



HAMILTON FIELD NATURALISTS CLUB

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20 October 2008

Report on Weed Control Work at the Fulham Streamside Reserve in September 2008

Summary

- Activities – the HFNC (6 members) spent 72 person-hours from 12-14 Sept. 2008 spraying pest and environmental weeds on floristically-rich parts of the western half of the Fulham Streamside Reserve. We did not spot-spray any weeds beyond a few metres north of the River Track because that part between river and track is so infested with *Sparaxis*, or so degraded by past broad-scale spraying for Cape Tulip, that unfortunately it would appear to be futile or beyond our ability to handle.
- Herbicides used – *metsulfuron methyl* (Ally) with a surfactant (Pulse) and dye marker (purple) – except for areas infested with Cocksfoot or Phalaris, Glyphosate was not used because it would also kill Tussock and other native grasses. Weeds were, wherever practicable, carefully spot-sprayed to achieve little off-target deaths. In addition, two operators used 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. We are convinced that is the only way to restore the area to its previous botanic composition and health.
- Weeds controlled – One-leaf Cape Tulip, Halequin Flower, Wild Gladiolus, Toowoomba Canary-grass, Cocksfoot, Yorkshire Fog-grass and Spear Thistle.
- Locations of weed hotspots – most were marked by GPS, to enable follow-up work in later years.
- African Weed Orchid – we saw no plants.
- Harlequin Flower – the degree of infestation from *Sparaxis* was greatly reduced in areas spot-sprayed in 2007 but we found a major site of infestation not sprayed in 2006 or 2007 near the eastern edge of the western half of this reserve (adjacent to the N-S stream that flows from Edgewood Rd). The area along and adjacent to the railway line that was heavily infested with *Sparaxis* in 2007 was treated again, but this time only hundreds of plants were found rather than tens of thousands. The treatment of the *Melaleuca neglecta* flats area in 2006 had greatly reduced the presence of *Sparaxis*, and we found much fewer plants this year.
- Cape Tulip – this weed was present in appreciable numbers, all pre-flowering, usually associated with old tracks but also in discrete patches spread across the landscape. This weed, and that of *Sparaxis*, is readily spread by grader/bulldozer tracks and recreational vehicles, presumably also from seed carried by the vehicles.
- River Track – we propose again that this track be improved (there are several sites that could be made trafficable by building up with sand or gravel) to allow all-year traffic, rather than attempt a seasonal closure – unsupervised closures and absence of fines ensure that signs will always be ignored by 4WD drivers accustomed to doing as they please.
- Iluka's new bore track – we were pleased to see that the Iluka bore track that runs east off the entrance road was not in use, and that will prevent weeds being spread into the heart of this reserve.
- Western-most loop track south off the River Track – this track is a danger to the long-term integrity of the vegetation in these valuable marsh areas. We spent much time spot-spraying infestations of *Sparaxis* along and adjacent to this loop track. If the River Track is open there is no reason for the other track to remain open. We were dismayed to see that recent vehicle tracks were evident along this section, despite the closed road sign. It was also evident that at least part of this activity was associated with inspections of the bores that are present in that area. Vehicles had driven off the track across the vegetation at both bores, whereas they had only a few metres to walk from the track without doing any physical damage or spreading weed seeds. It will be impossible to eradicate weeds if this damage is allowed to continue.
- Off-road recreational vehicles constitute a danger to the reserve, through spreading weed seeds in mud adhering to tyres or seed carried elsewhere on the vehicles, cutting up fragile areas and risking the spread of Phytophthora. Signs are needed to remind drivers of their responsibilities.
- Status of the reserve – this reserve needs the status of **Flora & Fauna Reserve**, since 323 native species have now been found on this reserve, with several rare and endangered species

Birds – 63 species were seen, including “new” birds in White-throated Gerygone, Australasian Shoveller, Black-fronted Dotterel, Black-tailed Native Hen, Brown Goshawk, Little Raven, Tawny Frogmouth and White-winged Triller, bringing the total to 110 for this area (see Table 2).

Mammals – Eastern Grey Kangaroo (*Macropus giganteus*), Red-necked Wallaby (*Macropus rufogriseus*) & Black Wallaby (*Wallabia bicolor*) seen. We also saw 3 Platypus (*Ornithorhynchus anatinus*) in the main Fulham Pool, our first sightings of this species here. Echidna (*Tachyglossus aculeatus*) diggings were also evident.

Flora – only one new species was recorded, a single plant of *Carpobrotus modestus* (Inland Pigface) along N-C creek, with the total of native species 325. We found more plants of *Templetonia stenophylla* this year – this is an unusual plant for this region.

Works undertaken in 2008

From 12-14 Sept. 2008 at the Fulham Streamside Reserve, members of Hamilton Field Naturalists Club located and sprayed the noxious and environmental weeds listed below:

- *Moraea flaccida* (One-leaf Cape Tulip)
- *Sparaxis bulbifera* (Halequin Flower)
- *Gladiolus undulatus* (Wild Gladiolus)
- *Phalaris aquatica* (Toowoomba Canary-grass)
- *Dactylis glomeratum* (Cocksfoot)
- *Holcus lanatus* (Yorkshire Fog-grass)
- *Cirsium vulgare* (Spear Thistle)

The general areas spot-sprayed were:

- **The SW Block** – from entrance at Edgewood Rd, running 1.4 km N along Entrance Tk to the junction with the W track that runs to the old railway bridge, and S along the railway line and creek from 37-09-15.4/141-51-17.5 to the Edgewood Rd. This area was lightly infested with Sparaxis and Cape Tulip on the W edge (the railway area), compared with extensive infestation treated in 2007.
- **The NW Block** – the area N of the track at 1.45 km from the entrance (37-09-13.8/141-51-34.0) W to the river and including all areas W of the Entrance Tk and river as far as the road closure point on the River Tk (37-09-04.2/141-51-46.4). This year we also treated the river frontage at and west from the most southerly river loop (camp areas) to the old railway bridge. We concentrated on the area south from the crossing of the major creek line that runs across to the old bridge. It had considerable infestation of Cape Tulip. (There is an area of floodplain north of that creek that follows the Glenelg River that was not treated).
- **The Central Block** – large area E of the Entrance Tk from Edgewood Rd (37-09-56.4/141-51-23.2) N to the river, thence E beyond the newly closed section of the old River Tk to its junction with the diversion loop at 37-08-54.8/141-52-59.2, with the area S of the River Tk (especially the *Melaleuca neglecta* swamps) being treated for many infestations of Sparaxis, Wild Gladiolus, Cape Tulip and Phalaris. Sparaxis here was much reduced from treatment in 2006, and all plants were very small (possibly new germinants). We were disappointed to find off-track incursions of vehicles, apparently visiting the 2 bores in that area.
- **The Eastern Block** – we checked the area further east along River Track, to the culvert at 37-08-53.4/141-53-10.3, the eastern end of the area we checked in 2006, and about 100 m further E to a small drainage line crossing the track at 37-08-55.6/141-53-14.8. From there we followed the drainage line to the corner post of the reserve, where the East Boundary Track (to Edgewood Rd) turns east, and spot-sprayed Cape Tulip there and on the 3 drainage lines that run down from the track to the N-S creek that runs from Edgewood Rd. The boggy creek (3^d Creek) had several infestations of Sparaxis (near 37-09-05.3/141-53-17.3), with further infestations on the N-S creek and a wet area further west at 37-09-00/141-53-09. Many large patches of Cape Tulip were also treated throughout the area. We checked the 2nd Drainage line, finding Cape Tulip at the intersection with N-S creek (37-09-17/141-53-15), but not the 1st drainage line (nearest Edgewood Rd), and followed down the N-S creek to the River Track.

A large area of Sparaxis infestation was found in a very wet area some 100 m west and 200 m south of the main culvert at 37-08-53.4/141-53-10.3. We treated the drier, smaller parts but left an area 100 m x 30 m that was too wet and extensive for us to treat. That area needs to be treated with a blanket-spray of Ally and Pulse (not Glyphosate) to control the Sparaxis without affecting tussock and other grasses.

Works

Friday 12 Sept 2008 – RB 8 hr

Saturday 13 Sept 2008 – RB 9 hr; RZ 9 hr, DL 7 hr; YI 7 hr, KG 5.5 hr, JG 5.5 hr

Sunday 14 Sept 2008 – RB 9 hr, RZ 5.5 hr, YI 5 hr, DL 7.5 hr

Total 72 hours

Chemicals

Spray applied, Fri 30 L, Sat 80 L, Sun 40 L = 160 L

Glyphosate 60 mL, Ally 64 g, Pulse 800 mL, colour 640 mL.