The Fotpin Pilot Planting Project

October 2011

Report by John Brannan

Introduction

Early in 2011, a group of fotpins, frustrated by incessant weeding, started looking at how we could constructively improve the existing vegetation in the Pinnacle Nature Reserve. Consultations with experts in the area of revegetation and native plant propagation persuaded us to scale back our initial grandiose plans and focus on targeted strategies aimed at increasing the complexity and diversity of the existing vegetation. This applies particularly to areas that were planted in the 90s, when the onus was on simply getting as many trees and shrubs into the ground as could be managed in the available time.

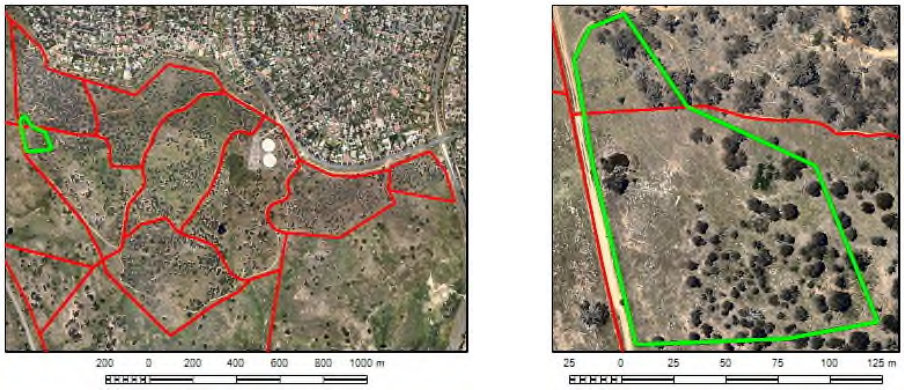
While the massive plantings of the early 90s have produced a reserve with generally good woodland connectivity throughout, the plantings themselves frequently lack an understorey or mid-storey, reducing their value as ecosystems and leaving them vulnerable to weed infestations. We concluded that our energies and resources could best be utilised by focusing on what was missing from the existing woodland and filling the empty niches in the ecosystems, rather than trying to create new tracts of woodland from scratch.

In March, through our consultations with other Parkcare groups, we became aware of a grant for planting projects being offered by Spicers Paper through Landcare Australia. Initially we were reluctant to apply for the grant, since the time frame was quite short and we did not want to be rushed into making decisions we might regret later. However, eventually we were persuaded that a small-scale pilot project would meet the requirements of the grant and provide us with an opportunity to gain some experience that would feed into larger projects down the track.

Site Selection

Our first decision was to select a suitable location. We looked at several sites before settling on an area just south of the stringybark woodland in the Forest paddock. We felt that this area met several key criteria, in that it was not too large (approx. 1.5 ha), included several different types of terrain, included areas where plantings would not be replacing already valuable native vegetation, and provided us with an opportunity to both bridge a gap between two neighbouring woodlands and add diversity to an area lacking adequate understorey and mid-storey species.

Location of planting site within the Reserve (left) and in more detail (right)
(photomaps from nearmap.com)



Plant Selection

Having selected a site, we next moved on to considering what we should plant. This involved conducting an assessment of types of terrain in the site and of the existing plant species, both native and exotic, so that we could choose those plant species that would best enhance the site

and also be most suitable for the terrain. A number of constraints further limited our options, namely the availability of suitable tubestock within the timeframe required by the grant. To be approved as suitable plants by the ACT Government Department of Parks & Conservation, and to meet our own standards for suitability, we needed to find tubestock sourced from within the local Molonglo catchment or an immediately adjacent area. We obtained a list of plants from Greening Australia that would fulfil these requirements and selected from those a list of plants that we felt were suitable for the planting site. Our final list comprised three tree species, five shrub species and three groundcover species (see the full list in the Appendix). All of these are species that already occur naturally on the reserve. Given the size of the site, we decided to limit the total number to 200 plants. In the event, the final number was slightly higher, at 218.

Planting Method

Having selected and ordered our plants, the next question was how to go about planting them. Should we pre-dig the holes or dig them on the planting day? Should we use plastic tree-guards or wire tree guards? If we use wire guards, how high should they be and how many stakes would they need? What about water? Where would we get the water for the planting day and for subsequent waterings? Fortunately, we were able to answer most of these questions by consulting with other Parkcare groups and learning from their experiences. A planting day on Mt Painter provided a demonstration of how fluted plastic tree guards are installed and what tools are needed. A visit to Mt Majura to talk to Waltraud Pix of FOMM illustrated the importance of follow-up protection for trees planted in wire guards, the need for at least two stakes to brace plastic tree guards, and, most importantly, how 1,000-litre IBC tanks can be used for on-site watering and regularly topped up by Parks & Conservation.

This now gave us a clear idea of what we would need, and roughly how many of each item. Particular credit must go to Len Taylor at this point for his hard work in tracking down sources for all the equipment we would need for the planting, and working out the costs involved so that we could go back to Landcare Australia with a definite sum and a breakdown of how the money would be spent. It was at this point that he also hatched his ultimately very successful scheme to "manufacture" wire tree guards on-site on the planting day, using an improvised workbench and a small collection of specialised tools. We also made the decision at about this point to hire a petrol-driven post-hole borer to pre-drill the holes, since we believed that digging the holes on the day would have been an unreasonable impost on our volunteers.

Manufacturing tree guards on site

Pre-drilling planting holes

We submitted our application to Landcare Australia and sent an application for a Works Plan approval to Parks & Conservation. Both replies quickly came back with positive responses and all of our visions and planning suddenly became realities.

Implementation

Having been given a green light to proceed, we now needed to set a date for the "Community Planting Day" required under the terms of the Spicers grant. In consultation with the Fotpin committee, we decided on Sunday October 9th as the best available date. Working back from this date, we drew up a list of tasks worked out a rough schedule for when each of the tasks needed to

be completed. These tasks included selecting locations for each of the 218 plants and pre-drilling the holes (preferably at least 2 weeks prior to the planting), purchasing and installing the 1,000-litre water tank and the fittings need to attach a hose, purchasing all the guards, stakes, weed mats, wire and tools for assembling and installing the tree guards, purchasing the plants themselves and organising delivery to the site on the of the planting, taking "before" photographs of the site so that we will have a baseline for assessing the success of the planting, notifying the Fotpin membership of the planting day, and organising catering for the Fotpins who responded to our call and turned up to help us get the plants into the ground.

The Planting Day

With the help of a group of fotpin stalwarts, the holes for the plants were pre-drilled on September 24th using a cantilever-type post-hole borer hired from Kennards in Belconnen. Despite being assured by the Kennards staff that it would take us "at least 2 days" to dig 200 holes, we managed to dig 210 holes and have the borer back at the Kennards yard by 2.00 pm the same day! Such is the awesome potential of committed Parkcare volunteers.

In the week prior to the planting, the 1,000-litre water tank was installed on site, along with three 44-gallon drums loaned to us by Richard Larson of the Watson Woodland Working Group, and the tank and all three drums were very kindly filled by Parks & Conservation.

The day prior to the planting, the guards, stakes, weed mats, wire rolls and other heavy equipment was dropped off at the site, so that the plants, the remaining equipment and the Ginninderra Catchment Group's equipment trailer -- which included a marquee and BBQ -- could be taken up to the site on the day of the planting.

At 7.30 am sharp on October 9th, a small convoy of vehicles drove into the reserve and unloaded a highly efficient team of volunteers to prepare the site for the day. One group erected the marquee and the BBQ while another organised Len's wire guard production line and yet another began placing plants, guards, weed mats and stakes beside each of the pre-dug holes. This last process was important in ensuring that the correct plants were put into each hole, so that every plant had sufficient space to grow and was in the best available spot in terms of moisture, drainage and shade.

When the first volunteers arrived a 9.00 am, the site was pretty much ready to go. Once we were confident that almost everyone had turned up, Malcolm gave an excellent demonstration of how to bed the plants in well and I gave a somewhat less competent demonstration of how to assemble and install one of the fluted-plastic tree guards. Once these formalities were out of the way, people split up into teams (with a few people choosing to work alone) and got on with the real work of actually putting the plants in the ground. Sue Cox, our "official" fotpin photographer got busy recording the event for posterity (in between helping her kids plant trees).

With a brief break for morning tea, everyone worked industriously and efficiently, and by around 1.00 pm when we stopped for lunch, almost all the plants had been planted and given a tree guard and a drink. After a delicious lunch, the remaining volunteers planted the last few plants and then began packing up the site and loading the equipment and leftover guards and stakes back into the trailers. By 2.30 pm, it was all finished.

Planting gets underway

A well-earned lunch

A few days later, Len and his wife generously went round and re-watered the plants in the uphill section of the site, thereby emptying the 44-gallon drums so that they could be returned, and I bucketed another drink to all the plants in the bottom section of the site. From the water level in the tank and the amount contained in the 44-gallon drums, I think we can safely conclude that every plant received enough water to give it a good start. The rest is up to the plants themselves.

Appendix. Plant list for 9 October 2011

Species	Number
Allocasuarina verticillata (Drooping She-oak)	13
Acacia rubida (Red-stem Wattle)	10
Bursaria spinosa ssp. Lasiophylla (Sweet Bursaria or Blackthorn)	30
Callitris endlicheri (Black Cypress Pine)	10
Cassinia quinquiferia (Cough Bush)	20
Chrysocephalum apiculatum (Common everlasting)	20
Chrysocephalum semipapposum (Clustered everlasting)	60
Dodonaea viscosa (Hop Bush)	15
Hardenbergia violacea (Native sarsaparilla)	10
Indigofera adesmiifolia (Tick Indigo)	10
Indigofera australis (Australian Indigo)	20
Total	218