

## Exclusion fencing paves the way for SE Queensland graziers to run sheep

In the heart of cattle finishing country in south east Queensland, graziers Jon and Marina Earl are successfully rearing prime lambs on their Legume property after installing exclusion fencing to control predatory wild dogs.

According to Jon, wild dogs are such a massive problem in the local area that many cattle producers are happy if they can achieve calf weaning rates of 80-85 per cent.
"We are deemed by the locals to be pretty rash and daring by running sheep and lambs in this environment," he said.

But, with a background in fencing manufacture and running a fencing contracting business, Jon was confident he could tackle the wild dog problem by establishing exclusion fences around the boundaries of his 80 hectare ewe/lambing block.

## Weighing up the costs

Jon said, as a fencing manufacturer and contractor, he was often debating with other livestock producers the costs of investing in exclusion fencing versus the potential gains.

For his own mountain-terrain property, he had a ready source of materials and labour from his fencing business to enclose the boundaries of a former cattle paddock that he now uses for Dorper ewes to breed prime lambs.

This paddock had capacity to run up to 40 cows, which he
 estimated - with an 85 per cent weaning rate - had potential to produce a gross income of \$20,400 from production of 34 weaners worth $\$ 600 /$ head.

By setting up 3.5 kilometres of exclusion fencing, he is now able to run 300 ewes in this paddock and is achieving an average lambing rate of at least 100 per cent.

Jon is now producing three lambs per ewe every two years, or about 450 lambs per year, with a potential income of $\$ 54,000$ (at lamb values of $\$ 120 /$ head).
"That is more than double what we could do with cattle and, for us, has been an absolute no-brainer," he says.

## Fencing type and construction

To set up his exclusion fences, Jon retained the original cattle fences made from timber split posts with five strands of barbed wire.

He added a high tensile barbed wire strand very tight along the ground and attached this to an 8/90/15 system (a set up with eight line wires that is 90 cm high and has 15 cm spacings between the verticals).
"It is the 15 cm between the verticals that is the main reason for its success, because nothing gets through it," Jon said.

Quality wire netting was also attached to the existing barbed wire strands using ring fasteners.

Some parts of the Earl's block required a new fence and for these a Quikfence Steel system was used.

This consists of fully hot-dipped galvanized end assemblies, or steel strainer assemblies, with steel pickets every five-six metres. Barbed wire is used on the top of the netting and
 again at 1.2 m high.
"Having the barbed wire on the ground has stopped all the feral animals digging under the fence and nothing has been through the fence to date, not even kangaroos," Jon said.
"We have had only two attacks from dogs in the past few years, where we lost six ewes and a couple of lambs.
"But, in both cases, we found a hole under the fence where we hadn't staked it down properly or had not repaired it after heavy rain that created a gully."

Jon said all internal fences in the paddock were electric four-strand and six-strand and these were in areas where there was more pressure from stock.
"We have found that very young lambs can slip through at times but, on the whole, the stock control with this set-up has been brilliant," he said.
"We also keep ewes out of oat and other crops using this low-cost internal fencing system."


Overall the Earl's constructed the exclusion fence at a rate of about 600-1000 metres per day.

## Fencing cost

Jon estimated the cost of the fully-installed new component of the exclusion fence on his property varied from about $\$ 5000$ to $\$ 7000 / \mathrm{km}$, depending on the amount of assemblies required and/or corners.

He said this could be broken down into $\$ 3000-3500 / \mathrm{km}$ for materials and about $\$ 2500 / \mathrm{km}$ for labour.
But he stressed that costs would change depending on individual sites.
This research indicated - at that site - a 180 cm high wire netting fence effectively contained most feral pest animals and a 115 cm high fence was also effective in pen trials (but not tested at a paddock scale). Electric wires further improved the efficacy of all fencing in the trials.

The researchers found the costs of exclusion fencing could be reduced where existing stock fences were modified with the addition of wire netting, as the Earls have demonstrated.

## Benefits

Jon said the economic benefits of exclusion fencing on his property spoke for themselves.
"Without the fencing, we would only be able to run cattle on this property and the returns from this are much lower than for running sheep," he said.

## Downsides

Being able to increase stocking rates
 and sheep numbers has led to higher incidence of sheep intestinal worm problems in the Earl's sheep flock.

But Jon said this was manageable and worth the trouble for the higher productivity gains he was making.

He said running Dorper sheep in a high rainfall area also led to some hoof softness and soreness, but again - the benefits far outweighed these issues.


Jon also stressed, when constructing barrier fencing, it was important to be able to clear and grade the fenceline when attaching it to an existing fence.
"In some instances we were unable toclear the fenceline where there were gullies, which created a weak point in the fence and both times this led to dogs getting through and attacking our sheep ," he said.

## Additional protection

The Earls are also running Maremma dogs with their ewes and lambs as an extra protection for the flock against wild dogs.

Jon said he was confident that even without the Maremmas, the exclusion fencing would keep wild dogs out - as there had been many times when the Maremmas were not in the paddock and no attacks or stock losses had occurred.
"We find the Maremma's are a very good way to ensure our sheep are not stressed from dogs and are kept safe," he said.

## The future

Based on the success the Earl's have had with their exclusion fencing, they have bought another property nearby, further and deeper into the dog country, and plan to construct exclusion fencing on a bigger scale.

When this is up and running, they plan to expand their sheep grazing enterprise further.

