

## Site 68. Hillside Park, Rowville

A park in Kelletts Rd near Taylors La, with remnant trees and revegetation. Melway ref 73 B11.

### Site Significance Level: *Local (western section) and State (eastern section)*

- Contains a remnant of an endangered Ecological Vegetation Class (Valley Heathy Forest) whose understorey is presently rudimentary but whose ecological restoration is showing good potential;
- Provides good habitat for forest and woodland birds in an area substantially depleted of suitable habitat;
- Contains large remnant trees containing hollows suitable as shelter and breeding locations for hollow-dependent native fauna;
- Represents a habitat link along the habitat corridors of Corhanwarrabul Creek and Monbulk Creek.



Scale  
10 0 20 40 60 80 100m

*Aerial photograph taken February 2007*

### Boundaries

The site is outlined in red above. It has been reduced in size since the first edition of this report due to clearing for Kelletts Rd to be widened. The northern, eastern and southern boundaries follow property boundaries (or extensions of them). The western boundary has been drawn to enclose planted trees that serve some habitat function, skirting kindergarten buildings and associated facilities.

The white line on the aerial photograph divides the site into an eastern section of 0.9 ha with a canopy of remnant trees and a western section of 2.0 ha whose significance derives only from one large old eucalypt and areas of revegetation.

**Land use & tenure:** Council park, zoned 'Public Park and Recreation Zone'.

### Site description

The site is located on a minor knoll in very gently undulating terrain, at elevations between 70 m and 80 m. The slope is shallow and predominantly faces east toward the Corhanwarrabul Ck, approximately 300 m away.

The soil is shallow, poorly draining, light grey loam over clay subsoil, derived from decomposition of the underlying Lower Devonian sedimentary rocks of the Humevale formation.

Native vegetation in this neighbourhood was originally cleared long ago, probably for grazing. Tree cover was spared in places, including the eastern part of this park and along nearby Taylors Lane. More recently, urban development and road construction have made further, substantial reductions to the amount of remnant vegetation in the vicinity.

The eastern section of Hillside Park retains a good cover of remnant trees, including several large specimens likely to be 100-200 years old. The history of clearing, grazing and mowing in this area has left the indigenous understorey vegetation very depleted, but the grass contains some native grass species and some other remnant ground flora persists around the base of remnant trees. Moderate foliage dieback of remnant trees is apparent.

The section of the park west of the white line on the aerial photograph has previously been cleared of nearly all remnant vegetation, except for a large Mealy Stringybark tree (*Eucalyptus cephalocarpa*) along the Kelletts Rd frontage, as marked on the aerial photograph. This tree has a trunk diameter exceeding 1m and contains substantial natural hollows.

Indigenous revegetation areas have been established throughout the reserve within the last ten years, including extensive planting of shrub and ground layer species such as Sweet Bursaria, Hop Wattle, Spiny-headed Mat-rush, Common Tussock-grass and Kangaroo Grass. These include revegetation areas established around remnant trees in the eastern section of the reserve. The revegetation undertaken will undoubtedly contribute substantially to the cover of indigenous vegetation within the reserve over time.

A number of mature planted native trees occur within the reserve and adjoining residential properties, including Red Ironbark, Spotted Gum, Southern Blue Gum, Southern Mahogany, Sydney Blue Gum and Silky Oak. Most of these trees would have been planted around the time of establishment of the reserve and the residential development of the area, approximately thirty years ago.

The only built facilities within the reserve are paths and some playground equipment towards the northern side, as seen on the aerial photograph.

### Relationship to other land

Planted native trees are scattered within residential properties in the surrounding area, however the reserve is only weakly connected to other areas of remnant vegetation. The main connection is a fair to good cover of remnant indigenous and planted native trees along the western side of Taylors Lane, providing a habitat link to Corhanwarrabul Creek (approximately 600 m to the north).

Eastern Rosellas, Spotted Pardalotes and abundant lorikeets were seen to move through Hillside Park during the site inspection. This indicates that the park represents an ecological stepping-stone as these birds move around the district. The birds may well also be nomadic along nearby Corhanwarrabul Creek and Monbulk Creek.

**Bioregion:** Gippsland Plain

### Habitat type

Valley Heathy Forest (EVC 127, **regionally Endangered**).

Eastern section: 0.85 ha, all in poor ecological condition (rating D). 7 remnant indigenous plant species were recorded on 24th May, 2002.

Canopy trees: A good cover of remnant *Eucalyptus goniocalyx* and *E. cephalocarpa* trees up to 25m tall, mainly 80-100 years old but with several larger trees 100-200 years old. Moderate foliage dieback is apparent.

Lower trees and shrubs: Reduced by past clearing to a single small specimen of *Acacia mearnsii*. Indigenous shrubs have been included in recent revegetation activities.

Ground flora: Generally restricted to a few plants around the base of remnant trees because of previous clearing, grazing and mowing activities, including some *Microlaena stipoides*, *Poa morrisii* and *Lomandra filiformis*. Mowing of some areas has been discontinued in recent years. Recent revegetation activities have included the re-establishment of indigenous ground flora.

Western section: Naturally occurring vegetation is reduced to a single, large remnant specimen of *Eucalyptus cephalocarpa* (marked on the aerial photograph above) with a trunk diameter of approximately 1 m and moderate foliage dieback. All other remnant indigenous trees have previously been cleared west of the white line on the aerial photograph. There are scattered planted native trees and many areas of indigenous revegetation, amid mown introduced grass.

### Plant species

The following plant species were observed by Mr Rik Brown on 24th May 2002. Additional species would no doubt be detectable in other seasons. A 'V' in the column headed 'Risk' indicates the species' risk of local extinction is Vulnerable.

Risk	Indigenous Species	Risk	Indigenous Species
V	<i>Acacia mearnsii</i>		<i>Lomandra filiformis</i> subsp. <i>coriacea</i>
	<i>Dichondra repens</i>		<i>Lomandra filiformis</i> subsp. <i>filiformis</i>
V	<i>Eucalyptus cephalocarpa</i>		<i>Microlaena stipoides</i>
	<i>Eucalyptus goniocalyx</i>		<i>Poa morrisii</i>

### Introduced Species

<i>Acacia baileyana</i>	<i>Ligustrum vulgare</i>	<i>Prunus cerasifera</i>
<i>Arctotheca calendula</i>	<i>Pennisetum clandestinum</i>	<i>Rosa rubiginosa</i>
<i>Galium aparine</i>	<i>Pittosporum undulatum</i>	<i>Rubus anglocandicans</i>

### Fauna of special significance

None recorded during field surveys, although significant birds associated with nearby creeks and their floodplains are likely to visit the reserve.

### Fauna habitat features

Remnant trees within the site provide good habitat for forest and woodland birds in an area otherwise substantially depleted of suitable habitat. Substantial populations of lorikeets were apparent in the area during field surveys, along with smaller forest birds such as the Spotted Pardalote.

The large remnant trees within the site contain natural hollows suitable as shelter and breeding locations for birds, possums, bats or insects. Nesting activity by Galahs was apparent during field surveys. There are also nesting boxes.

Habitat values of the reserve are likely to increase over time with the further re-establishment of indigenous vegetation.

### Significance ratings

The following is an assessment of the site's significance against the Department of Sustainability & Environment's standard criteria (Amos 2004).

#### *Ecological Integrity & Viability*

The site is a component or ecological 'stepping stone' of a habitat corridor, as explained above under the heading, 'Relationship to other land'. The link that it provides appears to be important for fauna movement at the local scale (or perhaps more widely). This represents **Local** significance under criterion 1.2.6 of Amos (2004).

#### *Regionally Endangered Ecological Vegetation Class*

Under the Department of Sustainability & Environment's criteria, the eastern section of this site contains a 'remnant patch' of an endangered EVC. It follows from Appendix 3 of *Victoria's Native Vegetation Management - a Framework for Action* (NRE 2002a) that Hillside Park's native vegetation is of at least High conservation significance. This, in turn, gives the site **State** significance under criterion 3.2.3.

#### *Locally Threatened Plant Species*

The two locally threatened plant species listed above have viable populations, thereby meeting criterion 3.1.5 for a site of **Local** significance.

The large remnant trees within the site are also locally significant because of their age and size, particularly the old specimen of Mealy (or Silver-leafed) Stringybark (*Eucalyptus cephalocarpa*) along the Kelleys Rd frontage, marked on the aerial photograph. However, this does not meet any of the significance criteria of Amos (2004).

### Threats

- Lack of recruitment of indigenous vegetation because of mowing;
- Eucalypt dieback;
- Reduced visitation of the site by small insect-eating birds due to its degree of isolation from other areas with indigenous understorey, possibly leading to a worsening of plant pests and diseases;
- Loss or decline of plant species whose populations are so small that they are vulnerable to inbreeding, poor reproductive success or elimination by incidents such as digging by dogs;
- Potentially, invasion of environmental weeds, but these are under control and none are rated in the categories of 'Very Serious' or 'Serious'.

### Management issues

- Monitor the success and maintenance needs of revegetation areas, and when the time is right, augment them with additional revegetation to create greater continuity in the tree canopy and understorey;
- Keep suppressing weeds that emerge, particularly woody weeds such as Sweet Pittosporum.

### **Administration matters**

- This site is suited to the proposed Environmental Significance Overlay (ESO2) because of the presence of an endangered EVC. The western section is included because of its high potential to assist the ecological function of the remnant vegetation in the east, give Council's efforts to revegetate the area;
- The eastern part of the site is presently covered by Vegetation Protection Overlay 1. The placing of the overlay was partly on the basis of the study by Water Ecoscience (1998), in which this is Site 45.

### **Information sources used in this assessment**

- A site survey undertaken during this study by Rik Brown on 24/5/02, following this study's standard procedures discussed in Section 2.4 of Volume 1. This included a description of the composition and condition of the vegetation, compilation of lists of indigenous and introduced plant species, incidental fauna observations, and checks for fauna habitat, ecological threats, management issues and populations of scarce or threatened plant species;
- Description of the site by Water Ecoscience (1998), in which Hillside Park forms their Site 45;
- Aerial photography from February 2001, April 2003 and February 2007;
- Satellite imagery of the district;
- The Department of Sustainability & Environment's BioMaps of the area;
- Maps of geology and topography produced by agencies of the Victorian government.