

Case study

McLaren Vale Wine Region

Calcaire Vineyards, McLaren Vale

EcoGrower: Ben Lacey

"It's been an extremely gratifying experience, knowing we are changing landscapes for the better and increasing the biodiversity on our properties."

It has been very helpful having Mary's support, to point me in the right direction on the selection and procurement of plants."



October 2023



EcoGrower: Ben Lacey, Calcaire Vineyards

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What worked well?

There was an established stand of gum trees already in the strip, so our focus was mostly on grasses, ground covers and shrubs and smaller trees such as sheoaks.

Most shrubs, ground covers and trees are well established. Strike rate was around 70% with no irrigation. This was in line with our expectations.

Grasses although have mainly survived haven't spread as hoped from original plantings, there seems to be higher competition from weeds surrounding.

This has required a lot of extra maintenance and not giving them opportunities to spread.

Pitfalls to avoid?

In hindsight, we should have treated the area with herbicides for a couple of years prior, to get a good clean seed bed for the native grasses. Weeds have been the major obstacle.

We were lucky that the year was reasonably wet, so the planting in August worked well. Would need to be earlier if it was a drier season. Or irrigation would be needed if plantings were later in the season.



Progress (June 2021 to 2023):

What were you hoping to achieve and why?

Our project was to establish a strip of native vegetation, endemic to our local area.

Species were selected based on them being a good host for beneficial insects. With the increase of beneficial insect populations, this should in turn help reduce reliance on insecticides in the future to control pests.

We were wanting to achieve tiered layers of vegetation not just one layer, it included grasses, ground covers, shrubs, and trees.

What did you do and when?

In mid 2021, we selected and bought endemic plants specific to our area, which were known to provide shelter and food for beneficial insects.

In August 2021, we planted these (1,058 in total) and over the following months kept up with weed management, via whipper snipping and spot spraying.

Any highlights that you would like to share?

Ground covers grew the quickest and strongest. Trees and shrubs are still young and establishing, so not able to notice any significant increase in insect/bird populations at this point.

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

Knowledge of the names of native endemic plants and the benefit that each one brings has grown.

Photo above: Native grasses planted in groups, so it is easier to manage the weeds around the edges.

Photo left: Planting native plants using a Stihl post auger (Photos: Ben Lacey).



Main photo: All paws on deck to help plant the native insectary plants (Photo: Ben Lacey).

Clockwise: Planting day (August 2021). When the vineyard was established the fence line was extended onto the property in addition to the council verge to allow for additional room to plant native insectary plants – a great example of planning ahead with wise intentions (Photos: Ben Lacey), *Vittadinia blackii*, New Holland daisy with a full head of seed (Photo: Mary Retallack)





Clockwise: Plant growth in December 2022 (Photos: Mary Retallack).



Insights

What are you more aware of now?

Preparation of site is key to any success of establishing native vegetation, particularly grasses. Regular ongoing maintenance is required and the time and cost (to do properly) is easily underestimated.

Where to from here?

On all our properties we hope to increase and establish more native plantings to increase the biodiversity and therefore hope to see increases in beneficial insect populations, taking pressure of our production systems.

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

Seeing the boundary strip of our property, which was previously a wasteland of woody weeds (except for native gums) grow and evolve into a diverse range of native species. The under and mid story plants have been very successful.

Native plant list:

- *Acacia igulata*, umbrella bush
- *Acacia pycnantha*, golden wattle
- *Acacia victoriae*, elegant wattle
- *Allocasuarina verticillata*, drooping sheoak
- *Atriplex semibaccata*, creeping saltbush
- *Austrostipa nodosa*, tall spear grass
- *Bursaria spinosa*, sweet bursaria
- *Cullen australasicum*, tall scurf-pea
- *Dodonea viscosa*, sticky hop bush
- *Enchyleana tomentosa*, ruby saltbush
- *Eucalyptus porosa*, mallee box
- *Hakea rugosa*, dwarf hakea
- *Hardenbergia violacea*, native lilac
- *Kennedia prostrata*, running postman
- *Leptospermum myrsinoides*, heath tea tree
- *Melaleuca lanceolata*, dryland tea tree
- *Myoporum insulare*, common boobialla
- *Pittosporum angustifolium*, native apricot
- *Olearia axillaris*, coastal daisy-bush
- *Poa poiformis*, coast tussock grass
- *Rhagodia candolleana*, seaberry saltbush
- *Rytidopserma caespitosa*, common wallaby grass
- *Themeda triandra*, kangaroo grass
- *Vittadinia blackii*, New Holland daisy



Photo above: Brian O'Malley from Ocloc dropping off the predator perch to Ben Lacey, Calcaire Vineyards (Photo: Mary Retallack).

Expenses (cash and in-kind)

Name: Calcaire Vineyard			Region: McLaren Vale		
Date	Activity	Number of plants	Grant cash expenses	Additional cash co-contribution	In-kind time captured
16/07/2021	Clayton Bay Nursery- Mixed Plants	163	\$ 326		
07/06/2021	Kersbrook Landcare Nursery- Purchase tube stock (40 plants x 1.50 ea)	40	\$ 60		
07/06/2021	Kersbrook Landcare Nursery- Purchase tube stock (220 plants x 1.70 ea)	220	\$ 374		
22/06/2021	Trees for Life- Purchase forestry tube stock (145 plants x 2.50 ea)	145	\$ 363		
22/06/2021	Trees for Life- Purchase forestry tube stock (120 plants x 1.25 ea)	120	\$ 150		
22/06/2021	Trees for Life- Purchase 40 x Tree Scheme surplus	40	\$ 8		
14/07/2021	McLaren Vale Natives- Purchase tube stock (330 plants x 1.82 ea)	330	\$ 600		
28/07/2021	Aborgreen SA- Bamboo Canes (4 at \$25.16 ea) (Bale 250)		\$ 101		
28/07/2021	Aborgreen SA- Tree guards (250 in a box \$43.08)		\$ 86		
28/07/2021	Aborgreen SA- Mallee Flute Tree Guard (400 x \$1.52 ea)		\$ 608		
28/07/2021	Aborgreen SA- Mallee Tube Guard		\$ 119		
28/07/2021	Aborgreen SA- Hardwood Stakes (560 stakes x \$0.80 ea)		\$ 448		
	Ben's hours on the project				20 hrs
	Calcaire Payment			\$ 1,500	
TOTAL		1,058	\$ 3,243	\$ 1,500	20 hrs

ECO VINEYARDS

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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