

Site 35. Norvel Rd Reserves, Ferntree Gully

Two reserves located in Norvel Rd either side of Concord Place.

Summary of significant features:

- Locally significant: viable populations of several plant species threatened with dying out in Knox;
- Remnants of a regionally-endangered Ecological Vegetation Class (Valley Heathy Forest) in fair ecological condition.

Aerial photograph and plan: See page 256, which covers this site and Site 34.

Boundaries

Apart from the exclusion of a narrow walkway, the site boundaries coincide with the property boundaries of two neighbouring reserves, labelled Site 35A and Site 35B on the aerial photograph. The latter is named Norvel Reserve; the former is termed 'the scout hall reserve' below. Norvel Reserve measures 0.85 ha and the scout hall reserve measures 0.48 ha.

Land use & tenure: Council reserves. Norvel Reserve is a park with playground facilities and two paths through it. The other reserve has a hall for the 8th Knox scout group and associated car parking area.

Site description

These reserves are 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 clay loam over clay subsoil, derived from weathering of the underlying Lower Devonian siltstone of the Humevale formation.

Roughly 70% of each reserve has a natural density of remnant eucalypts.

The treeless part of the scout hall reserve (excluding the hall and car park) was once a cultivated paddock, as shown on a 1946 aerial photograph. No indigenous plants at all remain there. The rest of the site appears on that photograph as regrowth with thinly scattered mature (but not fully-grown) trees, consistent with selective tree removal. The property was regularly mown from when Council acquired the land until c. 2000, when mowing was reduced to allow regeneration of the scattered indigenous groundcover plants that had been detected. The May 2002 ecological survey for the first edition of this report detected only seven indigenous groundcover species – all but one of them grasses or their relatives. They were competing with dense introduced grasses, particularly Couch (*Cynodon dactylon*). A July 2024 survey detected significantly more indigenous plant species than 2002: leaving aside three that are presumed to have been planted, the author found four additional grassy species and six additional non-grassy species. However, there remains strong competition from introduced grass species and eucalypt health is poor.

Turning now to Norvel Reserve, the 1946 aerial photograph shows only one mature tree, which has long since been removed. The largest trees in the reserve today were probably young in 1946. As in the case of the scout hall reserve, Norvel Reserve was regularly mown from when Council acquired the land until c. 2000, when mowing was reduced. The subsequent regeneration of indigenous plant species has been comparable with the scout hall reserve and the number of planted plants and species is considerably greater.

Relationship to other land

As can be seen on the aerial photograph on p. 256, there is a gap of approximately 300 m between these reserves and the more extensive native vegetation along the Blind Creek corridor in Sites 33, 34 and 103. To the south-southeast, there is another 300 m gap to Site 36 (Burke Road Reserve and the Knox Reservoir) and 400 m further to Pickett Reserve.

Movement of hardier native flying fauna between these sites is probably assisted by the intervening scattered remnant eucalypts and planted Australian native trees. Street trees represent a large fraction of those intervening trees – increasingly so as residential site coverage increases.

Bioregion: Gippsland Plain

Habitat type

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

The Scout Hall Reserve: 0.3 ha of native vegetation, of which roughly 30% is in fair ecological condition (rating C) and 70% is in poor ecological condition (rating D) – not significantly changed since 2002.

Canopy trees: Dominated by *Eucalyptus goniocalyx*, followed by *E. cephalocarpa* and *E. radiata*.

Sub-canopy trees and shrubs: Wild species were eliminated by previous clearing but some have since been planted.

Groundcover: A fair cover of indigenous grasses beneath remnant trees which have tolerated mowing, including *Microlaena stipoides*, *Rytidosperma* species, *Poa morrisii* and *Themeda triandra*. Other species include *Arthropodium strictum*, *Dianella revoluta*, *Dichondra repens*, *Gonocarpus tetragynus* and *Oxalis exilis/perennans*.

Norvel Reserve: Approx. 0.6 ha of native vegetation, of which roughly 20% is in fair ecological condition (rating C) and 80% is in poor ecological condition (rating D) – a significant improvement since 2002.

Canopy trees: Dominated by *Eucalyptus goniocalyx* and *E. cephalocarpa*, plus a few large *E. obliqua* and a *E. radiata*. A single *E. viminalis* adjacent to 1 Concord Pl appears to have been planted, noting that a 1946 aerial photograph shows that location to have been within a treeless paddock.

Sub-canopy trees and shrubs: Wild species were eliminated by previous clearing but some have since been planted.

Groundcover: Similar to the scout hall reserve.

Plant species

Ticks in the list below indicate which indigenous plant species the author found in July 2024 in each of the two reserves, with the column headed 'A' for the scout hall reserve and 'B' for Norvel Reserve. The three asterisks indicate additional observations from the May 2002 survey conducted for the first edition of this report. The column headed 'Risk' indicates each species' risk of dying out in Knox, with 'C'=Critically endangered, 'E'=Endangered and 'V'=Vulnerable. Other species would be detectable in spring or early summer. One or two species may be wrongly categorised as wild or planted, particularly where they are descendants of planted plants.

Risk	Wild indigenous species	A	B	Risk	Wild indigenous species	A	B
	<i>Arthropodium strictum</i> , Chocolate Lily	✓			<i>Oxalis exilis/perennans</i> , Wood-sorrel	✓	✓
	<i>Austrostipa rudis</i> subsp. <i>rudis</i> , Veined Spear-grass	✓	✓		<i>Pandorea pandorana</i> , Wonga Vine	✓	
	<i>Carex breviculmis</i> , Short-stem Sedge	✓			<i>Poa morrisii</i> , Soft Tussock-grass	✓	✓
	<i>Dianella longifolia</i> var. <i>longifolia</i> , Pale Flax-lily		✓	E	<i>Poa tenera</i> , Slender Tussock-grass	*	*
	<i>Dianella revoluta</i> , Black-anther Flax-lily	✓	✓		<i>Rytidosperma ?fulvum</i> , Leafy Wallaby-grass		✓
	<i>Dichondra repens</i> , Kidney-weed	✓			<i>Rytidosperma racemosum</i> , Clustered Wallaby-grass	✓	
E	<i>Eucalyptus cephalocarpa</i> , Mealy Stringybark	✓	✓		<i>Rytidosperma ?setaceum</i> , Bristly Wallaby-grass		✓
V	<i>Eucalyptus goniocalyx</i> , Bundy	✓	✓		<i>Senecio quadridentatus</i> , Cotton Fireweed	✓	
E	<i>Eucalyptus obliqua</i> , Messmate Stringybark		✓		<i>Themeda triandra</i> , Kangaroo Grass	✓	✓
E	<i>Eucalyptus radiata</i> , Narrow-leaved Peppermint	✓	✓	E	<i>Xanthorrhoea minor</i> , Small Grass-tree		*
C	<i>Gahnia radula</i> , Thatch Saw-sedge	✓	✓				
	<i>Gonocarpus tetragynus</i> , Common Raspwort	✓		Risk	Planted species (indigenous or not)	A	B
	<i>Lepidosperma gunnii</i> , Slender Sword-sedge		✓	V	<i>Acacia implexa</i> , Lightwood		✓
	<i>Lomandra filiformis</i> subsp. <i>coriacea</i> , Wattle Mat-rush	✓	✓	V	<i>Acacia melanoxylon</i> , Blackwood	✓	
	<i>Lomandra filiformis</i> subsp. <i>filiformis</i> , Wattle Mat-rush		✓	E	<i>Acacia myrtifolia</i> , Myrtle Wattle		✓
	<i>Microlaena stipoides</i> , Weeping Grass	✓	✓		<i>Acacia paradoxa</i> , Hedge Wattle		✓
				E	<i>Acacia stricta</i> , Hop Wattle		✓
				V	<i>Acacia verticillata</i> , Prickly Moses		✓
					<i>Bursaria spinosa</i> , Sweet Bursaria		✓
				C	<i>Chrysocephalum semipapposum</i> , Clustered Everlasting		✓

Risk	Planted species (indigenous or not)	A	B	Risk	Planted species (indigenous or not)	A	B
	<i>Correa ?glabra</i> × <i>reflexa</i> , Rock Common <i>Correa</i> ×		✓		<i>Lomandra longifolia</i> subsp. <i>exilis</i> , Cluster-headed Mat-rush		✓
C	<i>Daviesia latifolia</i> , Hop Bitter-pea		✓		<i>Lomandra longifolia</i> subsp. <i>longifolia</i> , Spiny-headed Mat-rush		✓
	<i>Dianella longifolia</i> var. <i>longifolia</i> , Pale Flax-lily	✓		C	<i>Lomandra multiflora</i> , Many-flowered Mat-rush		✓
C	<i>Eucalyptus viminalis</i> subsp. <i>viminalis</i> , Manna Gum		✓	C	<i>Olearia myrsinoides</i> , Silky Daisy-bush		✓
	<i>Goodenia ovata</i> , Hop Goodenia		✓		<i>Poa ensiformis</i> , Sword Tussock-grass	✓	✓
C	<i>Kennedia prostrata</i> , Running Postman		✓	V	<i>Spyridium parvifolium</i> , Australian Dusty Miller		✓
	<i>Lomandra filiformis</i> subsp. <i>coriacea</i> , Wattle Mat-rush (perhaps all wild)	✓					

Fauna of special significance

None recorded.

Fauna habitat features

The relatively intact cover of remnant trees provides habitat for forest birds and other flying fauna in an area otherwise substantially depleted of suitable habitat. The largest trees in Norvel Reserve are of highest value for such fauna.

Significance ratings

The following is an assessment of the site's biological significance against the Department of Energy, Environment & Climate Action's standard criteria (Amos 2004).

Regionally Endangered Ecological Vegetation Class

The reserves' native vegetation belongs to a regionally-endangered EVC – Valley Heathy Forest. However, neither reserve has a continuous area of at least 0.25 ha with at least 10% native understorey cover throughout, which is the definition of a 'remnant patch' for the standard criteria. A small increase at Norvel Reserve – e.g. through self-sustaining revegetation – may result in this definition being met in future, resulting in State significance under criterion 3.2.3.

Locally-threatened plant species

The surviving wild, locally-threatened plant species listed above have viable populations, thereby meeting criterion 3.1.5 for **Local** significance.

Threats

- Human-induced climate change, which is predicted to cause more severe droughts, heatwaves and storms, as well as substantially lower rainfall (particularly in winter);
- Further deterioration of eucalypt health, which is already poor in the scout hall reserve and below par in Norvel Reserve. Eucalypts are quite vulnerable to the abovementioned droughts and storms;
- Displacement of indigenous flora by introduced grasses, particularly Couch and Kikuyu Grass;
- Loss or decline of plant species that are present in such precariously small numbers that they are vulnerable to inbreeding, poor reproductive success or localised chance events such as being struck by a falling tree limb.

Strategic planning

- As a result of the second edition of this report in 2010, both reserves are covered by Schedule 2 of the Environmental Significance Overlay (ESO2). That edition cited the presence of the regionally-endangered EVC. The ecological condition of the vegetation and the number of wild indigenous plant species have since improved modestly and been supplemented by planting. There is no apparent reason to change the application of ESO2 to these reserves;
- Both reserves are larger than 0.4 ha and therefore do not qualify for the size-based exemption from the state-wide baseline planning controls over removal of native vegetation (clause 52.17);
- The reserves are zoned Public Park and Recreation Zone (PPRZ).

Information sources used in this assessment

- For each of the two reserves, a site survey undertaken by Rik Brown on 20th May 2002 for the first edition of this report. This included a description of the composition and condition of the vegetation, compilation of lists of indigenous and major introduced plant species, incidental fauna observations, and checks for fauna habitat, ecological threats, management issues and populations of scarce or threatened plant species;
- Botanical surveys of the reserves by Dr Lorimer on 26th July 2024 for this report;
- Records of flora and fauna observations stored in the Atlas of Living Australia (except there were no flora records);
- The Victorian Government's 'NatureKit' website;
- Aerial and satellite imagery from between 1946 and 2025;
- Maps of geology, topography and strategic planning information produced by agencies of the Victorian Government.