

What's Up Doc?

By Jackie Davies



Happy New Year! We hope your festive period was a joyful one!

In December a lot of grass turned to seed on farms, but a few rain showers here and there have kept some grass growing through the summer. This, along with the large quantities of grass silage most farmers were able to make in spring, should mean that even if it goes dry now there will be plenty of resources to feed cows to keep them in great condition for the start of next season.

In general, cows appear to be happy and healthy as we progress through this season. However, there have been a few lameness cases popping up – remember to treat lame cows as soon as you notice them for the best results.

We've been busy pregnancy testing herds and, as of mid-January, scanning results so far indicate empty rates may be a little higher than last year.

Facial eczema season is here. The only way we can know how extensive the problem is this year is by counting real spore samples. Rain is on the forecast, so spore numbers are likely to be rising. If you do not wish to rely on data from other farms to inform your decisions, you can bring in samples from your own farm to be tested.

To collect good samples, select four paddocks with different characteristics (e.g. hill, flat, north-facing, and hedge). Walk diagonally across the paddocks and cut a small amount of grass at grazing height every few steps, getting a representative sample of the paddock. Put the grass in a bag, label it with the paddock number and your farm name, and bring it in to the clinic to be tested. Having 'real' data can improve decision making about zinc treatment for your stock.

If you need a hand with zinc bulleting calves, our team is happy to help.

What's happening on-farm?

- ✔ Pregnancy scanning
- ✔ Facial eczema
- ✔ Calf weighing (should be 30% of adult body weight at 6 months old)
- ✔ Dry off planning

On a final note, we welcome new vet George to the clinic – fresh from Massey University! You will no doubt see his enthusiastic face on-farm over the end of this season and into the next.

Tackling facial eczema

By Gus Condie

You've probably all seen cows with facial eczema (FE) damage; poor animals with peeling skin desperately seeking shade.

The fungal spore that causes facial eczema requires dead vegetable matter, warmth and moisture to thrive. **Once eaten, the spores produce mycotoxins that cause the cow to process Chlorophyll (the green pigment in plants) differently, resulting in liver damage and photosensitivity** – think English tourist on a Spanish beach levels of sunburn!

The best way to prevent facial eczema is with zinc. Zinc binds with the mycotoxins to form a stable compound which no longer affects the animal.

Aim to have sufficient zinc in the bloodstream to provide protection against FE throughout the high-risk



period. Typically, this is late January to late March. We can get zinc into stock via a bolus, water or feed.

Bolus – e.g. Face-Guard

The application of boluses are labour intensive, but they release a known amount of zinc for a sustained period, so they offer cows the best protection

against FE. A bolus provides 4-6 weeks protection and can be repeated twice if necessary.

Water – e.g. Solutrace FE

Water additives contain a good percentage of zinc, in addition to other minerals such as boron, cobalt, copper, iodine and selenium. ▼

This means they provide FE protection while also giving trace element supplementation. Soluble minerals can be added into the water through a Dosatron or trough dispensers. Whilst convenient, they can struggle to reach protective levels against FE if the cows are not drinking enough.

Feed

If supplementary feeds are being given through the shed or feed pad, powdered zinc can be added to the ration. This is often more reliable than water additives as feed intake is more consistent. Feed and water options can be used together to provide reliable levels of zinc to protect against FE during the risk period.

The challenge with zinc is that it competes with copper for uptake in the gut. This means copper can't be

supplemented effectively at the same time (unless it is chelated copper) and cows may become low in copper over the facial eczema season.

It is for this reason that we advise avoiding starting zinc supplementation too early and don't recommend repeating a bolus unless required.

Keeping an eye on FE spore counts allows us to anticipate when we should recommend starting zinc prevention. Ideally, farms would begin as spore levels are rising in order to get up to protective levels in time to meet the threat.

Have a chat to us about getting some grass samples tested to see what spore levels are like on your farm and get your zinc treatments, such as boluses or water additives, from our in-clinic farm supplies shop.

Collecting samples for FE spore count testing

- 1 Select four paddocks with different characteristics (e.g. hill, flat, north-facing, and hedge). Sampling from paddocks ahead of where your herd is on the grazing rotation is the best way to assess spore risks.
- 2 Walk diagonally across the paddocks and cut a small amount of grass at grazing height every few steps (at least four spots in each paddock). It's best to cut the grass at a height of 1cm from the ground using scissors or a knife, don't rip the grass up by hand! Avoid shaded or overly irrigated areas – try to get a good representative sample of the paddock.
- 3 Put the grass in a bag and label it with the paddock number and farm name. The sample needs to weigh at least 60g (e.g. one bread bag full).
- 4 Deliver to our clinic for testing within 24 hours. If you have to hold samples overnight, keep them refrigerated.



Managing a late season increase in your BMSCC

By Jackie Davies

Here are some tips when dealing with a late season increase in your bulk milk somatic cell count (BMSCC):

1. **Strip the herd (manually milking the teats) to check for clinical cases of mastitis.** Regular stripping (e.g. one quarter each milking) can help you quickly detect new cases.
2. **Use herd test information to identify subclinical mastitis/high SCC cases.** When considering how to manage these cows look at:
 - Age,
 - Pregnancy status,
 - Udder/teat conformation,
 - How many quarters are affected,
 - Milk production,
 - How long she has been infected, including: Was she high at previous herd tests? Has she been treated for mastitis and, if so, how many times? Cows that have been more recently infected are likely to have better treatment outcomes than cows that are

chronically infected. Antibiotics and drying off early can work, but sometimes it may be time to cull.

3. **Do milk culture tests to identify the bacteria causing the mastitis infections.** Results will help identify if it is a contagious or environmental bug, making it easier to put prevention measures in place, and will also enable treatment to be targeted correctly.
4. **Ensure your teat spray is mixed to the correct concentration and apply it after every milking.**

Treating or removing mastitis-affected/high SCC cows is a short-term fix for your BMSCC. Preventing new infections should be your long-term focus.

Consider having us complete a full mastitis assessment for you, including a milking machine check and/or milking time visit. Assessing your milking routine, cow teat health, and machine function is invaluable for identifying risk factors for the spread of infection. Get in touch to find out more or book in.



New to the herd, George Varney!

Having started in January, George is the newest member of our dairy vet team. He's a 2024 Massey University Bachelor of Veterinary Science graduate who will be working as a mixed animal veterinarian. He has a passion for both large and small animal medicine, making him well suited for this role, and having previously worked as a relief milker he will be right at home in the dairy shed! In his spare time George enjoys running and tramping, so if you see him out and about be sure to say hello.



Getting up to calving weight

By Jackie Davies

It is more efficient to put weight on cows when they are milking than when they are dry, and it's easier to put it on with higher quality feed. So now is a great time to set them up to be in good condition for calving.

When on leafy summer pasture with 10 megajoules metabolisable energy per kilogram of dry matter (MJME/kgDM), on top of daily requirements for digesting food, walking, producing milk and maintaining a pregnancy:

- A lactating cow would need to eat 4kgDM to gain 1kg.
- A dry cow would require 5.4kgDM (of the same grass) to gain 1kg.

If palm kernel with 12 MJME/kgDM was used:

- A lactating cow would need to eat 3.6kgDM to gain 1kg.
- A dry cow would require 4.3kgDM to gain 1kg.

A 500kg cow needs 33kg liveweight gain for 1 body condition score (BCS) gain.

So, for a 500kg cow to gain 1 BCS using the leafy summer pasture at 10 MJME/kgDM (on top of the feed needed for her lactation and daily maintenance):

- A lactating cow would need to eat a total of 128kgDM.
- A dry cow would require a total of 178kgDM.

Of course, there also needs to be enough protein in the diet for efficient

growth – but late summer is the main time in a dairy cow's yearly diet that this may not happen. If the grass has gone dry and stalky (e.g. 140g crude protein (CP) per kgDM) and it is being supplemented with only maize silage (80g CP/kgDM), the protein levels can be low enough in the diet that it will limit efficient digestion. Which in turn can limit both weight gain and milk production.

Autumn and spring grass is much higher in protein (300g CP/kg DM and 250g CP/kgDM respectively) and feeding a low protein supplement like maize silage is very unlikely to cause a protein deficiency in the diet at these times. Choice of feed is very important in summer, particularly if aiming to put weight on cows.

Why do my cows need to have a certain body condition for calving?

Cows that calve at BCS 5-5.5 will have improved outcomes after calving, including better repro rates.

Cows with BCS lower than 5 at calving will produce less milk and take longer to start cycling and get pregnant again.

Body condition scores higher than 5.5 can reduce the appetite of cows, resulting in a greater drop in condition after calving. These fatter cows can have more problems with ketosis and milk fever in spring and can also take longer to get back in calf.

Why do cows lose weight after calving?

Going from pregnant and not milking (dry) to calved and milking doubles a cow's energy requirements within a very short period of time. **Cows take longer to adjust their feed intakes to match these new energy requirements than milk production allows, so weight can easily be lost.**

While there are theories as to why a cow does not voluntarily eat enough to prevent her losing weight in the first weeks of lactation, it is not completely known why. Usually, after about seven weeks post-calving, a dairy cow being offered enough high quality food will stop losing weight and come back into a positive energy balance.

Because of this, most cows tend to lose 1 BCS after calving. If problems arise due to insufficient or poor diet, or other illnesses after calving, more than 1 BCS may be lost, and it may take longer to reach the point where the cow has a positive energy balance.

This impacts the milk production and fertility of the cow, even if she started at a good BCS of 5. Hence everyone knows how vital feeding your herd right over the milking period is.

How does pregnancy affect cows putting on weight?

The energy required to grow a fetus is relatively low in early pregnancy compared to a cow's lactating or daily maintenance requirements, but it does increase in late pregnancy due to the rapid growth of the calf.

However, the cow does not increase her feed intake relative to this increase in requirement over late autumn and winter. This could be because of how much room the calf is taking up in the abdomen, shrinking the available space in the rumen, but it may also be related to discomfort and hormonal changes.

Gaining weight in late pregnancy also tends to increase the weight the calf is born at, causing more assisted calvings.

Weight gain is often more achievable and appropriate in summer.

Are my cows a good weight?

Body condition scoring is used to see whether cows are in the right condition.

Key body condition scoring times throughout the season are:

- Just before planned start of calving,
- Two weeks before planned start of mating,
- After the end of mating, but before pasture quality drops in summer,
- Late lactation.

If you would like help to score your herd to help identify what actions you need to take now ahead of calving next season, please get in touch.

Our clinic

62 Moorhouse Street,
Morrinsville
3300

Phone : 07 889 6738

Email: office@vetcm.co.nz

www.vetclinicmorrinsville.co.nz

