Livestock ATTERS www.xlvets.co.uk

Inside this issue:

MILK TESTING

We look at the use of milk progesterone testing in improving herd fertility.

Reducing lamb losses







GROWING FARM BUSINESS SUCCESS

FatmSkills workshops are open to farmers from across the country and on any livestock subject - so whether its DIY AI in Dorset or lambing in Leicester, please contact us to find out more.

> from practical courses...

FarmSkills workshops coming up

EMBRYONICS (7-10 January	Cheshire
- Sim	9-11 January	Lancashire
EMBRYONICS (14-17 January	Perthshire
S Scarsdale Vets	28-31 January	Derby
Westmortend Veterinary Group	29 Jan - 1 Feb	Kendal
Paragon	5-8 February	Carlisle

S Scarsdale Vets	9 January	Derby	
Westmerland Weternay Group	9-10 January	Kendal	
EMBRYONICS (16 January	Perthshire	
Scarsdale Vets	23 January	Derby	

TYNDALE Form Veterinary Practice	16 January	Gloucester
NORTHWET	22 January	Orkney
EMBRYONICS	25 January	Cheshire
HOOK NORTON	31 January	Oxfordshire
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Please note dates are subject to change

XLVet Training Services Ltd, Mill Farm, Studley Road, Ripon HG4 2QR

www.farm-skills.co.uk

Text 07854 063384 Telephone 01765 608489 E-mail farmskills@xlvets.co.uk

Many FarmSkills workshops are funded by LandSkills, which is managed by Lantra, in the North East, Yorkshire and Humber, East and West Midlands as part of the Rural Development Programme for England. The FarmSkills workshops in Cheshire are funded through the RDPE Skills Programme for Cheshire, which is managed by the Reaseheath Enterprise Delivery Hub. FarmSkills workshops in the South West are supported by the Duchy College's Rural Business School's Healthy Livestock and Skills projects as part of the Rural Development Programme for England, funded by DEFRA and the European Union.

















WINTER EDITION

XLVets is a novel and exciting initiative conceived from within the veterinary profession. We are all independently owned, progressive veterinary practices located throughout the United Kingdom committed to working together for the benefit of our clients.

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THE EDITOR

Welcome to the 'Winter' issue of Livestock Matters

Welcome to the winter issue of Livestock Matters. As the magazine goes to press the first snow has fallen and the first call has just come into the office from one member practice busy preparing for the lambing season.

In this issue we spend time with two finalists from the 2012 Farmers Weekly Awards, looking at how small changes to their farming systems have reaped many benefits and have led to them being in the final for the awards.

We also have the last two student diary columns from Eva and Mark. I'm sure you

will all agree it's been fascinating following a year in their lives and we wish them both every success for the future and hopefully we might catch up with them at some point in the future.

We would like to take this opportunity to wish all our readers a very Merry Christmas and a prosperous New Year.

We hope you enjoy this issue.

Joanne Sharpe



ANIMAL HEALTH

O5 A good system for sheep - EID and flock health planning:

Andrew Sawyer, Alnorthumbria Veterinary Group reviews how sheep farmer Duncan Nelless has implemented a successful sheep system and beneficial flock health plan.

07 Use of milk progesterone testing to improve herd fertility

Dan King and Jonathan Statham, Bishopton Veterinary Group investigate the importance of milk progesterone tests to improve herd fertility, saving time and costs.

O9 Attention to housing and health ensures beef unit efficiency on farm:

Adelle Isaacs, Larkmead Veterinary
Group reports on how beef farmer
Neil Rowe has achieved an established
and successful beef herd unit through
proactive health planning and by the
care and attention taken to the design
of cattle sheds and handling facilities.

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Prize-winning herd of British Blondes en route to accredited health status:

Hollie Dale, Wright & Morten reports on how Cheshire beef farmers Chris and Mark Shenton are setting out how to demonstate the good health of their prize-winning herd of British Blondes.

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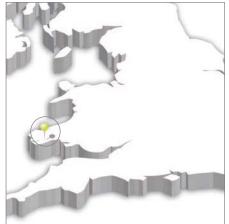
We conclude reports from our veterinary students Eva Kenny and Mark Challoner at the end of a year of their studies.

WINTER FEATURE

Reducing lamb losses:

A special feature by Katie Brian, EBLEX Project Manager. She looks at how improving animal performance and reducing physical losses is key to ensuring the success of sheep farming.

XLVets New Member Practice...



Fenton Vets



Fenton Veterinary Practice

Fenton Veterinary Practice developed from a traditional rural mixed practice to become increasingly specialised over the last 15 years, most recently with the creation of a new and separate equine practice, Cotts Farm Equine Clinic.

Based at one site in the county town of Haverfordwest in Pembrokeshire, Fenton Veterinary Practice is currently a partnership consisting of a farm and small animal department. On the farm side there are three partners, five assistants and two TB testers. On the small animal side there are two partners, plus one full-time and three parttime assistants.

The large animal work is predominantly dairy with some sheep, beef and the very occasional camelid and zoo species. Due to our geographical location and climate, we have a great diversity within our dairy farms, although all but one are family owned and run. There is a growing interest in grass based systems due to transport costs, milk contracts, and the more recent climatic challenges faced in growing forage crops such as maize. We still have a few herds housed all year round milking three times a day, but the challenges faced by the traditional all year round systems are driving the diversification.

We have a young and enthusiastic team of vets with a depth of knowledge (three Certificate holders) ready to contribute fully to the XLVets group. We understand fully the principle that we will only get out what we put in and are very excited at the prospect of membership of an established group of practices with a reputation of excellence in their field.



XLVets at AgriScot 2012 21st November 2012, Edinburgh

The Scots are quite a laid back bunch really, no entry fee, no astronomical car parking charges to make up for it, no wonder AgriScot is well attended by those in the know!

XLVets and FarmSkills had another busy day at the event on the 21st November; the stand attracted a steady flow of show goers, eager to find out what we were up to this year and with unerring support from several XLVet member practices, we were able to share knowledge and demonstrate what benefits an XLVet member client would have access to by way of literature, fact-sheets and training workshops.

Thanks to all those who gave up a day in practice to help and to all those who popped onto the stand to say hello, we're always delighted to see you.





Livestock 2012

This year's Livestock 2012 (previously the Dairy Event) returned to Birmingham's NEC for another busy two days. Armed with an abundance of FarmSkills t-shirts and the now infamous prosthetic bull's testicles, members of the XLVets and FarmSkills teams headed up the stand along with many willing volunteers from member practices.

The stand, as ever was impressive with areas for three skills challenges, a space for visitors to chat to vets, enter the competition and read the abundance of literature on offer.

Although numbers at this year's event were slightly down - mainly due to the exceptionally nice weather - we had a constant stream of willing participants for our activities which this year focused on taking a clean milk sample, bull and ram fertility and tying a halter from a single piece of rope.

Although we attracted many new people to our stand this year, with around 500 people leaving their details for further information, it was encouraging to speak to so many people who had been on FarmSkills courses over the past twelve months and were keen for more information on what they could attend next.

A big thank you must go to all the vets and support staff who volunteered their time to man the stand throughout the event and played an important role in encouraging people to take up the challenges and learn a new skill.

A special thank you also to Bryony Kendal from Tyndale Vets who helped the RABDF with ram MOT demonstrations in the livestock area, and to XLVet members who flew the flag in the Farm Health Planning seminars: Nigel Woolfenden (Bishopton) for his talk on swine dysentery; Mike Clarke (Minster) for a discussion on whether poultry and other livestock mix; Ed Hayes (Endell) who looked at how to get high yielding Holsteins into calf and Jonathan Statham (Bishopton) whose seminar looked at the threats of IBR on cattle.



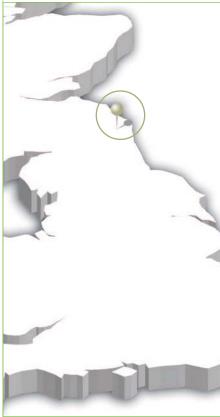








alnorthumbria veterinary group



Veterinary Surgeon Andrew Sawyer

XLVets Practice Alnorthumbria
Veterinary Group



FW SHEEP FARMER FINALIST **DUNCAN NELLESS** AND ALNORTHUMBRIA'S VET **ANDREW SAWYER**

A good system for sheep EID and flock health planning

Northumberland sheep farmer Duncan Nelless of Thistleyhaugh Farm near Morpeth was one of the finalists in the 2012 Farmers Weekly Awards.



His vet, Andrew Sawyer of Alnorthumbria Vet Practice, has been providing veterinary care and advice to Duncan for the past 20 years. During this time, there have been some major changes - a completely different breed of sheep, the introduction of electronic tagging and performance recording, and ongoing disease prevention and health planning. All have helped ensure the genetic potential of the flock is realised.

At Thistleyhaugh Farm, Duncan manages 1,600 pedigree Lleyns. In 2004, following the advice of Andrew Sawyer, he made the decision to convert to organic status. Duncan explains: "We didn't have to make too many changes. The biggest was to reduce the use of concentrates, which on our traditional system were 20% of the variable costs. With attention to grassland management, we are now rearing lambs only off grass, and the organic status delivers a worthwhile premium."

EID benefits

Duncan had begun EID-tagging his breeding flock in 2007 and, together with computer-based performance records, he has been able to select for improvement across a number of different parameters.

Ewes are split into two flocks - the main pedigree flock numbers 1,160 Lleyn ewes. These are put to carefully selected Lleyn rams and lambed outdoors in April. Ewes which do not meet the quality criteria for this flock are run as a separate commercial flock.

Linking the EID with the performance programme has been very beneficial for Duncan. He explains: 'It's a lot of work but it really pays off in the end. Every lamb is EID-recorded at birth, so we track not only the history of each animal, but also what medicines and vaccines it has received through its life.





'We are using EID to record worm resilience, lambing assistance, lamb vigour, udder conformation, and maternal drive. We can then use this information and select the best animals to go forward into our breeding programme.'

EID also proved very useful when a surprise case of copper poisoning led to the death of around 20 ewes, which were grazing some rented land.

Andrew explains: 'Sheep are very sensitive to copper - it builds up in the liver more readily than in other animals. They become lethargic and anaemic, and will grind their teeth and become very thirsty. Jaundice sets in, and death follows a few days after these clinical signs are first seen.

'The ewes had been grazing on red clover, and this plant can take up a lot of copper. Postmortem biopsies showed that their livers had become overloaded with the mineral. Hence jaundice developed and in a few cases, tatalities.'

Using EID information from the affected animals, Duncan was able to identify the families and sirelines that were more sensitive to copper levels. He now limits the time certain animals are grazed on this particular area of ground.

To help prevent any further problems, Andrew has also prescribed mineral licks containing molybdenum. This locks up, or binds, the copper in the liver, and reduces its toxicity to the animal.





Routine flock health matters

When first establishing the Lleyn flock in 1996, Duncan made the decision to protect health and performance of the sheep by ensuring it remained free of the virus Maedi Visna.

Andrew explains: 'Maedi Visna is a wasting disease which has a long incubation period. There's no vaccine or cure for it. So to protect flock performance, the best approach is to keep it out of the flock altogether. So Duncan keeps a closed flock and will only buy in rams from breeders that are members of an MV-certification health scheme, like his own flock.

Lameness is another issue on which Andrew and Duncan have worked together. It is well under control now with less than a 2% prevalence. Duncan adds: 'It's not going to be possible to totally eradicate footrot due to the high stocking density. But thanks to Andrew's input we've got it well under control using a combination of zinc sulphate footbathing and if required, antibiotic.'

Duncan adds: 'We did start using EID to de-select lame sheep. But then stopped as we became concerned that there wasn't sufficient genetic connection to justify it and we might wrongly be penalising some animals.'

'In Northumberland, selenium levels in the soil are low, and this shortfall carries through into grass and forages. Selenium deficiency will limit animal performance and farmers should check whether stock require mineral supplementation,' advises Andrew.

Since Thistleyhaugh Farm is organic, blanket selenium supplementation is not permitted. Instead, a number of ewes are blood-sampled pre-tupping to assess levels of selenium (and also copper). If required, a derogation is obtained and a long-acting selenium injection can then be administered to protect health.

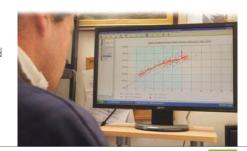


The system works

Andrew says: 'Duncan has been prepared to experiment and do things differently. He started off with Mule and Charollais flocks but then made the decision to switch to the Lleyn as it fitted the system he wanted to run.

He adds: 'Duncan and his brother go shearing in the summer, so their own flocks are winter-shorn at the end of February. They are kept housed for two weeks before being turned out onto grass again, where they lamb down in April. This not only fits in with the labour requirements, but also improves lamb vigour - because the ewes eat more, and are more inclined to seek shelter when about to lamb. So this different approach has benefits all round.'

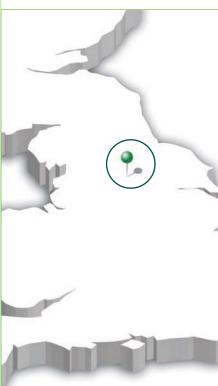
Duncan adds: 'My brother Angus manages a suckler herd, and so Andrew normally visits about once a month, to see at least one of us. It's a planned visit, he's rarely here on a 'blue light'.'





Use of Milk Progesterone testing to improve herd fertility





Veterinary Surgeons Dan King and Jonathan Statham

XLVets Practice Bishopton Veterinary Group



DAN KING AND JONATHAN STATHAM, BISHOPTON VETERINARY GROUP

Milk progesterone tests identify when (and when not) to Al your cows (so you can improve herd fertility, and save time and costs).



Good heat detection is one of the fundamentals for good herd fertility. Yet in many high yielding herds, spotting the signs of oestrus can be a challenge. Modern genetics and the pressures of high production, mean that many cows now show oestrus for only a short time, or hardly at all.

But there's another issue, as Bishopton's Jonathan Statham explains: 'With heat activity being low, and the drive to get cows back in-calf, it's estimated that around 20% of artificial inseminations are actually given to cows which are already pregnant. This may be further complicated by the fact that around 5% of pregnant cows will still show signs of bulling.

'Not only is this a waste of semen straws, but more importantly, inseminating a pregnant cow is likely to cause abortion. This in turn adds another 21 day wait before the cow is ready to serve again, increasing the calving interval at a cost in excess of $\mathfrak L3$ for every extra day. And that's assuming that no infection follows the abortion.'

Heat detection tools

In addition to watching cows for signs of heat, there are a range of heat detection tools that can be used on-farm to ensure cows are inseminated at the correct time. These include - Kamar markers, tail-painting, vasectomised bulls, and activity monitors like Heatime in

which the extra movement of cows on heat is recorded via transponders on head collars. Another method of heat detection is to measure the progesterone in a cow's milk. Bishopton's Dan King explains: 'The level of this hormone will rise and fall according to the stage of the cow's oestrus cycle. In a cow which is cycling normally, low levels of progesterone are found when the cow is in heat, i.e. she is not pregnant. High progesterone levels are found when she is pregnant, or in mid-cycle.

'The test is quite simple to do - a dipstick is put into a sample of milk and ten minutes later, a reading of high or low progesterone is obtained '



Jonathan Statham and Dan King monitor and record the progesterone test results

Case Study Robert Graham, Lazenby Moor Farm, Minskip

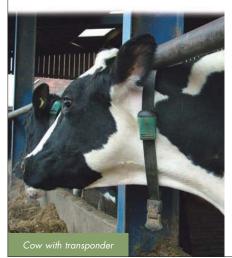


Dan has been evaluating the benefits of milk progesterone testing with six of the practice's dairy clients. Amongst them is Robert Graham of Lazenby Moor Farm where the 180-cow herd is averaging yields of 9,700 litres/cow/year. Jonathan Statham makes fortnightly routine fertility visits.

Robert and his staff rarely see a cow showing the primary signs of standing oestrus. So, a few years ago, the Heatime activity monitoring system was introduced. This has been very beneficial, and contributed to the herd's excellent fertility performance: a calving interval of 386 days, and a 100-day in-calf rate of over 60%.

However, some cows still only exhibit a marginal degree of extra activity when in oestrus. So despite using the monitors, it can be questionable whether to serve cows or not; they could either be in heat, or could be pregnant and showing marginally increased activity rather than genuine signs of heat.

At Lazenby Moor Farm, where cows are showing marginal increased activity at 19-22 days post-service, the policy has been to serve them again.



However, Robert believes there is still scope for improvement and would like to further tighten the calving interval. He has been using milk progesterone testing for cows which are showing borderline levels of extra activity, to obtain a more reliable confirmation of oestrus.

It is already proving beneficial. For example, on one occasion Robert was faced with 12 cows which were either 18-24 days post-service and/or showing marginal heat activity. Did these need to be served, or not?

The milk progesterone tests showed that four cows had low levels of the hormone, indicating that they were bulling, and should be served. However, eight cows had high progesterone levels - so they were either in-calf or mid cycle, and definitely should not be served. At Jonathan's next fertility visit, pregnancy diagnosis of these eight cows showed five to be pregnant. In this case, milk testing had saved the cost of eight semen straws, and potentially averted abortions and extended calving intervals. (See panel for examples.)

Cows with marginal heat activity

Cow 2398

Progesterone tested at 21 days post-service as suspected return to heat. Test showed high progesterone indicating she was in-calf. She was not served. At fertility visit, she was confirmed PD-positive at 35 days.

Cow 2422

Progesterone tested at 23 days post-service following borderline activity spike - a suspected return to heat. Test results showed low progesterone: heat confirmed. Cow served.

Robert comments: 'Progesterone testing is proving a valuable tool, and becoming part of the routine here. It allows us to identify cows returning to heat that we would have previously missed.'



Heat detection - the big picture

Regular fertility visits help ensure that all cows return to cycling normally, thereby increasing the number of cows that can be served and ultimately, put back in-calf.

Fertility visits can vary from being weekly to monthly, depending on herd size and system. They provide the opportunity for the vet to examine cows and heifers to check they are pregnant and carrying a live calf. It's also an opportunity to investigate animals that aren't cycling normally or may have reproduction-related disease. In this way, calving index is kept in check on many farms.

Jonathan explains: 'It's estimated that modern Holstein cows may only show heat for 3-6 hours, and will mount others only once or twice per hour. So heat detection tools, used together with herd records, can be very beneficial in improving fertility.

Their use can also reduce the number of PD-negatives presented at a fertility visit. So this saves time. Pregnant cows will still need inspection to ensure they are carrying live calves, however more focus can then be given to proactive post-calving checks and other infertility issues.

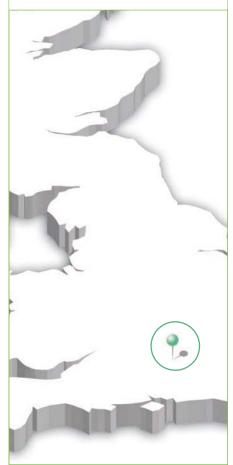
He adds: 'In order to express oestrus, cows need to be in a state of good health and nutrition. So it's also important to stand back and look at the big picture to remove detrimental factors such as poor nutrition, stress and lameness.'

Benefits of milk progesterone testing:

- Detect silent heats
- Prevent mistiming insemination
- Detect non-pregnant cows at day 19-24 after serving
- Helps improve PD-positive rates
- Prevent inseminating an already pregnant cow
- Be sure of calving date and start of dry period
- Investigate non-cycling cows
- Investigate poor fertility
- Use with other heat detection tools to remove false positives



Larkmead Veterinary Group



Veterinary Surgeon Adelle Isaacs

XLVets Practice Larkmead Veterinary Group



NEIL ROWE, FARMERS WEEKLY AWARDS BEEF FINALIST AND LARKMEAD VET **ADELLE ISAACS**

Attention to housing and health ensures beef unit efficiency on farm



One of the beef farmer finalists in the 2012 Farmers Weekly Awards was livestock manager Neil Rowe of Manor Farm near Abingdon in Oxfordshire.

Neil is responsible for two herds of Stabiliser cattle, owned by Cumber and Son. He manages the herd at Manor Farm himself, and oversees an organic herd 20 miles away. His vet, Adelle Isaacs of Larkmead Veterinary Practice helps Neil plan and manage the health and welfare of the two separate herds.

The beef unit based at Manor Farm was established in 2008. Central to its success have been the choice of the Stabiliser breed, proactive health planning, and the design of the cattle shed and handling facilities. The system requires only two hours of Neil's labour each day.

Building design benefits

When designing the shed, Neil knew what he wanted to achieve: 'The setup needed to have a low labour requirement, and provide a high welfare system for the herd.

'I wanted to keep it simple, but at the same time be technically efficient - allowing cows to perform physically, achieve a good financial performance, and at the same time minimise greenhouse gases.'

The design has been such a success that Neil now offers building consultancy on the system.

The shed holds 350 cattle, and its ventilation system allows both calves and cows to be housed under the one roof. Low energy fans,

26ft in diameter are suspended below the open roof ridge. They pull fresh air in from the outside and force it down. It meets rising warm air from the cattle, and the two pressurised air fronts then disperse straight out of the sides of the building. This enables the volume of air in the shed to be changed every five minutes. Fan speed is adjusted daily, at 8am and 5pm, according to the temperature forecast - this is important as they are capable of creating a 20°C wind chill!

This system has proven effective in preventing the spread of any respiratory diseases. Adelle explains: 'The cattle perform well and are always in good condition. In fact, we rarely sell any pneumonia drugs! And rarely get called out for emergency work either!'

The building is laid out with the handling passage on the inside, and cows in a series of pens with feeders on the outside. Neil explains: 'Cattle like to look around and see other cattle. It reduces stress and creates a calm atmosphere.'



Ventilation from overhead fans allows cattle of all ages to be housed under the one roof

Safer handling facility

The handling system is designed to both minimise stress and improve safety for man and beast. Adelle explains: 'Some farms make do with inadequate handling systems that can compromise operator safety significantly. However, grants are available to help with the capital costs of improving handling facilities. So any farmers concerned about the safety of livestock or people, should talk to their yet'

A recommendation in Neil's herd health plan helped him get funding for a squeeze-crush with a weigh cell. This piece of equipment has a calming effect on cattle, making handling safer. A neck scoop has been a simple addition which has improved safety when ear tagging.



Calendar - keeps health on track

As with all multiplier Stabiliser herds, a herd health planning document is a compulsory requirement. As is the monitoring for, and control of, infectious diseases. Both herds are registered on the SAC Premium Cattle Health Scheme and vaccinated for leptospirosis, IBR and BVD, and are also disease-monitored free of Johne's disease.

However, Manor Farm herd calves down in the autumn, whilst the herd at Rushall Farm calves over two months, starting in mid-January.

So with two different herds to manage and a series of vaccination control programmes, plus fertility visits, Adelle has created a calendar of the activities required through the year. This has been enlarged and is displayed in Neil's office, where it is regularly referred to. It has proven an invaluable management tool.

Adelle adds: 'Neil records when he's not followed the original plan. Then each year we review it and look at the reasons for the deviations, and make alterations if needed. It's got to work at a practical level.'



Fit cows and fit bulls

The aim is for heifers to reach 400kg at 12 months, be served at 15 months and calve at 23-24 months.

Stabiliser cattle have been bred to be highly efficient at converting forage into beef. Adelle explains: 'These heifers need to calve at two years of age, or they will get too fat.

Last year a few heifers were too small to serve at the ideal time, and it was decided to keep these and serve later. They calved down at 30 months, but the extended time empty allowed them to put on too much condition. This resulted in six difficult calvings, one required a caesarean, and a further three calves were born dead.

Neil says: 'We've decided that next time, we will finish the heifers instead of putting them in-calf.'

Adelle carries out a pre-breeding examination on the cows and heifers.

Around two weeks before the bull goes in, she palpates the ovaries and checks they are cycling. If they are not, then there is time to treat them and get them cycling again. After the service period, they are PD-ed.

The fertility of the farm's three bulls is also tested before each service period. In the past, this has prevented a sub-fertile bull from being run with the cows. The quality of the semen and libido of the bull, are used to assess the number of cows with which the bull is run. For the 9-week service period, the upper limit is considered to be fifty cows.

Adelle explains: 'It's important that the bulls have sufficient time to rest in-between the two herds. So this has dictated the dates of the calving blocks. Bulls are put in with the cows and heifers through Sept-October and from mid-January for 60 days.'



Planned health care

Herd health is not only proactive, it is planned well in advance. Neil explains: 'The health calendar sets the dates for Adelle's visits for the year ahead. And in our farm budget, we've split the vet costs into two. First, there are the known 'planned' costs - membership of the SAC Cattle Health Scheme, vaccines, and vet visits. Then there's a separate category for 'fire-brigade call-outs'.

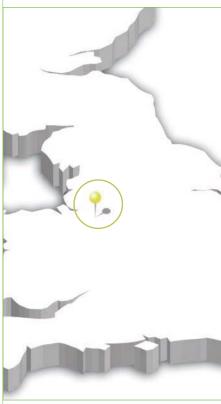
'I don't ever consider vets as 'drug dealers'. Instead, I'm buying their knowledge. Not only that, but I see these cattle every day, whereas Adelle brings a fresh pair of eyes to the unit each time she visits.'

10

Prize-winning herd of British Blondes en route to accredited health status



heshire beef farmers, Chris and Debbie Shenton, and son Mark and wife Kate, are setting out to demonstrate the good health of their prize-winning pedigree herd of British Blondes, of Bridge Farm, near Handforth. They have signed onto an accreditation scheme which will validate the disease-free status of their herd, and is hoped will further improve the appeal and value of their cattle.



Veterinary Surgeon Hollie Dale

XLVets Practice Wright & Morten Veterinary Surgeons





To help them do this, in April this year, they changed their vet practice and enlisted the services of XLVets' Wright and Morten Vet Practice. They are now getting support and advice from vet Hollie Dale, who is taking a proactive approach to ensuring all-round good herd health.

It's already been a significant year for the Shentons. For the first time, they entered their Bridge herd into the British Blonde Society's annual competition. And they were delighted when they won not only the Regional Herd of the Year competition in the Midlands, but also the National Large Herd, and National Herd of the Year.

Whilst the competition judges had been impressed with the productivity and uniformity of the cattle, these days prospective bull buyers also want to know about the disease status of a herd.

Chris Shenton explains: 'As a family, and also with encouragement from the Blonde Society, we wanted to take the herd forward and get health accreditation. We knew we would need some specialist veterinary back-up for the herd, and hence our move to Wright and Morten. Teamwork is a two-way process: Hollie has the experience and we trust her advice. And we also expect her to tell us when we need to do things differently!'

Herd management

The Bridge Blonde herd was established nearly 20 years ago and now numbers 60 breeding cows plus followers. The focus is on selecting animals for growth, temperament, fertility and longevity - the oldest cow (Lilac) is in-calf again at 18 years of age!

The herd is block-calved from January to March. The Shentons use a total of six bulls, with different bloodlines, which are used selectively on the cows and heifers. To ensure they are





not over-worked, and depending on their genetics, they may only be run with five cows or as a maximum, 18. When Hollie PD-ed the cows in May and October, all were in-calf.

There are rarely any calving difficulties, Chris adds: 'We don't often have to have help with calving, but we always call the vet out if we think we might have a problem, rather than waiting until we do have a problem. These cows are valuable, and so I don't worry about the vet cost.'

It has been a closed herd for the past five years, except for the buying in of new bulls. These are always purchased from herds which are certified as being disease-free for the key infectious cattle diseases.

Gaining disease-free accreditation

Hollie explains: 'The Shentons already manage the health of their herd very well. The whole herd is vaccinated against BVD, and calves are vaccinated against pneumonia.'

Hollie has registered the herd onto the SAC Premium Cattle Health Scheme which certifies the health status of herds for four key infectious cattle diseases: - BVD, Johne's disease, IBR and leptospirosis.

At Bridge Farm, the focus will initially be targeted on Johne's disease and BVD.

Although the herd had been vaccinated against BVD for the past seven years, the Scheme required further testing. Hollie explains: 'We blood-tested calves looking for the presence of BVD antibodies which







would have indicated the presence of persistently infected - PI - animals in the herd. These would then have had to be identified and culled. Fortunately the herd passed the first test with no evidence of antibodies. The second test will be undertaken next year and, provided that is also clear, the herd will be classified as a BVD-vaccinated-monitored herd.

The Shenton's cattle are kept in a number of fields away from the main holding. Although they have not found evidence of BVD in the herd, this makes it harder to monitor biosecurity across the boundaries. Nevertheless, they take a 'belt and braces' attitude, and the whole herd is vaccinated against BVD to be on the safe side.

Johne's disease is a wasting disease that takes several years to develop in an animal. So with most bulls being sold at 1-2 years of age, buyers often want assurance that they are not introducing an animal into the herd that could later develop the disease.

'There haven't been any problems with Johne's disease at Bridge Farm in the past. They have recently passed the first of three tests showing the herd is free from the disease.'

Hollie will annually blood-test all animals over two years of age. Once the third round of testing is clear, then the herd can be registered as Johne's disease-free.

After that, the plan is to then address IBR and leptospirosis. There is no history or evidence of either disease in the herd to-date.

Bridge Farm is in a TB area. Chris is often frustrated that this puts cattle sales at a disadvantage, despite the fact that his stock have always tested negative and are tested more frequently for the disease, than those in non-TB areas.

Trace element deficiencies?

Taking a holistic approach to health, Hollie has also suggested that the herd's nutritional status should be investigated and monitored on an ongoing basis.

She explains: 'The soil in this area tends to be deficient in the trace minerals - copper, selenium and iodine. So it's worth monitoring blood mineral levels to check the cattle are receiving adequate levels through their forages and feed, and deficiencies are not limiting performance.'

Blood-testing of calves earlier in the year had revealed slight deficiencies in selenium. This has been followed by blood sampling of several in-calf cows. Levels of selenium and copper have proven normal. 'If they had been low, I'd have recommended that adult cattle be given a mineral bolus with a sustained release,' adds Hollie. 'It's an area I intend to keep an eye on.'

It's been a memorable year. Triple wins in the breed society's annual competitions, new proactive veterinary care, and the start of the journey towards an accredited high health status for the herd.



Reducing lamb losses

Improving animal performance and reducing physical losses is key to ensuring sheep farming is profitable.

When financial margins are tight maximising ewe productivity is essential. The more live lambs they give birth to and rear, the greater the returns will be.

Yet recent data from a lambing project carried out in Wales suggest losses of around 10-25% between scanning ewes and the sale of their lambs. Generally, most occur during pregnancy or in the first week of life.

Farmers are often surprised to find out just how many lambs they do lose. This is partly because many are not visualised as dead animals, i.e. they either die inside the ewe, or are aborted as foetuses.

Infectious abortions continue to account for a significant percentage of losses on lowland farms. Weather is also an important factor - impacting on ewe condition leading up to lambing, and affecting lambs at birth.

Reducing lamb losses has to take various factors into account, including the farming system, ewe body condition, nutrition, health planning and stockmanship. The target is to optimise scanning percentage, i.e. the number of embryos created, and to minimise lamb losses up to the point of sale.

Why are losses occurring?

The first step is to look at and analyse farm records to understand what is happening now. Comparing scanning, lambing and rearing percentages between years, and with national benchmarks, highlights where problems occur and indicates where action is needed.



Photos kindly supplied by NADIS

Five key measures will indicate where the problems lie:

A Ewes tupped

The total number of ewes/ewe lambs put to the tup.

B Lambs scanned

Calculated from the results of pregnancy scanning.

C Lambing percentage

When compared to lambs scanned, this indicates how many lambs have been lost during pregnancy through absorption or abortion. When compared to the number of lambs born dead, it can highlight health problems such as underlying infectious abortion or nutritional deficiencies.

D Lambs turned out

When compared to lambs born, this shows how many lambs are lost during the first days of life. A fall in numbers could indicate underlying health problems, hygiene issues or problems with colostrum intake.



Katie Brian EBLEX Project Manager



E Rearing percentage

Comparing rearing percentage or lambs weaned/sold, to lambs turned out, gives an indication of mortality during the lambs' first few months. These are more likely to be related to health problems such as inadequate control of worms and infectious diseases. Rearing percentage is the number of lambs divided by the number of ewes put to the tup x 100.

Where ewes lamb outdoors 'lambing percentage' and 'lambs turned out' may be replaced by a figure for 'lambs tailed'. This is generally done a couple of weeks after lambing, but is still an important measure. The target for tailing could be based on the 'lambs turned out' figure 1.

		Lowland	Upland	Hill
Figure 1: Performance standards for different sheep farming systems	A Ewes tupped	100	100	100
	B Lambs scanned	195	175	116
	C Lambing percentage	183	166	112
	D Lambs turned out	172	156	104
stand ing sy	E Rearing percentage	168	151	100
ance : farmi	Lamb losses			
gure 1: Perform sheep	Scanning to birth (B-C)	12 (6%)	9 (5%)	4 (3%)
	Birth to turn-out (C-D)	11 (6%)	20 (6%)	8 (7%)
	Turn-out to weaning/sale (D-E)	4 (2%)	5 (3%)	4 (3%)
证	Birth to sale (C-E)	15 (8%)	15 (9%)	12 (10%)
	Scanning to sale (B-E)	27 (14%)	24 (14%)	16 (14%)

Improving output potential

Steps can be taken throughout the lamb production cycle to maximise the number of lambs produced. Ensuring ewes are at target body condition score at key stages ensures they are fit and robust, which will help.

Stress can increase losses, especially during early and mid-pregnancy, so handle ewes quietly at this time. Prolonged cold weather or limited grazing can also stress them at this critical time, and can cause embryo death.

The size of the lamb can be a reason for a loss - either too big or too small. This problem can be avoided through careful feeding pre-lambing.

Use body condition scores and the results of scanning at around 70 days to group ewes into similar batches. Pay special attention to those carrying triplets which require supplementary feeding sooner than those with twins or singles.

It is essential to analyse winter forages and ensure rations are balanced. Aim for a tight lambing period so most ewes have a similar feed requirement at the same time.

Underfeeding pregnant ewes can lead to them giving birth to light or sickly lambs. It can also reduce their milk yield which will reduce lamb growth rates and increase the risk of mastitis.

EBLEX recommends asking your vet to blood test a group of ten ewes, three to four weeks before lambing and ideally four hours after the last supplementary feed. The results will show the levels of beta-hydroxybutyrate (BOHB) and urea. This will show whether the animals are receiving enough energy and protein in their diet.

Give lambs the best start in life



Still-births are the biggest loss recorded at lambing. These can be due to infectious diseases, but many occur from difficult lambings through injuries, trauma or lack of oxygen.

Lambs that are poorly presented can become stuck inside the ewe and 'drown' before they make it out. High birthweights and disturbance levels increase the risk, as do high litter size and low supervision levels.

Mothering ability varies, but ewes in good condition, fed well and not disturbed in labour and just after, tend to be good mothers.

It is essential that lambs receive 50ml/kg of colostrum within the first four to six hours of life and continue to drink during the first 24 hours of life. Within this time a 5kg lamb should consume at least 1 litre of colostrum.



Studies show that many lambs, particularly triplets and small lambs, do not receive sufficient colostrum. If extra supplies are needed, colostrum from another ewe is ideal. Frozen cow's colostrum can be used but discuss the risks of anaemia with your vet.

Poor weather around lambing can cause significant problems, especially if wet, cold and windy. Lambs are unable to maintain

body temperature for long periods especially if colostrum intake has been insufficient.

The biggest causes of young lambs dying are exposure and starvation. Exposure leads to hypothermia, caused when a lamb loses heat quicker than it can produce it.

Starvation also leads to hypothermia - in essence this is a shortage of blood glucose in lambs over 12 hours old, which have none of the brown fat they were born with left, and no colostrum in their stomach.

Lambs that are suffering from hypothermia need assistance. Take their temperature before deciding a course of action to revive it.

In mild cases (37° - 39°C), dry the lamb, feed with a stomach tube and return to its mother. In severe cases, where the animal's temperature has dropped below 37°C, the lamb may need warming, as well as being stomach-tubed or given a glucose injection to get it going.

Case Study: Manor Farm

Shepherd Nick Smith of TP Gilman Ltd, Manor Farm, Tixover, Stamford.



4,300 mules 7,000 lambs: finishing all lambs off grass with creep; ewes are on fodder crops during the winter.

'We have tracked losses properly for the past five years using a bin system for all dead lambs wet or dry. Wet lambs are classified as those that are aborted, mummified or rotten and dry lambs are those that have been laid upon, wet mouth, starved etc.

In the past we have experienced quite a lot of abortion which we now vaccinate for.

But most of the wet lambs that die, or that have been born dead are very often put down to an abortion of some kind.

To identify at what stage we are losing lambs, and what age and type of ewes are losing them, we take records at five key events - when we scan the ewes, when they lamb, when we turn them out, while the lambs are in the field and finally at sale.

Analysis of the data highlights where the losses are occurring. For example we can pinpoint how many ewes are reabsorbing or aborting their foetuses from the number of lambs they give birth to. The number of deaths on the shed floor shows us how many ewes are giving birth to dead lambs or weak lambs. The birth to turnout figure highlights the numbers dying after birth perhaps due to poor colostrum intake or poor stockmanship in the lambing shed.

Having this information helps us allocate resources more effectively. If we don't lose any lambs in the field, then we know our flock health planning policy is working. But if most of the losses are happening in the lambing shed - then maybe investing in an extra pair of hands at lambing will be more than worthwhile.

Sometimes the information we collect makes dismal reading, but that is no reason to stick our heads in the sand. Having the figures means we can identify where we have to work harder, and most importantly when.'

There is much more information in the EBLEX Sheep BRP manual 14: Reducing lamb losses for Better Returns. Available online at www.eblex.org.uk or free by emailing brp@eblex.ahdb.org.uk or calling 0870 241 8829. Or in our Reducing Lamb Losses DVD, to view go to http://www.eblex.org.uk/returns/videos.aspx or email brp@eblex.ahdb.org.uk with your name and address for a hard copy.

FARMSKILLS



Sophie Throup FarmSkills Manager



GROWING FARM BUSINESS SUCCESS







FarmSkills on tour!

Environmental Mastitis workshops hit the road

Minimising disease and improving survival rates in stock is one of the most effective ways of controlling costs, reducing carbon footprint and improving cow productivity on farm. So when FarmSkills were asked to support the Arla Foods Milk Partnership and Kite with the delivery of 26 practical, business focused FarmSkills Environmental Mastitis workshops round the country to farmers from Penrith to Devon, we jumped at the chance.

As Matthew Pugh from Belmont Vets, and one of the FarmSkills trainers for this programme says: 'When farmers have to cull animals as a result of mastitis and rear additional stock to replace animals lost, they are not only increasing their carbon footprint, but also adding to their workload, pressure and costs. Through delivering this series of workshops for Arla, we hope that farmers will be able to understand mastitis more completely, and

pick up plenty of tips and good ideas to help improve their business.'

The workshops all run on farm from 11 am - 3pm. After a brief start to understand what attendees want to achieve from the day, the workshop moves round the host farm identifying key risk areas for dry cows, milking cows and their accommodation and in the milking parlour. Delegates are shown how to use a CMT kit to help test for mastitis at milking time, kindly donated by Boehringer Ingelheim and encouraged to monitor and measure mastitis statistics to help show where problems lie.

Farmer Lizzie Miles from Northallerton who attended a workshop on 19 November said:

I was interested to attend this workshop as the majority of mastitis cases within our herd are environmental. The course highlighted the importance of recording each case in detail in order to achieve a lowered rate of mastitis, as analysing the time in lactation cases occur most frequently can identify trends and offer reasons why some periods of time contain more mastitis than others e.g. Post-calving.

'I enjoyed looking round the host farm as it is always useful to see how other farms manage their herds and how they deal with mastitis. In the future I aim to lower mastitis cases within our herd by recording cases in greater detail, looking at milking cow management to lower rates along with the method cows are dried off and periods of time they are dry for.'

The workshops are running for Arla farmers from 19 November to the end of March 2013. If you are not an Arla farmer, but would like a workshop - or series of workshops - organised for you, please don't hesitate to get in touch with us at the FarmSkills office.





Controlling BVD

Controlling BVD has been on the agenda for many farmers for a number of years and as our Summer Livestock Matters issue showed, in addition to the compulsory testing programme in Scotland, plenty of regionally led programmes and initiatives have taken place.

However, a new DEFRA and EU funded RDPE delivery programme, managed by the AHDB and run by us here at XLVets, seeks to implement a co-ordinated campaign across England, working with vets in practice, and using materials developed by the Royal Veterinary College.

The new programme will seek to improve returns for beef and dairy farmers in England through knowledge transfer activities and targeted herd screening for BVD. Small, regionally based groups to control BVD will be established and spread across the country to help spread knowledge and understanding in as wide an area as possible. The learning and results from this programme will be used to contribute to the national BVD control strategy for England, being developed along with the project by the Cattle Health and Welfare Group for England and Wales.

Vet Jonathan Statham said: 'It is calculated that the impact of BVD can cost the average UK dairy farmer around 15-50%

reduction in farm income if left uncontrolled and cost the average beef farmer around \$37/cow/year i.e. 100 cow herd loses \$3,700/year or \$37,000 over 10 years. However, it's really hard to tell that BVD is in your herd as many of the side effects associated with the virus could be blamed on other factors. But by working together as a community, testing for BVD, assessing what impact the virus might have had to date and discussing with each other what steps can be taken, we can help stem these losses, improve animal health and welfare and hopefully increase profits too.'

To get involved in BVD control, please speak to your farm vet, or call us on 01765 608489.

STUDENT DIARY

Eva Kenny, Cork, Republic of Ireland

Third year student at The University of Nottingham, School of Veterinary Medicine and Science



Until the cows come home

For the last 12 weeks I have talked about cows, asked questions about cows, read about cows and written about cows until, well, the cows come home.

This is the nature of completing a third year research project; total immersion in your area of research, punctuated by bouts of panic when you fear that you do not have enough data, or enough time or enough information to possibly complete the task. I plagued farmers in both the UK and Ireland for their help completing a questionnaire. Every farmer that ever had the misfortune to cross my path was duly contacted and their help enlisted. The benefits of having a vast, enthusiastic extended family soon became apparent as, to their

enormous credit, questionnaires were soon being delivered to every farmer that ever had the misfortune to cross their paths also!

I'm sure the farmers might have been somewhat less enthusiastic with the extra paperwork and the broaching of the sensitive subject of cattle abortions. My study focused on the perception of cattle abortion and the uptake of abortion investigations by UK and Irish cattle farmers. The subject sparked my interest as I became increasingly aware that it was an issue that receives little attention compared with other afflictions of cattle.

Cattle industry profitability depends on a quick return to calf, which abortion directly threatens. Yet there is little concrete data regarding the long term implications of abortion on reproductive efficiency and success. The most logical place to start an investigation seemed to be with the people who are dealing with abortions, cattle farmers. I wanted to determine farmers' opinions on the matter and decipher what they thought the

current issues and problems were in relation to abortion and abortion investigation services.

This paved the way for my first visit to a cattle show in the UK, in an attempt to ambush as many farmers as possible and discuss their thoughts on the issue. Armed with 'Nottingham Vet School' branded pens and complimentary fluffy pink pig stickers, I was ready. The farmers I spoke to couldn't have been nicer and though many commented that it was a difficult topic they were still happy to sit down and have a chat about it. Though predictably most refused the fluffy pink pig, I can't imagine why...

Sadly my year of sharing tales of the life of a vet student has come to end but I have enjoyed it immensely. After Christmas, studies will continue in earnest with the commencement of 'Principles of Clinical Veterinary Science'. For now, I have placement booked and after writing a research project about them, I am looking forward to actually seeing some cows again.



STUDENT DIARY

Mark Challoner, Manley, Cheshire

Fifth year student, Liverpool University



So much more to know...

It feels quite strange to be writing the final of these articles. I wrote the first one in February before the start of the practical part of my course and I have now completed 20 weeks of rotations and only have one week of imaging (learning how to take and interpret x-rays and ultrasound scans) and three weeks of equine rotations left. I feel as if I have learnt a terrific amount in a very short space of time but there is always so much more to know.

Once our rotations are complete we then have an elective period when we spend an extra 4 weeks in an area of specialist interest. This can be done at the university or out at another practice. Having already spent a lot of my rotations in Finland I decided to stay in Liverpool and have unsurprisingly decided to do an extra four weeks in the farm animal department. Following the elective we then have time off to complete our weeks of seeing practice with local vets and revise for our final exams. Despite clinicians repeatedly talking about them and the questions we might face I am still doing my best to ignore them which I think I may have to stop doing sooner rather than later!

I have now completed my farm and small animal rotations. My farm animal rotations have so far been some of my favourite weeks. This term we learnt how to trim cows' feet with the farm department's foot trimmer and worked on a herd health plan for a local farm. I am currently doing my anaesthesia rotations. Last week was spent in the small animal hospital and this week I've moved across to the equine hospital. Both weeks have proved to be really interesting and good fun. We are responsible for making anaesthetic plans for the patients and have the freedom to choose which drugs to use as long as we can justify their use. We are encouraged to try as many of the different combinations as possible over the two weeks so we have experience of them and to help us make informed decisions in the future when there is no expert there to help us. The time spent monitoring the patient does however give the clinicians plenty of

time to grill you on all aspects of anaesthesia and the drugs you are using so they are quite intensive weeks! Our group also has to cover the nights and weekends so I'm on call two nights this week and over part of the weekend. Last week I had no call outs but on Monday we got called in for a colic surgery at 10:30 p.m., which went on until 1 a.m. Annoyingly my phone rang about 20 seconds after I had stepped into the shower, typical timing!

A lot of people in my year have recently been starring on the TV show 'Rolf's Animal Clinic', which has meant we have all been watching it with interest. I was away in Finland when most of the filming took place so managed to avoid being filmed and undoubtedly making a fool of myself! Both of my housemates have however appeared in the background and have seen some of their cases appear on the show. The programme has shown the vet

school in a good light and we have all been amused by the addition of dramatic music to the situations featured.

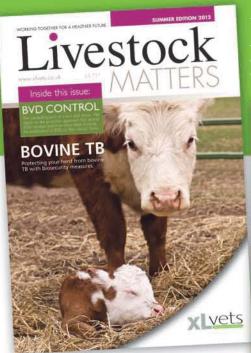
At home we recently scanned our sheep. Despite the current reports of poor lambing percentages we were very pleased to find that ours scanned at 195%, with my Texels also having a good scan at close to 200%. We also have fewer triplets than last year which will hopefully keep my dad happy (and a bit saner at lambing time!) My oldest ewe has however decided in her infinite wisdom to have triplets so we may end up have to help her out with some bottle feeding. I have been following the reports of low scanning percentages over the last couple of weeks with interest. Whether it has any links to the Schmallenberg virus still appears to be very much unknown and it will be interesting to see whether anything will be proven in the future. It seems at the moment the biggest problem is our lack of knowledge about the virus as it emerged so quickly and spread so rapidly across the country.

After four and a half years at university it feels strange to be so close to the end of the course which is both exciting and extremely scary. It is suddenly starting to feel very real that we will soon be the ones tackling cases on our own and making the final decisions! It will also be sad to finish as one of the parts of rotations that I enjoy the most is working with other people in our year. I doubt once I'm out in practice I'll have as much time and as many people to chat to! However I'm sure the challenges of my first vet job (as long as I can find one) will be rewarding and it will also be good to finally have the freedom to make the decisions. I'm also looking forward to earning some money again as the last time I had a chance to was my second year summer holiday, which seems like a long time ago.



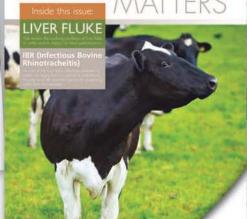
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