

Animal WOFs Newsletter – Sept/Oct 2011 -



Welcome to another *Animal WOFs for Lifestyle Blocks* newsletter.

Each issue we are covering important animal health issues relevant for that time of year. Please feel free to give us feedback or ideas for the next issue, with any topics you would like to see covered.

In this issue:

Animal Health Diary – things to watch out for at this time of year

Barber's Pole & Co – update on gastrointestinal worms

Raising orphaned farm animals – how to grow healthy calves, lambs, kids and crias

Come and see us at the Manawatu Country Living Expo



Animal Health Diary Sept/Oct

Four facts for spring animal husbandry



Feed availability:

With the current weather conditions being quite wet and cold, a lot of pasture has turned into mud and grass growth rates are anticipated to be poor compared to previous years in those waterlogged paddocks.

Supplementary feeds like hay, maize silage, palm kernel, meal or molasses are often needed at this time of year to maintain healthy weights, especially for lactating animals and growing young stock. A feed budget, working out the amount of feed required per animal and in total, is a good idea to ensure enough feed is available. Avoid overstocking at this time of year.



Maize silage

Take care when introducing grain-based feeds or fruits and start by feeding small amounts then gradually increasing amounts fed.

Sudden overindulgence of grains can drop rumen pH and cause ruminal acidosis in cattle, sheep and goats. Signs of this are a history of access to large amounts of carbohydrates, diarrhoea developing, inappetance, lethargy and in severe cases dehydration, shock and death. If you suspect ruminal acidosis in your animal, please call us at the clinic straight away so we can check the animal and start appropriate treatment.

Pre-mating checks (cattle):

To ensure optimum fertility at the time of mating, trace elements like copper, selenium and Cobalt/B12 need to be at appropriate levels. In the greater Levin area, soils are commonly low in Selenium and deficiencies in Selenium, Copper and Cobalt occur. The vet can blood sample 5-10 randomly elected animals to determine if any deficiencies are present in your

animals, that can then be treated with injections or oral products. Sheep can be blood tested for these as well.



Multimin injectible supplement



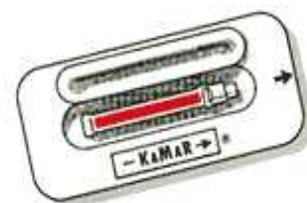
Vet taking a blood sample from a cow's tail vein

Mating (cattle):

Apply tail paint or heat detectors like Kamars to heifers or cows to be mated this spring. This will tell you who has started cycling and is ready for a new pregnancy.

Alternatively, heifers and cows can be synchronised for artificial insemination and cows that are not cycling before mating can be checked and treated by the vet. Talk to us about getting cows cycling and using AI without having to tail paint or get a bull.

For spring calving, aim to start mating your cows in mid -late October and take the bull out in early -mid January.



Kamar for cattle

Young stock:

Dehorn your calves before 6 weeks age. This way the horn bud can be removed completely, under sedation and pain relief, to prevent horns growing back later in life. Calves can be vaccinated at this time and bull calves can be castrated.



<= calves sedated for dehorning

Hugh Bentall, one of our vets, applying local anaesthetic to the horn buds =>



<= Disbudding the calf with the hot iron to avoid the horn growing back later in life

Goat kids should be dehorned between 2-7 days of age. This requires an anaesthetic and gentle use of a disbudding iron at the clinic. At this time male goats can also be castrated.

Lambs can be tail docked and/or castrated before 4 weeks of age but ensure all young stock have either received colostrum from vaccinated dams or have been vaccinated themselves at docking.

Piglets can be nose ringed and castrated young too, as soon as testicles can be felt in the scrotum.

For questions, queries or concerns on the above mentioned spring husbandry facts, please call us at the clinic on 368 2891 or contact animalwof@lhvc.co.nz for non urgent enquiries.

Barber's Pole & Co

– update on gastrointestinal worms –

Introduction:

Gastrointestinal parasites are a common problem in cattle, sheep, goats and alpacas alike.

One particular worm, *Haemonchus contortus*, also called “Barber's Pole worm” due to its characteristic red and white striped appearance under the microscope, can wreak havoc with our farm animals, especially young stock, and cause diarrhoea, anaemia and even death.



“Barber's Pole Worm”

Other worms that can cause problems are *Cooperia*, *Ostertagia*, *Trichostrongylus* and some Alpaca-specific worms. Pigs and horses have their own species-specific sets of worms and are not affected by the above named parasites.

Newborn farm animals have no immunity to Barber's Pole worm and similar worms and encounter them when first grazing pasture around 1-2 months of age.

Cattle and sheep generally develop full immunity to gastrointestinal worms by 18-20 months of age, however during stressful times like lambing and calving or when feed is short immunity decreases and these parasites can affect adult animals as well.

During lactation the dams have a higher protein and energy demand so infection with worms at this stage can have a higher impact on the animal.

Goats only develop limited immunity to these parasites, because they are historically browsing animals and not as reliant on pasture than other species. In pasture grazing goats however, control is therefore necessary at all ages.

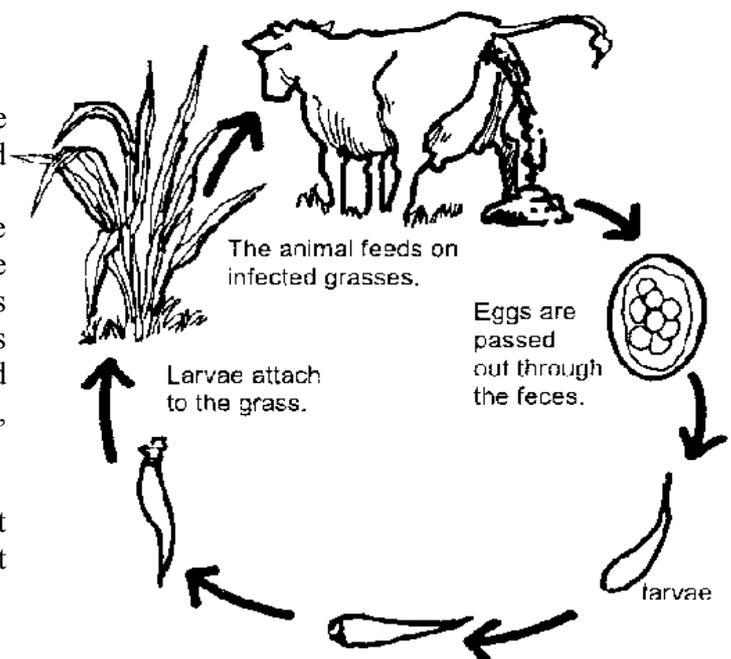
Alpacas also used to have different grazing requirements. If they are more intensively grazed and reliant on pastures, worm burdens will increase and preventative measures should be taken.

Worm lifecycle:

Barber's Pole and other similar worms have three stages in their lifecycle: egg, larva and adult worm.

The eggs are laid by adult worms inside the host animals stomach or intestine and are passed onto the pasture in faeces. Within 7 days in warm, moist weather and up to 5- 10 weeks in colder weather, the eggs hatch into larvae and migrate from the dung onto the grass blades, where they are eaten by the host animal.

Once the larvae have been eaten, it takes about 3 weeks before the new adult worms start producing eggs.



In the right weather conditions the entire lifecycle can be completed in as little as 4 weeks, causing a huge build up in worm numbers.

Dry weather with temperatures above 25 degrees and cold temperatures below 10 degrees destroys the eggs but larvae survive up to one year in undisturbed dung pats.

Larval numbers on pasture are generally higher in late spring and autumn because of warm wet weather conditions.

Clinical signs:

The initial effects of gastrointestinal worms are often unseen (also called subclinical parasitism) and cause reductions in animal production, growth rates and fertility. As the worms become established in the animals gut and compete with the host for energy and proteins from feed, clinical signs develop.

These are weight loss, scouring or diarrhoea despite initially good appetites. *Haemonchus contortus* in particular also attaches to the stomach wall in the abomasum (fourth stomach) in cattle, sheep and goats and the third stomach in alpacas and causes blood loss and anaemia through sucking the host's blood.



Scouring sheep

Additional signs of severe parasitism include dehydration, lethargy, pale or white mucus membranes (in the gums and conjunctivae around the eye), inappetance, weakness and often sudden death. Oedema (fluid build up) under the jaw and brisket, called "bottle jaw" can also develop.



Sheep with pale mucus membranes (anaemia)

Alpacas can show the above signs with severe worm burdens and can also appear colicky. Affected animals can deteriorate quickly and prompt treatment by a vet is recommended.



Calf with scours (note dirty bum and tail)=>

Diagnosis:

This is mainly based on clinical signs. A faecal sample should be taken to confirm worm burdens through a faecal egg count (FEC) and give an idea of prognosis for recovery.

Faecal egg counts can be carried out to check less severely affected herd mates also, prior to treatment, to assess worm burdens.



Haemonchus worm egg as seen under the microscope

If anaemia is suspected, a blood test can be done to assess the severity and whether a blood transfusion is needed.

If you think animals are a bit unthrifty and scouring, please call us to get them checked or get FECs done before clinical disease worsens.

Treatment:

Treatment varies depending on severity of disease.

Once worm burdens are confirmed, the animal should be drenched with a broadspectrum drench as soon as possible. For calves, sheep and goats a triple combination oral drench is available, for Alpacas an injectable form of drench is given. For cattle heavier than 100kg an intra-ruminal bolus called I-pulse can be given that provides protection from gastrointestinal worms for 5 months. This is available from the clinic.



For larger cattle, pour-ons or oral boluses like I-pulse are available too.

Talk to your vet about appropriate dose rates. Weighing the animal or using a weighband will allow drenching at correct dose rates, as overdosing and underdosing should be avoided.

<= Vet applying "pour on" to a cow

Vet using a weighband to assess a calf's weight for accurate dosing with drench or other drugs =>



Dehydrated animals may require fluid therapy, orally or into the vein or blood transfusions if they are severely anaemic. For patients with signs of colic, pain relief and anti-spasmodic drugs are indicated.

Also, preferential feeding and nutritional supplements like Ketol, molasses etc may be needed to provide enough energy for recovering emaciated patients.

Prevention:

Prevention is based on the following grazing management strategies and monitoring of worm burdens:

- Faecal egg counts and faecal egg count reduction tests (FECRT)
=> FECs can be used to monitor worm burdens and decide if drenching if necessary or not. We can collect samples for you or you can collect your own and drop them at the clinic to be tested, the fresher the sample the better! Our vets are happy to give advice on FEC results.

=> FECRTs can be carried out when FEC results come back high and drenching is needed. It involves taking another set of faecal samples 10-14 days after drenching and comparing these to predrenching levels. With an effective drench the second test should show zero eggs in the faeces. If burdens are still high, drench resistance has developed and types of drenches will need to be varied.

- Cross-grazing with other species, eg grazing goats and sheep (which share the same worms) with horses, cattle or pigs. Also different species prefer different lengths of forage and do not compete for the same pasture.
- Preventing close cropping of pasture – this means offering longer grass to animals. Most larvae only crawl up to 2.5 cm up the blades of grass, so if grass is grazed longer than this, larval ingestion is limited.



<= Long good quality pasture, ready to be grazed



Short pasture that has just been grazed. This needs time to regrow. =>

- Quarantine drench new stock with a broad spectrum drench before arrival on your property then do a faecal egg count before releasing them onto your pasture to ensure they are not carrying resistant worms
- Use weighbands or scales to get accurate weights before drenching, this is particularly important in goats as overdoses can be toxic. Also avoid underdosing as this encourages resistance.
- Regularly drench young stock once they start grazing on pasture, no more frequent than monthly though, and only drench adult animals when they are showing clinical signs like diarrhoea and weight loss.
- Keep drenching to a minimum and only drench animals when faecal egg counts are rising, clinical signs are apparent or if burdens are high in young stock.

The importance of Refugia:

After any drenching treatment there will be a small number of surviving worms that are resistant to the drench. If the larval population on pasture immediately post drenching is low, like pasture that has been ungrazed for a long time, these resistant worms will form the new worm population and widespread resistance will develop quickly.

To prevent this from happening, a refugia worm population is needed, this is a population of non-resistant worm larvae that can dilute out the resistant worm eggs produced after drenching. It is important to:

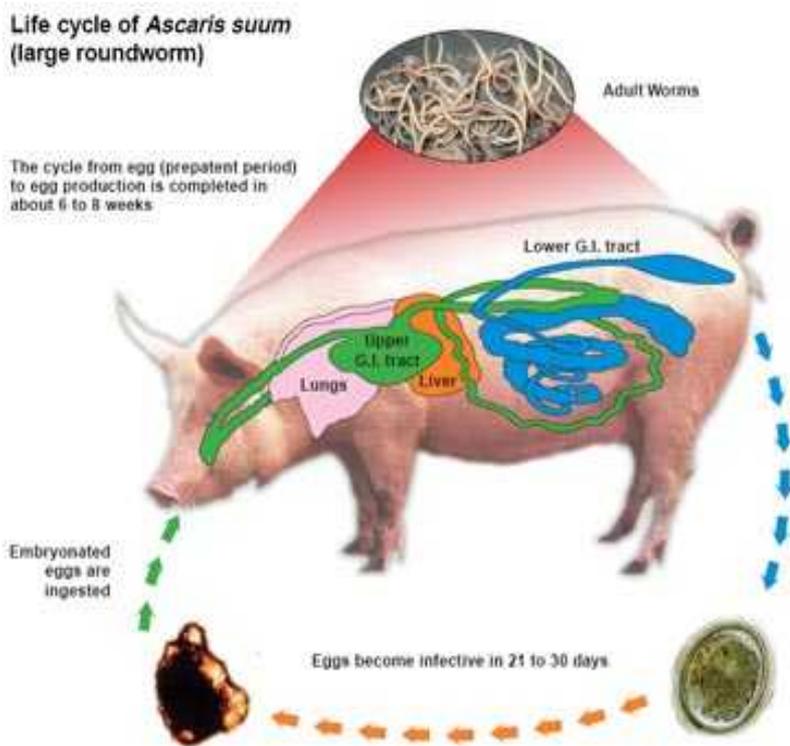
- NOT drench animals then immediately move them to clean pastures. Leave animals in the same paddock they have already been in after drenching to maintain refugia.
- NOT drench all animals in the mob at the same time. Leave some older healthy animals undrenched.

- Rotate older animals over the same pasture following young stock to dilute the worm population in these paddocks, particularly if young stock are being drenched regularly. Leave about 3 weeks between young and older animals so the grass has some time to grow back. This also allows worm eggs from young stock to hatch and these larvae to be eaten by older immune animals.

Worms in pigs:

Pigs have a completely different set of worms than ruminants do. Pigs can be affected by intestinal roundworms, stomach worms, lung worms and kidney worms.

The most common worm that causes a problem is the intestinal roundworm called *Ascaris suum*. =>



Adult worms in the pig's small intestine lay eggs that are passed out in the faeces. The eggs stay on the pasture until they are ingested by another pig and hatch once they reach the small intestine. The larvae then migrate through the gut wall into the blood stream and travel through the liver into the lungs.

Once they reach the trachea, they are coughed up and swallowed and return to the small intestine to become adults. The entire lifecycle is completed within 2 months.

Clinical signs include coughing and rapid shallow breathing from worms in the lungs and trachea, weight loss or reduced weight gain as worms compete for nutrition with the host, unthriftiness and colic.

Diagnosis is on the basis of clinical signs and a FEC can be carried out to assess worm burdens.

Treatment with Dectomax injectable is effective and oral dewormers are available as well.

A suggested worming programme is to treat all piglets routinely at weaning, one month later and again another three months later.

Adults are ideally treated twice a year, with sows treated pre-mating and pre-farrowing.

Pigs should also be treated if clinical signs are noted and FECs are high.

Raising orphaned farm animals

– how to grow healthy calves, lambs, kids, piglets and crias –

Many small block holders, especially families with school kids, decide to raise a lamb, kid or calf at this time of year. Be it for calf club or because the newborn's mum is unable to raise it herself, these cute newborn farm animals need 24/7 care to flourish and grow. In this article, we have outlined the vital parts of raising “a furry baby”, from the first days of life to weaning.

The first question when starting to raise a lamb, kid, calf or cria is: “Has this newborn had enough colostrum?”

Unlike dogs, cats and people, farm animal babies are born without any of their own immunity. They do not receive antibodies through the placenta before birth and are entirely susceptible to infections when born.

It is vitally important that they receive a decent feed of colostrum, a high energy milk filled with a large amount of antibodies, during the first 6-12 hours of life. During this time, the baby's intestine is primed to absorb the antibodies, to form part of their own immune system until it is exposed to bugs and can form it's own antibodies.

About 12 hours after birth, the gut “closes” and can no longer absorb antibodies.

Colostrum is produced by the dam for the first 4-7 days after birthing, with the antibody levels highest in the first feeding after birth, then gradually waning until normal milk is produced.

For newborns that have been orphaned straight after birth, colostrum can be taken from dams that birthed around the same time, either from your property or from a friendly dairy farmer maybe, or frozen colostrum is available. You can freeze fresh colostrum for the following year, just make sure it is defrosted slowly and not microwaved, as this will destroy the antibodies.

At the clinic we have dried colostrum powder available that can be used for most species. It gets made up with warm water, electrolytes or milk and can be fed to the baby via stomach tube or bottle.



“If I get a pet calf/lamb/kid from places other than my own property, what do I need to watch out for?”

- Check that the animal appears healthy and bright and is up and walking around, making noises and not just huddled in a corner
- Check that it has a good strong suckling reflex and is plump in the abdomen
- Ensure there is no evidence of scouring or a dirty tail
- Check that the animal had good colostrum intake within first 12 hours of life
- Check it was kept in a warm, clean pen
- Check that the navel is clean and dry, no swollen joints and bright eyes with no discharges



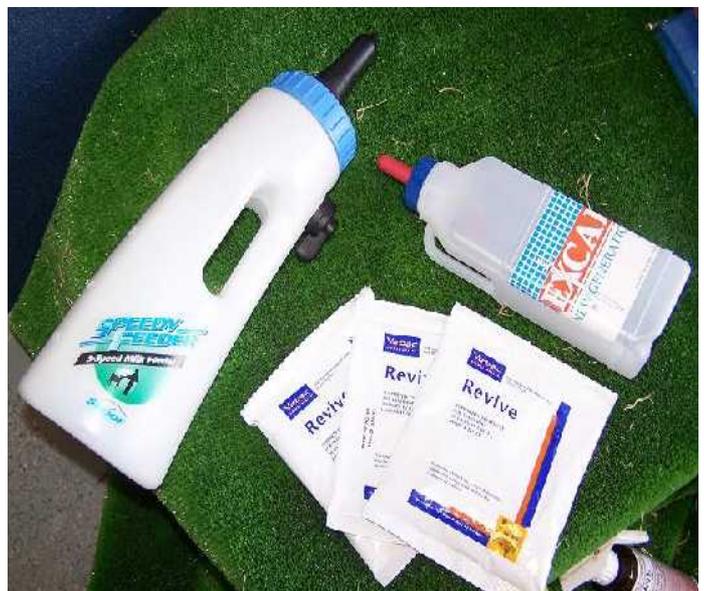
Bright healthy calves in a clean warm calf shed

“So, we've given the first colostrum, what happens now?”

- Ensure newborns are kept warm and have shelter available. In cold and wet weather covers are available for the newborns.
- Ensure sheds and pens are clean before moving the orphans in and be vigilant about washing hands and gumboots before and after entering the pen.
- Spray the newborn's navel with iodine and check regularly that it is dry and clean and no swelling is present.
- Always have fresh water available, they may not drink much at first but water intake will increase as the neonates get older.
- Once newborns have received their first colostrum, they should be continued on colostrum for the first 4-7 days of life. Towards the end of this time start diluting the colostrum with made up milk powder. Do not use milk from the supermarket though as it has been treated and does not resemble natural milk. Also make any changes in feed a gradual transition. For calves, “Ancalf” is a good product, for lambs, piglets, crias and kids “Anlamb” is fine to use.
- From 1 week of age onwards, offer hay, straw and a meal diet to encourage development of the rumen and prepare animals for weaning.

“I can't get the lamb to feed properly, what can I do?”

- Newborns have to learn how to bottle feed. With healthy neonates start bottle feeding 6-12 hours after taking them off mum, weak and cold animals will need to be fed sooner
- Hold the lamb's head (or calf, kid, cria etc) slightly up with the neck extended, put the teat into it's mouth and move the jaw gently by hand to stimulate sucking.
- Ensure the hole in the teat is not too big and not too small. When holding the bottle upside down milk should not pour out but should come out easily when squeezing the teat.
- Do not overfeed as this can cause bloating. With lambs and kids younger than 4 days start with 6 feeds of 150ml a day, then gradually increase milk volumes and decrease number of feeds a day. From 8-21 days they should receive 3-4 feeds of 350ml daily, 21 days to weaning 2 feeds of 500ml. For calves start with 1L 4 times daily initially, then reduce to twice daily feeding of 2L or more until weaning.
- If the newborn is too weak and not suckling, place them in a warm environment to increase body temperature. Often this will make animals more lively and bleating/mooing should start and a suckle reflex should develop.
- If the animal is not wanting to drink at all, consider stomach tubing it. Stomach tubes are available from the clinic, but please get a vet to show you how to tube animals first as care is required and an unexperienced person could drown the newborn.
- In very weak newborns, the vet can give a Dextrose injection into the abdominal cavity.



Feeding bottles and “Revive” electrolyte sachets, available at the clinic =>

“How do I wean my pet lamb/calf/kid...?”

- You can start weaning between 5 -10 weeks of age. Reduce the number of milk feeds gradually then stop completely.
- Readily accessible clean water and good quality green pasture along with pellets and hay must be available.
- Don't forget to dock, vaccinate, disbud, castrate, drench and/or nose ring your pets, the younger the better. Most procedures need to be done under local anaesthetic by a vet.

“What are common diseases that may affect my pet lamb/calf/kid?”

- Scouring: a common problem, especially with calves. Hygiene is important to avoid bringing diseases to your pets. Scouring can be caused by quality problems with the milk replacer or colostrum, insufficient colostrum as a newborn or diseases like Rotavirus, Salmonella, E.coli etc. Contact your vet if scouring does not resolve with 24 hours of electrolytes instead of milk replacer.
- Navel ill/joint ill: in neonates that have not had enough colostrum bacteria can enter the navel and travel to the joints, causing a swollen infected belly button and often swollen, sore joints. Spray newborns navels with iodine to prevent this. Contact your vet for treatment if you notice lethargy or lameness.



Scouring calf

- Bloat: can be due to overfeeding, twisted guts or other abdominal catastrophies. Young animals with bloat can go downhill and die quickly so urgent vet attention is needed to determine cause, prognosis and treatment.
- Tetanus or Pulpy Kidney can occur in unvaccinated lambs. Vaccination is strongly advised to prevent these severe diseases.

Manawatu Country Living Expo September 10th and 11th at Manfield Park in Feilding

A local group of Alpaca Breeders, in conjunction with a group of enthusiastic Highland Cattle Breeders are putting on a Country Living Expo to showcase everything involved in owning a small block of land with animals.

Levin and Horowhenua Vets will be there with a display. Half-hourly seminars and practical demonstrations are planned for both days on a multitude of different topics.

Check out the attached flyer for more information.

Hope to see you there! It will be a great event.

Also remember, any WOF farm calls from now until the end of October will still go into the draw for this Ipod Touch.



Looking forward to see you at the clinic, at your place or at the Expo,

Step of the team
@ LHVC.

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