

POOR BULL FERTILITY

late calves and less kilogrammes

Around 20% of bulls in beef suckler herds are infertile or subfertile, believes XLVets' John Macfarlane of Alnthumbria Vet Group in Alnwick.

Bull fertility testing is one of the key activities being carried out in the Defra-funded Farm Health Planning beef project run by a co-operation of seven veterinary practices in the north east of England.

John explains: 'If a sub-fertile bull is turned out with a group of cows, without any prior fertility testing, it will take at least 21 days before cows are seen returning for service and there's any clue that there's a problem. In fact, it is usually only after two oestrous cycles that any veterinary investigation is called for. That's more than a month.'

'Even if a fertile replacement bull is then put into the field, it is already too late - the calving interval has been extended with the knock-on consequences that the calves born later will be lighter at the finish, and the following year extra efforts will be needed to get the calving pattern back on track.'

'Lighter calves means money lost.' John explains: 'Take for example, a 50-cow suckler herd where calves are sold as stores. If an

infertile bull is run with the cows, let's say it takes 30 days before the fact is recognised. And let's say that cows can then immediately be put in calf either by another bull or by AI.

The calves born will be 30 days younger and therefore lighter by about 30kg - which at the going rate of £1.25/kg is a loss of £1875.'

Preventing this problem is simple: bull fertility testing must be made part of the annual farm health planning activities.

Bull fertility testing

There are three key factors affecting a bull's ability to do its job in the herd: semen quality, libido, and locomotion.

Testing semen quality is nowadays less time-consuming thanks to the availability of humane electro-ejaculators.

Previously it involved bringing an in-season cow to the bull and then a lot of waiting around with an artificial vagina at the ready, but now the process of obtaining a semen sample only takes around 15 minutes. Then smears from the semen can be put onto slides and taken back to the veterinary practice lab where the numbers of live, dead and abnormal sperm can be assessed. Bulls with

low sperm counts can then be identified and alternative options discussed.

Bull libido requires a more subjective assessment. Basically, when the bull is amongst in-season cows, how interested is he? How many times will he jump a cow?

Locomotion is also important. A bull's fitness will impact on his ability to serve the herd. Rating locomotion is done by eye, watching how the animal walks - is there evidence of arthritis, does gait and conformation look normal? A bull with a back problem may have the libido but not the physical ability.

'In herds where all breeding is done by natural service, then bulls represent half the herd, and attention to their health is just as important as that of the cows,' says John.

'Make it an annual part of your herd health planning to have the vet check your bulls prior to the breeding season. It will be time and money well spent.' For more information on the NEVA beef project, contact John Macfarlane.



John Macfarlane
(01665) 510999

January 2008

In Excellent Health

Special Feature

INVESTMENT

Herd health planning makes an extra £177/cow

Lameness

Lameness scoring used to help reduce herd lameness

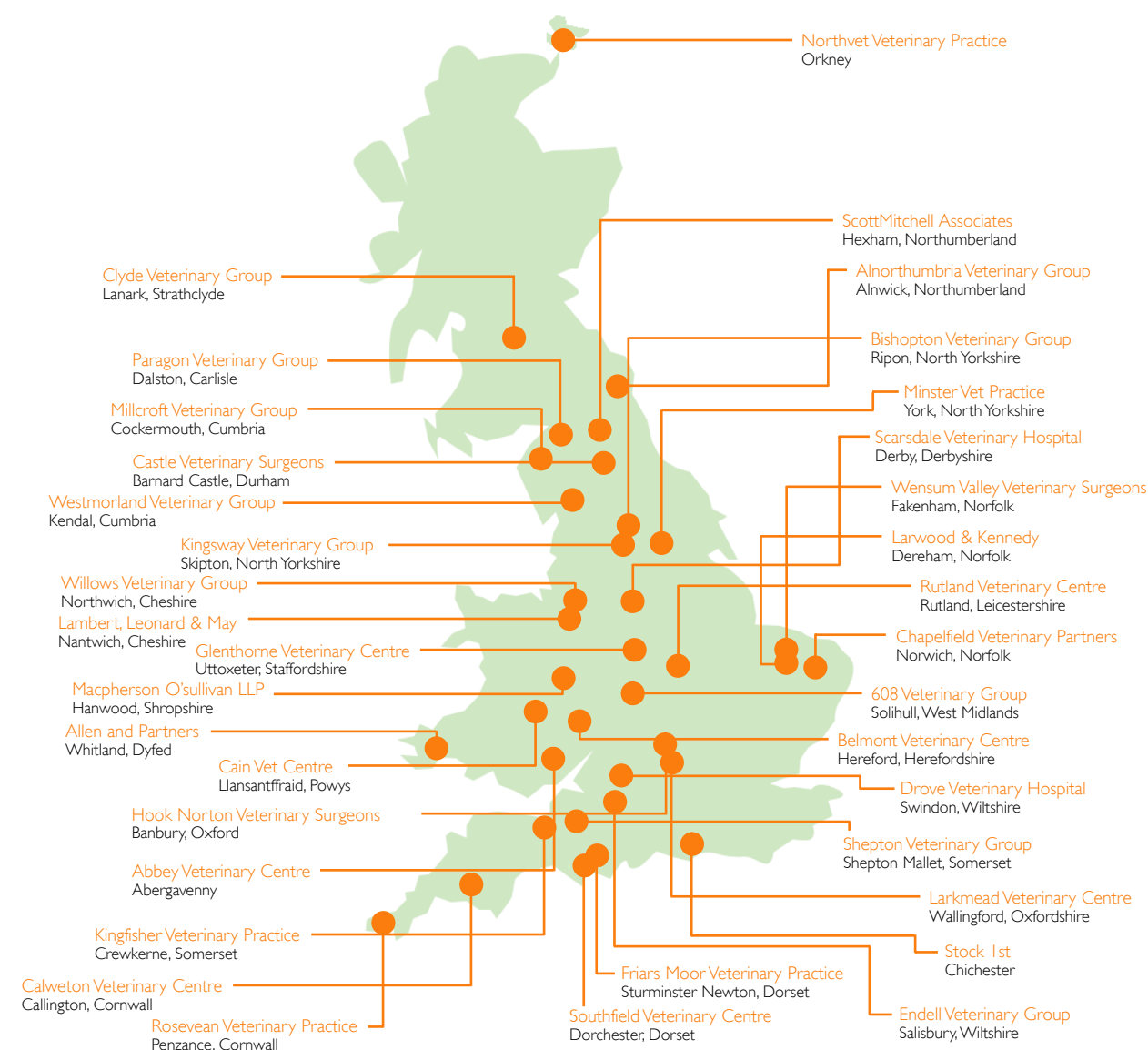


It's all about a team approach. Andrew Schofield from Minster Vets in York (left) with Andrew Reilly, herdsman at Askham Bryan College Dairy Unit.

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Invest in health. Don't pay for disease

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.



The future of Agriculture needs a Healthy Industry which needs Healthy Animals.
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XLVets Excellence in Practice

Everyone's Doing it. Are you?

The 27 cattle health plan initiatives sponsored by Defra Farm Health Planning (FHP) projects are all now in full swing.

For information on the FHP activities that are happening throughout England, visit the Defra website: www.defra.gov.uk/fhp and see what is going on in your area.

Are you actively Farm Health Planning?

These cattle health projects are covering all aspects of health planning on farm and as a result vet practices have been holding farm open days, evening seminars and stepped up the monitoring of a range of infectious diseases and health problems on farms. This information is then being used in benchmarking comparisons to help all farmers understand what makes most sense for their enterprises.

For the farms enrolled onto the projects, the benefits of taking a partnership approach to health are already clear. The projects have seen the development of FHP teams which can often include experts on other areas linked to health and profitability - such as nutritionists.

In fact, all of the projects are showing that by bringing in the different skills including those of bank managers, accountants, nutritionists, and vets, then each time, the winners are the farmers and their cattle.

The Defra projects are running now and benefits have already started to come through in dairy herds, although for some beef herds it will take longer for the effects to be seen due to the longer timescales involved in beef production.

For those not convinced of the benefits of farm health planning, turn to the article in this newsletter from Paddy Gordon of Shepton Veterinary Practice for a report on a recently completed dairy health planning project. Take a look at the return on investment that teamwork and health planning has made. And this was on a farm that was already considered by both vet and farmer to be a well run farm.

Farm Health Planning is something that every farmer should be doing, so if you are not already engaged in proactive ongoing health planning, then contact your XLVets practice. You'd be mad not to.



An industry lead partnership in association with Defra www.defra.gov.uk/fhp

Herd Health planning makes an extra £177/cow



Shepton Veterinary Group
Shepton Mallet, Somerset

Paddy Gordon - Shepton Veterinary Group, Shepton Mallet in Somerset

An amazing return on investment of more than 10:1 has been the result of active farm health planning on one of the farms that XLVets' Paddy Gordon has been working with over the past year.

Part of the Welsh Assembly's herd health project, the changes and improvements made on the farm resulted in an extra £177 of profit per cow, for a cost of only £12 per cow. Paddy Gordon from Shepton Veterinary Group in Shepton Mallet explains: 'The figures are quite astonishing as the farm was already well run - it's a 10,000 litre herd with a cell count of less than £150,000. But they do underline the fact that attention to detail and proactive health planning can pay huge dividends.'

'The project involved visiting and working with the farmer over a 12 month period. During which time, various production parameters were measured and then steps taken to improve matters. The result this autumn is that there are an additional 10 cows in milk, with cows 10 days earlier in the lactation - so there is an additional 500 litres of milk per day to sell. This alone is worth £3,000 per month.'

The herd health planning at the farm had focused on the key areas of fertility, infectious disease, nutrition, care of youngstock, and management of the dry period.

The biggest single financial return of £68 per cow was achieved through improving fertility. In particular the heat detection rate was improved by more than 20% which reduced the calving to first service interval from 104 days to 70, and the service interval from 70 to 33 days. This was made possible by having better fertility records and employing a technician service for heat detection.

'It has also reduced the vet bill for fertility work, with less time spent on cows not seen bulling. This has advantages as time can then be spent on addressing other issues!' adds Paddy.

Another gain was made through vaccinating against leptospirosis. Investigation of abortions had previously failed to identify a single infectious cause. Bulk tank serology showed leptospirosis to be the only infection active on farm. As a result vaccination with Leptavoid-H was recommended.

Whilst vaccination had a cost per se, the number of abortions fell from nine to none, resulting in a net positive benefit of £31 per cow.

The farmer reported that calf disease in 2006 had been higher than average. Twelve calves died around calving, ten died as a result of joint and navel ill, twelve died before weaning and another four just after. Having identified this as an area on which to focus, extra care was taken to improve the hygiene in the calving area, and all calves were drenched with 3 pints of colostrum as a matter of routine.

Management and treatment protocols were also established to cover the times when a relief stockman was looking after the calves.

Following the changes to calf management made in 2007, there were just two calf deaths in the herd of 157 cows.

By changing the dry period from 88 days to an average of 73, the amount of milk sold per cow increased by 22 litres per cow per day.

This could be achieved through improved records identifying accurately when cows held to service, along with a policy of reducing the dry period to 50 days. With no additional costs, the estimated gain was £66 per cow.

Still more to do

'There's still more that could be done,' says Paddy. 'The dry period could be shortened further, down to 60 days - and that would be another £60 gain.'

'Reducing mastitis was not seen as a first priority when the project began. But now, following the improvements made in other areas, it would be a good idea to devote some attention to this area. The mastitis cases on this farm have mainly been the result of infection by environmental pathogens. Changing the bedding material and use of a teat sealant at drying off could soon reduce the use of antibiotics in lactation, and save money.'

'Lameness is another area - last year there were 50 cases of clinical lameness - but this incidence could probably be halved if investments were made in laying down cow tracks and altering cubicle designs. Adopting the practice of regular locomotion scoring would also be a good practice to add to routine herd management - measuring a problem is one of the first steps to assessing and resolving it.'

'By working together, we have made a big difference to farm profitability. But farm health planning is an ongoing process - so by regularly monitoring and reviewing and always looking for improvements, I believe there is probably at least another £70 per cow that can be made over the next year.' The costs and benefits quoted are based on the total value of any health or performance improvement for the whole herd and then recalculated on a per cow basis.

For further information please contact Paddy Gordon on the following contact details...



Telephone
(01749) 341761

The biggest single financial return of £68 per cow was achieved through improving fertility.

Paddy Gordon, Shepton Veterinary Group, Somerset



“Lameness is one of the top three problems encountered on dairy herds, along with mastitis and infertility. Its effects on an animal are quite wide ranging - lame cows are in pain, so they don't eat as much, and will give less milk.”

Sara Pedersen - Lambert, Leonard & May, Cheshire

‘Body condition scores will eventually fall as the severity of the lameness increases, which has been proven to have a significant knock-on effect on fertility.’

‘Lameness can occur due to various reasons: sole ulcers, white line disease, digital dermatitis, foul or super foul, heel abscesses, or slurry heel. Most common are cases of white line disease and digital dermatitis.’

‘Once the key causes of lameness on a farm have been identified, then actions can be taken to remove or reduce the cause of the problem.’ Reducing lameness in the herd should be part of a farm's herd health planning. And the starting point is first to measure the degree of the problem, so that changes to herd management can be discussed and carried out to reduce the

number of cases of lameness. To measure lameness, Sara uses a 5-point lameness scoring system based on assessments of gait and back posture when the cow is walking on a flat, firm surface with sufficient grip. Score 1 is 'sound', walking normally, and 5 is 'severely lame' in which the cow has pronounced arching of her back and is reluctant to bear weight on the affected limb.

Using this system, not only can an overall herd average be determined - so that the problem can be benchmarked against other herds - but also individual lame cows can be identified and receive targeted treatment.

As shown in figure 1, milk yields of severely lame cows can be cut by over a third, and even slightly lame cows still suffer reductions in dry matter intakes and yield.

Lameness Score	% decrease in dry matter intake	% decrease in milk yield
Score 1	0	0
Score 2	-1%	0
Score 3	-3%	-5%
Score 4	-7%	-17%
Score 5	-16%	-36%

Figure 1: Effect of lameness on feed intake and milk production. (Robinson 2001. Applied Animal Science)

As with all herd health planning, it is important to monitor the effects of any changes made - so a follow-up assessment of locomotion should be made three to four months later. This will reveal whether the changes have improved the lameness situation or whether further actions are needed.

Reducing lameness

Lameness is on the increase in herds due to a number of reasons, including manpower being spread more thinly as herd sizes increase. Its incidence varies tremendously from farm to farm, says Sara who has seen incidences of up to 30% lameness on some farms, whilst others have only a few lame cows.

To reduce lameness cases, Sara recommends that all cows in a dairy herd are hooftrimmed at least every 6 months, allowing for early detection of any problems. Also that they are put through a weekly footbath of formalin or copper sulphate - ensuring that the solution is regularly refreshed and maintained at the correct dilution, so that the last 50 cows get as much benefit as the first 50 that walk through it.

Other changes include investment in laying down cow tracks, putting rubber mats down in the parlour or at the feed barrier (as bare

concrete is not very cow-friendly), improving cubicles so animals lie down more, and installing automatic scrapers to remove slurry and keep feet drier.

Farmers should also discuss with their vet, the use of pain killers and antibiotics for lame cows, Sara explains: ‘Lameness is a sign of pain, and this no doubt contributes to a lame cow's lack of appetite. Antibiotics are also implicated in certain cases to prevent further spread of infection and to speed up the cow's recovery and thus her return to normal productivity.’

She adds: ‘Lameness probably hasn't had the attention it deserves in herd health plans in the past. However, a herd with fit healthy claws will be more productive than one with lameness problems.’

‘In addition to regular hooftrimming and footbaths, farmers should ask their vet to help them with establishing a lameness scoring system. By scoring cows individually every four months, this will enable early detection of any claw disorders, and identify specific cows that need attention. This focus on footcare should help reduce lameness and safeguard herd productivity.

Lameness Scoring

Observe cows walking undisturbed in a straight line on a clean, level, non slippery hard surface. Observe all cows either from the side or from behind and from the side.

Score: 1
Not Lame - Good locomotion
<ul style="list-style-type: none">Long purposeful stridesSpine flat during stand & walkRegular gaitLimbs move smoothly and freely in a straight and forward line
Score: 2
Not Lame - Uneven
Any of the following signs: <ul style="list-style-type: none">Hind foot placement wide or narrow of front foot on the same sideShorter stride lengthSlightly arched back when walking
Score: 3
Lame - Limb(s) identified as bearing less weight or force
Any of the following signs: <ul style="list-style-type: none">Pasterns do not drop to the ground evenly when the feet bear weightConsistently shortened stride lengthFoot/feet placed slowlyUneven rhythm of steps or limb swingArched spine and head may nod
Score: 4
Very Lame - Walking speed impaired AND limb(s) instantly identified as bearing less weight or force
Any of the following signs: <ul style="list-style-type: none">Stopping to rest and may be reluctant to moveVery obvious head nodding or swingingLow head carriageVery uneven rhythm of stepsArched spine



Lambert Leonard & May
Nantwich, Cheshire

LAMENESS scoring



Contact Sara Pedersen
(01270) 781250



Lameness scoring being undertaken during a training session at Eastbrook Farm in Bishopstone organized by Janet Blickman of the Drove Veterinary Hospital as a part of the Wessex Positive Health Partnership Project.

...used to help reduce herd lameness

Lameness scoring is being used by cattle vet Sara Pedersen of Lambert Leonard & May, a veterinary practice in Cheshire, to help dairy farmers reduce the incidence of lameness in the herd - a problem which is estimated to cost around £180 per case depending on the cause. This includes not only the direct costs including reduced milk yield and veterinary costs, but also indirect costs including reduced fertility and time spent dealing with the case.

Thinghill Court near Hereford is one of the eight dairy farms included in the XLVets FHP project. The project team, led by Matthew Pugh of The Belmont Veterinary Practice, is working closely with the farm owner James Hawkins and the herd manager Dave Evans to identify problem areas and suggest solutions to improve herd health and farm profitability.

One of the major challenges facing the project team at Thinghill Court, is the somatic cell count and incidence of clinical mastitis. To try and help overcome these issues, Ian Ohnstad, a Milking Technology Specialist with The Dairy Group, was invited to become involved.

Examination of historic NMR information identified a clear problem with a significant number of chronic high SCC animals. Due to an on-going issue with TB, James and David have been unable to cull chronically infected cows as hard as they would like. The SCC in July 2007 was running around 380,000 cells/ml and the clinical mastitis rate was 152 cases / 100 cows. The recurrence rate was 38%.

A visit by Ian Ohnstad was arranged in September when a full assessment of the milking equipment and the milking routine was undertaken. The milking equipment was tested statically in accordance with BS 6690:2007 and a dynamic assessment was carried out. This visit highlighted a number of areas where

remedial action was required, although as always some areas proved easier to address than others.

The presence of a hard core of chronically infected animals was confirmed and a list of animals that required culling was prepared by Matthew. The majority of these animals have now been culled from the herd and they have been replaced with a herd from the Isle of Man.

Despite the best endeavours of Dave Evans and his assistant Dalia, around 40% of the teat surfaces were not disinfected post milking. It was agreed that there needed to be more attention to detail when the teats were sprayed.

There were significant vacuum fluctuations recorded in the pulsation chamber during the d-phase (liner closed) of the pulsation cycle. This was rectified by removing dirty filters from the filtered pulsation air line.

The swing-over parlour is not fitted with ACRs. Significant over-milking was identified, with

many cows being over-milked by 6 - 8 minutes. The over-milking would be solved by installing ACRs, although this would involve the farm in considerable capital investment. In the short term, the over-milking has been addressed by introducing a second operator into the pit.

The risk of cross infection has been reduced by running a split herd with high and low SCC animals. All cows with a cell count > 200,000 cells /ml are kept as a separate group. During the next consultancy visit, when the cows are fully housed, Ian will consider cow cleanliness and cubicle management.

Bulk milk cell counts are currently running at 100-150,000 cells/ml since the culling of 45 chronic cows. The herd is still being run as a clean and a dirty group. Once the herd is fully housed, it may prove hard to maintain the separate group, as there is not sufficient space to run them separately. It is likely that the dirty group may be limited to cows +400,000 at this point.

THINGHILL COURT NEAR HEREFORD IS ONE OF THE EIGHT DAIRY FARMS INCLUDED IN THE XLVETS FHP PROJECT.

One of the major challenges facing the project team at Thinghill court, is the somatic cell count and incidence of clinical mastitis.

HERD HEALTH PLANNING

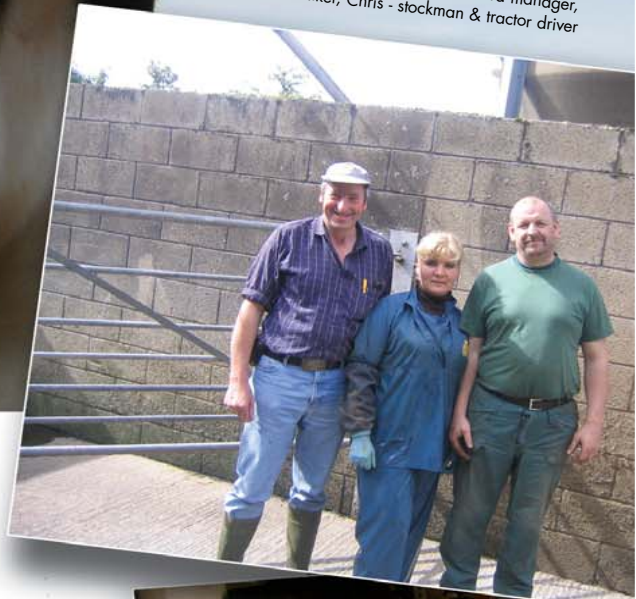
at Thinghill Court



Belmont Veterinary Group
Hereford, Herefordshire



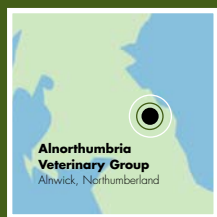
Contact Matthew Pugh
(01432) 370155



The Thinghill team: from the right Dave - herd manager, Dalia - assistant milker, Chris - stockman & tractor driver



“the
results
were better than
I expected”



Short of grazing fields, TMR is the most natural way of feeding livestock, insists John Macfarlane who heads up a veterinary practice based at Alnwick in Northumberland.

A member of the XLVets group, he is a strong advocate of preventative rather than curative action and, as such, believes that feeding systems that closely reflect the way livestock would act if left to their own devices is a way of maintaining their health - and performance.

No surprise then, to learn that he fully supports the feed system now adopted by one of his local farmers, Sandy Frater who, for the last 12 months has been feeding his cattle a home mixed ration that has allowed them to eat almost as and when they want to. And, as we shall discover, the results have been pretty impressive.

Based just outside Alnwick, on the east coast, Mr Frater runs an 800 acre farm of which about 300 acres is down to cereals and the remainder is grass.

'The main enterprise is the fattening of 350 cattle,' he explains. 'I buy them as good quality stores at about 400kgs weight and then finish them in the yards on silage and home grown cereals.'

Mr Frater also runs a breeding flock of 1000 ewes which he lambed inside for the first time last year.

Until a year ago, the feeding system was basically silage with cereals - the rolled barley was simply scattered along the top of the silage after it had been spread out along the feed passages.

'It was system that worked to a degree but I was not convinced we were getting the best from the cattle,' he says. 'The cereals were all consumed in one go and the silage lasted only a little longer.' A feeder wagon that could put together a complete ration and was mixed so that there was no picking out of individual ingredients, appeared to be the answer and a Keenan Klassik 140 was duly purchased and brought into use.

'For the first time, the mixer wagon enabled us to create a very simple finishing ration which used straw, grass silage, home grown barley and home grown beans,' he says. 'The only ingredients which we needed to purchase were minerals and limestone flour.'

Mr Frater adds that the quality of the mix with its chopped to length straw component and evenly incorporated cereals looked right and was well presented - the cattle just grazed their way straight into it, he says with no build up what so ever.

For the record, cattle were gaining 1.4kgs/day at a cost, he calculated, of 96p/day which meant that a kilo of live weight gain was costing about 68p.

'The results were better than I expected,' he says. 'Due to the fact that the cattle were finishing earlier, we managed to put more cattle through the system than in previous years - yet we only used the same volume of feed.'

According to John Macfarlane, the steady input of feed which TMR provides is so much better than giving the feed in two lumps each end of the day.

'Rumen pH does not remain at a constant and that can cause irregularities and will mean that performance is not being maximised,' he says.

He adds that in his experience such a feeding practice can lead to a higher incidence of pneumonia in store cattle and greater mortality.

The use of the Keenan mixer wagon and the shorter finishing period which resulted, also had a beneficial effect on Mr Frater's sheep

enterprise in that yards which would normally be full of cattle were now empty and could be used to lamb his flock inside away from the harsh Northumberland winds.

And better still, following the advice of his Keenan nutritionist, he decided to use a TMR ration to feed the sheep.

'We put together a ration based on silage and barley to which we added purchased molasses, soya and minerals,' he says. 'This ration made a saving of about 30% on the usual concentrate bill for the sheep.'

With some delight, Mr Frater reports that the inside lambing went very well with no cases of twin lamb disease.

'It's something we'll certainly be doing again next year,' he says.

For John Macfarlane, the Frater experience is one which he wishes could be adopted by several more of his clients.

'It just makes so much sense to use a system which mirrors the natural feed requirements of livestock,' he says. 'And it becomes even more important in intensive rearing and fattening systems where health issues can make the difference between profit and loss.'

But for Sandy Frater, the results say it all.

'I feel we have turned a corner in livestock feeding techniques,' he comments. 'We now have the means to produce good quality finished cattle in less time and at no extra cost. That has got to be the right way forward for this business.'

'For the first time, the mixer wagon enabled us to create a very simple finishing ration which used straw, grass silage, home grown barley and home grown beans.'

Mr Frater, Alnwick, Northumberland



“ I hope to become more involved in partnership of HHP. Promote active participation in these schemes ”

Rod Welford of Millcroft and Bruce Richards of Paragon set the scene, describing Herd Health Planning as a concept, and outlining the expected benefits to health, welfare and productivity, before identifying some of the factors that will be investigated on the 'Advocate Farms'. Representatives of these Advocate Farms, Robin Bell of Moorland Close and Trevor Whitfield of Woodhouses Farm then described their farms, the issues that they felt they had and what they hoped to get out of the project. Both farmers, despite professing not to be comfortable speakers, gave eloquent and candid presentations, and put to one side any worries about 'baring their souls' to a wide audience, an attitude that was complimented by many attendees.

Ian Ohnstad of The Dairy Group then gave a brief overview of udder health, mastitis and what his role was in the projects and this was followed by presentations by the two nutritionists involved on these farms - Martin Halliwell of BOCM-Pauls (Moorland Close) and Richard Vecqueray of EBVC (Woodhouses) who is also the consultant nutritionist to the XLVet group of practices.

Then, after a brief lunch, it was off to the nearby Advocate Farm of Messrs Bell, where four 'stations' had been set throughout the farm, around which the delegates moved in groups. Richard Vecqueray and Martin Halliwell conducted a 'trough-side' focus on key nutrition and feed management issues relative to both farms, while Ian Ohnstad held a session in the parlour explaining some of the key points he

was looking to address and entering into lively interactive discussions with the attendees. Bruce Richards managed to integrate some technology into a windy silage pit and showed some examples of how recording, monitoring and benchmarking could make a dramatic difference to herd health, while a very 'active' session was conducted by Rod Welford who demonstrated, with the help of two assistants how 'pen-side' blood sampling of a sick cow could be used as a marker of health within the larger group. This involved blood sampling of a cow there and then, and demonstrating an instant reading of her beta hydroxybutyrate (BHB) levels, and an explanation of how this 'signalman' cow could contribute important health information about her peers.

Overall, the meeting was very well attended, and had the desired result of bringing together many consultants, advisors, para-professionals and other related industry representatives to hear about the DEFRA led FHP initiative and for them hopefully to understand better about how Farm Health Planning as a concept is important and where that might fit into their personal roles when working with farmers.

Attendees included bank managers, accountants, pharmaceutical company representatives, foot trimmers, AI technicians, State Veterinary Service vets, (including the local Divisional Veterinary Manager), nutritionists, genetic advisors, trade suppliers and many more.

Comments recorded on the feedback forms were invariably positive and included:-

'We as a company are happy to support and become involved in these productive activities'

'Work more closely with Vets and other nutritionists'

'I am more aware of HHP and what impact this has on profitability of the business'

Paragon Veterinary Group and Millcroft Veterinary Group are both partaking in the XLVets Dairy Health Planning Initiative.

XLVets Dairy Health PLANNING INITIATIVE

Because of the proximity of the practices, and the degree of likely overlap, they opted to hold a joint Stakeholders Meeting. One of the objectives of the XLVets FHP projects is to bring together all specialists and stakeholders from across the board and encourage them to become active in Herd Health Plans and Planning.

The meeting was held on 30th October, and started off with some short, formal presentations at Mitchell's Lakeland Livestock Centre, near Cockermouth.



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Paragon Veterinary Group
(01228) 710208



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(01900) 826666



PROTECTION!

HEALTH PLANNING PROTECTS SUCKLER HERD FROM INCOMING DISEASE

Organic farmers, Kate and Andrew Redwood of Haye Farm near St Dominic, could have been counting the cost of introducing the BVD virus into their naive suckler herd if it wasn't for the fact they were working more closely with their vet as part of an XLVets farm health planning project.

Health Planning protects suckler herd from incoming disease Stuart Gough

The Redwoods vet is Stuart Gough of Calweton Vet Practice, Callington, in Cornwall, and they have been selected to be one of the XLVets Champion Farms, receiving a year's worth of free advice on farm health planning, as one of several initiatives funded by Defra.

Haye Farm is a National Trust Farm and the Redwoods have been tenants for the past seven years. They currently run 30 spring-calving suckler cows and 80 ewes - and sell organic beef and lamb, as well as a range of organic vegetables.

Andrew Redwood admits that, like many beef farmers, he has been keen to keep veterinary input to a minimum, to save costs. In fact, one of the key reasons for taking the organic approach was to have a system that was deliberately low input and un-intensive.

However, this year the Redwoods started working on a much closer basis with their vet Stuart, and particular attention has been given to infectious diseases and nutrition.

The suckler herd has been a closed herd for the past seven years - a practice recommended for organic livestock systems. As part of the health planning process, the herd was screened for presence or exposure to two infectious diseases - BVD and leptospirosis.

Test results showed evidence of leptospirosis and breeding cattle are now vaccinated - Andrew thinks some of the herd's poor reproductive performance in the past may have been due to this disease being present. As an organic farmer, vaccination is allowed as the disease has been shown to be present. However, Andrew hopes that, by maintaining strict biosecurity protocols and monitoring reared calves for exposure, over the next few years he will be able to cease vaccination as the infected animals are gradually culled from the herd, and no new disease is brought in.

More surprising was the fact that the herd tested totally naive to the BVD virus. Not only were there no animals carrying the virus, there was also no evidence that cattle had ever been exposed to the virus (because no antibodies to it were present in any of the blood samples).

The Redwoods had been considering buying in more cattle to boost numbers as extra land had been taken on. Stuart Gough explains: 'The BVD virus can be caught as easily as nose-to-nose contact with an infected animal. It is widespread across the UK. So there is always a risk that any new cattle coming onto a farm could be carrying the virus. If the Redwoods' in-calf cows had come into contact with them, then the consequences would have included abortions, infertility and possibly the birth of persistently infected calves which would then continue to infect the herd

throughout their lives. The financial impact would have been considerable.'

'Fortunately, we discovered the naive status of the herd, and this prompted the establishment of strict biosecurity measures which the Redwoods must follow. For example, Andrew may buy in cattle from a local farm - but first he will insist on blood testing the animals before they are moved, and he will not accept any that are BVD-infected. And, given a choice, animals with no sign of leptospirosis infection will be favoured over those which will require vaccination against it,' adds Stuart.

Another area where veterinary intervention has been beneficial is the screening of calves for previous exposure to respiratory diseases. Andrew thought that the condition and growth of last year's calves was not as good as he had expected. Test results showed previous exposure to pneumonia viruses - RSV and PI3 in those calves. Consequently the 2007-born calves have been vaccinated against these diseases prior to housing - again, having obtained an organic derogation. Meanwhile, a new shed is being erected at Haye Farm, and with better housing and ventilation, Andrew hopes he won't need to vaccinate next year. Simple structural changes to existing housing for this winter should also hopefully improve air flow and reduce risks of pneumonia.

Herd Nutrition

Another area for advice and planning was the herd's nutrition. The Redwoods' cattle tend to reach their finishing weights of 270-300kg for heifers and 300-350kg for steers when the animals are 24-30 months old.

Andrew says: 'Ideally we would like to finish the cattle at 18-24 months, but it will depend not just on formulating a ration to achieve this, but also on the cost of that ration. For instance, we will be growing more organic cereals next year - but we could be better off selling the grain rather than feeding it, and keeping the same growth rates.'

As part of the project, nutritionist Geoff Hughes of Dynamic Nutrition Services was asked to look at feeding strategies. He says: 'Although it is normal practice with milking herds, the preparation of accurate nutrition and feed planning for beef herds is often overlooked. As a result, diets often fail to deliver the performance and/or financial targets required by the business. 'It is fairly obvious that

feeding too little, or offering an unbalanced diet, will result in the animals not performing as expected. However, it is just as important not to set over ambitious performance targets and then waste valuable feed. This is essential on all systems but is especially vital with an organic farm where forage must be maximised and any purchased concentrate will be expensive.

'The starting point is to set realistic animal performance targets. At Haye Farm this meant looking at the requirements for suckler cows - both dry and lactating - and both the first and second winter periods for the beef fattening enterprise. 'The next step was to arrange for silage samples to be taken and sent away for analysis including some samples to look at the mineral balance. In this case it meant taking representative samples from first and second cut grass silage and a further sample from a barley/pea wholecrop silage. Once these were returned it was possible to allocate the forage in a way that matched most closely the animal performance required, and to take decisions on supplementary feeding where required.'

Once the diets are introduced it is essential that feed intake and animal performance is monitored regularly. 'The animal will tell us if the ration is performing as required, and this knowledge allows the diet to be adjusted quickly if needed to ensure all targets are achieved,' adds Geoff.

An open day is planned at Haye Farm. For more information contact;



Stuart Gough
(01579) 383231



Defra-funding for herd health planning projects has also been secured through the NADIS organisation. NADIS is the National Animal Disease Information Service and has been in existence for 10 years. It consists of a national network of veterinary practices and colleges, which monitor the incidence of diseases throughout the UK and relay this information back to a central database from which disease trends can be forecast. XLVet members contribute to the NADIS information network.

XLVets & NADIS

Herd Health Planning Initiatives...

Willows Veterinary Group
Northwich, Cheshire

Kingfisher Veterinary Practice
Crewkerne, Somerset

Rosevean Veterinary Practice
Penzance, Cornwall

The XLVets practices working on NADIS Herd Health Planning initiatives are: Rosevean Veterinary Practice in Penzance, Cornwall; The Willows Veterinary Group in Northwich, Cheshire; and the Kingfisher Veterinary Group, Crewkerne, Somerset.

At the Rosevean Veterinary Practice, vet Duncan Bruce and his colleagues have enrolled five beef and five dairy farms, one of which is organic, onto the NADIS initiative.

Duncan explains: 'All these farms tended to have had a lower than average veterinary input over the past years, and not been taking advantage of regular health planning advice.'

'We first visited these farms to make assessments of the current health and production status of the herds. Then we looked at where and how improvements could be made.'

On all farms, basic data such as cattle numbers, breeds and housing, and annual production data has been recorded.

For the dairy herds, mastitis and lameness cases are also recorded. This has included mobility, or locomotion, scoring to assess the degree that lameness is an issue.

'We are also recording the fertility data and disease profiles on all the farms, including their worming and fluke control schedules and any vaccine regimes they are using,' adds Duncan.

'This is already recorded on our other farms - albeit in less detail - and all this data is entered on a central database anonymously, to give a baseline position for these NADIS-project farms against our other clients. 'After the initial assessments, several problem areas have been identified and these are the focus of

our health planning activities on these ten farms. Worm and fluke control was an area in which some clear technical advice was needed. Many farms were overusing wormer and often worming or giving fluke treatments at inappropriate times.'

In response to these findings, Rosevean Veterinary Practice organised evening talks on parasite control as well as fresh cow management, for the project farmers as well as the practice's other farmer clients. Duncan adds: 'These were well attended and we had a lot of positive feedback as to their usefulness and value.'

'Four of the five dairy farms had mastitis and cell count problems, and on virtually all farms, some advice on improving fertility was needed.'

'On one farm, our tests revealed presence of the BVD virus. In fact, two PI (persistently infected) animals were present in the herd, and were the likely cause of infertility problems. So specific advice and help is being given to control the effects of the virus and improve biosecurity.'

For the ten farms which are part of the NADIS project, the practice is expecting to bring about significant improvements over the 12 months that the project will run.

Already improvements have led to a reduction in mastitis cases and a lowering of cell counts on the dairy farms.

'It will be more difficult to demonstrate specific improvements in health and fertility issues within the year,' says Duncan. 'However, herd health planning is an ongoing process and if the teamwork between the practice and the project's farms continues, then the benefits will soon become apparent in the following years.'

'For these herds where historically there has been little veterinary input, this project is highlighting very clearly that establishing herd health planning can improve aspects of herd health and production, and ultimately boost farm incomes.'

For more information on the NADIS herd health planning initiative in Cornwall:



Contact Duncan Bruce
(01736) 362215

Work at the Willows Veterinary Practice, Cheshire

Another XLVets practice with herd health planning funding through the NADIS initiative is the Willows Veterinary Group in Northwich, Cheshire.

Again, 10 farms have been recruited - five have dairy herds whilst the other five are beef units that either rear calves or finish beef cattle. Project leader John Dawson explains: 'There are few suckler herds in this area so we are focusing on these different systems of beef production. These also present different problems and challenges from sucklers. For instance, on calf units, the major problems are respiratory diseases and scour.'

As part of the project, John and his colleagues are recording more data than the farms have previously done. This allows monitoring of more parameters and gives a broader information base from which to work.

'As a result of being better informed, we hope to show a reduction in respiratory cases and digestive disorders during the next 12 months. 'However, in some cases, and with some health issues, 12 months is going to be too short a time to show improvements, so we will endeavour to continue the monitoring and health planning input for longer, to achieve maximum benefit for the farmer.'

'One activity which does produce results quickly is the identification of viral problems followed by strategic vaccination to prevent

them. This is being done on some of the units and already improvements have been seen.'

On the dairy farms, the usual problems of lameness, mastitis and fertility are tackled.

John adds: 'The project has allowed the practice to get more involved with farms where advice had not been sought previously - due to a reluctance to share the problem or sometimes just because the problem had been accepted as a way of life.'

'However, now that we are seeing the farmer and his herd more often, and have been able to gather information on the health status and issues, we can consequently analyse the root cause of problems like high cell counts, and introduce a treatment protocol which shows major benefits.'

Every three months, the Willows practice holds a meeting for the farmers from the ten farms to discuss what has been going on, so that everyone can share their experiences and learn more about the possibilities open to them. John adds: 'The project has started on a very positive note and through our continued on-farm monitoring and the regular meetings, I am sure there are further benefits for our clients to gain.'

For more information on the NADIS herd health planning initiative in Cheshire:



Contact John Dawson
(01606) 723202

Willows Veterinary Group
Northwich, Cheshire

Kingfisher Veterinary Practice
Crewkerne, Somerset

Rosevean Veterinary Practice
Penzance, Cornwall

Update from the first round of workshops completed by the Yorkshire FHP Group...

Suckler herd fertility

Workshops and presentations on aspects of beef suckler herd fertility were held at Moor Farm in Burton Leonard, near Ripon on 13th December. The day was sponsored by Pfizer Animal Health and supported by EBLEX and the Yorkshire Vet Society. Beef consultant Basil Lowman was a guest speaker.

A total of 35 farmers and vets attended, and were divided into three separate groups to rotate through a morning of practical workshops using the data and results found at the farm as part of the FHP project.

Workshop 1: Cow management with vet Jonathan Statham, which included examples of how the farm had cut feeding costs through a planned approach which included body condition scoring. The farm had also started weighing weaned calves as part of the FHP project and the results from this were related back to aspects of fertility and nutrition.

Workshop 2: A bull fertility workshop with vet Phil Alcock, in which the results of the farm bulls' fertility and semen evaluation were discussed while examining the bulls with Phil. Real costings were used to show variations in bull costs per calf set against the farm's 2006 and 2007 fertility performance.

Workshop 3: Basil Lowman led a discussion on heifer rearing, genetic selection and management to first service. Bulling heifers were appraised by Basil Lowman as part of the heifer management discussion.

In the afternoon, Basil discussed how to maximise efficiencies in the suckler production chain, and looked at what scope may exist for more cooperation within the industry. Basil also took an open floor session to round off the meeting.

Mastitis in dairy herds

Workshops and talks on aspects of mastitis control in dairy herds were held at Lazenby Moor Farm on the 19th December. The day was again sponsored by Pfizer Animal Health and also supported by NMR, MDC and the Yorkshire Vet Society.

Guest Speaker at this event was dairy technology specialist Ian Ohnstad from The Dairy Group.

Another good turnout was seen with 68 farmers and vets attending the day. The group was split up and rotated through three mastitis-related practical stations in the morning.

Workshop 1: Milking machine and milking routine with Ian, looking at the farm's parlour and changes to machine set up.

Workshop 2: Environmental mastitis with Phil using an analysis of the farm's SCC reports and relating these to the dry cow environment using NMR 'Herd Companion' software.

Workshop 3: The practical approach taken by Lazenby Moor Farm's FHP to tackle last summer's mastitis problem was presented by Jonathan.

In the afternoon, the meeting was rounded off with a presentation by Ian on contagious mastitis issues.

More workshops are planned. For more information contact ;



Bishopton Veterinary Group
(01765) 602396



Bishopton Veterinary Group
Ripon, North Yorkshire