

## South East Local Land Services June 2021

#### SOUTH EAST MONTHLY DISEASE SURVEILLANCE RESULTS

#### Alex Stephens District Veterinarian Yass.

Your local District Vet can help you to investigate, diagnose and manage herd health or mortality issues in your herd or flock. They provide impartial advice and can assist you with disease management and your biosecurity plan. Each month we provide this report of diseases and issues detected and managed in the last month by producers, their veterinarians and animal health advisors.

We are currently **a vet down** on the Monaro and advertising to fill this role ASAP as our Monaro vet Petrea Wait has taken a secondment to the Department of Primary Industries for 6 months. Petrea is working in the area of animal welfare and assisting with the development of training packages. Although she is being missed by the producers of the Monaro and the rest of the South East team she has a lot of expertise to give and is performing a very important role. If you have any enquiries or need for assistance, please contact the Cooma office and they will put you in contact with one of the other vets from our team.

**Footrot** has continued to be a concern for producers after a warm wet autumn. District vets have visited large numbers of properties in the last months to look at sheep feet. This has been in response to owner concerns about lameness, as well as trace forwards, trace backs and neighbour checks from infected properties. Virulent footrot is a notifiable disease meaning that you have a legal biosecurity obligation to report any concerns over lame sheep. There are currently 22 properties diagnosed with virulent footrot in the southeast. These properties have been given a biosecurity direction to contain and eradicate the disease. As well as cases of virulent footrot the vets have also found many cases of benign footrot. Both forms of the disease are caused by the bacteria *dichelorbacter nodosus* and respond to 10-20% Zinc sulphate footbathing and drying out of the feet. To eradicate the disease from the property, a tip and cull program or destocking and restocking is required. We have good contractors in the South East who can assist you with feet management and footrot eradication, contact your district vet for more information and advice. Refer to the DPI Primefact Footrot in sheep and goats and this Foot Bathing Factsheet.

Lice numbers will build over the winter. Long grass and thistles can pull at the fleece resembling lice derangement from rubbing and chewing, however, don't fall into the trap of missing early signs of lice by making assumptions and not checking. Catch sheep and perform checks of 10 fleece partings down each side of the body in the bright sunshine. Particularly look in areas where they are chewing. The lice are small so you will need your glasses! Look for movement as well as the larger more obvious females. Lice numbers can be kept under control with long wool products, but eradication can only be achieved by shearing and treating off shears. Your district vet will have names of sheep dipping contractors if you require them and can assist you with advice.

**Pig biosecurity plans.** If you have a small number of pigs, you may be contacted by your local district vet and asked if you would like to complete a biosecurity plan for your piggery. The idea of this planning is to both protect your pig individually from disease but also on a greater scale to help keep all domestic pigs in Australia, and the Australian pork industry protected against the imminent threat of African Swine Fever.

In backyard poultry, our Braidwood DV has diagnosed a case of **Mareks disease** in young pullets where some older chickens were brought into the flock and spread the disease as silent carriers. Mareks Disease is a



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common viral disease of poultry that causes internal tumours and has a fatality rate of 60%. The disease mostly affects chickens less than 18 months of age. Commercially bred chickens are vaccinated against Mareks disease either in the egg or at day 1 of age. Non-commercial breeders have less easy access to vaccine. It's important to understand the vaccination status of the chickens you have and of any chickens you plan to add to the flock. You can learn more about Mareks Disease in this video <u>Mysterious Marek's - YouTube</u>

#### COOLER WEATHER STILL FAVOURABLE FOR WORMS

## Lou Baskind District Vet Palerang (Braidwood), Alex Stephens (Yass) & Amy Underwood - Final year CSU Veterinary Science

During May sunny Braidwood had received 119mm of rain, with the bulk of this falling across four days at the start of the month. Mean daily temperatures ranged between 3°C and 16°C and are trending downwards as we head into winter. Rainfall for May was well above Braidwood's May average of 40mm. The soil profile at the Braidwood is fully saturated, creating favourable conditions for pasture growth. Most pastures are green and growing actively, although a couple of recent hard frosts have browned things off a little and chilled soil temperatures.

Daily maximum temperatures were over 15°C, thus worms remained active. Worm egg counts over the last month have varied property to property but numbers on many properties have been high and a mix of barber's pole, black scour and brown stomach worms. Monitoring to assess the need for drenching and monitoring the effectiveness of drenches given (Faecal Egg Count 10-14 days after drenching) has been highly worthwhile. Importantly many properties are finding that as well as mectin products being ineffective against barber's pole, the abamectin closantel combinations are no longer working as an effective drench, being only 50-80% effective. Heavy reliance on long-acting mectin products as the winter pre-lambing drench builds mectin resistance, particularly where barbers pole worm is present on the property. Instead, drench only if required with an effective drench and move to previously prepared clean pastures.

Daily maximum temperatures will now start dropping below 15°C, so hatching of barber's pole worm and black scour worm eggs in the dung will slow right down, but hatched larvae are still available for pick up from contaminated pastures. Brown stomach worms will continue to hatch and develop into larvae capable of infecting stock unless maximum daily temperatures drop to below 8°C for several consecutive days. This June is forecast to be warmer than average — our typical June average maximum is 12°C. That means that worms, in particular brown stomach worm, could continue to cause problems through the next few months. The signs of brown stomach worm include scouring, weight loss or poor weight gain, progressing to collapse and death.

Conducting faecal egg counts (FEC)(WormTests) to gauge if stock, particularly young stock, require drenching before heading into the tougher winter months would be sensible. WormTest kits are available from Local Land Services offices.

#### CHILL INDEX HELPS MANAGE FOR IMPENDING BAD WEATHER Lou Baskind District Veterinarian Palerang (Braidwood)

As we head into the colder months in the southern tablelands it's time to prepare for cold, windy and rainy weather events and the impact they could have on vulnerable livestock.

Livestock can acclimatise to cold weather, so low temperatures are not a big problem if the air is dry and still. But if cold temperatures are accompanied by wind or rain, animals are much less able to cope. As well as weather factors, the impact is dependent on animal age, fleece/hair cover and fatness, which is why new-born, freshly shorn, or thin/frail stock are most at risk.

While we can't control the weather, we can monitor for predicted severe weather events and take action to reduce the impacts.

The Bureau of Metrology (BOM) issues sheep graziers alerts (http://www.bom.gov.au/nsw/warnings/), and the farming forecaster website (https://farmingforecaster.com.au/) shows these alerts along with a 'wind chill index' value. The wind chill index is a combined measure of predicted rain, wind and temperature. Alerts are issued when the index reaches the critical level of 1100, with higher values indicating that a more severe weather event is predicted.

If a grazier alert is issued, act quickly. Move vulnerable animals to well-sheltered paddocks with dense layered shelter belts. Choose paddocks with slopes that protect against the prevailing wind. Other topographic features like rocky outcrops and large native tussocks can also provide shelter. Once livestock have become cold and wet, they may be very reluctant to move, so relocation should be done before the weather event starts.

Take note also of the expected duration of the event – cold, wet and windy weather that persists for several days is likely to be more harmful. In bad weather animals will be reluctant to leave shelter to graze, but they need the energy from food to help them keep warm. For prolonged events provide them with supplementary feed (e.g. good quality hay).

On small farms, moving farmyard animals into a shed before and during inclement weather is a good option. Considering installing individual stalls in sheds to accommodate mum and bubs on thick straw bedding. If shedding isn't an option, waterproof dog coats or even garbage bags can be used as rain jackets to keep animals dry. Providing high-quality feed will help them keep warm.

It is often remarked that having ewes lambing in the cold winter months is cruel, but there are valid reasons why some farmers choose to do so. Lambs born earlier will be bigger and stronger later in the year which is important for their survival when pasture quality declines and they are weaned off their mums.

Thanks to the strong mother-baby bond, lambs will usually be kept warm in bad weather by huddling close to their mum and following her to sheltered areas. Mum's milk is an excellent source of energy to help her lamb to keep warm. But if birth occurs during bad weather the mother-baby bond may not form. If birthing is occurring during a severe weather event check for abandoned newborns frequently and bring them home for hand-rearing.

#### IS MILK FEVER GETTING YOUR DAIRY HERD DOWN?

# Evelyn Walker District Veterinarian South Coast (Berry) and Vicki Timbs Snr Land Services Officer Dairy Assistance Program

For those in the dairy industry, milk fever is a frustrating, but all too common disease. There are many variables that can impact whether a cow or heifer close to calving, often referred to the "springer group", are at risk of developing milk fever. Some of these variables can be related to the management of the feeding ration, diet, mineral supplementation and condition score prior to calving.

This article aims to provide a brief background on milk fever including symptoms and treatment options, followed by a review of some of the prevention tools available to those managing dairy herds.

#### What is milk fever?

Milk fever occurs when there is not enough calcium in the blood to maintain normal bodily functions.

It can result in you finding 'downer' animals – animals that are unable to get up and move freely – in your paddocks.

It is not unusual for downer animals with milk fever to have more than one complication at the same time.

These include any or all of the following:

- low blood magnesium
- low blood phosphorous
- infection elsewhere in the body (metritis, mastitis)
- calving paralysis.

The more of these that exist together the worse the prognosis for the affected cow.

#### What signs might you observe in milk fever?

Milk fever presents in cows with a number of relatively easily observable traits:

• Hanging back at feed time or not as interested in feed.

- Able to walk but appears "off."
- Excited or nervous behaviour or occasional aggression.
- Difficulty walking, wobbliness or muscle tremors.
- Unable to stand but can support themselves in a sternal position.
- Lying on their side.

#### Timely treatment of milk fever is essential for survival.

If left untreated milk fever can be fatal. Managers of dairy cows should keep a close eye on their herd and monitor for any of the above signs. If signs of milk fever are observed, herd managers can administer doses of calcium borogluconate fluids under the skin or into the vein slowly.

Exercise caution as rapid intravenous administration of calcium products can and will kill cows. Sources of calcium borogluconate are available in solution or in conjunction with other commercially available solutions containing other minerals such as magnesium, phosphorous, and dextrose (glucose). These are often called "4 in 1" solutions. Talk to your local dairy veterinarian on advice on how to do this.

#### Prevention is key.

There have been a variety of methods proposed in managing milk fever in dairy herds. There is no "one size fits all" approach.

Some of the management options are described below:

#### Knowledge of calving dates.

Knowing the animals expected calving dates and good records, calculated from accurate early pregnancy diagnosis, is a must. Information on joining dates in conjunction with pregnancy testing can narrow down the expected calving period as close as 10 to 14 days. Talk to your local dairy veterinarian about accurate pregnancy diagnosis and how to best use it in your herd.

This way you can plan when to introduce animals to the springer group and better control their dietary needs during this transition period (4 weeks) close to calving. This will assist in being able to supervise and effectively manage animals that may be at risk of developing milk fever. As you will see below.

#### Monitoring green feed and calcium intake.

In the transition period leading up to calving, monitor the levels of green feed and provide ad lib cereal hays or silage to springers. Providing cereal hay ad lib and restricting green feed before calving helps to lower blood pH. As a result, this stimulates increased release of calcium from the animal's own bones and increases gut absorption of calcium.

#### Beware that not all hay nor silage is created equal.

Energy, protein, fibre content and calcium and potassium contents vary widely across feedstuffs—all of which are essential considerations in the lead up to calving. Feed tests are critical in determining whether your feed will meet your springers' metabolic needs.

Any feed provided to your springers should be free of potassium application such as pastures treated with effluent and/or potassium fertiliser, high potassium feeds such as legumes and molasses as too much potassium in the diet could trigger milk fever.

#### Magnesium is a "must."

In addition to conducting feed quality tests, magnesium supplementation should begin a minimum of two weeks before calving – another reason to know your calving dates. One way to provide this is via magnesium oxide (Causmag®) treated hay using a rate of 50g/cow/day of magnesium oxide mixed with small amounts of water into the feed.

Many commercially made springer pellets also have added magnesium. A feed test would help determine whether you are getting the ideal magnesium levels in what you intend to feed.

#### Energy is essential.

In the lead up to calving, a springer's energy requirements potentially double or triple. These extra energy requirements are met by supplementing the diet with concentrates in the form of specialised springer pellets, grain or maize silage. These concentrates also prepare rumen function when transitioning to their ration after calving.

#### Negative DCAD.

Specialised diets with a negative DCAD (dietary cation anion difference) diet tailored to your farm's needs is another tool. At a very basic level, DCAD is manipulated such that the springer is in a slight metabolic acidotic state before calving. This can be done with commercially made DCAD diets or by supplementation with anionic salts. Monitoring urine pH can determine whether your springer's diet is achieving an acidotic state.

#### Assess your diet's milk fever risk.

There are a number of online calculators and software programs you can use to check your transition diet and whether your springing cows or heifers are at risk of developing milk fever. Regardless of which tool you use, they all require pre-planning to utilise these calculators effectively.

You will need to know in advance what you intend to feed including forages made on/off farm, commercially made diets, and other available back-up feeds you have on hand. You will need each of their respective feed test results at hand. Feed bag labels and book values can differ substantially from the actual product you have on hand so a feedtest is the surest way to find out what your animals are getting in terms of energy, protein, Ca/Mg, P levels, digestibility, DCAD levels and much more.

Once you obtain all your feedtest results, enter them into a calculator, and it will give you an idea what you are missing in your diet and/or what your risk of developing milk fever is for particular diets.

No matter how closely formulated your diets are, there will be a small percentage of dairy springers that unfortunately will still succumb to milk fever. If you find that you're getting 2% or more of calving cows with milk fever, speak to your local dairy veterinarian, consultant or nutritionist going forward.

Managing the transition period of the springer group is complicated and this article has only just touched on a number of issues. We strongly recommend you looking into things further and embracing your resources, including your District Veterinarian for advice.

#### For further information, the following web resources are available.

MLA: Hypocalcaemia/Milk Fever Dairy Australia: Transition diet milk fever risk calculator DAF Qld: Springer and transition cow management CSIRO: Nutritional strategies for the prevention of hypocalcaemia at calving for dairy cows in pasture-based systems

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