

**Deer Reminders**

- Pregnancy scanning & TB test
- Weaners - drench for lungworm
- Liver copper & selenium
- Check dry hinds & drench stags

**The Importance of Liver Biopsies**

We are often asked whether dairy herds require additional copper supplementation over winter. Unlike other trace elements where diagnosis of a deficiency is relatively straight-forward based on blood testing, making recommendations for copper supplementation is somewhat more challenging (and potentially more devastating if we get it wrong!).

Excess copper from the diet is able to be stored in the cows liver and the body relies on mobilising these reserves into the blood when basic dietary requirements are not being met. When a cow is wintered on crop, other components of the soil, namely sulphur and molybdenum, can severely limit how much copper the cow can ingest. As a result, the copper stored in the liver moves into circulation and the body can adapt until the stores are able to be replenished over the following summer.

This year we compared the blood copper levels and liver copper levels in the same herd of dairy heifers grazing locally and the findings were very interesting! At first glance the blood levels appear to be relatively normal (with the exception of one animal). When we take a look at the liver copper levels, we can only then tell how deficient these girls really are. This is a disaster waiting to happen!

The importance of this finding cannot be underestimated – measuring blood copper really gives us no indication as to whether there is likely to be a deficiency. It simply gives us a measure of how the body is mobilising it's stores for that particular day. Instead, we need to take a sample of the liver to give us a true indicator about whether the animal needs additional supplementation. A liver biopsy is a short invasive procedure which allows us to take a tiny sample of the liver tissue. The information obtained by doing these biopsies is of most use in Autumn so supplements can be administered prior to moving the cattle out onto the crop. In order to do this, we

Serum Copper umol/L	Liver Copper umol/kg
10.0	57 L
10.0	61 L
12.0	61 L
16.0	<15
6.0 L	98
10.0	
10.67	69.25
8 - 20	95 - 3000

need to have access to the right-side of the cow whilst it is adequately restrained in a head-bale. Most cows tolerate this procedure well and do not require sedation. The procedure itself takes about 5 minutes per cow. Alternatively, testing liver samples at the time of slaughter can be a valuable tool to help you make decisions regarding supplementation.

Kate Taylor DVM



**Cattle Reminders**

- Milking machine annual check
- Calf rearers
  - Organise suitable housing & milk powder
- Rotavirus and Salmonella vaccination
- Preferentially feed light cows
- Teat seal heifers

**Down Cow - Act Quick - Get Results**

**Even the very best systems can have down cows, how we deal with them is crucial.** Being called to down cow too late can have a frustrating outcome for the vet and the farmer (and the cow!) If you want to have success you must intervene quickly, the longer a cow is down the poorer the prognosis. The well-being of the animal is always paramount. You are legally obliged under the Animal Welfare Act 1999 to achieve (ideally exceed) minimum standards. It applies not only to animal owners, but the people 'in charge' of the animal at that time. It is our responsibility to provide Food, Water (a minimum offer of 25 litres/d) and "the means to minimise the effects of adverse weather". If you cannot provide the basic needs of the cow then it is not acceptable for the cow to live.



**Code of Welfare Minimum Standard No16. - Caring for Recumbent Cows**

- If hip clamps are used they must be removed if the cow cannot promptly support her own weight
- Cows must not be transported so that all her weight is carried by the hip clamps and vehicle
- Cows suspended in a sling must be able to breathe freely, not suffer unnecessary discomfort, and be lowered from the sling if they are unable to support their own weight after one hour.

**Staff Comment**

Since the last staff comment we have had a few changes of note. Firstly, huge congratulations to Megan, Damian and Leo on the birth of Reid Tutty. Surely he will follow Damian into the forwards coming in at a hefty 9.5pounds!! Awesome work Megan. Unfortunately, we said farewell to both Justin and Sheree who have both headed to Canada (separately). Justin to hunt and guide (and with Tash – neither hunting nor guiding) and Sheree to work on a ranch. We are sure they will both have great adventures. Best wishes to you both.



With any departure, it opens the door for someone new and we have been delighted to welcome Brittney Webb to Riversdale as our new vet nurse. Brittney spent a fair

1. Meet Jon Snow
2. Menacing Mud Fever, AAA Drench.
3. Feeding Ewes in Pregnancy, Helicobacter Abortions
4. The Importance of Liver Biopsies, Troublesome Toes

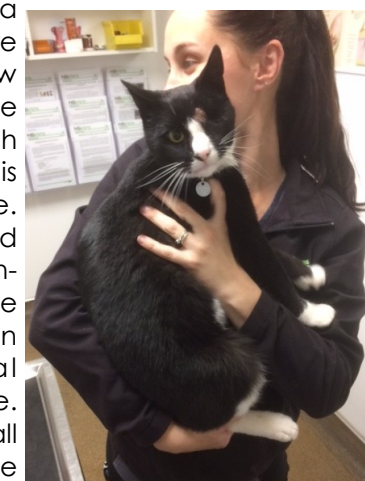
bit of time here while a student and was an obvious choice to replace Sherree. Mike is planning on attending the Bledisole Cup game in Dunedin in August. Not sure why he'll bother?? His favourites Joe Roff and Stirling Mortlock are both retired!!

**Meet Jon Snow**

This poor wee cat went missing for a few days and came home in somewhat of a state! It appeared that Mr Jon Snow may have had an argument with a car and come off second best, his presenting injuries were a prolapse of the globe, i.e. his eye was hanging out, he had a fracture of the lower jaw right at the front where the bone split in the middle, and he likely also had a fracture in the roof of the mouth that was stable but was making it difficult to breathe through his nose due to swelling. At the

time he came in he was also dehydrated. We treated him overnight with strong pain relief and iv fluids and by the morning he was much happier. X-rays of his skull and chest showed no damage other than what was evident at presentation.

We took Jon Snow to surgery that morning, removing the badly damaged eye and putting a loop of wire around his jaw just behind the fangs which stabilised his jaw fracture. While we had him under anaesthetic we also placed an oesophageal feeding tube. This is a small diameter tube that is placed



down the oesophagus into the stomach. The top end is brought out through a small hole in the neck just behind the jaw. Placing this tube allowed us to feed and medicate him directly into his stomach. This tube was left in place for a week or so until he was showing interest in food and the injuries and swelling in his mouth and face had resolved. He went home after 8 days with us at the clinic and has continued to recover well, having well and truly used up one of his nine lives. Mike Tapper BVSc

**Sheep Reminders**

- Vaccinate 2 tooth 2nd vaccine Salmonella Brandenburg
- Re-evaluate winter feed budget
- FEC ewe lambs
- Introduce winter feeding
- Condition score hoggets & ewes
- Vaccinate mixed aged ewes Salmonella Brandenburg





### Menacing Mud Fever

It is that frustrating time of year again where many horses (and their owners!) suffer from the woes of mud fever. There are a vast range of lotions and potions on the market for 'curing' mud fever which in itself tells you that often treatment success is poor or varied - what works for one may not work for another. And here is why.

We often refer to all skin lesions on the legs as mud fever, but there could be different causes. Most start with a predisposing factor, usually constant wetting or scratches/injury to the area which then damages the protective skin barrier allowing pathogens to enter. White skin seems to be particularly sensitive to this.

Pastern Dermatitis or Greasy Heel could involve *Dermatophilus* bacteria, *Staphylococcus* species (bacteria), or fungi (dermatophytosis). Mange can look similar but it involves the mite *Chorioptes equi*, it usually affects feathered feet and is often itchy. Note Dermatitis or 'rain scald' also involves *Dermatophilus congolensis* bacteria.



Some horses may suffer photosensitivity, sometimes due to underlying liver disease. Some cases may be due to contact allergies (to plants, bedding, shampoos, sprays etc), or have an immune mediated disease.



Treatment of mud fever involves softening the scabs to enable their removal safely and kindly. For bacterial conditions use a mild antibacterial wash such as chlorhexidine or 1% povidine iodine, soaking for 10 minutes daily for 7 days then twice a week until resolved.

Prevention is aimed at keeping the legs clean and dry. While you may laugh at this suggestion in Southland, it is essential for a satisfactory result. Clipping the hair (if tolerated) may help with removing scabs and keeping things dry.

Cream and oils and 'mud fever boots' must only be applied when the legs are clean and DRY or they can make things worse. Drying with a paper towel could achieve a better result than standard bath towels.

Some severe cases may require injectable antibiotics. Talk to us for advice on 'mud fever'.



### Horse Reminders

- Supplementary feed horses over winter
- Clip horses for hunting
- Lice treatment

### AAA Drench Acute Acidosis Antidote



When transition doesn't go right on fodder beet, results can be disastrous.

Acidosis is a common consequence of poor transition or break-outs during the transition period and often results in down cows and/or death. One of the key treatments is providing a buffer solution to aid in neutralising the acidosis. AAA drench has been specially formulated by NSVets to provide just this, ask at the clinic today and if you're having trouble on crops, be sure to talk to one of our vets.



Interest has been high in getting a sheep and beef discussion group going in Northern Southland. The last details are currently being finalised but I plan to meet with those that are interested in the next fortnight. Please keep an eye on your emails and if you are interested (but haven't contacted us yet) make sure you let us know.

Andrew Cochrane BVSc



Watch this space for our annual Winter Woollies Seminars coming to you in late July. This is a great opportunity to get off farm and learn the latest in sheep health and production. **Dates and venues to be confirmed soon.**

### Feeding Ewes in Pregnancy- Remember this chart?

Most people are probably now entering that 'free period' phase of the ewe feeding cycle. That is you are past 55 days since the ram went in. This is the time when, if feed is short and PROVIDED EWES ARE IN GOOD CONDITION ( $\geq 3.0$ ) you have some potential to apply a feed 'pinch'.

The aim is to achieve at least 1200 kgDM cover at lambing, not set stocking so we need to consider how much the ewes will eat in those 'set-stock' days and allow for that. Generally, as it doesn't grow much down here in June-July and even some Augusts, we need to have that cover sitting there now. If you don't have it, now is when we need to think of where the extra feed is coming from (baleage, nuts etc). A ewe underfed at the start of lambing will not milk well, will grow a poorer lamb, that will be on farm longer, and she herself will be in poorer condition.

Remember this allowable 'pinch' only applies to Mixed Age ewes that are in good/very good condition already. This period is available only up until 35 days pre lambing by which time feed should increase to almost twice maintenance. By 20 days into lambing requirements are three times maintenance.



#### Critical Feed Periods for the Ewe over pregnancy:

10 d Pre mate	Mating	10 d post mating	D 25	D55 (up to 80)	D56-114	35 d pre-lamb	Lambing	20 d post lamb	30 d post lamb	40 d post lamb
Critical feed period			Maintain, never under feed		Free period – feed pinch can happen here but only if ewes $\geq 3.0$ BCS	Critical feed period	Peak lactation D 30 (+/-10d)			
Flock in Lamb							1.9 x maintenance	3 x maintenance		
Growing Placenta						No weight loss				

### Helicobacter Abortions

For some this is still a foreign word, others now know it all too well. It has been suspected as a cause of abortions in ewes for several years now but as testing is becoming more advanced, its diagnosis is increasing.

It can resemble our other abortion causes; Like 'Toxo' it can present with one-live-one-rotten foetus, like 'Campy' the foetus' can have white spots on the liver, like *Salmonella* Brandenburg it occurs later in pregnancy, however unlike Brandenburg the ewes are otherwise unaffected by the bacteria, and appear quite healthy. It seems to target multiples where one lamb may be born dead one alive, with the live one going on to die within a few days. Like with Brandenburg, it seems to enjoy Southland and South Otago winters and has not been found north of Canterbury. When outbreaks have occurred (two confirmed in our area last year) it can affect large numbers of ewes. A case in Otago reported 300 ewes affected.



It does tend to stick to mobs each year, but can move to different age groups the following years. Ewes that have aborted are likely immune thereafter but seldom get the luxury to prove it.

The best diagnosis now comes from stomach contents of the aborted foetus so it is important that any samples bought in have not been scavenged. It is still uncertain how it arrives, maybe through the digestive tract of carrier animals (perhaps rams most likely). There seems to be a trigger such as wet, conditions/crop or mud but it seems also to survive on pastures.

Unfortunately there is no vaccine currently against this bug. Spreading ewes out doesn't seem to lessen the effect as it does with Campy or Salmonella. Mixing affected ewes with unmated hoggets may help to 'vaccinate' for future matings but this is unproven. Rochelle Smith BVSc MANZCVS

### Pet Reminders

- Check diet for winter
- Check bedding warmth for winter
- Arthritis month