HAMILTON FIELD NATURALISTS CLUB

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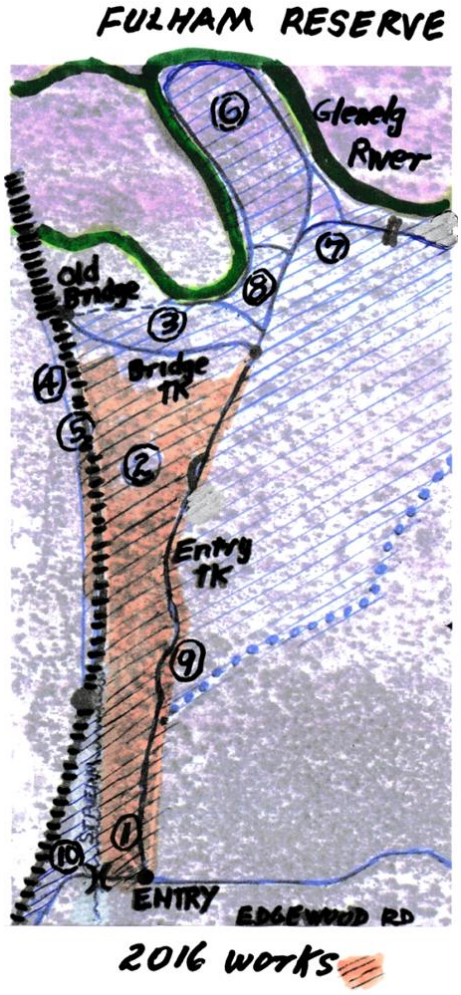
Report on Weed Control Work at the Fulham Streamside Reserve in Sept.-Nov. 2016

This year we concentrated on a smaller portion of the western half of the Fulham SR, the area west of the entry track, extending from the entrance to near the Bridge Track (see map). This restriction has been needed because of a lack of volunteers to manage a larger area. The exceedingly wet winter and early spring had produced an enormous germination of *Moraea flaccida* Cape Tulip (CT) and *Sparaxis bulbifera* Harlequin Flower (SB), the latter in places where we had thought to have eliminated it. On 22 September flowers were appearing on the SB but not on CT. The rainfall at Hamilton for May-Sept. was 103, 68, 136, 73 & 158 mm – a total of 538 mm cf. long-term average of 361 mm – as an indication of the likely comparative situation at Fulham.



On **22 Sept. 2016**, 2 members of HFNC (RB & PH) herbicide-wiped CT in the southern part (1 on map) of the reserve, west from the entry track to the creek and towards the bridge on the embankment. We also covered an adjacent strip of about 70 m width east of the track (9 on map). The weather was fine, following a wet spell that had caused a closure of the reserve, as we found on arrival at the entrance. We parked outside the reserve. Dense patches of CT in the area were wiped with a glyphosate-metsulfuron methyl solution (60 mL/L and 1 g/L) that included a wetter (Pulse, 5 mL/L) and vegetable dye (5 mL/L).

Work time = 12 hours

Herbicide wipe solution used = 4.6 L, CT wiped = 9,400 (based on 2000 CT wiped/L)

On **24 Sept. 2016**, 5 members of HFNC (RB, PH, RZ, YI & YI) attended the working bee and continued wiping CT in the southern part of the far western sub-block, extending north nearly as far as the first large old log in the wet heath area (2 on the map). Very light rain (perhaps 1 mm total) fell at times from 2.30 pm but work continued until 3.30 pm. The wet heath area had surface water in parts towards the embankment. A patch of SB was wiped near a small log. Dense patches of CT were found across the area. A few African Weed Orchid *Disa bracteata* (AWO) were found.

Work time = 16.5 hours

Herbicide wipe solution used = 6 L, about 12,000 CT wiped, with 30 SB & 10 AWO.

On **20 Oct. 2016**, 2 members (RB & PH) continued wiping CT & SB in the mid-section (2) including that covered in September. The plants wiped previously that had received light showers had been effectively treated. Areas where SB had been found in years past along old tracks through the heath and stream adjacent to the embankment were checked and about 300 SB were wiped (and any flowers removed). AWO were seen and wiped at many places across the heath and the drier parts to the south.

A dense patch of *Oxalis purpurea* (about 10 m x 5 m) was found about 25 m west of the entry track, 500 m from the entrance. Another small patch (3 m x 1.5 m) was found near the embankment directly west from the above site, 10 m south from the first lot of old sleepers on the line. Both patches were sprayed with glyphosate (200 mL/10 L) and wetter solution. This weed had covered the entire surface of the ground and no other small plant survived. There was no alternative to applying a blanket spray to eliminate this pest. These infestations will be checked in future years.

Work time = 13 hours

Herbicide wipe solution used = 6.7 L, about 13,000 CT wiped, with 300 SB & 200 AWO

On **25 Oct. 2016**, 2 members (RB & PH) continued work in the far western mid-section (2). SB spots were revisited and those missed earlier (those with no flowers then) were wiped and flowers removed. SB and CT were treated in the stream adjacent to the embankment. About 10% of CT had flowered.

There was a dense infestation of CT between the western fence and the rail line (5); 8 L of spray was applied to those plants in a stretch of about 200 m north from the junk yard in the adjoining paddock. The private land is infested with thousands of CT. That will be a continuing problem for the reserve. When we contacted DELWP in 2011 requesting that they ask for some action the owner did act in 2012, but apparently not in recent years.

Work time = 12.5 hours
Herbicide wipe solution used = 7.5 L, with 14,750 CT wiped, with 200 SB & 50 AWO

On **2 Nov 2016**, 2 members (RB & PH) made a final effort to complete the work on the target area, and managed to get within about 70 m of the Bridge Track. None of the small plants had flowers but most of the large CT had, and it may be that viable seed may be set. AWO were present.

Time was spent finding SB that had flowered since our visit on 25Oct:

- About 30 SB were wiped on the road verge just west of the entry gate.
- A dense patch of SB (3 m x 5 m) about 10 m NW of an old log in the mid-section (2) and 50 m west from the entry track, was sprayed with metsulfuron methyl (3 g/10L) and wetter solution.
- About 50 'new' plants were wiped (and flowers removed) on the old track nearby which is a loop adjacent to the entry track (this is about 250 m south from the Bridge Track). This site was thought to be clean, after years of work on it, but at least 400 plants were found there this year.
- One infestation (50 plants) was on the 2006 bulldozed fire-line that passes close to a big log with cut holes that lies in the wet heath towards the embankment (2).
- SB were found in a bulldozer scrape 70 m north from the big log and in another scrape nearby.
- An old track adjacent to the stream had some SB, too (that area was thought to be clean after years of work there).
- SB were found in the Melaleuca area about 70 m from the Bridge Track.

Work time = 16.5 hours
Herbicide wipe solution used = 9 L, with 17,400 CT wiped, with 300 SB & 350 AWO

Summary:
The time spent controlling the weeds, and the estimated number of plants treated, are shown below:

Hours worked	*Moraea flaccida*	*Sparaxis bulbifera*	*Disa bracteata*	*Oxalis purpurea*
70	66,000	830	610	2 patches

As found at Nigretta Flora Reserve, it seems that every seed in the soil germinated in the favourable wet conditions this year. The result was that we could not complete coverage of the main (southern) area of the far western block, nor the areas marked 3, 4, 6, 7 & 8 on the map. We also did not have time to search for SB in the stream bed adjacent to the embankment (4). However, we believe that we did achieve a thorough cover of CT and SB in the area we covered. Hopefully the job will be much easier in 2017 and we can then cover the areas missed this year.

A major concern is the degree of CT infestation on the western margin. Unless the owner of the land to the west continues to control the weed on his property there seems to be no hope of achieving eventual control on the reserve. That is a problem that DELWP or PV should be addressing. This is a serious issue and we were astounded that DELWP's weed managers failed to deal with the matter in confidence after we approached them in 2011. The owner recently informed a member of HFNC (PH) that DELWP had told him that we had 'dobbed' him in. Will DELWP act that way in future?

Flora & Fauna
Only 30 species of birds were noted but no waterbirds were looked for.

Orchids seen in flower on 22-24 Sept. 2016 were *C. carnea* (widespread, hundreds), *C. latifolia*, *C. tentaculata* (a few), *Glossodia major* (a few), *Diuris pardina* (2 near Edgewood Rd) and *D. chryseopsis* (a few clumps). *C. latifolia* (Pink Fairies) had not been seen by us previously on this reserve (it was seen by others in 2004). A dozen plants were seen under *A. paradoxa* near the entry track about 400 m from the entrance.

Orchids seen in flower on 20 Oct. 2016 were *C. carnea* (widespread, many), *Caladenia tentaculata* (widespread, many), *Thelymitra rubra* (many, in heath), *T. antennifera* (patches, in heath), *T. pauciflora* (buds only), *T. ixioides* (mostly buds) and *Diuris pardina* (2 plants 40 m west of Entry Tk, 250 m from Bridge Track). Pink Fairies, Mantis Orchid & Golden Moths Orchid are shown below.

Orchids seen in flower on 2 Nov. 2016 were *Caladenia tentaculata* (a few, in wet heath), *Thelymitra rubra* (many in heath), *T. antennifera* (patches in heath), *T. pauciflora (*in heath), *T. ixioides* (in heath) and *Microtis* spp. (many, widespread).

The lily-flowers (*Bulbine bulbosa*, *Burchardia umbellata*, *Arthropodium strictum*, *Caesia calliantha*, *Dianella admixta*, and *Tricoryne elatior*) were now out, amongst *Microseris lanceolata*, *Craspedia variabilis* & *Linum marginale*. Chocolate Lily, Native Flax & Black-anther Flax-lily are shown below.

Other matters

Off-road activities – as mentioned many times over the years, the absence of any signage asking drivers to keep to the tracks encourages this action. The result is weed incursion and ruts. Wood gatherers also currently drive off the entry track, mostly on the east side not far from Edgewood Rd, to cut wood. We saw several loads of wood being taken by campers. If this is condoned then it would be better if the people park on the track and carry any cut wood to the vehicle. That might also reduce the amount of wood burned in huge camp fires.

Facilities – a toilet needs to be installed at the main river camp area. It really is needed, particularly since many of the campers appear to have no notion of bush-camping.

Removal of signs – the routed sign outside the entrance to the reserve had been pulled over at some time between 24 Sept. and 20 Oct.