# COASTAL VETERINARY SERVICES LTD.

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# Eczema on your farm

Facial Eczema is the disease caused by spores of a fungus that lives on grass which multiplies in warm, humid conditions.

The damage to the liver affects its ability to process toxins, produce glucose (energy), albumin (protein), blood clotting factors and antibodies (which provide immunity). These are seen as peeling and red skin (light reactive toxins), decreased milk yield, decreased body condition score, abortions, and deaths.

Just approximately 30% of cows processed at Taranaki meat works have no evidence of eczema damage.

#### Minimum approach – choose trough or feed treatment for your cows and dose between dates

- Trough treatment: begin half rates start of January, to full rates by end of January, continue until the end of April ensure cows are drinking enough (may need to use a sweetener) and are weighed so dosed accurately
- Feed treatment: begin last week of January at full rates, continue until the end of April ensure all cows are eating the feed
- Bolus treatment: usually for calves, heifers and bulls put in first week of February, redose 6 weeks later (blood tests are not necessary when using boluses as they are so reliable)
  - → CHECKPOINT: weigh cows to ensure you are treating the correct weight for your herd
  - → CHECKPOINT: zinc (and GGT) blood test 10 cows to ensure their zinc levels are in the 'protected' range

#### Detailed approach – choose a treatment plan for your cows and dosing depends on spore counts on your farm

What's happening regionally?

When counts >20,000, count 4 of your own paddocks weekly What's happening on your farm?

When reach 30,000, dose at full rates to your own cow weights How effective is your treatment plan?

Blood test 10 random cows (3-6 weeks after beginning treatment)

When can I stop treating?

When the weather cools, AND counts are trending down AND are under 10,000 for 3 weeks

- Bolus is the most reliable protection, followed by in-feed and then in-trough treatment
- Pasture spraying: use before counts reach 20,000 to prevents increase, grass must be green and growing, and all areas including under hedges must get sprayed, very effective in years that reach high counts (difficult to predict and can use as an annual preventative)
- Know which are your safer paddocks (for example, is north-facing or south-facing better on your farm)
- Have other safer feeds available such as pure swards of chicory, plantain, tall fescue, or lotus
  - → CHECKPOINT: pasture count 4 set paddocks weekly throughout the risk period
  - → CHECKPOINT: weigh cows to ensure you are treating the correct weight for your herd
  - → CHECKPOINT: zinc (and GGT) blood test 10 cows to ensure their zinc levels are in the 'protected' range



# 1. It's not in my area/above the top road/in Kaponga

Microclimates exist in all these locations that allowed the spores to multiply to dangerous levels

#### 2. I only have a couple of cases every few years

One peeling cow indicates ten to twenty liver-damaged cows in your herd, sometimes even more ('the iceberg effect'), and while the peeling is a welfare issue, your major production losses will be liver related

#### 3. I don't have any peeling cows so I don't have eczema

Until you have blood tested you cannot be certain you are unaffected – some herds are more likely to peel

### 4. I can rely on my neighbours spore counts

Spore count farm to farm variation can be as great as 500,000 (due to microclimates)

### 5. A good rain will wash the spores away

We tested this in 2016 after 50mm rain and the count dropped from 230,000 to 180,000 (still toxic at one dose)

#### 6. No mushrooms means no eczema

The mushrooms turned up much later in 2016, and while they are both fungi they require slightly different climates to multiply and the season favoured the toxic spores rather than the mushrooms – farmers who waited until the mushrooms emerged to treat were caught out

# 7. I've treated for 100 days but I can't go longer as it's toxic

The toxic effects of the spores are far more significant than the side effects of zinc, but you should watch out for...

- Trough treatment: affected by taste, production level of cow, availability of other water sources, and doesn't allow for weight variation of cows
- Feed treatment: less affected by taste, affected by what your feed company will mix (vet permission to dose >450kg), what they will eat, and doesn't allow for weight variation of cows
- For all treatment approaches: weigh cows dose correctly, and begin before require full dose