



# NSVS LTD

## VetTIMES

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### Deer reminders

- TB test.
- Pregnancy scanning.
- Weaners-drench for lungworm.
- Liver copper & selenium check dry hinds.

### Inside this issue:

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Newsletter Date June 2008

### Situation Comment

Winter has arrived and it should be an interesting one though no weather catastrophes yet. While brassica crops on most farms were good, a lack of supplement made during summer may cause difficulties for some farms. Fertiliser costs are increasing by the day just like fuel. Space remains at a premium at the works and stock sales are definitely a buyer's market. Gypsy day has been and gone with pretty smooth changeovers. A big welcome to all those new to the area, I am confident that we will provide veterinary services of the highest standards for your needs. Feel free to call into the clinic and introduce yourself. The staff in the office are normally your first port of call and it's good to be able to put a face to the name. Farewell for now

to all those that have moved on, hopefully we can work together again in the future. What a great time to be a dairy farmer with fantastic payouts for this season just gone and great forecasts already for next season. It just makes each and every sheep farmer that little bit more depressed but there are always opportunities in adversity. There is certainly a big swing in the basin to dairy support, who'd have believed that 10 years ago? We will be TB testing less deer this winter with more farms on bi-annual testing. Pregnancy testing results have been very mixed for the beef guys so far. We certainly have come across some higher empty rates than normal. Bull failure has been identified in a few situations and I think we need to be looking more closely at these animals pre-mating. Final dairy empty rates have averaged a clik under 10%.

Still room for improvement. At the time of writing we do not have the final information yet on the new anoestrus programmes without the use of oestradiol but that will be released very soon. Our local results have been very positive. On the international front the American election may eventually end, rice prices will mean no more Chinese takeaways and the Wallabies, ably coached by Robbie Deans, will win the Bledisloe Cup and Tri-Nations (according to Mike). Finally we will be fully stocked for all your pre-calving and pre-lamb requirements. In addition there have also been a few new products launched recently – a new BVD vaccine, a long-acting anti-inflammatory for cattle and two new pre-lamb injectable drenches. Talk to one of the vets for more information.

### Staff News

Congratulations to Michelle who has been invited into the equine residency programme at Massey University. It is a great achievement and we wish her all the best. On the other side of the coin we are very disappointed to see her leave but retain hope that she may come back to work in Riversdale sometime in the future. Michelle has

been a great asset. A replacement will be announced shortly. We will also be increasing our office staff numbers at Riversdale to cope with the increasing workload. To this end we would like to welcome Donna Hailes from Balfour to the team at NSVS. I'm sure that Donna will settle in very quickly and it is great that she already brings a lot of knowledge and experience to the role.



"Now there's a vet that needs a holiday."

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Calf diarrhoea is a complex syndrome and a major cause of economic loss on dairy farms. It can be associated with a wide range of pathogens together with management, environmental and nutritional factors.

### **Rotavec Corona**

Rotavec Corona combines rotavirus, coronavirus and E coli antigens. Active immunisation of the cow gives passive protection to the calf through antibodies in the colostrum. When the antibodies in the colostrum are ingested they will aid in the protection of calves against enteritis caused by these pathogens for the period the colostrum is fed, generally the first 2-3 weeks of life.

The vaccine is given in a single injection to cows 3-12 weeks before calving. To maximise herd coverage, vaccination should be done 3 weeks prior to the planned start of calving. This will cover cows calving in the first 9 weeks. For herds with a greater calving spread split herd vaccination is recommended.

### **ROTAGEN**

Rotagen is a feed additive made up of freeze-dried antibodies and is used to prevent disease and to treat outbreaks of rotavirus. If you have had outbreaks of rotavirus in the past it should be considered. As a preventative it could be added to the milk for the first 2-3 weeks which is the danger period for rotavirus. It shouldn't be needed if the cows have been vaccinated with Rotavec Corona and the calves are receiving adequate colostrum.

### **Colostrum**

Newborn calves should consume at least 2L of colostrum immediately after birth and a further 2L before they are 6 hours old. This is because the ability of the calf to absorb the colostrum antibodies reduces with time and the antibody concentration in colostrum declines rapidly after calving.

The calf should always receive its first feed from its mother to take advantage of optimum colostrum quality and high antibody levels. If this is not possible colostrum from another cow if it comes from the first milking after calving is also accepted practice. Calves cannot get too much colostrum. Prolonged colostrum feeding for at least 2 weeks after birth is vitally important. Colostrum antibodies as well as being absorbed into blood, form a coating over the cells lining the gut wall to prevent viruses and bacteria gaining a foothold and causing disease. However these protected cells are shed every four days, so colostrum must continue to be fed to keep any new cells repeatedly coated until the calf has built up sufficient immunity of its own. Failure to keep these cells bathed in colostrum is one reason why typical rotavirus infection is so often seen 7-14 days after calving.

### **Calf rearing**

#### **Calves should be kept dry and draught free**

It is recommended that calves are kept indoors for the first 3 weeks. Cold calves will use most of their energy keeping warm rather than growing. A calf shed should be twice as deep as it is high or wide - this will ensure shelter for the calves at the back of the shed no matter how wet and windy the conditions. Ideally calves will get some sun and avoid the prevailing wind. Ideally 3 sides should be closed and walls should be solid.

Some rearers use calf covers to keep out the wind and rain. These can be very effective. Better quality covers are probably more cost-effective, as they will last longer and fit better. Calves can have a tendency to get lice under their covers, so if this occurs treat accordingly

#### **Disinfect regularly**

Prior to the arrival of each batch of calves the shed should be thoroughly cleaned and disinfected with a broad spectrum disinfectant like VirkonS. Pens should be frequently disinfected while in use to prevent build-up of disease organisms. VirkonS is ideal for this task because it kills all bacteria, fungi and viruses, and is perfectly safe to use with feed, water and the calves present. It is best applied by knapsack to enable treatment of difficult to reach areas.

#### **Adequate manure disposal system**

The flooring/bedding needs to facilitate easy cleaning and removal of waste. The calves should not be directly on concrete as it tends to become wet and slippery and also encourages the spread of bacteria through the barn. Ideally waste should not drain away from one pen through another - this can also spread disease.

Many farmers have calves on slats or grating. These surfaces will need to be hosed down frequently (in the absence of calves) and remember - beware of draughts! Untanilised shavings or sawdust spread on the floor, 300mm or more deep, works well. Raked and topped regularly it will absorb waste which can be removed at the end of each season.

#### **Feeding**

Colostrum/ Milk twice a day initially at 10% bodyweight

Then once a day and increase milk allowance\

Fresh clean water from day 1

Access to roughage and meal from 3-4 days old.

All feed/water up off the ground and freshen regularly.

#### **Segregate age groups and no more than 10 - 12 calves per pen**

While indoors the calves should each have at least 1.5m<sup>2</sup> of space per calf. They should not be run in mobs of more than 10 - 12 per pen. Keep calves in groups according to size and away from adult cattle especially. This applies to calves outdoors as well. This will minimise bullying and stress - relaxed calves will be healthier and grow faster.

If the calves are held indoors continuously for a period there should be no mixing of animals from different pens (All-in, all-out). Calves isolated due to ill health should not be returned to their original mob but put in a new pen - this will reduce the chance of spreading disease.

## Calf rearing cont.

### Navel infections

Infections of the navel cord can occur within the first 24 hours after birth due to overcrowding and bruising. Infection spreads from the navel cord to the liver, and then the joints of the leg. 'Joint ill' symptoms include a hot navel cord and swollen painful joints which make it difficult for the calf to walk. The infection can also spread to the brain and cause meningitis. Treat with 5mls of penicillin for at least five days, or seek veterinary advice.

Navel infections can be prevented by giving calves plenty of room and soft bedding while transporting them, keeping trailers clean and disinfected and spraying the navel cord with iodine

### Same calf feeding routine each day

Ideally the same person should be involved every day - the calves will be more comfortable getting into a routine, especially over the first few days. Whoever looks after the calves must have plenty of time to do the job properly. It is essential that the feeding, cleaning and animal health requirements of the calves are fulfilled adequately, and problems are not overlooked or put off.

### Bring milk to calves

Quiet handling will reduce calf stress - avoid overuse of dogs when shifting mobs. Where practical, bring the milk to the calves, not the other way around - the calves will be more relaxed and more likely to drink their share.

### Provide clean air and water

There should be good ventilation to remove effluent gases (ammonia) and prevent outbreaks of pneumonia. Remember no draughts at ground level. This is easily checked by use of a match or lighter. Make clean water available to the calves at all times, especially when calves are scouring. When dehydrated, calves will drink anything so avoid calf access to stale, rank water, which may be harmful.

J McKerchar BVSc BSc

### Dairy—Cattle reminders

- Lice control.
- Milking machine annual check.
- Calf rearers - organise suitable housing, organise milk powder requirements.
- Rotavirus vaccination.
- Magnesium supplementation.
- Pre-calving trace element testing.
- Transition cow management.
- Dairy-plan inductions.
- First shot BVD vaccine to heifers.

## Manipulating Milk Components (Fat and Protein Percentages)

The percentage of the milk fat and protein in liquid milk can be manipulated by genetics and diet. In this brief summary we will discuss only the nutritional effects.

### Body Condition at Calving:

Provides a buffer against short term deficits in feed intake such as cold weather and provides energy in the first month of lactation when appetite is low.

**Protein in Diet:** Dietary protein stimulates cows to produce milk. The majority of milk protein is produced by the digestion of microbial protein produced by bugs in the rumen, not dietary protein. Very high protein intakes reduce the efficiency of the feed digestion because of toxic effects in the liver.

### Energy in the Diet (ME):

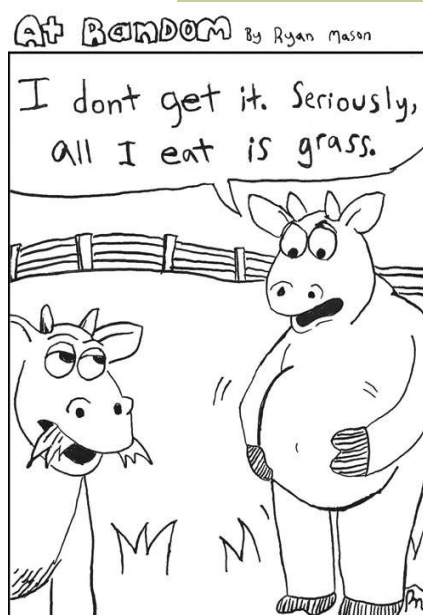
Energy intake affects milk protein by increasing the ability of the rumen bugs. More microbial protein is produced allowing more milk protein to be produced. Low energy intake can result in high milk fat percentages as cows "milk off their back".

While the percentage may be high, the total yield will be low.

**Type of Feed:** Concentrates such as grain may increase milk protein and lower milk fat. Silage hay and high fibre diets will raise milk fat percentages. This difference is due to the way rumen bugs breakdown different food types and the final products of the breakdown.

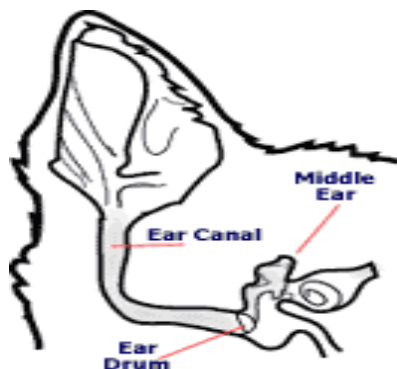
**Fat in the Diet:** Feeding fat to animals can either increase or decrease milk fat percentage. At high levels of fat in the diet (greater than 5-6% of feed intake) fat will interrupt normal digestion in the rumen resulting in reduced milk fat percentage. At lower levels fat feeding can increase the milk fat percentage.

M Baer BVSc



## Ear Infections in Dogs

The ear is divided into three chambers; outer, middle and inner. The outer ear is the ear canal separated from the middle ear by the ear drum. It funnels sound down to the ear drum. The middle ear has 3 small



bones that vibrate against each other in response to the sound waves moving the eardrum. The inner ear is responsible for balance and converting sound vibrations to the nerve impulse.

Most ear infections in dogs ears are in the outer ear. This canal is lined by skin so it is not unusual for dogs with skin problems to have ear problems as well. The shape of the canal makes it easy for moisture or foreign objects to become trapped and makes infections more difficult to clear up. With repeated infections the ear canal becomes more narrow and drainage gets worse.

Outer ear infections can be caused by parasites (mites), allergies, foreign bodies (eg. barley grass), bacteria and fungi. Often

a combination of these causes are found.

Repeated outer ear infections or direct injury may result in damage to the ear drum. This exposes the middle ear to bacteria and ear drops-if they are being used. This exposure can lead to damage to the middle ear and deafness. Subsequent infection of the inner ear can lead to loss of balance and/or a head tilt. This can be permanent depending on the degree of damage.

Treatment of outer ear infections can be difficult and may require a combination of drops and tablets to resolve. Treatment may need to be for a prolonged period of time.

M Baer BVSc

## Trace Element Supplementation and Liver Biopsies

Inadequate essential trace element intake can result in

1. Reduced milk production
2. Increased disease (as a result of poorer immunity)
3. Decreased reproductive performance

The important trace elements in NZ for dairy stock are selenium, copper, cobalt, iodine and zinc.

### Selenium

Needed for disease resistance, getting rid of cleanings after calving, milk production.

Northern southland is in general quite low in selenium.

Need 5mg/cow/day.

Oral dosing, injections, fertilizer

### Copper

Needed for growth and production, health and immunity, reproduction. Uptake affected by high molybdenum, sulphur and iron levels especially in winter and spring.

Need 250mg/cow/day

Oral dosing, injections, bullets

### Cobalt

Needed for Vit B12 and B1 production, energy metabolism in the rumen, fibre digestion.

Pasture is normally low in cobalt.

Need 10mg/cow/day

Oral dosing, fertilizer, injections.

### Iodine

Needed for energy metabolism, protein synthesis, reproduction and heat detection.

It is leached during wet weather esp. in winter and spring. Iodine requirements increase during cold weather. Iodine

uptake from crop is negligible.

Need 50-60mg iodine daily.

Oral dosing.

### Zinc

Needed for growth and production, reproduction, hoof strength, and immune system. Facial eczema is not a problem in Northern Southland.

Excess zinc can increase risk of milk fever and copper deficiency and depress appetite.

Need max. 750 mg/cow/day.

Oral dosing, footbath.

### Magnesium

Begin supplementing with Magnesium two to three weeks before calving and continue until early November when the grass is more mature and the weather is better.

Need 20gm/cow/day

E.g. 60gm MagC via dosatron plus 50gms

Mag Oxide gives 20gm magnesium

### Calcium

Colostrums need lime flour 50gms/cow/day

### How do we test for these elements?

The simplest way to test is by blood testing a number of animals in whatever group is to be tested. Usually 8-10 animals are needed to give an overall representation of what is going on in that particular group.

The other method is by testing the liver for some of these elements.

Liver copper concentration is recommended over blood sampling when we are trying to establish a risk of deficiency or to check on reserves. This is particularly important for in-calf dairy cows entering winter. The liver acts as the storage reserve for copper however adequate blood levels can be obtained even where storage reserves are quite low.

Liver biopsy is recommended over post slaughter collection as the cull cows may

not be representative of the herd. In addition the same cows can be sampled from year to year providing valuable trend information.

Early winter is the best time to assess liver copper stores as it gives time to supplement before late pregnancy and lactation.

As gestation progresses the foetal demand for copper increases which puts a drain on copper reserves. In addition iron and molybdenum interfere with copper uptake.

Animals on crop over winter are ingesting very little copper normally but also tend to have interference from these other elements.

The biopsy procedure itself is a relatively quick and simple procedure, with most of the time involved in the procedure is to ensure the site for the biopsy is surgically prepared. The procedure involves inserting a small trochar from the right hand side of the animal into the liver which removes a small core of liver that can be tested at the lab. Post biopsy health complications have not been reported.

We can tailor testing done on farms to suit individual requirements and in general this would comprise a mix of blood testing and liver biopsy work. The results of this testing will then determine what supplementation if any needs to take place.

Feel free to talk to one of the vets about what your requirements may be this year. Remember it is only one part of the strategy to get trace element status right – fertiliser programmes and soil and herbage analysis are also very important. Ultimately however it is what is in the cow that counts!

M Greene MVB MRCVS

## Hills Pet Slimmers Programme 2008

### Is your pet a little chubby??

**NOW AT NSVS, The Hills Pet Slimmers Programme.**

Is your pet becoming unwilling to participate in activities, stiff, even lame, short tempered, lethargic, sleeping more often, has loss of breath/excessive panting or seems unwell and depressed looking???

This could be as a result of obesity, which WILL reduce the lifespan & the quality of life of your valued pet and family member.

Overweight dogs and cats are more susceptible to many life threatening diseases, such as diabetes, cancer and heart disease, not to mention the strain on their body often causing ruptured ligaments, slipped discs, joint problems and arthritis, as well as anaesthetic/surgical risks and heat intolerance.

So how do you know if your pet is overweight...

Some symptoms as already mentioned earlier like lethargy, lameness, lack of interest and loss of breath, but also your pet should have a visible waist! When sighted from both birds-eye view and side-on, the flank area should be noticeably smaller than the ribcage area, but an even easier way to gauge body condition, using your own hand as a guideline is as follows.



Your pet's ribs should not protrude obviously - like your knuckles when you make a fist



Neither should the ribs be absent - like the feeling of the heel of your palm



The ribs should be present but with a small layer of tissues covering them - they should feel like the opposite side of your knuckles on the palm of your hand



So how can you help your pet to lose weight?

All pets have an ideal weight for their breed & size – what they eat plays a very important part in their overall health & wellbeing. So, come in & see the staff at NSVS for a free weight check. We will tailor a diet plan specifically for your pet, from the food it should be eating, how much it should lose per week and how long it will take to reach the goal weight. You will receive a record card with all this information on it & a chart so we can monitor the weight loss, you will also receive \$10 off your next bag of Hills Prescription Diet food and you can go in the draw to win lots of great prizes, including \$1000 travel vouchers, \$150 Pet Shopping Spree and one year free supply of Hills Pet food, just by entering the Pet Slimmer of the Year Competition. There is a great range of low calorie & low fat pet foods available specifically formulated & proven to aid in healthy weight loss.

#### Key Tips

Reward without giving food treats - your pet's love your attention, so pats, praise and affection are all very rewarding, also fun games like fetch and even giving your pet a massage!

Do not give your pet's human food - place your pet outside during family meal times, to avoid tit-bits and dropping food from the dinner table & also to avoid those begging eyes

which you end up giving in to.

Divide daily amounts of food into smaller meals and feed often (2-4 times a day) & even measure out the recommended amounts to avoid over feeding.

Keep food out of pet's reach & ensure the whole family knows when the pet is to be fed and how much to feed - to avoid double dosing.

Exercise! Take your pet for regular walks or runs, find a playmate, play fetch or (for cats) play catch the light. Easy toys like boxes or bags also encourage cats to play. During warmer months take your dog swimming. Try to encourage some form of exercise & play every day.

By J Grant  
Senior Vet Nurse



#### **Pet Reminders**

- **Worm cats and dogs.**
- **Arrange annual checkup.**
- **Check dog registration.**
- **Check diet for winter.**
- **Check bedding warmth for winter.**

**Horse Reminders**

- **Supplementary feed horses over winter.**
- **Clip horses for hunting.**
- **Lice Treatment.**
- **Check for cover sores.**
- **Check for mud fever.**

**Equine flu spreads by horses coughing out infected droplets that are a source of infestation for other horses.**

**Equine Influenza**

After the outbreak of equine influenza was confirmed on 24<sup>th</sup> August 2007 in New South Wales, Australia, New Zealand now remains the only major horse breeding country free of Equine Influenza (E I). Immediately following confirmation of the outbreak in NSW there was a national clampdown on all horse movements in Australia. The rapidity with which the initial results were reported and subsequent clampdown on horse movement restricted the disease to N.S.W and Queensland, and prevented a national outbreak. The disease was eradicated by movement restriction and isolation together with a huge screening programme and vaccination.

**Signs of E I**

The disease is a rapidly spreading flu like illness and many horses will develop a deep seated hacking cough and some a high temperature. They will have mucus at the nose and eyes be stiff and sore and generally off colour. Pneumonia may develop in the young and old horses. This may be fatal in some cases.

**How it spreads**

Equine flu spreads by horses coughing out infected droplets that are a source of infection for other horses. There is a short period after first contact with the virus before the signs of the illness appear. An incubation period of only 1-3 days. Infected horses can pass the virus to other horses during this time and for at least 5 days after the illness becomes obvious. The virus can readily spread between properties by fomite transmission (carried on inanimate objects). These agents can include equipment and clothing.

**Control**

The introduction of Equine Influenza is the most serious threat to the future of the New Zealand horse industry today. Because more and more horses, horse semen and people are moving between countries, the risk of introducing E I increases year by year.

**Equine Influenza**

Equine Influenza entering New Zealand would cause serious (and probably permanent) damage to the horse industry. In almost all cases it would result in immediate cancellation of all horse exports. At worst, all horse events would be cancelled for a period and movement of horses from one place to another would be stopped. It would seriously affect racing clubs, owners, stable and stud employees, equine health companies, feed suppliers, selling agents, saddlers, TAB and, of course the government and all would lose income.

What can New Zealand horse people do to prevent this happening? The only way to be certain of keeping out E I is to close the boarder to all traffic. This is simply not feasible. All international traffic in animals, people and goods carries some risk of introducing E I. However we can take steps to reduce the chance of introducing E I and to minimise the impact if it does get introduced.

There are three things that horse people can do to help keep our horses safe from E I:

1. Follow the quarantine rules when returning from overseas or importing horses,
2. Stay alert to signs of disease in horses,
3. Know what to do if exotic disease is suspected.

**Returning home**

When returning to New Zealand from travelling overseas, it is important to complete the arrival declaration form **responsibly** (i.e.: carefully and honestly) and to declare horse related items such as clothing, gear, feed, feed activities, equipment or medicines. If importing a horse, follow the import procedures conscientiously.

**Identifying disease**

In the event of E I occurring, it is enormously important to identify it as quickly as possible. That way it can be stopped from spreading and there is the best chance of eradicating it.

**Watch carefully** for any sign of illness in a newly imported horse. The sorts of symptoms to look out for are: going off food, high temperature, runny nose, coughing, rapid or laboured breathing, and general change of behaviour.

**Vaccination**

As in people the influenza virus is constantly changing in its genetic make-up. It is these changes that make it hard for the body to provide lasting immunity to the virus and for drug companies to produce effective vaccines. This is why horses can catch influenza more than once or become infected even if they are vaccinated. When a new outbreak occurs it is important to identify the virus type so a suitable vaccine can be used in the face of outbreak. Overall though vaccination gives only short lived immunity, and is costly. In Australia vaccination was used effectively to create buffer zones around areas where disease occurred to minimise the chance of infection spreading outside these areas. However other measures such as movement bans and strict cleaning and disinfecting to prevent the spread from property to property played a significant role in getting the outbreak under control.

P Langford BVSc



## Pre-lamb Worm Management in Ewes

### **Pre Lamb Worm Management in Ewes**

The pre lamb rise or periparturient rise (PPR) in faecal egg counts of ewes has been the subject of much discussion in recent years. Its significance to pasture contamination, the significance in productivity of the ewe and the role in development of anthelmintic resistance on farms has been debated.

The PPR is the result of a naturally occurring relaxation in the immune system of pregnant sheep around lambing. Sheep that tend to have a higher PPR are pregnant hoggets and two toothed esp if they are multiple bearing; underfed pregnant sheep and probably pregnant sheep of lower body condition score.

In practical terms we want to know how important it is to suppress the PPR by drenching. Do we need to drench all our ewes? Will drenching lead to an increase in productivity of the ewe by improving lactation and will it reduce the pasture contamination and challenge to lambs later on? Unfortunately none of these questions have a clear answer.

Research shows that in a twin bearing mixed age ewe of

adequate body condition score, there is no production advantage from drenching pre lambing. Yes I can hear you all saying 'when do we ever have all our ewes in ideal body condition, carrying twins with ideal grass cover at foot'. Therefore we must identify the 'at risk' stock classes to give the greatest benefit when considering drenching pre lamb. In general terms we know the stock can be ranked as follows from the group that is most likely to have a high PPR to the least.

1. Multiple bearing hoggets
  2. Single bearing hoggets
  3. Multiple bearing two toothed
  4. Multiple bearing mixed age ewes
  5. Single bearing two toothed
- Single bearing mixed age ewes

Other factors should be taken into consideration including body condition score, pre lamb FEC's, feed situation, projected feed budget and pasture contamination leading up to lambing.

Once specific stock classes have been identified the next decision is which drench to use. You should always ensure the drench you are using is

effective on your property. If there has been any resistance to drenches identified on your property then those drenches should be avoided. Single active drenches will always be more selective for resistance than using combinations. Long acting products have been shown to accelerate the development of resistance so there is no doubt to slow the development of resistance in sheep we should avoid whole flock treatment pre lamb with a long acting product. That is not to say it may be appropriate to target specific stock classes that are at greater risk with long acting drenches providing you know they are effective on your property.

Overall the pre lamb worm management is multifactorial including age of ewes, multiple or single bearing, body condition score, pasture cover, drench efficacy, soil temperatures and weather conditions. There has to be a balance between the more immediate production gain and the longer term sustainable parasite control. We welcome your enquiries regarding the particular situation on your property.

J Sloan BVMS MRCVS

### **Sheep Reminders**

- **Vaccinate 2 toothed 2nd shot Salmonella Brandenburg.**
- **Vaccinate aged ewes Salmonella Brandenburg.**
- **Re-evaluate winter feed budget.**
- **FEC ewe lambs.**
- **Introduce winter feeding.**
- **Condition score hoggets & ewes.**
- **Vitamin E, selenium to brassica fed hoggets.**

## INVITATION

You are invited to an evening at the  
Te Anau  
Working Mens Club.

3 July 2008. At 7 pm.

Two of our vets will be speaking on  
Pre Lamb Drench, Lamb Survival  
and Clostridial Vaccine.

Also Peter Anderson is  
coming to speak on the  
subject of LSD

RSVP 03 2497039.



## Sleepy Sickness and Milk Fever in Sheep

### **SLEEPY SICKNESS**

- Also known as pregnancy toxemia or ketosis and affects overfat or skinny ewes and multiple-bearing ewes in late pregnancy.
- Occurs when there has been a period of starvation such as yarding, a falling plane of nutrition or bad weather.
- Signs - ewe separates herself from the flock, may appear blind and wander aimlessly. The wool plucks easily from the ewe. Eventually she will lie down, become comatose and die. She may abort her lambs.
- Post Mortem – pale and friable liver and little body fat remaining.
- **Treatment – the best treatment is oral mono-propylene glycol or Ketol. 120ml should be given daily as a drench. Maintaining appetite is essential to the ewe's survival as well as providing shelter.**
- Prognosis - poor unless there is early detection. If treatment is given before onset of nervous signs, up to 50% may survive.

### **MILK FEVER**

- Also known as hypocalcaemia and typically affects multiple-bearing older ewes in late pregnancy.
  - Occurs when there has been a sudden change in feed, either in feed type or grazing regimen.
  - Signs – ewes are initially hyperactive and wobble on their feet. They will lie down with their head turned back into their flank. Regurgitation of rumen contents and prolapse of the vagina may be seen. They will die without treatment.
  - Post Mortem – unremarkable.
  - **Treatment – subcutaneous or intravenous injection of calcium borogluconate. High concentrations of this should not be given IV.**
  - Prognosis– good, they usually respond well to treatment if given early enough.
- M Reidie BVSc

## Mud Fever (Equine Pastern Dermatitis)

Mud fever in horses is part of a whole range of similar looking skin problems of the lower leg given the name Equine Pastern Dermatitis. Any breed of horse can get pastern dermatitis. It is mostly seen in adults and usually starts on the back of the pasterns but easily spreads to the front of the legs and to the forelegs.

### **What are the signs of Equine Pastern Dermatitis?**

The first signs are swelling, redness and swelling of the skin below the fetlock. A discharge then appears with matting and crusting. Three main different types have been found:

1. Mild: hair loss, dry scales and crusts with thickened skin, itchiness and pain usually called mud fever.
2. Exudative: redness, hair loss and a lot of oozing usually called greasy heel.
3. Chronic proliferative: this can look like proud flesh, this is much less common.

### **What causes Equine Pastern Dermatitis?**

Mud fever is usually caused by a combination of factors. There needs to be a predisposing factor initially. Next there needs to be something called the primary factor to start the disease followed by perpetuating factors to continue the disease process.

**1. Predisposing factors:** Predisposing factors are things that make a horse prone to getting mud fever. Genetics can play a part in this, Shires and Clydesdales are more prone to getting mud fever. White legs, lots of feathers, moisture and alkaline soil, wet bedding or muddy pastures are also common predisposing factors.

**2. Initiating causes (primary factors):** This can be trauma for example grooming with a hard brush or a small paddock cut, something irritant e.g. lotions or shampoos, allergy (this will affect all four pasterns whatever the colour), photosensitisation (often caused by contact with or eating toxic plants, commonly seen on clover pastures.) Just the white areas will be affected including a white muzzle, ringworm, parasites (eg mites chorioptic mange) or it can be a type of cancer, inflammation of the blood vessels or immune mediated disease.

**3. Perpetuating factors:** Once there has been some damage or irritation to the skin then the perpetuating factors set in to continue the inflammation. Infection by

*Dermatophilus congolensis* is the most commonly found bacteria in pastern dermatitis. Other types of bacteria can also be involved and this is important to remember if the infection isn't improving with the normal treatment.

### **Treatment and Prevention**

Prevention of mud fever involves preventing the predisposing causes and initiating factors. Obviously the genetics of your horse cannot be changed but keeping a horse that is prone to mud fever in a well drained paddock or clean stable instead of wet muddy conditions can help if possible.

A preventative measure that may well be worth a try is to spray clean dry legs with a mixture of half and half baby oil and white vinegar. This should help repel moisture from the legs and change the pH. Remember one of the predisposing causes was alkaline soil so making the skin more acidic may help prevent mud fever. Try this on a small area first in case your horse reacts to it as this will only make things worse.

There are lots of different treatments recommended, the main thing is to clip the hair from the area and remove the scabs to allow the treatment to get down to the site of infection. The scabs are usually very painful to remove so applying cream and leg wraps overnight often helps loosen the scabs. Washing with iodine or chlorhexidine both to help remove the scabs and to treat the area underneath is a recommended treatment. There are several antibiotic creams with or without steroids that are also used. If the infection is severe then injectable or oral antibiotics are needed. Please ring to discuss treatment of individual cases.

One important thing to remember is, as this article describes, there are lots of different causes of pastern dermatitis and these will need different treatments. If your horse is not responding to the normal treatment then please ring us as samples may need to be taken (swabs and skin biopsies) to determine exactly what factors are involved and then a correct treatment plan can be formed.

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