
Banksia, Bursaria and Sheoak Project for Victorian Volcanic Plains (VVP)

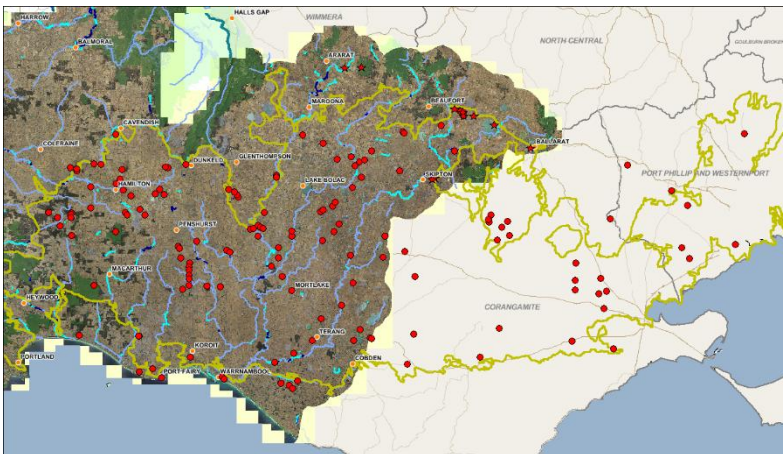
There are many people who are interested in Silver Banksia, Sweet Bursaria and Drooping Sheoaks. Silver Banksia especially seems to attract a wide following, and because of this, we invite all lovers of Banksia to come to a Banksia workshop in Lake Bolac on **Friday 24th February 2017**, at the Bush Nursing Centre 155 Montgomery St. Please put it in your diaries, as this day will be all about showcasing what has been happening with regards to Banksia research, mapping, genetics and seed orchards over the past few months.

Also, hopefully you received a *Banksia Bylines* email from Martin Driver at the ANPC (Australian Network for Plant Conservation). Please let us know if you have missed it, so you can be included on the email list for the next edition.

This workshop has been organised by the ANPC *Bringing Back the Banksias* project, through funding received from the Norman Wettenhall Foundation.

Mapping workshop, March 2015

We gathered in Lake Bolac on 31 March 2015, and focussed on pooling knowledge of the remnant *Banksias*, *Bursarias* and *Sheoaks* on the VVP. Steve Sinclair gave us an excellent view of the past distributions of *Sheoaks* and *Banksias*, painstakingly gathered from old records. The records demonstrated a difference in the distribution of the two species, and showed that Banksias had occurred over a wide range of VVP soils and rainfall.



Sites mapped at Banksia workshop in March 2015

Genetics Project

Glenelg Hopkins CMA provided significant funding to examine the genetics of tree-form Silver *Banksia* populations on the VVP and nearby areas. This is a huge boost to the conservation of Silver *Banksia*, and the work that the Friends of the Forgotten Woodlands Inc. group is doing to conserve the species. In cooperation with Linda Broadhurst (CSIRO), Adam Miller (Deakin University / Nature Glenelg Trust) has guided the selection of populations to analyse. This project fits in with other CSIRO and Bringing Back the Banksia genetic research projects across the species distribution.

We are so fortunate to have had this huge boost from Glenelg Hopkins CMA, and to have the expert guidance of Linda Broadhurst and CSIRO, Adam Miller, and Steve Sinclair from ARI and John Morgan from La Trobe University. We have quite a team of samplers, so thank you to all of you.



Thank you to all of you who contributed knowledge of sites where the species remain.

We are slowly working to standardise the records, to make them easy to use. We need to estimate numbers and know whether they are seeding naturally in those sites. They help give a picture of how few trees remain, and how few sites have reasonable numbers.

The results will show the reproductive connectedness of remnant *Banksia* populations scattered across the VVP, and their relative genetic condition. Specifically, this analysis will help identify genetically fit seed sources for the development of seed production areas (SPAs), and populations lacking genetic diversity and in need of genetic reinforcement. The SPAs are expected to act as security populations, and a source of genetically optimal seed for maximising fitness and adaptive potential in restored populations. It will take the guesswork out of providing trees suitable for planting through the VVP.

We will have a very good picture for the species on the VVP, which will also indicate the situation for the other species. Linda Broadhurst has made some genetic analysis of western Victorian *Sheoaks*, which clearly demonstrated differences, and hopefully in the future we can add to this, and look at the *Bursarias* also.

Hopefully an end result of all this will be a great increase in the numbers of *Banksias* (and *Bursaria* and *Sheoak*) being grown across our landscape, and a rebuilding of the landscape and its ecology. Results from the genetic analysis will be presented at the *Banksia* workshop in February 2017.



Last surviving Silver Banksia in approximately a 2,000km square radius; this is on Mt Hamilton, Nerrin

What's in a name?



We coined the name 'Bring Back the Banksias and Bursarias, Save the Sheoaks', but didn't want to lock ourselves into three species only, especially as Tree Violets are also on our radar! Also, there is a much broader ranging project called 'Bringing Back the Banksias', which focuses on Silver Banksia right across south-eastern Australia that is being managed by Martin Drive at the ANPC.

We are operating within the VVP, and we cover many woodland species; Ian Lunt coined the phrase "Forgotten Woodlands" to describe the woodlands of *Banksia*, *Sheoak*, *Wattle*, *Bursaria* and *Tree Violet* that were once significant keystones of the ecology of the VVP. So, Aggie asked Ian if he would mind if we borrowed his phrase to give us a title – *Friends of the Forgotten Woodlands*. He very kindly agreed.

Setting up a Group

As you probably know, we started with, and have functioned as, a small working group. We needed to set up something more formal to handle projects and funding in the future.

Over the last few months, Bill has been working on an application to incorporate the *Friends of the Forgotten Woodlands*; after holding meetings, sending in official notice of the meeting and nominating 'officer bearers', the group is now incorporated! We now need to apply for an ABN, and can then apply for DGR (deductible gift recipient) status. An important part of all this will be to have members – we hope you will want to be part of the Friends. There will be a small cost - \$10 p.a. - associated with becoming a member of the Friends group to help with administrative costs; however it is hoped that our main source of income will be from both Government and philanthropic funding.

We are very lucky indeed to have had so much good will, and to have such a great range of supporters for the Friends group. We are bringing together contributors and great support from all levels of government and management agencies, expertise and enthusiasm from universities and CSIRO, land stewards, propagators and individuals who have been captivated by these iconic species.

Orchard Projects

We know several good *Banksia* plantings have been established over the years, and more are being grown and planted. Hopefully we will soon have the genetic knowledge to improve on these further.

There are more trees that have just been planted in recent weeks, and they look to have a great prospect this year. Bill has planted *Sheoaks*, *Banksias*, Tree Violets and *Bursarias* on the east edge of Lake Bolac over the past three years. There represent 7 *Banksia*, 12 *Bursaria* and 10 *Sheoak* sources; plus a few Tree Violets are included. We used the corflute/weed-mat combination, with watering through late spring and early summer on this dry site.



VicRoads seed orchard site, Glenelg Hwy, Streatham

An orchard has been started on the Glenelg Highway west of Streatham. 20 *Banksias* (3 sources), 49 *Sheoak* (8 sources) and 26 *Bursaria* (10 sources) went in late. More will be added in 2017.

Nearby another orchard has been established on private land on the edge of the Chinamans Swamp. 49 *Banksias* from 8 sources, 36 *Bursaria* (10 sources) and 27 *Sheoak* (12 sources) have been landscaped into this great site. We are very grateful to Lyndal and Charlie Geddes for giving these trees a home. We also added another 150 *Sheoaks* on another bank of the Chinamans, and over 200 mixed *Banksias*, *Bursarias* and *Sheoaks* have been provided to another nearby property. Hopefully we will get more sites in this area to add to the genetic and ecological value of these plantings.

VicRoads Officer arrests FotFW tree planter

On 23 November Bill was planting *Banksias*, *Bursarias* and *Sheoaks* into the recently approved seed orchard site on the Glenelg Highway west of Streatham. The borrowed Universal Worker signs were up, and he was wearing a borrowed HiViz vest (thanks Aggie!), and the Traffic Management Plan was in the ute. He had only been planting on the site for an hour or two, and was surprised when a VicRoads car pulled up and an officer in HiViz got out of the car. "Have you got authority to be doing that?" the officer called. The cap shaded the officer's face. When Bill replied that he had the permit in the ute, a loud laugh was the response.



Frank Carland happened to be passing through, and so got to see the first trees going in.

We are all extremely grateful to VicRoads for giving us approval to establish a number of orchards on suitable sites. Frank Carland has been pivotal to achieving this. He spent two days last year looking for sites with Bill, and then approached the team within VicRoads to put the project to them. They were impressed with the support from CMA, DEWLP, universities and community groups. We made application, and were given consent within a day. Again, when we came to lodge plans for approval, we were given approval within a few hours.

We are very thankful that Ashley Goad and Allan Carter certainly went out of their way to help us. It allowed us to get the first lot of trees in this year while there was still some soil moisture. Hopefully the rain last week will give them a push along. The orchards on VicRoads sites will

Frank Carland, VicRoads, helps planting after the 'arrest' at Mt Sturgeon have set up an orchard collection of 40 *Banksias* (8 sources), 40 *Bursaria* (9 sources) and 40 *Sheoak* (11 sources). Graham has added more to the established Mt Leura orchard collection.

The orchard trees will be GPS recorded to give a permanent record of the source of each individual tree. We want community to support any orchard site – we will make sure we have agreement from the local CFA, and adjoining land owners. If you know of good potential VVP orchard sites, please let us know.



Silver Banksia seed orchard at the Euroa Arboretum

Propagation

Banksia seed collecting can provide some challenges. We read and use our permit conditions, but Black Cockatoos don't. They can take virtually all the viable cones.

If you gather too early to beat the cockatoos, seed is likely to be immature. If you wait, you can miss most, as the seed can mature quickly. There doesn't seem to be a great deal of time between having an obvious but immature valve, and the valve opening and shedding the seed.

Last year I cut strips from the orange plastic mesh used to make fruit bags, and wrapped a single thickness around the cones. I taped the top and bottom to hold it tight against the cone. When the valves opened, the spacer and seeds were held, and the cones could be collected later. As you get more seed from the cones, you can either grow more seedlings or can harvest fewer cones. This will be more important in sites where natural recruitment can occur.

We don't want our seed collection to have a negative impact on the remnants. We follow the permit conditions, but we may not know if someone else may also have collected. The more we can share what we do, and share seed, the less likely that we will be taking too much.

Cuttings and Grafting

Cuttings or grafts would allow us to “move” the old tree into orchards alongside diverse genetics, and produce good seed from the old tree.

Stoney Knoll Shrublands, CCMA

Anna Carrucan of Greening Australia, working with Corangamite CMA, is developing a Living Landscapes project in the stony knoll woodland east of Lake Corangamite. The area still retains significant populations of Tree Violet and *Bursaria*, while a few old *Sheoaks* remain. We hope to hear more about that when we have our *Banksia* workshop in February.

Thank you everyone for all your wonderful work, to get this project up and going. It has been an enormous effort on so many peoples' parts, and we are grateful. An invitation will be sent out to you in the new year for the Banksia workshop that will be held on Friday 24th February 2017 in Lake Bolac. We would like to wish you all a very Merry Christmas and a safe and Happy New Year.

This project is supported by Glenelg Hopkins CMA, through funding from the Australian Government's National Landcare Programme. For further information about the Friends of the Forgotten Woodlands Inc., please contact:

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