

# Leading Sheep

— a proactive network, progressive producers and sheep and wool businesses leading the way

Welcome to the first edition of **Flock talk for 2016**. By the time this edition has gone to print, the next phase of Leading Sheep (2015–2018) will be well underway with more than 590 participants at 13 events already run and others in the planning stages.

**These events** focused on sheep health and diseases, predator control and financial management, which align with the priorities of Leading Sheep:

- pest animal management
- health/nutrition
- business performance
- beneficial technologies
- young people.

Leading Sheep is also planning a number of new initiatives including:

- a pilot youth mentoring program for young people (18–39 years) either involved in or wanting to be involved in the industry
- a sheep challenge where competitors identify an industry challenge and develop an innovative solution
- promotion of existing industry educational opportunities and resources for schools.

If you want to find out more about Leading Sheep or keep up to date with upcoming events and activities, please sign up to our monthly e-newsletter at [www.leadingsheep.com.au](http://www.leadingsheep.com.au).

Leading Sheep is a joint initiative of Australian Wool Innovation and Department of Agriculture and Fisheries Queensland, and is supported by AgForce.

*Nicole Sallur  
Department of Agriculture and Fisheries  
Senior sheep extension officer  
Leading Sheep project manager  
Flock talk editor*



# Electric fencing the obvious choice

When town dogs killed \$25,000 worth of stud sheep in a single night, Kym Thomas, her husband Greg Dunsdon and son, Tony Reid, knew they had to take action to improve the state of the boundary fencing on their south western Queensland operation.



Greg Dunsdon, Tony Reid and his partner Francesca inspecting the electric fence on 'Kahmoo'

**Located eight kilometres** from Cunnamulla, they run 7,000 Australian White Dorper-cross ewes on their 83,000 acre property 'Kahmoo'.

The pair presented on their experience with electric fencing for pest animal control and relieving grazing pressure at a recent Leading Sheep field day at Charleville, attended by 164 people.

The main goal for all at 'Kahmoo' when researching different fence types was bang for their buck. After trialling a number of designs, including mesh and seven strands with barb both top and bottom, electricity became the clear choice.

'We had little success with other designs as kangaroos and dogs just pushed through. The task certainly needed some creative thinking and learning at times and everyone in the family was involved in the project,' Ms Thomas said.

They decided to go with electric fencing because it would not only act as a barrier but would educate kangaroos, dogs and sheep to stay away from the fence line, thus limiting damage and maintenance.

Weighing up the cost of doing nothing or installing fencing, the choice became obvious.

'The cost of electric fencing was \$2,000 per kilometre (materials only, excluding end assemblies and gateways) which we compared with the annual losses in pasture degradation by kangaroos – it was clear the electric fencing was a smart move,' Ms Thomas said.

There were also the added management benefits of having fencing that was close to 100 per cent reliable.

The key to success was in the planning and understanding how the system worked. The family worked closely with fencing reps to plan out the fence, the materials to be used, and earthing and power requirements to ensure the fence had a consistent power along the 70 kilometre boundary.

The 1400 mm high fence consists of 10 wires, of which four are hot and mainly located at the bottom of the fence where predators, such as dogs, are most likely to push through. Poly droppers were used, because they were quicker and easier to install and cost effective.

The fence is fully solar powered, which Ms Thomas believes is breaking new ground in electric fencing by powering the energiser with solar panels.



Greg Dunsdon holding an earth wire of the electric fence on 'Kahmoo'

'The electric fencing was not without problems to start with and we nearly gave up on it, but we learnt that the problem was our lack of knowledge and understanding. We are so pleased we stuck with it as the results mean so much to our bottom line and productivity', Ms Thomas said.

'The success of the fence is dependent on the ongoing support being provided, and my advice to anyone investigating electric fencing is to understand the system and know where to go for help and support.

'In the 12 months since its construction the only animal to the breach the fence that we know of is a lone dingo and the odd large kangaroo, making us confident electric fencing is the best option for our circumstances.'

They now plan on constructing a further electric boundary and internal fencing as well installing a digital monitoring system that will provide SMS alerts to faults in the fence line.

## Top five tips for electric fencing design:

- Plan it completely before you start building anything – start from the energiser and work outwards
- Fence line preparation matters – clear the line well to either side, level the line and design the fall to shed water
- Implement a good monitoring system
- Power up as you go, it will help identify any faults in each section
- The right equipment makes the job easier.



## Editorial committee

Nicole Sallur and Alex Stirton (DAF)

## Enquiries

Nicole Sallur

Phone: (07) 4654 4220; Mobile: 0427 603 241

Email: [nicole.sallur@daf.qld.gov.au](mailto:nicole.sallur@daf.qld.gov.au)

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# Brucellosis in rams

By Dr Noel O'Dempsey BVSc (Hons)  
 'Linallie', Texas

**Brucellosis in rams** has been the subject of much discussion and is often blamed for low lamb marking percentages. For some, this may be the case. For most, brucellosis will not be solely responsible for the low percentages.

Why? The reasons lie in the nature of the disease and the fact that brucellosis has been around in sheep flocks in Queensland for a long time. In some ram flocks, it has been evident at very high rates.

Simply finding brucellosis in your ram flock does not mean it's the cause of low lambing. Pregnancy testing is important to validate any suspicions of a joining-related problem.

Over the last thirty years, as a veterinarian working in the sheep industry in western Queensland, I have seen two or three similar peaks of concern with brucellosis. Removing brucellosis from your ram flock is good management but people can spend a lot of time and effort and still not be addressing the issues that have caused their low lambing problem.

Brucellosis is a disease of rams of all breeds and has two main costs:

**Infertility** – the fertility of infected rams is reduced. In individual rams, this can range from partial to total infertility. Where the incidence of brucellosis in a flock is low, the ram joining percentage is high and the length of joining is prolonged (2 to 3 per cent and 8 to 12 weeks), the overall pregnancy rates will not be affected. Where producers are using lower ram percentages (1 to 1.5 per cent) and a joining period of 5 to 6 weeks, brucellosis is more likely to be a problem with reduced conception rates.

**Premature culling** – annual ram replacement costs can increase if brucellosis-infected rams have to be culled and replaced prematurely. The Brucellosis Accreditation (BA) scheme has been in place for many years. All replacement rams should now be brucellosis-accredited free. If not, you should ask your ram supplier 'Why not?' or get a new ram supplier.



*Dr Noel O'Dempsey palpating a ram's testicles*

When brucellosis is contracted by a ram, the bacteria can localise in the epididymis and cause an infection and tissue reaction that blocks the tubules (epididymitis). The epididymis then swells and hardens. Swellings are most common in the tail of the epididymis but can occur anywhere along its length. The period from initial infection to the appearance of detectable lesions can be 8 to 12 weeks. However, not all infected rams will develop palpable lesions.

In the early stages, semen can be abnormal having a high proportion of dead and dying sperm. The development of a total blockage takes some time and until this happens, viable sperm can be shed. When the blockage becomes total, sperm cannot be passed. In the majority of rams only one testicle is affected with the other being able to function. The longer that brucellosis-affected rams remain in the flock, the more rams will be affected and more will have lesions in both testicles.

Brucellosis is not the only cause of epididymitis but is the primary cause. Epididymitis can also result from injury and infection by a range of other bacteria.

Brucellosis in ewes is rarely a significant problem but can establish in the placenta and cause abortion or the birth of small weak lambs. Ewes carrying the infection will throw it off after lambing.

Brucellosis can spread in rams:

- At joining. Ewes are commonly served by more than one ram at each cycle. If an infected ram serves a ewe, then rams that subsequently join with that ewe can become infected. Ewes will not normally carry the organism through to the next cycle.
- With homosexual and dominance related activities in rams.
- At shearing or whenever rams come into contact with infected semen.

When palpating rams it is very common to see groups of rams that run together, all with the disease.

Manual palpation is an effective and practical way of identifying rams with testicular disorders. Both testicles should be the same size, firm and without any swellings or hard lumps. When examining rams both testicles are palpated feeling for differences.

When palpating, start as high up the cords as possible. As you come down to the top of the testis, feel for hard swellings. Next, gently squeeze the testicles feeling for size and testicular tone (firm, not hard). At the same time, with your thumb, feel along the body of the epididymis for lumps and swellings. The tail of the epididymis should be firm, not hard and the same size on each side.

Annual (preferably bi-annual) palpation and culling, before ordering replacements and before joining, will reduce the incidence of brucellosis and other ram faults to manageable levels and let you plan your ram replacements.

**To eliminate brucellosis** from your ram flock:

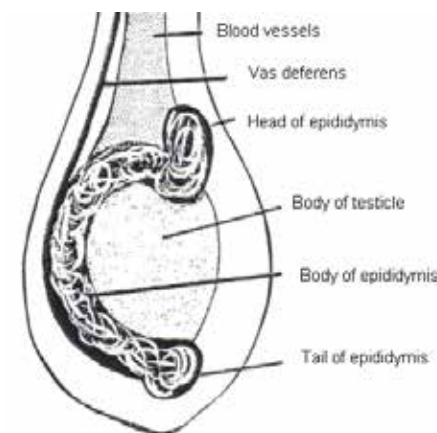
- Blood testing by your veterinarian normally requires a number of rounds of testing and palpation due to false negatives and on-going spread
- All newly purchased rams should be accredited brucellosis-free and palpated before purchase or at delivery. All non-accredited rams should be quarantined and tested at delivery

- Stags (with one testicle retained) can carry and spread brucellosis and should be identified at marking and removed from the flock
- Rams should never be run with the killers, black sheep or a few ewes to keep them happy.

After the ram flock is free, on-going monitoring with at least annual palpation of all rams is required. This helps prevent re-infection or at least alert you to a problem if there is a breakdown, such as rams getting in from neighbours.

Good fences around the ram paddock and with neighbours can help reduce this possibility. Most Merino studs are now Brucellosis-Accredited free. Some of the newer prime lamb breeds do not offer the same level of assurance. If your ram supplier cannot guarantee their rams, get a new supplier or quarantine and test all rams at delivery.

Figure 1 illustrates the anatomy of a ram's testicle. The head of the epididymis curves around the top of the testis. The body runs down the inside finishing at the tail which forms a distinct knob at the bottom of the testicle (tail).



## Want to find out more?

Watch a **recorded webinar** on ovine brucellosis at [www.leadingsheep.com.au](http://www.leadingsheep.com.au)

Participate in a **Bred Well Fed Well** workshop, find out more at [www.makingmorefromsheep.com.au](http://www.makingmorefromsheep.com.au)

Join a **Lifetime Ewe Management** group, visit [www.lifetimewool.com.au](http://www.lifetimewool.com.au)

