

Site 108. Knox Park Primary School

Primary school with heavily treed grounds.

Summary of significant feature:

- Locally significant: many Mealy Stringybarks – a locally-threatened species.

Aerial photograph and map: See page 675.

Boundaries

The site is the whole school, occupying 2.93 ha.

Land use & tenure: Primary school.

Site description

This site is at an elevation of typically 85 m on a north-facing slope with a very shallow gradient of 3%. The topsoil is shallow, poorly draining, pale loam over clay subsoil, derived from weathering of the underlying Lower Devonian siltstone of the Humevale formation.

The main area of biological significance is the treed schoolgrounds between the school buildings and Lakewood Nature Reserve (Site 43, p. 287). The trees in this area are overwhelmingly remnant Mealy Stringybarks (*Eucalyptus cephalocarpa*), many of them quite large and with hollows used by birds (and probably also bats). The shrub layer has been mostly cleared, but there is a patch of dense Sweet Bursarias (*Bursaria spinosa*), just northwest of the school buildings. The lawn beneath the trees contains only a small proportion of indigenous plants: Slender Wallaby-grass (*Rytidosperma penicillatum*), Clustered Wallaby-grass (*R. racemosum*) and at least one Wattle Mat-rush (*Lomandra filiformis* subsp. *filiformis*). Considerably more indigenous understorey species were present at the time of the author's previous ecological survey in 2004.

The grass in the playing field contains large numbers of Slender Wallaby-grass.

A small number of Australian native trees and shrubs were planted around the school last century. In the past two decades, many indigenous plants have been planted around the school buildings and the school's periphery.

One of the most important biological attributes of the site is that it abuts Lakewood Nature Reserve (a site of State significance) and augments the reserve's habitat.

Relationship to other land

As noted above, the schoolgrounds' vegetation provides an effective extension of the state-significance habitat of the abutting Lakewood Nature Reserve, which the school helps to look after and uses as an educational resource. Native birds were observed moving between the schoolgrounds, the reserve and the treed neighbourhood to the south, and probably also moving to and from R.D. Egan-Lee Reserve (Site 42, p. 281). Native flying insects are likely to exhibit similar behaviour but were not investigated in this study.

Bioregion: Gippsland Plain

Habitat type

Valley Heathy Forest (EVC 127, **regionally Endangered**): Estimated to occupy 0.73 ha, all in poor ecological condition (rating D).

Dominant canopy trees: *Eucalyptus cephalocarpa* plus at least one *Eucalyptus radiata*. *Eucalyptus obliqua* was recorded as scarce in 2004 but not seen in 2026.

Dominant sub-canopy trees: In 2004, several *Allocasuarina littoralis*, one *Acacia melanoxylon* and one *Exocarpos cupressiformis* were present but none of these were seen in 2025 (perhaps due to confusion with planted plants).

Shrubs: *Bursaria spinosa* is dense northwest of the buildings – the only wild shrub species recorded in 2025.

In 2004, *Coprosma quadrifida* was scattered to the east and southeast of the buildings and there was one each of *Acacia paradoxa* and *Leptospermum continentale*.

Vines: None found.

Ferns: None found.

Groundcover: Native groundcover is patchy and limited to hardy native grasses and mat-rushes, competing for dominance with the weeds, *Agrostis capillaris*, *Ehrharta erecta*, *Hypochoeris radicata* and *Plantago lanceolata*. The only indigenous species are *Rytidosperma penicillatum*, *Rytidosperma racemosum* and *Lomandra filiformis* subsp. *filiformis* – the last of these very scarce. In 2004, there were also large numbers of *Lomandra filiformis* subsp. *coriacea* but none could be found in 2025, nor the previously-seen *Gahnia radula*, *Hemarthria uncinata*, *Microlaena stipoides*, *Poa morrisii*, *Austrostipa rudis* and *Themeda triandra*.

Fauna habitat features

- The remnant trees, combined with mature planted trees, provide basic habitat needs for native forest birds, bats, possums, tree frogs and invertebrates. There are many large Mealy Stringybarks with hollows, at least some of which are used by native birds, and some are likely to be inhabited by bats. Mealy Stringybarks make good habitat trees because they produce plenty of carbohydrates and form hollows and crevices more readily than most eucalypts;
- Flowers on the dense patch of Sweet Bursarias are likely to be extensively visited by adult butterflies in summer. Lakewood Nature Reserve provides excellent habitat for caterpillars of butterfly species that rely on grasses and sedges for larval food, and the adults may move into the school in search of nectar.

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).

Ecological Integrity and Viability

The value of the school's native vegetation as habitat for fauna moving through the area makes the school an ecological link or 'stepping stone'. Criterion 1.2.6 attributes **Local** significance to sites that it describes as 'Important at Local scale - Link between individual remnant habitat blocks'.

Regionally Threatened Ecological Vegetation Class

Valley Heathy Forest is listed by the Department of Energy, Environment & Climate Action as regionally Endangered. However, the representation at Knox Park Primary School does not have sufficient understorey to qualify as a 'remnant patch' under criterion 3.2.3, and therefore its status as an example of an endangered EVC is not formally significant.

Locally-threatened plant species

The site contains a substantial population of Mealy Stringybark, which falls into the Endangered category of risk of dying out in Knox. This meets 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);
- Debilitation and deaths of eucalypts due to the effects of climate change;
- Lack of recruitment of indigenous vegetation because of mowing and trampling;
- Potential future need for more school buildings, which might involve removal of native vegetation.

Strategic planning

Schedule 4 of the Vegetation Protection Overlay (VPO4) applies to this site as a result of a recommendation in the previous (2010) edition of this report. The site's understorey has since deteriorated significantly but VPO4 only addresses canopy trees, which remain generally healthy and have improved in habitat value because they are 15 years older. There is therefore no apparent reason to amend the application of VPO4 to this site.

Information sources used in this assessment

- A botanical survey by Dr Lorimer for 45 minutes on 30th April 2004 for the first edition of this report, including:
 - Compilation of a list of indigenous and introduced plants;
 - A description of the vegetation's structural and floristic composition;
 - Incidental fauna observations; and
 - Checks for fauna habitat, ecological threats and management issues;
- A vegetation survey of the site for this edition on 19th January 2025;
- A search in vain for records of flora or fauna observations stored in Knox City Council's biodiversity database and the Atlas of Living Australia;
- 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.