Animal Health Update

Blue Green Algae
By District Veterinarian Gabe Morrice

Several recent enquiries have been received regarding dam health and blue-green algae issues, along with an alert issued for the lower Murrumbidgee and Murray-Darling river systems.

Blue green algae outbreaks are more likely when water levels are getting low and the water is warm, along with other factors such as an increase in phosphorus in the water and low levels of zooplankton. Typically, in this area, they are seen in late summer and autumn. Algal blooms are often seen as a scum on the surface of the water (particularly the side of the dam away from the wind). Dried scum will have a pale blue/ green appearance, and can remain toxic in itself for up to five months. As the algae becomes more toxic, it may even disappear from the surface of the dam.

If you suspect that your dams have blue-green algae, exclude stock from them as quickly as possible. Although toxins vary, sheep or cattle that have drunk contaminated water will usually die very quickly. Generally deaths occur within close proximity to the dam. Sometimes affected stock may be seen to have the presence of algae on their muzzle and lower limbs. Other susceptible species include dogs, humans and even insects such as honey bees.

Other diseases can cause these sudden deaths, so it is important to have them properly investigated and determine the actual cause.

Dams that are contaminated can be treated using algaecides registered for that purpose. Currently registered algaecides include Coptrol Aquatic Algicide, Cupricide Algicide, Cupricide 110 Algicide and Copcide Algicide. The addition of allum or gypsum may also help control algae by removing the phosphorus source, however these are more likely to be beneficial as a preventative measure than a treatment. Copper sulphate MUST NOT be used to treat affected dams and could result in further deaths.

A NSW Primefact is available to provide more detail on these treatment methods at: http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0006/103785/Managing-blue-green-algae-in-farm-dams.pdf

It should be noted that these products are not for use in rivers or other natural water courses.

Stock should be excluded from dams that have been treated for blue green algae for at least three weeks post treatment as the water can remain toxic for that length of time.

Figure 1: Blue-green algae in a dam

Reproductive Disease in Cattle
By District Veterinarian Kristy Stone

Vibriosis, Leptospirosis and Pestivirus are common diseases capable of causing severe reproductive losses in cattle but thankfully there are ways to prevent problems occurring in your herd.

Campylobacteriosis (Vibriosis)
A bacterial disease spread to female cattle by infected bulls at mating. Vibriosis in females causes an infection in the uterus resulting in failure to conceive or early death of the embryo.
Signs of vibriosis include:
- low calving rates
- early-term abortion or embryonic loss
- extended breeding season
A vaccination is available to control the spread of Vibriosis and should be given annually to bulls for ongoing prevention of this disease.

Leptospirosis
A bacterial disease which occurs in cattle, sheep and goats and can also cause severe illness in humans. Leptospira bacteria survive for long periods in wet conditions and are shed in the urine and uterine fluids of infected animals. Infection may pass unnoticed; however, when an infected animal is introduced to a naïve or unvaccinated herd severe abortion storms can occur.
Signs of Leptospirosis include:
- Abortions (usually late term)
- Still births
- Retained foetal membranes
- Fever & lethargy
Vaccination with a 7-in-1 vaccine protects cattle against the two most common serotypes of leptospirosis, Leptospira pomona and Leptospira hardjobovis.

Pestivirus
Pestivirus is a widespread virus in cattle herds. Major reproductive loss can occur if a naïve herd or mob becomes exposed to the virus during the mating period or pregnancy.
Signs of Pestivirus include:
- poor reproductive rates
- abortions
- deformed calves
- ill-thrift, weight loss
- fever, cough
A pestivirus vaccine is available and is the most reliable way to achieve immunity. Exposure to a persistently infected animal prior to breeding (known as “auto-vaccination”) will achieve immunity in a large proportion of animals over time however the results may be inconsistent compared to vaccination.

Grass seed management starts now
Reprinted from MLA industry news 4 March 2016
Sheep producers need to start planning their grass seed management strategies now, to ensure they are well prepared for next spring’s grass seed danger period.
That’s the message from Dr John Broster, Senior Technical Officer at Charles Sturt University (CSU) at Wagga Wagga. John specialises in herbicide resistance and is involved in Integrated Weed Management projects with the Graham Centre for Agricultural Innovation at CSU.
“Producers now need to be thinking about what weed control measures they will use over the growing season that will reduce grass seeds next spring and summer,” John said.
“While the short-term goal may be ensuring there are no grass seeds to contaminate their sheep next spring, the longer term goal should be reducing the weed seedbank on their property.
“Controlling grasses prior to seed set in late spring and early summer will reduce the number of plants that actually germinate in the next autumn. Proper control of the plants that do germinate will then reduce the number of plants that set seed, and eventually they should be able to run down their problem.
“When it comes to controlling grass seeds you have to think well ahead and it may be a one to two year project.”
Grass seeds cost producers in multiple ways, including through:

- diarrhoea
- ‘persistently infected’ animals
- mouth lesions (Mucosal disease)
processor discounts of up to $1.50/kg for seedy carcases

reduced productivity and welfare of sheep affected by seeds in their bodies and eyes

reduced pasture productivity due to weed incursions.

What constitutes “proper control” depends on location, seasonal conditions, existing seedbank composition, the time of year and farming system. Control measures are also determined by the outcome the producer is trying to achieve which may range from a few clean paddocks for lambs and weaners to graze, through to whole-farm weed seed control.

There are a number of useful resources to help producers manage specific grass seeds problems including the Winning Against Seeds manual, Tips and tools: Winning against seeds, MLA webpage: Seed contamination of carcases and the GRDC Integrated Weed Management Hub.

Strategies for managing grass seeds

Spray grazing – Producers can spray graze in autumn and winter when establishing new perennial pastures. Spray grazing uses sub-lethal rates of selective herbicide to increase the palatability of broadleaf weeds, including corkscrew, which are later grazed at high stocking rates.

Winter cleaning – Herbicides such as Simazine will control silvergrass and suppress barley grass and brome grass in pastures, while products such as Sprayseed®, Simazine and Diuron can control problem grasses in mature lucerne stands. Conduct winter cleaning when soil moisture conditions are good.

Forage crops – A staggered sowing of fodder crops in winter and early spring enables lambs to be removed from pasture with potential grass seed problems into clean paddocks.

Strategic grazing – Use grazing management to manipulate pasture composition and reduce the total number or height of seed heads to minimise their impact on young sheep.

For more information, contact Dr John Broster at CSU on 02 6933 4001 or jbroster@csu.edu.au

Bluetongue disease and the Australian NAMP

By District Veterinarian Timothy Biffin

‘Bluetongue’ is a disease caused by several of the many Bluetongue viruses (there is currently 26 known strains). These viruses are transmitted by midges and have the ability to infect various ruminants, most notably sheep and cattle. Bluetongue is a concern as it has the ability to cause serious disease, and can result in up to 40% fatality rate. Symptoms are varied but may include: facial swelling (predominantly the lips and tongue – sometimes will appear blue!), salivation, fever, lameness and death.

Only some of the strains of Bluetongue have the ability to cause disease. These pathogenic strains are currently exotic to Australia due to effective, ongoing quarantine measures. There is no reason why these strains could not “do well” in Australia if given the right opportunity for introduction; Australia has large areas of tropical and sub-tropic climates, favorable to midges (the vector), and large populations of sheep, cattle and goats.

For international trade reasons, it is of significant financial benefit to Australian producers to not have “clinical bluetongue”. Unfortunately it is not good enough to just say “we don’t have it”, disease freedom has to be proven to the rest of the world. For this reason, the National Arbovirus Monitoring Program (NAMP), directed by Animal Health Australia, exists to monitor for the presence of clinical bluetongue, as well as 3 day sickness and Akabane virus (which causes “Acorn calves”). It also serves as an early warning system for the incursion of exotic bluetongue virus strains.
In this program, state officers coordinate sentinel herds around Australia (periodically testing their blood for virus). Insects near these herds are also caught and monitored for the presence of midges. Subsequently, a map is developed which displays the current distribution of (non-clinical) bluetongue virus within Australia.

Figure 3. The most recent distribution map of blue tongue virus in Australia – this map is valuable information for international market access and trade negotiations.

A Good Season for Broadleaf Weeds
By Janelle Jenkins, Mixed Farming Officer

Spring 2015 and summer 2016 have provided perfect conditions for the proliferation of many broadleaf weeds in pastures. A dry period during late spring and early summer resulted in many pastures being grazed quite heavily reducing groundcover. This was followed by good mid-summer rainfall resulting in the germination and growth of many broadleaf weed species, such as common heliotrope, fleabane, silverleaf nightshade, melons, Bathurst burrs and summer growing thistles.

The proliferation of summer weeds can impact on subsequent pasture growth as the summer weeds use valuable soil moisture reducing the amount available for the germination of the more desirable temperate pasture species in early autumn (i.e. clover and grasses). The weeds also reduce the amount of soil nitrogen available for the temperate species. They can reduce germination of the more valuable species by either physically taking up space, impeding germination, or by chemically impeding germination via alleopathic means.

Many of the common summer broadleaf weeds contain alkaloids and/or other chemicals that can be toxic to livestock. Generally the plants are also unpalatable and the animals will avoid them. However where feed is short and/or grazing with naïve young animals, large amounts can be consumed causing production losses and even animal deaths. The use of hormonal type herbicides can increase the plants’ palatability resulting in increased animal consumption and its associated problems.

Summer growing broadleaf weeds are notoriously hard to remove from pastures. Like many weeds they are best controlled when they are in the seedling stage, usually early spring. For this reason it is useful to be able to identify the weeds at this early stage. As spring and summer progress the plant’s roots system grows, temperatures increase and soil moisture reduces making it much hard to find the condition when herbicides will be affective on the plants.

The main herbicides used on summer broadleaf weeds are glyphosate, 24-D products, metsulfuron, atrazine and triclopyr. If using a residual type
herbicide it is important to be aware of the impact that the residues can have on autumn germinating desirable pasture species. During summer it is important to use high rates of water and the appropriate wetter/spray oils with certain herbicides, as the plants are often covered in a waxy cuticle that make it hard for the herbicide to penetrate. It is also important to not spray stressed (usually moisture stressed) plants as this will result in herbicide failure.

WARNING – ALWAYS READ THE LABEL

Users of agricultural or veterinary products must always read the label and any permit, and strictly comply with the directions on the label and the conditions of any permit. Users are not absolved from compliance with the directions on the label or the conditions of the permit by reason of any statement made or not made in this information. To view permits or product labels go to the Australian Pesticides and Veterinary Medicines Authority website www.apvma.gov.au.

Announcements

Event Invite – MLA ReproActive Workshop

Developed by Australia’s leading vets, cattle specialists and rural business experts, ReproActive is an outstanding specialised training workshop series designed to help maximise the reproductive potential of herds. Each module will provide a wealth of knowledge to producers, resellers and veterinarians.

Through informative, highly-practical and interactive modules you’ll learn:

- The significance and assessment of **Critical Mating Weights**
- How to plan and achieve shorter **Joining Periods** and
- The implications of **Condition Scoring** and the best corrective action to take
- **Bull Management and Assessment** for reproductive success

**Date:** Monday 18 April 2016
**Time:** 8:30am-3:00pm
**Location:** Boonongo, 2500 Urana Rd (Federation Way), Morundah

**Contacts**

- Tom Graham - Coolac Veterinary Services
  M: 0499 986 838 ● E: tom@coolacvet.com.au
- Rob Inglis - Elders Limited
  M: 0439 739 055 ● E: rob.inglis@elders.com.au
- Jock Munro - Zoetis Australia Pty Ltd
  M: 0419 496 848 E: jock.munro@zoetis.co

**Riverina Local Land Services**
**District Veterinarians**

**Wagga Wagga**
Tim Biffin and Emily Stearman
6923 6300

**Young**
Elizabeth Braddon and Rahul Shankar
6381 4700

**Gundagai**
Kristy Stone
6940 6900

**Griffith/Hay**
6960 1300 (Griffith) 6993 1403 (Hay)

**Narrandera**
Gabe Morrice
6958 1800

1300 795 299
www.riverina.lls.nsw.gov.au