

# Wannon Flora Reserve *Acacia paradoxa* control report 2020

## Background to the project

From 1963 to 1969 HFNC had 11 working bees to remove tons of rubbish, to rabbit-proof fence the reserve and to remove thousands of *Acacia paradoxa* seedlings that had established on the disturbed areas. Removal of the spiny *A. paradoxa* (which was then classified as a 'noxious weed') continued annually until about 1980 and sporadically thereafter. Sallow Wattle (*A. longifolia*) emerged as a threat after 1980 emanating from plantings in the adjacent Wannon Falls Scenic Reserve in the 1960s.

*A. paradoxa* has spread from the west to invade the Damp Sands Herb-rich Woodland EVC in the eastern half of the reserve. Currently the western half is packed with thickets of the wattle. The consequence has been the disappearance of dozens of the ground flora species. Virtually nothing grows under the thickets of *A. paradoxa* and it is clear that what was a magnificent flora reserve is being trashed. Rabbit burrows under the thickets result in additional damage when the manager is asked by landowners to control the rabbits and a back-hoe is used, regardless of the negative impacts on native vegetation. Our aim is to remove those *A. paradoxa* shrubs to allow regeneration of the ground flora and to stop its further encroachment on the eastern area of heath.

In Feb. 2018 HFNC applied to the SGSC (the official manager of the reserve) for a Planning Permit for the removal of *Acacia paradoxa* and *Acacia longifolia* from the Wannon Flora Reserve: (TP/3/2018): '*Removal of Invasive Acacia Shrubs from the Wannon Flora Reserve*'.

Vegetation Quality Field Assessments had to be done (Dale Tonkinson, then the Biodiversity Officer within SGSC, was most helpful) and a case was presented to remove these invasive native species. Oddly, an exemption from the FFA Act was needed for *A. longifolia* but not for *A. paradoxa*.

In March 2018, HFNC applied for a DELWP SmartyGrants Community and Volunteer Action Grant to control the pest plants ('*Restoration of native understory flora on the Wannon Flora Reserve*'). Advice was received in June 2018 that the application was not successful.

Another funding application was made in 2019, to the Glenelg-Hopkins CMA Victorian Landcare Grants 2019-20 program. Andy Govanstone, working then with the CFA and SGSC, helped with the application (VLG192065 '*Conservation of native flora on Wannon Flora Reserve through community action to control woody weeds*'). In July 2019 the advice was that the application was not successful.

Meanwhile, HFNC proceeded with preliminary work on the Wannon Flora Reserve to investigate whether it was necessary to poison cut stumps of *A. paradoxa* and *A. longifolia* after lopping them below any branch. We prepared 4 plots each approx. 10 m x 10m and applied 2 treatments to the *A. paradoxa*:

- Cutting of the shrubs below any branch or live twigs – 2 plots
- As above plus application of 50% concentration of glyphosate to the cut stump within 30 seconds of the cutting – 2 plots

*A. longifolia* was a minor contributor to the problem in the reserve and our permit to remove it expired in Feb. 2020 so we decided to remove that species in 2019.

## Work in 2020

Our aim in 2020 was to cull the *A. paradoxa* in the NE corner, as well as clearing a swathe along the S<sup>th</sup> side, adjacent to (and including) the Glenelg Highway road reserve.

The CFA (through Andy Govanstone with SGSC) removed *A. paradoxa* from both sides of Powells Lane and both sides of the track on the N<sup>th</sup> side of the reserve. The material was chipped and removed from the sites. The verges along the N boundary track have been greatly disturbed by the heavy machinery, leaving scalped areas and little mounds of earth. This may lead to an influx of weeds.



An inspection in winter 2020 of the experimental plots where freshly cut Hedge Wattle stumps were either painted with glyphosate herbicide or left untreated on 25 May 2019 showed clearly that the poison was not required. There was no sprouting of any cut shrubs.

Work done by HFNC after the Shire and CFA had cleared the perimeter of the reserve of *A. paradoxa* was largely confined to the NE quarter of the reserve. From 3 May to 29 Oct, HFNC devoted 81 man-hours to eliminating the pest acacia from that part of the reserve. Much of this involved use of chain-saws to fall the hardwood shrubs (some were small trees), a very prickly task. The cut shrubs were left in situ. Most of the large branches were sawn into smaller pieces.

On 21 September 2020 a 'hydro-axe' was used to inject neat glyphosate into about 70 *A. paradoxa* (5-10 cuts per tree, applying a total of about 5-10 mL/tree). If that technique proves to be successful it will make the further removal of the large shrubs from the reserve a lot easier.

More will be done in 2021 to remove the large shrubs, working westward and to remove new seedlings from the NE area. The aim in 2020 to clear most of the eastern heath area was achieved.

In the NE area a thin layer of cut *A. paradoxa* shrubs were spread over the bare areas nearer the road and track (some bare areas were due to prior dense infestations of *A. paradoxa*) – that was done to deter people from driving in there to dump rubbish and to offer some protection for emerging seedlings from rabbits that are rampant in the reserve. Laying a poison-bait trail along the northern track should be considered, to reduce the rabbit population in the reserve

Dumped garden rubbish is a problem in the reserve – in 2019 we removed 1 lot of 'new' succulent garden plant refuse from the perimeter in the NE corner and another from the roadside towards the SE corner. A large patch of flowering garden Soursob (*Oxalis pes-caprae*) was found near the boundary in the NE corner – that may have come from dumped garden rubbish some years ago. Fallen timber at the 5 x 5 m spot was shifted and the exotic Soursob was spot-sprayed on 21 September. We will check the site every year for as long as it takes to remove every plant. Great care has to be taken to reduce collateral damage. Unfortunately, more weeds were found to have established in the reserve.



On 21 September, an infestation of Cleavers (*Galium* sp.) was found under a clump of *Exocarpos cupressiformis* (Cherry Ballart) in the central NE area. The plants were sprayed with glyphosate then and on 27 October several dozen small germinants were removed with a hoe. *Sparaxis bulbifera* (Harlequin Flower) was found in a wet run-off area from the Wannan-Nigretta Rd, towards the SE corner. The plants were herbicide-wiped on 27 October and must be followed up in 2021 and thereafter. The garden plants cited above are potentially a very serious problem for this reserve.

A request has been made for the Shire to erect a Wannan Flora Reserve sign at the eastern entrance to the track on the northern edge of the reserve, together with a sign prohibiting the dumping of rubbish and removal of wood. Now that the eastern track has been opened up there has been more traffic and it will inevitably result in more rubbish dumping and firewood extraction activities. People need to be reminded that the area is a nature reserve.

Lastly, a comment about the native flora in the reserve. Due to the wetter than usual spring, the shrubs were in good condition later in the year. Orchids seen in flower included Tiger Orchid (*Diuris sulphurea*), Dotted Sun-orchid (*Thelymitra ixioides*), Salmon Sun-orchid (*Thelymitra rubra*), Slender Sun-orchid (*Thelymitra pauciflora*) and Pink Fingers (*Caladenia carnea*). Gorse Bitter-pea (*Davesia ulicifolia*), a rare plant in this area, was in flower, along with Pink Bells (*Tetralthea ciliata*), Red Parrot-pea (*Dillwynia hispida*) and Smooth Parrot-pea (*Dillwynia glaberrima*).



Pink Fingers



Dotted Sun-orchid



Salmon Sun-orchid



Slender Sun-orchid



Tiger Orchid



Red Parrot-pea



Smooth Parrot-pea



Gorse Bitter-pea

## Wannon Flora Reserve *A. paradoxa* & *A. longifolia* control

### Hamilton Field Naturalists Club Volunteer Work Hours

| Date        | Volunteer and hours of work |     |     |      |     |     |     |     |     |     |     | Σ hours | Cumul. hours |
|-------------|-----------------------------|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|---------|--------------|
|             | RB                          | DL  | RT  | PH   | GK  | NK  | RZ  | YI  | JS  | SP  | AW  |         |              |
| <b>2019</b> |                             |     |     |      |     |     |     |     |     |     |     |         |              |
| 25 May      | 2.5                         | 2.5 |     | 2.5  |     |     | 2.5 |     |     |     | 2   | 12      | 12           |
| 3 July      | 3                           |     |     |      |     |     |     |     |     |     |     | 3       | 15           |
| 6 July      | 3                           |     |     |      |     |     |     |     |     |     |     | 3       | 18           |
| 21 July     | 1.5                         |     | 1.5 |      |     |     |     |     |     |     |     | 3       | 21           |
| 3 Sept.     | 2                           |     |     |      |     |     |     |     |     |     |     | 2       | Σ23          |
| Σ           | 12                          | 2.5 | 1.5 | 2.5  |     |     | 2.5 |     |     |     | 2.5 | 23      |              |
| <b>2020</b> |                             |     |     |      |     |     |     |     |     |     |     |         |              |
| 3 May       | 2                           | 2   |     |      |     |     |     |     |     |     |     | 4       | 4            |
| 5 May       | 4                           |     | 2   | 2    |     |     |     |     |     |     |     | 8       | 12           |
| 6 May       |                             |     |     | 2.5  |     |     |     |     |     |     |     | 2.5     | 14.5         |
| 9 May       | 2.5                         |     |     |      |     |     |     |     |     |     |     | 2.5     | 17.0         |
| 10 May      | 2.5                         | 2.5 |     | 3    | 2.5 | 2.5 | 3   | 3   |     |     |     | 19.0    | 36.0         |
| 12 May      |                             |     |     | 2.5  |     |     |     |     |     |     |     | 2.5     | 38.5         |
| 19 May      |                             |     | 2   |      |     |     |     |     |     |     |     | 2.0     | 40.5         |
| 20 May      | 3.5                         |     |     |      |     |     |     |     |     |     |     | 3.5     | 44.0         |
| 26 May      |                             |     |     | 2.5  |     |     |     |     |     |     |     | 2.5     | 46.5         |
| 30 May      | 2.5                         | 2.5 |     | 2.5  |     |     |     |     | 2.5 |     |     | 10.0    | 56.5         |
| 09 June     | 4.0                         |     |     | 4.0  |     |     |     |     |     |     |     | 8.0     | 64.5         |
| 25 June     | 2.5                         | 2.5 |     | 2.5  |     |     |     |     |     | 2.5 |     | 10      | 74.5         |
| 11 Sep      | 1.0                         |     |     |      |     |     |     |     |     |     |     | 1       | 75.5         |
| 21 Sep      | 3.0#                        |     |     |      |     |     |     |     |     |     |     | 3.0     | 78.5         |
| 27 Oct      | 3.0♯                        |     |     |      |     |     |     |     |     |     |     | 3.0     | Σ81.5        |
| Σ           | 30.5                        | 9.5 | 4.0 | 21.5 | 2.5 | 2.5 | 3.0 | 3.0 | 2.5 | 2.5 |     | 81.5    |              |

#### HFNC working bee

# Hydro-axe used with glyphosate on 70 *A. paradoxa*; garden Soursob (*Oxalis pes-caprae*) near the road and an extensive patch of Cleavers (*Galium* sp.) under Cherry Balart in the mid-N area sprayed.

♯ 10 *A. paradoxa* in SE corner area cut down and an extensive patch of Sparaxis near the corner and road was wiped with herbicide. New Cleavers germination under the Cherry Ballart were grubbed.