Animal Health Update

Blood parasite in lambs post-shearing
By Monika Devi – University of Queensland veterinary student intern

A case of ‘Mycoplasma ovis (M. ovis)’ was recently diagnosed in lambs 4 weeks after marking. Mycoplasma ovis, formerly known as Eperythrozoonosis, is a bacteria affecting the red blood cells (RBC) of infected sheep. Sheep commonly get infected within 4 to 6 weeks after stock management procedures that causes bleeding and transfer of blood between animals, for example, post marking, mulesing, shearing, ear tagging, castrating or tail docking. It is also transmitted through blood sucking insects or flies on wounds. Young sheep over the age of 4 weeks, and weaners in particular, are more susceptible. Severity depends on the level of stress. Internal parasites and malnutrition are a contributing factor as well. Stress lowers the immune system allowing M. ovis infection in bloodstreams. Older animals may be resistant due to previous exposure but if they are stressed enough to lower their immune system, then they get infected as well. Signs of the disease include ill thrift or poor growth performance, anaemia, jaundice and death if severely infected.

Prevention of M. ovis can be achieved through minimizing stress, such as, eliminating movement within 6 weeks of marking/mulesing, the use of trisolvend topical anesthetic and antiseptic solution for pain relief in lambs following mulesing, parasite and worm control, ensure adequate nutrition and trace supplementation. Also ensure sheep are in good condition before and after operation and good hygiene practice during procedures.

It is always vital to get correct diagnosis before treating since M. ovis may occur in conjunction with other conditions and the treatment recommended for the M. ovis could be deleterious. Anaemia can be confused with barbers pole worm infestation or liver flukes and jaundice with chronic copper poisoning or leptospirosis.

Scabby mouth in juvenile sheep
By Emma Sutton – Charles Sturt University veterinary student intern

Scabby mouth is a disease of young sheep, namely lambs and weaners, although older animals may be affected. The disease is characterised by the development of yellow-red scabs and pustules around the lips, muzzle, nostril and eyes. Scabs may also develop on the lower limbs and hooves as well as around the vulva, rectum, scrotum and udder. If severe, the wounds may deter eating and cause production losses. Infected animals are also at increased risk of secondary problems such as fly-strike.

The virus is a member of the pox virus family and can persist in the environment for months to years when conditions are favourable. It is carried in the pustules and blisters of infected animals and spread through close contact or through fomites. The virus infects the host through small skin abrasions which often develop from feeding on rough pastures or thistles. Wet pastures containing bur predisposes animals to lower limb lesions.

Scabby mouth is a self-limiting disease; it runs its course in 3-6 weeks. As scabby mouth is caused by a virus it does not respond to antibiotic treatment. A vaccine is available to aid in the prevention of scabby mouth on contaminated properties. Vaccinating exposes the sheep to a small dose of the disease, it is not recommended on properties that are not affected by the disease. Sheep develop immunity to the virus.
after exposure; any subsequent infections are mild and may go unnoticed.

Humans are at risk of contracting the virus so must wear personal protective equipment when dealing with suspect cases.

Brucellosis in rams
By Emma Sutton – Charles Sturt University veterinary student intern

Infection with *Brucella ovis* causes decreased fertility in mature rams. The bacteria accumulate in the epididymis, the site of sperm maturation, causing inflammation and obstruction of flow of the sperm. The accumulation of sperm and inflammatory cells results in the development of a hard, cyst like structure. Sperm that is produced is compromised and often unsuccessful in fertilisation.

Flock reproductive efficiency will suffer with an outbreak of brucellosis. The ram to ewe ratio must be increased to counteract sub-fertile rams and lambing percentages may be reduced by up to 15-30% in infected flocks. Ewes may also be transiently affected by the organism, resulting in an increased risk of abortion.

*Brucella ovis* is spread in the semen of infected rams. Producers should purchase stock from sources that are certified free from *B. ovis*. If this is not achievable it is recommended that rams are tested upon arrival and quarantined until results are received. Old, untested rams should be run separately to young, virgin rams to prevent infection through homosexual behaviour. Rams should only be mixed once testing has been performed.

Your local veterinarian can check your rams for *B. ovis* by assessing their testicles and collecting blood for laboratory testing. Not all infected rams have changes to their testicles so it is important that all rams are tested, not just the ones with obvious signs of disease. Rams that test positive to *B. ovis* should be culled. Any rams that have been in contact with these animals must produce two negative blood results (30 days apart) to be confirmed ‘free’ of brucellosis.

As always, prevention is best practice. The losses in genetics, offspring and the cost of managing an outbreak are far greater than the effort it takes to prevent the disease.

The battle for worms over drenches
By District Veterinarian Amy Shergold

It is an exciting time for worm management in sheep. Why? Because we now have two new drench families to chose from; and we have better ideas on how to use them in rotation. We have monepantel or Zolvix®, introduced to Australia in 2010, and we now have derquantel, the newest molecule on the sheep drench scene. It is available in the new product Startect®, which is a combination drench also containing abamectin.

New drench families are invaluable to the sheep industry and we need to do our best to look after them. We have learned the hard way that using the same drench over and over in a consecutive manner is a sure fire way to select for resistance. This is what happened with ivermectin, with resistance surfacing only 5 years after release, and more recently with monepantel in goats (1 reported case in NZ and 1 in Australia).

How should we use new molecules to better preserve their efficacy? The key is not to ‘save’ them until all other drenches are shot, rather use them now, in rotation. One strategy is to change actives every time you drench. This way if resistant worms survive a treatment, they will be knocked-off next time using another chemical with a different mode of action.

Using drenches in combination formulas also helps stave off resistance, as if one ingredient fails another will (hopefully) do the job. Good options include abamectin triples, for example Triguard®, Pyrimide® and Hat-Trick® and naphthalophos combinations including Rametin Combination® and Napfix®. When rotating between combinations, choose a drench containing at least one effective active that was not used in the previous treatment.

Let’s look after our sheep and our drenches with rotation programs that include new drench molecules and combination products.
Footrot is not eradicated
By District Veterinarian Amy Shergold

We are so proud of the very successful footrot eradication program run in the 80s and 90s, which earned NSW the formidable ‘Protected Area’ status in 2009. This means that less than 1% of properties in NSW are affected with virulent footrot. The low prevalence has led some to believe that virulent footrot is eradicated in NSW, which unfortunately is not the case. We still see affected flocks, particularly where sheep have been bought-in from higher prevalence areas.

One of the problems with footrot is that it is a ‘fair weather’ disease. If environmental conditions are not right, affected sheep may seem normal, even though they are carrying the causative bacteria. Conversely, when it is warm and moist footrot takes off. It begins with inflammation between the claws and progresses to destruction of the sole and sometimes wall of the hoof. The outcome is devastating for sheep welfare and production.

In the Riverina, spring is conducive to the expression and spread of footrot. As last autumn was wet and mild, we diagnosed a few new cases then too. Moving or selling sheep into higher rainfall areas can also uncover previously undiagnosed footrot.

If you have lame sheep, with irritation between their claws, get us out to have a look at them before you start any treatments such as foot bathing. It can be very difficult to distinguish virulent footrot from the milder strains of benign footrot or ‘scald’. It commonly involves examination of 100 or more sheep and laboratory tests.

Thorough inspections of lame sheep are vitally important. They allow us to maintain the low prevalence of virulent footrot in NSW which our predecessors worked so hard to obtain. Many of us have never seen the ‘bad old days’ where footrot was rife across our region, and we need to keep up the hard work so that we never will.

Introduce new stock, not new disease
By Jenni Hawke – University of Sydney veterinary student intern

Introduction of new stock to a property is one of the fastest ways to introduce or spread disease, with outbreaks of virulent footrot and ovine brucellosis in sheep and shipping fever in cattle representing a few recent problems in the area associated with introduction of new stock. There are a number of precautions that can help reduce the risk of introducing disease along with your new stock. These include buying from a trusted, accredited source, inspecting the animals and obtaining NVDs and Animal Health Statements before you buy.

Another highly important measure is submitting new stock to a period of quarantine (minimum of 10 days), before mixing them with resident farm stock. Then, if any new animal starts to show signs of illness, they can be identified and treated accordingly prior to introduction to the rest of the farm stock. New animals should be dealt with by separate staff or dealt with at the end of the day, again, to minimise the risk of spreading disease (if present). The quarantine area should be in a safe secure spot away from other stock and high traffic areas, with some kind of protection from inclement weather and a clean water source. The animals should be provided with hay/feed daily and monitored for any signs of illness such as inappetance, lethargy, coughing, nasal discharge or diarrhoea. Any animals with signs of illness should have their temperature taken and veterinary advice should be sought.

The quarantine period also provides an opportune time for new animals to be weighed, drenched, vaccinated, tagged and tested for certain diseases (eg. Ovine Brucellosis).

Useful resources: www.farmbiosecurity.com.au
Worm Issues

Young:
In Young and its surrounds we have had no clinical investigations for worms this past month. The few worm egg counts we have received have been good barring a few mobs in one property that were having high counts, but were likely attributed to scour worm over anything else. An appropriate drench was recommended and the problem appears to have resolved with that.

On a disease investigation at another property the incidental finding there was large amounts of Barbers pole worm that were not causing any production issues. This producer had not drenched in over a year and was advised to go with an appropriate drench to avoid any issues that may arise down the track.

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