Site 40. Ferntree Gully Rd Verge, Ferntree Gully

Road verge near Scoresby Rd with remnant understorey and revegetation. Melway ref. 73 E5.

Site Significance Level: Local

• Remnants of a regionally endangered Ecological Vegetation Class (Valley Heathy Forest) in fair ecological condition.



Boundaries

This 0.25 ha site of three parts is outlined in red above. Kerbing or property boundaries define most of the site boundary. The narrow, magenta oblong along Scoresby Rd is part of Site 106 (page 523).

Land use & tenure: Private property (zoned 'Residential 1') used for horse grazing, and adjacent road verge.

Site description

The site is at elevations of 76-78 m on a shallow slope facing southeast, close to the floodplain (and one-time swamp) of Ferny Ck and Monbulk Ck. The slope is less than 3% for a radius of more than 1 km around the site. 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.

The site supports remnant trees and a moderate density of indigenous understorey vegetation, including a range of typical species of Valley Heathy Forest such as Sweet Bursaria (*Bursaria spinosa*), Prickly Currant-bush (*Coprosma quadrifida*), Grey Parrot-pea (*Dillwynia cinerascens*), Thatch Saw-sedge (*Gahnia radula*), Flax-lilies (*Dianella admixta, D. longifolia*) and Yellow Rush-lily (*Tricoryne elatior*).

At the time the first edition of this report was prepared in 2004, there was additional remnant vegetation where there is now a subdivision surrounding Watling Grove. To compensate for the loss of this vegetation, revegetation has been conducted within the site described here. The species planted are mostly indigenous.

Relationship to other land

Remnant trees are scattered within residential areas to the north. The treed verge of Scoresby Rd (Site 106, p. 523) provides continuity of treed habitat to the treed precinct of Site 107 in Knoxfield (p. 525) and from there to high quality habitat at Lakewood Nature Reserve (Site 43, p. 215) and neighbouring sites.

Knox Park is located on the opposite side of Ferntree Gully Rd. This potentially provides a link with the Ferny Creek - Monbulk Creek valley to the south, however suitable habitat is currently scarce within the reserve.

Bioregion: Gippsland Plain

Habitat type

Valley Heathy Forest (EVC 127, regionally Endangered): Estimated to occupy 0.24 ha, all in fair ecological condition (rating C).

Canopy trees: Dominated by Eucalyptus goniocalyx, with some E. cephalocarpa and E. radiata.

Lower trees: Acacia melanoxylon, A. mearnsii and Exocarpos cupressiformis.

Shrubs: Bursaria spinosa, Coprosma quadrifida and Acacia paradoxa. Indigenous shrub layer is depleted elsewhere.

Vines: Billardiera mutabilis were present in 2002 but could not be found in 2008. This species may regenerate.

Ferns: Absent.

<u>Ground flora</u>: A fair cover of indigenous ground flora, e.g. *Gahnia radula*, *Dillwynia cinerascens*, *Gahnia radula*, *Dianella admixta*, *D. longifolia*, *Tricoryne elatior Dianella admixta*, *Microlaena stipoides* and two subspecies of *Lomandra filiformis*. Includes several specimens of *Dianella longifolia*. Ground layer vegetation is depleted elsewhere because of previous clearing and ongoing grazing activities.

Plant species

The following plant species were observed by the author and Mr Rik Brown on their respective inspections of 24th May 2002 and 16 on 10th March 2008. The column headed 'Risk' indicates the indigenous species' risk of extinction in Knox with 'E'=Endangered and 'V'=Vulnerable. Additional species would no doubt be detectable in other seasons. Introduced plants that are not having significant environmental impact are not included.

Risk	Indigenous Species	Risk	Indigenous Species
V	Acacia mearnsii	E	Eucalyptus radiata
V	Acacia melanoxylon	V	Exocarpos cupressiformis
	Acacia paradoxa		Gahnia radula
	Billardiera mutabilis		Leptospermum continentale
	Bursaria spinosa		Lomandra filiformis subsp. coriacea
V	Coprosma quadrifida		Lomandra filiformis subsp. filiformis
	Dianella admixta		Microlaena stipoides
V	Dianella longifolia s.l.		Poa morrisii
	Dichondra repens	E	Poa tenera
V	Dillwynia cinerascens		Poranthera microphylla
V	Eucalyptus cephalocarpa		Rytidosperma sp.
	Eucalyptus goniocalyx		Tricoryne elatior
	Introduced Species		
	Coprosma repens	Pennisetum clandestinum	Prunus cerasifera
	Crataegus monogyna	Pittosporum undulatum	Rubus anglocandicans

Fauna of special significance

None known. A locally rare Brown Goshawk was observed flying overhead during the 2002 inspection, but the site does not provide substantial habitat for this bird.

Significance ratings

Regionally Endangered Ecological Vegetation Class

According to 'Victoria's Native Vegetation Management – A Framework for Action' (NRE 2002a), remnant patches of native vegetation belonging to an endangered EVC (including Valley Heathy Forest) have a conservation significance rating of either High or Very High, depending on their ecological condition. In either case, any site containing a remnant patch of such vegetation is of State significance under the Department of Sustainability & Environment's standard criteria (Amos 2004 – criterion 3.2.3).

The native vegetation in the present site meets the Department of Sustainability & Environment's current definition of a remnant patch, but at the time Amos (2004) prepared the significance criteria, the unpublished convention was that native vegetation only qualified as a remnant patch if it occupied at least 2,500 m². Because this threshold is so much larger than the area of native vegetation beside Ferntree Gully Rd, the author has reduced the significance level of the site to **Local**.

Locally Threatened Plant Species

Some of the locally threatened plant species listed above have viable populations (in combination with other plants in the neighbourhood), thereby meeting criterion 3.1.5 for a site of **Local** significance.

Threats

- Some of the remaining indigenous plant species are represented by only one or two individuals, rendering them vulnerable to loss through inbreeding, poor reproductive success or misadventure;
- Reduced visitation of the site by small insect-eating birds due to its isolation from other areas with indigenous understorey, possibly leading to a worsening of plant pests and diseases.

Administration matters

• This site is suited to inclusion under the proposed ESO2 overlay because it contains a remnant of an endangered EVC, complete with native understorey.

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;
- A botanical survey of the site by Dr Lorimer on 10/3/08 to document and map the vegetation that remained following residential development on the majority of the native vegetation that was present in 2002;
- 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.