

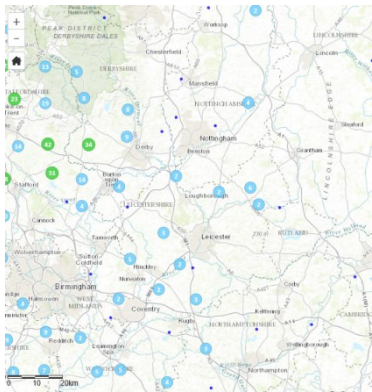
SPRING NEWSLETTER 2017

Unseasonal warm weather in Spring had some dairy guys considering first cut silage! With such good grass, lambs and calves have got away well with plenty of milk and warm conditions. Schmallenberg virus raised its head after 5 years of absence but fortunately not as significantly as before. Harriet discusses it again in more detail in this newsletter.

TB Update

A benign spring has brought us fresh challenges on the TB testing front as many of you are itching to turn out your cattle earlier than anticipated. We have more testing than ever as we have had to take on at least two neighbouring practices TB work. This at a time when we down a vet due to having to send one to Lincolnshire to help DEFRA control the Avian Influenza outbreak. This year we will test in excess of 125,000 head, so bear with us as we try to accommodate your specific needs. It is also of great benefit if you have good handling facilities, a safe crush and at least 3 people to help if there are more than 20 animals to test.

There is a survey underway with the University of Nottingham to sample road kill badgers for TB in our vicinity. They are going to analyse 100 dead badgers in each county. At present, there is a shortfall in Northants with only 22 badgers sampled. If you spot a carcass but you cannot submit it as you don't have a collection kit, please report it through ProjectSplatter



(www.projectsplatter.co.uk.... Data reporting) – this is a project run by the University of Cardiff and uses public reports of road-killed animals to understand better the distribution of animals across Great Britain. Nottingham will be sharing data with ProjectSplatter and so even if they cannot collect your badger carcass, they will be able to detect areas where carcasses are found but not yet collected and make sure they put arrangements in place to cover those areas.

Whilst on the web you might want to check out the TB map of our area at www.ibTB.co.uk

It gives you up to date information whereabouts TB is in the vicinity and if you are intending to buy in stock from afar.

Dairy

With the increase awareness of reducing antibiotics on farm, Elanco, the makers of Tylan, have developed a novel product that helps the dairy cow protect herself from infection. Imrestor is nothing like an antibiotic; instead it is an injection similar to that used in human cancer patients to increase their own white blood cells that fight infection. Most infections occur in dairy cows within the first 100 days after calving, such as metritis (infected womb) and mastitis, this is partly because the cow's immune system is very depressed at this time and her white blood cells are at a very low ebb. By giving two injections 10 days apart, one before calving and another at calving, the medicine dramatically boosts the white blood cells in the cow by making her manufacture more from her bone marrow, this in turn means that there are more white blood cells primed to kill bugs as soon as they enter the cow and thereby reducing infection. We have trialled it on three dairies in the practice and all of them have seen a benefit and a reduction in antibiotics when Imrestor was used. It retails for £30 per cow and is readily available from us.



Rotavirus in calves

The virus typically affects calves between 5 and 14 days of age. Clinical signs in calves older than one month are rare. Typical symptoms include pale yellow diarrhoea and sometimes flecks of blood may be seen. Other clinical signs that can be seen include a reluctance to stand and suck, mild depression and salivation, however the most important clinical sign and effect of the virus is that it can lead to dehydration through fluid loss (clinical signs: sunken eyes and inelastic skin) and as it depresses the immune system then they can be more prone to picking up secondary infections.

Faecal samples can be tested at the practice for common causes of scouring calves. Fresh samples which have been collected on the same day should be submitted.

The most important treatment is to provide oral fluids to prevent dehydration and lost salts. An electrolyte solution should be administered orally. Ideally the calf should drink this itself as administering by a stomach tube can mean that it is deposited in the rumen, delaying absorption. Very weak calves may require intravenous fluids. Antibiotics will not kill the virus, but may be required to treat secondary bacterial infections.



Colostrum is key to providing a healthy immune system and is very important in protecting a new born calf. Each calf should have at least two litres within the first six hours of life. This reduces the risk of rotavirus but protection will only last for three to four days. Prevention by providing a hygienic environment is also key. Maintaining strict disinfectant protocols and ensuring thorough disinfection of pens where sick calves have been. There can be an increase in affected animals seen towards the later stages of calving season if biosecurity is not kept up as a build up of the virus in the environment will infect more calves.

The infection of coronavirus can be more severe however it is less common than rotavirus. The slight differences include slightly more mucus like material in the scour, rapid deterioration and it affects slightly older calves up to 20 days.

Rotavec Corona is a vaccination licensed to:



- reduce the severity of diarrhoea caused by *E. coli* F5 (K99);
- reduce the incidence of scours caused by rotavirus;
- reduce the shedding of virus by calves infected with rotavirus or coronavirus. Onset of Immunity: Passive protection against all active substances will commence from the start of colostrum feeding.

A single 2ml injection is given to the pregnant cow between 12 and 3 weeks before calving is expected. Calves then gain immunity by receiving adequate colostrum during the first 6 hours of life.

Rotavirus in lambs

Lambs can be affected by a slightly different strain of rotavirus compared to calves however generally the clinical signs are the same. Rotavirus generally causes diarrhoea in lambs and kids at 2 to 14 days of age. Young animals become very depressed and dehydrated.

As with calves, rotavirus is treated with supportive care and treating secondary bacterial infections with appropriate antibiotics. Viruses tend to be less of a cause of diarrhoea in lambs and kids than

calves. It must also be noted that intensive lambing practices and shed-lambing increase the potential for disease and build up of infectious agents and can be associated with serious outbreaks of diarrhoea.

Border Disease in Sheep

What is Border Disease?



Border disease (or hairy shaker syndrome) is caused by a pestivirus, similar to BVD in cattle. If a normal ewe encounters the virus you wouldn't normally notice and she would fight it off and then gain some immunity going forward. However, if a ewe becomes exposed to the virus during pregnancy, it could lead to abortion or the birth of a "hairy shaker" lamb, depending on what stage of pregnancy they were at when infected.

Clinical Signs

Flocks with a problem with Border disease often notice high barren rates at scanning or lambing. Border disease lambs are born 2-3 days early, have an abnormally hairy appearance and nervous signs like tremors, weakness and wobbliness. These lambs have a poor survival rate but interestingly those that do survive often see a resolution of the clinical signs in around 3-4 months, but should not be retained for breeding.

Lambs born like this will be persistently infected (PI) and will consistently shed the virus. This can be used to our advantage, as if they are mixed with susceptible ewes long before they go to the tup, it gives them a good chance of becoming infected and gaining immunity, so effectively "vaccinating" them.

Other complications with Border Disease

Having persistently infected lambs shedding border disease will put pressure on the immune system of the other lambs in contact and we often see more severe outbreaks of Navel Ill, Joint Ill, infected tail and scrotal rings or ear tags.

Good hygiene and good colostrum management is key to preventing this as prevention is much better than cure.

In severe cases of the above diseases we recommend daily dosing with antibiotics (Penstrep or Combiclav) for 5 days. In less severe cases, or to protect the rest of the group in the face of an outbreak, a long acting antibiotic (Alamycin LA 300 or Betamox LA).

Diagnosis

Diagnosis can be confirmed on aborted lambs or dead lambs and is part of the testing carried out when we send samples off as part of an abortion investigation. It can also be confirmed on a blood test of the ewes and can also be blood tested in lambs however this is often trickier as the mother's antibody in colostrum causes an issue for the first couple of months.

Control

As mentioned above getting ewes exposed to the disease well before tupping is the best control method, so it's important to mix ewe lambs and ewes well before tupping so that they have some

immunity during pregnancy. Similarly, be careful with bought in animals and either mix them early or keep them separate during tupping time.

There is currently no effective vaccine but some of our clients have used the new live BVD vaccine Bovela with anecdotal success.

Trace Element Deficiency

Trace elements, such as copper, iodine, selenium and cobalt are essential components of a ruminant's diet to ensure good health, reproduction and productivity. Young, pregnant and milking animals have the greatest need for these elements. Low levels can be quite variable across the UK as the availability in grass and forage is affected by soil type, geology, pH, plant type, drainage and fertilisation. Typically, sandy, free draining soil has a greater issue in retaining these trace elements and can result in animals grazing on this land to be deficient. Monitoring trace elements throughout the year, and especially when at grass or prior to mating indicates if supplementation is required to optimise the health, fertility and ultimately profitability of your herd or flock.

Copper

Copper is needed for enzymes in the body to function. It plays a key role in the production of melanin, which forms the colour in hair and skin. It also plays a role in protecting the nervous system and bone tissue growth.

Causes of copper deficiency:

- Primary deficiency: low copper intake
- Secondary deficiency: interference by other elements e.g. molybdenum and sulphur decrease the availability and absorption of copper from the diet

Clinical signs of copper deficiency:

- 'swayback' in young lambs
- Poor growth rate
- Diarrhoea after turn out
- Discolouration of coat, commonly 'spectacles' around the eyes in young calves
- Lameness
- Anaemia
- Delayed oestrus behaviour in heifers

Please note that sheep are more susceptible to copper poisoning and supplementation should only be given on diagnosis of a deficiency.

Cobalt

This trace element is an essential component of vitamin B12, which in ruminants is produced by rumen bacteria and is essential for energy metabolism. It is transferred to offspring via the mother's milk while the rumen develops. Deficiencies are more commonly seen in sheep than cattle.

Causes of cobalt deficiency:

- Soil pH
- High worm burden reduces absorption

Clinical signs of cobalt deficiency:

- 'Pine' – ill thrift and poor appetite leading to a greater risk of clostridial disease and pasturellosis
- Lethargy
- Open fleece
- Tear staining
- Anaemia
- Infertility in adults and increase in peri-natal deaths

Iodine

Iodine is stored in the thyroid gland and is used to make the hormone thyroxine. This is important in controlling the energy requirements of individuals and in pregnant animals, essential for foetal growth and development.

Causes of iodine deficiency:

- Soil type, climate and season
- Types of forage crops e.g. brassicas contain goitrogens which stop the body from utilising iodine

Clinical signs:

- Weak, sickly calves born to deficient dams
- Poor growth rate
- Goitre (enlarged thyroid gland in off spring)
- Poor milk production, anoestrus, and low fertility
- Retained foetal membranes

Selenium

This trace element works with vitamin E to protect against tissue damage and breakdown. It is also important for the immune system to function properly.

Causes of selenium deficiency:

- Low levels in soil (there is a direct link in the levels of selenium in the soil and levels in the animal grazing i.e. low soil levels = deficiency in livestock)
- Excessive use of sulphur in fertilisers

Clinical signs:

- Stillbirth, weak and sickly offspring
- Higher susceptibility to infection
- White muscle disease seen in young calves and lambs – stiffness, inability to stand, respiratory distress
- Infertility, abortion and retained cleansings in adult cows
- Increase in cases of mastitis and metritis
- Decreased fertility in males

Diagnosis of Trace Element Deficiencies:

If you are concerned that you are seeing these clinical signs on farm and not providing any supplementation, then blood sampling 7-10 individuals of each cohort to assess the group status level is the best way to provide a definitive diagnosis. The most at risk time for livestock is out at grass, when concentrate feeding is less likely. Assessing the trace element status is especially important prior to mating. The best time to sample ewes is prior to tupping to highlight any deficiencies and enable supplementation to be provided in time for tupping and pregnancy.

How to provide trace element supplementation:

Type	Pros	Cons
Ad lib; licks, blocks	Easy to provide Cheaper	Does not ensure each individual animal ingests correct amount
Drenches / Injectable	Individuals given correct amount	More labour intensive Repeat treatment often required Cost
Boluses	Individuals given correct amount Longer lasting	More labour intensive Cost
Top dressing	Longer lasting	Very costly Difficult to control all factors Labour intensive

New Products:

Product	What it does	Cost
Oligovet Super Grazing Bolus	Provides trace element supplementation for 8 months Ideal for cattle turned out at pasture, beef cows that calved over winter In-calf heifers	£7.95 Dose: one single bolus (cattle must be at least 400kg body weight)
Oligovet Dry Cow Bolus	Provides 90 days of trace-element and vitamin supplementation Ideal for dairy cows at dry off, heifers 2 months pre-calving Beef cows at weaning	£9.95 Dose: one single bolus (cattle must be at least 400kg body weight)

Gamebirds – Successful chick rearing

Whether pheasant or partridge chicks, getting the birds off to a good start is crucial to avoid ongoing losses and disease outbreaks throughout the rearing period. Many of the common gamebird diseases have the same risk factors which can largely be avoided by good husbandry. Here are our top tips to help ensure things go well.

Sourcing policy

Aim to get chicks from one supplier, or at least single sources for pheasants and partridges. Several important bacterial and viral pathogens can be transferred to the chick through the eggs depending on disease and nutritional status of the hens, laying pen and hatchery hygiene. Laying birds also transfer specific antibodies/immunity through the egg to the chick depending on what pathogens they have been exposed to. This transferred immunity protects the chick during the first few weeks of life whilst its own immune system develops. Chicks from different laying flocks will therefore have different levels of immunity to specific infections. If numbers reared allow, try to source a single weeks' hatch, with an all in all out system reducing the risk of disease contamination between ages.

Before arrival

Environmental conditions need to be perfect to get chicks off to a good start. Brooder houses should have been cleaned, dried and disinfected well in advance. Brooders need to be running at least 24 hours before chick entry to allow bedding temperature to reach required levels of approx. 35°C directly under the brooder. Temperatures can be checked using a laser thermometer. Remember sufficient ventilation should be in place to prevent CO₂ and other harmful gasses building up especially if using gas brooders. Bedding should be easily distinguishable from feed sources to prevent gizzard impactions and the depth should be adequate for insulation but not prevent free movement of chicks. Drinker lines should be filled 24hrs previously to ensure leaks are not present, then flushed through immediately before placing chicks to ensure cold palatable water is available on entry. Whether using egg or plastic trays plenty of feed stations should be provided to ensure chicks find feed. Numbers can be reduced after 4-5 days once birds are well started.

On arrival

Inspect chicks closely to ensure hatching and transport conditions have been good, down should be dry and clean and they should be spread out in the boxes. Chicks should be even in size and a sample of chick boxes can be weighed with target for pheasants at ~20g and French partridge at ~12g/chick. There should be less than 0.5% dead/malformed in boxes. If you are concerned about the chicks confront potential problems, raising any issues with the supplier and us at this early stage with a view to inspecting the birds, rather than waiting until losses have occurred.

Electrolytes are advisable in the water for the first few days to improve hydration. Monitoring light levels is crucial as if too low activity will be reduced and if too high cannibalism can occur. Birds should be left to settle, then repeatedly and quietly checked to ensure they are well spread through the rings, with brooder height/heat levels adjusted accordingly. A small percentage of starve outs is inevitable once yolk sac contents have been used up around 3-4 days old. Crucially all losses should be recorded and if problems persist beyond 4 days or mortality levels exceed 3% visits/post-mortems should be carried out. Even if first hatch losses are low, a routine post-mortem is advised at 5-7 days, with culture of infected yolk sacs etc to check bacterial sensitivity and which antibiotics are suitable for use, if required for following hatches.

During the rearing period

Hygiene is paramount for a successful rearing season. If multiple hatches are present on site always attend to the youngest birds first, keep equipment separate and use foot dips/disinfection points to prevent disease transfer. Pathogens replicate well in a warm, moist environment so use powder disinfectants proactively and if bedding becomes dirty or wet clean and replace. Flush drinker lines on a weekly basis to prevent biofilm build up in the pipes. A good rule of thumb is, if you aren't happy to spend half an hour kneeling in the brooder shed then it is not a suitable environment for chicks.

All changes we make to the birds environment/feed/equipment, plus handling for biting etc can place high levels of stress on birds, reducing their ability to fight disease. Counteract this by monitoring the birds' behaviour and environment closely and providing gradual changes in feed/equipment over a few days. Routine electrolyte and multivitamin water treatment pre and post stress factors e.g. biting are always advised. In most diseases birds will show the same subtle, early signs of disease/pain, so if there is any sudden increase/decrease in water intake, decrease in feed intake, change in faecal consistency, wet feathers or huddling contact us and investigate quickly before smothers and high mortality occur.

Well stocked gamebird pharmacies are available at both Melton and Uppingham for the forthcoming season. Whether rearing or releasing birds this year please talk to Max at the Melton branch regarding registration, site visits, post mortems and preventative health planning.

Summer Parasite Control

Cattle

Gut/Lungworm control - There are many options for worming cattle over the summer turnout period. Major factors to consider when choosing a worming strategy include the age and previous exposure of cattle, pasture contamination levels and ease of handling. For grazing dairy cows it is important to remember that high gut and lungworm burdens can have production limiting effects before clinical signs are seen. We therefore recommend monitoring bulk milk antibodies over the summer, with worming if required. For adult beef cattle care should be taken to monitor for lungworm signs over the late summer, especially if any new animals or grazing land are added. Yearling cattle should have some immunity to worms if grazed the previous year but generally require some treatment, whether intermittent or long acting pre-turnout to prevent reductions in growth rates. Calf worming frequency, route of administration and timing should be discussed on an individual basis. With lungworm (husk) still causing yearly problems we strongly recommend the use of Huskvac in replacement heifers. Rotation of wormer class in cattle is advisable but may prove difficult as only avermectins are now available as pour-ons.

Fly Control – Fly control is an important part of grazing strategy whether dairy or beef, as high fly burdens reduce feed intakes and increase disease particularly eye problems and mastitis. For topical SP products used for fly control it is important to remember they are actually long acting insecticides not repellents. Fly control should therefore be started early in the season (May) and applied regularly to remove the first generations of flies and prevent their replication. Otherwise disappointing results may be seen later on when huge numbers of flies are hatching on a daily basis.

Sheep

Worming protocols – Several important risk factors have to be considered in your worm control plans e.g. pasture contamination, age of animals and wormer resistance on farm so protocols are best discussed on an individual basis. With young lambs remember that although any long acting treatments given to ewes at lambing time should reduce pasture worm burdens this does not always prevent nematodirus infection. The clinical signs are very similar to coccidiosis with scouring, rapid dehydration and deaths. To increase confusion the early larval stages cause the damage so negative faecal egg counts may be seen. Please contact us for post-mortem/diagnosis and treatment advice if problems occur. As the grazing season moves on regular faecal egg counting is advised with prompt treatment protecting lamb growth rates. Simple drench testing is a good way of checking for wormer resistance on farm with faecal egg counts ideally taken at time of treatment, then follow up samples 7 days later if yellow, 10 days later if white and 14 days later if clear wormers used. If resistance is suspected from these results, then full faecal egg count reduction tests should be performed. Please continue to follow SCOPS principles by rotating traditional wormer classes and adopting the new classes. Once yearly treatment with Zolvix/Startect helps delay resistance to the traditional classes appearing on farm. We frequently advise these as a post weaning treatment for lambs when faecal egg counts can rise rapidly, alongside their use as a quarantine dose for purchased animals.

Fly control – Whether using the IGR products (Clik) or SP products (Ectofly) for protection against flies it is important to follow application instructions closely. They have very different modes of action and spread so use the correct nozzles/application method etc to avoid problems and wasted money. Sheep must be clean when these are applied so always remove any soiled fleece first.

***Please see our summer VPS offers available until end July 2017 for further details–
Contact Melton branch on 01664 567481 for further information/orders***

New branch in Syston



We have opened a new branch in Syston, near Leicester.

The address is 41 Albert Street, LE7 2JA. It will primarily be focused on small animal consulting and surgeries, however will stock some farm drugs. If it is more convenient, you can request to collect your medicines and supplies from here too. There is a car park to the side.

Staff News

Rachel is sadly leaving us after 5 years. She has been an integral part of all aspects of the business, especially running the Market Harborough branch and doing the majority of the flock health visits, so she will be sorely missed and we all wish her every success in the future.

We have also welcomed 2 new vets over the last few months, Rebecca Davenport and Jorge 'George' Robayna. Rebecca is joining the team as a mixed vet with a special interest in sheep so she will take over from Rachel with the flock health visits and Jorge is joining the TB team.

Let's meet them:

Hi Rebecca, please introduce yourself: I was born and grew up near Cambridge and studied at Nottingham Vet School, graduating in 2014.

What brought you to Rutland: Having seen practice at Uppingham while I was a student I really liked the practice and team and I have always wanted to work here.

Where did you work before: After graduating, I worked as a farm vet in West Sussex for 2 years.

What do you enjoy doing in your spare time: Eating and drinking mainly, along with attempting to participate in most sports!

Favourite drink: Gin

Rugby or Football: Rugby

Where would you like to go in the world: New Zealand



Jorge, please introduce yourself: I graduated in 2016 from Alfonso X El Sabio in Madrid and I am originally from Tenerife.

How long have you been in England: I moved here in September and worked in a slaughter house until joining Rutland Vets.

So how is working with live cattle: Much more fun!

Tea or Coffee: Tea

Lager or Bitter: Bitter

Rugby or Football: Rugby, I play 2nd row

Where would you go in the world: China



SMALLHOLDERS CLUB

We would like to invite clients to our first Smallholders Club Meeting on

Tuesday 23rd May 2017

7.30pm

At

**Rutland Veterinary Centre
Uppingham
LE15 9RL**



Come along to our introductory evening to find out more about club membership and a short presentation on parasite control for the coming months.

To book your place please contact Kirsty Black at the Melton Branch

Tel: 01664 567481 Email: kirstyblack@rutlandvets.co.uk

Product	Details/Uses	Withdrawal	Pack Size	Dose	Price (ExVat)
Spotinor 10mg/ml	Deltamethrin spot on for prevention of flies in cattle and treatment of established blowfly strike and ticks in sheep	Cattle Meat 17days Sheep 35 days	500ml 1Litre 2.5Litre	Cattle 10ml Ewes 5ml	£45 £67 £155
Clík Pour-on	Dicyclanil pour-on for prevention of blowfly strike on sheep for up to 16 weeks	Sheep Meat 40days	2.2Litre 5Litre	See pack for instructions	£99 £182
Ectofly Pour-on	Cypermethrin pour-on for treatment and prevention of blowfly strike in sheep for up to 6 weeks	Sheep Meat 8 days	2.5Litre 5 Litre	See pack for instructions	£39 £61
Enovex pour-on	Ivermectin pour on for control of adult and larval stage roundworms, mange mites and sucking lice in cattle	Cattle Meat 28days Milk >60days	2.5Litre	1ml/10kg Pour-on	£26
Eprizero pour-on	Eprinomectin pour-on for control of adult and larval stage roundworms, mange mites and sucking lice in cattle	Cattle Meat 10days Milk 0Hours	2.5Litre 5Litre	1ml/10kg pour-on	£149 £245
Dectomax pour-on	Doramectin pour-on for up to 5 weeks control of adult and larval stage roundworms, mites, lice and hornfly in cattle	Cattle Meat 35days Milk >60 days	2.5Litre 5Litre	1ml/10kg pour-on	£112 £184
Levacide LV drench	Levamisole (yellow) drench for control of adult and developing roundworms in cattle and sheep.	Cattle Meat 14days Sheep Meat 21days	1Litre 2.5litre	1ml/10kg drench	£22 £41
Levacide 7.5% Injection	Levamisole injection for control of adult and developing roundworms in cattle and sheep.	Cattle Meat 28days Sheep Meat 15days	500ml	1ml/10kg s/c	£10
Noromectin 1% Multi-injection	Ivermectin injection for control of adult and inhibited larval stage roundworms, mange mites and sucking lice in cattle, sheep and pigs	Cattle Meat 49days Milk >60days Sheep Meat 42days	50ml 300ml 750ml	1ml/50kg sheep and cattle	£12 £29 £54
Noromectin 0.08% drench for sheep	Ivermectin (clear) drench for control of adult and inhibited larval roundworms in sheep	Sheep Meat 14days	2.5Litre 5Litre 2x 5Litre	2.5ml/10kg drench	£28 £46 £79
Parafend 2.265% drench	Oxfendazole (white) drench for control of roundworms and tapeworms in sheep	Sheep Meat 10days	1Litre 2.5Litre 5Litre 10Litre	1ml/5kg orally	£14 £19 £30 £42
Cow & calf grazing pack	All required fly and worm control for the summer season to cover 50 cows and their calves (up to 300kg) – Mid-season ivermectin treatment and 3x deltamethrin fly control treatments to cover the whole grazing season.	Contains 2x Enovex 2.5L Spotinor 2.5L Spotinor 500ml			£230