WORKING TOGETHER FOR A HEALTHIER FUTURE

AUTUMN EDITION 2012

\TTFRS

www.xlvets.co.uk

£3.75*

Livestock

Inside this issue:

Ve review the evolving problem of liver fluke

We review the evolving problem of liver fluke in cattle and its impact on herd performance.

IBR (Infectious Bovine Rhinotracheitis)

As one of the four main infectious diseases in cattle, we learn that it is critical to understand the nature of IBR and the options for protecting cattle from this disease.



FarmSkills GROWING FARM BUSINESS SUCCESS



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.









LandSki





vets

CONTENTS

AUTUMN 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 Alnorthumbria Veterinary Group Ardene House Veterinary Practice Armour Veterinary Centre Belmont Veterinary Centre Bishopton Veterinary Group Cain Veterinary Centre Calweton Veterinary Group Capontree Veterinary Centre Castle Veterinary Surgeons Chapelfield Veterinary Partnership Clyde Veterinary Group Donald S McGregor & Partners Drove Veterinary Hospital Endell Veterinary Group Farm First Veterinary Services Fenwold Veterinary Practice Friars Moor Veterinary Clinic Glenthorne Veterinary Group Hook Norton Veterinary Group Kingsway Veterinary Group Lambert, Leonard & May Larkmead Veterinary Group Milfeddygon ProStock Vets Millcroft Veterinary Group Northvet Veterinary Group Paragon Veterinary Group Parklands Veterinary Group PAWS Veterinary Health Centre Penbode Veterinary Group Rutland Veterinary Centre Scarsdale Veterinary Group Scott Mitchell Associates Shepton Veterinary Group Shropshire Farm Vets St Boniface Veterinary Clinic Synergy Farm Health Tyndale Vets Wensum Valley Veterinary Surgeons Westmorland Veterinary Group Willows Veterinary Group Wright & Morten

Disclaimer: XLVets does not necessarily share the views of contributors. No responsibility can be accepted for opinions expressed by contributors, or claim made by advertisers within this publication.

THE EDITOR

Welcome to the 'Autumn' issue of Livestock Matters

As autumn approaches and Livestock 2012 is almost upon us, we have a focus on Infectious Bovine Rhinotracheitis (commonly called IBR) and liver fluke in cattle. Both diseases can have devastating consequences on herd performance and, as we see, their identification and control both require a planned approach.

We also take a look at the benefits one farmer has seen since implementing a flock health plan with his vet Chris Trower at XLVets Larkmead Veterinary Group. Don't forget to take a look at the XLVets

Grassroots website for some helpful tips and advice for worming sheep too; just contact your XLVets practice for any further support or advice you may need.

If you are attending this year's Livestock 2012 show, XLVets will be on Stand AH-154; please do come along and join in with the FarmSkills 'mini-bites' challenges we are running this year and for your chance to win one of the FarmSkills famous green t-shirts.

We hope you enjoy this issue.

Joanne Sharpe XLVets



- 05 Grassroots Pneumonia: Miranda Josephson, Calweton Veterinary Group explains how one year on since the launch of the Grassroots Pneumonia Campaign their clients' thoughts are turning to pneumonia once more.
- 09 How effective is your worm control? We focus on the latest XLVets initiative -Grassroots Worm Control, which aims to increase worm control awareness and help sheep farmers identify and manage their resistance status.
- 13 Liver fluke in cattle: Neil Laing, Clyde Veterinary Group reviews the evolving problem of liver fluke in cattle and its impact on herd performance.

REPORTS

07 Flock health planning: Chris Trower, Larkmead Veterinary Group reports on the benefits of flock health planning on a farm in the Chiltern Hills.

Centre Pull-out:

A guide to XLVets member practices.

FARMSKILLS TRAINING

15 Bull fertility and soundness We look at how FarmSkills has been raising awareness and skills in bull fertility and soundness training, plus we take a brief look as we prepare for the launch of Dairy Pro.

INDUSTRY FEATURES

17 Student Diaries:

We continue to follow veterinary students Eva Kenny and Mark Challoner through a year of their studies.

IBR - relatively cheap to control, but potentially expensive to ignore ...

Tom Wright, Lambert Leonard and May focuses on one of the main infectious cattle diseases - IBR (Infectious Bovine Rhinotracheitis).



XLVets New Member Practices... Milfeddygon *ProStock* Vets



We are a rapidly expanding dedicated farm animal vet practice based in Carmarthen surrounded by a large quantity of quality mainly dairy, beef and sheep farms. We started trading on 7th March 2011, five of us having split from a local practice.

We are a young team (early 30's to early 40's), are well qualified, experienced and have lots of enthusiasm. At present we work out of a couple of offices and a pharmacy adjacent to the livestock market on the outskirts of town. We are supported by four receptionists (two full time equivalents).

We are committed to the future of our clients' businesses and the health, production and welfare of their livestock. Our aim is to provide a high quality, cost effective and proactive service. The future of agriculture needs a healthy industry, which needs healthy animals. We at ProStock are fully committed to this and, as a result, are extremely excited to join XLVets.



Donald S McGregor & Partners



DS McGregor and Partners join XLVets on 1 st September. The practice has two surgeries based in towns 20 miles apart. Clinically, the branches run fairly independently of one another, but all the administration is done from one site. Both surgeries were purpose built within the last 20 years.

There are 11 full time vets plus two retired part-timers that help out at various times. There are currently six partners and the practice



employs another five vets, five registered VNs and approximately 15 other staff.

The practice area covers the former Scottish county of Caithness and the north coast parishes of Sutherland, from surgeries based in Wick and Thurso. The work is still very mixed with 55% being farm work (beef cattle and sheep), 35% small animal and 10% equine. The farms are mainly family run units averaging 80-100 breeding cows each. On the small animal side the practice does routine surgical procedures and some more specialised orthopaedic work. Most lab



work is outsourced but they do have the ability to run some tests locally.

The practice feels very strongly that it is part of the local community, and as such, aims to meet the needs of that community with the services it offers. As part of that commitment to the community they still do all their own night and weekend work.

They are looking forward to establishing contact with a range of other practices and practitioners throughout the UK as part of their membership of XLVets.

Beef Expo 2012

This year Beef Expo went back to the Three Counties showground in Malvern on 24th May. Along with the XLVets FarmSkills stand, XLVets was also asked to assist with the organisation and running of the new 'beef from the dairy herd' exhibition and the animal health and production seminars.

The FarmSkills stand was adorned with challenges to tempt visitors onto the stand to learn a new skill they could take home and use. With a particular focus on bull fertility, the prosthetic testicles provided not only great amusement, but more importantly demonstrated how to identify common fertility problems. Another challenge was learning to tie a halter out of a single piece of rope - a good skill to have and one that would come in useful, many commented.

James Allcock, of XLVets Lambert Leonard and May was part of this year's NBA beef expo 'beef from the dairy herd' exhibition planning committee. Working alongside other companies including EBLEX, Blade and Meadow Quality, XLVets supported the exhibition by providing information on health planning, parasite and disease control and had vets on hand to discuss further the aspects of disease control and stock management. The exhibition focused on many aspects of beef production from dairy bred calves including; the importance of genetics, feeding youngstock through to finishing cattle and considered the potential for the finished product.

Finally Mel Macpherson, from XLVets member practice Drove Vets chaired the Beef Expo animal health and production seminar area for the day; introducing the speakers, many of which were XLVets members. The seminars provided visitors with the opportunity to come and listen to speakers on subjects including health and management of out-wintered suckler cows and opportunities to tighten suckler cow calving patterns.

Our sincere thanks to all those XLVet members who came along to help out on the day.







NSA Sheep - 4th July 2012

This year the NSA sheep event was held at the Three Counties showground at Malvern. Sadly the dismal July weather made it a rather muddy state of affairs, but the bad weather did keep the stand busy all day as everyone wanted to be indoors.

The XLVets FarmSkills stand and the many XLVet helpers ran a 'match the parasite to the condition' picture competition as part of the XLVets Grassroots worming campaign, among other challenges which had people vying to win one of the vibrant green t-shirts and tickets to Livestock 2012.

Once again, thank you to all the XLVet members who came along to help on the stand.









Veterinary Surgeon	Miranda Josephson
XLVets Practice	Calweton Veterinary Group



Pneumonia

MIRANDA JOSEPHSON, CALWETON VETERINARY GROUP

A year on from the launch of the Grassroots Pneumonia Campaign we are approaching another housing period, and our clients' thoughts are turning to pneumonia once more.

Therefore this season will see a return of our Autumn Pneumonia meetings, at which farmers are treated to a hot meal, and also a presentation introducing the concept that pneumonia is a complex, multi-factorial disease. The different aspects of susceptibility to disease are covered, in addition to how we can influence this. The importance of history, diagnoses, good treatment protocols and possible vaccination strategies are discussed. The true cost of a pneumonia outbreak is easily illustrated through the 'Cost Calculator', a tool that attendees enter their own farm data into to reveal the full cost of an outbreak. Interestingly, the vet bill is only a very small part of the total cost calculated. A heavy emphasis is placed on the importance of good ventilation - a vital part of any successful pneumonia-control strategy and the undisputable fact that prevention is far better than attempting treatment.

2011's meetings were well attended and well received, with the vast majority of attendees requesting visits for ventilation assessments and an overhaul of their approach to respiratory disease. In addition, advice was also sought from clients with whom our services had been discussed at routine fertility clinics, or at visits to groups of coughing calves. Over the course of the ventilation assessments I carried out on 17 farms (some 60-70 sheds), I had a brief moment of feeling 'the more I know, the less I understand'. Happily this was soon replaced with the recognition that the more one practises something, the more knowledgeable one becomes. Certainly I found myself contacting a few of the farmers who had early visits, a month or so down the line, with additional information which I felt would supplement the advice already given. With this in mind, I feel an update on the Grassroots Pneumonia campaign is due.





Case Study Update

In winter 2011 we featured a case study from a beef bull enterprise, here we have an update from Miranda on progress following the initial assessment. Dairy bull calves are bought from mixed sources in batches of 20-22 calves, at 3 weeks old. Disease as a result of pneumonia is frequent, and it is not uncommon for a couple of calves per batch to die. Problems are mainly seen when calves are 8-9 weeks old. The single shed houses a total of around 80 animals in four groups at any one time, with ages ranging from three weeks to 15 months. All calves are dosed with Zactran[™] on arrival.

In ventilation terms, the shed was found to be extremely good. Space boarding provides ample inlet, there are no draughts, and the 30cm gap running almost the full length of the ridge provides generous outlet.

The risk factors were identified as not being from poor ventilation, but from a variety of other causes, mainly:

- 1. Insufficient colostrum at birth
- 2. Stress of transport and mixing
- 3. Mixed ages in the same airspace

Warmth

Several weeks after my visit, however, I became concerned that whilst the shed was not draughty, it was not warm.

At our CPD event in January 2012, speaker and housing expert Jamie Robertson made much of the fact that cattle enterprises are the only sector of the UK livestock industry which does not provide heat sources for very young animals. Pre-weaned, i.e. pre-ruminant, calves are unable to generate the degree of body heat that older cattle do.

Being too cold significantly depresses the body's ability to fight disease. Thin calves with spiky coats indicate a severe problem; however losses are likely to occur before this is seen, and this was thought to be an issue on this farm.



Figure 1: Calves cosying up under the canopy

There are various ways of addressing this. Very young calves may need an external heat source such as a heat lamp. A practical method for slightly older calves is to place group hutches within the building. On this farm, the same effect was achieved by creating canopies, as pictured in Figure 1. It was gratifying to visit on a cold February morning and see two thirds of the calves nestled cosily underneath.

Moisture

It was also felt that, in our rainy Cornish climate, too much water was entering the building. The ridge has therefore been protected.



Cap protecting the 30cm open ridge, but not reducing the available outlet, by sitting 15cm above it.

Importantly, protecting this ridge has NOT reduced the available outlet area, so has not compromised the ventilation of the building.

Leaking gutters and downpipes and poorly sited feed and water troughs are another common culprit resulting in excessive moisture in a building. Concrete floors can also be problematic, as they do not allow water to soak away.

Conclusion

There is a lot more to pneumonia than a bottle of antibiotic. The response from our farmers to the Grassroots Pneumonia campaign has provided convincing support as to the value of a co-ordinated approach to respiratory disease. The nature and complexity of respiratory disease means that there will always be a need for pneumonia treatments, but it feels good to be dispensing a healthy dose of sound advice along with the drugs.

Three essential requirements for cattle housing

MOISTURE

Too much moisture favours bacterial growth and hence disease. It also absorbs energy, meaning that what you feed will be keeping the cattle warm rather than helping them grow. In young animals it will also make them more prone to disease (pneumonia, coccidiosis etc).

FRESH AIR

Lack of fresh air increases the survival time of airborne bugs, and hence increases the risk of disease. Noxious gases may also build up.

AIR SPEED

Excessive air speeds, or draughts, are associated with energy losses, reduced growth rates and increased risk of disease. Too little is associated with lack of fresh air.

Good ventilation (enough inlets and outlets) is essential in order to fulfil the above requirements.

Attention to detail is also important. The following points apply to housing in general:

- Don't forget the importance of maintaining gutters and downpipes in reducing moisture.
- Site feed and water sources away from bedded areas, and make sure troughs aren't leaking.
- Bedding (and forage) quality is important, especially for young calves (under 5 months old) as they cannot cope with dust and mould. When you find a good straw bale, set this aside for baby calves.
- Space boarding should have a gap of NO MORE THAN ONE INCH between boards - greater than this and you will lose control of air speed.
- Avoid any draughts at animal level in particular gaps between the floor and the bottom of a solid door. For example attach rubber sheeting to the bottom of the door to block up the gap.





 XLVets Practice
 Larkmead Veterinary Group



CHRIS TROWER, LARKMEAD VETERINARY GROUP

Flock health planning Case Study: Turville Park Farm

The Farm

Bob White runs a flock of 1,700 March-lambing Mule ewes in the Chiltern Hills, on the borders of Oxfordshire and Buckinghamshire. The home farm is tenanted, with additional grass rented annually. It is a condition of the rented land that its organic status is maintained, and so for the last 10 years the flock has been farmed to Soil Association standards. Bob's two eldest children, Tom and Anna, are both agricultural graduates of Reading University and have joined the family business in the last five years. Shepherding is a family affair, with additional help from a veterinary student at lambing time.

All lambs are finished on the farm and are sold to St Merryn Meat, of Merthyr Tydfil. Bob says 'Selling direct to an abattoir gives me vital feedback on carcass conformation, which is essential if I am to produce what the market requires'.





WORKING TOGETHER FOR A HEALTHIER FUTURE ...

CASE STUDY

Flock health planning

Bob White is an advocate for veterinary involvement in flock health planning. He says 'I have worked closely with my vet on flock health programmes for the past ten years, and these have significantly contributed to the improvements in the productivity of the flock we have achieved over this time'. Chris Trower of the Larkmead Veterinary Group explained his part in this. 'The flock health plan for Turville Park Farm was initially drawn up in 2002 to give specific advice on areas of the sheep enterprise that were underperforming.

Since its inception, I visit the flock at two key times in the sheep production cycle. These are in August, about two months before tupping, and then again in January, about two months before lambing. At each visit the current situation is recorded and any recommendations for further improvements are made in a separate written report. Any changes are recorded in the flock health plan, which is updated after each visit.

Bob says 'I started involving Chris on a regular basis because I wanted to improve the general welfare and productivity of the sheep. There was also a need to meet the requirements of Quality Assurance Schemes, which I thought should be more than just a boxticking exercise. With each year, the health plan has become more sophisticated and detailed. For example it now contains a Standard Operating Procedure (SOP) on the care of newly born lambs, which is an important reference for any inexperienced help that I may have at lambing time'.

One of the areas that the plan concentrated on from the start was biosecurity. The biggest risks to flock health come from other sheep,





and Chris quickly established a protocol for all replacement breeding stock. Although these are purchased from known sources, they are always quarantined from the rest of the flock for a period of at least two months, during which time they undergo a programme for the control of internal and external parasites, following SCOPS principles, as well as monitoring for diseases such as CODD, CLA and foot rot'.

One of the earliest successes of the health plan was to substantially reduce the incidence of foot rot in the flock. Úp until the late 1990's foot rot was causing significant lameness in the flock. An action plan was adopted, which involved early treatment of affected sheep, together with regular foot bathing using zinc sulphate. Persistently lame sheep were culled and within two years the incidence of foot rot had been dramatically reduced. Bob commented 'although we' still see occasional cases of foot rot, the annual incidence is now less than one per cent. We no longer foot-trim and rarely use a footbath. This has not only improved the welfare of the sheep, but also reduced the work involved in catching and treating lame animals'.

Another disease that was tackled early on was 'watery mouth'. In 2002, all lambs were receiving a routine dose of oral antibiotic soon after birth, without which watery mouth and other neo-natal diseases caused significant levels of lamb mortality. Major factors in lamb disease are low birth weight and the consumption of insufficient or poor quality colostrum, both of which are often reflections of poor ewe nutrition in late gestation. On the advice of a nutritionist, the farm changed to a silage-based diet in late pregnancy, fed from a mixer wagon to ewes that were housed inside. The ewes were differentially fed, according to the numbers of lambs they carried, as determined by scanning. These changes improved ewe condition and colostrum guality, and reduced the need to use routine

oral antibiotics on the lambs. This was a good demonstration of the importance of nutrition in sheep health. Tom White is particularly keen to further improve their use of forage and the farm is growing an increasing amount of red clover, both as grazing for lambs and for silage.

A more recent problem was the surprise appearance of liver fluke in adult ewes in 2009, which caught everyone unawares and severely affected the lambing results in 2010. Liver fluke had never been diagnosed before on this farm, and it is still not known whether this was bought in, or acquired from rented low lying pasture that was prone to flooding. Permission for treatment was rapidly obtained from the Soil Association and fluke drenching is now carried out three times a year on all adult sheep. The health plan specifies which product to use at each of these times, in order to selectively target the different stages of fluke development. The long withholding times for fluke drenches can make control extremely difficult on organic farms, especially if store lambs are affected. However, at the moment the disease appears to be under control, but no chances are being taken.

The White family feel that flock health planning has paid dividends for them. Bob says 'By managing the health of the flock in a proactive manner, areas of weakness are easier to spot and mechanisms to deal with them can be quickly put in place. I can honestly say that farm veterinary bills have been reduced and there is now rarely a need for a 'fire brigade' veterinary service. Since we started the sheep health plan, improved disease status and better teeding management has improved the productivity of the flock, which has benefited the welfare of the sheep and the profitability of the enterprise.'



Worm Control Worm Control How effective is your worm control?

Have you discussed your farm's worm status or resistance levels within your flock with your vet? Are you aware of the benefits of integrating the new orange or dual active purple groups into your farm's worm control plan?

Grassroots Worm Control is the latest XLVets initiative that aims to increase worm control awareness and help sheep farmers identify and manage their resistance status. Resistance is now being detected on farms throughout the UK and without changes to current worming practices now, it has the potential to become an increasing problem for the industry in the future.

Anthelmintics (wormers) are a vital weapon within the sheep industry's worm control armoury. However, over the years, an unavoidable consequence of using anthelmintics to control worm populations has led to the development of parasite resistance to many of the drenches we use.

The Grassroots Worm Control booklet provides sheep farmers with basic worm control information. The pocket sized guide outlines good practice techniques and includes details on the use of pre- and post-drenching faecal egg counts as part of a flock worm control plan.

Unfortunately once wormer resistance is present there is no going back. However, it may not be too late to slow down the progress of resistance on your farm and help protect the future of the UK sheep industry.

Contact us...

Contact your XLVets practice or log onto the XLVets wormer website for more details.

www.grassroots.xlvets.co.uk

Further information is also available from the industry led group 'Sustainable Control of Parasites of Sheep' (SCOPS) at www.scops.org.uk.





Current worming groups:

GROUP 1

BZ, Benzimidazoles ('white' drenches)

Resistance can be found on most farms.

GROUP 2 ML, Levamisoles ('yellow' drenches)

Resistance less common than to BZ, but incidence is increasing rapidly.

GROUP 3 LV, Macrocyclic lactones ('clear' drenches)

Resistance is growing. It is very important we protect the effectiveness of this group.

GROUP 4 AD, Monepantel ('orange' drenches)

Currently no known resistance - use in accordance with SCOPS guidelines to protect the effectiveness of this group.

GROUP 5 SI, Derquantel ('purple' drenches)*

Currently no known resistance - use in accordance with SCOPS guidelines to protect the effectiveness of this group.

Group 5 - SI Derquantel is not available as a single product; it is only available in combination with Abamectin, an ML class wormer.

WORKING TOGETHER FOR A HEALTHIER FUTURE

www.xlvets.co.uk

EXCELLENCE IN PRACTICE





EXCELLENCE IN PRACTICE

XLVets - We Excel

The members of XLVets have worked hard to create what they see as a model of how practices can work together, sharing the latest ideas and passing on savings and joint expertise to clients.

The group comprises of a number of the foremost farm practices in the UK. With many years of combined experience, it is able to give expert advice on all areas of farm livestock, health and production.







Glenthorne Veterinary Group Uttoxeter, Staffordshire Telephone: 01889 562164

Hook Norton Veterinary Group Banbury, Oxfordshire Telephone: 01608 730085

Kingfisher Veterinary Practice Crewkerne, Somerset Telephone: 01460 72443

Kingsway Veterinary Group Skipton, North Yorkshire Telephone: 01756 700940

Lambert, Leonard & May Whitchurch, Shropshire Telephone: 01948 663000

Larkmead Veterinary Group Wallingford, Oxfordshire Telephone: 01491 651479





KINGFISHER eterinary practice



Lambert Leonard & May

Larkmead Veterinary Group



Minster Veterinary Practice York, North Yorkshire Telephone: 01904 486712

Northvet Veterinary Group Kirkwall, Orkney Telephone: 01856 873403

Paragon Veterinary Group Carlisle, Cumbria Telephone: 01228 710208

Parklands Veterinary Group Cookstown, Northern Ireland Telephone: 028 867 65765

PAWS Veterinary Health Centre Nuneaton, Warwickshire Telephone: 02476 384064

Penbode Veterinary Group Holsworthy, Devon Telephone: 01409 253418

Rosevean Veterinary Practice Penzance, Cornwall Telephone: 01736 362215

Scarsdale Veterinary Group Derby, Derbyshire Telephone: 01332 294929

Scott Mitchell Associates Hexham, Northumberland Telephone: 01434 608999

Shepton Veterinary Group Shepton Mallet, Somerset Telephone: 01749 341761

Shropshire Farm Vets Shrewsbury, Shropshire Telephone: 01743 860920

St Boniface Veterinary Clinic Crediton, Exeter Telephone: 01363 772860

Synergy Farm Health Ltd Evershot, Dorset Telephone: 01935 83682

Thrums Veterinary Group Kirriemuir, Angus Telephone: 01*575 57*2643

Tyndale Vets Ltd Dursley, Gloucester Telephone: 01453 511311

Wensum Valley Veterinary Surgeons Fakenham, Norfolk Telephone: 01328 864444

Westmorland Veterinary Group Kendal, Cumbria Telephone: 01539 722692

Willows Veterinary Group Northwich, Cheshire Telephone: 01606 723200

Wright & Morten Macclesfield, Cheshire Telephone: 0845 8330034



The future of agriculture needs a healthy industry, which needs healthy animals.

XLVets is a group of 49 independently owned, progressive veterinary practices that are committed to the future of the UK livestock industry. Spanning the length and breadth of the UK, we work together, sharing experience, knowledge and skills in order to define and deliver the highest standards of veterinary practice, animal health and productivity.

We strive to be at the heart of our farm clients' business as the primary source of highly valued on-farm advice and the central co-ordinating consultant for other farm services.

Founded in 2005, XLVets originated from a group of dynamic farm animal veterinary practices, who worked hard to create what they saw as a model of how individual practices can work successfully in partnership. Following a period of rapid growth, XLVets is now becoming recognised nationally as a 'quality mark' for veterinary care; not only for livestock, but also in the fields of small animal and equine care.

The group also endeavours to source and supply the highest quality, best priced medicines, equipment, products and accessories. In addition, XLVets works alongside academic bodies and commercial research and manufacturing companies; forging strong industry partnerships to place its member practices at the forefront of veterinary science.

For farm clients of XLVets member practices this gives local access to many of the unique national initiatives the group develops; from health management, consultancy advice and disease prevention, through to bespoke analytical services to improve farm productivity and financial returns.

XLVets member practices are dedicated to providing a high quality, cost effective service to their clients, to support long-term growth and future prosperity within the UK livestock industry. For further information on XLVets and its member practices please contact the XLVets office.

Telephone: (01228) 711788 Email: admin@xlvets.co.uk

www.xlvets.co.uk





September 2012





Veterinary Surgeon XLVets Practice Tom Wright Lambert, Leonard & May



TOM WRIGHT, LAMBERT, LEONARD & MAY

IBR (Infectious Bovine Rhinotracheitis) is one of the four main infectious cattle diseases. It is caused by the bovine herpes virus (BHV), and infection can lead to acute respiratory disease ('classic IBR') or a sub-clinical syndrome characterised by poorer health and fertility, and a reduction in milk production.

IBR - relatively cheap to control, but potentially expensive to ignore...

XLVets' Tom Wright of Lambert Leonard and May Farm Vets explains: 'The bovine herpes virus is similar to the herpes or cold sore virus in humans. IBR outbreaks are often triggered by stress or the introduction of infection into a naive group of animals.

The main clinical signs of an acute infection in a naive animal can be spectacular: nasal and ocular discharge that becomes pus-filled, red eyes, coughing, increased respiration rate, high rectal temperature and a decreased feed intake and milk drop.

'After initial infection, the virus remains dormant within the animal's nerve cells for the rest of its life. But it can be re-activated in further times of stress, e.g. at calving, due to poor nutrition, or hot weather which will lead to further bouts of virus shedding.

'So what is commonly seen in herds where the disease is endemic, is a sub-clinical syndrome characterised predominantly by production loss and poor fertility.'

A range of vaccines and administration programmes are available which reduce the clinical signs of the disease and help prevent virus shedding.

Tom explains: 'Vaccination for IBR differs from that of BVD and leptospirosis as it doesn't actually stop the animal becoming infected with the bovine herpes virus. Instead, it helps protect animal health by reducing the clinical signs. And when a virus outbreak has been triggered, it reduces the shedding of the virus, thereby reducing the spread of infection.

'IBR and the BHV have not historically received a lot of publicity. However the effects on cattle health and performance are still significant. Moreover, IBR vaccines are relatively cheap, and so it is far better to vaccinate than to allow the virus in infected herds to depress production and health.'

Bulk tank milk tests can indicate the presence of the bovine herpes virus in a herd. A recent survey of herds in south Wales, carried out by XLVets' Rob Davies of 'Allen and Partners practice, revealed nearly 80% were positive for IBR.

Types of IBR vaccine

There are a number of vaccines on the market which protect cattle against IBR. They fall into two types: '**live**' or '**inactivated**' (sometimes referred to as 'dead'). Both reduce the clinical signs of disease and reduce virus shedding - but neither of them stop the animal becoming infected.

Tom explains: 'Live vaccines are best used on animals which are naive to the disease, i.e. those that have never been exposed to the virus. This is because live vaccines are better at preventing clinical signs of the disease. So typically, live vaccines are used on calves and heifers.

'Once an animal is considered to have encountered the virus and be carrying latent infection, then using an inactivated vaccine might be better. This is because there is some evidence to suggest that these vaccines may be more effective at reducing virus re-activation and shedding, and so could help to reduce the spread of infection in the herd.

Frequency of vaccination

Tom explains: 'The programmes for booster vaccinations may be for 6-monthly, or annual, injections. The most appropriate frequency will depend on each herd's individual situation.

'In fact, in the control of IBR on a farm, every situation is different and this is very much an area which farmers should discuss with their vet.

'The choice of vaccine - manufacturer, live or dead - and the frequency of booster vaccinations, need to be decided based on each farm's system, stress factors, levels of disease challenge, and herd health history. Simply opting for an 'off the peg' vaccination programme that may appear to be a cost saving may in fact not be appropriate for the circumstances, and end up costing dearly in terms of lost productivity.'

Tom adds: 'Whatever the vaccine and programme that's adopted, it's just as important to also ensure that all at-risk animals are treated, and that booster injections are not allowed to lapse.'

Case Study: Bawhill Farm

Keeping IBR in check

For Shropshire dairy farmer Steve Cope and herd manager Dan Wragg, IBR vaccination is essential for their high yielding herd of nearly 800 cows at Bawhill Farm, near Market Drayton in Shropshire.

The dairy herd is currently averaging 9,600 litres of milk per cow on three times a day milking with the goal being to ultimately build to over 11,000 litres/cow. Weekly fertility visits are made by vets from Lambert, Leonard & May, helping maintain a 408 day calving index. A proactive approach to infectious disease control is taken with vaccination programmes for IBR, leptospirosis and BVD.

Vaccination programmes add to Steve's costs, but he fully appreciates that the cost of not doing them is even higher. He'd rather spend money on preventative medicines than therapeutic treatments.

The original IBR vaccination protocol had been to vaccinate every 12 months, but 3 years ago, a breakdown in IBR protection resulted in a clinical outbreak - 'snotty' noses, red eyes, high temperatures after calving and poor fertility. Milk production suffered too.

The protocol was revised and the herd is currently vaccinated every 6 months. But

even now, Dan and Steve are noticing a drop in health and production in the weeks preceding the next booster injection.

Steve explains: 'As the time to re-vaccinate approaches, cow health starts to fall, but then picks up again after IBR vaccination. For instance, this time we have seen conception rate drop from 38 to 29 per cent. Milk production has also dropped by around one litre per cow from an average of 33 litres/day. We've also had cows positively Pd'd at 35 days, only to return to heat 8 days later because they've slipped their calves.'

As part of general herd care, the temperature of every fresh calver is taken in the first two to seven days of lactation. This helps identify any cows with post-calving infections such as metritis or mastitis. However, in the past week, two cows had shown high temperatures of 41°C, without any sign of infection.

Tom explains: 'This indicates the fever could well be viral and it could be that IBR is the cause. High temperatures can cause embryonic death, which would explain why some cows have returned to service.'

'The bovine herpes virus becomes active when cows are under stress - and calving is probably the biggest stress a cow ever experiences. So that's why the effects of IBR infection are typically seen in fresh calvers.'



Cows at Bawhill Farm



Checking temperature in fresh calvers











Tom says: 'As with any vaccination programme, it's important to make sure all at-risk animals are protected. This includes youngstock, heifers and bulls.'

Calves born at Bawhill Farm receive their first IBR vaccination once they are a month old - a live vaccine is used. At two months of age, they leave the farm and are contract-reared on another farm where they are the only cattle. In-calf heifers then receive a live vaccine prior to returning to Bawhill Farm, and it is timed so that their boosters are in synch with the rest of the herd.

The goal is to continue with the IBR vaccination programme, accepting that some animals will be latently infected with the bovine herpes virus. However, the vaccine will be reducing the virus shedding and reducing clinical symptoms. So over time, as heifers come into the herd, protected by vaccination, there will be fewer new infections. And as time goes on,



and older cows are culled, the levels of BHV infection in the herd will fall, reducing the disease pressure.

Steve adds: 'With today's dairy economics, we need our cows to be achieving 'A1' performance. It would be a false economy to not vaccinate, or to reduce the frequency of vaccination. After all, it's not an expensive vaccine. Without it, we'd lose milk production, fertility would fall - further reducing the annual output of milk, and we'd be wasting money on semen.'

Tom concludes:

'IBR is a complex disease to control. There are a variety of vaccines and programmes to control it, however the situation from farm to farm will vary. The best approach is to consult with your vet who will be able to advise what is most appropriate for your individual situation.'

What is a marker vaccine?

All the available IBR vaccines are marker vaccines. This means that it is possible to determine whether the IBR antibodies measured in milk or blood tests are a consequence of IBR vaccination or exposure to the bovine herpes virus.







Veterinary Surgeon Neil Laing



NEIL LAING, CLYDE VETERINARY GROUP

Fluke infection has been recognised for generations, but evolving problems in cattle demand we look afresh at how liver fluke might be undermining herd performance.

Liver fluke in cattle

Over recent years there's been an alarming increase in the incidence of liver fluke. This has coincided with a greater geographic distribution beyond the traditional at-risk high rainfall areas.

Consequences of fluke infection in cattle:

- A low grade infection of just 100 fluke has been shown to reduce milk yield by 400 litres/cow/lactation.
- Fluke has a detrimental effect on butterfat. Research has shown untreated animals can produce 10 per cent less milk solids.
- Heavily pregnant dry cows in poor body condition can experience a fluke-associated nutritional challenge in late pregnancy.
- Calf birth rates on fluke-infected cows can be up to 10 per cent lower. Youngstock will also experience poorer growth rates giving reduced efficiency for the rearing of replacement heifers.
- Reduced feed conversion and depressed appetite; dry matter intakes can reduce by as much as 11 per cent. This nutritional stress depresses fertility and compromises the cow's immune status. In essence fluke infection will reduce lifetime performance.
- Fluke infection can also precipitate other infectious disease such as the Clostridial infection Black disease or it can compound outbreaks of Salmonella.



The main signs of liver fluke infection are a reduced growth rate, a gradual depression of milk yield, and stock that are generally not thriving. Sheep are particularly susceptible to fluke and infection can cause serious illness and death. However in cattle fluke is often overlooked because the signs are very subtle and clinical disease is rare. But an absence of fluke symptoms and a lack of farm history of fluke is no reason to leave fluke risks unmonitored. Many farmers see the need to treat for fluke infection in sheep where symptoms can be more graphic, yet fail to recognise the production loss in cattle. A fluke control strategy is still recommended for both cattle and sheep.

Liver fluke life cycle

Figure 1: Life cycle of the liver fluke



'Liver Fluke' (Fasciola hepatica) is a flat leaf-like parasite (Figure 2) that can grow up to 3.5cm in length. It is a parasite found in the liver of grazing animals. Eggs from adult female fluke pass in the dung to contaminate pasture. When conditions are suitable (i.e.damp and warm) - the eggs develop and hatch to form mobile larvae that seek out mud snails to complete their life cycle.

The presence of the amphibious mud snails determines the distribution of fluke. So the highest risk grazing are wet areas and rutted pools of water. The larvae multiply in the snails and emerge to attach to the grass as cysts. The grazing animal ingests the cyst where it breaks out as an immature fluke to make its way to the liver. The fluke tunnel through the liver and if conditions favour, will mass hatch and this infection can cause severe and permanent damage.

Adult fluke live in the bile ducts of the liver where they feed on blood. This can amount to half a millilitre per adult fluke per day, which explains the anaemia exhibited by infected animals.

Diagnosis

Fluke diagnosis is not straightforward and needs careful interpretation so speak to your XLVets practice. Fluke egg counts from faecal samples indicate infection but fluke egg production is sporadic and therefore this test can be unreliable to detect the presence of fluke. Blood sampling a random group (often young home-bred stock are a good indicator) can reveal the foot-print of fluke infection. Post mortem/slaughterhouse feedback provides a direct report of fluke level in condemned livers and many more abattoirs are doing this now. Bulk milk testing is also available to detect the presence of fluke within a dairy herd.



Figure 3: Liver fluke can result in condemned livers at the abattoir

Treatment

Treatment is very effective but needs to be targeted to the fluke season and to recognise the variable efficacy of products for the different stages of fluke; early immature, immature and adult. Also the milk withhold must be considered and often means treatment must be targeted in the dry period. Fluke treatments come as drenches and injections, and are also available in combination with wormers.

The recognition of fluke and a strategic approach to treatment should be a component of herd health plan reviews. A little investment in health will go a long way to alleviating the production loss which is the hidden cost of fluke infection.

Case Study

In January 2011 Clyde Vet Group received a call from one of their farm clients as a group of home-bred store calves were looking quite poorly and one of them had died that morning. The farmer requested a visit to investigate and Neil Laing from the practice attended.

Neil comments: 'The group of calves were indeed in poorer condition than would be expected and had not really done well since they were weaned and housed in early November. Feeding rates seemed to be appropriate and there were no obvious signs of infection in the group. Plus, there was no history of pneumonia on the farm.

'I performed a post-mortem on the dead calf and found chronic liver fluke infection in the liver. The liver was badly damaged and scarred and there were quite a lot of adult fluke in the bile ducts,' he says.

It is known to be a wet farm; which provides an ideal habitat for both fluke and the mud snails to exist. There are sheep on the farm too, which are routinely treated for liver fluke, but it had never been perceived as a big issue. The farmer was surprised at the diagnosis as he had treated all the calves with a combination fluke and worm product at housing. 'It appeared the product the farmer had bought from his merchant had been used in accordance with the data sheet, although he did comment that he had estimated weights of the group to be treated,' says Neil.

With this in mind, Neil advised a fluke treatment with Nitroxynil injection for the rest of the calves and they quickly picked up. Trace element profiles showed no obvious deficiencies that would compromise the immune system of the calves.

So what went wrong?

- The autumn of 2010 was relatively dry, but it followed a wetter than normal summer where conditions were ideal for fluke to multiply rapidly.
- With the good autumn weather, the calves were out for longer than usual so probably picked up more fluke larvae than normal.
- The combination product the farmer used only kills immature fluke at more than eight weeks of age, which doesn't make it the ideal product to use at housing, as not all the fluke in the calves would be killed at this time.

In a normal year the problem could have easily gone unnoticed, as a small number of surviving fluke might well not cause obvious production losses, but due to the circumstances in this particular year there were probably more larvae than normal



Figure 2: Liver fluke is a large parasite that can grow up to 3.5cm in length

in the calves, which led to the problems we saw. 'The lessons to learn from this case are twofold; firstly, make sure the product you use is appropriate for the purpose you are using it for and secondly, plan the timing of your treatment to kill as many fluke as possible,' advises Neil. 'Combination products are very convenient to use, and this is an advantage where time and manpower are short. However, as this case demonstrates, they may not always be the most effective product for both purposes.

'In this instance, delaying application of the product until at least eight weeks after housing would have been more advantageous. By doing this all fluke would then be at an age where the product would kill them. Alternatively, if treatment is to be undertaken at housing again, a product that that kills early immature larvae, such as Triclabendazole, should be used. Having said this, in situations such as with this case where lungworm is also a concern, it might be more appropriate to use a wormer at housing and then administer a separate flukicide later in the winter.

'This case highlights that there can be several treatment routes available, even for a single farm, but consideration must be given to the products and their capabilities and advice sought before commencing any treatment programme,' concludes Neil.

With such a wide range of products available to treat liver fluke, plus all the combination products offering fluke and worm control, it can be confusing to know which is the most suitable. To complicate matters further, as we've seen above the different flukicides have varying degrees of effectiveness against the different stages of fluke. So before using an anthelmintic on your cattle at housing time speak to your local XLVets practice. They will be able to help ensure you are using the most appropriate product, based on your individual circumstances and will also discuss the optimum timing of your treatment to ensure the most effective control of liver fluke this winter.



FARMSKILLS



Sophie Throup FarmSkills Manager

FarmSkills GROWING FARM BUSINESS SUCCESS

One of the key themes for FarmSkills this year is helping raise awareness and skills in Bull Fertility and soundness training. From 20th June, in association with EBLEX in England and QMS in Scotland, and with the generous support of CEVA Animal Health, workshops are running throughout the country to highlight the importance of giving your bulls a thorough MOT to check they're fit for business.

Bull fertility and soundness

To date 14 workshops have run across the country from Devon to County Durham bringing training to over 100 delegates on farms, in local auction marts and in veterinary practices. Another 14 workshops are planned in England and seven in Scotland and Wales before the end of the year.

Keith Cutler from XLVets Endell Vet Group in Salisbury helps explain why bull breeding soundness examinations are so important.

Bull breeding soundness examination

Managing reproduction effectively to achieve optimum fertility is essential to the running of a profitable cattle enterprise. In the dairy herd effort is usually concentrated on the female with male fertility being managed at a distance by bull studs and through the use of AI. Ensuring the capability and fertility of 'sweeper' bulls remains of great importance however, as these are often used to:

- serve cows which are slipping in the calving pattern
- serve cows proving difficult to get in calf
- run with groups of maiden heifers

In the beef suckler herd, where the use of natural service is more common than in the dairy herd, maintaining a tight calving pattern is vital to the profitability of seasonally calving herds, and so managing reproductive efficiency and bull fertility assumes even greater importance.

Although few bulls are sterile (incapable of successfully impregnating cows) sub-fertility is relatively common. It is not unreasonable to expect a fully fertile stock bull running with fifty normally cycling, disease-free cows to achieve a 90% pregnancy rate after a nine week serving period. Published work, however, shows almost one in three stock bulls currently in use fail to achieve this target, taking a longer time to get fewer cows pregnant, which has a profound effect on profitability.

A bull breeding soundness examination carried out by your veterinary surgeon, aiming to identify individual infertile and subfertile bulls in advance of the breeding season, allows appropriate action to be taken and will frequently prove to be a very worthwhile investment.

What does the FarmSkills bull fertility workshop involve?

The FarmSkills Bull Fertility workshops bring small groups of 6-8 farmers together to discuss why fertility matters and why testing is important. An overview of infectious disease and its impact on bull health is also covered, as are the EBLEX Better Returns slides on national benchmarking.



Rose Jackson, Scarsdale Veterinary Group running one of the bull fertility workshop days

FARMSKILLS

Farmers are all taught in an interactive session to then know how to body condition score and how to assess conformity - and how to understand any semen samples that might have been taken by the vet on a previous occasion.

All delegates are encouraged to discuss health outcomes and devise an action plan for their own farms following the workshop.

Comments from delegates who have attended the workshops to date:

Wright and Morten: 27th June 2012, Chelford Auction Mart

'I have gained a better understanding of what to look for in a bull before buying. I found the information on the general health of bulls and the importance of inspecting them very useful and I now have a better understanding of how to evaluate bulls which I will be using in the future.'

'The Bull Fertility workshop has given me the knowledge to assess bulls in greater detail and highlighted what to look out for in a good breeding bull. The information was detailed, interesting and useful and will be of benefit to my business in the future'



Penbode Vets: 21st June 2012, Holsworthy Auction Mart

'Good group participation and the live demonstrations were excellent'

'Good to be made aware of the scale of the problem and what to look out for in the future'

Synergy Farm Health: 11th July 2012, Sedgemoor Auction Mart

'Really useful information presented at the right level'

Please log on to the FarmSkills website to find out which courses are running near you going forward at www.farm-skills.co.uk, or call us on 01765 608489. The FarmSkills team would like to extend their thanks to the EBLEX team, and XLVet members Keith Cutler from Endell Veterinary Group and Jonathan Statham from Bishopton Veterinary Group for their support and input to the content of the presentations for the bull fertility workshops.

We are also grateful for the additional funding granted for the workshops through the DEFRA RDPE programme for England, managed by The Duchy College in Cornwall, Devon, Dorset and Somerset, The Royal Agricultural College in Wiltshire and Gloucestershire, Reaseheath College in Cheshire, Rural Skills Cumbria in Cumbria and by LANTRA in the West Midlands, East Midlands, Yorkshire and North East.



Dairy Pro

FarmSkills and XLVets are supporting a new scheme to enable UK dairy farmers and their staff to get recognition for their skills and achievements. 'Dairy Pro' launches at this year's Livestock Event on 4th and 5th September and has been devised and implemented by an industry steering group, of which XLVets are a part, and is funded by DairyCo and Residual Milk Marketing Board funds.

'We want Dairy Pro to be a recognised mark for professionalism in dairy farming,' says group chairman David Cotton. 'As dairy farmers we are constantly working to improve our farms, develop skills within our workforce and keep up-to-date with the latest developments in technology and business management. Dairy Pro gives us a simple way to record those efforts by providing a register for farmers and staff who participate so that they have a tangible way of recognising that work.'

Dairy Pro has been deliberately developed to recognise all the different areas that farmers operate in and to accommodate the wide variety of skills that they have. 'It's an inclusive scheme,' says David, 'it doesn't matter what size of farm you have, or what type of system, as long as you are continuing to develop your skills, you can



register your training, build your points tally and work to become part of a professional network of dairy farmers.'

Dairy farmer Tom Rawson is the Dairy Pro industry group vice chairman. He says the scheme will be extremely useful for a number of reasons. 'As a dairy farmer and an employer I'm constantly making an effort to keep up with the latest developments in dairying and I need to know that staff and prospective employees are doing the same. Dairy Pro will provide a credible platform for all of us to demonstrate and recognise that commitment to continuous development.'

To join the scheme simply register at **www.dairypro.co.uk** or visit our stand at Livestock 2012; then look out for the Dairy Pro logo on stands and at demonstrations around the event where you can start to pick up points.

STUDENT DIARY Eva Kenny, Cork, Republic of Ireland

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

Calving Chaos

Holidays. For most students they mark the start of freedom; long days uninterrupted by coursework, punctuated by some part time work to fund a growing social life and time to embark on an endless array of adventures. For vet students a slightly different promise of adventure lingers in the air.

In the first two years it is lambing, mucking out stables and milking. After this our adventures continue in earnest with 26 weeks of placement with vet practices to be completed before graduation. While being perpetually covered in faeces from a variety of species certainly wouldn't warm the hearts of many, this is the state you will usually find your average vet student in!

I myself am just after a ten minute hose down after getting gloriously splattered while trying to aid a new calf who hadn't yet figured out where his sustenance comes from. To the outsider I'm sure it would have been amusing to behold; a suckler cow in a head gate finishing her nuts all too quickly while a young one (me) tries to hold a large, lazy calf up, open his mouth and squirt some milk into it, while he struggles to get as far away from me as possible. It is a feat requiring not only two hands but also some clever knee work, not quite an Olympic achievement but not far off.

To what do I owe this pleasure/punishment? The family holiday, from which I am mercilessly excluded as someone has to manage the homestead and keep the home fires burning.



It is made all the more exciting by the fact that this is our main calving period, hence providing me with a wonderful opportunity to gain hands on experience and improve my skills, or so they remind me when I question my aforementioned exclusion. Undeniably there was experience galore gained but more than that I gained an overwhelming appreciation for how hard my father and farmers work. It is a totally different story when you're shouldering the responsibility for making sure you have live calves and healthy mothers at the end of the day. It certainly was a summer of new experiences one of which was starting my placements with vets. Fortunately I was allowed to get fully involved and see as much as possible, helping to banish my exam-induced semi-comatose state. But alas, when holidays are this jam packed they are never long enough. Already third year beckons, and with it the challenge of completing a research project. I am happy to report mine focuses on one of my favourite topics - cattle. But until then I am rounding up my summer with my first trip to the city of London!

17

STUDENT DIARY Mark Challoner, Manley, Cheshire

Fourth year student, Liverpool University



A busy summer...

With the country fully in the grip of Olympic fever I am writing this having just returned from a weekend in London.



We had tickets for the table tennis, which despite watching team GB lose was incredible to watch. I also got out of bed early on Saturday morning to be part of the huge crowd watching the women's triathlon in Hyde Park. The atmosphere was incredible and despite getting there quite early, I had to use the full advantage of my height just to get a glimpse of the action!

I returned from Finland in time for the last two weeks of rotations in Liverpool, giving me a great chance to catch up with everyone before the holidays. I completed the herd monitoring week, which involved going through herd records to identify problems on farm and the ways to address them.

The last three weeks of my time in Finland were spent on farm rotations, which finally provided a chance to get out into the countryside. The farms were very different from home and it did feel a little bit like stepping into a time warp. An average sized herd was 40-60 cows, most of which were in tie stalls and milked via a pipeline and bucket system, although robots were starting to take over on the modern units. A lot of the cattle housing was quite old fashioned with low buildings which looked in need of modernisation. One of the key differences was a greater emphasis on individual animals rather than herd health. In Finland, antibiotics could only be prescribed to individual animals, so each had to be seen by a vet before it could be treated.



This meant a lot of our time was spent seeing routine cases of mastitis and milk fever as bottles of calcium were not left on farms for farmers to administer. This was very different from farm practice at home but could be a sign of the way we are heading if all of the talk about antibiotic use is put into legislation, although I doubt British farm vets currently have the capacity to deal with it. The biosecurity was however very impressive, with most units having sets of wellies for visitors, some even providing overalls. A good example from a country that is IBR, BVD and bTB free. Surprisingly all Finnish farmers were officially given 21 days holiday a year. Farm workers employed by the local government could be booked to cover holidays free of charge! An interesting idea, but I'm not quite sure what people would think if you suggested introducing it here.



During my holidays I am required to complete 26 weeks seeing practice with local vets, so far this holiday I have done three weeks small animal and two weeks equine. The highlight of my time at the small animal clinic was the successful treatment of a cat that had been hit by a car. The owner rang up having horrifically witnessed the accident to say that she had the cat's tail but the rest had run away! Once she had located the cat and brought it in, we had to remove its tail and stitch up a large wound on its leg. It went home a few days later and after a few bandage changes made an excellent recovery. My parents are always amazed by the wildlife that are regularly brought in. Last year we had what I termed 'pigeon of the day', however this year the local pigeon population seems to be in much better health, or at least much less amenable to getting caught!

I am now only a couple of weeks away from a five week gap in my placement and I'm planning a trip to the alps with some friends from the university climbing club and hoping for some better weather there.



Ask yourself <u>3</u> questions before you worm Do your sheep need worming? Will your wormer work? Is there resistance on your farm?

Ask your XLVets practice to arrange a Worm Control Resistance Check for your farm. A simple, cost effective way to screen for worms and check for resistance, helping you to reduce your sheep flock's dependence on wormers, improve your flock's performance, reduce your worming costs while saving you valuable time. Don't wait until growth rates suffer and resistance is obvious - ask for a Worm Control Resistance Check today.



