health planning.

16 farmers have been recruited and initial visits were carried out between January and March 2007 in which the following problems were identified:

- 7 farms had problems with lameness
- 8 farms had problems with mastitis and/or high somatic cell counts
- many had health problems at calving (milk fever, metritis, etc)
- high calf disease levels on two farms
- lack of structured approach to fertility management
- infectious disease is frequently not controlled by vaccination programmes
- a lack of accurate data and disease records. This makes it much more difficult to understand the economic impact of disease and to identify likely risk factors.

Paddy explains: "General observations are that many participating farmers do not work fully with their vet in improving health and

performance. In fact, many farms only use their vet for crisis management, such as when there is an individual sick cow or herd problems become excessive."

"This project enables health planning to be discussed between farmer, local vet and, in many cases, a third party consultant e.g. nutritionist."

Cell count problems solved

One of the farms visited is a 200 cow dairy herd that had struggled with cell count for many months. Cell count variation between 300,000 and 500,000, resulted in milk price penalties of a shocking £2,000 per month. This was in spite of attempts at antibiotic treatment or culling of problem cows.

Investigation identified a high level of infection of the mastitis pathogen *Strep. uberis* in the herd. This had arisen from buying-in cows carrying the infection and then the problem had been exacerbated by a long delay in changing liners. Perished liners can harbour bacteria and will prolong milking times.

A management plan was put in place to isolate infected cows by milking them last or through a separate cluster, along with good attention to post-milking teat dipping. Infected cows were then targeted to receive either an

antibiotic treatment during the lactation or at drying off. Some cows were identified for culling. In addition an improved milking routine was proposed, with forestripping to identify at an early stage any new cases of mastitis.

"Month on month, the herd has seen a steady reduction in cell count and in the number of high cell count cows," reports Paddy. "Forestripping identified problem cows and attention to detail with teat dipping has reduced the number of new infections."

"Problem cows are identified after each milk recording and a decision tree used to determine action. With sensible decision-making the response to treatment has been excellent. After just two months, the herd received a milk cheque without deductions."

A follow-up visit in June was a chance to review advice and look to further areas for attention. Previously advice had been given on colostrum feeding to calves and attention to both quality and quantity had reduced calf disease. In addition changes to dry cow housing were suggested.

"Successes have bred confidence and mean that there is an enthusiasm to tackle further issues, along with a willingness to seek and adopt advice given. This is the basis of health planning," says Paddy.

