



## CASE STUDY

# RE-VEGETATION TO CREATE BIODIVERSITY AREAS AND INSECTARY PLANTINGS AT DOMAINE CHANDON AUSTRALIA, YARRA VALLEY, VIC

By Anthony Tully, Domaine Chandon Australia; Karen Thomas, Melbourne Water  
and Dr Mary Retallack, Retallack Viticulture Pty Ltd



# ENHANCING FUNCTIONAL BIODIVERSITY

## Background

Domaine Chandon is in Coldstream, Yarra Valley. The property is approximately 143 ha with 40 ha planted to Pinot, Chardonnay and Pinot Meunier. The Yarra River runs along the back of the property and extensive capital works are underway in partnership with Melbourne Water to restore the billabongs that were historically present along the floodplain.

Local plant communities include Ecological Vegetation Class (EVC):

- **EVC 55:** Plains grassy woodland
- **EVC 164:** Creekline herb-rich woodland
- **EVC 126:** Swampy riparian complex
- **EVC 47:** Valley grassy forest

EVC55: Plains grassy woodland and EVC 126: Swampy riparian complex are endangered plant communities.

*“My level of knowledge has increased significantly since becoming an EcoGrower. All the resources provided have been a tremendous help. The shared knowledge and experience from Dr Mary Retallack and the other EcoGrowers across the regions make it an invaluable resource for growers and vineyards.”*

**Anthony Tully, Domaine Chandon Australia**



**Figure 1:** Insectary planting site, September 2023 [Photo: Anthony Tully].



**Figure 2:** Insectary planting site, September 2024 [Photo: Melbourne Water].

## What were you hoping to achieve and why?

---

Domaine Chandon Australia has an ambitious target to eliminate herbicide use in the vineyard and is seeking alternative management options for the under-vine area. The vineyard is also undertaking re-vegetation projects to create biodiversity areas and insectary plantings.

A variety of groundcovers are being trialled in under-vine areas, additional hydroseeding trials will also be set up with the sites monitored for establishment success, competition with weeds, low water thirst during dry months and to support improved soil moisture.

## What did you do and when?

---

The insectary site was planted in September 2023 with a community planting day and the hydroseeding site was sown in May 2024. The hydroseeding site had undervine ground preparation to reduce the weed competition. Native seed was broadcast under panels with individual grasses and forbs in panels as well as mixes of grasses and forbs.

## Where to from here?

---

The use of a hydroseeder for applying native seed mixtures directly undervine has sparked considerable interest from our viticulturist, Matt Duggan. We're exploring the possibility of obtaining a hydroseeding unit for use across our Coldstream, Strathbogie and Whitlands sites.

Once we proceed, we would be happy to keep the EcoVineyards growers and other interested parties informed of our experiments with the various seed mixes.

Additionally, we've added a seeding unit to our power-harrow, which will allow us to plant and experiment with cover cropping mixes throughout the vineyards. Our first batch of winter seeding crops is ready to go.

We will continue planting out areas with native species across our sites with the intention of establishing habitat and corridors for our beneficial friends.



**Figure 3:** Hydroseeding May 2024 [Photo: Melbourne Water].



**Figure 4:** Hydroseeding May 2024 [Photo: Melbourne Water].



**Figure 5:** Undervine competition is challenging, December 2024 [Photo: Melbourne Water].



**Figure 6:** Some success with *Linum marginale*, native flax showing signs of establishment with flower heads emerging above the clover, December 2024 [Photo: Melbourne Water].

## Insights

Simon Green and David Thompson from the vineyard team invested significant effort in preparing the undervine area for the hydroseed trial. Their work, which included mechanical undervine intervention using Clemens equipment, hand hoeing/weeding, and a well-managed herbicide application, provided the trial with the best chance of success.

### Ground preparation is essential and patience is also crucial!

Interestingly, the hydroseed trial area saw a beautiful cover of clover germinate across the undervine site. This was interspersed with various trial species that successfully propagated, with Native Flax, Swan River Daisy, and New Holland Daisy being the most noticeable.

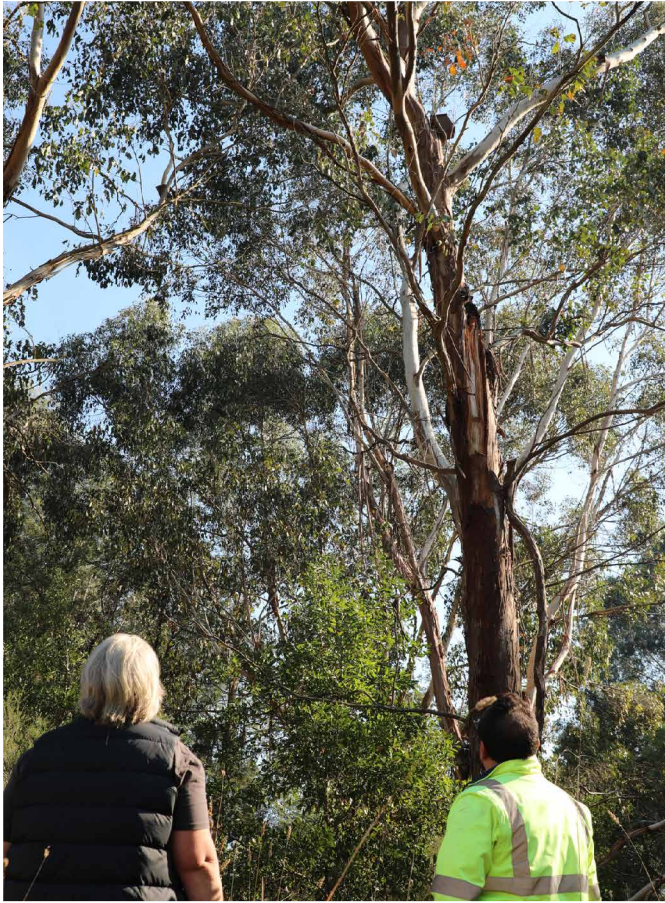
## Pitfalls to avoid?

It's important to manage expectations and remain patient. Given our limited experience growing various grasses like wallaby and kangaroo grass, we needed to temper our expectations, especially considering the success of similar trials in Adelaide Hills. We had to avoid asking, "Why isn't my wallaby grass performing like that?"

## Has your level of knowledge increased significantly?

Yes, my level of knowledge has increased significantly since becoming an EcoGrower. All the resources provided have been a tremendous help. The shared knowledge and experience from Dr Mary and the other EcoGrowers across the regions make it an invaluable resource for growers and vineyards.

**The provided resources are a valuable source for any viticulturist, vineyard manager or operator looking to expand their knowledge and experience. The ongoing growth of this knowledge base is a very good thing.**



**Figure 7:** Microbat boxes installed to provide supplementary habitat [Photo: Melbourne Water].



**Figure 8:** Predator perch installed to provide a vantage point for raptor birds of prey [Photo: Anthony Tully].



**Figure 9:** Insectary plantings in the ground [Photo: Domaine Chandon].



**Figure 10:** Mature insectary plants [Photo: Melbourne Water].

## What has been the most valuable aspect of the program?

The shared knowledge and experience from the EcoVineyards trial in the region have been invaluable. Our Regional Coordinator (ROC), Karen Thomas, has also been a fantastic source of knowledge and support over the past three years.

The program has enabled Domaine Chandon to explore various areas, including soil health, beneficial insects/insectary planting programs, microbats, dam/water health, and more. We are only beginning to scratch the surface in these areas, and the program has generated considerable interest from other parts of the organisation.

## Plant lists

Insectary area		
#	Scientific name	Common name
1	<i>Bursaria spinosa</i>	sweet busaria
2	<i>Goodenia ovata</i>	hop goodenia
3	<i>Indigofera australis</i>	austral indigo
4	<i>Leptospermum continentale</i>	prickly tea-tree

Hydroseeding under-vine		
#	Scientific name	Common name
1	<i>Brachyscome basaltica</i>	swamp daisy
2	<i>Brachyscome iberidifolia</i>	Swan River daisy
3	<i>Calocephalus citreus</i>	lemon beauty heads
4	<i>Chloris truncata</i>	windmill grass
	<i>Chrysocephalum apiculatum</i>	common everlasting
	<i>Dichondra repens</i>	tom thumb
	<i>Linum marginale</i>	native flax
	<i>Microlaena stipoides</i>	weeping grass
	<i>Pycnosorus globosus</i>	billy buttons or drumsticks
	<i>Rytidosperma geniculatum</i>	knead wallaby grass
	<i>Trachymene composita</i>	parsnip laceflower
	<i>Vittadinia cuneata</i>	fuzzy New Holland daisy
	<i>Vittadinia gracilis</i>	woolly New Holland daisy

## Costs

Date	Activity	Number of plants	Grant cash expenses (ex GST)	Additional cash co-contribution	In-kind time captured
31/10/2023	Native Seeds		\$2,679		24 hrs
29/08/2024	Indigenous tubestock Friends of the Helmeted Honeyeater	75	\$188		8 hrs
16/07/2024	Arboregreen - Mallee Tree Sleeves Long Life, 330/pack	3	\$295		
16/07/2024	Arboregreen - Bamboo Canes 11-13mm x 750mm Long - 250/Bale	12	\$555		
16/07/2024	Arboregreen - Freight		\$94		
12/09/2024	Impact Ecology - Microbat call analysis		\$124		
1/04/2025	Native Seed, <i>Linum marginale</i>		\$45		
	EcoGrower contribution			\$3,000	
	<b>Total</b>	<b>90</b>	<b>\$3,980</b>	<b>\$3,000</b>	<b>32 hours</b>



## Disclaimer

The information contained in this EcoVineyards case study is provided for information purposes only. Wine Australia, Retallack Viticulture Pty Ltd and Melbourne Water give no representations or warranties in relation to the content of the case study including without limitation that it is without error or is appropriate for any particular purpose. No person should act in reliance on the content of this case study without first obtaining specific, independent professional advice having regard to their site(s). Wine Australia, Retallack Viticulture Pty Ltd and Melbourne Water accept no liability for any direct or indirect loss or damage of any nature suffered or incurred in reliance on the content of the case study.

For more information about the National EcoVineyards Program please visit [www.ecovineyards.com.au](http://www.ecovineyards.com.au) @EcoVineyards

© Retallack Viticulture Pty Ltd, 2025



## PROGRAM PARTNERS



## REGIONAL PARTNERS



MARGARET RIVER WINE



The National EcoVineyards Program is funded by Wine Australia with levies from Australia's grape growers and winemakers and matching funds from the Australian Government.

## ACKNOWLEDGEMENT OF COUNTRY

EcoVineyards proudly acknowledges the Aboriginal and Torres Strait Islander Peoples, and their ongoing cultural and spiritual connection to this ancient land on which we work and live.

As the Traditional Custodians of this land, we recognise their wealth of ecological knowledge and the importance of caring for Country.

We pay our respects to elders past and present and extend this respect to all Aboriginal and Torres Strait Islander Peoples.





