



HAMILTON FIELD NATURALISTS CLUB

PO Box 591
Hamilton 3300

13 October 2009

Report on Weed Control Work at the Fulham Streamside Reserve in Sept.-Oct. 2009

Summary

- Activities – the HFNC (7 members) spent 82 hours on 11 & 18-20 Sept. and 8 Oct. 2009 treating environmental weeds on floristically-rich parts of the western half of the Fulham Streamside Reserve, south of the River Track to Edgewood Rd. The areas treated are shown on the attached map.
- Application of herbicides — except for a few areas near the River Rd infested with Cocksfoot or Phalaris, where Glyphosate was used to spot-spray individual plants. Sparaxis plants were carefully spot-sprayed with Ally solution (*metsulfuron methyl* with Pulse as a surfactant and a dye marker) to minimise off-target deaths of other lily plants and woody vegetation. Cape Tulip plants were mostly individually treated with Ally using tongs fitted with herbicide pads to deliver a more concentrated herbicide solution to pest plant leaves without contacting other vegetation. The objective of both spot-spraying and herbicide wiping is to allow adjacent native species to re-colonise the small areas treated. Our experience, and observations of work by other operators here, demonstrate that spraying Cape Tulip is not effective in killing all the plants (the spray misses or does not wet the target) and it cause extensive losses of adjacent non-target species. Walking the site and wiping individual plants is the only way to remove all of the Cape Tulip plants and to restore the area to its previous botanic composition and health.
- Sparaxis (Harlequin Flower) – the degree of infestation from *Sparaxis* was further reduced in areas spot-sprayed in 2007 but significant infestations still remain, including along a former part of the Entry Tk where hundreds of small plants were treated. Another source was a 75 m stretch along an old track west of Entry Tk (at 37-09-27.4/141-51-24.7). The major site of infestation found in 2008 (but not treated then) in the salt marsh near the N-S Ck was treated with Ally + Pulse as a blanket spray. Spot-spraying was not possible here, owing to the density of plants in the 70 m x 10 m area. The area along the creek adjacent to the railway line was treated again, with only hundreds of plants seen rather than thousands. This year we also concentrated on Sparaxis along Edgewood Rd, down N-S Ck and into the salt marsh adjacent to River Tk.
- Cape Tulip – this weed was present in appreciable numbers, mostly pre-flowering, often associated with old tracks but also in discrete small spots of a few plants (sometimes several dozen) at random across the landscape. We treated thousands of plants along Edgewood Rd, East Boundary Tk and down N-S Ck and tributaries 1-3 into the salt marsh adjacent to River Tk. Walking is the only way to detect all plants. We were dismayed to see that Cape Tulip had been sprayed by an operator using a vehicle and/or 4-wheel motor cycle in part of the eastern “salt marsh” area that we were treating. Apart from the collateral damage to adjacent plants (killing all vegetation in an area at least 30 cm radius around each Tulip plant) many plants were unaffected by the spray and others nearby had not been treated at all. We had to treat those plants. There is little point HFNC working to protect and restore the area if inappropriate practices continue – over many years those practices have created most of the extensive patches of so-called saline areas in the marsh, where the diversity of native plants has been drastically reduced. This is a part of the reserve that supported a large population of Yam Daisy, *Thelymitra antennifera*, native lilies & other grassland species.
- River Track – while the blockade at each end of this Winter Closure section seems to have reduced illegal usage some vehicles have driven around the blockage and created off-road damage there. Vehicles have also engaged in some destructive “circle work” in the salt marsh area in the eastern part of this block (SE of the eastern loop in the River Tk). While the “Seasonal Road Closure” notes in the information box asks drivers to respect the “road closure” rules, most of the 4WD drivers who indulge in those activities would not bother to take the note or to read it. A more immediate reminder is needed, with signs along the River Tk requesting vehicles to stay on the road:
 - to allow restoration of the degraded sections of the salt marsh
 - to prevent transfer of weeds and disease into the reserve.
- Western-most loop track south off the River Track – this track is a danger to the long-term integrity of these valuable marsh areas and should be closed and the adjacent River Tk in this section needs to be improved.
- Off-road recreational vehicles constitute a constant danger to the reserve, spreading weed seeds in mud in tyre treads or carried elsewhere on the vehicles, crushing vegetation, cutting up fragile areas and risking the spread of Phytophthora. Signs are needed to remind drivers of their responsibilities.
- Camping – camping in the bush W of the Entry Tk at the river is a serious threat to that special area.

Birds – 43 species seen (and Powerful Owls heard), incl. a ‘new’ bird in Blue-winged Parrot (total now 110 species).

Mammals – 3 Echidna (one dead), Hare (3) & rabbit (2, on Edgewood Rd)

Reptiles – Bearded Dragon (1, near Edgewood Rd) & Shingleback (many).

Flora – a new orchid for the reserve, *Caladenia pusilla*, near the River Tk (total native flora now 324 species).

Works undertaken in 2009

On 11 September, 18-20 September and 8 October 2009 at the Fulham Streamside Reserve, members of Hamilton Field Naturalists Club located and sprayed the noxious and environmental weeds listed below:

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| ○ <i>Moraea flaccida</i> (One-leaf Cape Tulip) | ○ <i>Phalaris aquatica</i> (Toowoomba Canary-grass) |
| ○ <i>Sparaxis bulbifera</i> (Harlequin Flower) | ○ <i>Asparagus asparagoides</i> (Bridal Creeper) |
| ○ <i>Gladiolus undulatus</i> (Wild Gladiolus) | ○ <i>Cirsium vulgare</i> (Spear Thistle) |

The general areas spot-sprayed were:

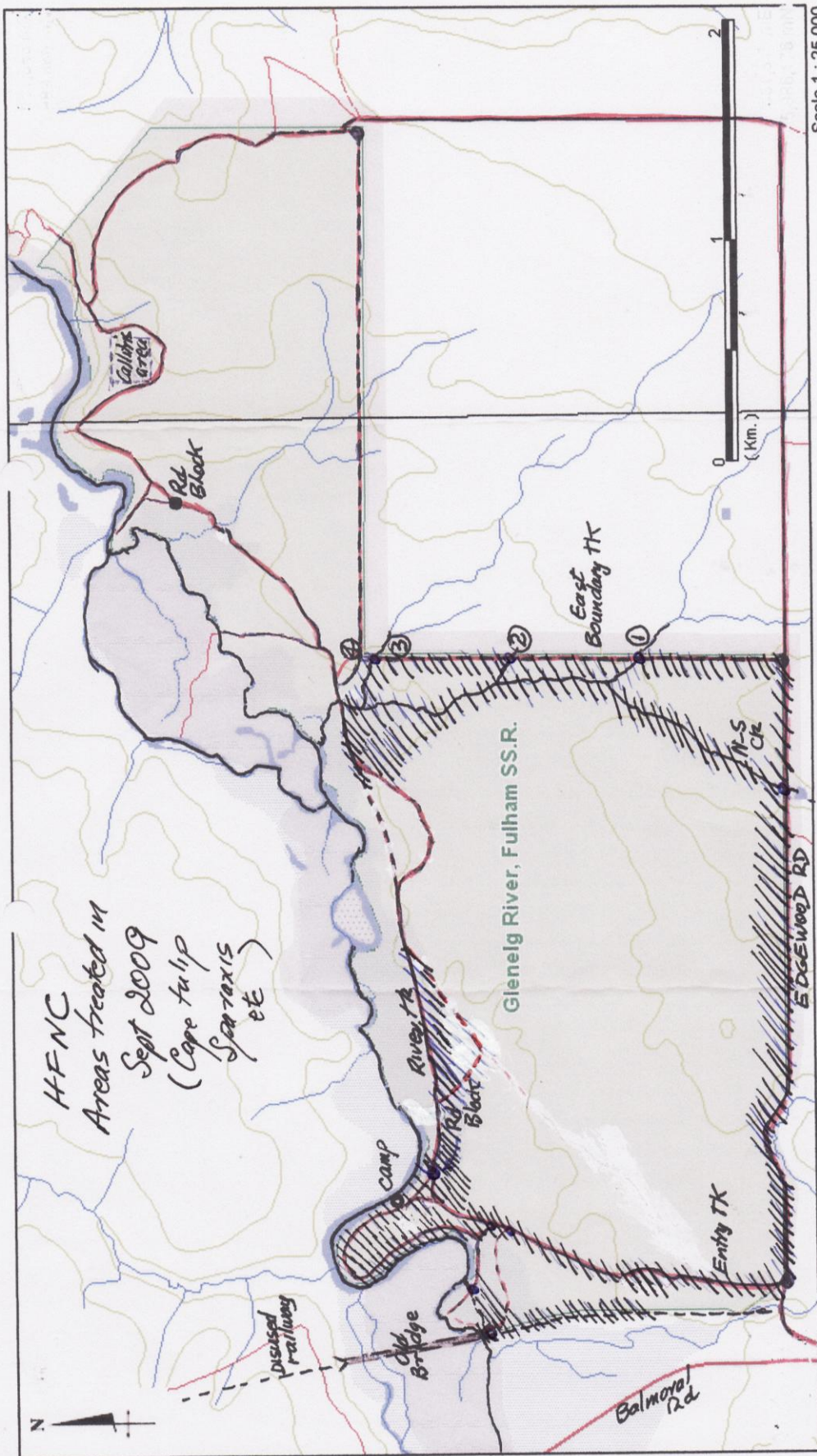
- **The Edgewood Rd margin** – worked from Entry Sign (0 km) E along the Edgewood Rd, ~ 200 m into the reserve. Treated Sparaxis (Sprx) and Cape Tulip (CT) at the entry, and 50 m E among *C. carnea*. At 0.35 km a host of *P. nutans*. At 0.85 km a hot spot of Sprx on S of rd. At 0.9 km CT & Sprx (~ 30 plants on N side). At 1.8 km a few CT near rd (near a Telstra post) and odd patches up to 200 m N. At 2.2 km a patch of ~ 100 Sprx ~20 m W of creek & 20 m from rd. At 2.4 km a nice patch of Golden Moth orchids. A few Sprx at 2.9 km (cnr of Boundary Tk) and also ~ 50 m W. One patch of Sprx seen later (untreated) on S side of road.
- **The East Boundary Track** - a small patch of CT just W of Tk. at 3.0 km from Entry and at 4.0 km (2nd Ck) on track and on the seepage. At least 50 Morel fungi were seen on S side of 2nd Ck (37-09-18.0/141-53-17.5). Three small spots of CT on track between 2nd Ck & 3^d Ck. At 4.5 km (3^d Ck), several spots of CT near track and W on both sides of the wet area down to N-S Ck.
- **N-S Creek** – there were a few CT from Edgewood Rd (2.2 km) to junction with 1st Ck, especially where a fire trail crossed. Also a few Cootamundra Wattles in the creek (large trees not poisoned). From 1st Ck to 2nd Ck there was a patch of Sprx at 37-09-20.3/141-53-14.4), about 70 m S of 2nd Ck jn. Also many 100s of CT along entire section, especially on W side. From 2nd Ck to 3^d Ck junction there were 100s of CT. From 3^d Ck to River Tk there were also 100s of CT, with many more extending W on the Marsh. A few Sprx were found on W side of N-S Ck (at 37-09-05/141-53-17), a spot treated in 2006 below the jn, but none thereafter along the creek down to the culvert on the River Tk (at 37-08-53.4/141-53-10.3).
- **Along railway line, SW part of block** – this area was lightly infested with Sprx & CT on the W edge (the railway area), compared with extensive infestation treated in 2007. However, several hundred very small Sprx plants were found and treated (10 L spray), some extending out of the drainage line into the heathland.
- **Strip adjacent to track from Entry to river** – both sides from Entry at Edgewood Rd (37-09-04.2/141-51 46.4). Isolated CT and Sprx were treated. A previous hotspot on the W side contained several hundred tiny Sprx, stretching along the old track on both sides of the bulldozed fireline that crosses the Entry track. Some 6 L spray applied - the Sprx eradication will result in the loss of a few heath plants. Attention will be needed again in 2010. A further area of infestation was found on another old track some 70 m W of the Entry Tk. The N edge was at 37-09-27.4/141-51-24.7 and extended 75 m S into acacias. This infestation required 13 L spot-spray.
- **River area from main camp on river downstream to second bend** – this most southerly bend is a camping spot. CT, Bridal Creeper & Phalaris treated in this “peninsula”. The sandy soils support a tree that has affinities with Desert Stringybark (*E. arenacea*). The area contains a good regeneration of Desert Banksia (*B. ornata*) and Silver Banksia (*B. marginata*), along with Redbeak Orchid and other species. There is an unfortunate expansion of camping across the track from the main site that threatens to devalue the flora of this important area and allow weeds to penetrate the reserve. Signs are needed to restrict camping to the strip between the track and the river.
- **Area from south bend downstream to a creek and down that creek to Railway Bridge** – this area is heavily infested with pasture grasses and CT. The area extends across to the track that runs west from Entry Track to the Bridge. CT were treated here. The remaining area between the creek and the river was not assessed or treated.
- **The NW river area from the gate on River Rd downstream to the main camp** – the gate is at 37-09-04.2/141-51-46.4. The treated area includes the area S of the River Tk that contains Nodding Greenhoods, amongst Sprx, that was rutted by off-road vehicles and has received previous treatment. The area was treated again to mop up Sprx and Phalaris plants were also sprayed. Some Sprx remains between the River Tk and the river in this area.
- **The Central Marsh area** – E beyond the winter-closed section of the River Tk (at 37-09-04.2/141-51-46.4) to the junction with the diversion loop at 37-09-05.9/141-51-56.8, then to the E edge of the marsh (37-09-04.8/141-52-04.2), with the *Melaleuca neglecta* marsh being treated for many infestations of Sprx, Wild Gladiolus & CTs. Sprx was reduced from treatment in 2008, and all plants were very small (possibly new germinants).
- **The Eastern Marsh area** – on 8 Oct. we sprayed the large area of Sprx in very wet marsh some 100 m W & 200 m S of the culvert at 37-08-53.4/141-53-10.3. The periphery was spot-sprayed in 2008, reducing the area to be sprayed this year from 100 m x 30 m to about 75 m x 10 m. The area was pegged with red tape markers. A blanket-spray of 30 L of Ally and Pulse spray was applied to eliminate Sprx without affecting tussock and other grasses. The NE corner is at 37-08-57.8/141-53-06.3. Many hundreds of CT were wiped across the entire marsh. As stated in the Summary, we were disappointed to see our efforts to restore this important marsh compromised by another agent operating in the same area and using inappropriate methods (see attached photos of the area). Odd small spots of Sprx were found across the marsh (e.g. 37-08-58.6/141-52-58.8). Larger areas were located at near the River Tk at 37-08-54/141-53-03 (partly treated) and at 37-09-05.9/141-52-58.2 (near S end of the marsh).

Works

Friday 11 Sept. – RB & DL each 6 hr; Friday 18 Sept. – RB & DL each 6.6 hr; Thursday 8 Oct – RB 10 hr

Saturday 19 Sept. – RB 5.2 hr, DL 4.5 hr; JC, GC, RZ & YI each 4 hr, HT 3 hr

Sunday 20 Sept. – RB 5.3 hr, DL 3.5 hr, JC & GC each 2 hr, RZ & YI each 3 hr



Gleneig River, Fulham SS.R.



Fulham Oct 2009, eastern marsh in the western block, near the River Tk – area sprayed by an unknown operator from a 4-wheel bike. Note area of vegetation affected this year and in past years



Fulham Oct 2009, eastern marsh in the western block, 200 m south of the River Tk – area sprayed by an unknown operator from a 4-wheel bike. Note area of vegetation affected this year (purple) and in past years (the area devoid of mcuh vegetation)



Fulham Oct 2009, eastern marsh in the western block, 200 m south of the River Tk – area sprayed by an unknown operator from a 4-wheel bike. Note the collateral damage to vegetation (purple) in spraying the Cape Tulip plants. This approach should not be used.