RIVERINA LOCAL LIVESTOCK UPDATE

August

NSW GOVERNMENT | Local Land Services

www.lls.nsw.gov.au/riverina

Case study: GOAT TO KEEP ON TOP OF DISEASE PREVENTION

District Veterinarian Dione Howard

Goats

CASE HISTORY

Recently two goat producers contacted the District Veterinarian with similar flock histories, animals found suddenly dead in the paddock. The first property had a flock of mixed age goats running together on short native pastures. Some goats on this farm were scouring as well as animals found dead. The goats had been drenched a week prior. The second property was growing weaner wether goats grazing lush improved pastures for the past six weeks. No goats appeared sick in the paddock, but eight were found dead over the last fortnight. The wethers had been vaccinated at marking and given a booster six weeks ago before moving onto lush feed.

CLINICAL EXAMINATION

Two scouring goats were examined at the first property: temperatures were normal, however their mentation was quiet/dull. The producer also commented that these goats were losing body condition, even though they had recently been drenched. Faecal samples were collected from the goats for a Worm Egg Count (WEC) to be completed.

At the second property, no live goats were showing signs of illness, so they were left undisturbed in the paddock. Post mortems were completed on two of the dead goats. The kidneys of both goats were abnormal in colour (more red than normal) and very soft (see picture). There was also glucose present in the urine of both goats. The brain of one goat was collected for laboratory analysis.

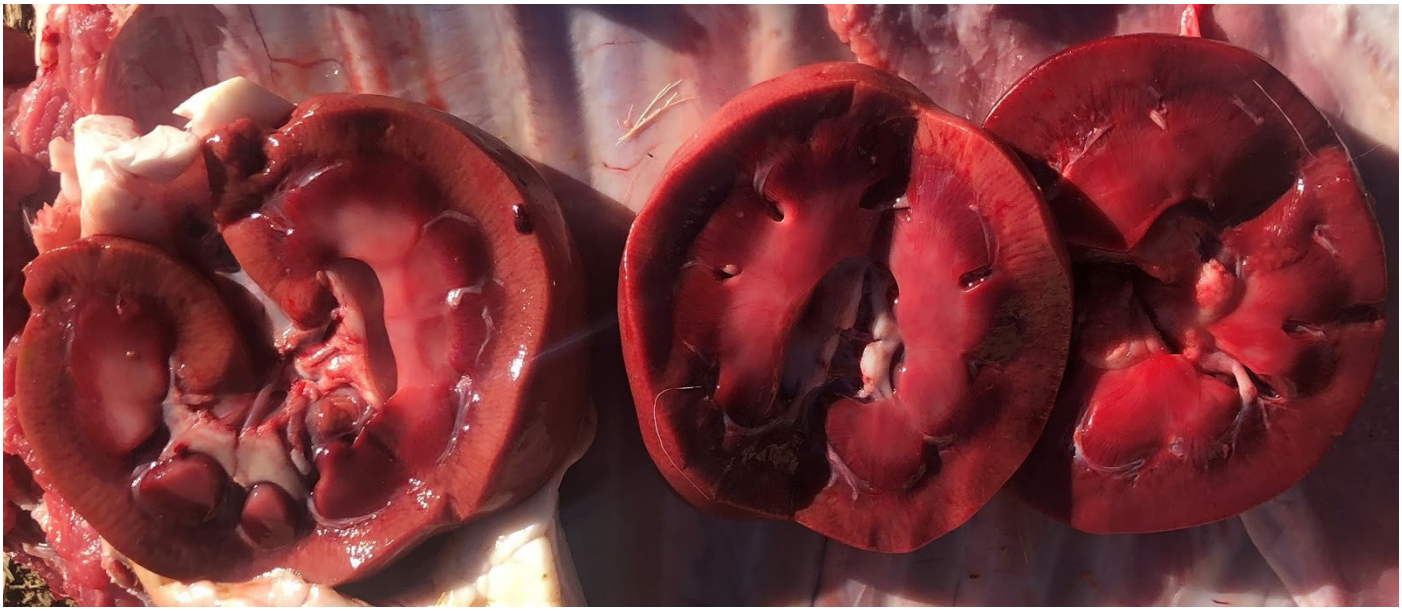


Image 1: Image: Kidneys from goats at the second property, L to R normal kidney colour to abnormal kidney colour (red colour with no distinction between sections of kidney).

DIAGNOSIS

The WEC from the first property was very high at 27,800 eggs per gram (to give you an idea, the drench threshold for dry does or wethers is 250 eggs per gram). Larval culture was performed to determine the species of worm, 100% of the worm eggs were Trichostrongylus species (Black Scour Worm).

Property 2: Histopathology performed on the brain revealed blood vessel damage and fluid buildup. This information combined with soft kidneys and glucose in the urine indicated enterotoxaemia (pulpy kidney) was the cause of death.

WHAT DOES THIS MEAN AND WHAT CAN BE DONE TO PREVENT?

Both of these cases remind us just how important disease prevention strategies are for goats. Just like sheep and cattle herd health programs, it is important to consider assessing worm burden for goats, especially in young stock and prior kidding. Routine WECs, particularly if considering a paddock rotation or when there is a flush of feed, are essential to your management schedule.

WHY DID ANIMALS ON THE FIRST PROPERTY DIE EVEN THOUGH THEY'D BEEN DRENCHED?

Drench resistant worms are particularly widespread in goats. Using too low a dose rate is thought to be a major contributor to drench resistance. If there is a worm burden in your goats, get in touch with your veterinarian to discuss important considerations for drenching goats and an integrated approach to managing parasites.

Similarly, enterotoxaemia is a preventable disease in goats by using a clostridial vaccination. An initial two doses are required followed by a booster dose at least every six months for immunity against enterotoxaemia in goats. Additional boosters may be required prior to times of maximum risk, such as transfers to lush pasture.

WHY DID ANIMALS ON THE SECOND PROPERTY DIE EVEN THOUGH THEY'D BEEN VACCINATED IN THE LAST SIX WEEKS?

A constant lush pasture diet without any access to roughage can cause overgrowth of Clostridium perfringens bacteria in the gut, in suitable conditions this results in enterotoxaemia. This cements the importance of including a source of roughage in the diet as well as maintaining up to date vaccinations.

For further information:
DPI Primefacts: https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0017/721700/Managing-worms-in-goats-in-NSW.pdf
https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0015/142107/goat-health-keeping-the-herd-disease-free.pdf

WormBoss:
http://www.wormboss.com.au/sheep-goats/programs/goats.php

NSW GOVERNMENT | Local Land Services

Case study:

POWER HUNGRY WEANERS

District Veterinarian Evie Duggan

Cattle

CASE HISTORY

Nine months ago 50 head of weaner cattle were agisted onto a nearby property. Two days after being introduced to the paddock nine of the weaners were found showing severe neurological signs - some were staggering with muscle tremors, others were recumbent and salivating. One steer was in a state of mania.

The severity of the clinical signs exhibited resulted in six acute deaths. A veterinarian attended the farm. The live animals were observed to be jaw champing and twitching. Post mortem examination was performed on two dead animals.

Close inspection of the paddock revealed an old onsite tip. Items included old fencing material, machinery parts and batteries. The batteries were degrading with a large amount of the plastic casing cracked off, exposing the lead plates and salts.

DIAGNOSIS

Brain, kidney and liver were submitted from one of the euthanised weaners. Blood samples were collected from the live animals demonstrating clinical illness. Histopathology on the brain showed perivascular haemorrhage - consistent with acute onset lead toxicity. Tissue lead levels were elevated in tissues sampled. All blood samples tested positive for lead, with one heifer had blood lead levels five times greater than the acceptable level, confirming lead toxicity.

WHAT DOES THIS MEAN?

The detection of lead greater than 0.24 mmol renders meat unfit for human consumption. Levels moderate over this baseline do not always results in the expression of clinical signs by the animal. Considering the risk to food safety, the remaining weaners were yarded and all individually blood tested to assess lead levels. Blood samples taken showed that a further three animals had consumed trace amounts of lead. All affected animals' RFIDs were recorded and a notable management tag applied to each affected animal. This ensured the affected stock were both recorded on the NLIS database as lead affected while being easily identifiable to the stock owner when drafting cattle for sale in the future.

Lead is highly mobile within the body moving between blood, tissue and bone. This mobility determines clear time frames for when testing can be undertaken to determine the animal safe to slaughter for human consumption. The six lead affected weaners in this case will been detained on farm for a period of 12 months, until testing can be repeated. Lead levels continue to decline over time, unless animals have ingested lead particles during fixation with the battery itself. Particulate lead is heavy, it sits in the abomasum and acts like a slow releasing bolus; some animals will pass the particulate matter while others may retain it.

WHAT CAN BE DONE TO PREVENT?

Batteries must be disposed of appropriately. The inquisitive nature of young cattle, combined with the palatability of the battery salts creates a great interest in these tasty toxic treats. Batteries aren't the only possible source of lead on farm - lead paint and waste motor oil are just two other examples of common on-farm materials that can cause toxicity. Stock should be properly restricted from areas where rubbish and oil is dumped or burnt.

For further information:

https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0014/102416/Lead-affected-cattle.pdf

Announcements + additional warnings

SHEEP MEASLES

A reminder of the importance of worming your working dogs

Sheep Measles is the description you will receive from abattoirs after condemnation due to Taenia ovis cysts being present in sheep carcasses. T. ovis is a tapeworm hosted by dogs or foxes. As part of the lifecycle, the tapeworm sheds eggs in the faeces of the dog/fox, which then contaminate pasture and are accidentally ingested by sheep. These eggs are able to survive in the environment for at least 300 days. Sheep act as a secondary host to T. ovis - the eggs hatch and the larvae migrate to organs or muscle tissue where they form cysts. These cysts then remain viable for 2-3 months, waiting to be eaten by a dog or fox which they will then infect and develop into an adult tapeworm. The cysts do not cause any issues to the sheep, however they will be condemned based on aesthetics for consumers. The presence of these cysts in the muscle of sheep is a serious cause of financial loss to the sheep meat industry through condemnation.

Prevention is the key - maintain a regular worming schedule for all dogs with a wormer containing praziquantel. Contact your local private veterinarian to discuss the best worming program for your working and pet dogs. Our Biosecurity Officers are always available to assist with pest management plans if fox control is an issue on your farm.

For further information please see:

- *http://www.wormboss.com.au/sheep-goats/files/pages/worms/tapeworms/sheep-measles/Farm_Note_471___Taenia_ovis_sheep_measles_infection_in_sheep.pdf*
- *http://www.wormboss.com.au/sheep-goats/worms/tapeworms/sheep-measles.php*

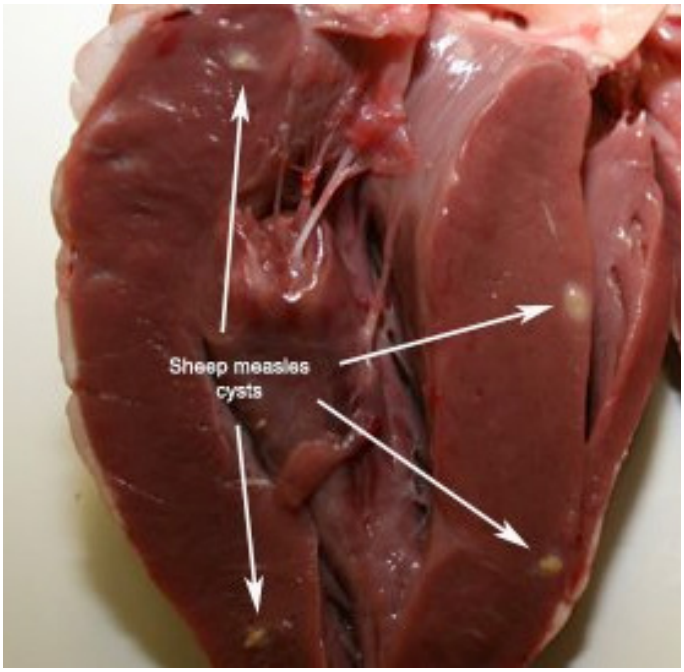


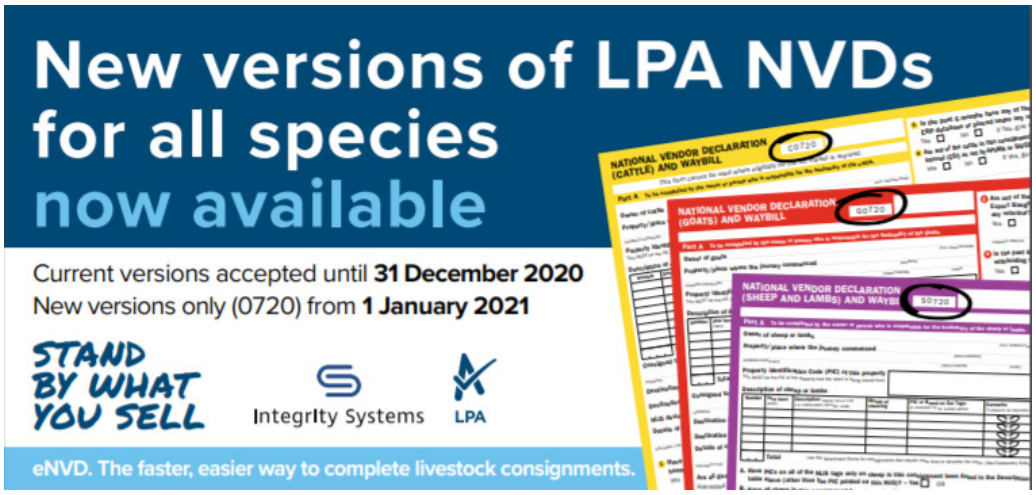
Photo courtesy of David Jenkins
www.wormboss.com.au/sheep-goats/worms/tapeworms/sheep-measles.php

Announcements + additional warnings

CHANGES TO NATIONAL VENDOR DECLARATIONS

New versions of Livestock Production Assurance National Vendor Declarations (LPA NVDs) for all species are now available, identified by version number 0720. Current versions of NVDs for all species - cattle, EU-cattle, sheep and lambs, goats, and bobby calves - will continue to be accepted until 31 December 2020. From 1 January 2021, only the updated versions of all NVDs (0720) will be accepted for all species.

The development of updated versions of LPA NVDs for all species followed a review of all NVD versions by SAFEMEAT in 2019, which recommended a number of changes be made. LPA accredited producers, feedlots and value chain stakeholders can use the electronic National Vendor Declaration (eNVD) platform to automatically access the updated versions. New NVD books can be ordered through the LPA service centre, using LPA log in details. As part of the MLA Accelerated Adoption Initiative announced in November 2019, there is no cost for LPA NVD books until 30 June 2021. For instructions on how to complete the new version (0720) NVDs, visit the ISC website.



Please see: www.mla.com.au/news-and-events/industry-news/five-things-to-know-about-the-new-nvds/#

GUIDELINES FOR PAIN RELIEF IN AUSTRALIAN GRASS FED CATTLE

For your information as a follow on from our recent information about pain relief in lambs. The Cattle Council has released the framework recommendations/guidelines for use of pain relief for routine husbandry procedures.
Visit www.cattlecouncil.com.au/assets/Resources/200605%20Pain%20Relief%20Gui de%20-%20FINAL.pdf

Included in the framework document are the following notes:

1. Use of pain relief is advised for routine, aversive cattle-husbandry procedures including disbudding/dehorning, castration, spaying, branding, tattooing and ear notching.
2. Pain-relief compounds are now relatively available for lay operators, noting many require veterinary prescription.
3. Producers are encouraged to replace surgical procedures with non-surgical replacements if available. Examples include breeding for polled cattle to replace dehorning; using electronic forms of identification to replace branding (where allowed); and using immunocontraception if available and practical to replace castration and spaying.
4. Use of pain relief must not replace good animal welfare practice as described in the Animal Welfare Standards and Guidelines for Cattle.

Our pick: Webinars + podcasts

WEBINAR – STAND BY WHAT YOU SELL! 27 AUGUST 2020 – 1-2PM

Is your integrity record keeping in order? Join Kathleen Allan from Integrity Systems Company to find out, with discussions covering: change to the NVD's; how to use the faster easier new eNVD's platform; LPA accreditation and audits and NLIS transfers and reconciliations.
Find out more here https://www.sheepconnectnsw.com.au/events/738/

WEBINAR – MANAGING GRASS TETANY IN CATTLE

Dr Paul Nilon of Nilon Farm Health discusses the management options for grass tetany in cattle. Paul answers the questions:
What is grass tetany and when does it occur?
How do I manage grass tetany in my herd?
The recording of this webinar can be found here https://youtu.be/CLo1ecjyTGM

PODCAST – PICKING THE RIGHT RAMS THIS SEASON

In this episode of Sheep Connect's 'It's Time for Ewe' podcast series, NSW DPI sheep breeding technical specialist Luke Stephens explores some practical tips for buying the right ram this season.
Listen here or wherever you download your podcasts https://player.whooshkaa.com/shows/sheep-connect-nsw-podcast

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

CONTACT YOUR CLOSEST DISTRICT VETERINARIAN

WAGGA
Emily Stearman - 0437 644 714 or 6923 6300
Dione Howard - 0428 115 134 or 6923 6300
YOUNG
Evie Duggan - 0427 147 939 or 6381 4700
NARRANDERA/GRIFFITH
Sophie Hemley - 0427 696 895 or 6960 1300
HAY
0427 418 006 or 6990 1304
GUNDAGAI
Kristy Stone - 6940 6900