

Site 37. Pickett Reserve, Ferntree Gully

A recreation reserve located at the northwestern corner of Burwood Hwy and Commercial Rd. Melway ref. 73 J2-3.

Site Significance Level: *Local*

- Contains remnants of a regionally endangered Ecological Vegetation Class (Valley Heathy Forest) in fair to poor ecological condition due to previous clearing and mowing, but with good potential for rehabilitation;
- Provides good habitat for forest birds and possums in an area substantially depleted of suitable habitat.



Aerial photograph taken April 2003



Scale 1:2,000
10 0 20 40 60 80 100m

Boundaries

This 3.01 ha site is outlined in red above. It includes most of Pickett Reserve as well as a narrow triangle of road verge abutting the reserve's southern boundary, next to the Burwood Hwy traffic lights. The reserve occupies five lots, and one of these (Lot 13, LP32239) is not included in the site because it has no influence on the site's biological significance. The oval, buildings and some of the car parking areas are of no environmental significance but are included in the site because activities in these areas can affect the significant vegetation, and because of desirability of aligning site boundaries with cadastral boundaries. The triangular extension southwards from the reserve's cadastral boundary, near the traffic lights, is intended to include all the native vegetation between the reserve boundary and the footpath.

Land use & tenure: Council reserve mainly utilised for sporting activities, with some buildings and car parks. Most of the reserve is zoned 'Public Park and Recreation Zone'. The two smaller lots fronting Mossfield Av provide a car park for the adjoining gymnastics stadium, and are zoned 'Residential 1 Zone'. The narrow triangle at the southern tip of the site is zoned 'Road Zone Category 1' and it functions as part of the reserve.

Site description

The site is on the upper slope of a broad, low ridge, which is oriented roughly northwest to southeast. The natural surface of the ground has a slope that is shallow and faces generally southwest, and there has been a small degree of levelling for

the oval. The site's elevation range is approximately 110-115 m. The soil is shallow, light grey loam over clay subsoil, derived from decomposition of the underlying Lower Devonian sedimentary rocks of the Humevale formation.

The aerial photograph shows a fair cover of remnant trees around the fringe of the reserve. This includes several large indigenous trees likely to be over 100 years old. Understorey vegetation is mostly absent due to clearing and ongoing mowing activities, but some remnants persist in places. In particular, a fair cover of indigenous ground flora occurs towards the southwestern corner of the reserve. Mowing activities appear to have been discontinued in this area relatively recently. Ground flora elsewhere within the reserve is generally restricted to around the base of remnant trees.

Relationship to other land

Remnant vegetation within Pickett Reserve is rather isolated from other native vegetation. Some remnant trees occur in residential properties to the north and east.

Bioregion: Gippsland Plain

Habitat type

Valley Heathy Forest (EVC 127, **regionally Endangered**): Estimated to occupy 0.5 ha, comprising 5% (250 m²) in ecological condition C (fair) and 95% (0.5 ha) in ecological condition D (poor).

Canopy trees: A fair cover of remnant trees up to 25 m tall, including *Eucalyptus cephalocarpa*, *E. goniocalyx* and *E. radiata*. Several *E. melliodora* trees occur towards the northern end. Most remnant trees are 50-80 years old, with several older specimens. Moderate foliage dieback is apparent in some locations, mainly near car parking areas.

Lower trees: A few scattered specimens of *Acacia melanoxylon*, *A. mearnsii* and *Exocarpos cupressiformis*.

Shrubs: A few *Bursaria spinosa* and *Kunzea ericoides* shrubs around the base of remnant trees. Most shrub layer vegetation has been cleared.

Vines and ferns: Absent.

Ground flora: A fair cover of indigenous ground layer vegetation occurs in the southwestern section of the reserve, including *Microlaena stipoides*, *Gahnia radula* and *Rytidosperma pallidum*. Otherwise substantially depleted by clearing and mowing activities and restricted to a few plants around the base of remnant trees.

Plant species

The following indigenous plant species were observed by Mr Rik Brown on 24th May 2002. The column headed 'Risk' indicates the indigenous species' risk of extinction in Knox with 'E'=Endangered and 'V'=Vulnerable. Other species would no doubt be detectable in other seasons.

Risk	Indigenous Species	Risk	Indigenous Species
V	<i>Acacia mearnsii</i>	E	<i>Eucalyptus radiata</i>
V	<i>Acacia melanoxylon</i>	V	<i>Exocarpos cupressiformis</i>
	<i>Austrostipa rudis</i>		<i>Gahnia radula</i>
	<i>Bursaria spinosa</i>		<i>Kunzea ericoides</i> spp. agg.
	<i>Dichondra repens</i>		<i>Microlaena stipoides</i>
V	<i>Eucalyptus cephalocarpa</i>	V	<i>Plantago varia</i>
	<i>Eucalyptus goniocalyx</i>		<i>Rytidosperma pallidum</i>
V	<i>Eucalyptus melliodora</i>		

Fauna of special significance

None recorded during field surveys.

Fauna habitat features

The fair cover of remnant indigenous trees within the site provides moderately extensive habitat for forest birds and possums in an area otherwise substantially depleted of suitable habitat. This includes providing good foraging habitat for parrots. A Common Ringtail Possum drey and carcass (probable cat predation) was observed during inspection of the site.

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).

A small part of the native vegetation at Pickett Reserve 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 at Pickett Reserve, 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, thereby meeting criterion 3.1.5 for a site of **Local** significance.

Threats

- Dieback of remnant trees associated with altered drainage and soil compaction from vehicles;
- 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 trampling or digging by dogs;
- 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;
- Lack of recruitment of indigenous vegetation because of mowing;
- Potentially, removal of remnant vegetation to allow future expansion of recreational facilities;
- Invasion by environmental weeds, specifically exotic grasses and herbs and particularly Panic Veldt-grass (*Ehrharta erecta*).

Management issues

- Protect remnant vegetation in any future development;
- Containment of vehicle access and car parking within the northern section of the reserve to prevent soil compaction and other damage to indigenous vegetation (including by installation of barriers where required);
- Incorporate remnant trees within revegetation areas wherever possible to provide ongoing protection and opportunities for regeneration. There are substantial opportunities for the re-establishment of indigenous vegetation within the site compatible with recreational uses of the reserve;
- Continue to reduce mowing of areas supporting remnant ground layer vegetation, which appears to have been facilitating natural regeneration of indigenous flora in the southwestern corner. Prospects for rehabilitation of these areas are good;
- Selectively control exotic grasses and herbs in areas supporting indigenous ground flora;
- Monitor the recovery of indigenous ground layer vegetation in areas where mowing has been discontinued.

Administration matters

- This site is suited to inclusion under the proposed ESO2 overlay because it contains a viable (if degraded) remnant of an endangered EVC;
- Part of the site is presently covered by Vegetation Protection Overlay 1. This is partly because of the study by Water Ecoscience (1998), in which this is Site 42.

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;
- Aerial photography from February 2001 and April 2003;
- 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.