

HFNC Report on Kanawalla Rail Flora Reserve works 2018

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Background

HFNC applied to VicTrack in 2004 to manage the Kanawalla section of the disused Hamilton-Cavendish rail reserve. Despite a history of grazing after the line closed in the 1970s and this reserve contained valuable remnants of the basaltic plains woodland/grassland of which less than 0.2% remains in the public domain.

HFNC worked from 2004-08 with various funding bodies to remove 200 pines (100 of which were from 30-150 cm diam.) and 41 large cypress from the reserve. In 2006-08 HFNC planted 850 shrubs and trees indigenous to the area on degraded parts of the reserve. A few of those Drooping Sheoak, Manna Gum and Blackwood have blown over in storms and Black Wallabies have also taken a toll on many of the unguarded trees. Most of those trees have recently been guarded and are responding. Control of weeds has been on-going in most years since 2004.

Seed collection in Dec. 2017 and early 2018 and plant propagation

- 21 Dec – RB collected *Banksia marginata* seed from the ground from 12 trees at Yatchaw Rail Reserve and 14 trees on the Pierrepoint Rail Reserve.
- 11 Jan. – RB collected cones of *Allocasuarina verticillata* from Hamilton Community Parkland (Old Reservoir) – 145 cones from 15 trees.
- 9 Feb. – RB took seed from the above collections to Arborline nursery for production of about 50 seedlings of each collection.
- 19 Feb. – RB made a further collection of *Banksia* cones from the ground at Pierrepoint (10 trees) and from Yatchaw (15 trees). I counted 72 trees at this site (many of them younger trees from plantings in the 1980 & 90s) and there are 36 live old trees at the Pierrepoint site.
- 28 Feb – RB sowed Drooping Sheoak seed from Old Reservoir (75% Coleraine sand and 25% potting mix).
- 14 Mar. – RB sowed Yatchaw and Pierrepoint *Banksia* seed (66% sand & 33 % potting mix).
- 2 Apr. – RB collected Sweet Bursaria seed from Hensley Pk Rd and Lake Linlithgow (most capsules had shed). Seed was put in a freezer overnight and sowed next day in 66% sand/33% potting mix.
- Nov. – planting stock probably available for 2019 from seedlings grown by RB or Arborline:
 - Drooping Sheoak (Old Reservoir) – 60 seedlings
 - Sweet Bursaria (Lake Linlithgow) – 25 seedlings
 - Sweet Bursaria (Hensley Park Rd) – 75 seedlings
 - Yatchaw Silver *Banksia* – 50 seedlings (plus 10 from Arborline)
 - Pierrepoint Silver *Banksia* – 70 seedlings (plus 30 from Arborline)

Site preparation and planting and weed control work in 2018

- 7-8 Jun – PH & RB (11 hr) collected wire mesh guards from Parklands. These were later cut to form extra guards (67 each about 1 m tall and 21 about 50 cm tall).
- 2 Jul. – RB (2.5 hr) sprayed planting spots and clumps of *Phalaris* at the Forts Rd-Hensley Park end of the reserve. Also sprayed *Fumaria* & *Galium* weeds near ramp (12 L spray).
- 22 Jul. – RB (1.5 hr) sprayed planting spots and clumps of *Phalaris* south of the gate at the Hensley Park end of the reserve (16 L spray, 2 hr). Also crow-barred 45 sites for planting
- 26 Jul – RB (2 hr) crow-barred 30 planting spots and fitted a padlock to Hensley Park gate
- 5 Aug. – working bee (27 hr) with RB, DL, DM, LM, JS & PH (variously 9.30 am-4.30 pm):
 - 85 planting spots were crow-barred to break through rubble at the old loading area.
 - 60 Drooping Sheoak planted, 40 Pierrepoint *Banksia* (Nth side of entry) and 40 Yatchaw *Banksia* (Sth from the entry gate). This stock came from Arborline and were very small.
 - Plastic guards were fitted over all seedlings. Wire mesh guards were fitted over 100 plants to keep off browsing Black Wallabies. Other plants to be guarded later.
- 11 Sept. – RB (5 hr) sprayed *Phalaris* near the MacFarlanes Rd fence (3 L spray), *Fumaria* and *Galium* at the Cherry Ballart area (2.5 L) and Wild *Gladiolus* further east near the fence (0.5 L). *Oxalis purpurea* was wiped with Ally & Roundup from Sth end to power line (42 small clumps) and thence to start of the wide section (22 clumps).

- 12 Sept. – RB (4 hr) recycled mesh guards from NE corner and old Cypress area and made 16 guards. These, plus 4 made from old ringlock, were fitted over trees on Nth side that had not been guarded. The plastic guards on all trees were checked for correct fit and stabilised where necessary. Sprayed phalaris clumps near the Nth end missed previously, a small patch of *Oxalis purpurea* and patches of *Fumaria* and *Oxalis pes-caprae* in the old Cypress area (9 L spray).
- 18 Sept. – RB (4 hr) collected 39 Pierrepoint Silver Banksias and 36 Yatchaw Silver Banksias from Arborline. One Pierrepoint Banksia was planted on the Nth side and 25 Yatchaw Banksias on the Sth side. Plastic guards were fitted and 1.5 L of water was given to each seedling. No mesh guards were available for these trees.
- 31 Oct. – RB (4 hr) hand-weeded or herbicide-wiped about 25 *Fumaria* weeds at the Cherry Ballart area. Wiped Wild Gladiolus nearby and several dozen plants at 2 places along the eastern fence. Wiped Briar Rose and clumps of Phalaris at the McFarlane's Rd entry. Installed wire mesh guards on 14 Silver Banksias planted in August.
- 29 Oct. – RB (5 hr) constructed 45 mesh guards (approx. 77 cm tall and 30 cm diameter) from old mesh rolls obtained by RZ.
- 09 Nov. – DL & RB (8 hr) weeded around the 166 seedlings planted this year. Plants south from the Hensley Pk Rd gate (excluding 21 trees at the south end) were each given about 2.5 L of water. Wire guards were put around 26 trees and old ringlock coils around another 8 trees, including trees from 2005 planting that had been heavily browsed.
- 11 Nov. – RB (5.5 hr) fitted 13 guards around remaining unguarded seedlings. Replaced 1 dead Silver Banksia with a Drooping Sheoak and gave it 9 L of water. Trees south of the gate that had missed watering earlier were each given 3 L. Spot-sprayed around the guards of 166 trees and clumps of Phalaris & Cocksfoot that remained from early spraying. Also sprayed the trail for first 100 m from Hensley Pk Rd gate, Phalaris clumps through the fence along the road in the old Cypress area (30 L spray).
- 19 Nov. – RB (1 hr) sprayed Phalaris south and east of the old cypress block (8 L spray).
- 21 Nov. – RB (2.5 hr) sprayed Phalaris and Cocksfoot near the old Cypress area and on Forts Rd reserve (30 L). More to do. Rain fell 2-4 hrs after this spraying but had no obvious impact.
- 05 Dec. – RB (3.5 hr) sprayed Phalaris and Cocksfoot NE from the old Cypress area, mopped up clumps missed previously in adjacent areas and sprayed weed growth around the tree guards. About 10 St John's Wort (*Hypericum perforatum*) – a Regionally Controlled Weed (landowners are responsible for control) were flowering on the Forts Rd reserve. There were a few dozen small plants (not flowering) there and extending about 3 m into the Kanawalla Reserve on the NE corner. These have all been sprayed but attention must be given to removal of plants that emerge in 2019. Paspalum is also a threat at that corner.
- 08 Dec – RB (2 hr) removed weeds from inside the tree guards. About 5 % of seedlings planted on 5 August have died in this dry spring season – more can be expected over summer.

In all, 90 hours of voluntary labour has been devoted to work on the reserve in 2018, not including other time involved in seed collection and producing the trees that were planted.

One aim of the weed control measures is to greatly reduce (and hopefully eliminate) the Phalaris and Cocksfoot in the fertile area near the Hensley Pk Rd area before planting Drooping Sheoak and Silver Banksia on those infested areas. The sheoaks are capable of suppressing weeds once the ground is clear. Other aims are to remove all weed spots from the native grassland areas. The weeds include *Phalaris*, *Dactylis glomeratum*, *Sparaxis bulbifera*, *Oxalis purpurea*, *Oxalis pes-caprae*, *Gladiolus* sp., *Fumaria*, *Galium*, *Disa bracteata*, *Rosa rubiginosa*, *Hypericum perforatum* and thistles. Wild Gladiolus, Cleavers, *Fumaria*, African Weed Orchid (AWO) and St John's Wort have emerged as new weeds in recent years and it is vital that these (and other 'new' weeds) are closely monitored and controlled in future years.

Future tree planting – the objective is to establish indigenous trees and shrubs (from local stands) on all of the weed-infested, fertile areas and on any other areas that do not have good native grassland species.

Reptile sightings – the first snake seen on the reserve on 12 September 2018 was a Copperhead.

Bird list – the list so far is 56 species (Black-shouldered Kite and Whistling Kite were added this year)

Flora List – the native plant list currently has 86 species.