RIVERINA LOCAL LIVESTOCK UPDATE

November

NSW GOVERNMENT | Local Land Services

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Case study: Strawberries in season this spring!

By Amy Underwood, District Vet

Sheep

CASE HISTORY:

Case history: A producer called concerned about red, scabby sores on the legs of approximately 20% of lambs that were weaned 2 weeks ago. The lambs had been running in a lush clover paddock following above average spring rainfall.

CLINICAL EXAMINATION:

On examination, the affected lambs had large scabby lesions between the coronary band (skin just above the claws) and up to the carpus (front knee joint). The lesions were raised, scabby and weeping. When the top of the scabs were knocked off a sore with a strawberry-like surface was revealed. There was no sign of lesions on the interdigital skin. On closer examination, several of the lambs also had small raised scabby lesions around their mouths.

DIAGNOSIS:

Strawberry Footrot. In this case, the vet collected scabs from several lambs to be tested at the laboratory. The tests revealed concurrent Orf virus (also known as scabby mouth virus/contagious pustular dermatitis).

WHAT DOES THIS MEAN?

Strawberry Footrot, despite its name is not related to virulent footrot. The disease occurs when the bacteria *Dermatophilus congolensis* (which normally causes 'Dermo' or lumpy wool) infects broken skin on the legs. Breaks in the skin may be caused by prickly plants or from maceration by water from consistently wet pastures. In some cases of Strawberry Footrot the initial break in the skin is first infected with the Orf virus (the virus that causes "scabby mouth") which makes a large scabby lesion. In wet conditions, this is the perfect site for the 'Dermo' bacteria to colonise.

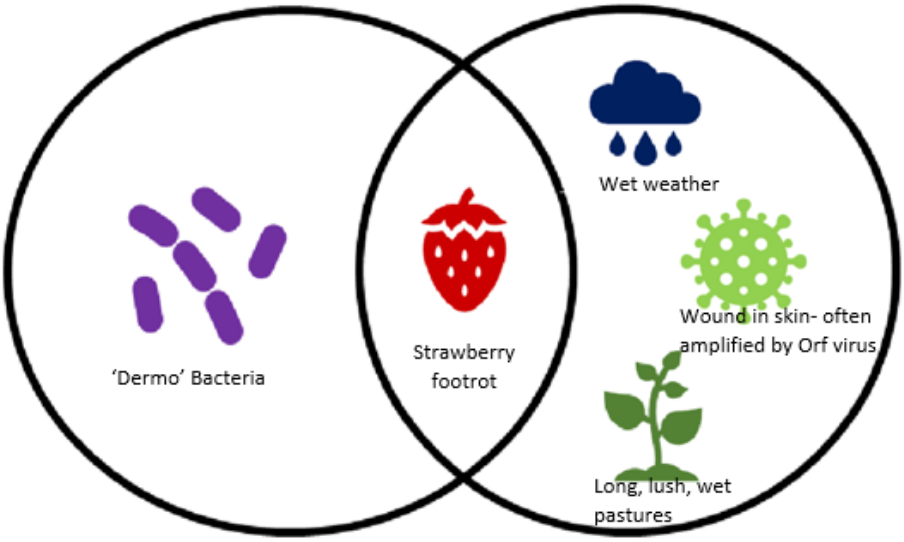
WHAT CAN BE DONE TO PREVENT?

Eliminating a favorable environment for the "bugs"- in this case the bacteria and virus.

The Bacteria:

'Dermo' bacteria are ubiquitous, this means it is normal for the bacteria to be on sheep so it is impossible to eliminate from a flock. Typically, the bacteria cause no issues unless given the right

environment- this being moist conditions, which is typically around the feet of sheep in lush wet spring pastures. If a producer notices signs of Strawberry Footrot they should move sheep into a dry paddock with shorter pastures so the bacteria cannot survive on the legs of the sheep. In severely affected stock, producers should contact their local vet who may prescribe antibiotics to help the sheep overcome the bacterial component of the disease.



Causes of Strawberry Footrot

The Virus:

Orf virus is not always implicated in cases of Strawberry Footrot. If a property with Strawberry Footrot has no known history of Orf a vet can collect scabs to test if Orf is involved in the disease on that property. If Orf virus is implicated in the disease then it is important to be aware that only stressed, naive animals will be susceptible to infection with the virus, therefore reducing stress to the flock may help reduce the incidence of the virus and in turn Strawberry Footrot. Vaccination can also be used at marking to help reduce the severity of any future outbreaks of scabby mouth.

TAKE HOME MESSAGE:

The incidence of Strawberry Footrot this spring is likely to be increased due to lots of long, lush damp pastures. If your sheep or lambs have Strawberry Footrot, move them to shorter drier pastures for the lesions to dry out and don't hesitate to contact your local District Veterinarian with any questions or concerns you have around the disease.

FOR FURTHER INFORMATION:

Refer to the Local Livestock Vets August Animal Health Update to find out more about Orf virus and 'Dermo' as individual diseases.

Case study: 'Transport Troubles'

By Georgia Grimmond, District Vet

Sheep

CASE HISTORY:

A consignment of 500 x 6 month old cross-bred weaners were purchased and transported from a local sale yard to a property in the Riverina. The consignment had initially originated from a property in the Western LLS region, were weaned onto the truck and had gone for an extended period of time without feed. On arrival at the farm 10% of the mob presented with clinical signs consistent with transit tetany (low calcium and glucose +/- low magnesium).

Following the provision of mineral supplements and good quality vetch hay, the weaners improved. They were let out to graze a barley crop and supplemented with ad lib access to vetch hay and loose lick supplements. Five days later the producer reported deaths within the mob. The District Veterinarian was called out to investigate.

CLINICAL EXAMINATION:

Approximately 20% of the mob appeared lethargic, were separated from the main mob and were not observed to be grazing. Scouring was observed in some of these weaners, and an occasional cough was audible.

POST-MORTEM FINDINGS:

On post-mortem there was evidence of worm burden, with inflammation and damage to the abomasum and small intestinal tract and dark, malodourous scours evident in the large intestines. There was also signs of protein loss with fluid build-up in the abdomen (ascites) and thoracic cavity (pleural effusion), attributed to parasitism. Signs consistent with negative energy balance (weight loss) were also observed.

Examination of the lungs revealed an acute pneumonia.

Faecal egg count averaged 480 eggs per gram with both scour worms, barbers pole worm and a moderate amount of coccidia oocysts present.

Lung cultures revealed overgrowth of normal commensal bacteria.

DIAGNOSIS:

1. Transit tetany – Hypocalcaemia, Hypoglycaemia & Hypomagnesaemia
2. Acute Pneumonia
3. Internal Parasitism – Brown Stomach Worm, Black Scour Worm, Barbers Pole Worm & Coccidia.

Credit: Lisa Lund

WHAT DOES THIS MEAN?

This case highlights just some of the many livestock health issues that can occur with long distance transport. This is largely attributed to stock succumbing to disease as a result of prolonged periods without feed which is compounded by the overall stress of transport.

Stock that go for extended periods of time off feed can develop what we call 'dead rumen' whereby the microbes within the rumen die. This reduces the animal's ability to digest and absorb nutrients. The decline in their normal microbial population within their digestive tract or 'gut flora' provides the opportunity for the overgrowth of disease-causing pathogens within their gut, predisposing them to diseases such as salmonellosis and coccidiosis.

As with this case, stock can develop transit tetany, or low calcium, glucose and/or magnesium, due to a reduced capacity to absorb nutrients from the gut at a time when their demand for nutrients increases.

The stress of transportation (particularly in young stock) can suppresse their immune system which increases their risk of disease. With transport also increasing the intensity and frequency of contact between animals, we create an environment perfect for disease spread. In this case, the stress of both weaning and transportation allowed for the proliferation of intestinal parasites and potentiated the development and spread of pneumonia.

WHAT CAN BE DONE TO PREVENT?

Long distance transport of livestock is never without risk. However, by minimising the time off feed and ensuring livestock receive a proper induction when they arrive on farm is key to mitigating losses. The following is a checklist producers should consider when introducing stock that have been transported long distances.

1. **Ask questions!** Ensuring you are aware of the history of purchased livestock helps you to prepare and make plans so you can mitigate disease risk.
2. **Provide safe feed source on arrival:** when stock arrive on farm ensure they are provided good quality hay before introducing new feed or putting them out to pasture. Hay is a relatively safe feed source that will provide adequate gut fill and 'kick start' the rumen bugs into functioning properly again.
3. **Quarantine drench on arrival:** Immune suppressed animals will be particularly susceptible to worms and are likely to have high faecal shedding. Ensure you use a drench(s) that contains four active ingredients including one new class anthelmintic e.g. Derquantel (Startect) or Monepantel (Zolvix Plus) to ensure you don't introduce resistant worms.
4. **Vaccination:** ensure livestock are fully up to date with vaccinations, particularly for 5-in-1 and against other diseases endemic to your property.
5. **Introduce new diets slowly:** When livestock are suddenly introduced to certain feeds after a period without eating it can predispose them to a number of diseases. For example, acidosis (when fed high starch feeds), pulpy kidney (when introduced to lush feed) or nitrate/nitrite toxicity (if they are not adapted to high nitrate concentration in plants).

FOR FURTHER INFORMATION:

Livestock Requirements for Transport

Announcements and additional warnings

CHLAMYDIAL ARTHRITIS IN GROWING LAMBS

We commonly link outbreaks of arthritis with management operations such as marking, mulesing or dipping, where bacteria can enter the circulation via an open wound.

Chlamydial arthritis caused by Chlamydia pecorum can occur in rapidly growing lambs up to about six months of age in the absence of these management practices.

Lameness characterised by a stiff, stilted gait, develops rapidly. When moved, lambs will often 'warm out of it', and re-join mob mates. Mortality (eg. death) rates are low, however morbidity (eg. sick/affected) rates can reach up to 50% of the mob in some cases. Animals are often lethargic due to the concurrent high body temperature. A presumptive diagnosis can be made based on presentation and history.

Joint culture of affected animals or testing for Chlamydia antibodies in blood >7 days post first clinical signs, confirms diagnosis. Antibodies are negligible by 56 days post infection making retrospective diagnosis difficult. Affected lambs respond well to oxytetracycline antibiotics however delaying treatment can result in chronic arthritis in some sheep.

A forecast wet start to summer should keep lucerne pastures fresh across the Riverina, as was seen in the summer of 2018/19. This provides a wonderful grazing opportunity for rapidly growing lambs but may concurrently increase the risk of chlamydial arthritis outbreaks.

While the triggers for disease are poorly understood, rapidly growing lambs less than 6 months of age, in feedlots or grazing lush/irrigated lucerne can be affected. British breeds are most at risk but cases have been seen in merino mobs across the region.

While deaths are uncommon from Chlamydial arthritis, humid summer conditions with extreme heat events mean that some animals may succumb to overheating/misadventure or concurrent summer pneumonia.

If you wish to discuss lameness or lambs that are presenting with similar signs to those described above, please get in touch with your local district veterinarian – we are looking for blood samples from affected lambs!

GRASS SEEDS IN SHEEP

Krystle Yin, CSU Veterinary Science Student

Grass seeds and burrs cause a number of serious production and health problems in sheep particularly in the excellent growing seasons we have seen in the last two years. It is important to be aware of the risks of grass seeds during our current spring and going into summer. Notably, merinos are more prone to damage by seeds and young sheep may be most affected.

Effects of grass seeds on sheep

Grass seeds attach to the fleece and become embedded in the skin and muscle and cause damage to eyes, mouth, ears and feet.

- Irritation
  - Rough, discoloured or cotted wool from biting or rubbing may lead to discounts and higher processing costs on fleeces.
- Secondary bacterial infection
  - Abscesses may form
  - Increased risk of flystrike
  - Tetanus
- Damage to eyes, mouth, ears and feet:
  - Reduced feed and water intake
  - Starvation
  - Blindness and wounds to face
  - Lameness and reluctance to move
- Severe pain, distress and death
- Reduced bodyweight and growth rates
- Carcass downgrading and condemnation as infested carcasses must be trimmed heavily.

Strategies to protect from grass seeds

Shearing:

- Shear sheep before grass seeds mature.
- Shearing is the most effective method of relieving pain and discomfort of sheep suffering from grass seeds.

Animal management:

- Strategic short-term heavy stocking rates to reduce potential infestations when seed heads emerge.
- Use cattle to graze before sheep, allowing them to access shorter feed. Cattle notoriously are not bothered by grass seeds, though horses and goats can have a similar effect.
- Identify when problem grasses set seed and aim to graze these pastures prior to this.
- In heavily grass infested years, wean early on to prepared pastures or into feedlots.

Genetic Improvement:

- Selection for less wool cover over the face and fewer body wrinkles can reduce the complications associated with grass seed infestation.

Pasture management – chemical, slashing and fodder conservation

- Contact your local agronomist to discuss the best options for your pasture mix.

You can see how grass seeds and other sheep health conditions can reduce sheep carcass quality and quantity by checking out Animal Health Australia's app Sheep Health Conditions – Carcass Impacts (sheepcarcassconditions.web.app).

FARMERS' SHEEP HEALTH AND MANAGEMENT IN NSW SURVEY QUESTIONNAIRE - $50 WOOLWORTHS GIFT CARD AVAILABLE TO PARTICIPANTS

This survey is part of a research project being conducted at The University of Sydney to better understand the current management practices and impact of sheep diseases, risk factors contributing to diseases, as well as the financial and animal welfare impact.

It is anticipated that information and data collected as part of the study will enable a greater understanding of the common sheep health issues in NSW as well as how to better improve disease management in-order to increase production and welfare on NSW sheep farms.

As part of this study, this questionnaire has been administered to sheep producers within NSW.

You can participate in the survey here.

To claim your $50 gift card upon completion, take a photo or screenshot of the screen after you've submitted your responses and email or text through to elizabeth.ferguson@lls.nsw.gov.au or 0439 557 567

MOVED OR CHANGED CONTACT DETAILS? PLEASE LET US KNOW

Accurate records are essential for our response to emergencies affecting agriculture and animals, and keeping you updated on relevant news and events. We'd greatly appreciate landholders keeping us informed on any change in your contact details.

To let us know of any changes, please contact us on 1300 795 299.

Upcoming events

THURSDAY 18TH NOVEMBER 2021 - WEBINAR – IT'S FLY TIME! NOVEMBER 2021 UPDATE

Australian Wool Innovation's 'It's Fly Time!' assists growers in managing high-risk fly conditions, with tips for preventing flystrike, prioritising sheep for monitoring and treatment and options for when it does occur. There are also handy factsheets for further information, quick tips videos and links to tools and other publications.

Register now to join Dr Tim Gole, respected veterinarian and sheep consultant, for a one-hour webinar on Thursday, 18 November at 1:00 pm AEDST.

Sheep Connect NSW - WEBINAR- It's Fly Time! November 2021 Update

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

CONTACT YOUR CLOSEST DISTRICT VETERINARIAN

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