Animal Health Update

Don’t drop your guard with routine vaccination programmes in cattle
By District Veterinarian Ian Masters

Some recent investigations have highlighted the need to stick with vaccination programmes. Some significant Leptar hardjo titres have been found in spring calving herds that experienced late term abortions/stillbirths or calves that were born alive but failed to thrive. This bug likes warm/wet conditions and a lot of the time in this district the environment is not ideal for the organism to thrive. Carrier animals can be rats and mice, feral pigs or cattle that have recovered from the disease. These animals can pass the organism in their urine but it needs mild wet conditions to survive in the environment. The early autumn break and mild wet start to winter may have been ideal for the spread of Leptospirosis. A 7 in 1 vaccination programme for all breeders will cover clostridial diseases and lepta. This disease can also cause serious illness in humans. Another good reason to vaccinate your cattle.

Vibrio, now called campylobacteriosis is another disease that can come back and bite you if you let vaccination programmes slip. This is a venereal disease spread by carrier bulls that can result in very poor fertility when it initially gets into a herd. In infected herds, fertility in the cows may not be too bad but a lot of heifers will be empty. It can have a major impact in heifers if joining has been tightened up to 7-8 weeks. Cows exposed to the disease eventually develop immunity to it and will join but fertility will always be lower than in herds that are free of the disease. Always difficult to stop animals jumping fences and this disease is not an uncommon problem. The disease is controlled by vaccinating bulls. You need two initial doses and an annual booster about 4-6 weeks before joining. Good idea to buy bulls from studs that vaccinate for Vibrio and keep up the booster dose before joining. You will get a lump at the vaccination site and some studs don’t routinely vaccinate young sale bulls because of that. In a recent confirmed case, vaccination was allowed to slip for a couple of years and less than a third of a group of well grown heifers were found to be in calf at pregnancy testing this year.

Mob-based movement of sheep
By District Veterinarian Gabrielle Morrice

What if Australia had a terrible exotic disease diagnosed tomorrow and your property was implicated or a shipment of meat was held up overseas due to chemical residues being detected in your sheep meat?

Would your records tell us immediately where all of your sheep had come from? Would the national recording database (NLIS) for stock movements be able to be used to track the movements of all sheep on and off your property to rapidly prevent the spread of an unwanted disease or to trace where chemical residue affected stock had come from?

NSW DPI has recently stated that it believes our current system of paper-based and mob-based movements for sheep is adequate for traceability standards set by overseas markets. For it to work however, and not be replaced by an electronic tag device for all sheep (as is currently used in the cattle industry), all sheep movements must be recorded on the NLIS database within 7 days of the movement occurring.

When buying in sheep it is the purchaser’s responsibility to ensure that sheep are transferred on the NLIS database to their PIC. To do this, ensure that you receive a National Vendor Declaration (NVD) for any sheep you buy and keep it in your records for seven years. Unless your agent tells you that they are going to do the transfer, it is up to you to go onto your
NLIS database and transfer the sheep onto your Property Identification Code (PIC).

An accurate traceability system is required in Australia for biosecurity (preventing or rapidly stopping disease outbreaks), food safety and market access. It is important that all sheep producers play their part.

Remember:
- all sheep PICs must be recorded on the NVD when selling sheep (unless pink post-breeder tags are used);
- tags should not be removed from sheep, even if pink post-breeder tags are used;
- mob-based movements of sheep should be uploaded onto the NLIS database within 7 days of the movement.

**Erysipelas arthritis in lambs**  
*By Franky Lo and Henry Truong - University of Sydney Veterinary Interns*

A case of 'erysipelas arthritis' was recently diagnosed in crossbred lambs a few weeks after marking. This type of arthritis is caused by a bacterium *Erysipelothrix rhusiopathiae* which survives for prolonged periods in soil and enters the body through wounds or breaks in the skin, such as marking wounds or the navel of newborn lambs. The bacteria move from the bloodstream and localise in the joints causing arthritis. Pain can be severe and affected lambs become 'crippled' and lose condition.

Prevention of erysipelas can be achieved through vaccination. A vaccine is given to ewes pre-lambing and immunity is transferred to the lambs in the milk. Good hygiene at marking will also reduce the chance of bacterial contamination of wounds. Disinfection of instruments, moving lambs out of yards promptly and avoiding wet conditions are all good practices.

While erysipelas is a common cause of arthritis in sheep, there are a number of other bacteria that can be involved. The vaccine will not provide protection against different bacteria. If you are having problems with arthritis in lambs, it is worth getting an accurate diagnosis as it will greatly improve the management plan.

**Don’t forget about calcium**  
*By District Veterinarian Amy Shergold*

There is research to show that supplementation with magnesium and salt is beneficial to sheep grazing winter cereals crops. A Grain & Graze project in 2005 and 2006 demonstrated substantial live weight gains in crossbred lambs on grazing wheat provided with a 1:1 mix of Causmag and salt, compared with lambs not receiving mineral supplementation.

However, calcium is important too and young sheep can become deficient grazing winter cereal crops. These crops are naturally low in calcium and there is also debate about the presence of a factor that suppresses vitamin D synthesis, causing rickets. Lambs with rickets will have low vitamin D, which causes low calcium.

When growing sheep have unbalanced mineral levels, the results can be catastrophic. There have been a handful of cases around Wagga Wagga where weaner lambs have broken their legs due to weak bones, particularly after being run through yards. Post-mortems revealed that ribs of affected animals could be easily snapped as they were poorly mineralised.

On all affected farms, no further cases were seen after sheep were gently moved onto another pasture and fed legume or lucerne-based hay and provided with a loose lick containing lime.

**Bloat**  
*By District Veterinarian Rahul Shankar*

Bloat is a disease of ruminants, seen most commonly in both beef and dairy cattle and occasionally in sheep. Bloat usually occurs after the rapid consumption of a lush legume pasture species such as clover or lucerne but bloat can also occur in animals grazing young lush pastures, especially rye grass and crops. Bloat can occur in significant numbers of animals within an hour of placing them on high risk pastures.

Bloat causes a tight gaseous ballooning of the rumen seen as an obvious distention high on the left side of the body from the ribs to the hips. Death occurs because of extreme pressure on the heart and lungs. Animals become reluctant to move and have obvious distention of the abdomen, as the disease progresses.
they may open mouth breath and strain. Animals will go down, and without intervention death is rapid.

Bloat prevention involves a combination of animal management methods and preventative chemicals and medications. Limiting grazing time or implementing strip grazing can also restrict pasture intake. Animals will adjust their intake as they become accustomed to the pasture and older animals are likely to be better at monitoring their consumption. Pasture management involves recognizing and avoiding higher risk pastures. Stage of growth of the pasture and clover content is some guide to bloat risk. Bloat potency is highest at the vegetative growth stage, which is before the plant matures to flowering stage. Pastures with greater than 30 per cent clover are higher risk especially as animals tend to selectively graze the clover.

Figure 1 - Sheep affected by bloat

Bloat blocks usually contain a detergent called alcohol ethoxylate. If cattle lick the block it will effectively inhibit the foam formation. Alcohol ethoxylate is also the active ingredient in most of the bloat drenches. A new alternative on the market is Weatherpro® Prevent. This product is a rainproof loose lick with the active ingredient sodium monensin. This is the same active that was found in the sustained release anti-bloat capsules and helps control foam-forming bacterial populations in the rumen. This product can only claim a significant reduction in bloat losses, however the change in rumen bugs and function caused by the active can also increase live weight gains. It takes about a week before this product has full effect.

Ovine Brucellosis (OB)
By District Veterinarian Ian Masters

Over the past few months several properties throughout the region have been diagnosed with OB. Regular pre joining ram checks are recommended to ensure rams are at their best and to keep on top of potential disease risks like Ovine Brucellosis. This disease is not uncommon and in some areas a high percentage of commercial flocks can be infected. OB is an infectious bacterial disease usually spread by rams riding each other in the ram paddock. You can waste money buying expensive replacement rams if you have this disease in your flock. Older, dominant rams if infected can quickly spread the disease through the new rams. It can also spread during joining if a clean ram serves a ewe recently joined by one of his infected mates. In most cases the infection in the ewe is transient and ram infertility is the main problem with this disease in commercial flocks. Initially the organism causes inflammation and oedema in parts of the testes which may not be detectable on manual examination but can affect semen quality. Scar tissue and fibrosis build up to interfere with sperm transport in the chronic stage of the disease. Hard, abnormal lumps can then be felt on palpation. These are usually found in the tail of the epididymis at the base of the testicle. It may take some time before you notice a drastic drop in lambing rates. Most producers tend to over-join and sound rams may carry the passengers for a few seasons until the level of infection builds up to the point where fertility crashes. A much more compact lambing is often one of the main changes that producers notice when they clean up OB. This is a plus with lamb management and helps to reduce the impact of things like fox predation.

Learn how to palpate rams for breeding soundness. Check teeth and toes at the same time. Call in a vet if you find anything that you suspect may be abnormal. Brucellosis is not the only cause of lumps and bumps in the testicles of rams but most of the other conditions are not highly infectious and cause only minor ram wastage. Blood testing will sort out if OB is the cause of the problem.
The disease can be eradicated by culling unsound rams and blood testing the rest at 3-4 week intervals until the disease is cleaned up. The earlier you detect the problem, the easier it will be to eradicate.

Purchase replacement rams from OB accredited studs but check them out to make sure they are sound and well equipped before taking them home. Stray rams and new introductions from non accredited sources present the greatest risk to your ram.

**Worm Issues**

**Young**: Worm tests have been far and few for this past month. The few properties that have tested have reported counts less than 300epg. All of the larval differentiation has come back to the black scour worm and oesphagostomum. One producer had experienced some deaths in some of his 3 year old ewes due to trichostrongylus but the problem was soon alleviated with the aid of a suitable drench. Producers have been made aware via a regular animal health radio update to be mindful of worms and to move mobs as necessary, along with undertaking wormtest counts to avoid any issues this spring.

**Narrandera and Hay**: Over the past month, there has been a variety of results. The worst counts seen were in lambing ewes with egg counts of 5600. This was associated with scouring, weakness and death. In general, counts have been low, but the variations seen underpin the need for individual farm monitoring and advice rather than relying on generalisations.

**New District Veterinarian (DV) and Biosecurity Officers (BSO)**

As of this month we welcome three new staff members to the Animal Health and Pest Animal Health team of Riverina Local Land Services. **Suzie Holbery** (BSO) will be based in Hay, **Michael Spinaze** (BSO) will be based in Narrandera and **Tim Biffin** (DV) will be based in Wagga Wagga.

**Riverina Local Land Services**

**District Veterinarians**

Wagga Wagga
Amy Shergold and Tim Biffin
6932 3263
Young
Elizabeth Braddon and Rahul Shankar
6382 1255
Gundagai
Ian Masters
6944 1588
Narrandera
Gabrielle Morrice
6959 2322

**More information:**

Riverina Local Land Services
1300 795 299
www.riverina.lls.nsw.gov.au