

Weed Warriors - Upper Murray host site

Producer case study: Brooke McKimmie

What's happening?

We are assessing a range of weed management options to increase pasture productivity following fire. This site is run as a 'paired paddock' using two side-by-side paddocks of uniform soil type and pasture composition.

Both paddocks are on creek flats and are hard to traverse with either a boom spray or spreader due to tree cover, gilgais and old stump holes. Neither paddock has been resown since the 2020 fires.

One paddock is being subjected to 'normal' farm management, while the other is given normal farm management 'plus' – Normal Farm Practice + (NFP+) whereby the plus is an extra level intervention not typically conducted over the farm.

To quantify any gains in production, we will monitor pasture composition and production.

Paddock goal

To increase the percentage of perennial species (ryegrass and clover) from within the existing plant populations, while not relying on chemical weed control or resowing of the pasture.

Normal Farm Practice '+'

Additional management practices to lift pasture production are primarily based on soil fertility and grazing management.

'Poor patch' soil testing involves deliberately soil sampling areas of poor pasture growth, as opposed to a random sampling method.



Figure 1: Creek flat paddocks at Towong used in the demonstration

Fertiliser applications will be based on addressing the elements limiting production.

In addition to soil tests, we are also using tissue tests to help address trace element deficiencies.

Grazing management will include tactical use of high grazing densities to remove surplus feed, with a view to increasing tillering from perennial ryegrass in spring and germination of clover in the autumn.

Pasture composition

Baseline pasture composition has been assessed. Weed grasses make up 19% and broadleaf weeds 18% of the total pasture. Predominant weeds include barley grass, silver grass, capeweed and erodium.

Desirable species include ryegrass (42% of pasture), white clover (9%) and sub clover (5%). Additional species include paspalum.

Early results

Results from 'poor patch' soil testing have been compared to those from conventional soil testing. While soil pH was not noticeably different, there were significant differences in both Phosphorus and Potassium.

Table 1: Comparison of 'poor patch' and conventional soil tests

Sampling method	pH (CaCl)	Olsen P	Potassium
'Poor patch'	4.9	7.4	140
Conventional	5.0	16	340

By addressing the deficiencies of the poorest areas of the pasture, it is anticipated that pasture composition will improve, leading to an increase in overall pasture production.

Where to from here?

A fertiliser program will be developed and implemented, addressing the requirements of the poorest parts of the pasture/paddock.

We will also manage spring grazing to encourage tiller development in perennial grasses.

Pasture quality and composition will be monitored on a regular basis. Producers are welcome to come along and inspect the site and are encouraged to participate in assessments of herbage mass, feed quality and pasture composition. Where there's interest, the project team is happy to help producers assess their own paddocks.

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