Animal Health Update

South East Local Land Services

January/February 2021

SOUTH EAST DISEASE SURVEILLANCE RESULTS

Alex Stephens District Veterinarian Yass.

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 in the South East.

Many flocks of sheep have been checked for **foot rot** over the last months. There are many strains of foot rot caused by the bacteria *Dichelobacter nodosus* with variable power to cause scald, lameness, and damage to the feet. Both benign and virulent foot rot have been found. Conditions were ideal for expression of foot rot through spring and early summer but are now drying out. 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 click here.

Summer pneumonia in sheep caused by infectious organisms, the heat wave and *manheimmia haemolytica* has caused losses in young sheep. Hot days, dust and weather changes influence this disease. Avoiding dust and ensuring good nutrition is important but talk to your vet about treatment and prevention options if you are seeing **severe coughing and deaths**.

Ewe deaths over summer are best investigated with a postmortem of terminal animals as there are many potential causes. Wasting progressing to death in one property was found to be **chronic pneumonia**. On another property, drench resistance caused losses in ewes and lambs from **barber's pole worm**. On another **copper toxicity** resulted in multiple ewe losses. The ewes were in good condition but died suddenly with obvious jaundice (yellowing of the eyes and gums) when put under stress. Liver damage due to pyrrolizidine toxicity was the underlying cause (usually fireweed, heliotrope or Paterson's curse) as damage to the liver results in liver accumulation of copper and copper toxicity.

Several deaths over a period of 2 – 3 weeks occurred in wether lambs grazing lucerne. The problem appears to be multifactorial but some losses were due to insufficient roughage in lush highly digestible crop causing **redgut**. If sheep are grazing lush crops consider alternate grazing of low-risk pastures, in a 5 days on 2 days off manner. Roughage can also be provided as hay, but quality must be adequate to attract the sheep to eat it.

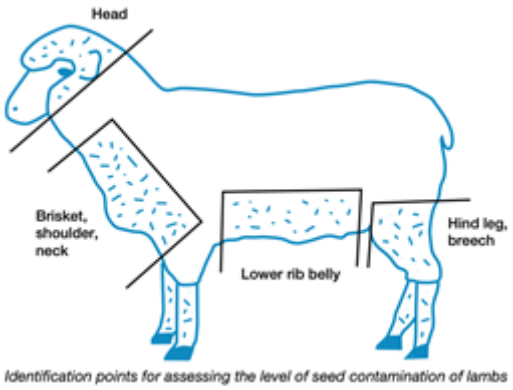
A case of suspected **pine needle abortion** occurred on one property where cattle in late pregnancy ate leylandii cypress. Blood testing ruled out other common causes of late term abortion and restricting access to the trees resolved the problem. Some pine trees contain a compound called isocupressic acid which is thought to affect blood flow to the uterus if consumed in the third trimester.

Grass seeds are causing issues in cattle and sheep, getting into **eyes** and requiring removal and treatment. Eye problems from grass seeds look like pinkeye but, if the seed is not found and removed, the eye lesion will not heal (even with pinkeye ointments) and can progress to a severe and painful ulcers, and permanent loss of vision.

Cows with grass seed in their eye, two stages. Photo: Stephanie Shlager

Grass seeds in young sheep cause considerable welfare and financial impact. Seeds migrate through the wood and skin, cause considerable irritation and ill thrift, and can enter the blood stream. Look at the amount of grass seed contamination present in the wool, specifically looking at the head, neck, shoulder, brisket, underbelly and legs regions of the animal.

Grading scale for grass seed contamination in sheep wool	
None Observed	-
Light	Very few seeds on the belly, lower points and brisket
Medium	Moderate numbers of seeds on belly, brisket and flanks
Heavy	Obvious large numbers of seeds over most of the body



Identification points for assessing the level of seed contamination of lambs

In managing grass seeds appropriate identification and awareness of problematic grasses is important, common grasses that are associated with lesions include barley grass, brome grass, Chilean needle grass, erodium, silver grass, spear grass and wire grass. Both long term and short-term strategies can be employed to manage these

grasses. Despite an apparent abundance of feed, it may be better to sell lambs earlier if appropriate pastures are not available. Strategic grazing with cattle or wethers, harrowing or slashing will help, and shearing or feed lotting may be appropriate solutions.

Grass seeds in working dogs. Early detection and treatment of grass seeds found in eyes, ears, noses, feet and bodies of working dogs is important. Early detection increases the vet's ability to identify and remove the seed before it migrates or sets up an infection and becomes harder to find.

Blow fly strike is causing considerable issues as heavy rainfalls have decreased the efficacy of chemical protection and increased fly risk. Long pastures have also made it more difficult to find sheep for treatment. Treating fly blown sheep early is key in maximising sheep welfare and minimising deaths. Please see the article below re best management of flystrike to minimise the development of resistance in our fly strike products.

Barber's pole warning. Counts are starting to rise, with some counts approaching 20,000 and deaths and bottle jaw being seen. The rain and warm weather will result in a rapid escalation of problems. It is important to **check your sheep now with a faecal egg count** to see if you have a developing problem that needs treating with an effective drench and movement to a clean pasture. Resistance to mectin products (abamectin, ivomectin and cydectin) is present on many properties. Resistance of barber's pole to Closantel is also developing, and remember it is not effective for the treatment of scour worms. Use of multiple combination products or newer products (such as zolvix or startec) is recommended to achieve effective drenching. Checking the drench was effective can be achieved with a repeat faecal egg count 10-14 days after drenching.

As we start to think about joining, **Campylobacter** was identified through blood tests as the cause of reproductive wastage on many sheep properties in the South East last year. Affected producers were disappointed with their scanning to lambing results in the maidens. They also felt that they had a significant difference between the results in the maidens compared with the more mature ewes. In some cases they saw evidence of abortion. These factors all point towards it being likely that vaccinating maiden ewes with campyvac® will provide benefit to the flocks. Talk to your vet re the risk of this disease to your property.

EARLY BREEDING OF EWE LAMBS

Lou Baskind – District Vet Braidwood

After three drought years we had an absolutely cracking spring season last year, with many people now having the "good to have" problem of too much grass. With excess demand in the market, restocking can come at a high financial cost. Many sheep farmers will be trying to breed back their numbers over the next few years.

There may be an opportunity this year for savvy livestock managers to increase the total number of lambs born on the farm by breeding the youngest group of ewes – the ewe lambs. In many Australian sheep enterprises, the maiden (unbred) ewes are introduced to the rams for the first time at around 18-20 months of age. In an early breeding program, the ewes are introduced to the rams at around 8 months of age. But be aware that extra planning, labour and time will be needed. This approach needs special care and attention.

If done well, early breeding has obvious advantages – a shorter generational interval, more lambs born on farm, opportunities for quicker genetic selection, and a younger ewe flock overall. However, if done poorly it can lead to increased lamb and ewe mortalities, and negative effects on liveweight gains, reproductive performance and wool quality. Early breeding is challenging and with it comes reduced management flexibility and increased workload.

For the ewe lambs to be drafted into an early breeding program they must reach certain liveweight and body condition targets. These targets indicate that the ewe lamb will reach puberty and be able to get pregnant, but also ensure that she will be able to cope with the whole pregnancy and the lambing process. If these targets are not met, you can expect breeding failure, major constraints on growth and performance, fibre quality effects, birthing problems, and mortalities of both ewes and offspring.

Bodyweight targets vary between and within breeds, so be sure to check the targets for your own flock. As a rule of thumb, you're aiming for the ewe to reach (by the time of joining), 75% of what her mature body weight will be.

Slower maturing merinos are less likely to meet the targets, but early maturing breeds, crossbreeds and composites can get there. Meeting these targets is more possible this year because of that burst of high-quality forage in spring 2020. Lambs born in late winter are more likely to be ready, compared to those born later in spring.

Body condition score is also a very good predictor of success. Young lambs that are growing rapidly are unlikely to deposit significant fat until they begin to mature and approach puberty. A condition score of 3 suggests that a fat layer is being laid down and the ewe lamb can be enlisted into the breeding program.

It might be an idea to draft your ewe lambs now, recruiting those approaching weight and condition targets into an early breeding mob, or adding them into the maiden ewe mob from the previous year. They can then be preferentially fed to ensure they meet targets by autumn joining. The balance of the ewe lambs can remain in the usual management program.

Any factors that affect the growth of the ewe lambs will impact this reproductive strategy so supplementary feeding might be needed, especially now that the pasture quality has declined over the summer. Internal parasites must be monitored for, and managed.

If your ewe lamb cohort are on track to meet their liveweight and body condition targets, consider these other tips for early breeding:

- Maiden ewes are inexperienced and should be bred separately from the main ewe flock. Experienced rams should be selected, and ram percentages should be around double that normally used. Growing ewes have a very high metabolic demand, needing to support not only the pregnancy but their own growth as well. You must be prepared to supply extra supplementary or preferential feeding to this group if required.
- Lambing will need extra supervision.
- The ewe lambs will be challenged to recover from raising their first lambs to then be ready for their second joining, so you'll also need to factor in those nutritional and management needs.
- Maiden ewes are susceptible to pregnancy loss from certain infectious diseases, particularly campylobacter. Speak to your animal health advisor or District Veterinarian about vaccination and disease prevention programs.

BEST MANAGEMENT OF FLY STRIKE INSECTICIDE RESISTANCE

This summer we have seen an **amplified flystrike season** following the wet and warm spring, with heavy rain diminishing the efficacy and longevity of applied fly protection products.

Recent research has demonstrated widespread **resistance developing** to our mainstream flystrike prevention products dicyclanil and cyromazine. **These 2 products are related and form the backbone of current flystrike prevention.** It is urgent that producers strategically manage the use of these products to maximise fly control and minimise the development of resistance.

If you are worried that you may have a product resistance issue in your flock, **sheep blowfly resistance testing** is available at EMAI, at a cost of around $350. Kits are available at the LLS offices

Preventing the development of resistance involves producers applying the following principles outlined here: (flyboss.com.au)

1. Use an integrated approach to reduce reliance on chemicals (crutching, shearing, minimising scour, +/- mulesing).
2. Rotate your chemical groups where practical, this involves knowing which chemical group the product you are using fits into.
3. Use a different chemical to treat fly strike to what you use for protection.

4. Minimise the number of insecticide treatments you apply in a season.
5. Apply insecticides carefully and as specified on the label.
6. Monitor for flystrike frequently and follow these guidelines for **best management of flystrike**

BEST MANAGEMENT OF FLYSTRIKE

A. Shear struck wool and a 5 cm barrier of clean wool around the strike close to the skin to remove maggots.

- Unless wool is shorn off it is likely that maggot trails will be missed, and sheep will remain struck.
- Machine-shearing is generally better than hand-shearing.
- Consider purchasing a battery powered hand piece.

B. Collect the maggot-infested wool into a maggot-proof (plastic) bag and leave the bag in the sun for a couple of days to kill all maggots.

- Unless maggot infested wool is collected and bagged, most maggots will survive and pupate and come back as adult flies. Don't rely on registered flystrike dressings to kill maggots—some are incapable of killing large maggots.
- If sheep have had a preventative applied, the maggots on sheep are resistant to the product and their survival will lead to the development of resistance.

C. Apply a registered flystrike dressing to the shorn area to prevent re-strike.

- A product registered as a flystrike "dressing" is different to a preventative.
- A dressing has two purposes: to kill remaining maggots and to prevent re-strike as the affected area is drying and healing.
- Where maggots remain, a dressing that rapidly kills maggots should be applied; these contain either ivermectin, spinosyn or organophosphates. (Note: there is a high level of resistance to the organophosphate, diazinon, which may reduce its effectiveness in killing larger larvae.)
- If longer ongoing protection is required, one of the dicyclanil or cyromazine preventatives may also be applied. Products that contain either spinosyn (Extinosad) or ivermectin will both kill maggots and provide some residual protection.
- Ensure a product with a suitable withhold period is chosen.

D. Remove struck sheep from the mob.

- Leaving struck sheep in the mob attracts more blowflies.
- Moving struck sheep to a 'hospital' paddock allows closer monitoring of recovery and reduces the risk to the rest of the mob.

E. Cull struck sheep from breeding programs

- Susceptibility to flystrike is heritable and repeatable. Sheep that have been provided suitable management and/or chemical protection but have become struck are best culled from breeding programs to improve both current and future flock resistance to flystrike.
- Adult sheep that sustain repeated flystrike (crutch or body) are best removed from the property.

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