RIVERINA LOCAL LIVESTOCK UPDATE

March

NSW GOVERNMENT | Local Land Services

www.lls.nsw.gov.au/riverina

Case study: Barbers pole bedlam

By Evie Duggan, District Vet

Sheep

CASE HISTORY:

The district veterinarian was contacted following deaths in Merino lambs. A mob of 1,200 Merino lambs were being yarded for crutching and were described as 'doey', with a tail end of weak lambs when mustering. Once in the holding paddock, five went down and three died.

The lambs were up to date with their clostridial vaccine (6in1) and had been drenched with Cydectin® six weeks prior to yarding. They had been grazing an improved pasture.

Clinical examination:

- the live lambs were laterally recumbent (lying flat on their side)
- bottle jaw (oedema of the ventral jaw)
- pale mucous membranes
- elevated respiratory rate
- poor body condition.

POST MORTEM FINDINGS:

Muscle and tissue was notably pale. Blood was 'watery' and not clotting as expected. The lungs appeared normal, other than being pale.

The liver, kidneys and other abdominal organs appeared normal. The abomasum (4th stomach) was dissected and revealed the diagnosis – hundreds of adult barbers pole worms.

DIAGNOSIS:

Barbers Pole (*Haemonchus contortus*) burden.

The clinical signs of weakness, bottle jaw and dying when under stress (eg mustering) is a result of the anaemia caused by the barbers pole worms. The adult worms feed on blood, which gives them their characteristic pink colour (their blood-filled intestines).

The abomasal wall is shown, with Barbers Pole worms (light pink in colour and size of an eyelash) in amongst the digested pasture seeds.

WHAT DOES THIS MEAN & WHAT WAS DONE TO TREAT?

This summer has been particularly challenging to manage worm burdens and has caught a lot of producers off-guard. The continued rainfall, mild temperatures and dense pastures has meant that a one-off summer drench hasn't cut it. Worm larvae survival has been exceptional, with significant worm egg counts – some counts being seen up to 2,000 eggs per gram (epg) in a six week period post effective drench.

Treatment for this mob was a drench with a triple active. It was recommended that they were yarded either early morning or evening, that no dogs were used and it was as low stress as possible. The lambs should ideally then be walked slowly to a nearby paddock. A post drench check will be done 10-14 days post drench.

In future, when Cydectin® is used a post-drench check will be done to ensure that there is not an issue with resistance on farm, and that this particular case was a result of pasture contamination and infection from larvae.

WHAT CAN BE DONE TO PREVENT?

Worm egg counts should be conducted every 4 – 6 weeks this season, to monitor worm burdens before clinical signs and production losses are realised. Monitoring of worm burdens this season will need to continue as we go into autumn. Young sheep and pregnant ewes should be of particular focus.

Ten to fourteen days post drench, a drench check should be carried out. This is just a simple worm egg count to ensure that the count is down to 0 epg, and that there is not an issue with resistance to a particular active or drench on farm.

Barbers Pole are prolific egg producers, with each adult female worm producing up to 10,000 eggs each day. This must be kept in mind when managing pastures that have had sheep grazing that had a worm burden. The current pasture mass, regular rainfall and mild temperatures leading into autumn will create perfect conditions for the larvae to survive.

FOR MORE INFORMATION

Barber's pole worm (wormboss.com.au)

Case study: The Trouble With Twins

By Jess Dalton, District Vet

Sheep

CASE HISTORY:

A group of 320 approximately 2.5 year old Merino X Ewes were purchased in lamb. Two weeks after introduction, two ewes died and a further eight became sick with symptoms that included apparent blindness, twitching and shaking.

CLINICAL EXAMINATION:

A sick ewe and a dead ewe were examined. The sick ewe was off-food, lethargic, had twitching ears and a mildly elevated temperature. She urinated and a dipstick confirmed a high level of ketones in her urine.

A post-mortem was conducted on a dead ewe, which was normal. She was pregnant with twins in her last month of gestation.

DIAGNOSIS:

Pregnancy toxaemia (a.k.a lambing sickness, or twin lamb disease).

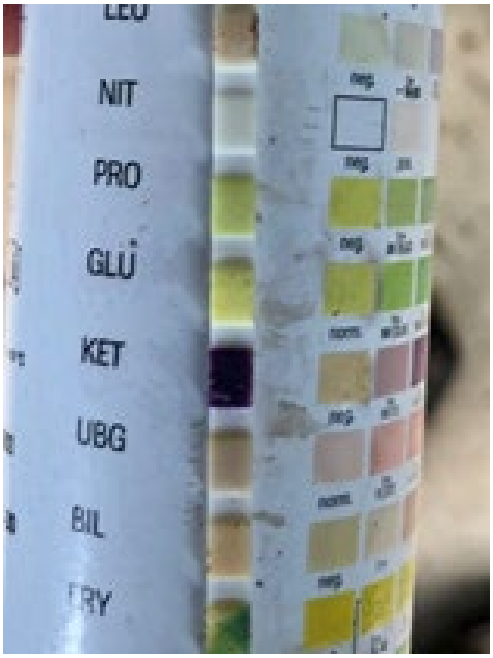
WHAT DOES THIS MEAN?

Pregnancy toxaemia commonly occurs in ewes with twin pregnancies during the last month of pregnancy, when there is a high demand for glucose from the rapidly growing foetuses.

The ewe does not obtain enough glucose from the feed offered, resulting in fat being metabolised for energy sources. This results in the production of ketones as an energy source, which can become toxic over a prolonged period of undernutrition.

Short periods of fasting (eg shearing, bad weather, transport, etc) can also increase the amount of fat metabolised and consequently, ketones produced for energy. When these short periods of fasting coincide with late pregnancy and under-nutrition, it can result in pregnancy toxaemia.

Treatment of acute cases can involve propylene glycol treatments orally or "4-in-1" injections given intravenously or under the skin. Treatment is not always successful, especially in advanced cases.



A dipstick confirmed a high level of ketones in her urine.

A post-mortem confirmed ewe was pregnant with twins in her last month of gestation.

WHAT CAN BE DONE TO PREVENT?

- Minimise stress and fasting in the last month of pregnancy.
- Avoid ewes becoming over-fat at joining (they will eat less during pregnancy which places them at risk of pregnancy toxameia.
- Provide adequate nutrition during pregnancy, with particular attention to the last month of gestation when supplementation is often required. Often energy dense grains are supplemented such as lupins and cereal grains.
- Scanning of ewes, and ewes with twin pregnancies separated and provided a high plane of nutrition.

FOR FURTHER INFORMATION:

DPI Ag Fact Pregnancy Toxaemia in Breeding Ewes.

Announcements and additional warnings

JAPANESE ENCEPHALITIS DETECTED IN NSW

Japanese encephalitis (JE), a mosquito-borne viral disease exotic to Australia, has been detected in western and southern NSW. Infected mosquitoes can cause disease in wild and domestic birds, domestic and feral pigs, horses and other livestock species as well as people.

JE in pigs is associated with:

- aborted, mummified or malformed foetuses, stillborn or weak piglets born at term
- infertility in boars - this is most commonly temporary but may be permanent if the boar is severely affected
- nervous signs such as tremors and convulsions in pigs up to 6 months of age.

Report all unusual signs of disease in animals to the Emergency Animal Disease Hotline on 1800 675 888. More information on JEV is available from the NSW Department of Primary Industries website www.dpi.nsw.gov.au/jev and information on human health effects is available from www.health.nsw.gov.au

INTRODUCING BIANCA GARNHAM – DV YOUNG (MONDAY, WEDNESDAY)

Where are you from? Central Coast NSW originally – now Temora

What's your favourite part about livestock vet work? Finding an answer to a herd health issue to help producers keep their stock on track – so much goes into producing animals and it's never a good day when something goes wrong with them.

Why did you become an LLS DV? I met a sheep farmer the first month of university whom I ended up marrying – farmers come as a package deal with their farm, so it gave a fair bit of motivation and interest in farming/livestock through the duration of studying and then practising. A DV job ticked all the things I liked doing so I was quite happy when one came up locally(ish).

What are you most looking forward to about working in the Young area? Helping solve some of the aforementioned stock issues – I'd be glad to do it anywhere, but it's a bonus that Young is so beautiful.

What do you do outside of work? We have two young kids and pile of cropping and sheep all demanding attention – they use up the majority of the time!

CATTLE PRODUCER SURVEY!

Calling beef cattle producers with self-replacing herds, from commercial to stud – we would love to hear from you!

We are looking for feedback on where your skills lay. We will collate this feedback to target program delivery, providing you with the opportunity to upskill in areas you identify. Please complete the survey and share your experience.

- Complete the survey now.

EXOTIC DISEASE AWARENESS - AVIAN INFLUENZA

Over the next few months, we will look at a number of exotic animal diseases that have been declared as priority diseases. This means there is a high risk of these diseases entering Australia, and state and federal departments are on alert for any signs in our animals. These diseases are foot and mouth disease, avian influenza, lumpy skin disease, African horse sickness and African swine fever. This month, we will focus on avian influenza.

About avian Influenza

Avian influenza (or 'bird flu') is a highly contagious, viral disease that affects birds, with a small number of strains also able to infect people. The virus spreads within bird populations by wild birds which can transmit the virus to poultry and other domestic bird species. Serious forms of the disease can result in severe symptoms and sudden death in birds. However, milder strains may cause few or no symptoms. Avian influenza can be spread by movements of infected birds (domestic or wild), through droppings and secretions, or through movement of contaminated objects, clothing or vehicles. Windborne spread from infected large flocks is also possible over short distances. Other animals like cats and dogs can also spread the avian influenza virus if they come in direct contact with contaminated materials or infected birds.

Clinical Signs

The clinical signs are extremely variable depending on many factors such as the type of bird, the virus subtype and the presence of other diseases. Infected birds may die shortly after acquiring the infection with no obvious signs or they may show a variety of symptoms including breathing difficulties, coughing, swollen head, dark comb and wattles, depression, drop in egg production, changes in egg shell colour, loss of appetite, decreased feed intake and decreased vocalisation. Nervous signs like tremors of the head, unsteady gait, twisted necks and other unusual positions of the head and body sometimes occur. These clinical signs are not specific to avian influenza and can be seen in other poultry diseases.

How Are We Keeping it Out?

A number of low pathogenic strains of avian influenza are endemic in Australia, with surveillance on wild bird populations being undertaken by National Avian Influenza Wild Bird Surveillance Program.

There have been several outbreaks of highly pathogenic avian influenza, all of which have been successfully eradicated.

NSW DPI has worked with poultry producers to upgrade the level of biosecurity on commercial poultry farms in NSW to minimise the risk of exposure to risk factors like wild birds, contaminated water supplies, other animals and visitors. The poultry industry in NSW has been closely cooperating with NSW DPI to develop early reporting systems for unusual mortalities.

The control of avian influenza in wild birds is not feasible. It is important to prevent outbreaks in commercial poultry farms because these birds could multiply the virus dramatically and the virus could spread further. It is essential to minimise possible contacts between domestic and wild birds.

It is also important for households with backyard chickens to be aware of the signs of avian influenza, and report anything suspicious to their local veterinarian, Local Land Services or call the EAD hotline on 1800 675 888.

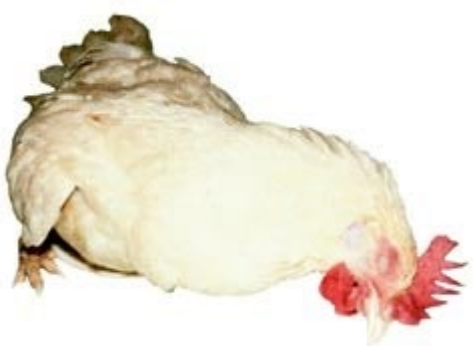


Image: Swollen combs and wattles; weakness and staggering in avian influenza*-infected poultry. Image: www.awe.gov.au*

For more information on avian influenza, you can go to:

https://www.dpi.nsw.gov.au/animals-and-livestock/poultry-and-birds/health-disease/avian-influenza

COPPER TOXICITY IN THE RIVERINA

Lachlan Bailey, CSU Final Year Veterinary Science

The current seasonal conditions of late summer and early autumn rain are contributing to a proliferation of weeds within pastures. In the Riverina this typically leads to an increase in the number of cases of secondary copper toxicity in sheep.

Example of Jaundice discolouration of the eyes often seen in a copper crisis (Image: Google Images).

Sheep have the capacity to readily absorb copper, but limited capacity to excrete copper. The main method of excretion is through the liver into the bile and subsequently out as faeces. Toxicity issues occur when ingestion of weeds causes liver damage, resulting in an accumulation of copper within the liver. Stressful events cause a rapid release of copper into circulation which leads to destruction of red blood cells (RBCs), further liver damage and subsequent neurological signs with the accumulation of copper altering flow of neurological signal. This commonly presents as aimlessly wandering and head pressing. More common clinical signs are caused by the destruction of RBCs which lead to weakness, lethargy and sudden death.

Producers should focus on controlling levels of heliotrope, caltrop and hairy panic which are well known to cause photosensitisation in stock often seen as large ulcerative skins lesions with loss of wool. These plants also have the capacity to steadily increase the accumulation of copper in livers. Death can often occur months after accumulation with a sudden release of copper following stressful handling events or further liver damage. Another focus should be subterranean clover which has a high content of copper that can work in tandem with the other weeds to bring on a quicker copper crisis.

Death is rapid upon release of copper and animals may be noted as jaundice with yellow discolouration within the mouth and the eyes. At this stage animals are unlikely to respond to treatment and as such prevention is key to minimise losses. If concerned please contact your district veterinarian for assistance.

Upcoming events

WEBINAR - THE BETTER BULL BUYING ON-LINE SERIES

The better bull buying on-line series is your guide to selecting and buying bulls that best suits your breeding objectives, region and target markets.

In partnership with Southern Beef Technology Services, NSW Department of Primary Industries (Animal Genetic and Breeding Unit) and HVC Production and Breeding, Riverina Local Land Services will host a series of on-line webinar workshops for landholders and cattle producers during March 2022.

Making Bull Selection Decisions for Heifer Matings - completed and recording is available

Catriona Millen, Technical Officer, Southern Beef Technology Services, Agricultural Business Research Institute, Armidale NSW.

Watch the recording here: https://attendee.gotowebinar.com/recording/8149067134730100747

Wednesday 16 March, 7:30pm – 8:30pm: Southern Multi-Breed Project Update

Dr. Brad Walmsley, Research Scientist Extensive Livestock Industries, Animal Genetics and Breeding Unit, Livestock Industries Centre, DPI, Armidale NSW.

Register here: https://attendee.gotowebinar.com/register/1364311832098639887

Wednesday 23 March, 7:30pm – 8:30pm: Production and Breeding in Southern NSW – Managing Bulls to Ensure the Genetics Work

Dr. Shane Thomson, HVC Production and Breeding Services, Holbrook Veterinary Centre, Holbrook NSW.

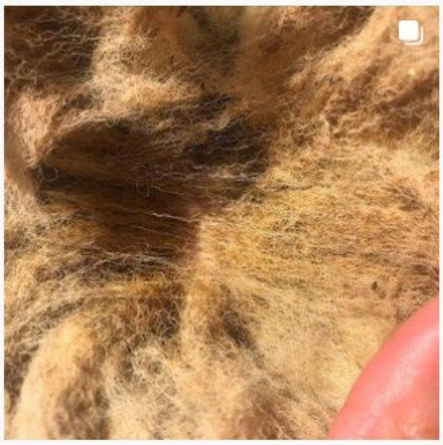
Register here: https://attendee.gotowebinar.com/register/7926074081364778255

Each webinar will run for 60 minutes with 45 minutes presentation and 15 minutes questions time.

For further information, contact Martin Pruess (martin.preuss@lls.nsw.gov.au or 0455 729 318).

Follow us at **@locallivestockvets** on Instagram to see photos and videos direct from the paddock!





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