Animal Health Update

South East Local Land Services November 2020

SOUTH EAST DISEASE SURVEILLANCE RESULTS

Alex Stephens District Veterinarian Yass.

District Vet disease surveillance has shown some interesting and significant results this month. Your local District Vet can help you to investigate, diagnose and manage any herd health or mortality problems you may be having, provide impartial advice, and assist you in the disease management part of your biosecurity plan.

Photosensitisation caused by the cowpea aphids in the lucerne on the Monaro is being investigated by both LLS Agronomists and District Vets. Photosensitisation is a very painful condition resulting from toxins accumulating in the skin and reacting to UV light. The team is working together with producers to gain a better understanding of cowpea aphid related photosensitisation and contribute to best practice management recommendations. You can read more about it here.

A reproductive work up on a beef cattle property found Vibriosis as the cause of missing calves. **Bovine Vibriosis (Bovine Venereal Campylobacteriosis)** is an infectious cause of infertility and abortion. The bacterial disease is common in northern Australia and although less common in NSW, it is present and an important cause of reproductive loss. Vibriosis is spread by infected bulls at mating and is usually introduced to a clean heard by an infected bull. The risk can be eliminated by yearly vaccination of your bulls with Vibriovax®. For more information go here.

Investigation of a disappointing lamb marking percentage found **Ovine Brucellosis** in the ram flock the cause. Ovine brucellosis can be introduced to a clean flock through introduction of an infected ram via straying or buying from non-accredited sources. The disease should be checked for by you at the annual health check of the rams. It may be detected by careful palpation of the ram testicles, any rams with abnormalities palpated should then be blood tested to confirm or rule out the disease. For more information see here.

Disappointing lamb marking percentages have also caused producers to request blood testing of the maiden ewes for **campylobacter**. Blood testing and analysis of your lambing data is a good way of assessing the need and benefit of vaccination with Campyvac®. As this disease causes abortion the best time to test is whenever breach staining or signs of abortion are seen, blood tests can also be taken after lambing but may be more difficult to interoperate.

An investigation of juvenile lamb losses showed death was caused by **pneumonia and pleurisy** with the bacterium *Mannheimia haemolytica* isolated. In another investigation joint swelling and lameness in lambs was shown to be caused by the opportunistic bacterium *Histophilus somni*. This is the same



bacteria that we found earlier in the year was causing spinal abscess in lambs. On other properties severe anaemia caused by the blood parasite **mycoplasma ovis** caused multiple losses after lamb marking. On coastal properties **barber's pole worm** numbers have been building to the point of causing losses in lambs as well as ewes.

Still born lambs were found to have **lodine deficiency causing goitre**. The lambs were smaller than usual and still born with hard large swellings identifiable in the mid neck region, which were the enlarged thyroid glands. Iodine deficiency can be seen in years where there is profuse clover and pasture growth as sheep consume less soil. It can also be induced by certain crops. It can be prevented by drenching ewes in early and late pregnancy with potassium iodide or providing trace mineral licks.

Johne's disease has been recently diagnosed in both cattle and sheep. These animals became obvious as the season improved, weight gain occurred in the rest of the mob, yet the affected individuals remained obviously poor. Although the infection is acquired in infancy the disease lies latent until stress, such as drought times, causes the immune system to break down.

Copper and selenium deficiencies have been detected via blood tests conducted in the coastal region. Contact you District Vet if you are interested in testing.

Prolonged wet weather events have caused sheep to be affected with fleece conditions such as **dermo** (**dermatophilus**) and **fleece rot**. These conditions will attract flies, and as conditions warm so do the fly numbers. Preventative action against **flystrike** and frequent checking of susceptible mobs for stuck sheep is required.

Several properties have been checked for **virulent foot rot**, through saleyard detections, tracebacks form other districts and reports from owners of lameness in their sheep. Virulent foot rot has been detected on some properties and benign foot rot and abscess on others. Remember that **virulent foot rot is a notifiable disease** meaning that you have a biosecurity duty to report concerning lame sheep to your District Vet. For more information see here.

WORMBOSS REPORT

Lou Baskind District Veterinarian Queanbeyan- Palerang.

Rain has fallen over the last few months lifting much of the South East region out of drought. Even some of our most intensely drought- and fire affected areas are starting to recover. It's almost certain that the whole South East region will receive enough moisture over the next month to continue to support worm development. While the Snowy Mountains remain cool, the rest of the South East is now in a temperature range which promotes worm eggs hatching and developing to infective larvae. The sheep worm to watch for now is barber's pole, which becomes active at slightly warmer conditions than the other roundworms.

As a result of these wet and warm conditions, many properties are experiencing superb pasture growth. This has two benefits when it comes to worms. Firstly, worm larvae can only move to about 5cm up the pasture skyward so when stock graze taller pasture they will pick up less larvae, and secondly, good nutrition from quality pasture promotes the development of immunity to worms. But not everyone has been as fortunate – the impact of drought and bushfires means that not all pastures have been able to

spring away. Worm monitoring and control should be an even higher priority if livestock are grazing short pastures.

Cattle are drenched routinely at strategic times and otherwise monitored for internal parasites by close observation of their performance. Sheep should also be drenched strategically but are also monitored by using a faecal egg count (WormTest) – which simply requires the collection of fresh dung. As part of a bushfire recovery fund, properties in the South East that were bushfire affected or in proximity to the summer bushfires may be eligible for a **free WormTest**. Contact us for more information. If you have never done a WormTest this might be a fantastic opportunity to give one a go and see the benefits for yourself! Your district vet can guide you through the process from start to finish.

A drench check can be performed by doing a FEC prior to drenching to demonstrate a need and then 7-10 days after drenching to confirm the drench has worked.

Weaning of lambs is coming up soon and a chemical drench for lambs at weaning is recommended. Lambs are very susceptible to worms and effective drenching will help them to survive the stressful weaning process. Many drenches are now available in smaller packs, which makes drench rotation and drenching of small numbers of animals much more practical. Using combination drenches and rotating drenches is important to slow the development of resistance to the chemicals. Drench resistance could leave you with few options to manage worms on your property.

JOHNE'S DISEASE, MORE THAN JUST A PAIN IN THE GUTS

Mark Doyle – District Veterinarian Far South Coast

Bovine Johne's Disease (BJD), more commonly known simply as Johne's (pronounced yo-nees, and funnily enough pronounced as Johns disease in Wales....) is a horrible disease, causing terminal weight loss. It is caused by a bacterium *mycobacterium paratuberculosis* that inhabits and changes the intestine of affected animals and prevents the absorption of nutrients. This mycobacterium is generally 'caught' as a calf and usually takes years to develop into clinical disease. In the meantime, although it is improving, the testing available makes it very difficult to get an accurate picture of the status of an animal, meaning that truly diagnosing an animal requires post-mortem analysis. All these factors combine to make BJD a very difficult disease to control. Until recently, Johne's was also a word that could easily strike fear into the heart of the most seasoned cattle producer due to the fears of quarantine.

No longer is that the case! Thanks to the recent changes in the National Johne's Disease Management Plans, BJD is now part of your biosecurity plan. That means it's up to you to assess the risk of getting the disease and being responsible for controlling it. Like it should be with any disease, the rule is buyer beware. BJD is still a notifiable disease, meaning that if you notice chronic wasting, weight loss or scouring that is unresponsive to drenching you need to notify your local district veterinarian to obtain a diagnosis, but it doesn't mean you stop trading if you find it.

I have worked in a country that took little to no approach to BJD control and the diseases prevalence was so high it was a common occurrence to diagnose clinical BJD in young stock as well as older cows. This was because the disease had gone unchecked for so long. This is the worst-case scenario and not a situation we want to get into. Though our (generally) extensive systems of production are less conducive to its spread, BJD may have been introduced with trading or agistment to beef and dairy

herds across New South Wales. The prevalence of the disease is difficult to ascertain, but it should be constantly on our radar and considered a risk.

What does this mean for you? A buyer beware system has advantages and disadvantages. In this system the sooner you know your BJD status (i.e., if you have it or not) the better. If you do find Johne's there is a way out without being unduly/poorly treated and if you don't find it, you can use that to your advantage. With the advent of the Biosecurity Act and biosecurity plans came 'new' risk assessment scoring systems called Johne's Beef Assurance Score (JBAS) and the National BJD Assurance Score (Dairy Score). With these you score your herd based on the approach you want to take to assess the risk of and control this disease on your property. Whatever your score starts on it can always be improved!

The beef JBAS scoring system goes from 0 to 8, with 0 referring to no risk management in place and 8 being a high assurance. It is an uncomplicated system and easy to climb up the rankings. If we start at 0, the moment you introduce a biosecurity plan you climb to score 2. From score 2, even if you were previously infected, if you take steps to contain the disease you progress to a score 4 in 2 years. Once you've had a biosecurity plan in place for 5 years (and it's been 5 years since any confirmed clinical cases you climb to a score 6). Attaining scores higher than 6 involve testing regimes which your District Veterinarian will happily discuss if you require. At the moment there is no hard advantage to scores of 7 or 8 except for export and interstate certification to states like Western Australia. But a canny buyer will also see the value in herds with JBAS 7 and 8.

For more explanation of J-BAS see here.

The dairy score also exists on a 0 to 8 score system in the same order with 0 being unmanaged and 8 being the highest score possible. It incorporates more detail about vaccinates and requires more input to climb the rungs of the ladder but essentially is very similar to JBAS. For more details see here.

I hope everyone is catching onto the vibe here.....it is worth investing the time in a biosecurity plan! So, if you haven't got one already – or if your current plan doesn't incorporate BJD please contact your local District Vet to help you work through your options and attain a higher score. The sooner you start the sooner you can start climbing that ladder.

ZOONOSES- HENDRA VIRUS

Henry Clutterbuck – District Veterinarian Goulburn

Zoonotic diseases are animal diseases that can infect and cause disease in humans. Anyone working with or handling animals needs to know about these diseases and the precautions they must take to minimise the risk to themselves and their family. Every month we look at the human risk posed by an animal disease.

Hendra Virus

Disease

Hendra virus is a virus carried by flying foxes that inhabit Australia, Papua New Guinea, and surrounding islands. Other viruses carried by bats in Australia include Australian bat lyssavirus and Menangle virus.

So far, clinical disease due to Hendra virus infection has only been recognised in Australia. Flying foxes appear to be unaffected by the virus.

Transmission

Hendra virus spreads from flying foxes to horses, (spillover events) causing severe disease, and may then spread to people or animals in close contact with infected horses. The virus can be deadly to both humans and horses. To date, close contact with infected horses has been consistent with all human cases.

Horses are thought to become infected by ingesting or inhaling Hendra virus from the environment. This exposure is most likely to occur when horses feed/are fed in areas contaminated with urine and/or virus-contaminated fruits and spats from flying fox.

Symptoms

There are two syndromes that are commonly described. The first is respiratory (fast and laboured breathing) and the second is neurological (shakes and tremors). Despite these syndromes Hendra positive animals have been found showing any combination of fever, colic signs, and reduced feed intake.

Treatment

There is currently no recognised treatment that is effective. Euthanasia on animal welfare grounds is almost always elected. Providing supportive treatment to infected horses poses a significant risk to people and euthanasia of infected horses may be required to prevent the spread of infection to people – or to other animals

Prevention

Currently Zoetis' HeV vaccine is the only registered vaccine for protection against Hendra virus infection in horses. If you suspect Hendra Virus in your horse, please call the EAD hotline (1800 675 888) or get your private practitioner to do so as soon as possible.

Reducing the chance of infection in horses

DPI recommends the following additional actions to reduce risk:

- 1. Do not place feed and water under trees.
- 2. Cover feed and water containers with a shelter so they cannot be contaminated from above.
- Do not leave food lying about that could attract flying foxes, such as apples, carrots, or molasses.
- 4. Inspect paddocks regularly and identify trees that are flowering or fruiting,
- 5. Remove horses from paddocks where fruiting or flowering trees have temporarily attracted flying foxes.
- 6. If the horse(s) cannot be removed from the paddock, erect temporary or permanent fencing to keep horses from grazing under trees.
- 7. If these measures are not practical, consider stabling horses, or removing them from the paddock before dusk and overnight, when flying foxes are most active. Clean up any fruit debris under the trees before horses are returned to the paddock.

More information

https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0019/310492/Hendra-Virus-Primefact-970-1.pdf dpi.nsw.gov.au/animals-and-livestock/horses/health-and-disease/hendra-virus

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