Site 38. Clyde Reserve, Ferntree Gully

A small Council reserve extending between Clyde St and Hayward Rd.

Summary of significant features:

- Locally significant: viable populations of plant species threatened with dying out in Knox;
- Vegetation belonging to a regionally endangered Ecological Vegetation Class (Valley Heathy Forest), slightly too small to qualify for State significance.

Boundaries

The site is outlined above with blue dashes, occupying an unused road reserve and a lot to its south. The total area is 3,380 m².

Land use & tenure: Council bushland reserve with an east-west path providing thoroughfare for pedestrians and cyclists.

Site description

As shown on the aerial photograph, this small reserve is at the interface between commercial premises to the north and a residential neighbourhood to the south.

The land is almost flat and the elevation is 90 m. The slope is less than 3% for a radius of 1 km around the site. The soil is shallow, poorly draining, clay loam over clay subsoil, derived from weathering of the underlying Lower Devonian siltstone of the Humevale formation.

The reserve's vegetation can be divided into four east-west strips, as follows (from north to south):

- Within 5½ m of the northern boundary, no trees grow due to powerlines and there is no native understorey;
- The next strip – 12 m wide – contains the site's most significant vegetation and is a contender for the title of the native vegetation that has improved most since the first (2002) edition of this report. This strip has a near-full canopy of remnant eucalypts (scarcely changed since a 1984 aerial photograph), a groundcover dominated by native grasses, and some sensitive groundcover species such as greenhood orchids and over 100 Chocolate Lilies (*Arthropodium strictum*);

- A 9-metre-wide strip has a near-full eucalypt canopy but a modest cover of native grasses and extensive revegetation that compensates for the near-absence of natural indigenous forbs (i.e. herbaceous, non-grassy species). Most of the reserve's footpath abuts the southern edge of this strip;
- The southernmost strip, 7 m wide, has few remnant trees, little or no naturally-occurring understorey but some mulched revegetation.

The whole reserve was kept regularly mown until c. 2000, when Council staff noticed some indigenous groundcover species. Mowing was then modified to encourage regeneration of indigenous species. As a result, many more naturally-occurring plant species were recorded for this edition in 2024 than for the 2002 edition. Because of the long history of mowing, shrub species have not regenerated except the usual Sweet Bursaria (*Bursaria spinosa*).

Relationship to other land

The reserve is at the northern edge of a residential neighbourhood whose properties and nature strips contain scattered remnant trees and trees from other parts of Australia. This neighbourhood is Site 105 (p. 667), which is covered by a Vegetation Protection Overlay. Any native birds, insects, possums or other fauna that may use the reserve's habitat would also need additional habitat in Site 105 or further afield.

Native vegetation is very scarce in commercial premises along Burwood Hwy north of the reserve.

Bioregion: Gippsland Plain

Habitat type

Valley Heathy Forest (EVC 127, **regionally Endangered**): Estimated to occupy 0.22 ha, comprising 0.12 ha in ecological condition C (fair) and 0.10 ha) in ecological condition D (poor).

Canopy trees: Dominated by *Eucalyptus cephalocarpa* followed *E. radiata*, then *E. obliqua*. A solitary *E. viminalis* is presumed to have been planted.

Sub-canopy trees: Dominated by *Exocarpos cupressiformis* and with a few *Acacia melanoxylon*.

Shrubs: Scattered *Bursaria spinosa*.

Vines and ferns: *Billardiera mutabilis* is scarce.

Creepers: *Dichondra repens*, *Oxalis exilis/perennans* and a single *Hardenbergia violacea*.

Groundcover: The most natural areas are dominated by a combination of *Austrostipa rudis* subsp. *rudis*, *Microlaena stipoides*, *Lomandra filiformis* and *Poa morrisii*. *Arthropodium strictum* is dense in a small part of the site and there are two fairly large colonies of *Pterostylis nutans*. *Veronica gracilis* is characteristic of Valley Heathy Forest.

Plant species

The following list contains the species of wild, indigenous plants observed by the author in July 2024, except that the species with asterisks were observed by Monte Hall in 2024 and those with daggers (†) have only been seen in May 2002 during a survey for the first edition of this report. The column headed 'Risk' indicates the indigenous species' risk of dying out in Knox, with 'C'=Critically endangered, 'E'=Endangered, 'V'=Vulnerable and 'N'=Near threatened. Additional species would be detectable in summer.

Risk	Wild indigenous species
V	*Acacia melanoxylon*, Blackwood
	Arthropodium strictum, Chocolate Lily
	Austrostipa rudis subsp. *rudis*, Veined Spear-grass
	Billardiera mutabilis, Common Apple-berry
N	*Bossiaea prostrata*, Creeping Bossiaea*
	Burchardia umbellata, Milkmaids*
	Bursaria spinosa, Sweet Bursaria
C	*Coronidium scorpioides*, Button Everlasting (reported by John Erwin in 2004)
	Crassula decumbens, Spreading Crassula*
	Dianella longifolia var. *longifolia*, Pale Flax-lily
	Dianella revoluta, Black-anther Flax-lily†
	Dichondra repens, Kidney-weed
E	*Eucalyptus cephalocarpa*, Mealy Stringybark
V	*Eucalyptus goniocalyx*, Bundy†
E	*Eucalyptus obliqua*, Messmate Stringybark
E	*Eucalyptus radiata*, Narrow-leaved Peppermint
C	*Eucalyptus viminalis* subsp. *viminalis*, Manna Gum (planted)
V	*Exocarpos cupressiformis*, Cherry Ballart

Risk	Wild indigenous species
C	*Gahnia radula*, Thatch Saw-sedge
	Gonocarpus tetragynus, Common Raspwort
E	*Hardenbergia violacea*, Purple Coral-pea (perhaps planted; 1 plant only)
	Lepidosperma gunnii, Slender Sword-sedge
	Lomandra filiformis subsp. *coriacea*, Wattle Mat-rush
	Lomandra filiformis subsp. *filiformis*, Wattle Mat-rush
	Lomandra longifolia subsp. *exilis*, Cluster-headed Mat-rush*
V	*Luzula meridionalis*, Common Woodrush
	Microlaena stipoides, Weeping Grass
	Oxalis exilis/perennans, Wood-sorrel
	Poa morrisii, Soft Tussock-grass
	Pterostylis nutans, Nodding Greenhood
	Rytidosperma fulvum, Leafy Wallaby-grass
E	*Rytidosperma pallidum*, Red-anther (or Silvertop) Wallaby-grass†
	Rytidosperma penicillatum, Slender Wallaby-grass†
	Rytidosperma ?*setaceum*, Bristly Wallaby-grass†
	Senecio hispidulus, Rough Fireweed
	Themeda triandra, Kangaroo Grass
	Tricoryne elatior, Yellow Rush-lily*
V	*Veronica gracilis*, Slender Speedwell (perhaps planted)
E	*Wurmbea dioica*, Common Early Nancy*

Fauna of special significance

None recorded.

Fauna habitat features

The relatively intact cover of remnant trees provides good (if small) habitat for forest birds in conjunction with remnant trees scattered within the adjoining residential neighbourhood. Substantial populations of Musk and Rainbow Lorikeets were apparent during field surveys.

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 reserve's native vegetation belongs to a regionally-endangered EVC – Valley Heathy Forest. However, the area is 0.22 ha and so does not meet the definition of a 'remnant patch' adopted by the standard criteria, i.e. a continuous area of at least 0.25 ha with at least 10% native understorey cover throughout. The standard criteria only recognise occurrences of regionally-endangered EVCs if they are 'remnant patches' (see criterion 3.2.3). Otherwise, it would seem reasonable to recognise Clyde Reserve's Valley Heathy Forest as being locally significant.

Locally-threatened plant species

Most of the 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);
- 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 being scratched out buy a dog or struck by a falling tree limb.

Strategic planning

- This site is covered by Schedule 2 of the Environmental Significance Overlay (ESO2) as a result of the second edition of this report in 2010, which cited the presence of the regionally-endangered EVC. The ecological condition of the vegetation and the number of wild indigenous plant species have significantly increased. There is no apparent reason to change the application of ESO2 to the site;

- Land to the south and west of Clyde Reserve is covered by Schedule 4 of the Vegetation Protection Overlay (VPO4) to protect a range of habitat trees;
- The lot that forms the southern 40% (approximately) of the site is smaller than 0.4 ha and therefore exempt from the state-wide baseline planning controls over removal of native vegetation (clause 52.17). The rest of the site is formally a road reservation and does not qualify for the same exemption;
- The site is zoned Public Park and Recreation Zone (PPRZ).

Information sources used in this assessment

- An ecological survey by Rik Brown on 8th 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 introduced plant species, incidental fauna observations, and checks for fauna habitat, ecological threats, management issues and populations of scarce or threatened plant species;
- An inspection and botanical survey of the reserve by Dr Lorimer on 26th July 2024 for this report;
- Four records of flora and fauna observations stored in the Atlas of Living Australia;
- Five records of plant species from Monte Hall, seen on 3rd October 2024 and uploaded to iNaturalist;
- Aerial and satellite imagery from between 1976 and 2025;
- The Victorian Government's 'NatureKit' website;
- Maps of geology, topography and strategic planning information produced by agencies of the Victorian Government.