WORKING TOGETHER FOR A HEALTHIER FUTURE

SUMMER 2018

www.xlvets.co.uk

LIVESTOCK S3.75* Inside this issue:

Health and management

Managing calvings





BREAK FREE FROM BVD

Achieve BVD Free status for your herd.

Join the **BVDFree Scheme** today and help create a **BVDFree** England.

bvdfree.org.uk

CONTENTS

SUMMER 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.

XLVets member practices

608 Farm and Equine Veterinary Surgeons Allen and Partners Armour Veterinary Group Belmont Farm and Equine Vets Bishopton Veterinary Group Black Sheep Farm Health Cain Farm Vets Calweton Veterinary Group Calveloin Veterinary Croup Capontree Veterinary Centre Cliffe Veterinary Group Clyde Vets Donald S McGregor & Partners Dunnuir Veterinary Group Endell Veterinary Group Farm First Veterinary Services Farm Vet Solutions Friars Moor Veterinary Clinic Glenthorne Veterinary Group Hook Norton Veterinary Group Kingsway Veterinary Group Lambert, Leonard & May Larkmead Veterinary Group Midshire Veterinary Group Millcroft Veterinary Group Mount Vets Ltd Paragon Veterinary Group Parklands Veterinary Group Penbode Veterinary Group ProStock Vets Rosevean Veterinary Practice Scarsdale Veterinary Group Scott Mitchell Associates Shepton Veterinary Group Shropshire Farm Vets St Boniface Veterinary Clinic Synergy Farm Health Thrums Veterinary Group Torch Farms Vets Tyndale Vets Westmorland Veterinary Group Wright & Morten

© XLVet UK Ltd No part of this publication may be reproduced without prior permission of the publisher. **Disclaimer:** XLVets does not necessarily share the views of contributors. No responsibility can be accepted for opinions expressed by contributors, or claims made by advertisers within this publication.

THE EDITOR

Welcome to the 'Summer' issue of Livestock Matters

In this issue we learn how Dairy Vet of the Year – Tony Kemmish works with his farm clients to improve herd health, performance and profitability. Tony explains his GROW framework and how this translates to a better understanding of a farm's goals and priorities which leads to a better farmer/vet partnership.

We explore how one farming team has changed enterprises to ensure profit and efficiency by carefully selecting sheep and cattle breeds to suit the end market, and find out how they have worked with their vet to adopt grazing and worming strategies to minimise costs and maximise production.

We also hear from vet Hannah Griffiths, Mount Vets who feels that dairy farmers could gain a useful perspective on herd health and performance by looking outside of the dairy sector. There is a lot to be gained by standing back from a business and looking at another that is similar, but different - laying hen flocks.

We hope you enjoy this issue of Livestock Matters.

CANGre

Gemma Ayre Editor



CONTENTS

ANIMAL HEALTH

05 Taking a team approach and GROWing the dairy business

Tony Kemmish, St Boniface Veterinary Clinic outlines his GROW philosophy whilst working with dairy client Richard Daw, and explains how this has underpinned the continuous improvement in his herd's health, performance and profitability.

- 07 Focus on efficiency includes attention to breeds, grazing, and worm control Vet John Hemingway of Shropshire Farm Vets, explains how he works with farmer Andrew Crow to adopt grazing and worming strategies to minimise costs and maximise production.
- 09 A different perspective on dairy unit health and management Vet Hannah Griffiths of Mount Vets believes dairy farmers will get a useful perspective on herd health and performance by looking not just at other dairy units but also at poultry units.

11 A flock club is keeping farmers informed on management and health Millcroft Veterinary Group in Cumbria started up a flock club two years ago. Vet Laura Sloan explains how it runs and outlines some of the topics that have been covered.

FARMSKILLS

13 Managing calvings: when to intervene, what to do, and when to call the vet Synergy Farm Health vet Peter Siviter gives advice on when to intervene, and how best to ensure a successful result: a live cow and a live calf

15 Failure to dispose of PI animals hinders path to BVD eradication

Three XLVet members provide an update on BVD eradication in their area. They explain that although more farmers are testing and/or vaccinating their herds for BVD, where active infection is present then culprit animals need to be identified and culled immediately.

GRADUATE DIARY

18 Life as an island vet

Find out what our new graduate writers have been up to in their roles in XLVets practices since completing the XLVets farm graduate programme.

Invest wisely: Keep BVD out of your herd

When you next look to bring cattle into your herd, a simple way to protect your investment is to check the Bovine Viral Diarrhoea (BVD) status of the stock before purchase. Simply enter a tag number at bvdfree.org.uk to search the national database.

Introducing BVD into your herd either by bringing a virus positive persistently infected (PI) animal, infected bull or a pregnant cow which will carry a calf of unknown BVD status, into your herd can be costly. For herds with an underlying infection the impact per cow per year is approximately \pounds 40. However this can escalate if BVD is introduced into a herd initially free of the disease.

Within the dairy herd the greatest impacts are often noted as reduced fertility, with cows returning to service, aborting or having stillborn calves. For the beef herd the most notable impact is on calf health with cases of pneumonia, scours and increased calf mortality. These costs mount up in terms of production losses, the time and money needed to take action against the disease and the emotional toll of seeing persistently infected (PI) cattle culled.

Don't put your herd at risk. Protect your investment by checking the BVD status of any cattle you are looking to bring onto your farm.



BVDFree Herd Status Launches

Cattle herds which have tested negative for BVD for two years will qualify for BVDFree Test Negative Herd Status.

The new herd status launched in March is available to farmers who are registered with BVDFree England and have recorded two years of negative BVD testing under the scheme.

A veterinary declaration is required before the status can be awarded, giving the opportunity to review the herd health plan and on-farm biosecurity protocols.

Rethinking cattle performance 2018

XLVets, Zoetis and Volac are working with Farmers Weekly to deliver Rethinking Cattle Performance 2018, to help farmers take the next step in the journey of promoting healthier cattle and improving productivity.

The first workshop took place in May and focused on feeding milk to weaning, disease and vaccination.

Tim O'Sullivan, Shropshire Farm Vets explained that colostrum is a true "superfood" and needs to be treated accordingly. When fed correctly it can provide the calf with immunity to fight off disease challenges - three litres within the first three hours of life! The absorption of immunoglobulins drops significantly six hours after birth. Workshop two and three will be taking place in August and October respectively book early to ensure your place! https://www.fwi.co.uk/ms/events/rethinki ng-cattle-performance/





Cattle Lameness Academy Seminar

Reuben Newsome

The second Cattle Lameness Academy (CLA) seminar was held on 28th March in the Great Tythe Barn near Crewkerne, Somerset, with over 120 delegates attending including farmers, foot trimmers, vets and industry representatives.

This year, the seminar adopted fresh themes, inviting the younger and emerging



generation of foot health experts to present short, snappy, 15 minute talks.

After Dick Sibley opened the seminar with a "State of the Nation" address, the first session covered recent and ongoing research, with Reuben Newsome, Laura Randall, Sara Pedersen and Jonathan Huxtable keeping delegates up to date on the pathology associated with lameness and consequences for the cow and management, the direction of foot trimming research and possible roles of nutrition in digital dermatitis.

Before lunch, the second session brought vets and foot trimmers to the stage to discuss the practicalities of lameness management. Synergy Vet Tech Dave Phillips spoke of how the practice approaches lameness control and Ben Westaway (Tamar Hoofcare) described his approach as an independent trimmer. Gareth Foden (Synergy Farm Health) and Tom Wright (Lambert Leonard and May) also gave insights into their views on the matter, and entirely by chance the overriding



theme from this session was that a team approach, involving all relevant people, is essential to bring lameness under control.



After lunch, we looked to the future with Jo Speed explaining the role of the Register of Mobility Scorers (RoMS), John Remnant discussing antibiotic use in lameness, Nick Bell demonstrating the value of lying time data in lameness detection and George Oikonomou discussing the future of genetics in lameness prevention. These topics are vital for the future welfare, productivity and sustainability of our dairy systems.



Look out for a full update in the Autumn issue of Livestock Matters. Visit

http://www.cattlelamenessacademy.co.uk/ for further information.

Beef Expo 2018

XLVets once again attended Beef Expo 2018 at Shrewsbury Livestock Auction Centre on the 25th May. The event brings together the very best in British commercial and pedigree cattle, equipment, knowledgesharing, and show classes for everyone involved in the industry.





St Boniface 🛞 🕕 Veterinary Clinic



Veterinary surgeon	Tony Kemmish
XLVets practice	St Boniface Veterinary Clinic



Tony Kemmish, St Boniface Veterinary Clinic

Taking a team approach and **GROWing the dairy business**

As reported in the last issue of Livestock Matters, St Boniface vet Tony Kemmish has won the award for Dairy Vet of the Year in the 2018 CREAM Awards. Here, he outlines his GROW philosophy for working with dairy clients, and how for Devon farmer Richard Daw this has underpinned the continuous improvement in his herd's health, performance and profitability.

GROW

Dairy farming clients of St Boniface Veterinary Clinic in Crediton all benefit from working with their vet under a framework called GROW -Goals, Reality, Objectives and the Way forward

Tony explains: "As vets we need to understand our clients and their business aspirations. Different farms have different goals and priorities: understanding these is key to a successful farmer/vet partnership. From these, we can pull out some key objectives - these go into the Herd Health Plan which sets out the priorities and the targets - in writing.

"Being realistic is important too: we all have to be frank about the current situation - the good and the bad. As for the way forward, we need to keep checking that we are making progress, and ensure both parties stay motivated and inspired.

"I make no secret of the fact I want each partnership to be win:win. If the farm does well, then so will my own business. That's a fact, and I don't shy away from it."

Putting GROW into practice

Tony has been working with Richard Daw and his pedigree Lapford Holstein herd at Clotworthy Farm near Crediton, for the past 10 years.



The herd calves down all year with an autumn bias. During the main breeding period, Tony visits fortnightly to carry out routine fertility checks.



Richard explains: "During the summer when the cows are out at grass, instead of AI, an Angus sweeper bull is run with them. So the calves being born from the end of February will be Angus cross not Holstein."

Richard admits that before Tony came, the farm had something of a fire-engine philosophy. But now through working with Tony and his GROW approach, Richard has seen herd yield increase by around 100,000 litres each year over the past decade.

Some of this is due to herd number increasing from 180 to 250 cows. But significantly, changes in breeding policy have resulted in the calving interval shortening considerably from around 490 days to 415 days.

Richard explains: "We used to only serve cows once they were 100 days or more in milk. That way, our fertility rate was good and we didn't use so many semen straws. But on Tony's advice we are now serving cows from 40 days after calving.

"Milk production per annum has gone up from 7,500 litres per cow to 8,500 litres."

Tony adds: "Instead of having two milk peaks in a 1000 days, there are now three, plus a third calving.

"Consequently, there are more replacements coming through, and this gives Richard the flexibility to cull more cows, in particular for health and fertility reasons.

High health objective

IBR disease was one of the first issues addressed by Tony when he started working with Richard ten years ago.

While discussing the poor conception rate of a certain heifer, Richard had commented to Tony that it had a cloudy eye.

Tony says: "My first thought was: this could be IBR. And indeed, this was confirmed in tests of the bulk milk, and in blood samples taken from cows and heifers that had lost calves."

It highlighted a herd issue, and not just a problem animal. The herd is now vaccinated with an IBR marker vaccine. Thanks to this, and the culling of non-breeding animals, the herd is now testing free of the disease.

Tests for BVD and leptospirosis showed the herd was – and still is - free of both these contagious diseases.

Tony adds: "As for Johne's disease, a partial screening of the herd was carried out on 'suspect' animals – those with mastitis or poor performance. After prolonged discussion the two animals that tested positive were culled, even though there was a chance this one result was due to the inaccuracy of the test, rather than real disease presence."

Richard explains: "We are currently discussing the costs versus benefits of testing the whole herd for Johne's.

"Ultimately, the goal is to go for accreditation as a high health status herd which is clear of all four diseases. In the future, there is the potential for sales of youngstock, or maybe even embryos. So on top of better herd performance, having accreditation will be beneficial financially."

Breeding goals

Both Richard and Tony are very excited about genomics and new breeding

technologies, and the benefits they can bring. A first batch of heifers has already been genomically tested, and they are also considering embryo transfer as a fast track to boosting herd genetics.

Tony explains: "From the genomics results we can decide if a heifer should be inseminated with sexed Holstein semen, conventional Holstein or just put with the Angus bull. The very best heifers could be flushed to produce more eggs for use in embryo transfer, and heifers with poorer genomics can be identified and used as recipients."

Both agree that genomics is not just for breeding cattle for the show ring, but is hugely beneficial for commercial farmers too. Richard adds: "It can help us identify the animals with the best genes and improve our herd, picking the characteristics that suit our herd situation. The potential for acceleration is so great."



With more replacements coming through, Richard has more flexibility to cull cows with poor fertility.

However he is very realistic: "If there is nothing good enough to flush then we won't do it. But if we find gold, then we will. The long term goal is to have embryos for sale. Tony adds: "There is scope to go one step further and use 'ovum pick-up' technology which allows eggs to be harvested from juvenile heifers which are too young to serve."

Being realistic

Tony is keen to stress that every farmer has to be realistic about their farm situation, and says he sometimes has to have some very 'blunt' conversations with his clients.

"At Clotworthy Farm, calf health and management needs improvement," says Tony. "With more calves coming through, stocking density increased, and the original accommodation became inadequate."

The issue had been further highlighted when Richard signed up for the XLVets Calf Tracker service. The levels of total proteins in weekold calves were very variable, signalling inconsistencies in colostrum quality and/or delivery to the calf. So the service has been put on hold while Richard takes steps to tackle the root cause.

Richard explains: "As from January, calves are now reared away from the adult cattle, in an old grain storage shed down the road. Here, there is a concrete floor, and a forced ventilation system has been installed.

"It's further to take the milk, but everyone here bought into the idea. And once up there, then you do focus on the calves, which is beneficial. But ultimately we do need to put up a new calf shed.

"We will restart Calf Tracker again when the Holstein calves start coming through in July, and we have made the ventilation improvements and got management routines better established."

Tony explains: "Richard and I have always been realistic: there are a lot of things that can't change overnight. "We are genomically testing calves now, and expect to be breeding from them in about 12 months' time. So this gives us a target of one year to get the calf situation sorted."



While cows are at grass, a sweeper bull is used instead of AI

GRAZING AND WORMING







John Hemingway, Shropshire Farm Vets

Focus on efficiency includes attention to breeds, grazing and worm control

Shropshire farmer Andrew Crow has a clear focus on profit and efficiency at Cherrington Farm near Newport. He has swapped potato crops for cows, carefully selected sheep and cattle breeds to suit the end market, and adopted grazing and worming strategies to minimise costs and maximise production.

Vet John Hemingway of Shropshire Farm Vets is working closely with Andrew and his team: he provides practical veterinary input and also attends monthly management meetings to discuss farm issues and future plans.

Andrew explains: "Five years ago, the land had become tired, organic matter was dropping and our wheat and oilseed rape yields had reached a plateau.



Farmer Andrew Crow

"We already had sheep and a farm shop. So I decided to drop the potatoes and went into producing beef for the retail trade in a bid to 'try to make some money'."

Breed choices

In selecting a beef breed, Andrew knew what he wanted. He explains: "I chose the Stabiliser because it is an outdoor breed which will finish off grass, is easy to handle, and easy-calving. They certainly do grow well, and at a low cost."

Beef is marketed as Cherrington Farm grassfed beef in the farm shop's butchery in Shawbury. To ensure a supply of meat all year round, cows are bred to calve down in February/March, or September.

Andrew explains: "This means the same bulls can be used twice in a year. I'm getting 90-100 calves per bull per year. So I'm prepared to spend what's needed to get bulls with EBVs in the top 2% of the country."

The breed of sheep was also selected with the end in mind. Andrew explains: "We've had two different flocks of sheep for the past 6 years, but 18 months ago we decided to focus on just one breed: Zwartbles. We want plenty of lambs and with these we are achieving lambing percentages of around 190%. Lambing starts in the second week of April – it's all outside to keep costs low.

"A large carcase is also important. Ewes are put to a Meatlinc sire, and their offspring will



Andrew purposely chose the Stabiliser breed of cattle for its performance on grass and ease of management.

GRAZING AND WORMING

keep growing for two years. So they kill out at 55-60kg. Customers love the eating quality – the meat is darker and sweeter. We also do a good trade in mutton.



"Currently, we've 81 Zwartbles ewes and 170 Stabiliser cows/heifers. But to meet demand in the shop, our target is to build numbers to 150 breeding ewes and 300 cows."

John adds: "Andrew is very strict. Cattle must rear a calf every year else they are culled. In the sheep, we take an aggressive stance on lameness, and culling is used as a primary tool to keep the incidence minimal."

Andrew adds: "My long term plan is to go organic, but first we need to get on top of the grazing situation."

Grazing strategies

Fields are reseeded in a rotation of: wheat, rape, wheat, and then grass for three years.

"We have a variety of soils here – from light land which is ideal for outwintering, to fields with medium and heavy clays. So it spreads the effects of the climate!" says Andrew.

To improve the utilisation of the grass, Andrew has moved from a set-stocked system to paddock grazing – and is now benefitting from 40% better grass utilisation.



Water troughs will be moved every three years so supply pipes are laid above ground

Fields have permanent fencing around the perimeters with one electric strand. Once sown with a grass/clover ley mixture, each field is then divided into paddocks. Water pipes for troughs are laid down above ground so that they can be easily moved on after the three years. Grass height is measured weekly with a platemeter, and the grazing wedge is then calculated using a software program. With 50 paddocks, it takes half a day a week to do this, so it is an investment of time.

Andrew organises the grazing rotations so that the sheep (and lambs) always follow onto pasture where cattle have grazed. In this way, the cattle will have 'hoovered' up the sheep worms, reducing the worm burden in the pasture. When cattle are moved off, the paddocks are given three weeks before sheep are moved onto them. It will be 35 days before the cattle return to the same paddock.

From the beginning of August, fields will start being shut off so that they can be strip-grazed from early autumn. The last cut of silage will have been big baled and left in the fields to supplement the strip grazing over the winter. Any excess silage is sold.

Monitoring the worm population

Two years ago, Andrew began monitoring the worm populations in the different paddocks by collecting faecal samples for worm egg counts (FWECs).

Andrew explains: "We used to worm lambs every six weeks as a matter of routine. This was scheduled into the farm diary from the office, without any monitoring of egg counts.

"Nowadays, faecal samples are taken monthly, from different groups of sheep, throughout the main grass growing season. They are sent to Shropshire Farm Vets for egg counts.

"I reckon we are using 40% less wormer than we did before, as lambs are now only wormed if egg counts show a rising trend or sudden high worm burden. We discuss each result with John to determine what constitutes a high result for lambs at different points through the season."

John explains: "The portion of the worm lifecycle that is spent inside sheep is around 21 days. So, by testing monthly, it's possible to see when the egg counts start creeping up, so that sheep can be drenched before big losses occur.

"Not only is Andrew saving money by cutting out some wormer doses, it's reducing the number of times sheep are gathered and time is spent handling them. Lameness is not a big problem here, but whenever sheep are brought together in a confined space, it's an opportunity for footrot and contagious foot diseases to spread.

"Last year, we saw a spike in egg numbers at the end of August. This is always a danger period as the number of larvae on the pasture is generally at its highest, and that year there was a period of warm and wet weather in August. Warm, humid conditions accelerate the maturation of parasite larvae on the pasture, quickening the worm life-cycle and increasing infection pressure on the lambs. Hence it is important to keep monitoring FWECs for as long as the ambient temperatures remain warm, which could be as late as October, or even early November."

Drenching strategies

John explains: "Historically, Andrew's sheep would be wormed with a long-acting clear drench – because its sustained duration of action meant less treatments were needed.

"However, it's been found that these long-acting products are good catalysts for resistance development. And the livestock/sheep industry is being advised to move away from using these products."

Another important management practice to prolong drench efficacy and prevent resistant worm populations developing, is to avoid dosing sheep and moving them on the same day. John explains: "This gives sheep time to pick up susceptible worms off the pasture and ensures that when they are moved on they are not carrying 100% resistant worms onto new 'clean' pasture. This will reduce the resistance pressure on that pasture.

"But the quickest way to get wormer resistance on a farm is simply to buy it in. Any new sheep being brought onto the farm need to be dosed with a knock-out drench – an orange drench – for which there is little known worm resistance."

John advises: "Monitoring faecal egg counts is good practice – it may show that less drench treatments are needed through the season, and it can also highlight where a drench has become ineffective due to resistant worm populations. Farmers should contact their vet practice and talk to their vet or SQP to establish a worm control strategy tailored to their farm."



lohn provides practical veterinary input and also attends the farm's monthly management meetings



Veterinary surgeon Hannah Griffiths
XLVets practice Mount Vets



Hannah Griffiths, Mount Vets

A different perspective on dairy unit health and management

There's often much to be gained by standing back from a business and looking at another that is similar, but different. This comparison may highlight aspects that would be beneficial to adopt. Vet Hannah Griffiths of Mount Vets believes dairy farmers will get a useful perspective on herd health and performance by looking not just at other dairy units but also at poultry units – in particular, laying hen flocks.



Hannah explains: "There are quite a lot of similarities between laying hens and milking cows. Their production curves are similar egg output/milk yields both rise to a peak, and then gradually fall away again over a similar timescale.

"Factors such as care of the young, nutrition, health, hygiene, and management all influence the height and slope of those production curves."

Longstanding clients of Mount Vets who keep both poultry and cows are Sally and Adrian McArdle: they run a 350-cow organic herd which calves all year round, and an 8,200 laying hen unit also under an organic system, near Honiton in Devon.

"The extra challenge for Sally is that her enterprises are organic, so she can't prop up management with medicines," says Hannah. "She has been copying many of the standard poultry practices across to their dairy herd, and seen improved health and production as a result."



Hygiene measures

Both young birds and young animals are particularly susceptible to disease from the environment.

Hannah explains: "Before day-old chicks are brought into a rearing shed, it is cleaned out, washed with detergent, and then disinfected. Birds are reared on deep litter bedding, and water and feed are always freely accessible, and available from the start.

"A chick needs to drink and eat safely and effectively so as to get 100% crop-fill in the first 24 hours.

"Staff looking after the chicks will be using foot dips and have a change of boots and coveralls. There will be a dirty area for external clothing and footwear, and they will only enter the chick shed wearing boots that are kept there for that purpose. When they leave, they will leave that set of boots and coveralls behind."



Staff have separate clothes specifically for wearing inside the poultry sheds

"At Sally's dairy unit, there is a footdip outside the calf shed, and calves are looked after by someone whose role is specifically to look after only the calves, and so has no contact with the adult herd.

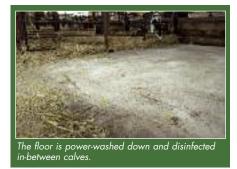
"Hygiene at turnaround is vital to prevent diseases like cryptosporidiosis in calves, and coccidiosis which can occur in birds, calves and lambs."

POULTRY

The eggs of both parasites – oocysts – can remain viable in the environment and go on to cause disease. So both physical and chemical cleaning is needed.

Hannah explains: "For pullets, there is a coccidiosis vaccine which stimulates immunity. However, for calves, there are no effective vaccine treatments. The coccidial and cryptosporidial oocysts persist in the environment, and so the only preventative option is disinfection. However, there are very limited options for organic farmers.

"So, Sally has made a concerted effort to improve hygiene conditions in the calving area.



"The floor is power-washed down and disinfected in-between calves. Pens have good drainage and are kept bedded up with clean straw. Attention has also been given to good colostrum management to ensure calves have good immuno-competence to help combat disease pressures."

Sally explains: "There are definitely a number of lessons we have learned on biosecurity from the poultry unit, such as the foot dip at the entrance to the shed. But in practice it is very hard to improve biosecurity as much as I would like as the herd calves all year around and the shed is never empty. So we don't get the option to clean it in the same way as the layer sheds."



Foot dips can be found outside both the calf shed and poultry sheds.

Disease prevention

Hannah says: "For birds in large numbers in a confined space, then ventilation and clean air are critical. In a moist environment the ammonia builds up and is very detrimental to respiratory health.

"Poultry farmers take a very precise approach to ensuring good air quality: establishing the size of fans needed for ventilation based on the volume of clean air and available outlets.

"In calf sheds, there isn't the stack effect that occurs in cow sheds as there isn't the body heat to make it work. Thus many calf rearing units now have mechanical ventilation to help in this regard.

"Good ventilation and vaccination are both key to reducing challenge and the use of antibiotics," says Hannah.

"Sally's pullets have a comprehensive programme of vaccination as they are free range and may encounter disease from the wild bird population.

Hannah explains: "To prevent respiratory diseases in the calves, we have done diagnostic testing to identify the causes so we can select the appropriate vaccines.

"The health and management of youngstock has a massive impact on how they perform in adult life. Both enterprises have target weights for poults and calves at key stages to ensure growth is on track."

Dairy plans

At the dairy unit, the decision has been made to invest in a new parlour, new cubicles and new dry cow accommodation.

Sally explains: "We had an issue with scours a number of years ago and hence have replicated the cleaning process in the poultry sheds to the calving pens – this includes moving the pens to a different building and pressure washing and disinfecting them. In practice this is not easy to do every year. But it did have a considerable impact on calf health and is something that we hope to factor in with our new cattle accommodation."

Installing a separate calving pen is also under discussion. Hannah explains: "A cow would calve onto rubber matting which can be washed down in-between calvings, thereby reducing risks: of navel ill for the calf, and mastitis for the cow. It's essential that cows resume eating again quickly post-calving to reduce the risk of negative energy balance. Having a separate calving pen would enable the cow to be individually fed and her feed intake monitored. Also, she could be milked and her calf given her colostrum – quickly and efficiently."

Poultry practices

"The egg-laying enterprise is a commercial and organic business. In order for it to work, Sally has to have high standards of management throughout. She makes sure to minimise stresses for the birds, ensures there is adequate provision of clean water and feed – both of good quality, and that ventilation is adequate for good air quality.

"All these elements are routine for poultry farmers, but can often get overlooked on dairy farms."



"Laying hen flocks are reared for 16 weeks, receive appropriate vaccinations and have growth rates monitored. Ensuring that the rearing stage is successful goes a long way to ensuring good consistent egg production. The same is true for dairy herds.

"In adult life, the nutrition and management of hens affects the egg production curves of the flock. The same is true for dairy herds.

"In fact, dairy farmers may find they have a lot more in common with egg producers than they first thought!"

Biosecurity

"Tight biosecurity on poultry units is a given: it prevents disease being brought into the unit on people's clothes or equipment. Again, adopting some of the same practices would be beneficial on dairy units."







Veterinary surgeon Laura Sloan

XLVets practice

Millcroft Veterinary Group



Laura Sloan, Millcroft Veterinary Group

A flock club is keeping farmers informed on management and health

More and more vet practices are creating discussion groups and clubs to give sheep and beef farmers the opportunities to refresh their livestock knowledge and skills. These also help keep farmers informed on any industry changes which may impact on the management of livestock health and performance.

Millcroft Veterinary Group in Cumbria started up a flock club two years ago. Here, vet Laura Sloan explains how it runs and outlines some of the topics that have been covered.

Flock Club

Laura explains: "The livestock industry is continuously evolving – there are always new regulations and policies, new diseases, and new angles on old problems.

"Dairy farmers will see their vet routinely, but for sheep and beef farmers there are few times in the year when there's a chance to chat to a vet and keep abreast of developments.

"We set up our own Flock Club here at Millcroft, in response to our more pro-active sheep farming clients wanting to engage more formally with their vet practice. We invited all our commercial sheep farming clients to join for a nominal fee. In our first year we had a flock club of around 20 people drawn from 9 farming businesses. This year a further three farms have joined and we now have a stable group of farmers who have become comfortable about opening up and discussing any problems they might have. "There's quite a diversity of farms within the group with ewe numbers ranging from 90 to 1200," says Laura. "And we can have both the older and younger generations attending from the same farm. So we always start out with the basics on a subject, and then go into more advanced detail, so everyone can gain some new knowledge or skill."

Meetings are held in the evenings, roughly every other month, with a break around lambing time.

"Each meeting starts with some time for informal chatting," explains Laura. "Usually there are several Millcroft vets attending, and also some of our farm receptionists who like to come and meet the farmers too."

Topics that have been discussed include: controlling lameness, fluke and coccidiosis, lamb grading, preparations for lambing - ewe nutrition and tup testing. Several meetings have covered disease prevention and reducing medicines usage.



Millcroft's Flock Club meetings cover a wide range of topics.

FLOCK CLUB

Practical skills

"One of the best meetings we have run so far – according to those who attended - was on lamb grading. As vets, we realised we weren't bestplaced to lead this meeting and so we invited the AHDB to come along and bring some experts.

"It was a very practical session: one of the farmers brought some lambs. We were shown that as well as running hands down the backline of a sheep, there are some more subtle techniques that can be used to evaluate when lambs are ready for slaughter. Everyone had a hands-on go at grading.

"We'd like to do some more practical sessions like this. A look at a few post-mortems would be good, but the opportunity – i.e a freshly dead animal that day - has not yet presented itself!

Data recording

"Now the club has been going a while, and members have built up some trust in sharing their experiences, we would like farmers to carry out some benchmarking. Due to the small group and different farm systems, it will be difficult to meaningfully compare performance between farms. However, every farmer can measure their flock's performance and compare it against previous years.

"For instance, by classifying lamb deaths in the first 48 hours of life, pre-weaning or preselling/joining the flock, we can obtain an idea of the most likely causes of the losses. Unlike with calves, lambs deaths often fall under the radar.

"Most of the useful data to record does need to be done at the busiest times! But by recording lamb deaths not just scanning percentages we can show where improvements can be made, sometimes just making small tweaks to the system.



Preventing disease

"Encouraging farmers to adopt policies which help prevent diseases from occurring in the first place is always one of our aims.

"Antimicrobial resistance threatens the achievements of modern medicine. If populations of resistant bacteria are allowed to develop then antibiotics will stop being effective. Then, for instance, when any person goes into a hospital for a routine surgical operation, it's going to be a lot more difficult to ensure they come out in good health.

"Farmers need to be asking us to help investigate and identify the cause of a problem. This helps ensure treatments are targeted, rather than being blanket treatments – so reducing the usage of antibiotics and medicines in general. "Similarly, there are benefits in checking ewes' body condition at handling points throughout the year, and in metabolic profiling in the 4-6 week run-up to lambing. The results may flag up a nutritional shortfall or parasite infection, or simply give the reassurance that everything is all right!

"Having evves in the right energy status means their lambs will have good vigour and colostrum will be of sufficient quality and quantity.



"Enzootic abortions were discussed at one club meeting: they account for just over one half of abortions in sheep. It's a zoonotic disease and so blanket treatment is justified in the face of an outbreak. But then control measures also need to be put into place.

"It's not acceptable to keep treating it when there is a vaccine available. A ewe only needs to be given it once, and then she is covered for life. So although the first year of the vaccine programme might be expensive, the second year will be cheaper than treating for the disease with antibiotics.

"There was some lively debate on the subject of preventing joint ill and watery mouth in neonatal lambs. There are always the high risk cases, e.g. triplets or lambs born outdoors in bad weather. But there's often not the need to treat every lamb.

"Every farm has different bugs which will respond differently to different medicines. It's vital that farmers get some diagnosis on the bacteria found on their farm. We can check the sensitivity of antibiotics by culturing samples of bugs. The lab report will then justify any medicine usage."

Pre-breeding checks

Pre-breeding preparations have also been discussed at Flock Club meetings. Up to 30% of tups are subfertile, so they get fewer ewes in lamb and take longer to do so. Hence tup testing is always advisable. "A good objective way of assessing colostrum delivery to lambs is to measure the total protein levels in their blood in the first week of life. However, it's usually not practical for sheep farmers as vets aren't routinely on the farm, unlike dairy units. But having discussed it at the meeting, the members are now aware it's an option."

Future plans

"At Millcroft, we are thinking about offering different packages to our sheep farming clients, which will incorporate Flock Health Plans and membership of the Flock Club.

"Then, as more farms come into the Flock Club, we may split it so that farms in each group are more comparable, and benchmarking between farms can be more useful.

"Vet-led farmer discussion groups – like our flock club – enable us to get a better understanding of our clients' businesses, as well as helping farmers to be more knowledgeable on aspects of flock health and performance, and what help their vet can give them. They also give us vets the opportunity to hear about a health problem which may seem a small issue to the farmer but is actually the tip of the iceberg. Learning of it at an early stage gives us time to act.

"We'd always much rather be working with a client to prevent a disease than have it impeding the maximum productivity that together we can achieve," adds Laura.





Veterinary surgeon Peter Siviter

XLVets practice

Synergy Farm Health



Peter Siviter, Synergy Farm Health

Managing calvings: when to intervene, what to do, and when to call the vet

How long should you leave a cow or heifer to calve by herself? What should you do to help her? And when do you call the vet? Here, Synergy Farm Health vet Peter Siviter gives advice on when to intervene, and how best to ensure a successful result: a live cow and a live calf.

When to intervene

Peter explains: "The lead up to calving – when the cow has her tail up with some discharge can take up to 24 hours. But the actual calving process should take no longer than four hours for heifers, and two hours for cows.

"Intervention is only needed if something about the cow looks 'abnormal'. For instance, if the animal has been trying to calve for longer than 'normal', or if the discharge is bloody, or if the calf is malpresented. Another reason to intervene is if the cow is showing signs of real physical pain – bellowing and sweating."



If a cow has been trying to calve for more than two hours, it's time to intervene.

Giving assistance

"The first action is to check the situation inside the cow by putting in a clean hand – ideally gloved, or scrubbed with disinfectant - along with plenty of lube.

"If the calf is correctly presented, but the cow has been straining for longer than normal, then calving ropes will be needed to help bring the calf out. They should be used along with plenty of lube, applied directly into the birth canal.

"Putting ropes onto the head as well as the legs, will bring the head forward and give more leverage. Head ropes are perfectly safe for the calf, provided they go behind the ears and in the mouth over the tongue. Calvings are easier and quicker with three ropes – correctly attached.

"It's important to maintain a steady and gentle traction on these ropes – this is made easier by having handles on them, and this also prevents rope burn.

"The force that a cow generates to expel the calf is equivalent to two strong adults pulling on a calf. So any human force above that is dangerous.

"Also, be mindful of the direction of pulling – the calf needs to come up and out over the hump of the pelvic rim.

"When you are totally absorbed in calving, it's easy to lose track of time. So if after 15-20 minutes of applying steady gentle traction, at the correct angle, and there's no progress, then change your strategy. This might be to call the vet. But, importantly, the solution is not to apply more pressure!

"Most interventions are to disentangle a calf, and only a minority of cows will need a calving aid.

"A calving aid is just that: an aid. It is not a winch. It is not a jack. Using it correctly is a practical skill that needs to be taught....by someone who has been trained.

"Misuse of a calving aid is not only very painful for the cow, but can cause long term physical damage. Putting undue pressure squashes nerves against the pelvic bone and can result in paralysis. The cow will go down, as she can't support herself on her back legs. She might hobble then recover, or she might not.

"Misuse can also result in tears in the vagina and bleeding. This is not only a welfare issue but will lead to infection and ultimately infertility from the scarring. And in extreme cases, the pelvis can be broken.

"So any damage done at this time is just storing up problems for the future.

"It's also important to remember that a difficult calving is a painful experience for the dam," says Peter. "So if intervention is needed, then pain relief will need to be administered to aid her recovery."

Tool kit for calving

- Arm length gloves or disinfectant scrub
- Lube lots!
- Three ropes (two feet + one head)
- Rope handles
- Calving aid
- Pain relief (anti-inflammatories/NSAIDs)
- Calcium bottles to treat milk fever

Calling the vet

"How do we know if a calf is too big? If it is correctly presented, and two adults are pulling on ropes and it's not coming out...then it's too big. Other clues are: if it has large feet, or if the legs will only come out as far as the first joint. In all these cases, the vet needs to be called straightaway. Don't battle on! The sooner the decision to carry out a Caesarean is made, the better the outcome for both cow and calf.

"Extended calvings can also occur when the dam is over-conditioned and there is less room for the calf to pass down the birth canal. An indication of this is when a calf is presented normally but its legs are crossed. Apply the basic principles – ensure correct presentation, add plenty of lubricant, apply steady gentle pressure - but be aware that veterinary assistance may be needed.

"Another cause of prolonged calvings is uterine inertia: the cow appears to be normal but nothing is happening. Calving ropes and plenty of lube will be needed to bring out the calf. The root cause is usually milk fever, so calcium may also need to be administered.

"If you ever feel out of your depth with a difficult calving, then always call the vet – some telephone advice may be enough to help you sort it."

Calving protocols

"It's beneficial to have your vet draw up a written protocol for calving: this will include guidance on intervention, and can be especially useful where there are several members of staff on the farm.

"When stepping in to assist a calving, success is down to having the right approach and the right technique. It's really important to work within your own competence and experience. For anything outside of this, call the vet! And that's not just so they can bring more muscle to the scene! We can provide the expert advice, and be there to operate if needed."

Practical skills

"The big challenge when putting your hand into a cow is the fact that you can't see the calf. You have to rely on what your hands are feeling, make sense of it, and then reposition the calf's limbs in what is a very tight space. It's a skill that improves with experience, but practical training can accelerate this," says Peter.

Courses on managing calving are run by XLVets practices through FarmSkills. Delegates learn more about a cow's anatomy, how to manipulate a calf inside a cow, plus how to correctly assist the calving.

Peter explains: "We run a course here at Synergy designed to give delegates the practical skills to efficiently and safely deliver calves. The course attracts complete novices as well as those looking to refresh their skills. "Like several XLVets practices, we have built our own calving simulator and delegates can practice delivering Colin the Calf!"

To find dates and locations of courses, visit www.farmskills.co.uk

Peter's top tips

- Have a calving protocol
- Always apply lots of lube
- Use head ropes as well as leg ropes
- Re-assess strategy after 20 minutes
- Administer pain relief



Having to rely only on what can be fe



Note the handles on the calving ropes.

"A difficult calving is a painful experience. So if intervention is needed, then pain relief will also be needed to aid her recovery."

Failure to dispose of PI animals hinders path to BVD eradication



Veterinary surgeon Ed Hewitt
XLVets practice Armour Veterinary Group



Veterinary surgeon Simon Allen XLVets practice Allen & Partners

Veterinary surgeon	Matthew Pugh
XLVets practice	Belmont Farm and Equine Vets

Ed Hewitt, Armour Veterinary Group; Simon Allen, Allen and Partners; Matthew Pugh, Belmont Farm and Equine Vets.

The key to eradicating BVD from the UK is to remove all PI (persistently infected) animals and instigate strict biosecurity protocols to prevent its re-introduction in animals purchased from abroad.

However, as three vets from Scotland, England and Wales explain, although more farmers are testing and/or vaccinating their herds for BVD, where active infection is present then culprit animals need to be identified and culled immediately.

"Compared to some other diseases, eradicating BVD from a herd is quite simple and straightforward, and can be achieved in 2-3 years," says Ed Hewitt of Armour Veterinary Group in Ayrshire. "Scotland will most likely be the first region of the UK to be BVD-free. Here it is illegal to knowingly sell a PI animal, unless it is going to slaughter."

PI disposal essential

Ed warns: "Keeping a PI animal on the farm once it has been identified is a false economy.

"Some farmers will keep and rear a PI calf to try and make some money from it. But there's no benefit in doing this. It will be shedding the BVD virus and suppressing the immune system of its fellow animals.

"On farms where a PI presence has been removed, massive improvements in calf health are seen – with less respiratory disease and less calf scour.

"And by keeping a PI animal in the herd, there's always the risk it will come into contact with pregnant cows – yours or the neighbour's - and consequently their calves will be born PI and shed the virus all their lives.

"If a PI calf is identified, then it's essential to also test its dam, and cull them as well, if they test positive.

"So the advice is: get rid of any Pl animal as soon as it is found. Don't try fattening it up either, because if it develops mucosal disease then you will also have wasted time and feed. Just call the knackerman!"

BVD databases

Ed adds: "Anyone can find out the BVD status of an animal or holding in Scotland on www.scoteid.com. The database is available to all. Here at Armour Veterinary Group, we encourage our clients to use it to confirm the status of animals they may be purchasing.

"There are 287 'suspect' Pls in Scotland across 115 holdings."

In England, a voluntary scheme is in operation, supported by various industry bodies including

XLVets. English cattle farmers can sign up to the BVDFree initiative, and have their herd certified BVD-free after two years of clear tests. So the status of some (but not all) herds and individuals can be checked at www.bvdfree.org.uk

Screening for BVD in Scotland

In Scotland, between 5 and 10 animals (depending on herd type) from each management group in a herd are screened for BVD-antibody. All year round calving herds have to test every six months. Where no antibodies are found, this indicates no exposure to the virus, and the herd is denoted as BVD-negative. Where a herd tests positive for BVD antibodies then the status is 'not negative', and the farm must investigate further to identify the reason for the breakdown.

A whole year's worth of calves can also be tested for antigen, either via blood test or tissue tag, in order to attain a negative status.

Animals from a not-negative herd cannot be traded unless going direct to slaughter or unless they have an individual negative animal status as a result of a blood test or a tissue tag.

When Scottish farms buy in an animal of unknown BVD status then individual tests will be needed to maintain BVD-negative status.

BVD CASE STUDY

Vaccination - not the total answer

Simon Allen of Allen and Partners in Carmarthenshire explains: "Vaccination does not stop a PI animal from being Persistently Infected, nor does it stop them shedding the virus. However, vaccination does give some protection against the performance-depressing effects of the virus if it is encountered by a non-PI animal.

"Some farmers have been relying on vaccination to protect their herd, but the key is not to have PI animals present at all.

"When BVD is present in a herd it is a 'dynamic' process – it's important to find the source of the virus, so measures can be taken appropriately. A non-PI animal can suffer a transient infection and will infect other animals in that time.

"80% of new PIs are calves born from transiently infected dams. This highlights the importance of vaccinating before pregnancy.

"An in-calf heifer or cow can test negative but its offspring may still be a PI," explains Simon. "The only way of knowing if the pregnant animal is a 'Trojan horse' is to test the calf when it is born. "Farmers also need to be aware that a vaccine takes about four weeks to become effective, so a whole new crop of PI animals could be created in that time."

Investigate!

"Every farmer needs to assume his herd may have BVD, until its proven otherwise," says Matt Pugh of Belmont Farm & Equine Vets in Herefordshire. "That includes small herds and cattle on smallholdings, as well as large commercial units.

"On farms with a cattle population which is totally naïve to BVD, an outbreak of the disease can be quite dramatic.

"However more often it's the case that BVD has been grumbling along in the background for some time in the herd, creating more niggles with poorer health and performance than expected. If performance is not being recorded and benchmarked, then it may not even be noticed.

"A classic example is calf pneumonia: has it always been a problem on the farm? Why? Could the presence of PI animals be depressing the immunity of their penmates and increasing their susceptibility to respiratory disease?

"Farmers can help themselves by working with their vet to investigate the causes of poor performance or poor health.

"The starting point for any farm is to do antibody screenings from samples of animals in different management groups of 9-18 months. Then we can look at the farm's purchase policy and biosecurity.

"There is, of course, a cost to eradicating BVD on a farm. There are direct costs: vet time, blood tests, Tag and Test ear tags and the loss of production from PI animals which have had to be culled.

"However, compare this to the indirect and long-term costs of leaving PI animals on the farm: poorer fertility, respiratory disease, scours in calves, and general immuno-suppression of animals encountering the virus – potentially more mastitis, secondary infections, etc. All of which ultimately increase vet and medicine costs!"



Voluntary BVD screening in Wales

In Wales, a three year voluntary screening scheme - Gwaredu BVD - started last autumn supported by EU funding. The testing is done, for free, at the same time as vets are on-farm doing TB check tests.

It involves blood-sampling five unvaccinated youngstock of between 9 and 18 months of age to test for presence of BVD antibodies.

Simon explains: "Calves are bled on the first day, and we get the results back the next day. What happens next is then a discussion between the vet and farmer. If there is evidence of infection then there is up to $\pounds500$ available to implement a PI hunt. But we have to be sure there is active infection – so at least two of every five animals needs to have tested positive. False positives can occur so if it's only one animal then we may decide just to monitor for the disease."

In the Gwaredu BVD scheme's first five months over 3,000 herds were tested and of these, more than 25% tested positive.

Simon adds: "This is in line with our practice's experience: since October 2017 we have tested 33 herds, and nine had BVD antibodies indicating exposure to a PI animal."

Dynamics of BVD disease require a strategic approach for control

Worcestershire farmer Richard Coleman knew about BVD and always sourced bulls for his suckler herd from High Health status farms. But he had never tested his own herd for it.



Farmer Richard Coleman

Richard farms with his wife Sarah, and son Henry at Sponend Farm, near Ledbury. The 40 cow Simmental-cross suckler herd is not the main enterprise and priority has always been given to the laying hen unit and sheep flock.

Richard admits: "The cattle always came third in the pecking order and we had slipped into bad habits. Cow fertility had decreased and led to protracted calving blocks - in spring and autumn."

When their farm vet retired at the end of 2016, the Colemans moved over to using the services of Belmont Vets, and began to receive a proactive approach from vet Matt Pugh.

Heifer screening

One of Matt's first recommendations when discussing the herd's fertility was to blood-test the yearling animals for BVD.

Matt explains: "Testing this group will show what the health status of the whole herd is like. Tests were carried out on 10 of the 15 heifers, and one animal showed a high antibody titre to BVD. We waited three weeks and then retested the whole group.

"Heifers that had previously been antibody negative were now antibody positive, indicating they had recently been challenged by the BVD virus. This is known as transient infection. It can occur through contact with an animal shedding the virus e.g. a neighbour's cattle over the fence, or a slip in bio-security that leads to the virus being carried onto farm inadvertently e.g. on mucky wellies/kit from another farm, cows returning from shows where they have encountered a PI."

Richard says: "When Matt explained how PI animals can give rise to secondary infections – it struck a chord. In recent years we have had problems with scouring calves. They are fine for the first few days after birth, but then scour and it is more challenging to cure them. We had been wondering if it was a problem with the shed."

Matt gave the Colemans two options to track down the culprit PI animals: Tag and Test all cattle, or blood test all cattle.

"Belmont priced it all up for us, and we decided to go with the blood-testing," explains



Richard. "The results were all clear! No PIs in the herd! But then Matt pointed out that some cows were in-calf so we couldn't know if the calf would also be clear or not."

"So in the spring of 2017, we Tag and Tested all the newborn calves. Unfortunately, one of them turned out to be a PI. That was painful! It was the best looking calf! Nevertheless it was culled."

Richard adds: "We sell our weaned calves as stores at eight months - so we'd have been spreading BVD onto other farms without knowing."

Vaccination with monitoring

Matt explains: "Richard's farm neighbours onto other farms with cattle. It's not feasible to make all the field boundaries stock-proof. So vaccination is needed as an insurance against these 'leaky boundaries'."

All cows and heifers due to be mated in the coming 12 month period are vaccinated, plus the bull.

The Tag and Testing of calves will also continue as a way of monitoring the situation. The benefit of this has been demonstrated after some pregnant cows came into contact with some other cattle, later resulting in the births of four PI calves.



All calves are now Tag and Tested at birth to check there are no new PIs coming into the herd.

Matt adds: "As a further check, we will also blood test a sample of animals annually. This will be done at the same time as a TB test, when a vet is already on-farm."

GRADUATE DIARY

Heather Waddell

Northvet Veterinary Group

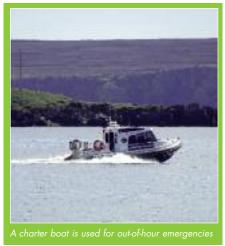
Life as an island vet

After qualifying at Glasgow University vet school, Heather Waddell left her home in South Lanarkshire and headed north to the Orkney Islands to take up a post at Northvet Veterinary Group.

Northvet, one of two practices on the islands, is a mixed practice of 12 vets, of which four are farm-only. The majority of clients are suckler beef farmers, around a third have sheep, and there are just 15 dairy farms in the Orkney Islands.

As well as 'mainland' Orkney, there are over 70 islands, many with farms, including Shapinsay, Rousay, Sanday and Westray. All of them are only accessible by boat or plane, during daylight hours.

This makes the Orkney Islands a unique place to work as a farm animal vet. Heather explains: "For routine work, like BVD screening, we fit the farm visits in with the public ferries. But out of hours, and for emergencies, then we have to charter a private boat – a four-seater 'rib'. However, this can't go out in bad weather, or in the dark. So if there's an emergency in the middle of the night, the vet on-call will get themselves organised to leave as soon, weather permitting, as there is sufficient light. In peak summer, it doesn't really get dark – sunrise is at 2.30am, sunset at 11.30pm."



In the spring, calvings and Caesareans form the bulk of non-routine cattle work. Heather adds: "Big bull calves are frequently the reason for Caesareans. But every farm is

different. Some farmers call us out too soon. While on others, I'll arrive and the cow has already been clipped and is standing waiting for me!

"Handling facilities also vary. It's really helpful to have Caesar gates – especially those with a locking yoke for the cow's head, then a chain around her back end and, most importantly, a kick bar. Then within the side gate there's another gate which can be opened to allow local anaesthetic to be given, and the incision made for surgery. The cow can't swing round so it's safer and quicker – for everyone.



Alternatives to antibiotics

"Now the main calving season is over, we have more time to be proactive. The practice is evaluating its sales of antibiotics which fall into the Critically Important Antibiotics (CIA) category: the macrolides and fluoroquinolones.

"We are looking at our records to see how much farms are buying of these antibiotics, and calculating the amount used per kg of meat estimated to be produced on that farm. Then we will make contact to see if we can help the farm to reduce or cease their use. This could for instance, be through changes in nutrition, management, or by adopting a vaccination policy."



About Heather

Heather graduated from Glasgow University in August 2017, and joined Northvet the next month. Through the practice, she also attended the XLVets Graduate Development course, a series of three one-week modules organised over three months which gives new graduates extra training for working in practice.

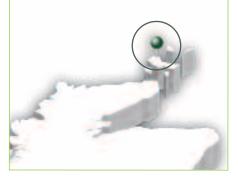
At Northvet, Heather spends alternate fortnights working in the farm side of the practice and then the small animal. "I enjoy the variety of doing both. But I especially like being outside and getting involved in farm businesses. There's the chance to build up relationships with clients that you just don't get with small animal work," says Heather.

Having grown up on a smallholding with Highland cows and alpacas, Heather can appreciate the hobby side of farming too. She adds: "A lot of smallholders have moved up here for the more laidback pace of life, so it's useful to have an enthusiasm for the less common patients like goats and pet sheep."

In her spare time, Heather likes to get out walking and make the most of island life, when it's not raining!











FarmSkills workshops coming up

10 July 2018	Mastering Medicines	Scott Mitchell Associates
17 July 2018	Smallholder Skills - Sheep	Bishopton Veterinary Group
20 July 2018	Mastering Medicines	Bishopton Veterinary Group
23 July 2018	DIY AI	Bishopton Veterinary Group
24 July 2018	Mastering Medicines	Scott Mitchell Associates
7 August 2018	Sheep Parasite Control	Bishopton Veterinary Group
13 August 2018	DIY AI	Bishopton Veterinary Group
14 August 2018	Sheep Nutrition	Bishopton Veterinary Group
7 September 2018	Mastering Medicines	Bishopton Veterinary Group
24 October 2018	DIY AI	Shropshire Farm Vets

10 July 2018	2 Day Foot Trimming	ProStock Vets
12 July 2018	Cattle Mobility Scoring	Synergy Farm Health
12 July 2018	Mastering Medicines	ProStock Vets
17 July 2018	Mastering Medicines	Belmont Veterinary Centre
18 July 2018	Calf Rearing - Birth to Weaning	Hook Norton Veterinary Group
2 August 2018	Mastering Medicines	Penbode Vets
3 August 2018	Mastering Medicines	Penbode Vets
8 August 2018	Practical Calving	Larkmead Veterinary Group
14 August 2018	Mastering Medicines	Belmont Veterinary Centre
3 September 2018	DIY AI (4 day course)	Belmont Veterinary Centre
4 September 2018	DIY AI (3 day course)	ProStock Vets
6 September 2018	Minimising lamb losses and improving carcass quality	Larkmead Veterinary Group
12 September 2018	Mastering Medicines	Hook Norton Veterinary Group
13 September 2018	Practical Calving	Synergy Farm Health
13 September 2018	Mastering Medicines	ProStock Vets

South

North

Please note dates are subject to change

For more workshops and to book online visit us at **www.farmskills.co.uk**

find us on | **facebook**

follow us | twitter