RIVERINA LOCAL LIVESTOCK UPDATE

June
Case study: **POOR, “LITTLE” LAMBS**

District Veterinarian Courtney Simkin

**CASE HISTORY**
A producer called concerned about his lambs at the time 200 head of second cross ewes were halfway through lambing. When born the lambs were low birth weight, with visible hip and ribs, 'scrawny' in appearance. The ewes appeared to be in good BCS with large udders, although lambs at 3 weeks of age did not appear to be gaining weight. It was estimated that 25 lambs had died with a large proportion being two-three weeks old.

**CLINICAL EXAMINATION**
Paddock inspection of the mob indicated the ewes were in good health, most laying down due to time of day or if up actively feeding a lamb. Pasture was of high quality.

**POST MORTEM FINDINGS**
The first 3 lambs were 2-3 weeks old. All had little visceral (abdominal) or subcutaneous (under the skin) fat. All three lambs had multiple sections in their lungs that were dark purple (consolidated). There were some faeces at the end of their gastrointestinal tracts, but their stomachs were empty.

Lamb 4 appeared to have typical findings of starvation/mismothering/exposure. Lungs were normal, no stomach contents and brown fat had been metabolised.

**SO, WHAT DOES THIS MEAN?**
The lambs were all born of low birth weight, putting them at a disadvantage from birth and at much higher risk of death (especially in the first 48 hours post-birth).

There are two main causes of low birth weight lambs:
- low maternal nutrition during the first trimester of pregnancy resulting in poor placental development, therefore reducing the capacity to supply nutrients to the foetus throughout pregnancy - also known as inter-uterine growth restriction (IUGR).
- low maternal nutrition in the last trimester to last month of pregnancy. It is during this stage that the lamb gains most of its body weight and lays down brown fat, critical to neonatal survival.

In this case although the ewes were in good BCS at the end of pregnancy, had well developed udders and were in a paddock with good quality feed it is likely that those first 90 days of pregnancy had nutritional restrictions. The contributed to the low birth weights, those that didn’t die took 3-4 weeks to thrive. The older lambs are now fat and playing, while lambs being born are still of low birth weight and unfortunately continue to die during any adverse weather conditions. Prevention is better than cure…

**WHAT CAN WE DO?**
Consistent, good quality feed is important throughout all stages of pregnancy. In the first trimester nutrition is supporting the placental attachments (first 80-90 days of pregnancy), the pathway for nutrient supply between the ewe and the lambs. In the second trimester major organ development occurs. The third trimester is about lamb birth weight and brown fat development, imperative for survival to stand and drink from the ewe. Concurrently late gestation nutrition has an important role in udder development and colostrum quality and quantity. A rising plain of nutrition for the ewe is essential to lamb survival.

If you do have low birth weight lambs (more common in twinning ewes) then there are ways to help bolster the lambs chances of survival:
- Make sure the ewes have good nutrition (especially in the last 30 days of pregnancy) so they can have good quality and quantity of colostrum, followed by good milk production.
- Having a lambing paddock with good coverage/shelter is a good way to reduce lambs exposure to the elements during their first vital 48 hours.
- Have good quality roughage in the ewes’ diet, roughage increases the fat component of milk, which is dense in energy for the lamb.

**DIAGNOSIS**
Abnormal lung tissue was sent away for bacterial culture however did results in any growth. Microscopic examination showed sections of poorly inflated or un inflated lung. This can occur in low birth weight lambs or lambs that have been exposed to cold and are unable to maintain body heat.
District Veterinarian Emily Stearman

CASE HISTORY

We recently attended a farm reporting 3 cows found dead, all found in the morning, grazing in two separate mobs, multiple days in a row. On the day of contact one cow was down, the first to present with any clinical signs. Cattle were in two mobs grazing a lush wheat crop and previously a grazing oats crop. Cows affected were Angus with 6-month-old calves at foot. Observations made of dead animals indicated a blown-up appearance when found.

CLINICAL EXAMINATION

• Down Cow: Found in lateral recumbency unable to rise. Marked muscle tremor, throwing head back and apparently aggressive; heart rate and respiratory rate were elevated and the cow had distention of the left flank.

• Dead Cow: Some areas of petechial hemorrhage with the presence of moderate amounts of froth in the rumen. No obvious bloat line visible on PM.

DIAGNOSIS:

Blood was collected from the down cow and eye fluid from the dead cow to assess calcium and magnesium levels. Results indicated the down cow was clinically affected by hypomagnesemia or grass tetany, with concurrently low blood calcium. Petechial hemorrhages found in the dead cow on post mortem supported death by hypomagnesemia. Eye fluid levels for calcium and magnesium were normal – a common finding if sampling occurs more than 12hrs post death.

WHAT DOES THIS MEAN?

Autumn calving cows of British breed are the highest risk group for grass tetany. High potassium soils containing rapidly growing short feed and mild morning daily temperatures followed by frosty conditions are the highest risk for clinical signs. The first clinical signs of mild aggression and muscle tremor are often missed with the above ‘healthy cows found dead one morning’ being to classic presentation. In this case the cows went down due to low blood magnesium, low blood calcium follows as a common sequelae. Calcium and magnesium play very important roles in muscle contraction, hence the type of clinical signs we see with low levels; subsequently gut muscle contraction is reduced and some down cattle will have concurrent rumen distention. Froth/foam in the rumen is indicative of a high protein diet. Protein creates a viscous rumen fluid which often traps gas particles preventing normal rumen stratification (lower liquid portion, with a fibrous matt of fibre content). An effective fibre source is essential at all times. Ensure constant access to straws or hays, this will help to disperse rumen gasses and allow belching. The high nutrient content can reduce rumen pH and in some cases replicate conditions similar to what we see in animals grazing high grain diets. Supplementation with loose lick that contains an ionophore (Rumensin for cattle) helps to reduce the amount of gas-producing bacteria in the gut, which often thrive in low rumen pH environments. The combination of fibre and an ionophore helps reduce gas production and ensures remaining gas is allowed to escape other gut contents.

WHAT CAN BE DONE TO PREVENT?

• Considerations for Grass Tetany: Conditions over the next few months will be conducive to clinical cases of grass tetany. A combination of environmental, plant and animal interactions occur for blood levels of magnesium to reduce to critical levels in a cow/ewe. Know the risks – cows in peak lactation, especially if pregnant again; mild daily temperature ranges followed by frost; high potassium soils, rapidly growing green feed. Manage the risks – ensure cattle have constant access to a source of magnesium, missing just one day of supplementation can be fatal. Many magnesium supplements are bitter to taste, combining these with more palatable components such as salt, molasses or grain is highly recommended. Commercial products in liquid, loose lick and block form are available, blocks being the least preferred method of supplementation due to the volume of intake required to meet the animal’s daily requirements. Direct application of magnesium onto hay material is also highly effective, providing a roughage source and a source of magnesium are both essential at this time of year.

• Considerations for Bloat: A lot of research has gone into creating high nutrient, dual purpose cereal varieties, a wonderful asset to mixed farming enterprises. It is critical that we consider the plant properties when grazing – high protein, high energy and variable fibre content. An effective fibre source is essential at all times. Ensure constant access to straw or hay, this will help to disperse rumen gasses and allow belching. The high nutrient content can reduce rumen pH and in some cases replicate conditions similar to what we see in animals grazing high grain diets. Supplementation with loose lick that contains an ionophore (Rumensin for cattle) helps to reduce the amount of gas-producing bacteria in the gut, which often thrive in low rumen pH environments. The combination of fibre and an ionophore helps reduce gas production and ensures remaining gas is allowed to escape other gut contents.

Loose licks that contain calcium, magnesium and an ionophore can be utilised to prevent both grass tetany and bloat. For further advice on either of these topics please contact your local District Veterinarian.

LAME EWES THROUGHOUT RIVERINA

Our lush autumn and early winter conditions has increased concerns of foot abscess in heavily pregnant or lactating ewes. The 2 most common causes of lameness at the moment are:

1. Foot abscesses

Appearing as a severe lameness, typically in one foot. When undisturbed the sheep will often hold the foot up. Foot abscesses is commonly seen in heavier sheep (heavily pregnant ewes, rams, etc). It is associated with damage to the sole of the foot muddy conditions in rocky terrain, and poor foot conformation. Antibiotics in the treatment of abscess should not be used unless in conjunction with foot paring to allow the abscess to drain and after discussion with a veterinarian.

2. Ovine interdigital dermatitis (scald)

In conditions where the foot remain moist for most of the day, when grazing crop or lush pasture, the skin between the toes becomes damaged and loses natural resilience against environmental bacteria. With the skin damaged, Fusobacterium necrophorum and other bacteria that are normally found in the environment establish and infect the tissue. The disease often resolves without intervention as seasonal conditions dry, facilitating the feet to dry and skin damage to heal. Management for scald should focus on changing the environment of the foot - if the skin is no longer moist and damaged, the bacteria are unable to survive. Foot bathing with 10% zinc sulphate can be effective in drying the foot, but is ineffective if sheep return to moist pastures.

If you are experiencing issues with lameness, please call your local district veterinarian to discuss a management plan tailored to your property conditions & flock.

NEW LICE TREATMENT PRODUCT ALERT - BE INVOLVED IN THE FIRST FIELD TRIALS!

Eurofins Animal Health (EAH) will be conducting a series of off-shears and long wool sheep lice field trials to assess a novel sheep lice treatment. EAH are interested in connecting with producers currently experiencing lice issues and willing to participate in developmental field work. All sheep in the trial mobs will be treated with the new lice product and remain on-farm under routine management. EAH will manage all treatment and efficacy assessment procedures. In addition to the control of lice issues at the site, producers will be compensated for their resource time.

For further information, please contact Ry Evans on 0455 027 554 or ryanevans@eurofins.com

ARE YOU GETTING AS MANY LAMBS AS YOU THINK YOU SHOULD?

Recent drought conditions have reduced lamb marking percentages for many, and feeding ewes has, in many cases, become common practice. So what management practices result in better lambing results and what should you avoid? To provide better recommendations Dr Susan Robertson is calling for your input. You are invited to anonymously complete a survey of Australian sheep breeders to help identify what works and what doesn’t. For more information and link to the survey: https://www.research.net/r/Containment_feeding
WEBINAR SERIES FOR NEW & ASPIRING SHEEP PRODUCERS - ONLINE TONIGHT!

A free webinar series aimed at giving new and aspiring producers a step up into the sheep industry, this webinar will be held by Neil McDonald - renowned stock handler, dog trainer and sheep producer who will discuss the foundations of working sheep effectively and efficiently both in the yards and paddock.

This webinar will be recorded & published online. Online 7:30 - 8:30 pm Monday 15th June 2020. To register: http://www.leadingsheep.com.au/event-list/?ee=365

GRAHAM CENTRE LIVESTOCK FORUM

Livestock producers will be able to tap into practical research to improve their production in an online and interactive Forum to be hosted by the Graham Centre for Agricultural Innovation on Friday 31 July. The program includes producers sharing their experiences, panel discussions with industry experts and new beef and sheep industry research that can be applied directly on-farm. Key topics for discussion include containment feeding, sheep reproduction, genetic benchmarking in the merino industry, dual purpose mixes and cover cropping, extracting more value from cull cows and multi-breed genomic evaluation in beef cattle. Check out the full program: www.csu.edu.au/research/grahamcentre/events/2020-graham-centre-livestock-forum
The Graham Centre is a research alliance between Charles Sturt University and the NSW Department of Primary Industries.

During this time of isolation it’s important to stay connected and keep up-to-date with industry advancements and there’ll be plenty of opportunities to network with other producers and the researchers in the interactive online platform. The Forum will be held from 9am to 1pm on Friday 31 July and will cost $10 to attend. Registrations will open soon and people can sign up for alerts about the Forum: http://eepurl.com/g4u4pH or for more information contact Toni Nugent on 0418 974 775.

The 2020 Forum is supported by Meat & Livestock Australia, Riverina Local Land Services, Animal Health Australia, ProWay Livestock Equipment and Sheep Connect NSW.

USING PREGNANCY SCANNING INFORMATION TO OPTIMISE REPRODUCTION RATE

18th June 1 pm | Join Dr Sue Hatcher as she explores the importance of differentially managing ewes based on scanning results to achieve maximum success. |https://sheepconnectnsw.com.au/events/

DRENCH RESISTANCE

25th June 1 pm | Join Dr Matt Playford to explore the current problem of drench resistance and what producers can do to slow the development of drench resistance on their farm. |https://sheepconnectnsw.com.au/events/

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
Courtney Simkin - 0427 418 006 or 6990 1304
GUNDAGAI
Kristy Stone - 6940 6900
Katelyn Braine - 0428 262 112 or 6940 6900

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