



HAMILTON FIELD NATURALISTS CLUB

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Report on Weed Control Work at the Fulham Streamside Reserve in Sept.-Nov. 2013

SUMMARY

On 21&22 Sept., 19 Oct., 29 & 30 Oct and 5 Nov 2013 members of HFNC spent 101 hours on-site treating *Moraea flaccida* Cape Tulip (CT), *Sparaxis bulbifera* Harlequin Flower (SB), *Gladiolus undulatus* Wild Gladiolus (WG), Bridal Creeper (BC) and some other environmental weeds – Phalaris, Briar Rose, Thistle & African Weed Orchid (AWO), on the western part of the floristically-rich part of the western half of the Fulham SR. The attached map shows the areas treated.

As in 2012, we estimate that many thousands of CT plants were found and treated again this year, predominantly by herbicide-wiping, walking most of the project area. It is evident that continued efforts are needed to control the pest. Eradication of CT is difficult since plants are easily missed and seed from previous years lies in the ground or is carried in on vehicles and the wind. Another problem is that some treated plants that are in flower may still produce viable seed, or their corms may not die.

It is clear now, after 8 years at this site, that WG is a major threat to the reserve. It has advanced in great numbers adjacent to the river and River Tk and along the track to the Old Bridge, extending steadily into the heathland. This weed has the potential to drastically affect the floristic value of the reserve and we devoted some time in late spring this year in an effort to impede its progress.

As found last year, we found only hundreds of SB, so our efforts over the years have been rewarded. However, the plant is persistent and eradication will be hard to achieve. We found and treated hundreds of tiny plants along the old transverse track (10 on the map) and many of these carried flowers or seed capsules. Clearly earlier action is needed to prevent these plants from seeding.

We found many more AWO this year (hundreds of plants), spread widely around the reserve although still only in small numbers at each spot. While we treated all plants seen, the weed has not been treated on areas that HFNC does not work in. It seems that the AWO problem may be intractable.

Off-track driving continues to be a major concern, with drivers creating the usual mess on the areas adjacent to the tracks (see Photo 3 of one area). Some of the damage results from drivers avoiding boggy spots or driving around the barriers on the River Track. Other damage results from hoons' 'circle' work' on the open sites. We are convinced that this problem can only be reduced by:

1. Erecting prominent signs directing drivers to stay on the roads to prevent spread of weeds, disease and destruction of native vegetation.
2. Fixing up the few boggy spots on the designated tracks so that vehicles need not go off road.
3. Leaving the River Track open – determined drivers are not deterred by the barriers.
4. Requesting local police to pay occasional visits to the reserve to keep an eye on motorist behaviour (this happens elsewhere and we believe the officers welcome such breaks).

Two 'new' flora species were found: *Caladenia formosa* Crimson Spider-orchid (see Photo 1) and *Ptilotus macrocephalus* Featherheads); native species number 331. As usual, Chocolate Lilies, Tiger Orchids (Photo 2), Podolepis, Buttercups and other wildflowers were at their best in late October.

We added 3 species (Chestnut Teal, Australian Pelican and Great Cormorant) to the birdlist, total now 121 species. A Platypus, Eastern Grey Kangaroos and Black & Red-necked Wallabies were seen.

WORKS

A total of 101 hours of voluntary work was done. The days when work was carried out, the volunteers and hours of worked performed on each occasion, were as follows:

Sat 21 Sept. – RB & DL, KG & JS, HC & GC, RZ & YI = 23 hrs

Sun 22 Sept. – RB & DL, JC & GC, RZ & YI = 29 hrs

Sat 19 Oct. – RB & DL, JC, RT = 25 hrs

Tues 29 Oct. – RB = 8 hrs

Wed 30 Oct. – RB = 9 hrs

Tues 5 Nov. – RB = 7 hrs

The area worked is shown on the attached map. As in previous years, we concentrated first on CT, but also treating any SB, AWO or BC found. On subsequent days attention was also paid to WG, none of which was in flower, and to SB on the old transverse woodland track (10 on the map).

The herbicide wipe mixture used to wipe SB and CT plants was a solution (*Metsulfuron methyl*, 1 g/L, *Glyphosate* 20 mL/L, surfactant 5 mL/L, dye 5 mL/L) using a tool (previously described).

The spray used on isolated patches of WG at Area 13 contained *Metsulfuron methyl* 3 g/10 L, surfactant 50 mL/10 L and a red vegetable dye 40 mL/10 L). *Glyphosate* (150 mL/10 L) was added when Phalaris was treated, or where the patches of WG were isolated.

Defined areas of work

1. **Along the Entry Track to the river** – this strip was covered well, plants missed early were detected and treated on subsequent visits. The strip approx. 100 m wide east of the Entry Tk near the Edgewood Rd was also treated for CT.
2. **Area between the Entry Tk and the Railway Embankment and north to the Old Bridge Tk** – a small portion of the central western part of this area across to the railway ditch may have been missed but the remainder was well covered. CT was the major weed and many dense spots were found, especially adjacent to the dwelling to the west. About 25 SB were along the old track midway along but west of the Entry Tk. This was once a major problem area. A few dozen AWO were found throughout the area.
3. **Between the Old Bridge Tk and the river at the Main (second) Creek (downstream from the river bend) to the Old Bridge** – CT and a few SB were treated over this area on 21 September. On 5 November a great many patches of WG (and 50 SB) on both sides of the track near the boggy section were spot-sprayed with glyphosate and metsulfuron methyl. WG there is a threat to the floristically rich wet heath to the south.
4. **The western boundary strip outside the channel along the railway embankment to the Old Bridge** – there was no time to treat this strip this year.
5. **The western boundary channel** – there was no time to treat this strip this year
6. **The ‘peninsula’** – CT (many clumps), BC (a few plants), AWO (a clump of about 200 plants), SB and WG (both along the margin) were treated.
7. **East side of the entry track near the river and River Tk** – this is a former hotspot of SB & WG along off-road vehicle tracks through the *Pterostylis nutans* site. We herbicide-wiped a few CT, several dozen small SB among the orchids along and adjacent to that line. We also wiped or spot-sprayed hundreds of small clumps of WG between that line and the River Tk.
8. **From the Seasonal River Road Closure extending ~ 300 m east** – on 19 Oct dense clumps of WG were spot-sprayed (10 L) in this section north to the river, plus a few SB and CT. The river frontage further east was not walked and has not been in previous years – that will be a priority for 2014. A strip approx. 20 m wide was treated south of the track where masses of WG and several hundred SB were spot-sprayed (10 L). On 29 Oct a further 20 L of spray containing metsulfuron methyl and glyphosate was used to treat WG & SB further east (on the northern edge of the Buttercup Field) to the western edge of the Melaleuca Swamp.
9. **River Tk east past the Melaleuca Swamp to the old Diagonal Tk** – this section includes a strip ~250 m wide through the Field of Buttercups and the Melaleuca Swamp, then the triangle east of the swamp. Dozens of clumps of CT and individual CT were found and wiped. A few SB were found on the edge of the swamp.
10. **The old ‘diagonal track’ from the River Tk to the old junction with the Entry Tk** – only the western and eastern ends were done, treating CT and SB. There were only a few dozen SB on the eastern part but hundreds of tiny plants on the track (and some just off the track) on the western half. A small section nearer the Melaleuca Swamp was not visited.

11. **The area west from the entrance on Edgewood Rd across the creek to the railway bank** – this section has not been treated in past years. We found many patches of CT throughout and severe infestation of the scrambling garden weed ('Carrot Weed') along the creek, beginning near the road bridge. The source is in the creek over the road (upstream from the bridge) where rubbish has been dumped in years past. That source needs to be removed. SB was also found at intervals along the creek, down to the Little Old Bridge. 'Carrot Weed' and CT was also rampant in the approach. Some 20 L of spray were applied to the task. CT and some SB were treated in the gutter along the railway embankment. Without that control it would be impractical to continue to control CT in the reserve.
12. **The large central area of heath and woodland east of the Entry Tk** – the major part of this large area was treated, with many large patches of CT found. A couple of large patches of 100-200 AWO were treated. The section from the centre to old Diagonal Tk was not walked.
13. **NE edge of Melaleuca Swamp** – on 5 Nov, an area of about 500 m² containing WG on the eastern edge of the Melaleuca Swamp and the River Tk was spot-sprayed with metsulfuron methyl (30 L of spray). The WG (and some SB) in that area is now dense, intimately associated with native rushes, grass, lilies and orchids, and imposes a serious threat to the vegetation in the swamp. If the chemical does not have an impact on the WG then glyphosate will have to be considered in 2014, in order to protect the bulk of the swamp vegetation.
14. **Edgewood Rd** – several patches of CT were seen on driving along this road where it indents into the reserve. CT on both sides of the road were wiped. A couple of other patches were treated nearer the entrance to the reserve.

Fulham Streamside Reserve – HFNC volunteer work areas in September-November 2013

The green-shaded part of the map indicate areas that were treated in 2013.

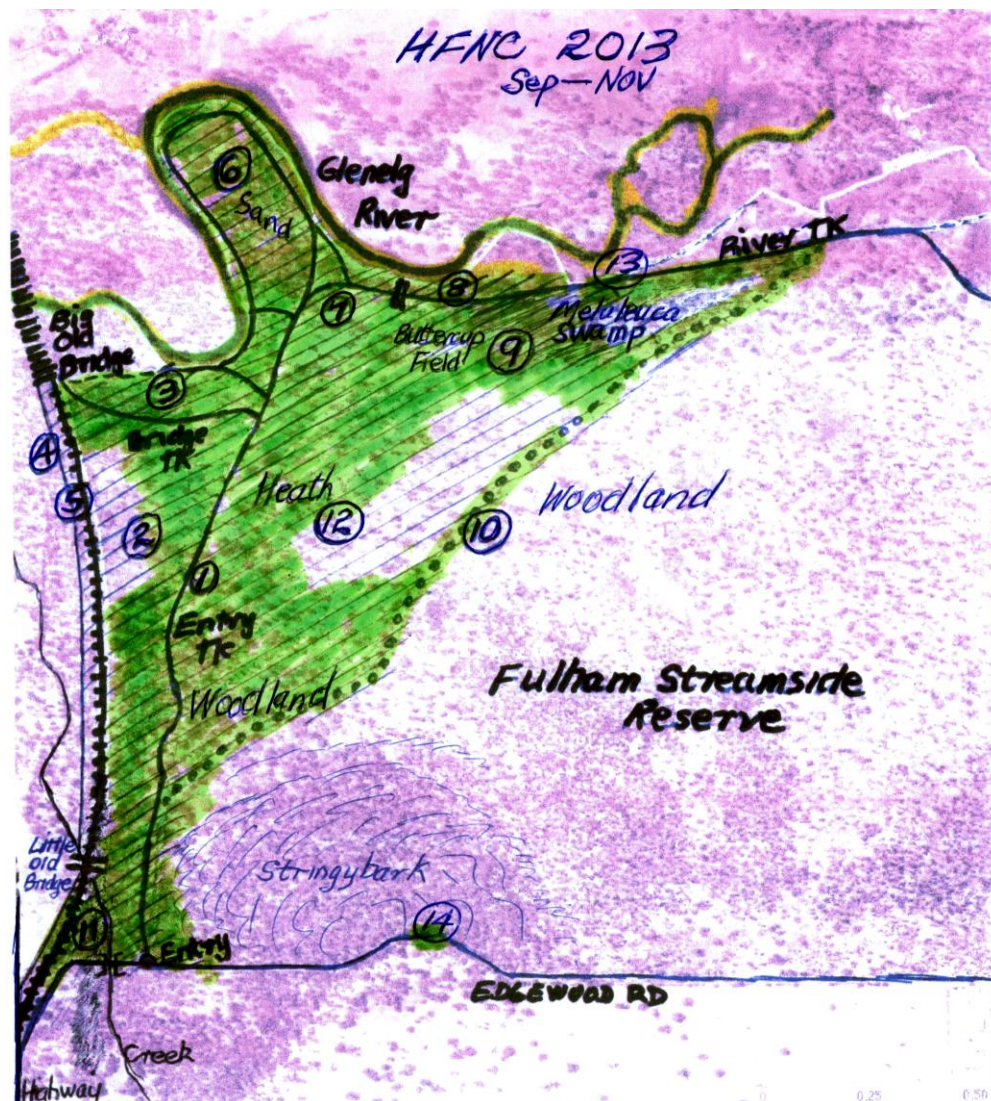


Photo 1. *Caladenia formosa* (Crimson Spider-orchid) at Fulham Streamside Reserve (22 Sept. 2013) – photo by Reto Zollinger)



Photo 2. *Diuris sulphuria* (Tiger orchid) at Fulham (22 Sept. 2013) – there were thousands flowering in the SW corner in late October 2013



Photo 3.

Part of the off-road damage along the Old Railway Bridge track in October 2013. The driver was avoiding the muddy spot on the track (shown at the bend on the right hand side of this picture).

This is one of the off-road ventures found at this site where weed control has been difficult – the actions increase weed invasion, destroy the native vegetation and may allow *Phytophthora* to gain access.

