WORKING TOGETHER FOR A HEALTHIER FUTURE

SUMMER EDITION 2010

Livestock MATTERS

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Inside ths issue:

PREVENTING MILK FEVER IN DAIRY COWS...

Tony Kemmish of St Boniface Vet Practice in Crediton outlines the causes of milk fever (hypo-calcaemia) and the preventative options available.

SHEEP FLOCK PLANNING CASE STUDIES

Using faecal egg counts to target wormer use in your sheep flock will reduce a flock's dependence on wormers. We also look at the effects of CODD.

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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.

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THE EDITOR

Welcome to the 'summer' issue of Livestock Matters...

This issue we focus on parasites in cattle and sheep; including a look at using faecal egg counts to target effective use of wormers in sheep and a case study demonstrating how a proactive approach to worming youngstock has removed the need to drench.

We have a report from the XLVets New Zealand scholarship, a programme set up in 2009, working with The Society of Dairy Cattle Veterinarians (DCV) in New Zealand. One of the first year scholars on the programme provides us with a seasonal update from New Zealand - look out for further updates in future issues of the magazine.

We also take a look at VLA Herdsure® - a new nationwide disease testing and control service that provides comprehensive support for the control of six major cattle diseases. Following a pilot scheme which involved several XLVet member practices the tool was launched in November last year.

We hope you enjoy this issue of 'Livestock Matters'.

Joanne Dodgson
XLVets

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High Health Status Herds

Vets Duncan Bruce and Matthew Berriman from Rosevean Vet Practice in Penzance have been encouraging a number of their clients with pedigree beef herds to seek independent accreditation of the high health status of their herds.

Royal Cornwall Show June 10th - 12th 2010

Report from Stuart Gough, Calweton Veterinary Group

Somewhere in the region of 125,000 people visited the Royal Cornwall Show this year; at times it felt as if every single one of them wanted to stop to rectal 'Daisy'! As one of the last true, large agricultural shows the farming fraternity from far and wide were in attendance.

Cracking weather, a perfect location adjacent to the main livestock ring and enthusiastic 'staffing' meant the XLVets stand was the place to be! This provided a fabulous showcase for XLVets in the South West and also the 'FarmSkills' project. Situated in 'AI Alley' nestling amongst the breed societies and AI companies and adjacent to the main cattle ring, we were treated to a constant flow of interest from livestock farmers and associated trades.

Well done to XLVet member practices and their staff from Calweton, Rosevean, Penbode and St Boniface for their efforts with the XLVets stand at the event.

National Cattle Mobility Event 2010

Following on from the successful events in 2008 and 2009, the third National Cattle Mobility Event took place at Reaseheath College, near Nantwich, Cheshire on Thursday, 8 April 2010.

The event is described as a must for all those that can make an impact on dairy cattle mobility, including farmers, foot trimmers and veterinary surgeons, and over 200 delegates attended on the day. XLVets had a joint stand in the main conference hall with member practice, Lambert, Leonard & May and a copy of the XLVets farm newsletter 'Livestock Matters' was placed in every delegate pack.

The event began with a morning session with two keynote presentations; Professor Nigel Cook from the University of Wisconsin, spoke about his research into dairy cattle lameness in the USA. Professor Cook detailed how the prevalence of dairy cow lameness has little improved over the past decade, despite a growing understanding of the important risk factors, such as management, environment and nutrition. As herd sizes continue to grow and cows spend more time in buildings and on concrete surfaces, he highlighted the importance of getting the concrete surface right, looked at sand beds versus mattresses and detailed the FirstStep® programme that produces an action plan to facilitate a reduction in lameness in dairy herds.

'How genetics affect mobility and locomotion', was discussed in the second session, presented by Dr Mike Coffey, leader of SAC's animal breeding group. Dr Coffey described how an industry consortium has come together to expand the traits in the national index £PLI to make it broader and to incorporate more traits known to influence profitability. To do this, farmer recorded lameness data has been collected from milk recording organisations. This data shows that the incidence of lameness has been rising in recent years, as well as the number of herds actively recording the trait. He detailed the results from this national data and concluded that it may be possible to eventually use this data to aid genetic selection.

The afternoon session was held at the college dairy unit; a series of workshops gave delegates the opportunity to gain practical tips in several areas of cow management:

- Foot trimming and disease identification
- Environmental factors affecting lameness
- Mobility versus locomotion - what's the difference?
- Parlour improvements and foot bathing

The National Cattle Mobility Event is a registered charity, whose aim is to advance the education and training of farmers and allied professions in the subject of cattle mobility, with the aim of reducing the incidence of lameness in cattle in the UK, and thereby improving animal welfare.

Welsh web-based herd health planner launches

Paul Rodgers, Allen and Partners Veterinary Surgeons

Welsh Lamb and Beef Producers Ltd (WLBP) is a farmer-controlled agricultural cooperative society of over 7,500 Welsh livestock farmers.

The sustainability of Welsh livestock farming is dependent upon the effective marketing of the produce of Welsh livestock farmers and WLBP's objectives are to develop and manage the tools that will help its members reach that goal. WLBP recently developed an on-line health planner; both Rob Smith of XLVets' Farm First and Paul Rodgers of XLVets' Allen and Partners were involved with the process.

To promote the planner to Welsh vets there was a series of seminars running from 4th to 6th May 2010 in Builth Wells, Gelly Aur, Carmarthen and Carnarvon – covering mid, south and north Wales. Paul Rodgers was asked to help run these seminars as he's a LANTRA approved trainer; gained after successful completion of the XLVets 'Train the Trainer' programme. Richard Vecquerary of EBVC also gave a talk on beef nutrition at the meetings.

BEEF EXPO 2010

Beef Expo 2010 was held at the Auction Mart, Hexham in Northumberland, where XLVets attended to promote their farmer training workshops, FarmSkills. Andrew Curwen, Roger Scott and his team from Scott Mitchell, John MacFarlane and his team from Alnorthumbria, Bridget Taylor (Wright & Morten) and Richard Knight (Westmorland) came along and wore their vivid green FarmSkills t-shirts to raise awareness of XLVets and FarmSkills, among the farmers who came along. As well as talking about the variety of workshops and knowledge sharing that is part of XLVets and FarmSkills, the stand was enlivened by our very own FarmSkills juggler! He drew attention to the fact that organising time for learning and skills development can be a bit of a juggle on farm and gave farmers the chance to improve their multi-tasking skills by learning how to keep more than one juggling ball in the air at once. In addition, Roger Scott and John MacFarlane gave two seminar presentations about learning and skills development which were very popular with the farmers who attended.

Beef Expo 2010 was a huge success with many enquiries received for FarmSkills training programmes across the country.

CALWETON
VETERINARY GROUP

Veterinary Surgeon	Stuart Gough
XLVets Practice	Calweton Veterinary Group, Cornwall

A PROACTIVE APPROACH TO

Parasite Control in youngstock avoids the need to drench...

Devon farmer Charles Sampson has not needed to worm his dairy youngstock for the past two summers thanks to taking a proactive and preventative approach to parasite control, and monitoring egg counts through the grazing season, all with the help of his vet Stuart Gough of Calweton Vet Practice.

At Hartshole Farm near Tavistock, Charles Sampson and his wife Sarah run a 140-cow pedigree Holstein Friesian herd, with average yields of around 9000 litre/cow. They are visited every two weeks by Calweton Veterinary Practice's Stuart Gough to carry out routine fertility checks. During these visits, and in-between times by phone, aspects of herd health are discussed on an informal and ongoing basis. As part of the herd's disease prevention strategy, animals are vaccinated against leptospirosis, BVD, IBR and Bluetongue.

Charles is increasing the size of his herd by breeding his own heifer replacements. 'I simply don't want other people's cattle's diseases,' explains Charles. 'I've had my fingers burnt in the past - bringing in a sweeper bull with Campylobacter.'

So, attention to calf growth and health in the first 14 months is an important focus. Heifers are calved down between 1 August and mid-December. Calves are then fed pooled colostrum before moving onto a milk powder mix and concentrates. They are housed in groups of five and weaned at 5-6 weeks of age.

Charles has been working with his vet Stuart Gough for many years, and they have devised a finely tuned intervention plan: 'If there is any incident of scours or pneumonia, or any illness, then tests are carried out. We never just give antibiotics, because there's always a reason for the problem.' explains Charles.

Stuart adds: 'There has been a rumbling cryptosporidiosis problem at Hartshole Farm. So Charles, and his staff, have to take extra hygiene measures. Sheds are cleaned and pressure washed in between calf groups, as it's only physical cleaning that will get rid of the cryptosporidiosis oocysts.'

Charles aims for calves to be 60% of their adult bodyweight at serving, and around 14 months of age. 'We don't bother weighing them but use a 51" height at the withers as our guide. Also, the group have to perform as a group - we don't want heifers calving when too big and old.

'In fact, anything calving over 580kg as a heifer tends not to perform as well after the first lactation, as too much condition is lost, and so they don't get back in calf. Then they are stale for too long and we lose out on performance.'

CHARLES SAMPSON

'Having a parasite control plan is part of the jigsaw - if cows' growth is good and there's no scouring, then we don't need to interfere at all.'

Drench-free parasite control

One very successful health initiative on the farm has been to ensure youngstock are protected against worms during the grazing months, without worming them.

Stuart explains: 'Fortunately, there has never been any fluke on the farm, in part due to the sloping fields which make it less wet.

'However we can't predict the lungworm challenge, so we have to assume that in a heavily stocked area we are going to have a problem with this in the late grazing season. The crux of Charles' parasite control plan is to vaccinate against lungworm with Huskvac at the start of the grazing season. And then to monitor the parasite burden in the sward through the summer.

'It's all about optimal use of drugs not maximal use,' says Charles. 'If I didn't vaccinate then routine worming every five weeks would be needed.'

Stuart points out: 'Admittedly, it is easy to carry out a worming programme. Options include a pulse release bolus administered once at the start of the season. Alternatively, cattle can be drenched every five weeks and again before being brought inside for winter. This is more time-consuming, and both have a cost.

'But for the past two grazing seasons, Charles has not needed to worm his youngstock and the single lungworm vaccination has been all that is needed, in conjunction with a grazing management plan and carrying out faecal worm egg counts.

The first egg count is made one month after turnout: samples from ten cow pats are taken and sent for analysis at the SAC, at a cost of approximately £15. In youngstock, it takes between three and six weeks from the ingestion of infected larvae to the excretion of eggs, depending on the warmth and moisture content of the sward. So the frequency with which subsequent counts are made depends on the previous results, and is altered accordingly.

Stuart explains: 'It's a careful balance - we want the first season grazers to develop immunity but not develop production-limiting levels of parasites. Last year, the egg count started to rise around mid-July, but then dropped, demonstrating that, as healthy heifers, they had coped with the challenge themselves.'

'The biggest issue in the early part of the grazing season is over-wintered infection. However, if the pasture is not grazed until after mid-July, then the last year's worm infestations will have died off. So Charles keeps a record of when fields were last grazed, and selects which ones are 'safe' for heifers.'

All cows and heifers are wormed at housing in October using a wormer product specifically to tackle the Type II ostertagia encysted larvae. This is required because the stress can cause them to break out and animals will scour. It also helps reduce pasture infestations as cows are coming out of the sheds 'clean' in the spring.

Stuart explains: 'Worm infections in pasture take a while to build up. Without using the initial lungworm vaccination then we would have to assume that in the second season of grazing there would be a rapid acceleration in worm populations in the late season.

'Over-worming is more of a sin than under-worming as the animal never gets a chance to develop immunity. This then makes them very susceptible in the second season.

'Having a parasite control plan is part of the jigsaw - if cows' growth is good and there's no scouring, then we don't need to interfere at all.' Charles adds: 'Taking this approach, not only have we saved time and money, but it's a more responsible use of medicines and I can justify my actions to people outside of farming.'

Rosevean VETERINARY PRACTICE

Veterinary Surgeon	Duncan Bruce Matthew Berriman
XLVets Practice	Rosevean Veterinary Practice, Cornwall

Duncan Bruce
Rosevean Veterinary Practice

Matthew Berriman
Rosevean Veterinary Practice

Vets Duncan Bruce and Matthew Berriman from Rosevean Vet Practice in Penzance have been encouraging a number of their clients with pedigree beef herds to seek independent accreditation of the high health status of their herds.

HIGH HEALTH STATUS HERDS

Gaining accreditation for high herd health status - is it worth it? **Yes it is!**

Many progressive dairy and beef farmers are already working with their vets to eradicate the four key main infectious diseases - BVD, IBR, leptospirosis, and Johne's disease - from their herds, and protect health and productivity. However, for pedigree breeders, being able to demonstrate a disease-free herd also increased the buying appeal of their livestock. There are a number of health accreditation schemes available.

At Rosevean Vet Practice, clients are steered towards using the SAC's Premium Cattle Health Scheme (PCHS).

A herd is certified to be fully accredited after two years of testing clear of the four main diseases.

For discerning pedigree buyers, it's becoming essential that cattle are proven to be free of BVD, IBR, leptospirosis and Johnes disease.

Benefits for breeders

Irwin Rowe
Millvale Farm

The first of Rosevean's clients to become fully accredited, i.e. testing clear of the four main diseases on the SAC Premium Cattle Health Scheme was Irwin and Dilys Rowe at Millvale Farm with their Bosullow Herd of Pedigree Aberdeen Angus. Their Elite status was achieved through hard work and planning over a period of several years.

Irwin says, 'We have been breeding Pedigree Aberdeen Angus for 20 years and after about 5 years started testing for BVD. Working with our vet Duncan, the whole herd was blood tested to find the status of each animal on the farm. Due to our Elite status It is only necessary to blood test young stock for BVD each year.

Testing at Millvale Farm for other diseases - IBR, Lepto and Johne's - began about 8 years ago, whereby all the required animals were tested. Just yearly testing of the relevant animals is now required.

'We now know the status of all the animals on the farm, and for this reason we keep a closed herd. One of the benefits to our customers is that they know our stock are free from these diseases,' adds Irwin.

Another of Rosevean's clients to become fully accredited on the SAC Health Scheme was Penny Lally with her herd of pedigree Chyenhal Simmental cattle.

Penny points out that a breeder's reputation can be ruined if their bull turns out to be diseased and has played safe in the past by slaughtering potentially infected animals. A policy that has worked and maintained a high health status for the Chyenhal herd.

Matthew explains: 'Whilst some farms aim to eradicate all four of these infectious diseases - BVD, IBR, leptospirosis and Johne's disease - it is not always practical. For instance, leptospirosis can also be carried by sheep, which Penny brings in as part of her grazing management, so it was decided to vaccinate her cattle and not gain accreditation for this specific disease.

BIOSECURITY

Strict biosecurity protocols are essential for any farm which wants to maintain its high health status.

'Strict quarantine and testing procedures have to be followed for all herds in the PCHS, and indeed a biosecurity protocol for incoming stock should be followed on every livestock farm,' explains Duncan.

'Most of the disease outbreaks we see are when animals are brought in, such as when a new bull comes to the farm. But disease outbreaks can also be simply down to contact with animals of a lower health status, in neighbouring fields, and of course, cattle shows are a risk too.'

BVD can be spread simply by nose to nose contact. So Penny Lally has double fenced the surrounds of many of her fields.

On the Rowes' Millvale farm a strict policy is also adopted to provide extra distance between neighbouring cattle and their own.

In the very few fields where neighbouring cattle are grazed in adjacent fields, electric fences are used on both sides of the field to prevent any cattle to cattle contact.

Further control measures include strict hygiene and disinfectant footdips for all visitors to the farm. They also have their own cattle lorry and when required can transport cattle direct to customers.

Penny Lally, Rose Farm

CATTLE SHOWS

For pedigree breeders, cattle shows can be one of the biggest risk factors for disease to be introduced into a herd.

'Shows are a good place to pick up disease,' says Matthew. 'Animals come into contact with other animals and humans.

'All the diseases can be spread by contact with other animals, and leptospirosis can be spread in urine splashes, or sharing a water tank at shows where contamination can occur with everyone dipping their buckets into it. Many disease problems can also be spread by aerosol between cattle, even over some distance.

'It's important that animals are transported in clean lorries.'

Penny Lally never shares transport, except with her neighbour, with a similarly high health herd. 'There's no point taking two years to become fully accredited and then sharing a lorry which has carried animals with a disease, thereby losing the accreditation, all for the sake of a rosette.' She also keeps her show animals apart from the rest of the herd during the show season, which lasts approximately three weeks, kicking off with the Devon County Show and finishing with the Royal Cornwall Show.

Matthew explains: 'BVD and IBR viruses can spread by aerosol spray, so it's not just important to stop physical contact between animals, it's also essential for them to have separate airspace.' At the end of the season, Penny's animals are tested to make sure they haven't sero-converted, before they are allowed to re-join the rest of the herd.

The pedigree herd of Ruby Red Devon cattle owned by Jeff and Pat Thomas of Bollowal Farm is part way through the 2 year accreditation process. Jeff adds: 'The herd has been testing free of disease for around six years, so joining the SAC Scheme has just been a way of formalising it using an outside organisation.'

Jeff Thomas has a show team of animals which are kept quarantined from the others during the show season and then for a further 4-6 weeks afterwards. He also has his own lorry. Jeff has the calves blood tested before vaccinating them for leptospirosis. He explains: 'We vaccinate because we show, and there's a biosecurity risk with this disease.

He attends the Three Counties Show, Bath & West and Devon County Show: 'We need to show! We need the show wins to advertise our herd and generate interest. Otherwise no one will come and see us all the way down here.' Jeff is not planning to buy in any more cattle, but if he did, he would blood test them on the source farm, and if disease-free bring them to Bollowal Farm and quarantine them for six weeks and then test them again

The Rowes show their Angus cattle at the Devon County and Royal Cornwall Shows. To minimise risking their accreditation, Dilys checks with the show organisers regarding where their cattle are placed in stalls. 'We also buy extra stalls to have space either side of the cattle and we erect extra barriers. We try to transport our cattle ourselves, but if that's not possible, they travel on their own in a hired lorry.'

For these Cornish breeders, shows are essential for promoting the quality of their cattle. Penny explains: 'Showing is our shop window, we all need it to gain the credibility of our fellow breeders.'

Jeff Thomas' show team of Ruby Red Devons are kept separate from the main herd during the show season.

Accreditation: Is it worth it?

Penny Lally says: 'It's important when selling stock to know they are protected against disease, and it adds something to their value - the value is not necessarily a monetary one, it's more about improving the appeal of the animals because buyers can have confidence they are not buying in disease.'

Jeff Thomas says: 'Twenty years ago, people used to buy cattle on their looks. Then we started weight recording and people wanted their EBVs as well as coming to see them. But now, people ring up and the first question is 'what's the health status of your cattle?' Only once they know we've none of the four main infectious diseases, do they then ask for figures and want to come and look.'

Irwin Rowe reckons that apart from the conformation and temperament of the cattle, farmers are interested in the health status of his animals. 'They do not want to buy-in diseases and we are 100% certain that we have done the right thing in testing, and would encourage other people to do the same.'

The health status of the Rowe's Bosullow Herd brings farmers from all over the country and brought one Pedigree Angus breeder all the way down from the borders of Scotland.

Matthew Berriman sums it up: 'I recommend to anyone selling breeding stock to get rid of these four infectious diseases and get the herd independently accredited as having a high health status. And if anyone is looking to buy stock, then they should buy from these herds.'

Sophie Throup FarmSkills Training Co-ordinator

FarmSkills Training

Dairy farmer Chris Simmons from Folly Farm in Gloucestershire, has worked with his vet, Will Tulley from Tyndale Vets to put together a series of hands-on workshops for the staff on his farm. Each course has tackled a specific topic and is delivered on-farm using interactive and practical methods to train a small and multi-national team of dairy staff – sometimes with the additional help of a Polish interpreter.

Chris wanted to invest in his staff with some training, but wanted it specific to Folly Farm where the herd is milked three times a day to achieve yields of 11,500 litres.

Chris Simmons said: 'I wanted a course which taught my staff the way things are done here. We have very strict milking protocols, milking three times a day and achieving yields of 11,500 litres, so procedures must be to a certain standard and be consistent. This training ensured we were all working off the same hymn sheet, and was also beneficial in improving staff morale as everyone had a better understanding of their role.'

'After just the one session on milking routines, everybody is now following exactly the same routine, and milking exactly how I want them to. It's nothing supersonic; this training is about keeping it simple and teaching people how to do the basics well.'

Vet Will Tulley added: 'As FarmSkills courses are designed specifically for training small groups of people, and take place on-farm, they can be practical and highly interactive. For all the courses, we assess the knowledge levels of those attending the course beforehand to make sure it is at a level that everyone learns something – sometimes we may need to run two courses to achieve this.'

Following the training on cow behaviour, some changes have already been made on the farm. Chris explains: 'We can now get cows in more quietly and the routines go more smoothly and more quickly. Cows undergo the same milking preparations and are calmer so have a faster milk let down, which has an overall effect of increased production.'

The **FarmSkills** series of training workshops continue to flourish across the UK, adding business benefits and improving practical skills for farmers. Courses run for the 700 farmers who have attended a course to date include advanced dairy fertility management, sheep parasite control, suckler cow nutrition, interpreting pig records, veterinary health for poultry keepers and practical foot trimming - for cows and sheep. In many areas, the courses are supported with grant funds from Lantra LandSkills who channel DEFRA and EU money to the training workshops to help farmers benefit from veterinary led courses at lower prices.

Will Tulley
Tyndale Farm Veterinary Practice

Chris Simmons
Folly Farm

Courses have also benefited farmers in the beef sector

Limousin beef breeder, Fred Scott, from West Farm, Alnwick attended a recent 'Finding the Right Beef Bull' FarmSkills course run by vet John MacFarlane of Alnorthumbria Vet Practice. The course looked at why EBVs are important and how they can be used to improve beef herd performance. The course also used information learnt to teach farmers why semen testing is necessary, how to measure scrotum size as a guide to fertility and what to look for when checking locomotion, eyes and teeth.

Fred Scott said: 'Since going on the 'Finding the Right Beef Bull' course, I have saved myself some expensive mistakes - like putting a sub fertile bull out to run with the cows for the season for example. I now know how to properly check scrotum size and why you do it - and I have learned that size varies between the breeds, which I didn't know before. I have my bull's semen regularly tested and it makes you realise that it's more than just how a bull looks on the outside that counts.'

If you think we could work with you to help tailor make a course for your farm staff - or you would like to find out about the workshops we are running across the country, please log on to **www.farm-skills.co.uk**, call either Sophie or Mina in the FarmSkills Office on 07748 805497 or e-mail farmskills@xlvets.co.uk

PULL-OUT GUIDE

PULL OUT & KEEP

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02 Sheep Parasite Control

Tim O Sullivan MacPherson O'Sullivan

Knowing the parasites in your flock not only ensures that the correct treatments can be used, but suitable control programmes can also be put in place to hopefully eradicate the parasite from your flock for good.

FarmSkills
GROWING TALENT IN FARMING
SHEEP

Knowing the parasites in your flock not only ensures that the correct treatments can be used, but suitable control programmes can also be put in place to hopefully eradicate the parasite from your flock for good. Here's a guide to what's out there and how you can treat it.

Common name	Also known as	Type of organism	What does it look like?
SCAB	Psoroptes ovis	Burrowing Mite	Mites cause small pustules on surface of skin, which produce the moist scab typical of this disease. This can quickly extend especially over back and flanks.
			Other mites can also cause scab like disease but are controll
LICE can be biting or sucking species.	Bovicola (Damilina) ovis		The lice are bigger than mites and visible to the naked eye on close examination.
KEDS	Melophagus		Keds are wingless flies bigger than lice but causing similar symptoms often in conjunction with lice.
TICKS	Ixodes ricinus		Approx the size of a black grain of rice when engorged with blood. (The parasites puncture the skin to suck blood)
FLY STRIKE	Myiasis	Blowfly larvae	Maggots clearly visible to the naked eye with distinctive odour. These maggots will burrow into the flesh eventually causing septicaemia shock and death.
			Some other non-p
LUMPY WOOL DISEASE	Dermatophilosis	Bacteria	As the name suggests the fleece becomes distorted and discoloured.
RINGWORM	Usually Trichophyton	Fungal disease	Powdery dandruff usually around head.
ORF	Parapox	Virus	Scabs around mouth feet/udder.
FACIAL ECZEMA		Bacterial infection	Swollen or pus producing lesions.
SCRAPIE		TSE	Notifiable disease of the brain which can cause self mutilati

How does it affect the sheep?	How does it transfer onto sheep?	When most often seen?	How controlled
Intensely itchy condition; affected sheep will bite and pull at their own fleece and can rapidly lose body condition.	Mites often go dormant over summer so infection is often brought in on replacements or store lambs that look clean. Mites can survive off the sheep for up to 17 days and so can be present on creep feeders and gateposts where affected sheep have been scratching.	Autumn/Winter	Organophosphate dips Vital that dip is made to right concentration, is clean and that sheep's head is plunged into dip to ensure that scab mites (which tend to hide in ears) are completely eliminated. As use of these dips is now regulated, only trained and licensed operators wearing suitable collective clothing should use them. **Avermectin injections**: such as Ivomec™, Dectomax™ and Cydectin™ are effective. Repeat treatments may be required depending on product.
ed in an identical way to true scab caused by *Psoroptes ovis*			
Animals in poor body condition are more susceptible to lice infestations, which can cause further weight loss and debilitation. Not as intensely itchy as scab but heavy infestations will cause the sheep to bite at itself and lose wool.	Direct contact from infected sheep. Can only survive for limited period off sheep.	Autumn/Winter	**Organophosphate dips** to be used as above. **Pour-on's**, e.g Spot On, Dysect if used as per manufacturers recommendations can give good protection against lice. Pour-on's should not be used as a quarantine treatment as they are ineffective against scab. Avermectin injections are often ineffective against lice especially biting lice.
Spread serious disease such as tick borne fever, louping ill and tick pyaemia. The symptoms of these diseases include abortion and infertility, meningitis and spinal paralysis.	Ticks survive for very long periods on rough grazing and then attach to sheep or cattle to feed on blood. Very heavy infections cause anaemia and poor thrift.	Mostly **Spring** through to **Autumn** but anytime once attached onto sheep.	Dipping/Pour-on's Most summer fly control products will also eliminate ticks.
Unshorn or dirty sheep are much more prone to disease which normally starts around the tail, but can affect any part of the skin. The disease rapidly progresses if left untreated Affected sheep initially appear agitated trying to bite at the affected area but, they may simply appear dull and listless.	Blowflies lay eggs on fleece. The flies are attracted to faeces and blood so mucky tails and footrot affected feet are often the first target.	**Summer** but temperature dependent so can occur in spring and autumn.	Timely shearing, dagging and preventative treatments are vital to control this disease, which is a major welfare issue. Dipping or Pour-on treatments such as Crovect or Clik are most commonly used.
parasitic diseases			
The fleece becomes matted and loses its natural protective and insulating properties leading to ill-thrift and secondary disease.	Generally only occurs where full, heavy fleeces coincides with constant wet weather and muddy conditions. Can also affect the skin around the legs.	**Weather dependent**	Timely shearing, good general health and adequate mineral supply. Well-ventilated shelter in prolonged wet spells.
Can affect any part of the body **and the owner.**	Often after contact with affected calves or calf buildings.	**Anytime** but often after indoor lambing	Generally self-limiting. Early shearing helps as sensitive to u.v. light.
Inability to suckle/graze. **Can affect people.**	Infected scabs and scab lesions.	**Often at lambing**	Vaccination in dirty flocks/bio-security in clean flocks.
Can cause loss of appetite and failure to suckle.	Usually secondary to some form of trauma such as rough troughs/ feeders or orf.	**Winter/Spring** mostly but can occur anytime	Correct the underlying cause and treat the infection with antibiotics.

on and biting leading to confusion with skin disease.

Biosecurity and Quarantine

If you are bringing sheep onto your holding it is important to remember they may well be carrying unseen parasites with them. Ideally therefore they should be quarantined, treated and kept separate for three weeks after arrival on farm. Good fencing is vital as many scab outbreaks occur after unwelcome visits from stray sheep. Also remember that some of these parasites can survive off the sheep for up to three weeks and can be transferred on clothes and equipment if not thoroughly cleaned and disinfected.

IN SUMMARY

- Avoid buying sheep from unknown sources.
- Quarantine and treat new arrivals.
- When you treat your flock treat all at once.
- Keep sheep fleeces clean by having a worm/coccidiosis control plan and by timely shearing/dagging.
- Put in place regular treatments during summer to prevent fly strike.
- When you have a problem get the sheep examined to identify the parasite involved.
- Work with your vet to use the right product, at the right dose, at the right time.

Find out more...

Get in touch to find out more or talk about courses we can tailor make for you.

Telephone **07748 805497**
e-mail **farmskills@xlvets.co.uk**
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If you would like to know more about controlling parasites in sheep - or any other sheep workshops, such as lameness control or effective lambing techniques, why not **contact the FarmSkills Office** to see what we can do for you in your area?

GARETH HATELEY, VLA

There are clearly defined testing steps and biosecurity principles to help the farmer control disease. **The Veterinary Laboratories Agency**

Herdsure®

The Veterinary Laboratories Agency (VLA) launched a new cattle health improvement service at the British Cattle Veterinary Association's Congress in Southport last November. Herdsure® aims to provide the industry with a structured, user friendly and cost effective health planning tool for beef and dairy herds.

Herdsure® uses stepped testing protocols for the management of major endemic diseases that have significant economic impact on the UK cattle industry:

- Bovine viral diarrhoea (BVD)
- Johne's disease
- Liver fluke
- Infectious bovine rhinotracheitis (IBR)
- Leptospirosis
- Neosporosis

There are clearly defined testing steps and biosecurity principles to help the farmer control disease. Herdsure® is divided into Levels with certificates of health status issued at each level.

Herdsure® LEVEL 1

Establishes health status.

Herdsure® LEVEL 2

Improves health status through disease reduction strategies.

Herdsure® LEVEL 3

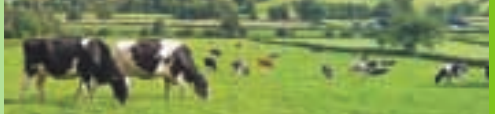
Monitors and maintains improved health status.

Herdsure® has some unique features designed to make it easier for the farm and vet:

- Herdsure® Management System (HMS) is a back office IT system designed by the VLA to support large scale herd health planning. It provides prompts when testing is due, records herd data and reduces administration for both vet and farmer.
- Postage paid return of samples and free consumables such as bulk milk sampling pots.
- Helpline for registered vets with a team of consultants offering advice and interpretation.
- Veterinary Practice and Farmer Handbook with information about diseases, protocols, biosecurity measures and management of added animals.

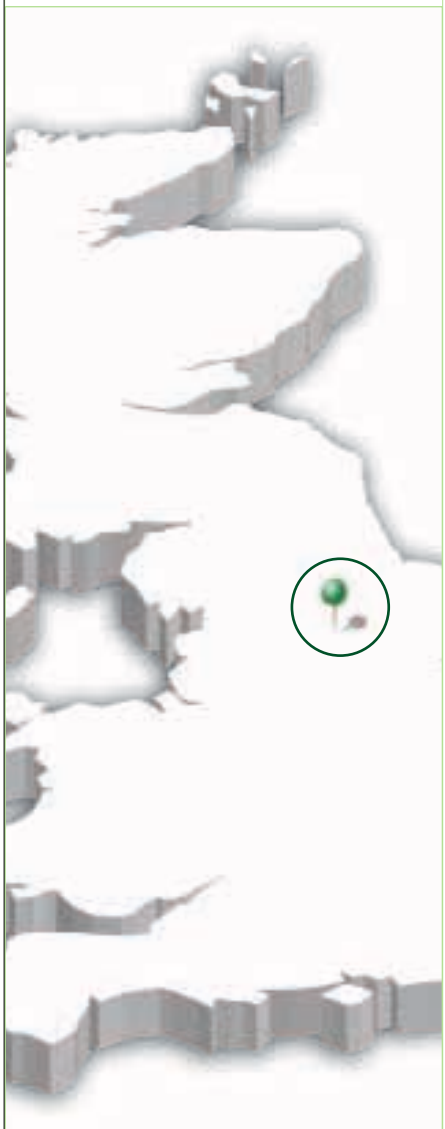
SUMMARY

Although there are a number of schemes in existence, the VLA has, perhaps, a unique position in that it is a national organisation that works from regional laboratories that can act as a local 'focus' for disease control. Thus, its Herdsure service could help develop endemic disease control at both a local and national level.



JONATHAN STATHAM

Experience of the Herdsure® Pilot Scheme



Veterinary Surgeon	Jonathan Statham
XLVets Practice	Bishopton Veterinary Group, Ripon

Infectious disease control is a priority at Bishopton and forms a central part of both our dairy and beef herd health schemes. We were therefore interested to see how Herdsure® could contribute to herd health management.

Every cattle herd in the region has different priorities:

- High health status and accreditation for the sale of germplasm and pedigree breeding stock.
- Effective disease control to deliver the maximum production at minimum disease cost for commercial herds.

We took part in the Herdsure® pilot project in 2009 with dairy and beef herds of varying sizes and profiles as follows:

- 130 pedigree dairy cows selling breeding stock, closed herd for more than 20 years with predominantly high health status (BVD, Leptospirosis and IBR seronegative), but with history of occasional Johne's disease and recently identified liver fluke issues on bulk milk ELISA screening.
- 300 dairy cows prioritising commercial milk production, limited purchase of replacements and BVD, IBR and Leptospirosis seropositive and vaccinated status, but Johne's and liver fluke negative on all screening.
- 80 cow extensive pedigree upland beef suckler herd, BVD, Leptospirosis and IBR vaccinated with history of sporadic Johne's and liver fluke.
- 200 cow lowland commercial beef suckler herd, BVD, Leptospirosis and IBR vaccinated with no history of Johne's but recent liver fluke outbreak.

We carried out initial screening on these herds to establish their health status and set out an action plan for improvement. Key points in this process were:

- Our strong relationship with the VLA regional laboratory at Thirsk.
- Ease of communication and benefit of 'local knowledge', with local VLA only 15 minutes drive from practice.
- Flexible approach to different levels of health improvement - a succession of stages were available through the scheme allowing a sense of progress.

The inclusion of liver fluke is highly relevant to the surge in fascioliasis cases experienced over the last two to three years. Similarly, neosporosis is often overlooked in a herd context and there is a role for a wider package of controls as presented in Herdsure®.

The farmers of higher health status herds at Bishopton often seek CHeCS accreditation as part of their package so they can access markets throughout the UK and abroad. Herdsure® does not currently offer access to CHeCS accreditation but the higher levels naturally lead to this process.

RUPERT HIBBERD

Experience of the Herdsure® Pilot Scheme

Veterinary Surgeon	Rupert Hibberd
XLVets Practice	Drove Veterinary Hospital, Swindon

Gerald Osborne manages an organic suckler herd of 100 Welsh Black and Devon cows in the Pewsey Vale, Wiltshire, producing finished cattle for a London farmers' market.

A BVD vaccination programme was started in March 2008 following a number of abortions and identification of two 'Persistently Infected' (PI) calves, presented as stunted calves. In June 2009, Gerald decided to attempt to eradicate BVD.

The team at The Drove Veterinary Hospital had some experience of monitoring and accreditation programmes but had not, as yet, set out to specifically achieve full herd eradication in a confirmed actively infected herd.

There was an opportunity to participate in a pilot of the Herdsure® Cattle Health Service to trial its sampling, testing and management protocols and the processes that were driven by VLA's in house newly developed IT system before its launch in November.

The herd was enrolled into the BVD pilot at Level 2 as active infection had already been established.

We agreed four essential points before sampling began:

- To ensure the farm staff understood the basic epidemiology of the disease and the threat to pregnant animals from the PI animal.
- To ensure there was a full commitment to the prompt removal of identified PIs whatever the value or pregnancy status they may have.
- To ensure the requirements for BVD biosecurity would be met.
- To ensure the commitment to adhere to the full eradication programme including the sampling of newborn calves until a period of 12 months without the disclosure of a PI animal was achieved.

Two biosecurity issues were identified:

- The farm was using a muck spreading contractor and his equipment needed to arrive clean and have a further wash before entering the farm.
- One field on the farm boundary had a single stock fence and the next field was periodically grazed by the neighbour's cattle. It was decided that this distant field should only ever be used for weaned, non pregnant yearlings. The threat of a recently acquired active infection from the neighbour's stock was considered to be minimal and could be managed by a short isolation period for stock returning from this area. Also, it was decided to continue the herd vaccination programme.

How it works

Herdsure® paperwork is straightforward requiring completion of one registration form for the practice and a form to enrol each herd. Following registration a prompt for sampling is sent with a sample submission form that includes a BCMS print out of ear numbers (with barcodes) of cattle to be tested so that samples can be matched with these.

The accompanying letter clearly explains the date the tests are required by, the ID - or age range - of animals to be tested and the type of sample required. For the Level 2 BVD protocol all cattle over four weeks old needed sampling and they are tested at the laboratory by the PCR test for BVD virus in groups of 10 initially.

Any positive batches are tested to identify the positive individuals by the antigen test. This screening reduces the laboratory costs involved.

Once this has been completed and all the PIs are removed, testing of calves upon reaching four weeks of age commences.

In a busy farm practice it can be a daunting task to keep up-to-date with the sampling of several herds in schemes for different diseases. The Herdsure® protocols effectively remove some of this workload from the vet by prompting for the appropriate samples at the correct times.

It is a big task that VLA is seeking with its Herdsure® service but on this exercise it has performed well.

St Boniface Veterinary Clinic

Veterinary Surgeon	Tony Kemmish
XLVets Practice	St Boniface, Crediton

Tony Kemmish of St Boniface Vet Practice in Crediton outlines the causes of milk fever (hypo-calcaemia) and the preventative options available. And herd manager Adrian Salter explains how working with Tony, he has changed the nutrition and routine for newly calved cows to help reduce milk fever cases and also improve herd fertility.

Preventing Milk Fever in dairy cows

Tony explains: 'When a cow goes down with milk fever after calving - the traditional 'downer cow' syndrome - it's because of a drop in calcium levels in the blood which means she can't support normal nerve and muscle function. Moreover, it's an indication that many of the transition cows are probably suffering sub-clinical levels of hypo-calcaemia, and could also become clinical cases themselves.

'As a cow or heifer approaches calving, there is a massive demand for calcium to be unlocked from her bones to support growth of the calf and to provide colostrum and milk.

'Calcium is involved with muscle contraction. Most visibly, in clinical cases, the cow can no longer stand. But low calcium levels also compromise gut movement, resulting in poor appetite and constipation, and there is an increased risk of mastitis as the teat sphincter may relax.

The uterus is also very muscular, and after calving it should shrink down in size, expelling any mucous and infection from the birth - a process known as involution.

However when cows are hypo-calcaemic, the lack of muscle contraction means the uterus can remain open, thereby increasing the risk of infection. If the cow returns to cycling and is inseminated, the fertilised egg may not be able to implant in the uterus. So there's a knock-on effect on fertility.

Treatment for clinical cases, involves an injection of calcium into the vein combined with other supportive therapy. However, prevention should be the focus, and for this, attention to the management of dry cows and to their transition diet is essential.

There are three main nutritional strategies:

1 Feed cows a low calcium diet pre-calving so that calcium is already being mobilised.

2 Feed anionic salts - like chlorides or sulphides - to reduce the pH of the blood and draw out the calcium.

3 Drenching with calcium solution around calving giving an instant boost to blood calcium levels (see the previous issue of Livestock Matters).

Case Study: Bremridge Farm

Clinical and sub-clinical levels of milk fever have been a problem for Adrian Salter, herd manager to the 500-cow Nuthatch pedigree herd at Bremridge Farm, near Crediton.

Herd average yield is just over 9,500 litres, and cows calve all year round. The main herd is housed indoors all year round. The low yielders graze by day and are housed at night while far-off dry cows graze outdoors up to 3 weeks before calving when they are brought indoors to form a transition group.

Hypo-calcaemia has been a problem on the farm because the high yielding Holstein cows struggle to physically eat enough of the diet around calving.

Tony explains: 'A cow is, naturally, very pre-occupied just before and after calving, and takes her focus off eating. Then, when she is returned into the main milking herd there can be competition for food in the new social group - this all adds to stress levels, further reducing her attention on eating. So managing her re-introduction to the herd after calving is vital in reducing milk fever cases.

At Bremridge Farm, cows are fed a transition TMR diet which is deliberately formulated to be similar to the milking ration, so that the right bacteria are already geared up once production goes into full swing. It's also a high fibre diet, to keep the rumen large, ready for the increased levels of feed intakes needed to support high yields.

The daily transition TMR ration per cow, those three weeks off calving, consists of 18kg maize silage, a 4kg fibre 80:20 mix of straw:grass silage, 1kg of protein blend and 1kg of dry cow Omega, 150 grammes dry cow minerals, and 250g magnesium chloride (MgCl) flakes.

Tony explains: 'The magnesium chloride flakes acidify the blood and this helps the calcium mobilisation from the bones. Intake levels are important, so these diets must be mixed to ensure the same density throughout. The levels fed to the Nuthatch herd are at the top end of normal. Magnesium chloride is not a very palatable ingredient, so care must be taken to ensure that feed intakes do not decrease.'

Adrian adds: 'Numbers in the transition group vary from day to day so whoever is on feeding duty needs to ensure enough feed is made for the animals present. They shouldn't be coming to the barrier at feed out, because they shouldn't have been allowed to get hungry in the first place.'

Tony and Adrian review the herd's nutrition on a monthly basis with an independent nutritionist and adapt the ration taking into account factors such as yields and dung consistency. They also take a close look at intakes and any metabolic problems during routine weekly fertility visits.

Despite the use of MgCl flakes, cows were still getting metritis (whites) after calving, sometimes for up to 6 weeks. Tony explains: 'We carried out an investigation looking at possible infectious diseases, energy deficiencies and trace element shortages but found no problems in these areas. Despite having few clinical milk fevers we suspected a calcium shortage around calving which was stopping the uterus closing down and involution.'

So now all cows are dosed with a calcium solution straight after calving and then kept under observation for a week. Adrian explains: 'Ideally we'd like to monitor individual cows, but we don't have the facilities and it would be a lot of extra work, plus they don't like being kept out on their own. So now we keep fresh calvers in a small group for the first week, where we keep an eye on them before they go back to the cubicles. We also keep check that their milk production is on a rising trend. If it isn't, then it's a sign the uterus may have some infection.'

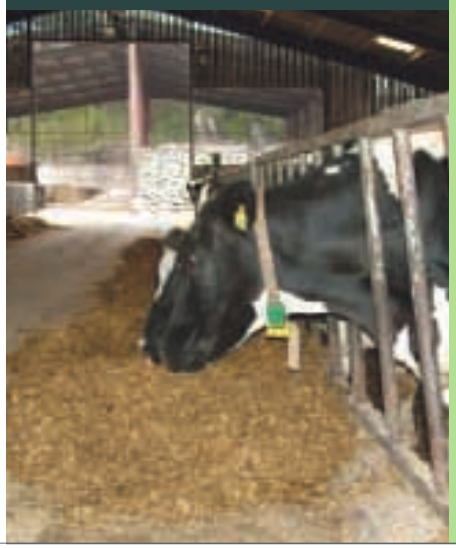
During his regular routine visits, Tony carries out a post-calving check on all cows, scanning the uterus after about three weeks to assess its size, as well as the quantity, thickness and discoloration/infection of any mucous still present. Tony says: 'Farmers can make their own checks by carefully dipping their hand into the cow's vagina to check the mucous is clear and not smelly or containing pus. Rectal temperature should also be taken.

Tony adds: 'Attention to dry cow management and nutrition is key to preventing cows from becoming hypo-calcaemic. Whilst avoiding milk fever and the 'downer cow' is often the main aim, just as important is the prevention of sub-clinical milk fever which can be responsible for cows failing to get back in-calf, and having a longer term effect on herd fertility performance.'

Adrian Salter

Bremridge Farm, Crediton

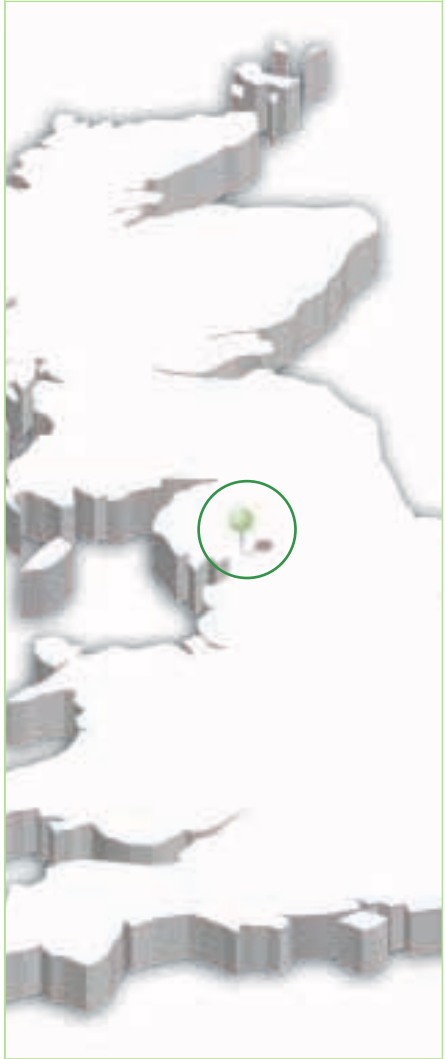
'Numbers in the transition group vary from day to day so whoever is on feeding duty needs to ensure enough feed is made for the animals present...' **Adrian Salter**



Using faecal egg counts (FECs) to target wormer use in your sheep flock will help reduce a flock's dependence on wormers, improve flock performance, reduce worming costs and save time.

Sheep Flock Planning

Iain Richards Westmorland Vet Group
Eric Thompson High Butterbent Farm



Veterinary Surgeon **Iain Richards**
XLVets Practice **Westmorland Veterinary Group, Cumbria**

XLVets' Iain Richards says sheep producers using the results of faecal egg counts as part of an Integrated Flock Health Plan are seeing the benefits both financially and in the health of their stock. What's more, it's helping maintain effective wormers for the future.

FEC's provide valuable information to help decide if worming is necessary, or if it can be safely delayed or left out to help determine when worming is needed.

Production pressures on the farm vary from year to year so keeping an ongoing dialogue between farmer and vet is a good idea. This is where a Flock Health Plan is invaluable, as a practical tool for looking at a problem from different directions, Mr Richards explains.

Cumbrian sheep producer Eric Thompson is a supporter of a planned approach. By collecting and sending in regular dung samples, altering the farm's worming strategy and from making changes to his grazing management all combined to hugely reduce egg numbers and improve lamb performance at High Butterbent Farm, near Kendal.

Warning signs appeared in Mr Thompson's Suffolk X Mule lambs during August 2008 when lambs began losing condition rapidly. Following the death of a lamb, it was brought for postmortem at the Westmorland Veterinary Group which revealed a very high worm burden.

This was further confirmed when a faecal from the flock egg count showed 7,400 trichostongyloid eggs per gramme. 'Faecal samples are easily collected from the ground after gathering sheep into a corner of the field and then collecting freshly dropped, warm faeces. Ten samples will give a good estimate of parasite burden of the whole group compared with individual counts on a few animals,' advises Mr Richards.

At High Butterbent Farm, resistance to BZ 'white' wormers was also suspected. Lambs were immediately treated with ivermectin (an avermectin based 'clear' drench) and monitored. Sampling and analysis following a repeat treatment revealed no trichostrongyloid eggs were present.

Eric Thompson also followed advice to reduce pasture contamination in the following year. Grazing management can help to avoid any unnecessary exposure to some worms whilst allowing the sheep to build up their own natural immunity to the parasites which are present.

'Exposure of lambs to worms increases throughout the summer and into early autumn. By moving them to pastures with a lower worm burden, this avoids intensive drenching and improves performance,' adds Mr Richards.

Due to the differing worm burden facing his flock, Mr Thompson was also advised to alternate between 'clear' and 'white' worming products.

Ewes were also treated during lambing 2009 as an effective means of reducing pasture contamination which arises from the reduced immunity of the ewe at this time. However, concerns over resistance means this wasn't repeated in 2010. Instead just the poorer ewes were targeted with a wormer, as these have the biggest contribution to egg counts.

The Flock Health Plan at Butterbent Farm also recommended that replacement breeding ewes brought on to the farm should be yarded for 24 to 48 hours and drenched appropriately before joining the main flock.

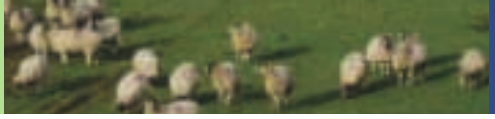
'Using Iain's knowledge and correct diagnosis I was able to correct the poor lamb growth rates in 2008 and ever since then, through regular FEC monitoring, the worm burden is now at very low levels. Drenching and labour costs have also been reduced,' adds Mr Thompson.

FARM FACTS
AT HIGH BUTTERBENT FARM

- 100 acres of owned and rented ground
- Mule ewes put to Suffolk tups
- Lambing from Mid-March to May
- All ewes scanned, twins separated and managed
- Aims to rear 370 lambs annually
- Lambs taken through to fat (18kg deadweight)
- Rear 95% from grass
- Tough culling policy for barren ewes, poor teeth and bad bags
- All replacements bought-in

WORM CONTROL
GETTING IT RIGHT

- Work with your vet to develop an integrated plan
- Check grazing management
- Know which parasites threaten your lambs
- Use regional information and risk assessment
- Use Faecal Egg Counts to monitor the need to drench
- Avoid dosing pre tupping
- Leave the fittest 10-20% of the group untreated
- If you can't weigh the sheep, dose for the heaviest in the group
- Check your drenching gun
- Administer correctly
- Store products securely



First recognised in UK sheep flocks about four years ago Contagious Ovine Digital Dermatitis (CODD) is a highly infectious foot condition and is difficult to deal with.

Sheep Flock Planning

Neil Laing Clyde Veterinary Group
Billy Tweedie Brownsbank Farm

Reports show it has spread rapidly to become a major problem, especially in commercial hill and upland flocks in the North of England and Southern Scotland.

The problem is compounded by the fact that cases on farms usually occur in combination with other foot infections such as scald and footrot, and these often need to be eliminated before a definitive diagnosis of CODD can be made, explains XLVets' Neil Laing.

Proper CODD diagnosis requires a thorough inspection by a vet. This helped diagnose CODD as the cause of severe foot infection in Billy Tweedie's North of England mule flock during 2007.

Based at Brownsbank Farm near Biggar, Mr Tweedie produces Texel X lambs from 1,000 breeding ewes on permanent pasture land rising from 900ft to 1,300ft. (270 to 400 metres). Most lambs are finished on grass and sold deadweight killing out at around 20kg, while all replacements are bought-in.

The first warning bells sounded when ewes stopped responding to the farms' routine practice of foot trimming and vaccinations of long-acting oxytetracycline of severely affected ewes.

'This is a tell-tale sign, as CODD fails to respond to orthodox treatments for footrot, says Neil Laing of Clyde Veterinary Group.

Veterinary Surgeon Neil Laing
XLVets Practice Clyde Veterinary Group, Lanark, Lanarkshire

During an inspection of six ewes and lambs with footrot and scald, Neil Laing also found on some feet that lesions had started at the coronary band and appeared to spread downwards. This caused the hoof wall to separate.

'The CODD infected sheep were severely lame and exhibited a lot of pain during examination. At present, there is no treatment licensed to treat CODD in sheep, but rapid action and sometimes severe procedures like culling will lead to successful control and eradication,' adds Neil.

Therefore, a Flock Health Plan was drawn-up for the farm. This 'back-to-basics' approach included a detailed foot inspection of the entire flock.

The flock was then split based on the type of foot infection and specific management began. CODD infected sheep were kept well away from the main flock. Ear tag numbers, date of infection and affected legs were all recorded.

The overall vaccination programme to control footrot in breeding ewes and scald in lambs was stepped up. This helped control the underlying footrot infection on the farm and thereby prevent further infection between animals.

Over a six-month period sheep were foot bathed at each handling using Zinc sulphate and Tylan soluble powder in rotation. Long-acting antibiotic injections and a Tylan-based spray were used on ewes that showed lameness after footbathing.

'A long-acting oxytetracycline based injection has a cure rate of around 90% within five days. When using a spray it's important the area to be sprayed is clean and ensure the lesion is adequately covered. Try to make sure the sprayed area has dried before releasing the sheep,' advises Neil.

'Eliminating footrot and scald made identification of CODD easier and meant we could really focus on treating severely affected animals. This targeted approach actually helped reduce labour and antibiotic costs.'

The Flock Health Plan for Brownsbank Farm also saw severely and repeatedly infected sheep culled.

Pleased with the success of the foot health programme drawn-up for his flock, Billy Tweedie says results after the six month treatment programme were impressive. 'We culled just 18 ewes, footrot infections were in single figures and no new CODD cases were found. The health status of the flock has improved, and lambs are finishing much sooner on the back of being infection free.'

'Mr Tweedie has worked hard to control foot infections and is now seeing the rewards of his endeavours with fewer losses,' says Neil.

A year after Flock Health Planning began, no further cases of CODD infection were indentifed, while footrot infection had almost been eliminated and treatment of lambs for scald had stopped. This helped reduce antibiotic use by around 75%.'

Neil also advises quarantining all stock coming onto the farm and checking their feet regularly, for at least four weeks, to prevent CODD entering a flock.

FARM FACTS
AT BROWNSBANK FARM

- Pasture ground ranging from 900ft to 1,300ft
- 1,000 North of England Mules
- Buys-in all replacements
- March lambing both in and outdoors
- Texel X lambs sold deadweight
- Lambs finished on grass
- 100 pure-bred Limousins

CODD CONTAGIOUS OVINE DIGITAL DERMATITIS

- Serious infection of sheep's feet
- Differs from footrot and scald
- Characterised by lesions that begin at the coronary band
- Often causes the whole hoof to be shed
- Strong association with specialised bacteria called a Spirochaete
- Direct transmission from sheep to sheep is the most obvious route of spread
- On no account should affected sheep be footbathed with formalin
- Insist on correct examination and diagnosis by your vet
- Use a Farm Health Plan to instigate a rigid treatment protocol
- Control and eradication can be achieved relatively quickly
- Eradication = welfare and economic benefits

Autumn in New Zealand

Amy Avery Endell Veterinary Group

Having been lucky enough to be awarded the XLVets New Zealand dairy travel scholarship I was determined to make the most of it, so I spent several months travelling around Asia before arriving in New Zealand early in February 2010. It was a fair shock to the system starting work just as everyone was getting stuck into scanning but surprisingly I was keen to get back to work. I am employed at a large veterinary practice based on the Canterbury plains on the east coast of the South Island where I intend to work for a year in order to experience all the seasons that come with 'New Zealand' farming.

Traditionally this was not a dairying area as it was too dry for pasture growth but, since sourcing water for irrigation has been possible, dairying in this area has boomed. Locals estimate an increase of 500% in the last 10 years, and figures I can find support this; from 1990 to 2003 stock numbers increased 390%. The majority of farms in New Zealand still work off a pasture based system, so are very seasonal. Herd size in Canterbury averages 800, which is above the national average of 337, and most are milked in rotary parlours. Cows tend to be Friesian (46%), Jersey (14%) or crossbred (32%); and they are much smaller than most cows I ever worked with in the UK! Whilst about 64% of herds are owner operated, many other herds are run by sharemilkers. The sharemilker doesn't own the land but will pay for everything else involving the cows and take home 50% of the income, depending on the exact agreement. Sharemilking has traditionally been the first step to farm ownership over here.

New Zealand is unusual in that most of its milk is exported rather than produced for its own citizens. Although it only produces 2% of the world's milk it makes up 30% of the world's milk exports, as most other countries produce milk for their own domestic market. This means, in New Zealand, dairy farmers are heavily governed by world market prices which can fluctuate quite substantially. Milk is often shipped as powder and as such milk solids (fat and protein) are very important. Farmers are paid on milk solids rather than volume. Currently they are getting about $6/kg MS, although this has varied dramatically from $3 to $8 in the last 10 years. It is difficult to compare the value of milk solids with the price per litre because although cows may yield different volumes, the milk solid percentage could be quite different. Here, cows tend to produce about 3.6% protein and 4.9% fat, reflecting the Jersey genetics. But to give you an idea, a good yield would be 300-400kg MS/cow/season or about 2.2MS/day which usually equates to around 18 litres/day.

Given that pasture feed isn't a hundred percent reliable, farmers have to be very on the ball with regard to condition scoring their cows. I have been out to do a few herd condition scores as many farms do this quarterly. If the cows are not in good condition for service, this can have a huge effect on the in-calf rates. Manipulating condition is most easily done at the end of their previous lactation. Cows are most efficient at gaining condition whilst they are still lactating however they need to be fed sufficiently at this time to achieve this. As most New Zealand cows are not fed large amounts of supplement, and at this time of year (autumn) pasture growth has slowed, it can be difficult to give them the feed they need whilst lactating. Therefore it is often more cost effective for farmers to dry off cows of a poorer condition score early or to cut them back to once a day milking, rather than supplement feed them. This is just one example of where keeping feed costs down is more important than increasing milk production.

Managing pastures here is done extremely accurately as keeping the pasture, often the only food source, in good condition is almost as important as the cow. Pastures are grazed down to specific residuals (eg 1500kg DM/ha) even if this requires putting cows out only for 1-2 hours on to one pasture after milking before having to move them to the next, in order to maintain pasture quality. Maintaining good quality pasture is vital to the success of the grazing season and during the growing season pastures are measured with a plate meter every 5-7 days. Most intensively grazed pastures are made up of perennial ryegrass and clover. Managing pasture quality is also important to avoid diseases such as nitrate poisoning, ryegrass staggers and frothy bloat.

Most cows calve from July to September just as the grass starts to become available, so the majority of scanning is done from February to April. Scanning is usually done during a milking, as the experienced scanners can manage about 300 cows an hour in the rotaries. Most farms use AI initially and follow up with bulls. Many cows that get in calf after 8-9 weeks of service will be induced (banned in the UK) in order to keep calving patterns tight. Good farms will aim for a 90% conception (in-calf) rate for the first 9 weeks, and they try to keep induced cows down to fewer than 10%. There are a number of ethical issues associated with inducing cows before the calf is viable, and so there are strict rules in place regarding the timing of induction so that no calves should be born dead. Therefore we need to age the pregnancies to determine which animals should be induced and when. Herds using inductions will have an initial scan for the first 6-9 week pregnancies then another 6 weeks after this to determine animals suitable for induction, and then they may have a final scan to figure out the empties. It is much easier and quicker to age pregnancies at 6-8 weeks so we try to scan most when the cut off for inductions are around this stage of gestation. Few hormonal treatments are used currently; however this may change if inductions are banned. Some use prostaglandin and/or progesterone to bring on their non-cyclers early on in the mating period.

Heifers are also scanned at this time. Most people will calve their heifers a couple of weeks before the rest of the herd. They aim for a <4% empty rate in the heifers using just over 1 bull per 20 heifers. We find the biggest factor affecting empty rates is getting the flush of feed at the right time, so they are on a rising plane of nutrition when they are served. Most farmers weigh them regularly from birth to make sure they achieve this. Bull problems and diseases such as BVD also affect heifer conception rates.

From a vet's animal health perspective, my initial view was how rosy dairying seemed out here. The cows were out in the sun, grazing lush green pastures and looked great on their low input low output system. Lameness and nutritional diseases such as acidosis and displaced abomasums are a rarity, and being an isolated island in the Pacific, New Zealand also has the luxury of being free from many of the diseases that we deal with every day in the UK. However after a few weeks of work and chatting to the local vets and farmers I am beginning to realize they have their own different sets of problems. Major production diseases like Johne's and BVD are pretty commonplace and control measures seem to have been fairly lax in the past, although slowly awareness is improving. There are also a whole set of problems associated with pasture which occur far more commonly over here; various toxicities, bloat, trace element deficiencies and photosensitization. I also think winter may change my opinion somewhat; if it is tough, cows outside can suffer hugely especially as they calve down at the coldest and wettest time of year with no housing whatsoever to protect them from the elements. When problems occur they tend to happen in outbreaks as all cows are at the same stage so I expect my view in a few months time may be slightly different.

NEW ZEALAND TRAVEL SCHOLARSHIP

The first four people to be awarded the XLVets New Zealand Dairy Travel Scholarships are:

Amy Avery
Endell Veterinary Group

Joe Davis
Torbridge Veterinary Hospital

Mark Spilman
Bishopton Veterinary Group

Nicola Fair
Lambert, Leonard & May

The scholarship programme provides recipients with help from members of The Society of Dairy Cattle Veterinarians (DCV) of the New Zealand Veterinary Association to find suitable dairy practice employment in New Zealand.

As part of their scholarship the candidates work in New Zealand and then receive an additional bursary for taking up employment with an XLVets member practice on their return to the UK.

Updates on their progress will be featured in future issues of the magazine.

XLVets would like to thank the DCV for their support with this SCHOLARSHIP SCHEME.

New

FarmSkills

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Farmer Fred Scott from Alnwick, Northumberland has saved money by starting regular bull fertility testing and condition scoring since going on the FarmSkills 'Buying the Right Beef Bull' workshop – positive benefits from practical courses.

Courses coming up this month:

Embryonics	14-17 JUNE DIY AI	*Derbyshire*
Shepton Veterinary Group	14-16 JUNE DIY AI	*North Yorkshire*
	18 JUNE Practical use of NMR records	*Shepton Mallett*
Castle Vets / SEMEX	22 – 25 JUNE DIY AI	*Barnard Castle*
Embryonics	28 JUNE – 1 JULY DIY AI	*North East*
Belmont / SEMEX	28 JUNE – 1 JULY DIY AI	*Hereford*
Kingshay	30 JUNE Healthy Soils, healthy profits	*Northumberland*
Scoradale	30 JUNE Feeding the high yielding dairy cow	*Derby*
SEMEX	12-15 JULY DIY AI	*Dorset*
Shepton Veterinary Group	14 JULY Practical foot trimming	*North Yorkshire*
	15 JULY Lameness and foot trimming	*Shrewsbury*
Blenheim	20 JULY Sheep parasite control	*Uttoxeter*
Lambert, Lamont & Way	22 JULY First Aid for Farmers	*Shropshire*

Find out more...

Get in touch to find out more or talk about courses we can tailor make for you.

Telephone **07748 805497**
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