### **LIVER BIOPSIES**

With most now having plenty of grass around and with early scan pregnancy results coming in, hopefully many of you will be enjoying moving into the business end of the season where decisions are beginning to be made for the following season. Culling of cows, herd testing and some regular weighing of young stock are all going to be helpful tools to set yourself up for success in the 24' - 25 season. Having animals set up for winter with adequate trace element levels is equally important to help with growth and immunity.

Copper is one trace element which is required in a variety of enzymes and co-factors across the body. From proper hair colour to bone formation, as well as immune, blood cell and nerve function, it is worthwhile knowing that it is up to scratch in your stock. There is too much of a good thing, with excess copper causing deaths in some herds. It is, however, difficult to determine just how much is going in and being absorbed in your animals.

Even if regular feed analyses is being done, ruminal absorption is variable (less than 10% in adult cattle). Moly concentrations (from fertiliser application or during winter) can cause deficiency even with dietary copper being adequate. Palm kernel is well known for having high copper levels, but these are also variable between batches and dependent on the amount being fed to cattle.

Testing is not straightforward either. Blood results show cows which are deficient - in their blood. Copper is found at multiple sites in the body, the largest store being in the liver. "Normal" levels in the blood may be fine on the day of sampling, but not further into winter and in spring where copper is unlikely to be able to be absorbed as quickly as it is being used.

To get a decent snapshot of your herds liver levels, research suggests 10 animals would be required for liver biopsies. Testing around or just before dry off is ideal, as it allows a decision to be made as close to cows going into the deficit risk period as possible. Testing can also be done on cull cows going to the works. These can give a similar indication, so long as they have had similar management - if being used to clean up old pasture and not being fed PKE like the main herd, they may show a lower level than the rest.

Lachlan Chittock BVSc

# Heifer Mastitis



**Contents** 

Comment Liver Biopsies

# **Cattle Reminders**

- Pregnancy test
- Wean, mark & drench beef calves
- Cows & yearlings—lepto vaccination
- Dry off light cows and culls

### SITUATION COMMENT

February is always a crazy time for the vets, full of preg scanning, ram rounds, FECRT, small animal surgeries, blood testing and constantly being pestered by office staff about hundreds of other things. This year has been no different and with no vets in clinic for me to delegate this job to, I have had to write this situation comment myself....I apologise in advance for the ramblings that follow (although I'm sure you are all well accustomed to trying to decipher this section of the VetTIMES after years of reading Staff/Situation comments by Rochelle, Morgan and the always cryptic Michael Baer).

So from the perspective of the office staff what is the current situation? Well it's very busy!

The weather is erratic, vaccine orders are coming in and going out at a rapid pace and we are already starting to book in teat sealing jobs—this year is flying by.

Kayla Burton has officially joined the team and has been put straight to work, she has been kept busy with small animals in clinic over the last couple of weeks but you will start seeing her on farm soon. Welcome Kayla its so nice to have you join the vet crew.

Well that's all I can come up with so here is a pretty picture to fill the gap and all the best for March.

# Julie Black



# **Horse Reminders**

- Worming treatment for foals
- Control bot eggs on horse legs



### **HEIFER MASTITIS**

The highest risk for mastitis in heifers is BEFORE calving. As well as the financial, emotional, and animal welfare costs of mastitis, they will go on to produce less milk for that and possible subsequent lactations. Internal teat sealants, administered 4-6 weeks pre calving by trained personnel, have proven the most effective protection.

Herds that have more than 15 cases of clinical mastitis within 2 weeks of calving per 100 heifer calvings require proactive management to reduce heifer mastitis. Subclinical infections (the ones that you **can't** see) reduced milk yield by 7% in their first lactation. Prevention is important.

Using an internal teat sealant has proved to be the most effective strategy for reducing environmental mastitis in heifer by providing a physical barier to the entry of bacteria. This can be inserted as early as April up until 2 weeks precalving.

We can apply teat sealant safely through our purpose-built trailer, all we need is a yard, and a few of your staff to push the heifers up to us.

What else can you do?

- Reducing the risk of udder oedema and milk leakage by
  - avoiding excessive feeding immediately prior to calving, excess sodium or potassium in the diet, and overfat heifers.
  - o Milking heifers within the first 12 hours of calving (pick up calves twice daily) Halving the interval between calving and first milking, from 20 hours to below 10 hours, led to a 45% reduction in clinical mastitis, less subclinical mastitis and less udder oedema
- Reducing bacteria at the teat end before calving;
  - o We cant pre-milk teat spray, but in the olden days (2015) perhaps not easily practical, regular iodine based teat spraying 3 times a week 3 weeks before calving was found to reduce Strep. uberis on the teat-ends at 24-48 hours before calving.
- Supporting the health of the animal to deal quickly with new infections.
  - Keep udders clean by managing pasture allocation following rain
  - Take steps to reduce the risk of dystocia or retained foetal membranes
  - Run separate heifer and cow mobs pre and postcalving to reduce bullying
  - Pre-calving milking for heifers with very tight udders (but you must take care to avoid a negative-energy balance in the pre-partum period)

# **Deer Reminders**

- Weaners—treat for parasites
- Put stags out
- Yersiniavax—second injection
- Certified velveters—return drugs and book

# OSTEOCHONDROSIS DISSECANS (OCD)

Osteochondrosis is a disease of the joints diagnosed in young horses (and dogs). That can be career ending. Early identification is the best remedy. This can be done by careful xray at the clinic.

The exact cause is unknown but is probably multifactorial, and may be related to excessive forces on weak or soft bones. Other contributing factors may include a high energy diet, calcium phosphorus imbalances, and copper deficiency. It is most commonly seen in 1-2 year olds and in fast growing athletic horses. It may affect one or several joints including the toe, fetlock, knee, shoulder, hock or stifle joints as well as occasionally the spine. It is not uncommon for the horse to have more than one joint affected. Depending on the joints affected, the horse may be sound at walk but have a bunny hop type of canter, with both hind legs moving together. There may be visible swelling in the affected joint.

Xrays are required for diagnosis and prognosis. Xrays may reveal bone cysts, fragmentation of the bone near the joint or even bone flap formation. These bone flaps may eventually float away from the bone (like a chip) but they may or may not cause further lameness.

Treatment in young horses may just involve rest and dietary change, in older horses arthroscopic surgery to debride the affected pieces of bone is likely required. If the lesion is located to the outer ridge of bone, the prognosis can be quite good (following surgery and prolonged rest), however if there is extensive damage to the joint cartilage the prognosis for athletic soundness may be poor.





# **Pet Reminders**

- Check for barley grass especially between toes, under arms and around ears.
- Flea prevention and treatment
- Senior wellness Month—save up to \$122.60

# **CALF WINTER TARGET**

In many years, nationwide, it is around March that R1s start underperforming. It is crucial that this is identified and rectified promptly to ensure they are set up for reproductive success. Heifers that fall more than 10% behind in their first winter often wont claw back to reach the target of 60% of mature weight by mating. This will flow on to affect in calf rates, calving spread, and lifetime production. Act now before it is too late!

Step one: Weigh young stock

**Step Two:** Identify where stock are placed relative to target **Step Three:** Identify the cause (for the good and the bad, so you can replicate or remedy)

- Check your feed budget (check quantity AND quality)
- Assess competition in the herd, consider splitting the group
- · Review parasite management plan
- Check trace elements
- · Signs or history of other disease

(We can help in all of these areas) **Step Four:** Make the changes required

The first Five clients to call and mention this message will receive a \$100 NSVets voucher!!

Call our Riversdale clinic (03) 202 5636 to claim.

#### TRAVEL CERTS – REMINDER

It is again approaching the busy time for culling cattle. Remember there are a few things that need to be in place before calling us to issue a cert.

- Book the works The certificate only comes with a 7 day expiry, after this the animal will need to be revisited
- Book the closest works It is a requirement of the certificate that the animal be sent to the closest operating works, which may not be your usual plant. For most of our clients this will be Alliance Mataura, but occasionally Prime Range Meats Invercargill or Silver Fern Finegand
- Have the animal close to the yard (or even better, in it) so we can properly view the animal, and its ear tag.
- 4. Tell the agent and the transport you are travelling an animal with a certificate, and the requirements that have been stipulated on it (e.g. first on last off, bottom deck etc)

We have to predict how the animal will appear after walking to the yard, standing off feed, transporting in steel pens, then standing on concrete yarding prior to slaughter, (as well as how they will climb the often steep ramps into the plant). This can be quite different to how they look at rest, with space, in the paddock.

### **RAM - OUT DATE**

The earlier you plan to mate (with the hope of getting early lamb prices) the more likely you are to have ewes in the first cycle at ram out time. Ewes in the first cycle tend to have a lower CR. There may also be a risk with the alteration on your feed demand/supply curve. However there may still be opportunities in this area, but with good planning and budgeting, with realistic expectations. The use of teasers\* can help bring ewes on to cycle so that more of them are coming on to their second (more fertile) heat when the ram goes out.

You can assess your perfect breeding time. At the peak of the breeding season 100 % of the ewes will cycle in a 17 day period (cycle length is 17 d) or 6.25% on heat per day. If 100% are to be mated in 2 or 2.5 cycles, that would mean on average 2.5-3% mated each day, so using a ram crayon, at least 30-40 % should be tupped in the first two weeks, if less than this then not enough ewes were cycling at the start of mating. Alternately, add 147 d to the date the ram was introduced (to find planned start of lambing) and count the number of ewes lambing in the first week. If 90% of the ewes were cycling, and 90% held to first service then about 25 % should lamb in the first week-10 days.

\*Teaser Rates - In general, introduce Teasers 17 days prior to the Ram, for 10 days only, at ratios of 1:300. For hoggets use higher teaser ratios of 1:75 ideally



# **Sheep Reminders**

- Monitor B12 levels
- FEC lambs
- FEC ewes
- 2nd dose Campy vaccine
- Review winter feed budget
- Exercise rams—check feet
- Flush ewes
- Re—vaccinate lambs clostridial vaccine
- Teasers out with ewes 17 days before ram
- Weigh ewe lambs and assess for mating

# **BIT OF A LAUGH**

I remember the first time I saw a universal remote control

I thought to myself....

"well this changes everything."

