



WA livestock disease outlook

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Recent livestock disease cases in WA

Deaths in cattle fed vegetable scraps

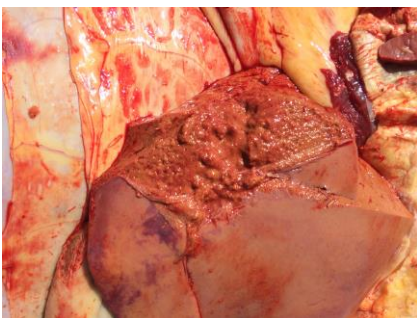
- In a mob of 18 one-year-old cattle, seven died and six were affected with dyspnoea and abdominal breathing. The cattle appeared anaemic and were being fed a variety of vegetable scraps (including sweet potatoes), wheat stubble, hay and pellets.
- Histopathology showed a severe, diffuse, subacute interstitial pneumonia with emphysema. A diagnosis was made of toxic interstitial pneumonia likely due to ingestion of mouldy sweet potatoes.
- Sweet potatoes can be colonised by a fungus, which causes production of the toxin 4-ipomeanol.
- **Differential diagnoses:** Fog fever, bacterial pneumonia, bovine respiratory disease complex, [bovine anaemia due to *Theileria orientalis* group \(BATOG\)](#) where anaemia is present.
- Waste vegetables may be a source of animal matter as well as toxins. Animal matter-contaminated food constitutes [restricted animal material](#) and is illegal to feed to ruminants in Australia.



Fig 1: Firm, inflamed lung from cow affected by interstitial pneumonia.

Respiratory signs and sudden death in cattle in the Midwest

- A total of 14 Droughtmaster cattle from a mob of 180 died suddenly within 7-10 days of being moved onto an oat stubble paddock with others showing respiratory and neurological signs.
- Deaths stopped when cattle were moved to another paddock.
- The cattle showed no further signs until cattle were fed hay cut from the oat stubble paddock. Several days later, 20 cattle died. Sheep fed the same hay were unaffected.
- Testing of the hay samples showed moderate and high risk of [annual ryegrass toxicity \(ARGT\)](#). A faecal test from one of the dead cattle was also positive for ARGT.
- **Differential diagnoses:** bovine spongiform encephalopathy (exotic) in animals showing neurological signs, [thiamine deficiency](#), [grass tetany](#). Discuss with your [DPIRD vet](#) subsidies available for testing where signs may be similar to exotic diseases such as [transmissible spongiform encephalopathies](#).
- Paddock management strategies to reduce the risk of ARGT in livestock include [hay testing](#) prior to feeding out, managing grazing of the paddock to remove seed-heads before they become toxic, controlling the ryegrass or sowing a safe ryegrass variety. Read more on these [control strategies](#).



In some cases of ARGT, you may see (from left): Fig 2: Hepatic lipidosis or Fig 3: neurological signs such as paddling and change in eye position. Fig 4: Annual ryegrass.

In autumn, watch for these livestock diseases:

Disease, typical history and signs	Key samples
<p>Gastrointestinal (GIT) worms in cattle</p> <ul style="list-style-type: none"> Mild summer weather and some rain may have allowed survival of infective larval stages on pasture in the southwest. Recent cases of cattle showing signs including diarrhoea, lethargy and poor body condition have been submitted to DPIRD. Testing has found significant worm burdens and GIT damage despite drenching. This can lead to reduced immunity and poorer outcomes when cattle are affected by other conditions. In winter rainfall areas, the brown stomach worm (<i>Ostertagia ostertagi</i>) is a major parasite of cattle. Ensure drenches are effective against parasites in your region and administered correctly. See the DPIRD drenching beef cattle webpage for more information. 	<p>Ante-mortem:</p> <ul style="list-style-type: none"> Faeces: 4g in cattle for worm egg count. <p>Post-mortem:</p> <ul style="list-style-type: none"> Alimentary sections: fresh and fixed GI contents (abomasal contents, SI contents) Faeces
<p>Pregnancy toxaemia in ewes</p> <ul style="list-style-type: none"> Consider pregnancy toxaemia if late pregnant/early lactating ewes present with depression, anorexia, weakness, recumbency, neurologic signs, and death. Signs may be worse following stress. Affected ewes may separate from the mob. Ewes carrying multiple lambs are at higher risk and if identified early at scanning can be separated and fed carefully. Pregnancy toxaemia can be avoided if producers provide adequate nutrition to the ewes and minimise stress (e.g. avoid herding and yarding of ewes in late pregnancy and early lactation). Differential diagnoses: Scrapie (exotic), cerebral abscess, acidosis, enterotoxaemia, hypocalcaemia, nutritional myopathy in primiparous ewes and meningitis. Early diagnosis and treatment with glucose and supplementary feeding of good quality hay and oats can halt deterioration. DPIRD's pregnancy toxaemia page has information on prevention and treatment. 	<p>Ante-mortem:</p> <ul style="list-style-type: none"> 10mL blood in lithium heparin tube <p>Post-mortem:</p> <ul style="list-style-type: none"> 2mL vitreous humour in plain tube (post-mortem) in addition to base tissue sample set. Adult sheep with neuro signs should be tested for reportable diseases such as scrapie. Speak to your DPIRD vet about subsidised investigations.
<p>Calf diarrhoea/scours</p> <ul style="list-style-type: none"> Affects young calves in autumn and early winter. Newborn calves that received a good supply of colostrum from their dams will be better protected. Signs include depressed appearance, diarrhoea, dehydration, recumbency, death. Calf scours may be caused by single or multiple organisms. Some common organisms include coronavirus, rotavirus, <i>E. coli</i>, <i>Salmonella</i> and <i>Cryptosporidium</i>. Cows can be vaccinated against a number of these prior to calving. DPIRD's calf scours webpage outlines strategies to prevent and treat an outbreak. 	<p>Ante-mortem:</p> <ul style="list-style-type: none"> 10mL faecal sample (chilled) from 5 affected animals if possible

Note: Include base samples and any clinical or gross lesions in submissions. For sample submission advice, contact your [DPIRD field vet](#) or the duty pathologist on +61 (0)8 9368 3351.

Register now for the next livestock disease investigation workshop!

Want to hear some great speakers and brush up on your post-mortem skills? There are two highly recommended workshops for livestock disease investigation coming soon:

- Livestock disease investigation weekend workshop** at Pagoda Resort, Como, on 23–24 June 2018
 - Keynote speakers: Dr Tristan Jubb, Livestock Health Systems Australia, and Dr Kim Halpin, Australian Animal Health Laboratory
- Practical post-mortem workshop with Dr Tristan Jubb** at DPIRD, South Perth, 25 June (limited places).

Participation is free to rural practitioners, including meals and accommodation during the workshop. For details and to register, go to the [webpage](#) or contact your [local DPIRD vet](#) or Dr Gill Scroxtton (08) 9956 8505 or 0418 943 064 gill.scroxtton@dpird.wa.gov.au. DPIRD is pleased to facilitate these events, supported by funding from the Agricultural competitiveness white paper through the Department of Agriculture and Water Resources.

We welcome feedback. To provide comments or to subscribe to the monthly email newsletter, WA livestock disease outlook, email waldo@dpird.wa.gov.au

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