

Balcanoona Park HQ and Historic Precinct Vegetation Project

November 2022

1. Background

In late 2017, Alan Harbour asked the Friends group to make a start on improving the visual appearance for visitors to the Park HQ, including around the entry road, shearers' quarters and office. The Friends group has pursued this in a program focussing on revegetation, coupled with the necessary improvement of the irrigation system, in order to provide a more attractive environmental setting and experience for visitors.

With the endorsement of DEW staff, the Friends group was successful in receiving Volunteer Support Grants for 2018/19 and 2020/21, and received periodic funding support from the local DEW operational budget. The bulk of the funds were allocated to improving the irrigation system and providing support (guards, stakes, fertiliser etc) to plantings. Apart from some purchases of plants early in the program, all plants have been propagated by the Friends' members.

The grants, together with strong support of the rangers and volunteers, has provided a successful and enjoyable start to this multi-year project.

The revegetation project aims to improve the condition and enhancement of key habitats around the Balcanoona Park HQ. It achieves this by:

- Continuing the rehabilitation of the degraded areas of the Park HQ and surrounds from when it was a pastoral station.
- Enhancing habitats for local flora and fauna (birds and insects) as a result of the re-vegetation.
- Replicating the range of hardy species found in 'good' habitat surrounding the Park HQ.



Map of Park HQ and surrounds

2. Progress to date

2.1 Volunteer and Ranger Engagement

- A core of around 15 volunteers is committed to revegetation activities. Several are involved in plant propagation. A coordination group plans and organises our activities.
- The re-vegetation project involves close collaboration and engagement between rangers and volunteers, both in planning and on-site activities.
- The Friends have been much supported in the rangers' provision of labour-saving resources, including use of the backhoe for hole digging and a large water tank on a trailer to provide easier access to water when planting.

2.2 Improved Irrigation System

- The existing 19mm and 4mm lines have been replaced by 25mm headers and 13mm lines, with drippers on the 13mm lines. This provides more reliable water supply to plantings and better protects drippers from intrusions by kangaroos.
- Four separate irrigation systems have been designed and installed. Each has its own tap and filter for the areas shown in the photo below - Area 1 (west side of entry road), Area 2 (east side of entry road), Area 3 (east of Shearers' Quarters carpark) and the 'Mound' north of the Shearers' Quarters.
- The existing taps servicing the irrigation system for the four areas above, were found to be too small in bore size resulting in restricted water flow to support the large number of plants in these areas. The taps have been replaced with a manifold of larger brass taps sourced from Reece Irrigation.
- For the Office / Carpark area, the two existing irrigation systems have been upgraded and extended.
- Experience has shown that the 13 mm lines can block up towards the end with precipitated mineral salts resulting drippers blocking up relatively quickly. End taps have been installed to enable the lines to be flushed out.

2.3 Plantings and Propagation

- As of October 2022, about 700 plants are under irrigation, of which over 500 are new plantings by the Friends in addition to about 200 were already in place under the previous irrigation system.
- In each area there are several large and well-established self-sustaining plants, including Eucalypt, Saltbush and Acacia species.
- On each trip, in addition to new plantings, the following steps are taken: all drippers are checked; plants are checked, replaced as needed and fertilised; guards changed or removed; and dirt mounds around individual plants rebuilt. This maintenance takes up an increasing proportion of time spent on each trip but is essential to the ongoing establishment of plants across the area.
- Seeds and cuttings from local species are collected, recorded on our seed collection permit, and propagated by members of the revegetation group. Ten different species have been propagated so far.
- Photo-points have been established to record the revegetation progress.

2.4 Natural Regeneration around Revegetation Plantings

- There are increasing signs of regeneration of native plants in and around established and new plantings, and in leaf litter from trees and shrubs. This provides enhanced habitat supporting native wildlife in this previously degraded area. It has included the following: annual Saltbush and Bluebush, and longer-lived species such as Senna, Fanflower and a variety of Wattles (picture of Senna with Red Mallee).

- The revegetation plantings are already providing evidence of improved habitat for insect species native to the area (pictures of a Blue Banded Bee and a butterfly in Eremophila). Native birds are frequent visitors including Honey Eaters, Parrots, Variegated Fairy-wrens, and Zebra Finches (pictures of Ringneck Parrot in annual Saltbush; Spiny Cheeked Honeyeater in Myoporum; White Plumed Honeyeater).
- Natural regeneration is expected to increase as our plantings become more established.



3. Matters for Consideration and Next Steps

3.1 Open Areas 1, 2,3 and 4

- For these large areas, the long-term intention is for plantings to be self-sustaining, without irrigation and ongoing support. However, irrigation will need to continue for several years to protect the planting investment. Over time, water to selected plants can be reduced and at some stage individual drippers can be turned off. The extent to which that will actually be possible is something we need to establish by trial and error, and experimentation.
- The surrounding areas of remnant vegetation are Curly Mallee woodlands, with understorey plants of Broom Bush, Senna species, Umbrella Bush, Boobialla, Ruby Satlbush and Rock Fuchsia.
- Each open Area has patches of remnant Curly Mallee along creek / drainage lines as well as Broom Bush and Plumbush, and the plantings are aimed at expanding and connecting these remnants and improving habitat.
- The majority of plantings has been predominantly Curly Mallee with some Red Mallee, River Red Gum, Umbrella Wattle and Dryland Tea-tree. Some Curly Mallee planted out in 2019 now have a canopy about 2 metres in diameter.
- Further in-fill planting will be largely Curly Mallee, and plants from seeds and cuttings taken from nearby understorey plants.

Other matters

- Area 4 is very large; irrigation and re-vegetation work has yet to commence. The intention, in the medium term, is to limit irrigation and plantings to a 15 – 20 metre section parallel to the entry road up to the visitors' shower and toilet block.
- Area 3, on the western side of the creek near the Shearers' Quarters carpark contains a wide variety of plants of interest to visitors. On the eastern side of the creek, the old irrigation system is still in place and will be upgraded along with significant revegetation.
- The 'Mound' and surrounding roadway way has been recently cordoned off with pine posts. The consequent expansion of this area will require removal of the road base aggregate and progressive rehabilitation of the soil. It could have a focus on bush tucker plants and is likely to require ongoing irrigation, plant support and plant labels in order to show-case the plantings to visitors.

3.2 Office / Carpark Area

- The planting in these smaller areas is largely complete and provides a welcoming entrance to visitors to the Park HQ who often use or pass through the carpark area.
- The intention is to maintain irrigation and plant support, and to provide plant labels to promote visitor appreciation of examples of indigenous/endemic plants.

3.3 Old Balcanoona Homestead Garden

- While the fencing of the garden has commenced, the purpose, design and plantings has yet to be determined.
- We suggest a project plan be developed for the OBHS Garden as part of the broader visitor / interpretation planning for the area. A plan might include: its intended purpose and audience; the content and form of useful interpretation and promotional materials; and links to The Old Balcanoona Homestead, Shearing Sheds, Uncle Gill's walk, the new walk to the Western Ridge and Echo Bend, and the vegetation resources emerging from the Balcanoona Re Vegetation Project.
- Ideally, the project plan should address visitor engagement in various activities and resources in and around the Balcanoona Park HQ, and how these experiences align with the broader visitor experience for the Park and the Gammon Ranges.

3.4 Plant Labels

- Adnyamathanha name, common English name and scientific name have been identified for the majority of plants.
- For the information of visitors, the intention is plant labels with the three names will be manufactured and displayed.

3.5 In closing

- The revegetation group has been able to improve its processes, both in propagation and in planting, irrigation and plant support, during its several trips to Balcanoona since 2018. It intends to continue this approach.
- The group gratefully acknowledges, and will work to maintain, the mutually respectful and practically supportive relationships it has enjoyed with the Rangers at Balcanoona.
- As a result of both these factors the productivity and communality of the revegetation group is trending upwards, a situation which will assist it in its efforts to support the intentions of the National Parks' system at Balcanoona.

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