Friends of Pallister's Reserve Inc.

Pallister's Reserve is a 254 ha wood- & wet-land reserve on Masons Rd, Orford, owned by Trust for Nature, & managed by the Friends of Pallister's Reserve Inc. Established January 1990

May 2026

TRUST FOR NATURE

Next Meeting: Sunday, May 24, 2026

10am: Working Bee *Noon: Lunch* *12:30pm: General meeting*

Cancellation of Incorporation

At the April meeting of the Friends of Pallister's Reserve a Special Motion was passed to apply for cancellation of the incorporation of the Friends. The impetus for this Special Motion was the strong opinion of the committee that this now represents the only viable option for us to continue Conservation work at the Reserve.

To pass this Special Motion required the approval of at least 75% of 2025-financial members. The committee thanks all those members who either attended the meeting or submitted proxy forms allowing us to reach this goal.

For lapsed members – or others – a synopsis of the underlying issues is given in the box at right.

The Friends committee has now begun the process of submitting an application to Consumer Affairs Victoria to have the incorporation legally cancelled.

In concert with this, actions are also required to establish our new operational conditions. For liability insurance, each active volunteer will be required to sign an independent volunteer agreement withTrust for Nature (TfN), the terms of which remain to be negotiated; no current Friend should feel obliged to sign an agreement they are unhappy with. In addition, an acceptable set of Standard Operating Procedures must be agreed upon.

Other issues remain to be resolved with TfN. For example, what restrictions will there be on visitors and guests? Can a visitor assist in a koala count, for example, a task having no direct property maintenance function?

Apart from our responsibilities as independent volunteers to TfN, there is a need to establish informal *modus operandi* that allow volunteers to work together co-operatively as in the past.

Other concerns include: How should the Friends' existing financial assets be organised so that control is retained by the volunteers, and not by TfN? How should we conduct meetings, and how frequently?

What will the new structure mean for current Friends? Only those **actively** involved with on-site Conservation works will be required to sign volunteer agreements. Formal membership of Friends will no longer exist – membership subscriptions will not be collected although, as with other Conservation groups, existing members will be welcome to continue as Contributing Supporters. All Supporters and past Friends will be encouraged to visit the Reserve providing no management activities are undertaken.

A first discussion of the issues sketched above will be held during our May 24 General Meeting. Please come along and share your thoughts.

Synopsis

For the following reasons, the Trust for Nature (TfN) requires the Friends of Pallister's Reserve Inc. to re-sign the Management Agreement:

- An updated Management Plan is required;
- Under current OHSA legislation, our current Standard Operating Procedures are inadequate.
- For their management activities, The Friends would be required to obtain Liability insurance acceptable to TfN.

These tasks present a confronting challenge to the Friends committee, exacerbated by the fact that the core volunteers, although dedicated, are a small and aging group.

Furthermore, because of the accompanying increased responsibilities, no current committee member is willing to accept the position of Chairperson for a re-negotiated Management Agreement.

TfN has, however, offered an alternative management arrangement whereby the Friends ceases to exist as an incorporated body, and volunteers independently sign volunteer agreements with TfN taking over formal responsibility for managing Conservation works. TfN would provide Liability insurance and limited funds for maintenance operations. Volunteers would, however, cooperate with TfN to revise Standard Operating Requirements.

While in-practice details of this alternative compact remain to be resolved, following discussions with TfN and volunteers at Snape – another TfN Conservation Reserve – we believe that under this volunteer arrangement the effectiveness of the Conservation work of the Friends should not be unduly compromised.

May Working Bee Tasks

- Kennedy koala count. Bring binoculars.
- Woolshed maintenance, weeding, mowing, …

Pallisters Reserve lies in the traditional Country of the Gunditjmara and Eastern Maar peoples, who never ceded their sovereignty of the Land. We are indebted for their past and ongoing custodianship.

Planting Native Bushlands Resistant to Climate Change, Part 1

"Tower Hill near Koroit", Eugene von Guérard, 1855. The artwork is on permanent display at the Warrnambool Art Gallery.

It has become a South-West legend how, in the early 1960s, Eugene von Guérard's 1855 painting of Tower Hill was drawn upon to guide the revegetation of the then-denuded volcano complex – to restore its bushland as authentically as possible to it's precolonial state. While the reliability of von Guérard's painting for this purpose remains an open question, community volunteers replanted the volcanic complex, steadfastly selecting only seedlings of the locally indigenous trees that would formerly have grown upon the mountain.

Indeed, "local provenancing" has long been regarded as the benchmark practice for seed-sourcing: it is based on the assumption that local-seeds provide the best chance of seedling success.

Although the link between increased atmospheric carbon and global warming had begun to be appreciated, in the early sixties it was for most only a vague theoretical construct: the ability to withstand climate change would scarcely have figured into the choice of seedling trees for the Tower Hill restoration.

Fifty years on, Amelia Caddy described an environmental disaster at a Bush Heritage Reserve located 70 km north-west of Bendigo:

"In January 2014, something unprecedented occurred: temperatures soared to over 40 degrees and stayed there for five consecutive days. A month later, it happened again.

"The woodlands might have recovered if it had just been those two heatwaves, but that year, the usual autumn rains never arrived to rehydrate the stressed trees. In the following months, around 100 hectares of Grey Box and Yellow Box eucalypts on Bush Heritage's Nardoo Hills Reserve died, leaving behind barren hillsides and less habitat for the region's woodland birds."

This was a wake-up call. Replacing the woodlands was essential for the native fauna and flora, yet, to simply replant the Box Eucalypts by means of local provenancing was doomed to fail when the next extreme climate event hit, something now expected to occur more frequently.

The Bush Heritage team – volunteers, academic researchers, and Bush Heritage staff – were therefore led to look elsewhere for variants of Grey and Yellow Box eucalypts better adapted to a drier and hotter climate.

Ideally, it would be preferred for any adaptions to be genetic, the result of natural selection. But the success of Box eucalypts in other – harsher – climates might have little to do with genetics, and instead be based on a combination of environmental advantages such as better soil structure and chemistry, accessible and reliable groundwater, less competition from other plants, and reduced browsing pressure.

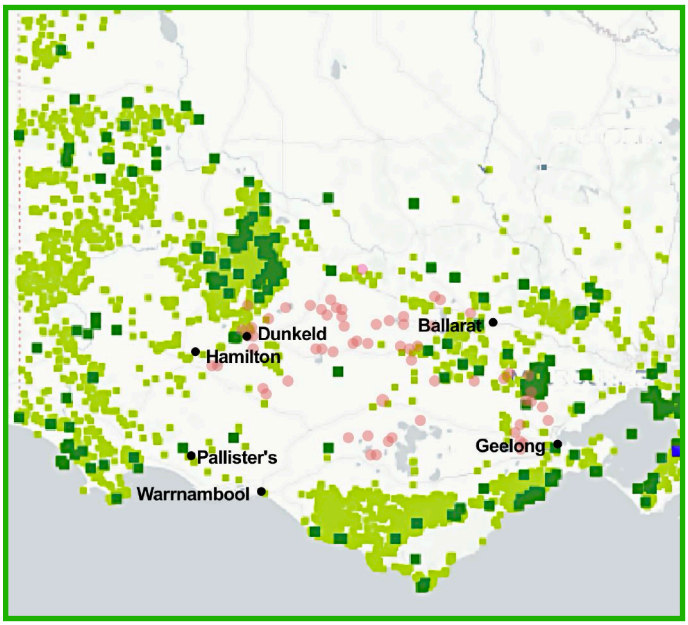
Disentangling genetic and environmental factors is an ongoing challenge for ecologists. A convincing understanding usually relies upon long-term comparative field tests supported by genetic sequencing.

The first 9000 "climate-adjusted provenance" seedlings were planted at Nardoo Hills in 2019, and additional plantings have been made subsequently. Early assessments have been made, although it is still early days yet for a project that, as dictated by the evolving climate, will continue over decades.

Provenances of Grey and Yellow Box seedstock used for Nardoo Hills plantings.

Another colonial artwork – Nicholas Chevalier's 1864 oil painting of Mount Abrupt – has been utilised to instruct new plantings close to Dunkeld. Again, rather than simply replant using only local provenances, ecotypes from drier areas have also been planted.

Mount Abrupt by Nicholas Chevalier, 1864. Artwork in the collection of the Hamilton Art Gallery.



Current distribution of *Banksia Marginata* in western Victoria according to VicFlora. Two databases are used: Victorian Biodiversity Atlas (light green) and Australian Virtual Herbarium (dark green). Pink

This restoration has been undertaken by the Friends of the Forgotten Woodlands. Over the past decade these community volunteers – including farmers, scientists, and resource managers – have planted close to 50,000 trees across a broad region of western Victoria.

FoFW have focussed on three key species: Silver Banksia (*Banksia marginata*), Drooping Sheoak (*Allocasuarina verticillata*), and Sweet Bursaria (*Bursaria spinosa*). Once abundant, these trees were razed, not only in land-clearing for grazing and cropping, but also for firewood and timber. By the early 1900's, vast stretches of the volcanic plains were almost completely denuded of these species.

B. Marginata has attracted special attention due to its presence across environments ranging from wet-temperate to warm-arid. The current distribution map for B. Marginata in western Victoria is shown above. Prior to colonization it was common across the broad expanse between Warrnambool, Hamilton and Geelong.

At Deakin University in Warrnambool, researchers set up a "common garden experiment" aimed at comparing B. Marginata sourced from seven diverse climate regions ranging from wet-temperate to arid. Grown from seed, saplings from the different sources were raised together in a glasshouse. They were watered by drippers, some at a "well-watered" rate equivalent to 3 mm of rain per week, and the others at a "water-limited" rate of 0.8 mm per week.

Plants were maintained for up to 151 days and then measured for structural traits including height, total leaf area, dry leaf mass, and wood density, as well as physiological factors such as water potential –the pressure differences that move water to within plants – and gas exchange through stomatas – the pores in leaf surfaces.

Some findings conflicted with the researcher's initial hypotheses. It was found, for example that under well-watered conditions dry-origin plants produced more leaves and grew taller than plants sourced from wet-temperate areas, this perhaps a survival response of arid-origin plants to cash in when conditions are ripe – "make hay while the sun shines."

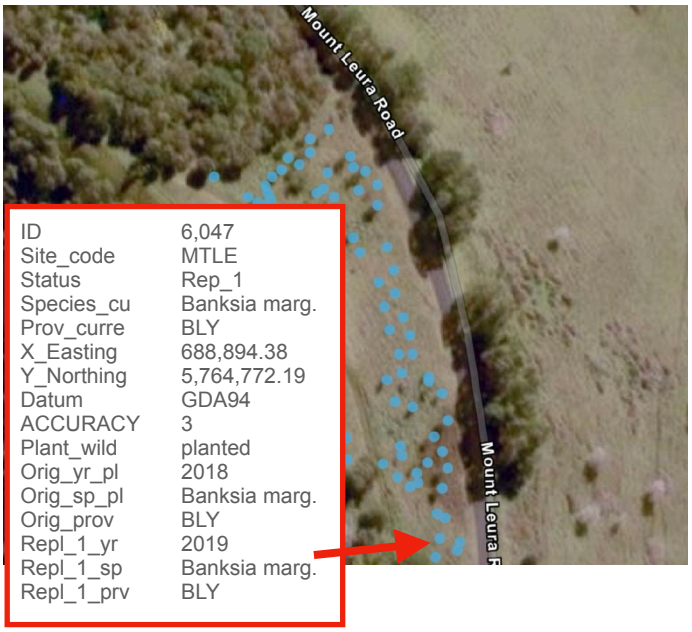
Dry-origin plants were also seen to more-readily adapt to dry conditions, this achieved by plant traits recasting in concert to conserve water.

While the results show evidence of innate adaptations in local growth strategies, a 6-month experiment conducted in a controlled glass-house environment scarcely assures that B. Marginata seedlings planted in low-rainfall areas today will survive tomorrow's evolving climate.

The most telling factors may not be the few extra degrees increase in the annual average temperature, or a 200–300 mm decrease in annual rainfall. Extreme weather events will likely be more decisive, especially as seedlings become established.

Of the 9000 seedlings planted at the Nardoo Hills Bush Heritage Reserve in 2019, only about half survived following the combined effects of a wet winter – that promoted rampant weed growth – followed by dry and occasionally hot and windy spring. Similarly, out of 350 Banksias planted in 2024 by FoFW for seed production, only about 30 were still alive one year later following a rainless summer.

Fortunately, most plantings are more rewarding, but setbacks are to be expected. FoFW prepare for dieback with meticulous record-keeping, as depicted in the satellite-derived image below of a banksia seed-orchard planted on Mt. Leura near Camperdown. Each dot represents a single banksia, geolocated to a precision of 3 m. When interactively clicked on a computer monitor a box pops up showing the planting date and provenance of the seedling. Seedling MTLE 6047 did not strike initially, and had to be replanted. The date and provenance for the replacement are also recorded.



FoFW have constructed a data-base recording the details of many thousands of trees spread over approximately 100 planting sites – a massive ongoing task.

The scale of global investment in agroforestry is in excess of US$1 billion. In contrast, the revegetation projects described above are shoestring operations, supported in part by public donations and relying on the planning, propagation, planting, and record-keeping of dedicated volunteers.

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