

Weed Warriors – Gippsland host site

Producer case study: Fraser and Penny Barry

What's happening?

We are demonstrating the benefits of weed control strategies and follow-up management for pasture persistence and productivity in a fire affected area.

This site is in the hill country east of Ensay. It is run as a 'paired paddock' using a fenced off area to enable two side-by-side paddocks of uniform soil type and pasture composition to be studied.

Much of the paddock and farm was burnt in the 2019–20 fires. In 2021, the paddock was sown to oats. The plan from then on was to sow annual crops before sowing to a permanent pasture.

One paddock is 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 of intervention not typically conducted over the farm.

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

Paddock goal

The specific focus of this site is the control of grass weed species (particularly silver grass), to increase the plant numbers of preferred pasture species and productivity.

The larger paddock will follow Normal Farm Practice (NFP). It will have a knock down spray before each annual crop and finally, will be sowed to a perennial pasture. A loose rotational grazing plan will be followed. The paddock will be fertilised annually according to a set rate used across the farm.



Figure 1: Site map indicating Normal Farm Practice + area (red) and rest of paddock (yellow)

Normal Farm Practice '+'

The additional management practice to improve this pasture involves knockdown herbicide applications to control weeds at each annual crop. Grass weeds will then be 'cleaned' out of the pasture using high grazing pressure.

Fertiliser will be applied according to:

- soil test results
- the agronomist's recommendations
- Grazfert principles.

Pasture composition

Pasture composition across both paddocks prior to resowing included weed grasses, clovers and other naturalised pasture species.

Early results

A soil test was taken of the paddock before dividing into the NFP and NFP+ in April 2022 (Table 1) indicating low phosphorus levels.

Table 1: Soil test results prior to the demonstration

	Units	Result
Soil texture		Clay Loam
pH (CaCl ₂)		5.3
Organic Carbon (W&B)	%	2.95
Nitrate N	mg/kg	8
Phosphorus (Olsen)	mg/kg	5.29
PBI		69
Potassium (Colwell)	mg/kg	270

Where to from here?

With assistance from the agronomist, a fertiliser plan will be developed and implemented.

Grazing will be strategic and managed to ensure grazing pressure and pasture weeds are reduced in the permanent pasture over time.

There will be regular monitoring of pasture quality and composition. Producers are welcome to come along and inspect the site and are also encouraged to participate in assessments of herbage mass, feed quality and pasture composition.

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