Animal Health Update

South East Local Land Services

August 2021

SOUTH EAST MONTHLY DISEASE SURVEILLANCE RESULTS

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Your local District Vet can help you to investigate, diagnose and manage herd health or mortality issues in your herd or flock. They provide impartial advice and can assist you with disease management and your biosecurity plan. Each month we provide this report of diseases and issues detected and managed in the last month by producers, their veterinarians and animal health advisors.

Persistently wet raining and windy conditions have created challenging times for stock over this last month.

Exposure takes a big toll on new born lambs.

Lambing ewes in particular have struggled with conditions and losses have been seen in ewes and new born lambs. Livestock can acclimatise to cold weather, so low temperatures are not a big problem if the air is dry and still. But if cold temperatures are accompanied by wind or rain, such as has occurred over the last month, animals are much less able to cope. As well as weather factors, the impact is dependent on animal age, fleece/hair cover, fatness, and pregnancy status, which is why freshly shorn, or thin/frail stock, late pregnant ewes and new-born, are most at risk.

New born lambs born to ewes in good condition do have good fat reserves which are designed to last them their first 24 hours, however a smaller twin lamb born in a high wind chill environment will quickly utilise its reserves. Cold, wet and windy weather that persists for several days is likely to be more harmful, and this is what we have just experienced. In bad weather animals will be reluctant to leave shelter to graze, but they need the energy from food to help them keep warm and produce milk. For prolonged events providing them with supplementary feed (e.g. good quality hay) will help but with paddocks extremely saturated getting feed to animals was extremely difficult.

Vulnerable animals will do best in well-sheltered paddocks with dense layered shelter belts. Choose paddocks with slopes that protect against the prevailing wind. Other topographic features like rocky outcrops and large native tussocks can also provide shelter. Once livestock have become cold and wet, they may be very reluctant to move, so relocation should be done before the weather event starts.

Perinatal ewe deaths have been investigated. These are best investigated as soon as possible with a postmortem of terminal animals to determine the cause. Deaths in ewes have been seen as a result of dystocia (large lambs or twins), pregnancy toxaemia, hypocalcaemia and hypomagnesaemia. Although checking ewes for dystocia can result in further mis-mothering, a down ewe should always be checked for a presenting lamb. Stuck lambs will result in septicaemia, blood poisoning and death.



Pregnancy toxaemia occurs where the energy or glucose demands of the fetuses are not being met and the ewe switches to an emergency energy source (ketones) which makes her sick and further put her off her feed. Ensure ewes have adequate quality green feed in front of them.

Hypocalcaemia and hypomagnesaemia are more usually seen when lambing on crop situations, however this year weather and pasture conditions, especially in paddocks with high grass and low clover levels, have created a higher risk of these diseases. Again, ensure adequate feed and the provision of supplement may be advised. Provide a 1:1:1 loose lick of salt, agricultural limestone (Ca) and Causmag (Mg). Problems can still occur even with loose lick provided. Please contact us if you are having issues as an accurate diagnosis is important.

Cattle deaths from Grass tetany: Grass tetany (hypomagnesaemia) has been diagnosed as the cause of death in lactating cows in the district. Wintery weather and short green grass dominated pastures have created a high-risk environment for grass tetany. Low levels of magnesium in the blood is the main cause of grass tetany. The simple form is caused by a magnesium deficiency and a complex form caused by high potassium in the diet interfering with magnesium uptake from the rumen. Cows are mostly found dead or down with evidence of paddling and sudden death. Muscle twitching, staggers and aggression may be seen. Convulsions are a progression of this disease and death may follow soon after. Excitable behaviour changes in stock may indicate subclinical hypomagnesaemia.

Treatment:

Calcium and magnesium injection. This in available at a 4 in 1 flow pack from rural stores or your veterinarian and can be given under the skin.

Feed supplementation with magnesium (60g/head/day Causmag® fed out on hay), looselicks (Salt:Lime:Causmag®; 1:1:1), magnesium lick blocks or oral magnesium boluses (Rumevite® Magnesium Capsule).

If treated early the prognosis can be good.

Prevention:

Move calving time to spring if possible.

Supplement cattle with magnesium (60g/head/day Causmag® fed out on hay), looselicks (Salt:Lime:Causmag®; 1:1:1), magnesium lick blocks or oral magnesium boluses (Rumevite® Magnesium Capsule).

Increase roughage intake. Feed more roughage/hay to encourage rumination and salivation. This encourages magnesium absorption from the rumen.

Increase the clover component of your pastures.

Minimize stress in grazing stock and recognise high risk situations.

Grass Tetany in Cattle – treatment and prevention (DPI 2009): https://www.dpi.nsw.gov.au/animals-and-livestock/beef-cattle/health-and-disease/general/grass-tetany-treatment-prevention

Foot abscess in sheep. This winter has been extremely challenging on feet. Conditions are extremely wet resulting in problems of interdigital dermatitis, benign foot rot or scald, virulent foot rot and foot abscess. Foot rot can often be confused with other causes of lameness, most commonly foot abscess,

as this disease increases in prevalence when paddocks are wet. Sheep with foot abscess are often very reluctant to put their foot on the ground as it is usually very swollen, hot and painful. The abscess may burst out at the heel, the coronary band or between the toes and discharge cream coloured or blood tinged pus. Heavy sheep such as pregnant ewes and rams are most often affected, and antibiotic treatment is frequently required to resolve infections. If lameness is persisting in a proportion of your sheep you must call your local District Veterinarian as virulent foot rot is a possibility and a notifiable disease. For more information see: https://www.dpi.nsw.gov.au/animals-and-livestock/sheep/health/footrot/footrot-sheep-goat

Weaner ill thrift and scours. A number of cases of weaner ill thrift have been investigated. In cases of scouring a FEC worm test is the first step as on many properties winter worms were found to be the cause. Wet conditions underfoot and stress has also contributed to bacterial or coccidial scours, which require talking to your veterinarian for a diagnosis and treatment options. Ill thrift without scouring may be a result of deficiency of energy or protein in the feed, or micronutrients such as selenium.

Pinkeye in sheep: Pink eye outbreaks in sheep have been reported to have been persisting into the winter. Although yarding sheep can cause further transmission of pinkeye it is best to recognise and treat affected sheep sooner rather than later, by first checking for grass seeds then treating with an effective treatment such as terramycin spray. Orbenin eye ointment is effective in some cases and ineffective in others due to the variety of causative organisms. Consult with your district or private veterinarian about treatment options. In some cases, injectable antibiotics may be required.

Calf scours has been causing issues on some properties. When scours are occurring, antibiotics is seldom required but deaths do occur from dehydration. Provide a change of paddock and then more closely monitor mobs for affected calves. Catching calves that are unwell and drenching with electrolyte enriched fluids such as vytrate can be a life saver. If you are getting calf deaths talk to your veterinarian.

Listeriosis found to be causing late stage sheep abortions. A concerning number of early foetuses were seen in the paddock. The veterinarian was notified and the producer donned some gloves and carefully collected the foetuses and any visible birth membranes to submit to the lab. This was the best way to get a prompt diagnosis. Blood tests of the ewe mob at the first opportunity can also yield results of other causes of abortion.

PAIN RELIEF OPTIONS FOR MULESING, CASTRATION AND TAIL DOCKING SHEEP

Alexandra Stephens District Veterinarian Yass.

The decision not to mules is an admirable goal for the industry but must be worked towards with years of selective breeding and then be backed with an integrated fly management plan. In the interim, although still optional in NSW, pain relief and the adoption of the smaller modified mules at lamb marking is widely supported and utilised by the industry. Another new mulesing option worth considering, and trialing is the liquid nitrogen mulesing option where the excess breach skin is frozen off by a cleverly designed liquid nitrogen applicator. It causes less pain and no open wounds. For more information see the following links.

https://www.abc.net.au/news/rural/2019-03-11/liquid-nitrogen-mulesing-alternative/10878280 https://agvetinnovations.com/2019/11/20/what-is-sheep-freeze-branding/

Strong progress has been made in the field of pain relief around lamb marking. With new products entering the market, there are now multiple forms of pain relief available. If you are introducing pain relief to your lamb marking program for the first time, one form of pain relief will be beneficial alone, but the best results are seen when pain relief is layered or multimodal (i.e. two forms are used together). Pain relief at lamb marking reduces the stress on the lambs and the time taken to mother up post marking.

There are now several options available for producers. To assist you we have put together this guide to present the options. The below table shows all available registered pain relief products that can be used in lambs in NSW:

Product Name	Active ingredients	Description & how it's administered	Veterinary Prescription Needed?	WHP	When would it be useful?
Tri-Solfen	Lignocaine(fast acting pain relief), bupivicaine (longer acting pain relief), adrenaline (reduces bleeding), cetrimide (antiseptic)	Gel spray applied to the wound providing antiseptic and local anaesthetic.	No	90 days	When there is an open wound - mulesing, surgical castration, gas knife tail docking (i.e. not using rings).
Buccalgesic	Meloxicam	Oral liquid to be put between the molar teeth and cheek.	Yes	10 days	General pain relief provided no matter which tail docking or castration method used.
Metacam20	Meloxicam	Sub-cutaneous injection providing anti-inflammatory action and analgesia. Ideally administered prior to being in the cradle.	Yes	11 days	General pain relief provided, no matter which tail docking or castration method used.
Numnuts	Lignocaine	Injection while castrator or tail ring is applied using Numnuts applicator providing anaesthetic to the area injected.	Yes	0 days	When using the Numnuts applicator to apply castrator and tail rings.

For a comprehensive break down of the cost of all of the above products per lamb please see: http://www.flyboss.com.au/sheep-goats/management/breech-modification/pain-relief-fags.php The most effective approach to managing pain in lambs is to use a local anaesthetic, topical (Trisolfen) or injected (Numnuts), combined with a long acting pain- relief /anti-inflammatory (Buccalgesic or Metacam20).

Tri-Solfen is used for open exterior wounds, it is a topical local anesthetic and antiseptic spray and was released in 2007.

Numnuts is a system/device released in 2019 which injects a long acting local anesthetic (numocaine) around the ring used for either castration or tail docking.

Buccalgesic and metacam are both meloxicam based anti-inflammatory drugs, released in 2016. Buccalgesic offers a good addition to Trisolfen to extend the pain relief for sheep undergoing surgical mulesing or offering pain relief on its own to those just undergoing castration, tail docking or dehorning.

For more information on these products and how they work please see:

https://www.wool.com/globalassets/wool/sheep/research-publications/welfare/improved-pain-relief/btb-dec2019-anaesthetics-analgesics-widely-adopted-by-woolgrowers.pdf

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SURVIVING THE FIRST DAYS

Lou Baskind, District Veterinarian

In Australia the leading cause of death in new born lambs is what is referred to as starvation-mismothering. It may surprise you that in most flocks factors like predators or infections have only a very small role to play in lamb losses, while starvation-mismothering accounts for almost sixty percent of new born lamb deaths.

KEY POINTS:

- Starvation- mismothering, not predators or infections, are responsible for sixty percent of new born lamb deaths
- The first few hours are crucial, as that is when the bond is formed between the ewe and the lamb
- Reducing flock size with temporary fencing, or paddock allocation, is a good way to reduce the risk of mismothering.

The term 'mismothering' seems to lay all the blame on the ewe. Other common expressions like "merinos are bad mothers" also permit us to view these losses as normal—there is an assumption that the ewe won't do her part and dead lambs are an inevitable consequence. It is my view that we should challenge this mindset. If we don't give the ewe the chance to 'be the best mother she can be', then these losses are not a fault of the ewe... they are the fault of our management.

The ewe is essential to lamb survival because she provides nutrition, immunity to disease, protection from weather, protection from predators, comfort, and teaching. Without its mother's nurture, even a healthy good-sized lamb will not survive more than about four days without intervention.

The bond between the mother and lamb forms in just the first few hours when the ewe cleans up her lamb and the lamb finds the udder and starts to suckle. The ewe and lamb must form an exclusive bond. The ewe can't afford to feed every lamb that tries to suckle her, and will avoid or reject a lamb she is not bonded with. If the bond is formed in the first few hours, then the bond will remain for the duration of the ewe's lactation.

Some causes of interruption or disturbance might be obvious – overenthusiastic people checking on ewes constantly, grain feeding in a trail so ewes rush away from lambs, even a noisy aircraft, but there is another source of interruption we don't always consider. That is the disturbance of other ewes in labour.

Until she goes into labour, a ewe will avoid areas which have the smell of birthing fluids. Then as she begins to go into labour, she becomes very attracted to the smell of those fluids. As her lamb is born, the smell induces her to begin to lick it, initiating that bonding.

When lots of ewes are lambing in a paddock on the same day, ewes about to go into labour can get attracted to the smell of new born lambs that are not their own. They may "pinch" these lambs while their mothers are giving birth to their next lamb in a set of twins. The lambs go along with it and attempt to bond with the ewes that are not their own mothers. Cross-mothering is not in itself a problem, but if that bonding gets interrupted, when that ewe gives birth to its own lambs, these "pinched" lambs can be forgotten and abandoned. These lambs now have no mother and will use up their body reserves and fade away in a few days.

This phenomenon of non-bonded lambs is compounded when ewes have poorer maternal behaviour to begin with (due to genetics), are less experienced at maternal bonding, in flocks with lots of twins, and where fertility and joining management is very good so the lambing window is small. More ewes giving birth on the same day as each other, means more confusion and disturbance. The problem may actually be an unintended consequence of really good management outcomes in fertility and fecundity.

The best solution to this problem is to have fewer ewes *per mob*. This means fewer ewes lambing in the same place at the same time. This does not mean reducing stocking rates overall, but instead dividing mobs up for lambing into the smallest possible groups. Aim for mob sizes of 100 or even fewer if possible. One way to achieve this is by using temporary electric fencing to subdivide paddocks only for the lambing period. The fact that sheep won't respect electric fences is much less true when they are heavily in lamb and good feed is available. Electric fencing can then be rolled up and stored away for lambing next year.

If you allow a ewe to bond with its lambs, you've got a good chance she will see those lambs through for you.

If you see any lamb that is a couple of days old that is alone, keep a close eye out for its mother, even if it is "big and healthy". If it doesn't have a bond with a mother, it will not find another ewe willing to let it suckle and should be brought in for hand raising.



Want to know more? Contact Lou Baskind, District Vet or Ross Kuchel, Ag Advisor at the Braidwood office on 02 4842 3800 or at ross.kuchel@lls.nsw.gov.au or lou.baskind@lls.nsw.gov.au

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