

# DAIRY NEWS

DECEMBER 2022



As the days start to heat up and mating (hopefully) starts to fade off, it can only mean one thing: Colin hits the BBQ! From hot and humid milkings, blustery nor'wests and glorious singlet tan lines December is one of the best months of the year. We hope that everyone is getting a chance at this point in mating to have a breather and look forward to the festivities ahead.



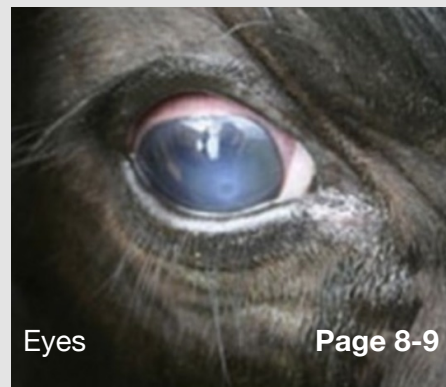
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We were lucky enough to have some great weather to host a nine hole friendly golf tournament at the Waimakariri Golf Club. Some great shots were played, some frustrations were had, sunscreen missed, moustaches shaven, balls were lost and lots of food and drink was shared in the sun.

Congratulations again to the Frampton team for narrowly beating Wychwood & Co and The Bradley Wilcock Show to the top of the table. We hope everyone enjoyed themselves and many thanks to Brian Te Awa and the Waimakariri Golf Club for having us for the day.

We know everyone will still be pushing on through the festive season, as always, someone from our team will be available at all times if you need help. From all of us at RVC we would like to thank all of you again for your support and wish you Merry Christmas and an uneventful and easy-going New Year!



By John Spearpoint

# Coughing Cattle

At this time of year and throughout summer, if you have animals on pasture coughing you should be suspicious of lungworm. Mobs of young calves can be severely affected due to reduced immunity and exposure to high larval loads on pasture, particularly if the same grazing area has been used for growing youngstock in the past.

Like intestinal worms, lungworm larvae are ingested from pasture, but then migrate from the intestines, travel through the bloodstream to the lungs where eggs are coughed up or swallowed and excreted into faeces. Lungworm larvae can survive for a long time on pasture and their spread is facilitated by attaching to fungal spores in mushrooms growing in cow pats. A perfect storm can occur following wet weather, long drenching intervals and if calves are being reared on the same paddocks over multiple years.

## How will I know if my cattle are affected with lungworm?

- Frequent coughing, especially after exercise
- Increased breathing rate when resting
- Discharge from nose or drooling
- Extended head and neck or gasping for air
- Reduced milk yield in adult cows
- Sudden death
- Youngstock may continue to eat but have poor coat and condition

Cross section of airways with lungworm >



Post-mortem examinations can be useful to diagnose infection.

## If I suspect lungworm infection, what should I do?

Thankfully, 'mectin-based' drenches are highly effective against lungworm and there are no current reports of resistance. Best results are achieved early in the course of disease before structural damage to the lungs occurs and to limit further larval contamination on pasture. The choice of product depends on duration of action and ease of administration.

Clinical signs may worsen after drenching as killed worms accumulate and block airflow in airways.

Also consider:

- Removal from affected pasture
- Anti-inflammatories are useful to reduce the reaction to larvae in severe cases
- Severely affected calves may need re-hydration

## YOUNGSTOCK

### Oral drenching options



**Ivermatrix** (*Ivermectin, Levamisole, Oxfendazole*) + B12 + selenium A good safe option for calves under 120kg.

**Dose rate:** 1mL/10kg, given orally



**Turbo INitial** (*Eprinomectin, Levamisole, Diclazuril*) + cobalt + selenium. Provides cover against intestinal parasites plus protects against coccidia.

A good safe option for weaned calves grazing on pasture and coming off coccidiostat-treated meal before they develop immunity to coccidia.

**Dose rate:** 1mL/10kg, given orally



**Eclipse E** (*Eprinomectin, Levamisole*), available with B12 + selenium. Levamisole targets *Cooperia* worms while Eprinomectin is particularly good at killing *Ostertagia*, so the two active ingredients will kill the two most important parasites in young calves. Provides persistent activity against lungworm.

**Dose rate:** 1mL/35kg, given under the skin

Regular drenching intervals for youngstock is important for lungworm control

## ADULT CATTLE

### Pour-on options

Most 'mectin-based' drenches (eg. Eclipse pour-on, Eprinex, Arrest C) are effective against adult and immature stages of lungworm but will not have persistent activity against subsequent pasture challenge.



### Injectable options

**Dectomax** (*Doramectin*) Provides persistent activity against infection and recommended for outbreak situations.

**Dose rate:** 1mL/50kg, given under the skin



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\*Promotion runs from 1st October to 16th December 2022. Only while stocks last.

By Jevan Eady

# You've been served

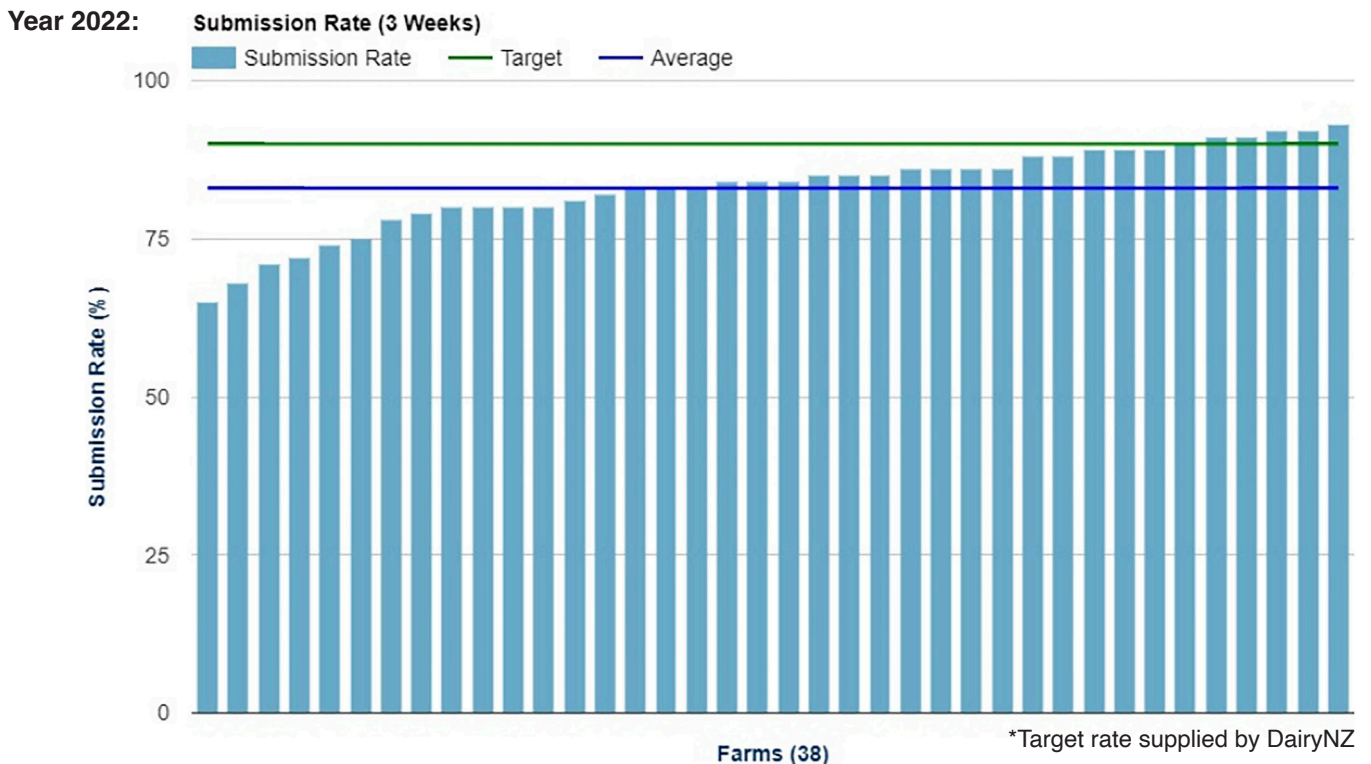
Mating is one of the most important times of the year and oftentimes the success of the following season hinges on these results. Between juggling multiple animal groups, detecting heats, making daily decisions around who to mate, and some big financial decisions around non-cycling cows, it's no wonder it's a stressful time of year. We have heard of a few of you who are short staffed and feeling extra pressure at this time of the year, so be sure to check in on your workers/colleagues/partners and reach out if you are struggling with the demands of this busy period.



With that said, it's also immensely rewarding to see all that hard work pay off with a good 6-week in calf rate. There are two things that determine your 6-week in calf rate – submission rate and conception rate. Conception rate we won't know until we start pregnancy testing in the days and weeks to come, however, we can look at the 3-week submission rates as an indicator of how things are looking.

## So, how do you stack up against other farms in the area?

Below is a graph of the submission rates from some of our farms. The average is 83% which is up 2% on last year.



Industry targets are that 90% of eligible cows will be put up for mating in the first three weeks of mating, but only NZ's top farmers will be hitting these targets – congratulations if that's you! 3-week submission rates of 80-90% are more common, but if your submission rates are below 80%, then it's worth having a chat with us about how things are going and if there's anything different you could be doing.

By Jevan Eady

# Early Aged Pregnancy Testing

You will all be familiar with how we pregnancy scan: The vet comes out, dons their best ghostbusters outfit, and stands on the platform confirming if cows are in calf or not. But what you may not know is what we see when we do it. Below are some snapshots of some foetuses at 40, 65, and 100 days old.



We commonly age pregnancies based off the length of the whole foetus, or by the diameter of the head.

- At 40 days the whole foetus is just 2cm in length – Trying to age younger than this increases the chances of the foetus being missed, or a cow with just fluid in her uterus being mistaken as pregnant
- At 100 days the head alone is 4cm in diameter - This takes over most of our field of view when scanning any older than this and it is difficult to capture the whole head in the image to age it effectively.

Ageing pregnancies therefore is only reliable between days 40-100 (6-14 weeks) of pregnancy. I.e. to do it we must wait at least 6 weeks after a cow has been mated but not

more than 14 weeks.

If mating was only 8 weeks long then we could age all pregnancies in one hit 6 weeks after the end of mating, but alas in order to get enough cows in calf we generally have to mate for much longer. A typical 11 week mating means that if we want to age all pregnancies we need to do 2 scans.

The first scan should be 12-14 weeks after the PSM. This allows us to effectively age anything that conceived in the first 6-9 weeks of mating (this should be about 70-85% of cows). A second scan of the recheck animals (Animals that were not identified as pregnant at the first scan - approximately 20% of the herd) at least 6 weeks after the end of mating will allow us to age anything that conceived in the second half of mating.

## So why bother doing aged pregnancy scans?

Accurate calving dates allow you to:

- Make strategic dry off decisions
- Make earlier culling decisions
- Manage body condition and late lactation feeding
- Better manage the dry period including movements to and from the run off and formation of the springer mob
- Produce a detailed reproductive analysis including:
  - o Accurate 6-week in calf rate & conception rate
  - o Success of non-cycler treatments/mating interventions
  - o Performance after the 6 week mark i.e bull performance

This is lot of extra information for the cost of rescanning a relatively small proportion of cows. Information you can use to make a number of important management decisions and have more control over the entire farm season. If you don't want these benefits and just want to know if your cows are pregnant or not, we can do a single scan 6 weeks after the end of mating.

Call us nice and early to book in your pregnancy scanning. It's a busy time of year for us and we only have limited scanning units. The earlier you book the better chance we will be able to do it on your preferred day.



First of all, we would like to thank everybody who nominated or entered this year's awards. We have had a noticeable increase in popularity from last year, which is great!

Calf rearing is an extremely important part of dairy farming and that until recently, has not been fully appreciated.

The research is clearly demonstrating that better calves = better dairy cows = more milk in the vat!

Not that productivity is the sole reason calf rearers do the wonders they do. They do it to achieve healthy, vibrant calves, by putting in an enormous amount of work and effort.

This year with the FTP testing problems the judging was solely based on expert opinion from our tech and vet teams during routine calf farm visits.

It was a tough task to separate out the finalists! All of them had impeccable hygiene, fantastic looking calves, and next to no issues with disease. Massive congratulations to you all, on your fantastic achievements. Needless to say, making the decision for this year's winners, really meant we had to nitpick through all the details.

Our winner for this year was **Carine Joubert from Landcorp Waimak.**

The runner ups, in no particular order:

Kristy Schouten, Eyrewell Dairy

Jess from Claxby farms Dukefield

Amy Schouten, Schouten Dairies

Katie, Silvacrest Farm



Here are just some of the lovely nominations we received from the farm owners and managers. This is what we feel it's all about, the mutual respect for the hard work which goes into rearing these awesome animals.



“We have had very minimal sick calves, no diseases, and low deaths. Before tagging she dips every tag in iodine and I don't think we have had one ear infection yet!”

“Our calf rearer left school last year, has come in totally green, yet has out done herself in rearing our calves. The owners said that this is the best the calves have looked and are very impressed. She is so hands on and is so loving to our replacements, that they nuzzle her even after feeding.”

“Our calf rearer has shown great knowledge, skills and organisation. She's has done background research on rearing systems and brought forward the idea of using probiotics again this season which is showing though in some very nice-looking calves. Her blood test for colostrum intake came back in the 90%.”

“The reasons our calf rearer had been nominated:

1. Using her initiative she went to a RVC calf rearing day
2. She came to me to discuss ideas for doing a better job
3. Organised for calf bloods to be taken for passive antibody transfer
4. Calf health has been well monitored, with any issues dealt with in a timely manner
5. Has the calf rearing team on the ball and they all understand the protocols set.
6. And is not afraid to ask questions if she is unsure

**Oh, by the way, the calves are pretty bloody good, and I enjoy being able to genuinely tell her so.”**

“Great attention to detail & careful management of gold colostrum feeding. Uses initiative to feed all mobs well & efficiently. Great teamwork, communication & planning. We are not letting her return to Scotland.”

“She is always very well organised and is solely responsible for feeding, organising disbudding as well as vaccinations and weighing of calves until they reach 100kg. And despite all the bruising and bumps, every calf that is up for a cuddle gets it and even some of the not so keen ones.”

“These guys do an outstanding job rearing 300+ calf by themselves. The calves are always in great order, do extremely well both in and out of the shed, and wean easily. Could not do this without them. AWESOME!!”

**“Her record keeping skills have been very impressive with each calf recorded when it was born, and a weekly planner kept of what mobs are where and how much milk they get.”**

“Despite doing fairly big numbers, every calf gets the individual treatment every day whether it's a replacement, beef or bobby. All calves are well fed with warm milk every day with no exceptions.

**You only get calves looking healthy and doing this well if the calf rearers are well organised and every detail is attended to.**

By John Spearpoint

# Eyes - Let's take a closer look!

There are several common conditions affecting eyes that cause pain and distress and therefore pose serious welfare issues. But many of these can be easily treated if picked up early.

## PINK EYE

Pink eye (Infectious Bovine Keratoconjunctivitis) usually occurs during summer and autumn and can vary from mild irritation to ulceration of the eye which, if left untreated, can lead to permanent blindness. It starts with damage to the cornea, the outside surface of the eye, from stalky grass, thistles, or wind and dust. The damage allows a highly contagious bacteria, *Moraxella bovis*, to attach to the surface of the eye and produce toxins which erode the cornea causing ulceration, pain and severe inflammation. Disease is easily spread by flies from one animal to another.

The first clinical signs of pink eye irritation appear as tearing ('a crying cow'), staining below the eye or squinting with the eye held partially closed as the animal becomes more sensitive to light and pain. This quickly progresses to a cloudy spot in the centre of the eye which can expand to form a deep ulcer or divot/hole on the surface. Left untreated, pressure can build within the eye leading to rupture.

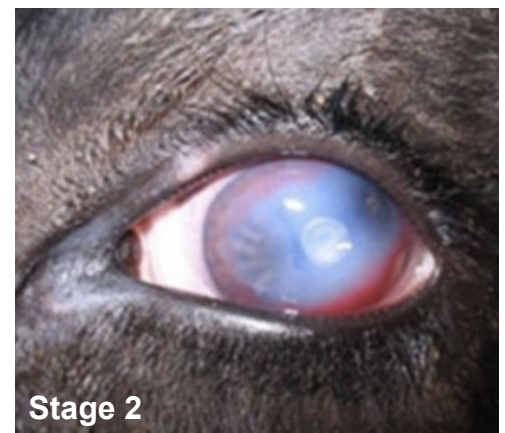
We commonly see pink eye mostly affecting youngstock but it can also affect any age group. Separating affecting animals can minimise further transmission and prompt treatment is important for a good recovery. Some animals may appear temporarily blind, so care must be taken when approaching and moving animals.

Treat pink eye with an antibacterial eye cream (Orbenin Eye Ointment). Half a tube per eye, repeated in 48 hours. And, as you can appreciate, anything to do with eyes is painful, so add pain relief (Ketomax or Meloxicam) to the treatment plan.

Depending on how badly the eye is affected, it may take several days, if not weeks, for the cloudiness to reduce. In advanced cases, permanent scarring/cloudiness may remain.



Stage 1



Stage 2



Stage 3

Photos from MSU Extension



## CANCER EYE

Cancer eye (Ocular Squamous Cell Carcinoma) as the name suggests, is a cancerous growth of the eye or surrounding tissues. The main risk factors are older animals, lack of pigmentation (white-faced animals) and sunlight causing UV damage.

Cancers usually start on the third eyelid as a wart-like growth, then spread to the surface of the eye and surrounding tissue. If detected early, and confined to the third eyelid (Figure 1), removal of the third eyelid can reduce the chances of it spreading further. This is a quick and cheap procedure if done early.



Figure 1: wart-like growth on third eyelid.  
Treatment: Third eyelid removal necessary



Figure 2: cancerous growth extending from third eyelid to surface of eye.  
Treatment: Eye removal necessary.

Once the cancer spreads to the outside surface of the eye (Figure 2), surgical removal of the entire eye and surrounding tissue is needed. These are malignant cancers so your vet will check to see if the cancer hasn't spread into the head and lymph nodes. Cows recover quickly after eye removal and adapt well to having only one eye.

These cases can progress quite quickly, become infected and as a result have a bad smell or bleed easily. So, prompt removal of the cancerous cells can improve the chances of a successful surgery. If there is evidence of spread, the animal should be humanely euthanised as they are not fit for sale and will be condemned at the works.

**If you decide to cull the cow, be sure to check she is fit for transport.**

Transport regulations prevent transporting animals if;

- cancer is larger than 2cm in size (\$1 coin)
- cancer is no longer confined to the eye or eyelid
- any bleeding or discharge
- blindness in both eyes
- pink eye with pus

Spotting eye problems can be difficult as the focus is usually on the rear-end of the cow during milking time. Regularly having someone paying attention to the side of the cow you don't normally see can help to identify these cases earlier.

By Heather van Hout

# Thiamine (Vitamin B1) Deficiency

## What is Thiamine?

- Thiamine is used in the pathway for carbohydrate metabolism in the ruminant digestive tract. It is critical in supplying energy to various organs in the body, specifically the brain.
- Thiamine is either ingested directly in the feed or produced by 'good' bacteria in the gut.

## How do animals become deficient?

- Deficiency usually occurs after a recent change in diet.
  - o The good and not-so-good gut bacteria become imbalanced; resulting in less of the thiamine producing bacteria and more bacteria that produce an enzyme which breaks down thiamine.
  - o Lower levels of thiamine can lead to inhibited carbohydrate metabolism which causes brain swelling, termed Polioencephalomalacia (PEM).
- Secondary thiamine deficiency occurs through any process which reduces feed intake and normal digestion (e.g. sickness).
- Grazing on soils with high sulphur levels can be a predisposing factor as it inhibits thiamine production. Generally, this is only a concern if you have had repeated cases over multiple seasons.

## How can it be treated?

- Acute cases can be diagnosed and treated by your vet with an intravenous vitamin B1 injection. Follow up injections of vitamin B1 will be needed over the next few days.
- If an entire mob is affected, an oral vitamin B drench can be used.



A calf 'star gazing' due to thiamine deficiency.

## What are the signs?

Brain swelling causes neurological signs and often includes:

- o Drunk looking animals that stumble around
- o 'Star gazing'
- o Depressed
- o Reduced appetite and fluid intake

Presenting signs can quickly progress to blindness, as the brain swelling affects puts pressure on the optic nerve. Eventually, animals may go down and be unable to stand back up.

## How to prevent it?

Avoiding sudden changes in diet key for preventing thiamine deficiency. If a risk period is approaching, such as a change in season, use a preventative oral B vitamin drench to help reduce the risk of an outbreak occurring.

**Please call and have a chat with your large animal vet if you have any questions or concerns regarding your ruminants and B12.**