

## Site 31. Knox Jaycees Reserve & Haering Rd Child Centre, Boronia

Part of a small park and the grounds of a child centre with kindergarten. Melway ref. 64 G7.

### Site Significance Level: *State*

- Despite decades of mowing, there is a fairly intact tree canopy and patches of unexpectedly rich indigenous ground flora, including orchids.



### Boundaries

The site is outlined in red above, enclosing the treed part of the Haering Rd Child Centre and the western part of the Knox Jaycees Reserve. All edges coincide with property boundaries. The area measures 5,816 m<sup>2</sup>.

**Land use & tenure:** Kindergarten playground, a park with a public playground, and pedestrian connections between these and adjacent roads.

### Site description

This site has a shallow slope to the west, with the 110 m elevation contour running along Murene Ct and Catesby Ct. The soil is shallow, poorly draining, light grey loam over clay subsoil derived from Lower Devonian sedimentary bedrock of the Humevale formation.

The aerial photograph above shows areas with an intact canopy of the site's original eucalypts. The more vivid green trees are pines.

In the Knox Jaycees Reserve, the understorey beneath the eucalypts is predominantly native. Decades of mowing has almost totally eliminated the shrub layer, but there remains approximately twenty indigenous species of ground flora, including such characteristic species of Valley Heathy Forest as Nodding Greenhood orchids (*Pterostylis nutans*) and Slender Speedwell (*Veronica gracilis*).

The un-treed part of the reserve, north and east of the public playground, supports some native ground flora (predominantly grasses); however the density and diversity of indigenous flora is low.

The kindergarten playground retains rather less indigenous understorey than the reserve, but a more extensive canopy of indigenous trees.

The native vegetation in the kindergarten playground and the reserve extends only slightly into the passage between Catesby Ct and Murene Ct, which is otherwise devoid of native vegetation.

## Relationship to other land

This site is rather isolated from other bushland, but the author's observations of native birds including Grey Butcherbirds, Laughing Kookaburras and many Crimson Rosellas indicate that such birds visit the park as they move around the neighbourhood. The neighbourhood's scattered remnant eucalypts and planted street trees such as Red Ironbarks appear to be the reason why such an urbanised neighbourhood retains so many forest birds that are rare in suburbia generally. This supports the current coverage of the neighbourhood by Schedule 3 of the Vegetation Protection Overlay in the Knox Planning Scheme.

**Bioregion:** Gippsland Plain

## Habitat types

Valley Heathy Forest (EVC 127, **Endangered**): Estimated to occupy 2,600 m<sup>2</sup>, comprising 150 m<sup>2</sup> in fair ecological condition (rating C) and 2,450 m<sup>2</sup> in poor ecological condition (rating D).

Dominant canopy trees: *Eucalyptus cephalocarpa* dominates over *E. radiata*. There are also two *E. obliqua* and one *E. goniocalyx*.

Dominant lower trees: *Acacia melanoxylon* persists in the reserve but not in the western half of the site.

Shrubs: Reduced to three *Bursaria spinosa*.

Vines and Ferns: The light twiner, *Billardiera mutabilis*, is the only climbing species present.

Ground flora: Grassy and comparatively rich in herbs (considering the history of mowing). Dominated variously by *Themeda triandra*, *Microlaena stipoides*, *Rytidosperma racemosum* or exotic grass (particularly the weed, *Ehrharta erecta*, in parts of the kindergarden playground). *Poa morrisii* and *Solenogyne dominii*. Species that are abundant but not dominant in foliage cover include *Gahnia radula*, *Poranthera microphylla* and *Pterostylis nutans*. In addition, the presence of the following species provide a good cross-section of the ground flora expected in Valley Heathy Forest: *Dianella longifolia*, *D. admixta*, *Gonocarpus tetragynus*, *Lomandra filiformis* (two subspecies), *Platylobium formosum*, *Solenogyne dominii*, *S. gunnii*, *Veronica gracilis* and *Viola hederacea*.

## Plant species

The following indigenous plant species were observed by Dr Lorimer on the site on 23/5/02. The column headed 'Risk' indicates the indigenous species' risk of extinction in Knox with 'E'=Endangered and 'V'=Vulnerable. Additional wild indigenous species would no doubt be found in other seasons.

Risk	Species name	Risk	Species name
V	<i>Acacia melanoxylon</i>	V	<i>Luzula meridionalis</i>
	<i>Acaena novae-zelandiae</i>		<i>Microlaena stipoides</i>
	<i>Billardiera mutabilis</i>	V	<i>Opercularia varia</i>
	<i>Bursaria spinosa</i>		<i>Oxalis exilis/perennans</i>
	<i>Carex breviculmis</i>	V	<i>Platylobium formosum</i>
	<i>Dianella admixta</i>		<i>Poa morrisii</i>
V	<i>Dianella longifolia</i> s.l.		<i>Poranthera microphylla</i>
V	<i>Eucalyptus cephalocarpa</i>		<i>Pterostylis nutans</i>
	<i>Eucalyptus goniocalyx</i>		<i>Rytidosperma racemosum</i>
V	<i>Eucalyptus obliqua</i>	V	<i>Solenogyne dominii</i>
E	<i>Eucalyptus radiata</i>	V	<i>Solenogyne gunnii</i>
	<i>Gahnia radula</i>		<i>Themeda triandra</i>
	<i>Gonocarpus tetragynus</i>	V	<i>Veronica gracilis</i>
	<i>Lomandra filiformis</i> subsp. <i>coriacea</i>	E	<i>Viola hederacea</i>
	<i>Lomandra filiformis</i> subsp. <i>filiformis</i>		

## Fauna of special significance

None observed.

## Fauna habitat features

There are enough mature, remnant eucalypts to provide good basic habitat for forest birds such as the Grey Butcherbirds, Laughing Kookaburras and many Crimson Rosellas seen during the site inspection.

## Significance ratings

### *Regionally Threatened Ecological Vegetation Class*

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 (criterion 3.2.3 of Amos 2004).

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

- Mowing over-frequently and in inappropriate areas in the reserve;
- Digging in the reserve, whose results were observed at the site inspection, but whose motivation is unknown;
- Invasion by the environmental weeds, Panic Veldt-grass (*Ehrharta erecta*), Monterey Pine (*Pinus radiata*) and Squirrel-tail Fescue (*Vulpia bromoides*) – all rated as Moderate seriousness;
- Loss or decline of plant species that are present in dangerously small numbers, due to inbreeding, poor reproductive success or vulnerability to localised chance events.

## Management issues

Mowing should be reduced or stopped just to the west, south and east of the public playground in the reserve.

## Administration matters

- This site is worthy of inclusion within the proposed Environmental Significance Overlay, ESO2, because of the endangered EVC with native understorey;
- The site is presently covered by Schedule 3 of the Vegetation Protection Overlay in the Knox Planning Scheme. This is partly on the basis that it is part of 'Composite Area F' of Water Ecoscience (1998), who did not detect any understorey in the neighbourhood;
- The northernmost lot is zoned Public Use Zone 6 (PUZ6, for the kindergarten) and the rest of the site is zoned Public Park and Recreation Zone (PPRZ).

## Information sources used in this assessment

- A site survey undertaken during this study by Dr Lorimer for 1 hour on 23rd May 2002, using this study's standard procedures discussed in Section 2.4 of Volume 1. This included a description of the vegetation composition, compilation of a list of indigenous and introduced plant species for each half of the site, incidental fauna observations, and checks for fauna habitat, ecological threats and management issues;
- 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.