

Temporary Electric Fencing Facilitates Decision Making for Paddock Subdivision

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Greg Koch has a focus on implementing a rotation grazing system to improve pasture management and utilisation. Implementation requires consideration of issues such as land classes, stock numbers, pasture varieties and expensive infrastructure such as fencing and watering points. Greg, like many producers is not 100% confident in knowing what is best set up and due to the costs associated with setting up a system it is important to ensure the 'best fit' is achieved. Utilising temporary electric fencing can help to work around some of these issues prior to the development of a permanent system.

Background

Since 2004 Greg has implemented many changes to his property to improve his grazing management and sheep enterprise. He has fenced off creek lines, built a containment feeding area and is making the change from cropping to predominantly a livestock enterprise.

Changing from cropping to pastures has meant converting cropping paddocks to pasture paddocks. In 2006 Greg converted a 38ha paddock, which was continuously cropped, into a perennial pasture of phalaris, cocksfoot, fescue and clover.

Greg chose a perennial pasture because it can:

- Survive for many seasons
- Increase water infiltration and use. Perennials have a longer growing season so produce more feed
- Depending on the variety, perennials can respond to rainfall at any time, especially at the break of the season
- Form a stable vegetative cover to reduce erosion and nutrient run off especially on hilly country
- Provides good quality and quantity of feed for livestock
- Is tolerant of extended grazing

Fencing for Rotational Grazing

After the paddock was sown Greg set the pasture up for rotational grazing by subdividing the paddock into four paddocks with a central water point.

Farm Facts

Producer: Greg Koch Location: Moculta Property Area: 809 Ha Enterprise: Wool/ Prime Lamb/ Fodder Annual Rainfall: 450mm

He used a permanent four wire electric fence incorporating two live and two earth wires. Steel posts were used with insulators on the live wires, so Greg could convert back to the cropping system if required however, the system is still in place today.

Good points of the system include:

- Easy to move stock through the water point from paddock to paddock
- Reduced selective grazing of pasture
- Even grazing in each cell with no camping or tracking
- Surface cover targets are easier to achieve across the whole area



Cell 1 (left) after grazing and Cell 2 (right) before grazing



Bad points of the system include:

- Can only run one mob of sheep due to the central water point
- With Greg's flock structure and numbers he still finds paddocks of 9.5ha too large for 600 weaners to graze efficiently. With this stocking density in one cell the graze period in spring becomes too long before they can get on top of the feed and be moved. As a result the cell is grazed unevenly and the feed in the other paddocks goes rank.



Utilising Temporary Electric Fencing to Subdivide the Paddocks Further

In 2012, even though the spring was very poor, Greg divided two of the cells in half using a three wire temporary electric fence with tredins spaced every 10m. The fence was powered from the existing permanent electric fence. The Rappa[™] machine was used and it took 30 minutes to install 300m of fence and 20 minutes to wrap it up which made it a quick, easy and a cheap process.

Key Messages

- Temporary electric fencing can be used to help design paddocks for rotational grazing
- If the temporary fence is in the wrong position it can be easily removed
- Temporary fencing allows you to trial different scenario's to improve grazing management

Grazing the Paddock in 2012

The pasture was rotationally grazed by 640 weaners rated at 0.9 DSE (Table 1). Due to the season Greg needed as much feed from the pasture without causing ground cover problems.

Greg's normal minimum benchmark for ground cover is 1200kg of DM/ha but due to the circumstances at the end of grazing period there was 80% ground cover and 400kg of DM/ha which is not ideal but acceptable. Greg was impressed with how the high stocking density for a 2-4 day graze resulted in no stock tracks or camps.

The Future

Although there was only 800-900kg of dry matter on offer in the paddock to graze Greg saw the benefits of having smaller paddocks and a shorter graze period. Greg will trial again in 2013 and if he thinks that the paddocks should be 4-5ha in size then he will implement further permanent electric fencing.

Table 1: Grazing Details for the Cells Grazing 640 Weaners (DSE 0.9)						
Cell	Cell Size Ha	Days Graze	Before Graze kg DM/ha	After Graze kg DM/h a	Stocking Pressure DSE/ha	Intake and wastage per DSE kg DM/DSE/d ay
1	2.5	2	850	460	230	0.84
2	2.5	2	960	450	230	1.1
3	4	4	800	400	144	0.69
4	4	3	750	400	144	0.81



Measuring the pasture quantity- 850kg DM/Ha in Cell 2 prior to grazing

Further Information

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