Farm Veterinary Solutions

Newsletter
Autumn 2019

A member of XL Vets Farm

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PARASITE CONTROL & DIAGNOSIS

Max Hardy BVSc MRCVS

Cattle - gut/lungworms

Pasture worm burdens will build up after a long grazing season. Housing treatment should aim to remove both the adult gut/lungworms present that will lead to reduced performance over the winter months and also reduce the larval burden which may cause problems later. As we get into autumn grazing the late *Ostertagia* (brown stomach worm) survive the winter by encysting as larvae in the gut wall before emerging in the spring ready to start the cycle again. This mass emergence can lead to marked diarrhoea, weight loss and even death in young cattle. Ivermectin (Enovex® Pour-on) is generally the worming product of choice for beef cattle and young stock as it is highly effective against these encysted stages and there is no requirement for any residual activity after housing. For adult dairy cattle and in-calf heifers, eprinomectin (Eprizero® Pour-on) is the product of choice due to its zero milk withdrawal. For organic farmers who can't use the clear group of wormers, the white drenches are most effective against larval stages as there is poor activity from the yellow group.

PARASITE CONTROL & DIAGNOSIS...
continued

Liver fluke - if you are unsure of your fluke status, blood sampling a group of adult cows for fluke antibodies is a good early indicator of liver fluke status in the immediate post-housing period. Faecal sampling is best delayed until January as it only detects the presence of adult liver or rumen fluke. Importantly, remember that all the injectable and pour-on products for cattle fluke control will only kill late immature and adult liver fluke so treatment should be delayed until at least six weeks post-housing. Triclabendazole (Fasinex) drench is the exception which can be used from one week after housing as it is effective against immature stages of liver fluke. However this is a product with mounting resistance issues, so should be reserved for acute fluke cases.

Sheep - parasite control has to be tailored to the specific farm depending on tupping/lambing dates and where ewes will over winter, so please speak to our vets/SQPs about your individual diagnostic requirements and treatment. The table below shows details on the diagnostic packages we offer for our sheep farmers to ensure your flocks are well prepared for the winter.

Diagnostic Test	Advantages/Uses	Disadvantages
FEC in-house test	Rapid cost-effective results for gutworms and advice on treatment of ewes/lambs. Post treatment drench checks, sample for resistance - yellow, seven days; White, ten days; Clear, fourteen days post drenching.	Not suitable for fluke testing. No speciation in-house - e.g *Haemonchus* can't be seen.
FEC & speciation (external SAC test)	Ideal for autumn ewe samples to determine if *Haemonchus* is present on your farm, as specific treatment may be required.	Increased cost and turnaround time compared to in-house sampling.
Liver fluke antibodies (red blood tubes)	Will detect late immature liver fluke presence so can be used from November onwards for diagnosis.	Screening test requires multiple animals/ samples for most accurate results.
Fluke egg count	Detects the presence of adult liver and rumen fluke in individual or pooled samples. Accurate indicator of current infection status.	Fluke take ~12 weeks to produce eggs so most reliably used after Christmas.
Wool pluck and skin scrapes	Reliable diagnostic for pre-treatment lice vs. mites in itchy sheep indicating which products are required.	Deep scrapes required for scab. Prior treatment gives false negative results.

SCANNING SUCKLER COWS

Jorge Robayna MRCVS

There are many reasons why it is good practice to have suckler cows pregnancy diagnosed (PD), as well as cost benefits, this will improve herd management.

Advantages

- Gives estimated calving dates - therefore you can arrange specific diets, pre-calving vaccinations, calving pens, identify late calvers and batch them together.
- You will be able to choose your cull cows and have these barren cows finished with supplementation, which will save you fodder, money, time and shed space.
- Predict the peak calving period for staffing.
- Tighten calving by selling late calvers.

Finding Fertility Issues

Many infectious diseases such as campylobacter, Lepto, BVD, IBR or Johnes can lead to reduced conception and embryo loss stretching out the calving period.

- Trace elements deficiency or marginal levels of copper, selenium or iodine can lead to reduced conception and wide calving period.
- Bulls, not just lame or infertile, but also a sub-fertile bull will contribute to drastically reduce the fertility of the herd.

Facilities/Costs

- The cost per cow ultimately depends on the vet time taken so you will benefit from a good crush and race set up.
- If you wish to PD on your TB test results day please let us know so we can book this in. We generally avoid PDs on day one of testing for hygiene purposes.

Bull Fertility Testing

- Figures from the SAC show that the average cost of keeping a bull is about £1000 per year.
- Complete infertility of bulls is rare, but sub-fertile bulls are common.
- A sub-fertile bull will get some animals pregnant, but it will take more time, which results in spread out calving patterns, leading to a significant reduction in farm profits.
- Performing this test five weeks prior to the service would allow re-tests, or more importantly, time to find replacements.
- Better bull:cow ratios in proven bulls.
- Pre-sale fertility testing can also be carried out and the bull can be accompanied to sale by a BCVA bull breeding certificate.

Checklist on Day of Testing

- 15 months of age minimum.
- Bull has not been with cows in last 48hrs.
- Crush/race with side access to the bull.
- Power point and sheltered area (warmth is vital) with table/bench.
- Clean water.

The Procedure

- The majority of the semen evaluation is carried out on farm giving you a quick idea as to the ability of your bull.
- The bull gets a full clinical examination of external and internal sexual organs and the size of the testicles is measured. This reflects directly on the quantity of the semen and number of cows he can serve.
- The semen is scored for volume, concentration and contamination before being examined under a microscope. Under the microscope, the sample is examined for gross motility and motility of individual sperm cells. A sample of the sperm cells is stained and back at the surgery the morphology of 100 sperm cells will be examined.
- It has become clear that an annual bull fertility check can be very beneficial - bulls can become sub-fertile at a later age and if dominant will stop other fertile bulls from serving the cows.

PNUEMONIA VACCINATION

Zoe Hebblethwaite BVSc MRCVS

Important History

When considering starting a vaccination programme it is important to consider the management factors on your farm which help us decide which vaccinations may be most appropriate. Information to consider is:

- Where are you buying livestock from? Homebred vs bought in replacements.
- Previous vaccination history.
- Previous disease history on farm.
- Age and numbers of animals brought in at a time.
- Management system - all in/all out vs batch; housed or out; duration of time on your farm if a suckler herd or beef finishing unit.

The risk of disease is much higher buying animals from multiple origins rather than homebred, so there are different aspects of a vaccination programme that may become more important, such as onset of immunity.

Causes of Pneumonia

There are many causes of pneumonia and predisposing factors such as poor colostrum intake as calves, transport stress, overcrowding, mixing of age groups, ventilation and housing problems all reduce the ability of an animal's immune system to overcome the primary cause. The most common causes are:

Viral: respiratory syncytical virus (RSV), parainfluenza virus (PI3), infectious bovine rhinotracheitis (IBR), bovine viral diarrhoea (BVD)

Bacterial: *Pasteurella multocida, Histophilis somni, Mycoplasma bovis, Mannheimia haemolytica.*

Vaccination	Virus	Bacteria	Route	Benefits	Limitations
Rispoval 4	✓	✗	I/M	Covers all viral causes listed above	No bacterial cover
Rispoval Pasteurella	✗	✓	I/M	Onset of immunity from 7 days after dose	Specific for *Pasteurella* only
Rispoval RS & PI3 intranasal	✓	✗	I/N	Can use from 9 days of age	Protection for 3 months
Rispoval IBR marker live	✓	✗	I/N or I/M	Can use from 2 weeks of age if I/N	Requires I/M dose at 3 & 9 months
Rispoval IBR marker inactivated	✓	✗	S/C	Can provide 12 months protection if used after marker live	Minimum age 3 months
Bovalto Respi 4	✓	✓	S/C	Cover for Mannheimia bacteria	No *Pasteurella* cover
Bovalto Respi intranasal	✓	✗	I/N	Can use from 10 days of age	Protection for 3 months
Bovalto Pastobov	✗	✓	I/M or S/C	Can use annual booster before risk periods	Specific for Mannheimia
Bovilis IBR marker live	✓	✗	I/N or I/M	Can be used concurrently with Bovipast RSP	Requires I/M dose at 3 & 9 months
Bovilis Bovipast RSP	✓	✓	S/C	Covers *Pasteurella*	Requires 2 doses
I/M = intramuscular injection, I/N = intranasal administration, S/C = subcutaneous injection					

For individual vaccine viral and bacterial spectrums please consult your vet.

Intranasal vs Injectable

Intranasal vaccines stimulate a strong local immune response because they are delivered to the nasal passage, the site where respiratory pathogens will first enter an animal's body. This mimics a natural infection and stimulates production of antibodies (specific to the pathogens) in the nasal mucosa which detect and target specific invading cells. Intranasal administration also simulates the production of interferon which is a non-specific immune response (cell mediated) in which the body recognises and attacks non-self cells, such as invading pathogens which may not be included in the vaccine. This non-specific response is quicker than antibody response, therefore intranasal vaccines can offer some protection a short time after dosing. Intranasal vaccines can also offer a quicker onset of protection compared with injectable ones. They can be used in younger animals due to the maternally derived antibodies not showing to affect the cell mediated response. However they do they have a shorter duration of protection than injectable vaccines, so intranasal vaccination is often followed by injectable in older calves, to offer a wider scale of protection.

Live vs Inactivated

Live attenuated vaccines are derived from live viruses/bacteria that have been attenuated or weakened compared to the original 'wild' pathogen. Once inside an animal they replicate and stimulate an immune response, often providing a good response with a long duration of immunity after one dose.

Dead or inactivated vaccines are made of killed or inactivated viruses, either by heat or chemical treatment. The initial immune response is not as strong as it is to a live vaccine, so often two doses of vaccine are required a set period apart, with the onset of protection often occurring two to three weeks after the second vaccination.

IBR Vaccination

Infectious bovine rhinotracheitis (IBR) is widespread in the UK, a recent study by MSD on nationwide bulk milk and blood tests revealed 75% of herds testing positive for the virus[1]. Once an animal is infected it will remain so for life and during periods of lowered immunity it will shed more of the virus, exposing naïve animals to the disease. IBR can spread very quickly via nose to nose contact, mucus, aerosolised, and infected bull semen. Typically affecting older calves and adult cattle. Clinical signs of the virus include elevated temperature, nasal discharge, coughing, conjunctivitis, reduced food intake, abortion and death if not treated early. The cost to the national herd through reduced health and productivity is estimated to be £5-£7 million[2]. Use of an IBR marker vaccine (either live or inactivated) reduces clinical signs and shedding of the virus, it also allows testing to differentiate vaccinated from carrier animals for export and will be important if an eradication program comes into force in the UK.

1. Cowley DJB et al. *Aspects of bovine herpesvirus infection in dairy and beef herds in the Republic of Ireland.* Acta Veterinaria Scandinavica 2011, 53:40.

2. Bennett R, IJpelaar J. *Updated estimates of the costs associated with thirty four endemic livestock diseases in Great Britain: a note.* Journal of Agricultural Economics 2005, 56, 135–144.

MOBILITY SCORING AND BODY CONDITION SCORING IN DAIRY COWS

Robyn Oram - Vet Tech & K-SQP
Vickie Gillespie - Vet Tech

Mobility Scoring

Lameness in dairy herds is a significant problem with recent studies estimating a 22% prevalence of lame dairy cows in the UK. There are ~1.9 million dairy cows in the UK and therefore it is estimated that ~420,000 are suffering from some form of lameness.

What is Mobility Scoring?

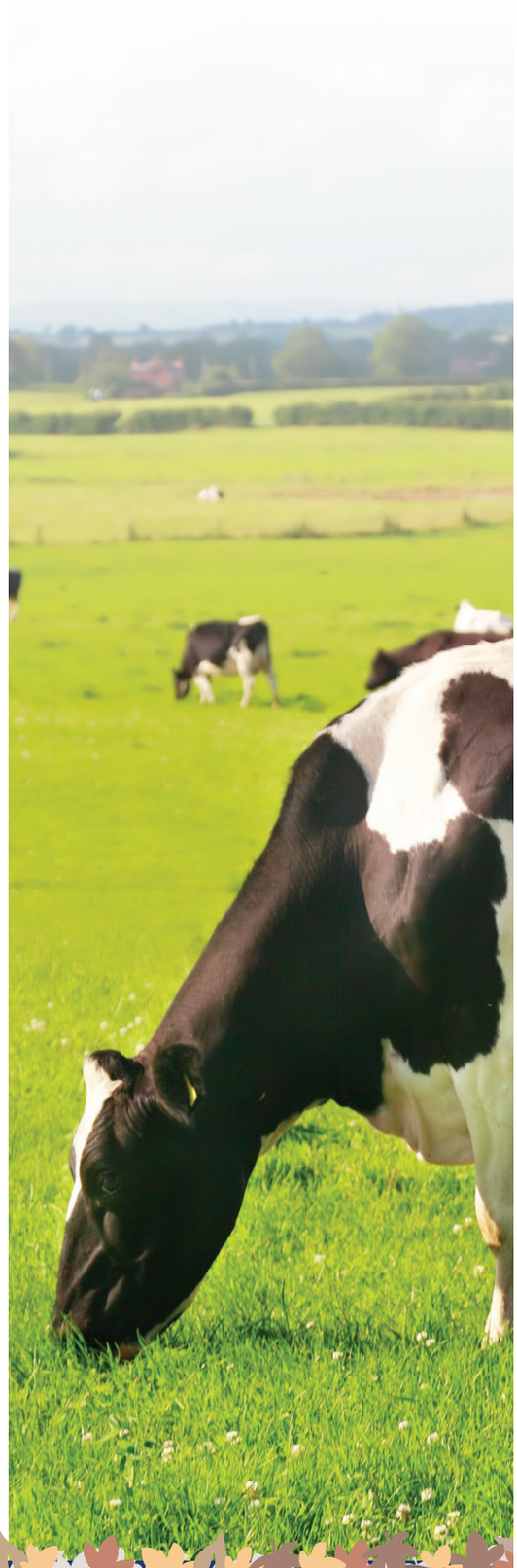
Mobility scoring measures the lameness prevalence in herds using a scoring system of 0-3. Cattle lameness is one of the most significant productivity and welfare issues within the dairy industry. Cows have evolved to hide their pain and weakness so as not to stand out from the herd. By the time the cow shows signs of pain and discomfort, it can often be fairly advanced resulting in reduced fertility, lowered milk yields, reduced feeding and socialisation and disturbed resting.

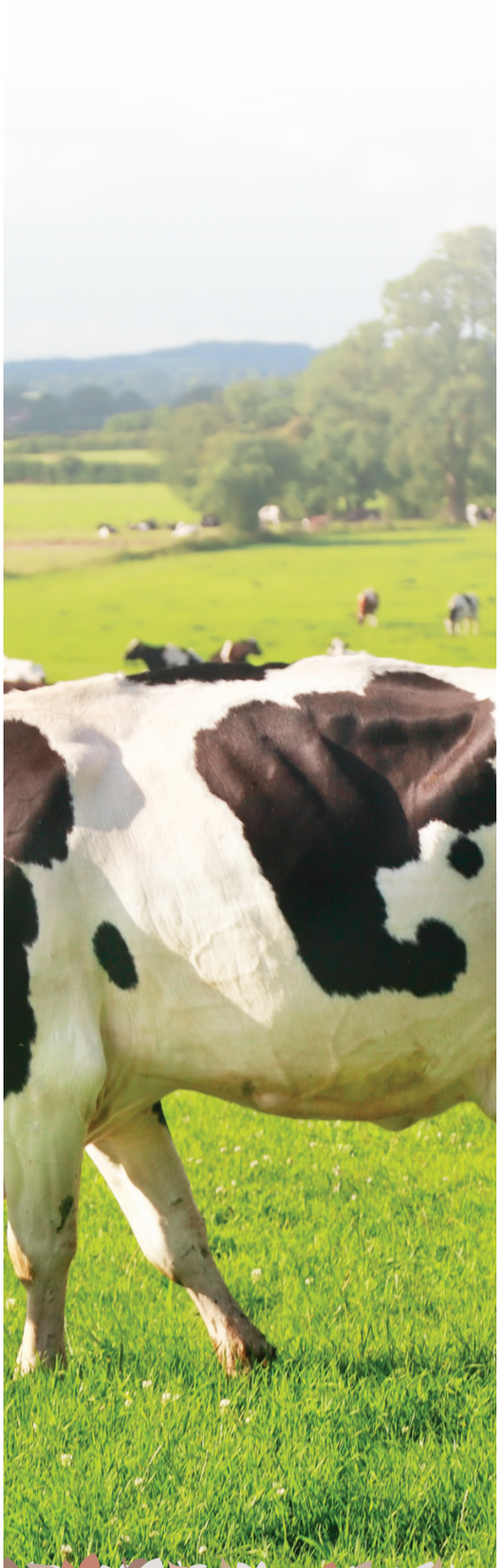
Why?

Regular scoring can identify lameness early on, meaning that treatment is more effective and more severe cases can be monitored to check improvement or removed from the herd. Reoccurring problems can also be highlighted and assessed during a herd plan. Lame cows can also be costly; on average, a level two lame cow can cost £2.00 a day, whilst a level three lame cow can be as much as £5.00.

When?

How often mobility scoring takes place depends on the dairy contract, but scoring every two to four weeks allows for early identification of lameness and prevents development of disease and the milk yield lowering.





Body Condition Scoring

Body condition scoring (BCS) can contribute significantly to good management and husbandry of dairy cows. Like mobility scoring, BCS can influence the fertility, productivity and longevity of the dairy cow. It can also be an indicator to underlying nutritional deficiencies.

What is Body Scoring?

BCS is a visual and tactile evaluation of body fat reserves using a five point scale with 0.25 increments. Score range from one, being a very thin cow, to five being a very over conditioned cow.

Why?

Regular BCS can be useful to monitor changes over the lactation period and for picking up on nutrition and health problems. For example, in early lactation the cow is under extensive nutritional pressure, BCS can be a vital indicator to excessive weight loss, this can lead to metabolic disorders and other welfare issues which should be avoided.

Trial work has linked condition at calving with milking potential or fertility; the correct body score is equally as important for ease at calving.

When?

Target BCS at calving is between 2.5-3, 60 days post calving 2-2.5, 100 days pre drying off 2.5-3 and at drying off 2.5-3.

Who?

Our vet technicians offer mobility scoring and body condition scoring as part of their services, and can visit your farm at a time convenient to you. Most farms decide to have the visit during milking hours so that each small group can be assessed as they leave the parlour, enabling a more thorough check.

Some farms may opt to complete their own mobility scoring or condition scoring, but it is always worthwhile having a second opinion to ensure cows are not being underscored, and therefore missing out on receiving adequate treatment/nutrition.

MEET THE STAFF

Freddie Watchorn BVM BVS MRCVS – Farm Veterinarian

Introduce yourself: I'm Nottinghamshire born and bred, having grown up on a dairy (and now beef) farm, so I've been around cattle all my life. I graduated from Nottingham Vet School this summer.

What made you want to work for Farm Veterinary Solutions? Being a client myself and having completed work experience here too, I have seen first hand the progressive and forward thinking nature of the practice which really appealed to me and I was made to feel like one of the team from the very start.

What do you do in your spare time? I enjoy playing most sports, especially football and have recently started to take up golf and clay pigeon shooting. I also enjoy going on walks and exploring new places and I am often back home helping out on the family beef and arable farm.

Where have you been to in the world? The furthest I've ever been is California, where I did a three week externship at a farm animal practice. I also travelled to Yosemite, Monteray Bay and spent a week exploring San Francisco. Although I've been to France, Barcelona, Malaga, Malta and Finland, most of my holidays have been spent here in the UK. In the future I would love to go to New Zealand.

Tea or Coffee? Coffee, especially first thing in the morning.

Beer or Wine? Or Vodka, I'll drink most things.

Rugby or Football? Football and a Liverpool supporter.

Interesting fact about yourself? I represented my county at orienteering when I was younger.

Andrew Thomas BVSc MRCVS – Farm and Companion Animal Veterinarian

What made you want to work for Farm Veterinary Solutions? I spent time with Farm Veterinary Solutions as a student and having seen their work on my parents' farm for many years, I know what a fantastic team of vets they are.

What do you do in your spare time? Play rugby, swim and hope to take up triathlon at some point. At agricultural shows I exhibit sheep and dairy cattle from my family's Tilton Charolais sheep flock, Wolston Holstein herd and Kimcote Guernsey herd.

Where have you been to in the world? France, Belgium, Ireland and Crete.

Tea or Coffee? Coffee in the morning. Tea the rest of the day.

Beer or Wine? Beer in the pub. Wine with a good meal.

Rugby or Football? Rugby through and through.

Interesting fact about yourself? I represented team GB on behalf of Holstein UK at the European Young Breeders Judging School in Belgium last year.

SMALLHOLDERS CLUB UPDATE

Rebecca Davenport BVM BVS MRCVS

In July, we were kindly hosted by one of our members, Paul Wisden for an evening discussing respiratory disease in calves. Zoetis provided an informative presentation on the many causes and ways in which we can prevent disease. Paul also took us on a farm walk detailing his own set up as a calf rearer. As always, it was great to gather together, to share experiences as well as a refresher on the current industry action to protect against pneumonia outbreaks.

Bovine respiratory disease is estimated to cost around £80 million per annum to the UK cattle industry and up to £43 per reared calf to the farmer. Secondary damage caused by respiratory disease also impacts fertility and longevity of breeding replacements and daily live weight gains. Often these damages go unnoticed until individuals fail to thrive amongst those in their own age group. Zoetis provide subsidised testing for respiratory diseases for five calves over four months of age, per farm.

The Club has been running for over two years now and provides a very informal setting for those either new to farming or wanting to gain more livestock knowledge and skills.

At our next meeting, will be discussing parasite control in sheep and also synchronisation protocols leading up to tupping time. If anyone is interested to find out more information about the clubs or joining our meetings, please contact **smallholdersclub@rutlandvets.co.uk** for more information.

December

CHRISTMAS

Meeting

Venue, Date and Time TBC

RESPONSIBLE USE OF MEDICINES MEETINGS

Venues

The Falcon Hotel, Uppingham

Date: Wednesday 9th October 2019
Time: 7pm

The Quorn Lodge Hotel, Melton

Date: Wednesday 6th November 2019
Time: 7pm

Cost: £20 +VAT per person and includes refreshments

Please call the **Melton Farm Office** on **01664 567 481** for more details and to book your place.

You can now pay your vet bill by direct debit!

We are now pleased to offer direct debit as a payment method. We think you will find it easier to pay unlike with a bank transfer or cheque, you will not have to remember to make future payments.

You will receive your monthly invoice by email as normal, and we will collect payment straight from your pre-agreed bank account on the 26th of each month. Your payments are protected, so you are guaranteed a refund if a payment is ever taken in error.

All you need to do is fill in a direct debit mandate, this can be sourced from Charlotte Durno at our Uppingham branch 01572 822399 (opt 1) or email charlotte@rutlandvets.co.uk

Thank you for your business from the accounts team at Rutland Veterinary Centre

Farm Veterinary Solutions

Rutland Veterinary Centre
we treat pets as family

VPS PRODUCTS - AUTUMN HOUSING DEALS 2019

Deals	Details/Uses	Withdrawal	Dose	Pack Sizes	Price (Excl. Vat)
Enovex Pour-On for Cattle	**Ivermectin** pour-on for control of adult and inhibited larval stage roundworms, mange mites and sucking lice in cattle.	Cattle Meat 28 days Not to be used in dairy cows	1ml/10kg	2.5L	**£28**
Eprizero 5mg/ml POUR ON SOLUTION for Beef and Dairy Cattle	**Eprinomectin** pour-on for control of adult and inhibited larval stage roundworms, mites and sucking lice in cattle.	Cattle Meat 10 days Milk 0 hours	1ml/10kg	2.5L 6L	**£125** **£225**
Taurador 5mg/ml POUR-ON SOLUTION for Cattle Doramectin	**New Product** **Dectomax equivalent - doramectin** pour-on for control of roundworms, mange mites and lice in cattle for up to five weeks.	Cattle Meat 35 days	1ml/10kg pour on	1L 2.5L 5L	**£75** **£115** **£200**
Noromectin	**Ivermectin** injection for control of adult and inhibited larval stage roundworms, mange mites and sucking lice in cattle, sheep and pigs.	Cattle Meat 49 days Sheep Meat 28 days	1ml/50kg	50ml 300ml 750ml	**£14** **£35** **£65**
Closamectin Pour on	**Ivermectin + closantel** pour-on for control of adult and inhibited larval stage roundworms, mange mites and lice, late immature and adult liver fluke in cattle.	Cattle Meat 58 days Milk - Do not use (>150 days)	1ml/10kg	2.5L 4L 6L	**£215** **£310** **£420**
Fasinex 240	**Triclabendazole** oral drench for control of early immature to adult fluke in cattle.	Cattle Meat 52 days Milk 50 days	5ml/100kg	2.2L 5L	**£165** **£315**
Zanil	**Oxyclozanide** oral drench for cattle and sheep for control of adult liver and rumen fluke only.	Cattle Meat 13 days Milk 108 hours	Cattle 3ml/10kg	5L	**£95**
Noromectin 0.08% w/v Drench Oral Solution	**Ivermectin** drench for control of adult and inhibited larval roundworms in sheep.	Sheep Meat 14 days	2.5ml/10kg	2.5L 5L	**£25** **£36**
Triclafas Drench Fluke Drench for Sheep	**Triclabendazole** drench for control of early immature to adult liver fluke in sheep (Fasinex 5% alternative).	Sheep Meat 56 days	1ml/5kg	2.5L 5L	**£45** **£65**
Solantel Oral Suspension for Sheep	**Closantel** drench for control of late immature and adult liver fluke and *Haemonchus* (barber's pole worm) in sheep (Flukiver alternative).	Sheep Meat 42 days	1ml/5kg	1L 2.5L 5L	**£34** **£64** **£99**
Bovigen Scour	Vaccine for cattle in late pregnancy to improve colostrum antibody levels against common causes of calf scour.	Cattle Meat 0 days Milk 0 days	3ml s/c	15ml (5ds) 90ml (30ds)	**£35** **£210**

To place orders or for further information please contact the Melton branch on 01664 567481

Farm Veterinary Solutions

A member of XL Vets Farm

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