Animal Health Update

Hairy Panic/ Witch grass poisoning
by District Veterinarian Emily Stearman

With summer comes the imminent risk of Hairy Panic toxicity, a common and unfortunately palatable (when green) grass species across the Riverina. While the grass can be toxic to other species, it is sheep that are most susceptible. Younger sheep are typically worst affected; a common presentation when ewes and lambs are grazing the same pasture. Older sheep will often graze other less toxic species while younger sheep graze less preferentially consuming higher amounts of the soft sweet grass.

The plant toxin is a primary liver toxin, resulting in secondary photosensitisation. Many producers have adapted to managing sheep affected by photosensitisation however dealing with liver damage is more of a challenge.

Signs of toxicity, including jaundice, lethargy, facial oedema or facial ulceration, are an indication that stock need to be moved off the pasture. Photosensitive animals should be kept out of direct sunlight; when ulceration is severe antibiotics may be necessary to treat secondary infection. Quality low protein roughage hay (eg. Cereal hays) and adequate fresh water should be readily available. Recovery can be prolonged and fatalities are common if liver damage is severe. Your district veterinarian is available to discuss the disease should it occur on your farm.

Blue-green Algae
by District Veterinarian Kristy Stone

Blue-green algae blooms occur more often in calm, shallow water, growing rapidly when water temperatures exceed 18°C. Growth is also triggered by an excess of phosphorus, resulting from soil erosion and stock manure being washed into dams.

Signs of blue-green algae include a green discolouration on the surface of the water and an unpleasant, ‘sewerage-like’ odour however occasionally toxin levels in the water can rise without the presence of an obvious bloom. Water testing is therefore the most accurate method for determining the presence of algae in water. A sample is best collected from the downwind edges of the dam.

Algae can produce neurotoxins and liver toxins. Affected animals develop breathing difficulties, muscle tremors, staggers, weakness, and convulsions. Death typically occurs within 24 hours. Some animals develop signs of liver damage including jaundice (yellow gums & eyes), photosensitisation, ill-thrift and scouring. Death may be delayed for 1-2 weeks in these animals.

The most effective ways for avoiding toxic algal blooms is minimising run-off and checking water supplies regularly. Prevention strategies include:

- planting trees or grasses around the dam to stop eroded soil and nutrients from entering the water
- preventing livestock from camping near water sources (ie don’t feed around dams)
- avoid excessive fertiliser use

If you are suspicious of an algae bloom, immediately prevent stock from accessing the water and seek advice.

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**Lupinosis strikes**

by District Veterinarian Tim Biffin

In October 2015, Kurt Lindbeck (DPI plant pathologist) alerted farmers to “an unusual, early sign of a toxic fungus which causes lupinosis” via media release.

It is my opinion that the majority of producers consider the risks of lupinosis in their management; however, despite such diligence some farmers have been caught out this month and subsequently lost stock. This reinforces the need to closely monitor stock for unusual signs (including the development of a tail to the mob or just the occasional dead ewe) and seek veterinary advice if an immediate cause is not identified.

The photo in figure 1 was taken earlier in the month from a typical case of lupinosis. The mob of crossbred lambs had been grazing lupin stubble for just under three weeks. The producer had inspected the stubble prior to grazing and it appeared to be free of any fungal damage. The affected mob was only monitored from a distance, until one animal died and less than 10 others appeared weak. The following day, approximately 10 more had died and the mob was moved off the lupins and onto a lucerne pasture. Despite this, the number of deaths increased.

The toxin which causes lupinosis (phomopsin) is produced by a fungus (*Diaporthe toxica*). This toxin causes progressive liver damage and eventually death. The mob of sheep described above had an increase in deaths when moved onto lucerne because the diet change to a higher protein feed placed further stress on the liver.

Lupin stubbles, especially when there is spilt seed, can be a valuable fodder source. There are a number ways to lower the risk of disease, the key of which is to lower the need for livestock to graze lupin stems, as the stems tend to contain higher levels of toxin. Wet weather is also well-known as a risk factor for the development of phomopsin. However, it is important to know that the toxin level in the stubbles does not decease when the pasture dries out, but rather, it just kicks off from where it left off, this is demonstrated in figure 2.

For more information or any concerns contact your local district veterinarian, or check out the following links:


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**Ovine Brucellosis in the Wagga Wagga area (Part 1)**

by District Veterinarian Emily Stearman

Ovine Brucellosis is a reproductive disease in sheep resulting in significant production and economic losses.

It is caused by a bacteria that infects the male reproductive organs reducing fertility. Over the past twelve months we have identified many cases of Ovine Brucellosis in several flocks in the Temora/Stockinbingal and the Marrar/Coolamon/Old Junee areas.
In September Wagga Wagga district veterinarians held a breakfast at Stockinbingal to discuss an eradication plan for the area outlined in the map below.

This involved land holders in the area bound by the Burley Griffin Way to the North, Dudauman Road to the East, Dimaseer Road to the South and the Old Cootamundra Road to the West.

![Map of Stockinbingal Ovine Brucellosis eradication area. Green indicates tested or OB free properties.](image)

Since the Stockinbingal eradication program was started Marrar/Coolamon/Old Junee has been severely affected by the disease. Below is a map of properties that have been tested by Local Land Services in these areas.

A planned eradication program will likely occur in this area concurrently. Producers may be contacted throughout 2016 regarding testing. It is important to note our work on this disease is not limited to the highlighted area, these are focus areas where disease has been diagnosed in significant proportions.

Ovine Brucellosis testing is a role of both private and Local Land Service Veterinarians. The disease is of significant biosecurity importance.

Producers in the Stockinbingal eradication area or from Marrar/Coolamon/Old Junee, please contact your local district veterinarian or private practitioner for further advice, including how to prevent this disease or regarding testing your rams.

### Common Questions about PIC’s, NVD’s and LPA

**by District Veterinarian Gabe Morrice**

**What is a PIC and who does it belong to?**

The PIC, property identification code, is a unique identifier that is linked to the lots and DPs of a property. ANY LAND WITH LIVESTOCK ON IT MUST HAVE A PIC. This includes land with horses, alpaca, deer, >10 emus/ostriches and >100 poultry.

It is used to identify the origin of stock for the purpose of disease and residue tracing. It underpins our livestock industries’ biosecurity and is of significant importance for trade.

If you sell your property, the PIC stays with the property. The PIC must be used for the movement of livestock (on a National Vendor Declaration form, NVD) and these movements recorded on the national database.

All **sheep**, **cattle** and **goats** must be tagged with an NLIS approved device showing the PIC, prior to leaving any property. These devices should never be removed. If missing from purchased in stock, non-breeder (pink for sheep and orange in cattle) replacement tags showing the current property PIC should be applied. **Pigs** over 25kg should be shoulder branded with the last six digits of the PIC.
What NVD book do I use?

From 16 November 2015, producers must use the most recent NVD books (or eDecs) to sell and move livestock. For sheep, goats, cattle and EU cattle, these will be version 0413. The NVD provides the majority of the information required by the national database, and also acts as a travelling stock statement. It complies with the requirements of the food safety authority for LPA accreditation. Producers can also use stock permits or annual stock permits to move stock, but will require an NVD to comply with LPA requirements. Pig producers moving pigs off their property must use a PigPass NVD.

How long must I keep the NVD relating to livestock movement?

In NSW, the NVD must be kept for seven years from the date of movement.

Who is responsible for recording the movement of livestock on the database?

The owner/person purchasing the stock is responsible for ensuring the movement of livestock is recorded on the NLIS database.

What is LPA?

All producers utilising NVDs must be registered with the Livestock Production Assurance Program. If producers do not confirm their LPA accreditation annually, they will need to undergo an audit, by the MLA, to confirm their eligibility to sell livestock.

The Livestock production Assurance program is the on-farm food safety program that incorporates five key areas:

- property risk assessment
- safe and responsible animal treatments
- stock foods, fodder crops, grain and pasture treatments
- preparation for dispatch of livestock
- livestock transactions and movements

NB: Local Land Services stock routes and reserves are not LPA accredited and stock may not be sold directly off a Local Land Services reserve or TSR.

To register for a PIC, contact your nearest Local Land Services office. To order new NVDs, call the MLA on 1800 683 111 or go to http://lpa.ausmeat.com.au/. For PigPass NVDs go to http://www.pigpass.com.au/ or call 1800 001 458.

Grain poisoning

by District Veterinarian Rahul Shankar

Over the past several weeks producers have been experiencing deaths with lambs on feeders. Subsequent on farm property visits have confirmed grain poisoning in all instances.

Grain poisoning/acidosis/overload occurs when sheep or cattle consume large amounts of grain. The grain releases carbohydrates into the affected animal’s rumen, causing the contents to rapidly ferment rather than being digested normally. Bacteria in the rumen produce lactic acid, resulting in acidosis, slowing of the gut, dehydration and ultimately death.

Wheat and barley are common causes of the problem, but lupins and oats can equally also cause issues. Cracking or crushing of grain can increase the likelihood of grain poisoning occurring because carbohydrates are able to be released quicker.

Common causes for grain poisoning are: sudden change in diet, stock being suddenly grain fed (rather than being gradually introduced), and stock grazing newly harvested paddocks with grain spills or unstripped areas.

Clinical signs of grain poisoning include: diarrhea (scours), staggery gait, severe lameness, lying down, inappetence, dehydration, and death.

Treatment: Seek veterinary advice if you are concerned that grain poisoning might be affecting your enterprise. Below are a few recommended treatment options:

- Removal of grain from the ration for affected animals, addition of hay to the diet. Lot fed animals can be changed to a diet consisting of 20-25% lower grain levels for 2-3 days to see if improvement occurs.
- The use of sodium bicarbonate may prove of some benefit, but it should also be noted that if the pH of the rumen is less than 5.5, introduction of bicarbonates generates a rapid release of carbon dioxide, leading to the occurrence of bloat.
- Antibiotics may be warranted in such cases, but should be used and prescribed in accordance with a registered veterinarian.
Following grain overload, the rumen lining may take up to six weeks to repair, so affected animals may show poor growth rates during this time.

Prevention includes gradual introduction of grain/pellets via trail feeding. During the introductory phase feed grain daily. Introduce oats in sheep at a rate of 50g/head/day, increasing 50g/head/day daily till the required ration is reached. Oats to cattle can be introduced at 500g/head/day, increasing every 4th day by 500g/head/day until the required ration is achieved.

Ensure a good quality source of hay or silage is present, making up 20% of the ration. To transition to wheat or barley from oats, increase the wheat or barley portion by 25% of the oat ration every five days over 16 days.

Check pulpy kidney vaccinations are up to date or vaccinate prior to introduction of grain feeding. Specific antibiotic preparations that reduce the number of acid producing bacteria are available, but only under veterinary prescription. Monitor stock for any of the above mentioned clinical signs, and contact your Local Land Services district veterinarian if you have any concerns.

Scabby mouth
by District Veterinarian Emily Stearman

Scabby mouth is a highly contagious, endemic skin virus in sheep in New South Wales. It typically affects lambs but can also affect naïve adult sheep. The virus causes a pustular dermatitis resulting in often severe and painful ulceration of the muzzle and occasional lesions above the hoof.

The virus survives in ‘scabs’ from infected animals, contaminating pasture and yards for months to years. Once introduced on-farm the virus can therefore infect stock every year. Infection occurs when the skin barrier is disrupted.

Dry summer periods, as we have experienced this year, have been conducive to the expression of scabby mouth across the region.

Grazing stubble or high thistle content pasture can provide enough mechanical abrasion to the skin to rapidly spread infection.

The disease is rarely fatal but production losses are high. Recovery can take 2-4 weeks over which period the animal may loss considerable body condition. If young stock are affected in their prime, weight loss significantly affects production.

It is important to note that the virus can infect humans. If handling infected sheep consider covering exposed skin that may come in contact with the animal. If you suspect your sheep are infected or for advice on how to manage disease on farm contact your local district veterinarian.
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