

Improving dryland pastures in the Midlands ‘shoulder country’

Growing red meat productivity through the selection and establishment of perennial legumes

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Chris and Claire Headlam: *Ratharney*, Tasmania’s Midlands

Background

Midlands sheep producers, Chris and Claire Headlam aim to increase the proportion of perennial species in the ‘shoulder areas’ at their property *Ratharney*. Their goal is to create pastures that are more resilient and productive for their grazing enterprise.

There are three grazing land areas in the Midlands region of Tasmania. Irrigated areas that occur largely on the river valley flats and better soils. The higher and rocky slope areas or ‘run country’ are largely dominated by native grasses with some exotic species that include subterranean clover. This leaves large areas of dryland ‘shoulder country’, which mainly consists of improved and semi-improved pastures. Some of these pastures are quite productive and support respectable stocking rates, while others have become degraded and are dominated by annual weedy grasses including barley grass and vulpia.

Shoulder areas

Many properties in the Midlands have increased their irrigation capabilities, which has led to grazing intensification. Pasture and fodder crops are being grown under irrigation in rotation with crops including poppies and grass seed. Chris suggested that it is the shoulder areas that have the biggest limitation to carrying capacity. Creating resilient perennial pastures in the shoulder areas can bring greater flexibility to a grazing enterprise by providing options when irrigated crops aren’t ready for grazing. This is particularly relevant when annual or short rotation fodder crops are grown under irrigation. Perennial legumes compliment subterranean clover in perennial pastures and help to increase the quality and productivity of feed. This is achieved by having deeper root systems and being able to take advantage of late or unseasonal rainfall events.

Snapshot

- Chris and Claire Headlam, *Ratharney*, Woodbury
- 1, 820 ha cropping and sheep production
- 5, 500 merino ewes
- 450 ha of centre pivot irrigation
- 430 mm annual rainfall. In the rolling 12 months from Jan 2022 - Jan 2023, 630 mm of rainfall recorded
- Chris grows poppies, grass seed and fodder crops using irrigation
- Timing the renovation of dryland pastures in the low-mid rainfall areas of the midlands is crucial to success



Above: Rowan Smith (TIA) and Chris Headlam discussing the success of Chris’s lucerne/phalaris mix sown at *Ratharney*, Woodbury in Autumn 2014.



Dryland mixed pasture mix

Taking advantage of seasonal conditions is vital when establishing perennial pastures in the midlands. On 10 August 2021, the Headlams planted a perennial pasture mix (Table 1) in a rundown area of shoulder country, hoping to take advantage of a good seasonal outlook. Sowing at this time paid off with an excellent establishment achieved. However, it is important to note that above annual rainfall was recorded during the summer of 2021-22, which aided in the establishment of the pasture. The Headlams have identified that timing is everything for the successful establishment of a perennial pasture in the low-medium rainfall zones of the midlands. This pasture is now a reliable perennial mix that can take advantage of unseasonal summer rainfall as well as being resilient during times of moisture stress.

Lucerne/phalaris mix

The Headlams have a number of dryland shoulder areas that have been planted to lucerne/phalaris pasture mixes. These mixes have proven to be a crucial asset in grazing rotations, offering flexibility and feed quality at critical times of the year. The value of these areas becomes most apparent during the lag phase of irrigated forage crops, particularly when short rotation crops are used.

Table 1. Dryland pasture mix

2 kg/ha Phalaris
2 kg/ha Cocksfoot
2 kg/ha Lucerne
2 kg/ha Red clover



Above: Mixed dryland perennial pasture sown at Ratharney, Woodbury, 10/8/2021.

KEY POINTS

- Productive perennial pasture in shoulder areas can help to increase stocking rates.
- Greater grazing flexibility, feed quality and productivity can be achieved from using perennial legumes in pasture mixes.
- Timing of sowing is key to success in dryland pasture renovation.
- Selection of deep-rooted species can increase the chance of success.

Next steps in Involve and Partner

- We will continue to follow Chris and Claire's progress as they continue to improve their feedbase with perennial legumes.
- Further Involve and Partner sowings will continue in the low-mid rainfall areas of the Midlands.

Scan for more project info



This project was co-funded with Meat & Livestock Australia. For more information please contact: Rowan.Smith@utas.edu.au or visit our project page www.utas.edu.au/tia/research/research-projects/projects/growing-red-meat-productivity-through-the-selection-and-establishment-of-perennial-legumes

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