

**Project name: Perennial Pasture
Persistence; Phalaris**

**MLA PRS Project B.FDP.0051
Case Study: Millbanks; Elmhurst, Vic.
Ben and Jodie Greene; April 2016**

Grandad Greene

The Greene family purchased the first section of Millbanks in 1938 and in the late 1940's Ben's grandfather, David Greene joined the "super and sub" revolution but he also added a couple of other vital factors that today make the property one of the most productive in the region.

Millbanks was one of the Victorian farms where the use of the trace element Molybdenum was trialled and shown to dramatically increase the growth of sub clover in the 1950's. Molybdenum was quickly added to the Millbanks fertility program and the extra clover growth added valuable nitrogen to the soil.

At the same time David Greene was sowing phalaris into paddocks that had been cleared of rabbits and tree stumps. One paddock was sown annually using a method of cultivation and directly dropping phalaris and sub clover onto the tilth. The phalaris was soon using the extra nitrogen from the clover growth and the productive transformation had begun.



Millbanks; autumn 2017

Millbanks is located a couple of kilometres north east of Elmhurst in Victoria and has land ranging from the flats of the upper Wimmera River through to steep hill country in the foothills of the Pyrenees Ranges.

The property has been long renowned for its high production but also for the high standard of land management.



Molybdenum response at Millbanks 1955

Generational Change

Two of David's sons, John and Michael, took over the management of Millbanks in 1972 and started the expansion of the enterprise with the purchase of the "Karingal" property south of Elmhurst. The establishment of phalaris based pastures continued and new paddocks were sown to permanent pasture after a period of cropping to aid with weed control and fertility build up. The area cropped reduced dramatically with the introduction of reliable chemical weed control and direct drilling technology which meant that pastures could be established without the need for cultivation.



Michael and John Greene at Millbanks during the 1982 drought at their stock containment area; one of the first in the region.

The Greene's were generous in sharing information with other farmers and Millbanks was often the location for field days and pasture research; a practice which continues today. John and Michael had a sound, succession plan in place and in 1991 an amicable dissolution of their partnership saw Michael take over Karingal and continue with the establishment of high quality pastures.

John continued at Millbanks with the improved pasture improvement program increasing the farm's productivity.

Results of the rules in practice 2014

Sharing Information

Ben and Jodie are foundation members of the Perennial Pasture Systems (PPS) group. Ben was the group's second president and has been on the management committee since its inception.

Jodie is an advisory group member of the PPS Girls & Grass group which focuses on women who are part of member farm businesses.

The Greene's are generous with their input to PPS hosting farm trials and group field days and also speaking to visiting groups.



Ben and Jodie hosting a farm visit by Melbourne University agronomy students in 2017

Ben's advice is also sought out by individual members of PPS and is highly regarded. There are two thumping phalaris pasture on PPS member farms that bear testimony to Ben's influence.

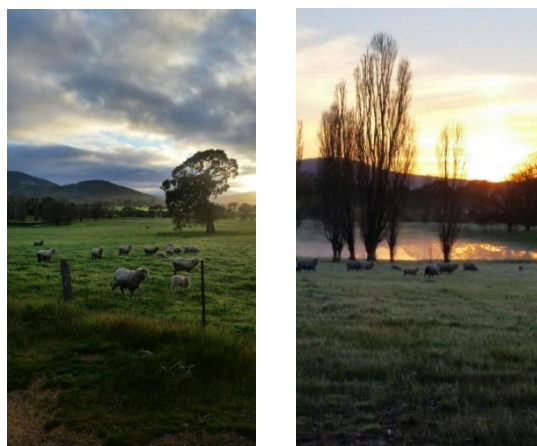
PPS commenced a pasture establishment economic project on a PPS member property near Ben's in 2014 and despite a dry year and some weed issues it was looking good after late spring and summer rains. PPS appoints a project advisory group to its projects and two of its members had decided that it would be ok to give it a grazing. Member Tony Roberts suggested that we had better consult Ben first as he was also on the advisory group.

A phone call to Ben elicited a response quicker than a triple O operator and he was in the paddock ten minutes later. He ignored the large plants focusing on their smaller neighbours "put the sheep in and they will go straight for these, lose them and you lose plant density, it will be a long term loss for a small gain". Needless to say his advice was followed and a highly productive pasture resulted.

In the drought year of 2015, PPS member Rod Vearing established a successful new phalaris stand and was tempted to graze it in late spring when it had a bulk of feed.

Ben's advice on not grazing until after seed set was heeded as well as his words "do you want to have it for two years or thirty" and Rod deferred grazing until there was moisture from

the next year's opening rains. The result was one of the best pastures in the district and it was sown in a drought year.



Good pastures, stock water and shelter at Millbanks

Summary

The PPS phalaris project involved an in depth study of persistence of forty old phalaris pastures and looked for the common factors in phalaris persistence.

One of the major findings related to paddock size and found that pastures over 20 Ha were less likely to persist than those less than 20 Ha.

The study also found that compounding stress factors such as low fertility, overgrazing and high acidity reduced the persistence level. Three of the Greene's paddock were used in the study.

The management system on Millbanks addresses all the negative factors involved in phalaris persistence and stand out as a model for productive, persistent phalaris based pastures.



Ben & Jodie Greene

Reference: Newman R.J. (1955) Molybdenum deficiency in Central Highlands and Upper Goulburn regions and adjoining districts; Department of Agriculture, Victoria