

Case study

Clare Valley Wine Region

PENNA LANE
CLARE VALLEY



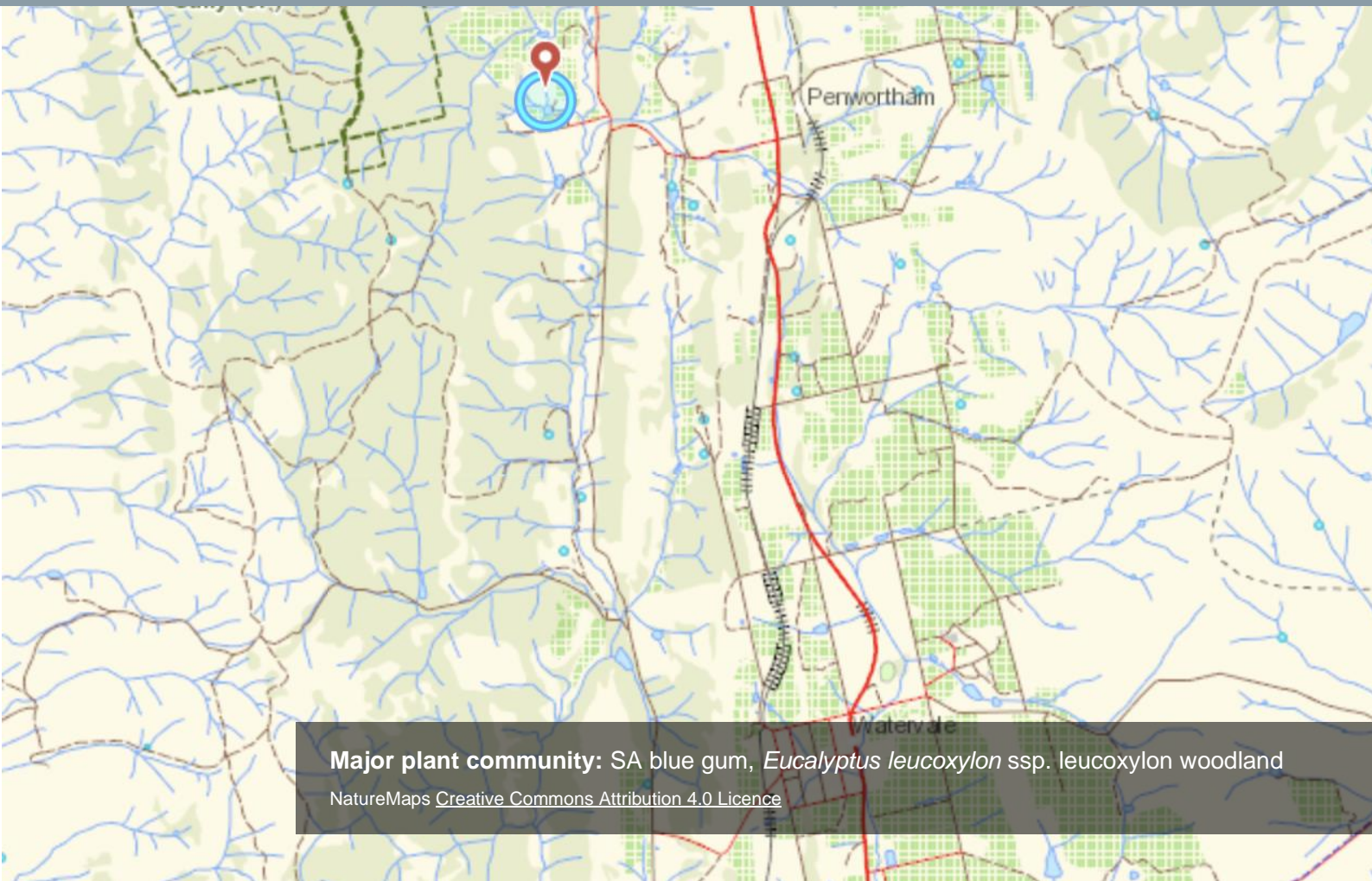
Penna Lane Wines, Penwortham, SA

EcoGrowers: Peter and Julianne Treloar

"It has been very satisfying to be involved in introducing biodiversity at Penna Lane Wines via some native plantings. Despite our demonstration sites being relatively small, we feel we have learnt a lot about the appropriate native plantings for our region and we will continue to apply this knowledge in the vineyard."



October 2023



Major plant community: SA blue gum, *Eucalyptus leucoxylon* ssp. *leucoxylon* woodland

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EcoGrowers: Peter and Julianne Treloar

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What worked well?

Overall, the native plantings (the tube stock) have done well.

We have lost a few in both locations and a few are struggling, but generally we are pleased with the growth of the plants.

We left enough space between each of the plants in the larger planting (not applicable for the end of row plants) so that we could whipper snip any weeds in between the plants, whilst they become established, and we feel this was a good idea.

What are you more aware of now?

The importance of having a diversity of plants within the vineyard, in order that a wide range of beneficial bugs can be supported.

Which native plants grow well in your area:

- *Bursaria Spinosa*, sweet bursaria
- *Thomasia petalcalyx*, paper flower
- *Templetonia retusa*, cocky's tongue
- *Grevillea lavandulacea*, heath grevillea
- *Daviesia leptophylla*, narrow leaf bitter pea

Progress (June 2021 to 2023):

What did you do and when?

When we commenced our project we planned a patch of natives, close to a new Riesling block, and we also planned some end-of-row native plantings for a second new Riesling block. We were also hoping to grow native grasses in the mid-rows of our new Riesling block.

With the native shrub plantings, we hoped the addition of these plants would assist in the introduction of beneficial bugs to the vineyard and, by extension, the natural control of vineyard pests.

With the native grasses planting, we were hoping that using these perennial grasses in the mid-rows would improve the soil quality in the vineyard.

Where to from here?

We are planning a native planting near the creek bed at the eastern end of the vineyard, where we recently lost a very old, large eucalypt. Peter is keen to establish a "native forest" and I am keen to ensure that we have reliable water to the area before we commence the planting. I imagine we will use tube stock.

What has been the most valuable aspect of the program for you personally?

I think we are much more attuned to the value of planting native species in and around the vineyard, for example, the loss of one large native near the cellar door has led us to consider a much larger native planting for this area. Prior to being involved with the EcoVineyards program I think we may have considered non-native trees as an option.





Above: Preparing area to plant native insectary plants and using the tree popper to remove woody weeds with a deep tap root (Photo: Mary Retallack).

Below: Native insectary plants in establishment at the entrance of the property (Photo: Julianne Treloar).

Main photo: Planting native insectary shrubs adjacent to the strainer posts.

Inset: Examples of native insectary plants growing in the first year (Photos: Julianne Treloar).



EcoGrowers: Peter and Julianne Treloar

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Insights when planting native tube stock and grasses in winter 2022

As far as the native plantings are concerned, I would like to have had the watering system to the larger planting established from day one. Unfortunately, this was not the case, and we had to hand water initially (via a water drum on the quad bike). Also, once the tubing was set up to deliver water via the auto system, we did not realise for several weeks that there were problems with the setup in that section of the block, and that the water was not being delivered to the plants.

Also, I would find a more foolproof way to identify the plants. I relied on tucking the plastic name tags in against the plant stakes – securely I thought – but I don't think there is one that remains. In future, I will use a permanent Texta and write on the stake or on the plant guard.

As for the sowing of the native grasses, there were a number of pitfalls that we wish we had avoided:

1. It was a very late break to the season in 2022, and it was extremely wet when it did break, which meant there was little opportunity to spray out the first flush of weeds before it was too wet and boggy to get into the vineyard to do any work and/or effectively spray for weeds.
2. There was a lot of work to be done in the vineyard, after the native sowing had been done and, in hindsight, this and a very late, wet season meant there were too many jobs jammed into too short a space of time.
3. One of the jobs which was delayed owing to the wet season, was the installation of the new wires in the vineyard. This meant more disruption to the vineyard, after the sowing, than we would have liked.
4. Owing to the drought which preceded the season break, we had no water in our dam and consequently had not been using the watering system for a couple of years. When we went to use it on the new vines, we found it was not working and required extensive repairs. This was another thing that meant more disruption to this vineyard than we would have liked.

In hindsight, I think it is too risky to attempt establishing your native grasses prior to planting your new vineyard. Unless you have plenty of time to get all the new vineyard work done before you sow the grasses, and the weather is on your side.

If we are going to attempt sowing native grasses again, I think we need to know more about preparing the vineyard for this. Our vineyards are regularly sprayed for weeds during the year, and we erroneously believed that this would be sufficient prep.

We usually spray at least 4 times a year and, in fact, the vineyard that was to be sown with the native grasses was sprayed 4 times in the period from 1/12/21 to 25/7/22. I also think we need to know more about the sponge wipe approach to removing weeds. Although in the end, I think it was the excessive amount of rain that really hampered our efforts. The truly annoying thing is that, with everything that went wrong in the season, the weeds still managed to come up!





Above: The Seeding Natives 'blue devil' native grass seeder in action (Photos: Mary Retallack).

Below: The mid-row of the Riesling block was sown with a mixture of wallaby grasses and forbs (Photos: Julianne Treloar).

Expenses (cash and in-kind)

Name: Penna Lane Wines		Region: Clare Valley			
Date	Activity	Number of plants	Grant cash expenses	Additional cash co-contribution	In-kind time captured
1/12/21 to 11/6/22	Herbicide (weed control) - section B of Biodiversity Action Plan; 3 applications			\$ 54	2 hrs
1/12/21 to 25/7/22	Weed spraying between mid-rows of new Riesling block - section A of Biodiversity Action Plan; 4 applications				4 hrs
23/03/2022	Mallee flute tree guard (70 x 0.95ea)		\$ 67		
23/03/2022	Purchase hardwood stakes (70 x 0.50ea)		\$ 35		
23/03/2022	Purchase weed mats (100/bundle x 49.00)		\$ 49		
23/03/2022	Freight		\$ 35		
8/06/2022	Purchase tube stock (45 plants x 1.75 ea)	45	\$ 79		
8/06/2022	Purchase tube stock (11 plants x 2.50 ea)	11	\$ 28		
13/06/2022	Purchase tube stock (5 x 4.00ea)	5	\$ 18		
30/06/2022	Purchase tube stock (5 x 4.00ea)	5	\$ 18		
20/07/2022	Native grass midrow by Andrew Fairney		\$ 800		
20/07/2022	Native crass seed		\$ 1,156		
20/07/2022	Travel related expenses shared with Skillogee		\$ 520		
6/07/2022	Planting time (2 people x 3 hours)				6 hrs
7/07/2022	Planting time (2 people x 2.5 hours)				5 hrs
TOTAL		66	\$ 2,804	\$ 54	17 hrs

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GROWING RESILIENCE NATURALLY

Program partners



This project is supported by the Department of Agriculture, Water and the Environment, through funding from Australian Government's National Landcare Program.

Acknowledgement of country

The EcoVineyards program acknowledges Aboriginal people as the First Peoples and Nations of the lands and waters we live and work upon and we pay our respects to their Elders past, present, and emerging. We acknowledge and respect the deep spiritual connection and the relationship that Aboriginal and Torres Strait Islander people have to Country.

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