Site 35. Norvel Rd Reserves, Ferntree Gully

Two reserves located in Norvel Rd either side of Concord Place. Melway ref. 64 G12.

Site Significance Level: State

- 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 in an area substantially depleted of suitable habitat;
- Forms a component of a fragmented habitat link between Blind Creek and the Ferny Creek / Monbulk Creek valley.

Aerial photograph and plan: See page 179, which covers this site and Site 34.

Boundaries

The site boundaries coincide with the cadastral boundaries of two neighbouring reserves, as marked in red as Sites 35A and 35B on the aerial photograph. The former, termed the 'scout hall reserve' here, measures 4,765 m² and comprises two lots (Standard Parcel Identifiers RES\LP56995 and RES\LP134582). The larger 'Norvel Reserve' measures 8,501 m² and comprises five lots (Standard Parcel Identifier RES\LP62338 and Lots 13-16 of LP62338). There are no fences within the reserves to mark their constituent lots.

Land use & tenure: Council reserves zoned 'Public Park and Recreation Zone'. The northern reserve is a park with playground facilities, the scout hall for the 8th Knox troop and associated car parking area. Norvel Reserve is a park with no facilities.

Site description

The site is located on a broad, low ridgeline that extends 600 m to the northwest, where it meets Blind Ck. The slope is very shallow and the elevation is approximately 105 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.

Much of the area of each reserve has a natural density of remnant trees. The scout hall reserve also has a fair cover of indigenous ground flora, but Norvel Reserve's indigenous ground flora is limited to patches of native grasses and single specimens of Pale Flax-lily (*Dianella longifolia*) and Small Grass-tree (*Xanthorrhoea minor*).

There is a single specimen of Manna Gum (*Eucalyptus viminalis*) around 50 years old in Norvel Reserve. It appears to be a disjunct ridgeline occurrence of this species, unlikely to have been planted. Two other Manna Gums are located within nearby residential properties at 1 Concord Pl and 35 Moira Ave, and many along the nearby Blind Ck.

Most understorey vegetation within both reserves has previously been cleared and regularly mown. Mowing activities appear to have been discontinued relatively recently in areas supporting remnant ground layer vegetation.

Relationship to other land

The site forms a component of a fragmented habitat link between Blind Creek and the Ferny Creek / Monbulk Creek valley, extending over hills through residential areas in Ferntree Gully.

Residential properties in the surrounding area support occasional remnant indigenous trees and planted trees that are native to other parts of Australia. These trees no doubt encourage some movement of hardier native birds between the reserves and Blind Creek, which is 320 m north of the site. The most significant and substantial patch of nearby habitat along Blind Ck is Site 34, just over 300 m away.

Bioregion: Gippsland Plain

Habitat type

Valley Heathy Forest (EVC 127, regionally Endangered) in both reserves.

The Scout Hall Reserve: Approx. 2,700m² of native vegetation, of which 30% (810 m²) is in fair ecological condition (rating C) and 70% (1,900 m²) is in poor ecological condition (rating D). 10 indigenous plant species were recorded. Canopy trees: Dominated by Eucalyptus cephalocarpa, E. goniocalyx and E. radiata. Good cover of remnant trees up to 20 m tall (mainly 50-80 years old with a few older trees).

Lower trees and shrubs: Depleted by previous clearing.

<u>Ground flora</u>: A fair cover of indigenous grasses beneath remnant trees which have tolerated mowing, including <u>Microlaena stipoides</u>, <u>Rytidosperma</u> species, <u>Poa</u> species and <u>Themeda triandra</u>. Some <u>Dianella admixta</u> occurs around the base of remnant trees.

Norvel Reserve: Approx. 6,550m² of native vegetation, of which 5% (350 m²) is in fair ecological condition (rating C) and 95% (6,200 m²) is in poor ecological condition (rating D). 9 indigenous plant species recorded.

<u>Canopy trees</u>: A fair to good cover of remnant trees up to 25m tall (mainly 50-80 years old) dominated by <u>Eucalyptus obliqua</u> and <u>E. cephalocarpa</u>. A few large specimens of <u>E. obliqua</u> over 100 years old. Single <u>E. viminalis</u> tree adjacent to 1 Concord Pl.

Lower trees and shrubs: Depleted by previous clearing.

<u>Ground flora</u>: Patches of indigenous grasses beneath remnant trees which have tolerated mowing, including <u>Microlaena stipoides</u> and <u>Poa tenera</u>. Some <u>Gahnia radula</u>, <u>Dianella longifolia</u> and <u>Xanthorrhoea minor</u> occur around the base of remnant trees.

Plant species

The following indigenous plant species were observed by Mr Rik Brown on 20th May, 2002. The column headed 'Risk' indicates the indigenous species' risk of extinction in Knox with 'E'=Endangered and 'V'=Vulnerable. Others species would be detectable in spring or early summer.

Risk	Indigenous Species	Risk	Indigenous Species
	Dianella admixta		Gahnia radula
V	Dianella longifolia s.l.		Microlaena stipoides
V	Eucalyptus cephalocarpa		Poa morrisii
	Eucalyptus goniocalyx	E	Poa tenera
V	Eucalyptus obliqua		Rytidosperma penicillatum
E	Eucalyptus radiata		Themeda triandra

Xanthorrhoea minor

Fauna of special significance

None recorded during field surveys.

Fauna habitat features

The relatively intact cover of remnant trees provides good habitat for forest birds in an area otherwise substantially depleted of suitable habitat, particularly larger Messmate trees within Norvel Reserve. Populations of parrots were apparent in the area during field surveys, including Crimson and Eastern Rosellas and Rainbow Lorikeets.

Significance ratings

Regionally Endangered Ecological Vegetation Class

Eucalyptus viminalis subsp. viminalis

Under the Department of Sustainability & Environment's criteria, this site contains a 'remnant patch' of an endangered EVC. According to 'Victoria's Native Vegetation Management – A Framework for Action' (NRE 2002a), remnant patches of native vegetation belonging to an endangered EVC 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 author has misgivings about such a high rating when the ecological condition of the vegetation is so poor, but these misgivings are overridden by the importance of consistency with the standard criteria.

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

- · Lack of recruitment of indigenous vegetation because of mowing;
- 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 falling branches 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;
- Soil compaction around the scout hall car parking area;

- Invasion of environmental weeds, specifically exotic grasses and herbs;
- Potential extension of buildings and other facilities around the scout hall.

Management issues

- Containment of vehicle access and car parking around the scout hall to prevent soil compaction and other damage to
 indigenous vegetation (including by installation of barriers where required);
- Incorporate remnant trees within indigenous revegetation areas to provide ongoing protection and opportunities for regeneration. There are good opportunities for community involvement in revegetation activities;
- Continue to avoid mowing of areas supporting remnant ground layer vegetation. Prospects for their future rehabilitation are good;
- Selective control of weeds, particularly exotic grasses and herbs in areas with remnant ground layer vegetation;
- Monitor the recovery of indigenous ground flora in areas where mowing has been discontinued.

Administration matters

- This site is suited to inclusion under the proposed ESO2 overlay because of its biological significance and because it contains a viable remnant of an endangered EVC;
- It is presently covered by Vegetation Protection Overlay 1. This is partly because of the study by Water Ecoscience (1998), in which this is Site 270;
- There should be liaison between Council and users of the reserve around the Scout Hall to ensure awareness of the environmental values of the land and requirements for their protection and rehabilitation.

Information sources used in this assessment

- For each of the two reserves, a site survey undertaken during this study by Rik Brown on 20th May 2002, 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.