





# Supporting your success

# WA livestock disease outlook

Producer edition | February 2017

### Reporting livestock disease protects our ability to trade

Australia's ability to sell livestock and livestock products depends on evidence from our surveillance systems that we are free of livestock diseases that are reportable or affect trade. To gather this proof of freedom, the Department of Agriculture and Food, Western Australia (DAFWA) investigates cases where livestock show signs of disease similar to reportable or trade diseases.

The *WA livestock disease outlook – for producers* is collated from information collected by DAFWA and private veterinarians as part of proving Australia's freedom from those diseases. In 2015/16, data from our surveillance systems allowed WA to access markets valued at \$2 billion.

## Recent significant cases submitted to DAFWA Diagnostic Laboratory Services

Case data from January 2017 to February 2017

#### Sudden death in Angus steers and heifers in the Goldfields-Esperance region

- Twenty young, recently introduced steers and heifers died in a herd of 400 cattle.
- Some of the animals were lethargic and walking abnormally while others died without any disease signs.
- The cattle were weaned on hay and then turned out onto barley and oat stubble. Ryegrass and ergot were present in the paddocks.
- A postmortem suggested inflammation of the first and fourth stomach. Given all the findings, the vet considered acidosis, annual ryegrass toxicity (ARGT), ergotism or bovine viral diarrhoea virus Type 1 (BVDV-1) to be possible causes.
- Testing for plant toxins ruled out ergot, ARGT and fluoroacetate-containing plants as the cause of disease.
- Laboratory testing showed severe inflammation and necrosis of the heart and other muscles and mild inflammation of the brain.
- The bacterium *Histophilus somni* was found to have caused the heart damage, while low vitamin E in the liver and muscle changes suggested that white muscle disease was contributing to illness in the herd. *H. somni* can occur in young cattle after the stress of transport, mixing and new management systems and may need to be treated with antibiotics.
- Test results for BVDV-1 and for the reportable disease bovine viral diarrhoea virus Type 2 (BVDV-2) were negative. BVDV-1 is present in Australia, but the more severe Type 2 found in North America and Europe has not been detected in Australia.

Exclusion testing for <u>reportable diseases</u> such as <u>bovine viral diarrhoea virus Type 2</u> supports Western Australia's proof of freedom for export to BVDV-2-sensitive markets.

#### Neurological signs in a 14-year-old pony in Perth

- A 14-year-old pony showed muscle and facial twitching, a wide-legged stance, an exaggerated hind limb gait and lack of coordination.
- The pony was being fed meadow hay sourced from a local supplier.
- Any feed that contains annual ryegrass has the potential for annual ryegrass toxicity (ARGT). All grazing animals are susceptible to ARGT, including horses and pigs.
- A faecal sample tested positive for ARGT and two out of three of the hay samples tested as high risk.
- When buying hay, ask if ARGT testing has been done or request a vendor declaration.
- ARGT may be difficult to diagnose if hay is sampled incorrectly or not enough samples are provided. Go to DAFWA's webpage on testing hay for annual ryegrass risk for more information and sampling instructions.

#### Collapse and anaemia in a dairy cow in the South-West

- A five-year-old cow, 120 days in milk, collapsed when coming in for evening milking.
- She was found moderately bloated with a fever and increased heart and breathing rate.
- The producer and vet thought the cause might be bovine anaemia due to *Theileria orientalis* group (BATOG).
- Laboratory testing confirmed a low red blood cell and platelet count with low calcium and increased magnesium and phosphate levels.
- The cow was diagnosed with milk fever, which can occur in high-producing lactating cows, mainly around calving. Signs of milk fever include agitation or excitement, muscle twitching and an uncoordinated gait. This can lead to collapse and in some cases death.
- Testing showed the cow did not have BATOG and allowed the producer to find the true cause of disease.
- Read more about <u>BATOG</u> search 'BATOG' on the DAFWA website.

#### During March, due to high summer rainfall and flooding, be on the lookout for:

Disease	Typical history and signs
Conditions associated with feed Read more on the DAFWA website about supplementary feeding	<ul> <li><u>Grain overload/acidosis:</u> Supplementary feeding of animals without sufficient roughage or gradual introduction to grain may cause grain overload/acidosis. Signs include diarrhoea, bloating, standing widelegged and lack of muscle control.</li> <li><u>Lupinosis</u> is common in summer and autumn especially following rainfall. Toxicity from the fungus, <i>Diaporthe toxica</i>, that colonises lupin stems and occasionally seeds, tends to increase following each summer rain event. Look out for early signs of lupinosis in stock, especially sheep. This may include hollow flanks, lethargy when driven, poor growth rates, jaundice and lagging behind the mob.</li> </ul>
Toxic weeds	<ul> <li>Feed availability or quality may have been reduced due to weather events and a flush of summer weed growth is likely. Check paddocks for weeds, particularly:</li> <li><u>Slender iceplant</u> is a prostrate succulent common in the eastern Wheatbelt. High levels of sodium attract sheep and high levels of oxalic acid cause calcium crystals to form in the blood and kidneys. Signs of poisoning in sheep include weakness, lying on their chest, clear nasal discharge and heads flopped back on the flanks.</li> <li><i>Gastrolobium</i> sp contain fluoroacetate (1080) and can cause weakness and sudden death.</li> <li><u>Caltrop</u> is widely distributed through WA, germinates following summer rain, and may cause liver damage, jaundice and death.</li> <li><u>Lesser loosestrife</u> is distributed widely through the South-West and wet conditions favour growth. It can cause liver and kidney damage and significant mortalities in sheep when it is the only green feed available.</li> </ul>
Barber's pole worm Read more on the <u>Paraboss</u> website	<ul> <li>The development of eggs and larvae of Barber's pole worms (<u>Haemonchus contortus</u>) is favoured by warm and moist conditions. High summer rainfall may cause cases further inland than normally seen.</li> <li>Larvae can survive on pasture for some time especially during cool conditions.</li> <li>Even adult sheep are at risk of infection with Barber's pole worm. Anaemia, 'bottle jaw', weakness and collapse (especially when moved) are characteristic signs.</li> </ul>

#### BATOG testing made simple with DAFWA sampling kit

<u>Bovine anaemia due to Theileria orientalis group (BATOG)</u> is a disease caused by the organism Theileria. The main vector of the disease is the bush tick (*Haemaphysalis longicornis*), which occurs in south western coastal areas of WA. The disease may occur in areas where the tick is present. The disease causes a severe anaemia in infected animals and signs can include jaundice, pallor and red urine. Sampling kits are available for veterinarians who suspect *Theileria* in an animal. Samples can be submitted to DAFWA Diagnostic Laboratory Services for testing for BATOG and other diseases which may cause similar disease signs. Contact your <u>DAFWA or private veterinarian</u> to conduct testing. Read more about <u>BATOG</u> on the DAFWA website.

#### We welcome feedback. To provide comments or to subscribe to the monthly email newsletter, WA livestock disease outlook, email <u>waldo@agric.wa.gov.au</u>

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