

Fotpin update #7 February 2012

Dear Friends of The Pinnacle:

My apologies for it being so long since the last fotpin update. The Fotpin Committee has decided to keep you better informed by shorter, monthly updates.

In this update we'll cover the Belconnen Hills Woodlands Strategy, erosion control, the native grass project and our biodiversity monitoring project. Key contacts for each project are listed if you want to get involved or have questions.

Belconnen Hills Woodlands Strategy (John Brannan: john.fotpin@gmail.com).

The 2011 ACT Government budget allocated \$250,000 per year, over four years, to undertake woodland restoration activities in four corridors around Canberra. One of the corridors is the Belconnen Hills, which includes the Pinnacle Nature Reserve.

In late 2011 ACT Parks released to local parkcare groups a draft plan for the Belconnen Hills. Committee placed that draft woodland plan on our website and invited all fotpins to inspect it and provide comments. We made a brief submission that the revegetation maps presented in the draft as fotpin's were out of date and did not reflect our current expectations, and that the plan needed to reflect the latest science on minimum tree spacing.

Since mid-January John has met with Parks and Canberra Ornithologists Group in the field to discuss the proposed restoration works, in particular species for planting, providing best outcomes for threatened bird species, and the introduction of additional coarse woody debris (eg logs).

It was generally agreed that planting along the existing drainage lines (generally running N-S) would provide the best outcomes and that a mixture of locally endemic tree and shrub species would suit. The tree species discussed were Yellow Box (*E. melliodora*), Blakely's Red Gum (*E. blakelyi*) and Scribbly Gum (*E. rossii*), and the shrub species mentioned were *Bursaria*, *Cassinia*, *Dodonea* and *Indigofera*. It was felt that groundcover plantings should follow at a later stage.

The next step will be ground-truthing planting sites in Bottom Pinnacle and North Kama and selecting species to be planted. Plantings will be tubestock, to go in during April-May 2012, so ground-truthing will need to occur very soon.

Erosion control (Pax: fotpin@optusnet.com.au)

One of the key areas identified for action at our inaugural meeting of fotpins (July 2010) was to address active erosion, particularly in the Bottom Pinnacle. Since then we've completed some assessments of track, soil surface and drainage line erosion. This was to establish the baseline information for setting priorities and identifying projects and activities.

In mid-2011 Andrew Yates and I assessed the condition of all drainage lines in the Reserve, and some drainage lines in North Kama and Bottom Pinnacle. This showed that the clear priority for action is in the Bottom Pinnacle.

The opportunity has now arrived to commence erosion control work. With expert guidance from member and landscape ecologist David Tongway, we will soon be installing coir logs and brushpacks adjacent to an actively eroding gullies. Ten coir logs and stakes have been supplied

by Parks, and we will use the Cootamundra Wattles recently removed from the Reserve to construct brushpacks (these act as “leaky weirs”, to slow the movement of water and trap sediment). This work will take place in the coming weeks.

John Brannan and I are also developing a project proposal, for possible funding under the Commonwealth Community Actions Grant program, to purchase a large number of additional coir logs to treat this and another actively eroding gully. A planting program will be designed to complement these activities. If funded, this project will be planned for Spring.

Fotpin Grass Project (Don Driscoll: weedmenace@dodo.com.au)

November was the busy time for the fotpin grass experiment. We had 37 people contribute to our plant surveys, sugar sprinkling and slashing treatments, including 13 from the Federal Department of Sustainability, Environment, Water, Population and Communities, two from Hawker College, two from ANU and 20 fotpins. A range of plant species appeared in our surveys for the first time this year, notably some new weeds including fleabane, a brome grass, and a grass related to serrated tussock that was masquerading as a spear-grass, *Nassella megapotamia*. Our crop treatment seemed to work at some sites, but not at others. Perhaps some seed was stolen by birds before it germinated? Our detailed measurement of plant species and abundance in our plots will let us identify these subtle changes in species composition and we'll be able to discover how any of these changes relate to our experimental treatments.

Our observations during the survey suggest that there may have been slightly fewer exotic annuals on the sugar-treated plots (or was that just wishful thinking?). Our slashing and weighing teams, led by Bob Hodgson, reported there were very strong effects of fencing. The herbivores had reduced the amount of vegetation outside of the fences enormously. What will be interesting is to see if they also altered the proportion of natives to exotics.

Our soil collections from 2010 have been analysed by the laboratory at the Fenner School of Environment and Society at ANU. We now have a record of available and total soil nitrogen and phosphorus from before we started any of the treatments. We will take additional samples at the end of the experiment (in two years time) to see how the nutrient loads in each of the treatments have been altered.

After a meeting with ACT Parks and Conservation late last year, we agreed that Parks would apply the burning treatment to our experimental plots using weedburners. This meant that our little experiment will be treated for what it is, a small experiment, and not a full-on "controlled burn". Although this means our burn treatments will not have the same properties as a controlled burn, it will nevertheless give us the best insight into the effects of burning that we can get, given the scale of our plots and the resources that are available. Many thanks to Parks for agreeing to help out with this aspect of the experiment.

Over the coming months I will finish entering the data and update our analyses. I will also have a look at any relationships between soil nutrients and the original state of the vegetation at each of the sites. We will apply sugar every four months, we will re-apply our crop treatment, in winter this time to give birds less time for seed stealing, and we will re-survey the sites in spring. Then more will be revealed about how we can best manage the weed menace at The Pinnacle Nature Reserve.

Biodiversity monitoring (John Brannan: john.fotpin@gmail.com)

John Brannan and Elizabeth Smith are leading the establishment of a biodiversity monitoring project. The Molonglo Catchment Group is providing expert support (Sarah Sharp) to parkcare groups to establish monitoring programs.

John and Elizabeth have set up a monitoring plot at the site of our October 2011 community planting. This is comprised of a 50 m x 20 m monitoring plot with an internal 20 m x 20 m plot, to monitor herbaceous plant diversity in more detail and then conducting a plant survey along two 50 m transects inside the plot.

This site was selected because one of the key aims of the monitoring project is to study the extent to which species introduced by a planting event successfully spread into adjacent areas. If we can observe and demonstrate this sort of "recruitment", then we will know that it is possible to effectively introduce understorey plants into some of the existing woodlands by planting in open areas around the woodlands rather than planting inside the woodlands where conditions are less conducive to direct planting.

Elizabeth also began the photo-monitoring phase, by placing marker posts and taking a number of baseline photos that we can replicate in years to come.

There are additional surveys that need to be conducted in the plot, and we are also planning to mark out another plot in a different and more open part of the site to give us a comparison of planting success in predominantly grassy areas vs success in open woodland areas.

The project is currently designed to run for 5 years, with surveys conducted either annually or at longer intervals depending on the information collected, and after critical events such as fire. In addition to the initial surveys conducted when the sites are established, we will conduct another set of surveys in Spring of this year (October) that will act as the "official" starting point of the monitoring project. This is because the vegetation visible in Spring is more easily identified and provides a more representative dataset for native and introduced plant species.

Bird surveys will also be conducted covering the entire planting site 4 times a year in conjunction with Canberra Ornithologists Group bird monitoring.

A separate monitoring exercise will involve checking the success of individual plantings including comparing the different tree guards that were used.

That's a taste of some of fotpin's activities at present. Of course weeding continues apace, with new records for the amount of effort being set regularly (see the recently updated [weeding effort](#) page on our website). The results of our increased spraying effort this year are evident across the Reserve.

I'll update you with news of some of the other activities in a month or so, including plans for this year's Kangaroo Count and the Autumn Walks and Activities Program.

Kind regards,
Pax
Convenor