Fies ...DON'T LET THEM GET YOU DOWN

The diseases and irritation caused by flies have, perhaps, been less of a problem to date than in many recent years. Yet conditions are now ripe for a surge in the population of many troublesome insect species. So farmers and their veterinary advisors will need to take controlled steps to avert an increase in conditions such as fly strike, summer mastitis and New Forest eve.

Warm weather patterns earlier this year saw an early emergence of flies in some parts breeding conditions for flies.

The best way forward is to establish a comprehensive approach to fly control that considerable financial benefits in cutting losses due to fly-associated diseases. At the extreme end, DEFRA figures suggest that a single incident of fly-borne disease can cost up to £1500 with treatment and replacement costs for an in-calf heifer with a fatal attack of

On sheep enterprises flies may also cause cases of blowfly strike each year. Up to one million individual sheep may be affected and there are about 12,000 deaths. Even non through loss of body condition and damage to the fleece and hide

treatment and flock management measures. increased fly activity or incidents of overt disease. But disease problems can be predicted to some extent - the Bristol veterinary - that provides a very useful management tool in forecasting patterns of fly development.

will vary according to the length of period of activity required and the management policies has traditionally been a summer activity to provide protection, it is labour intensive and may be better reserved for autumn treatments

growth regulators have advantages in requiring less handling and these products provide varied lengths of protection. Early treatment these products maximizes their effect.

As well as flock treatment, farmers should try to identify and treat the animals most at risk. Flies are attracted to sheep mainly through their sense heavy worm burdens or foot rot are likely to be targeted by flies. Therefore, these animals should be treated for these predisposing

fatal cases can also cause substantial damage | Controlling fly problems on dairy units is made more complicated by there being two vards and milking parlours.

> Chemically impregnated ear tags, pour on and spray on insecticides are all useful options in are a constant cause of irritation to the cattle. But they are less effective against non biting flies that feed on the skin and surface fluids, as

So managing the herd to minimise exposure sheep flocks, dairy cattle should be kept away from high risk areas when the fly population is at its peak. So they should be moved away breed, particularly fields adjoining woodland where flies shelter.

different tactics are needed against the flies that ultraviolet lamps, fly paper and insecticidal paint to name but a few - and a multiple pronged attack is more likely to be effective.

by removing the organic material in which flies

like digital dermatitis.



June 2007

COCCIDIOSIS

In Calves - it's more common than you think. How can you prevent this.

Ectoparasites

What are you doing to control them...





IT'S MORE COMMON THAN YOU THINK

The first obvious sign of coccidial infection is a calf with scours. But coccidiosis is highly contagious, so all in-contact calves will be carrying some level of infection too. The consequences? Intestinal damage, depressed growth and performance, and greater susceptibility to other infections.

calves will have some degree of sub-clinical their intestines despite there being no outward signs of illness.

sub-clinical levels of infection..?

XLVets' Keith Cutler of Endell Veterinary Group believes the disease often goes undiagnosed: 'Because many infections exist at a sub-clinical level, it's often not tested for. Yet there are production losses which probably occur due to an underlying coccidial infection. For example,

Symptoms

Signs of COCCIDIOSIS

- Loss of appetite
- Reduced feed intake
- Retarded growth
- Dehydration
- Secondary infections
- Watery diarrhoea accompanied by staining mucus and blood
- Death (in severe cases)

On farms where coccidiosis has previously occurred, repeat outbreaks are more likely.

Disease persistence

An infected calf will shed millions of coccidial oocysts in its faeces, every day. Other calves contract the infection when they consume these oocysts from the environment.

Coccidial oocysts are very persistent - existing for over a year, able to withstand freezing temperatures, and resistant to the majority of disinfectants. So a high infective pressure remains long after calves have stopped scouring.

Once the disease has occurred on a farm, it will most probably occur again - with or without the presence of scours. Even with sub-clinical coccidiosis, calves suffer an increased susceptibility to other bacterial infections, costing time and money to resolve.

So to prevent a sub-clinical or clinical outbreak of coccidiosis from limiting your calves' future potential, pre-emptive treatment needs to be factored into your herd health planning.

Preventative treatment

Scouring usually begins about two weeks after infection, however oocyst shedding may not yet have begun. In fact peak oocyst shedding may be as much as a week later (see graph). By the time a calf is showing clinical signs of coccidiosis the damage has already been done and with every oocyst ingested having the potential to result in up to 24 million oocysts being released into the environment, this poses a significant risk to all calves on the unit.

For maximum benefit, animals should be treated before the expected onset of clinical signs. It's a real case of 'prevention is better than cure'.

Where you have a history of coccidial infections, your XLVets vet will be able to work with you to calculate when an outbreak of coccidial scours is most likely to occur, and consequently the best time to administer

preventative treatment. For example, coccidial scours typically occur two weeks after housing calves together, but this will vary from farm to farm depending on management routine.

What is for certain is that all calves that have come into contact with a coccidia-infected calf, or that are being kept in an environment with a history of infection, will need treating.

Treatment options

There are two types of preventative treatment for coccidiosis. One option is an in-feed coccidiostat which stops further reproduction and growth of coccidia. Calves must consume a sufficient dose of the drug each day for 28 days, for treatment to be effective.

The other choice is oral administration of a coccidiocide - to destroy the coccidia and limit oocyst shedding.

Newly available is Baycox Bovis, a convenient single-shot coccidiocide licensed for dairy calves. It prevents the clinical signs of coccidiosis and also significantly reduces the levels of oocyst excreted. This reduces the disease pressure and helps safeguard other calves from developing infection. Moreover, this oocyst-suppressing effect has been shown to last a long time, still allowing the calf to develop its own immunity to the infection (in fact Baycox Bovis has been shown to enhance this) and such that one shot is enough for its whole life.

Integrated approach

XLVet's Keith Cutler adds: 'As with all infectious diseases, it's important to take an integrated approach to control - pay attention to hygiene and management. Scouring calves should be isolated to allow them to be treated effectively and to reduce the risk of disease transmission to others in the group. Minimise other environmental stresses - temperature,



moisture levels, Draughts. Where possible, an 'all-in all-out' policy with effective disinfection in-between batches of calves is a good idea too.'

Action steps

Recent studies have revealed a huge incidence of pathogenic coccidia species on farms throughout continental Europe. And in the last survey of UK farms, three in every four samples of faeces tested positive for pathogenic coccidia species.

So when you next see a scouring calf, don't automatically assume the cause is rotavirus, or E.coli. It could be coccidiosis. If so, all its pen mates will either already be infected sub-clinically, or at significant risk.

Call your XLVets contact - immediately. Timing is a key factor to achieving optimal results.

An analysis of faeces will confirm presence of coccidial oocysts. Samples will be collected not just from the scouring calf but also its pen mates, as peak oocyst-shedding often does not correlate with the diarrhoea (see graph again).

In some cases, repeat sampling may be needed to catch the presence of oocysts in the faeces. Once identified, appropriate treatment at an appropriate time can be recommended, stopping any further losses.

Risk Factors

For COCCIDIOSIS

- Poor Ventilation
- Draughts
- Poor calf nutrition
- Group pens
- Heavy stocking
- Cows present with calves
- Soiled bedding
- Warm ambient temperatures
- Presence of coccidia-infected calves

Stable Coccidiosis Disease Dynamics



Dry cow management is a notoriously under-researched subject area. The majority of farms manage problem that we invented ourselves!

Apart from the introduction of teat sealants, is rarely reviewed. However, over the coming 12 months, a campaign being run by Intervet entitled 'The Modern Approach to Dry Cow Management' will aim to provoke a fundamental review of dry cow therapy amongst farmers and vets.

Why might we even consider short dry periods?

'Work currently being done in the USA is challenging the established principles of what a dry period should be and even if any comes to drying cows off and not surprisingly, is needed,' says Intervet large animal vet adviser, Rosemary Booth. 'It is an exciting prospect, but is new science and may be prone to conservative criticism and scepticism.

'Reassurance will be demanded on mastitis cure rates in short dry periods, cow health, effect on colostrum and the calf as well as milk yield in subsequent lactation. However, the starting point ought to be the following questions," Ms Booth states.

- Why do we dry cows off?
- What is an ideal dry period length?

The original need to dry a cow off was to allow her to put on body condition before the next lactation, as nutrition during lactation was often limiting and a period of non production was needed to correct it. During the war years of the 1940s it was established

that the 'ideal' length for this was 60 days. antibiotic choice and the approach to treatment This was partly based on trying to standardise maximum food production and also to aim for maximum genetic gain by aiming for a 365 day calving interval. In turn, this gave rise to the accepted lactation length being defined as 305 days - 60 days off a 365 day calving pattern.

> Today, nutrition during lactation is no longer a limiting factor and a 365-day calving interval is rarely obtainable, so this old reasoning rarely applies. We need to ask the right questions about what we are doing when it some very interesting answers are emerging.

'What happens in the dry period and why is a cow so susceptible to mastitis at this time?' questions Rosemary Booth.

'The dry period is both a time when existing infections are cured, provided the most effective antibiotic therapy is used, and when new infections are picked up."

Long or short, there are some key issues that need to be considered when it comes to dry cow management: -

- The withdrawal period of the DCT used will determine the minimum length that is possible for the dry period.
- Enough time to establish a cure. Both natural mechanisms and dry cow antibiotics must have long enough to

act on any infection left from the previous lactation.

• That it will not increase the risk of new infection at the high risk phase at either end of the dry period. There may be some residual effect at the end of the dry period from DCT but as with any length of dry period, we cannot rely on antibiotic products alone to achieve this as we need complete withdrawal before or soon after calving.

The graph below illustrates possible situations during the dry period.

Frequency of new IMIs during the lactation cycle



Revolution SHORT DRY COW PERIODS FOR UK HERDS



The udder is 10 times as likely to become infected with new organisms during the dry period, compared to during lactation for all DCTs. A typical cure rate of 65-70% is considered good but, looking specifically at mastitis rates in the short dry period, there would appear to be some clear benefits.

- 1. As lactation is extended, milk yield falls (15 litre guideline), lessening the risks associated with slow teat plug formation.
- 2. The window of opportunity for new intramammary infections is also reduced. Less time dry means less risk period for new infections entering the dry udder

And what of the other benefits, or potential pitfalls? A yield reduction in subsequent lactations was mentioned earlier

'Studies have shown that this can sometimes be the case in very short dry cow periods of less than 30 days, as is used in the US sometimes - but, most of the time, the benefit of extra days in milk still delivers a net benefit,' Ms Booth says.

- 8000 litre cow with a 40 day dry period means an extra 20 days milk = 4 - 6%extra milk
- At 40 days dry there will be no loss in next lactation = net gain of 4 - 6% milk

- (At 30 days dry a drop of 3% at worst = still 3% overall benefit)
- Milk solids are improved with short dry periods so could give better milk price

'One Hampshire farm that has been using short dry periods for a little over a year reckons there is an improvement in margin/cow of £35, through the additional milk sold per cow per lactation alone. Other parameters will also show benefits such as milk solids, mastitis control in the dry period. fertility in subsequent lactations and health of the cow around the time of calving', concludes Ms Booth.

One Hampshire farm that has been using short dry periods for a little over a year reckons there is an improvement in margin/cow of £35...

Rosemary Booth - Intervet Large Animal Vet Adviser



CURRENT FOCUS

One reason for the current focus on short dry periods, comes as a result of an amendment to the datasheet for Intervet's Cephaguard® DC product. It is now licensed for 35 day + 1 day milk withdrawal, meaning that short dry cow periods with the latest generation dry cow intramammary can be considered.



CONTROLLING ECTOPARASITES



The year is rolling by and summer has been in the air. The 'green' medicine tends to make things easier and the sunshine helps animals and humans alike. However farming is a rollercoaster of events and a mild winter and fair spring allows certain parasites to come through. So how can we prepare for the inevitable?

Late spring and summer 2007

Peter Bates* (Controlling Ectoparasites) has again highlighted the now familiar dilemma of making the best use of currently available treatments. Insecticide resistance follows the same path as worm resistance to anthelmintics

Ectoparasites are either permanent (i.e. spending its entire life cycle on sheep) or free living). Permanent Ectoparasites include scab mites, chewing and sucking lice, mange mites and keds. Semi-permanent ones are blowfly larvae, ticks and head flies. Control therefore needs a careful balance of sheep management and biosecurity on one hand and the appropriate choice of medicine

Farm Health Planning and correct diagnosis

Most of the problems associated with ectoparasites can be prevented by looking ahead. Farm Health Planning will identify planned approach to prevent and control the parasite. This may include flock management and biosecurity.

Preserving the range of ectoparasititicides is based on accurate diagnosis. Your vet will identify the parasite on the skin or fleece and animal or flock. Advice will then be given to reduce further outbreaks because prevention is better than cure. Scab mite is a perfect example where correct diagnosis will save on time, money and welfare problems.

Plan ahead with your XL Vet

- Confirm the main ectoparasites found in the flock
- Request skin scraping in sheep showing signs of infestation (nibbling, rubbing, scratching, areas of wool loss etc)
- Clean your applicators and equipment
- Select the appropriate control for your ewes and lambs
- specific ectoparasites Remember the importance of treating for

contact sheep.

Now is the time to plan ahead.

• Ask your XL Vet's advice to protect against

the heaviest animal in a group and when indicated, treat the entire flock and all

Seasonal Ectoparasites

Permanent ectoparasites should initially be eradicated by using medicines to treat the whole flock. Plunge dip with an OP dip or use one of the ML injections. Care should be taken to prevent reinfestation from contaminated grazing or housing as some products do not provide residual protection. Thereafter a strict closed flock policy can be adopted.

by using one of the highly effective growth regulators. Clik PourOn is an example which offers 16 weeks control. If the flock has a concurrent chewing louse or tick problem then cypermethrin PourOn may be more effective but remember that it is applied in different ways depending upon which parasite you are controlling. The optimal time for treating chewing lice and mycotic dermatitis is immediately after shearing. Ask about the most appropriate method of control.

Ask your XL Vet

Correct diagnosis and a Farm Health Plan in conjunction with the correct medicine and biosecurity will help to make best use of remaining treatments.

Better eturns FOR ENGLISH BEEF PRODUCERS

'The opening up of the export market has already presented opportunities for beef farmers to get better returns,' says Netta de la Cour, Beef BRP Project Manager, EBLEX. 'With the end of direct support on the horizon

form the key themes of Beef BRP.

Five key themes of Beef BRP

Better Systems and Costings - beef producers can identify areas where their costs differ significantly from the industry average and investigate where savings can be made

or returns improved. For example, variable costs (like feed and forage, veterinary bills and bedding) per head of cattle among the bottom third of extensive finishers are nearly twice those of the top third.

Better Breeding - using Estimated Breeding Values (EBVs) to improve, for example, carcase merit (e.g. conformation, fat covering, carcase weight) can result in an extra $\pounds 17/calf$. Using another £9/calf.

Better Health and Fertility - a tighter calving pattern can improve returns by up to weaning weight at a fixed weaning date. Better Selection - targeting a particular market, researching its specific needs and

Setter Feeding - correct rationing and grazing management can offer a 10% saving on total feed and forage costs without performance loss. This could save up to $\pounds 18/animal$ in an intensive finishing system, for example.

a beef enterprise operates can yield improved returns,' continues Netta de la Cour. 'If one out of every 10 producers moved from average to top third performance in these areas, the potential return to the industry would be around £25million.'

Practical, hands-on events have become a trademark of the Better Returns Programme. At live-to-dead selection days, producers get the opportunity to hone their skills at identifying conformation and fat classification on live cattle before checking their accuracy against the same carcases on the hook later on

Similar events, held at cattle markets, allow participants to handle and compare a selection of live animals of differing conformation and fat classes. A butchery demonstration on site highlights the consequences of, for example, poor conformation or too much fat on a cut of meat

These events and many more on grazing management, feeding systems, breeding, and health and fertility are being held all over England and are FREE to attend.

For more information or to register your interest, call Sophie Whigham on 01953 601655, email brpevents@eblex.org.uk or see www.eblex.org.uk

Upcoming Events

Eastern region launch of summer programme inclu
Western region launch of summer programme inclu
Grassland Management
Grassland Management
Northern region launch of summer programme, inc
Better Breeding farm walk



XLVets was delighted to see so many old friends and meet many new ones at this year's Beef Expo held in Skipton. The focus this year was on the importance of restoring profitability to the beef industry following the de-coupling of support from production and exposure to the free market.

Six thousand visitors to the show enjoyed the opportunity to discuss ways of improving efficiency and maximising returns from the market by precisely meeting buyers' specifications for weight, grade and quality. The range of trade stands, educational and advisory exhibits, practical demonstrations, beef breed exhibits and seminars that featured at Beef Expo 2007 provided an unrivalled opportunity to assess all the latest technical and marketing developments in the industry - and the overall mood was very upbeat.

Phil Allcock, veterinary surgeon with The Bishopton Veterinary Group, a member of XLVets, delivered a positive and inspiring message of 'improving herd fertility to improve returns' within the Healthier Returns seminar that ran at the Expo. Producers visiting the XLVets stand also took the opportunity to discuss the issues raised within the Bull Health and fertility booklet coauthored by David Black, Managing Director of XLVets and published by the EBLEX Better Returns Programme document.

Useful information and Material

include:

for Better Returns

Beef BRP manuals, technical leaflets, DVDs, CD-roms and other material are available to all those signed up to the programme. Materials

• Herd notebook - featured recently in Farmers Guardian and Farmers Weekly, this handy notebook helps you keep all records for your herd in one place

• Manuals - the first three manuals have been published: Beef selection and handling for Better Returns; Choosing bulls to breed for Better Returns; and Improving cattle handling

• Technical leaflets - the latest leaflets cover: Bull health & fertility; Better Returns from cull cows; and More profitable beef from grass • Other media - A DVD covering beef cattle and cull cow selection and handling is available, as well as a CD-rom called Snapshot which will signpost areas in your

enterprise where you might be able to reduce costs or increase returns

WIN NOW!

Sign up today and **WIN** a power washer worth £350

If you are not already part of Beef BRP and sign up before 30th September 2007, you will be entered into a FREE prize draw to win a power washer worth £350.

Signing up is quick and easy and you are under no obligations as a result. Call: 0870 241 8829 Fax: 0871 433 6205 email: brp@eblex.org.uk



farm walk	Hermitage and Badlingham Herd, AG Wright & Sons (Farms) Nr Ely, Cambridgeshire	
g farm walk	Gatley Farms, Nr Leominster, Herefordshire	;
	Warnham, Sussex	
	North Chorlton, Northumberland	
ng farm walk	Moss Herd, Nr Liverpool	
	Twemlowes Farm, Shropshire	
	Halsey Cross Farm, Somerset	
	Twyford Simmentals, Calthorpe, Norfolk	
	Ravenglass, Cumbria	
	Hilltop Farm, Harrogate	

XLVets go to the Expo...









implemented will become just another piece of paper in a farmer's daily battle with bureaucracy.

so what are nera nearin plans and why are they important. They are an idea that is gaining popularity now because most farm assurance schemes require some form of animal health plan. But the concept has been around for many years and, over time, it has been defined in a number of different ways. One handy definition dating from 1974, is 'a programme that should identify health problems on a farm, rate them in economic importance, institute control measures, monitor health and financial outcomes and make evidence based and economic decisions as to which should be emphasised. This concept emphasises economic aspects of disease and the financial implications of herd monitoring'.

Health Management Planning on farm

That 30 year old statement defines a goal which we are still trying to achieve today, emphasising as it does the economic importance of disease and the financial

identity disease such as leptospirosis, IBK (infectious bovine rhinotracheitis), Johne's disease and neospora and allow investigation of abortion outbreaks. Blood is also useful for some mineral and vitamin monitoring but care is needed interpreting these results. Faeces sampling can be used for worm, fluke and

'Health Planning' is a concept and state of mind rather than a dusty unopened document on a shelf. It is a dynamic process, utilising risk assessment and measurement of disease levels on an individual unit, and agreeing an approach to prevent and control those diseases relevant to that enterprise. And hence improve productivity and welfare.

Farm Health Planning Initiative XLVets are delighted to be working with the Farm Health Planning initiative supported by DEFRA. Look out for farm walks, activities and information that will involve you over the coming year from your XLVet practice.

Farm Health Planning is an industry led initiative in partnership with DEFRA

- Cut bills
- Save time
- Reduce avoidable stock losses

Planning for healthy profit

- Calculate the economic impact on your

- Monitor and review health and financial

HEALTHY EATING in Yorkshire

A change of feed system for a York-based beef enterprise would appear to have been a profitable decision - both in greater feed efficiency and in overall health.

With more years' experience in raising beef animals than he cares to remember. Will Kirby is a knowledgeable man when it comes to getting the best results from the 600 head of cattle he fattens each year from purchased stores.

Based at Linton Wood Farm at Linton-on-Ouse, near York, Mr Kirby runs 194 acres along with a further 100 acres of summer grazing. Ā firm believer in utilising home-grown feeds, the farm produces a range of cereals, beans and fodder beet.

The store cattle are purchased mainly from local markets or dealers and comprise about 450 Friesian dairy bred bulls and bullocks which arrive in September and October, and 120 continental-cross heifers that are delivered during the winter months. Their age is usually about six months. 'The Friesian cattle are housed and brought on as quickly as we can achieve,' explains Mr Kirby. 'While the autumn-bought heifers are turned out to grass in April and finished in yards during the late summer and early winter.

He says there are two key factors in successfully fattening beef animals - one is their nutrition, which has to be spot on, and the other is their health and welfare. 'I know you can't necessarily split these two issues - they are linked, in that you can't really have one

without the other,' he says. But on the health and welfare front Mr Kirby has, for the last 18 years, called on the knowledge and expertise of his local XL vet. Don Macmillan of Minster Vets. York.

'I find Don a very pro-active type of vet who, while performing vaccinations and treating the occasional problem, is a man prepared to discuss and offer advice on a wide range of health issues,' he says.

For Mr Macmillan, a visit to Linton Wood farm is a welcome opportunity to see what he considers to be a professionally run business which clearly takes pains to do the job well.

'If all our clients were like Will our life would be much easier,' he insists. 'What a lot of livestock farmers don't appear to appreciate is that there is a positive link between nutrition and health - if their cattle are not receiving a correctly balanced diet they can become increasingly susceptible to the effects of illness.

And on the subject of nutrition, last October saw Mr Kirby purchasing a Keenan Klassik 140 feeder wagon. It has enabled him to move away from a system which relied heavily on the use of ad-lib cereals and silage. It has also allowed him, for the first time, to incorporate straw into the diet and provide extra fibre. 'There's no doubt that

• Develop and use husbandry, treatment

Three Steps to healthy animals and healthy profits

Measure Identify the impact of disease on the performance of your stock.

Manage Prioritise control measures for these issues.

the cattle are doing better on a properly mixed, high-fibre diet and, in terms of cost, I can also take advantage of any cheap feed products that become available.' he says.

Mr Kirby adds that the store cattle arriving on the farm can now be put straight onto the full ration with out any lead in time - it used to take up to three weeks to get the cattle up and running on full cereal rations. 'This means that finishing time is reduced. Combined with their better performance, I would think we shall see cattle going off fat as much as a month earlier than before,' he says. 'Which is quite a saving in feed costs.'

Currently, the Friesian bulls are putting on 1.2kg liveweight/day compared with 1.7kg for the continental bulls. Feed conversion efficiency (FCE) is running at 7.13kg DMI/kg daily liveweight gain for the Friesians and 6.99kg for the continental bulls.

Improvements in feed efficiency aside, Don Macmillan comments that the cattle also look better and are certainly more content. 'I see Will's decision to take the feeder wagon route as part of a progression in this business,' he says. 'It would appear to be the way forward - not only as a means of creating balanced high fibre diets but also as a contributory factor in keeping cattle healthy."