Site 112. Starlight Treed Precinct, Rowville

A treed residential area west of Stud Rd and a group of largely undeveloped properties over 2 ha east of Stud Rd. Centred on Melway ref. 81 G6.

Site Significance Level: *State* at the rear of 1331 Stud Rd, *Local* elsewhere

- There are substantial numbers of mature trees, particularly remnant eucalypts, that provide rudimentary habitat for native birds, bats, possums, frogs and insects;
- There is a patch of the regionally endangered Swampy Woodland at 1331 Stud Rd, but badly degraded;
- The site provides habitat linkage between sites with higher quality vegetation.

Scale 1:10,000
0 100 200 300 400m

The site's two sections are outlined in red and other sites are outlined and numbered in magenta. The aerial photograph was taken in April 2003.

Boundaries

The site comprises the two areas outlined in red on the aerial photograph, excluding Starlight Reserve (which is labelled as site 73). The boundary edges follow property boundaries except where they cross streets. The total area is 92·52 ha.

Land use & tenure

- West of Stud Rd: Freehold residential land, park and streets;
- East of Stud Rd (which is outside the Urban Growth Boundary): Meeting place, gardening supplier, electricity sub-station and farmlets.

Site description

The residential neighbourhood on the western side of Scoresby Rd contains a substantial number of mature remnant eucalypts and mature planted eucalypts from other parts of Australia. They provide a tree canopy that, despite its fragmentation, provides basic habitat needs for native birds, bats, possums, frogs and insects. Substantial numbers of native forest birds, such as Crimson Rosellas and Eastern Rosellas, frequent the area, which can be attributed to the site's trees and the presence of more substantial areas of habitat in the sites that are numbered and outlined in magenta on the aerial photograph.

Many of the properties west of Stud Rd are of no biological significance. They would be unaffected by the schedule for the Vegetation Protection Overlay that is proposed for this site (Section 5.5 in Volume 1).

The section of the site east of Stud Rd has lots exceeding 2 ha. There are remnant eucalypts and wattles, some of which are large, old trees, but they are very patchy in distribution. There is also native understorey beneath remnant trees in an area of 4,750 m² at the eastern end of 1331 Stud Rd (clearly visible on the aerial photograph). However, the understorey is being badly degraded by declared noxious weeds (Blackberry and Gorse). The vegetation belongs to the regionally endangered vegetation type, Swampy Woodland.

Planting of trees in the untreed areas east of Stud Rd has the potential to substantially improve habitat links through southern Rowville, because of the strategic location for fauna movements.

Relationship to other land

The aerial photograph on the previous page shows how this site is interposed between several other sites, which have more significant habitat. The Starlight treed precinct represents a habitat link for faunal movements between these other sites.

Starlight Reserve (Site 73) is embedded within the precinct and undoubtedly attracts some native birds, insects and perhaps other fauna through the site. The tree cover within the precinct generally is believed to help facilitate such movements.

Without such movements, the habitat at the Rowville Electricity Terminal Station (Site 72) would be much more ecologically isolated and hence of less value to fauna and more at risk of inbreeding and tree dieback.

Bioregion: Gippsland Plain

Habitat types

Valley Heathy Forest (EVC 127, **regionally Endangered**). Reduced to scattered trees (dominated by *Eucalyptus cephalocarpa*, *Eucalyptus radiata* and *Eucalyptus goniocalyx*) and localised occurrence of a few hardy understorey species. Eleven indigenous plant species were found.

Swampy Woodland (EVC 937, **regionally Endangered**), dominated by *Eucalyptus ovata* and *Melaleuca ericifolia*. Only scattered trees remain of most of the Swampy Woodland. The exception is 4,750 m² at the eastern end of 1331 Stud Rd, where there is native understorey that is infested with Blackberry and Gorse. Twelve indigenous plant species were found.

Plant species

The following indigenous plant species were observed by the author on 28th November 2002. Additional species would no doubt be detectable in other seasons. The column headed 'Risk' indicates the indigenous species' risk of extinction in Knox as follows: 'C'=Critically Endangered; 'E'=Endangered; and 'V'=Vulnerable.

Risk	Indigenous Species
V	*Acacia mearnsii*
	Acacia paradoxa
C	*Amyema pendula*
	Dichondra repens
V	*Eucalyptus cephalocarpa*
	Eucalyptus goniocalyx
V	*Eucalyptus ovata*
E	*Eucalyptus radiata*
V	*Exocarpos cupressiformis*

Risk	Indigenous Species
E	*Melaleuca ericifolia*
	Microlaena stipoides
E	*Ozothamnus ferrugineus*
V	*Rytidosperma erianthum*
	Rytidosperma laeve
	Rytidosperma penicillatum
V	*Rytidosperma pilosum*
	Rytidosperma racemosum
	Themeda triandra

Rytidosperma erianthum (Hill Wallaby-grass) is the dominant ground flora species on the ridge and upper slope of the 'Syrena' Polish House property on the east side of Stud Rd. There is only one other known locality in Knox with this species.

Fauna of special significance

None detected, but if there are any significant fauna species, they would probably have escaped detection due to the brevity of the author's time within the site.

Fauna habitat features

- The remnant tree cover, combined with mature planted trees, represent basic habitat for native forest birds, bats, possums, frogs and insects. Some of the large trees have hollows that are likely to be inhabited by birds or bats.

Significance ratings

The following is an assessment of the site's significance against the Department of Sustainability & Environment's standard criteria (Amos 2004).

Ecological Integrity and Viability

As discussed above, the site is an important ecological link for local-scale movements of native fauna. Criterion 1.2.6 attributes **Local** significance to sites like this that meet the description, 'Important at local scale - Link between individual remnant habitat blocks'.

Regionally Threatened Vegetation Types

Swampy Woodland is regionally endangered. It follows from Appendix 3 of *Victoria's Native Vegetation Management - a Framework for Action* (NRE 2002a) that the Swampy Woodland vegetation with understorey at the eastern end of 1331 Stud Rd is necessarily of at least High conservation significance. It follows that this part of the site is of **State** significance under criterion 3.2.3 of Amos (2004).

The remaining native vegetation in the site fits the description of 'scattered trees' in Victoria's Native Vegetation Framework, and is therefore not regarded as a representation of any EVC for the purposes of the standard criteria.

Rare or Threatened Flora

Rytidosperma erianthum is endangered in Knox, but not throughout the whole of the relevant bioregion. The abundance of *Rytidosperma erianthum* at the 'Syrena' Polish House is of **Local** significance under criterion 3.1.5.

The site's locally threatened eucalypts and *Acacia mearnsii* also appear to have viable populations in combination with neighbouring native vegetation, thereby meeting criterion 3.1.5 for a site of **Local** significance.

Threats

- Invasion of the site's only substantial area of native understorey (1331 Stud Rd) by Blackberry and Gorse, which are both rated as very serious infestations;
- Residential development.

Management issues

- The declared noxious weeds, Blackberry and Gorse, should be controlled on 1331 Stud Rd as a matter of high priority, and the landowner should be advised of this. Note that care will have to be taken not to damage the intermingled native vegetation, which is of a regionally endangered type and is protected under Clause 52.17 of the Knox Planning Scheme;
- The habitat value of the area west of Stud Rd could be enhanced by planting additional indigenous trees and understorey species (e.g. Sweet Bursaria, *Bursaria spinosa*) that suit insect-eating birds;
- The section of the site east of Stud Rd is strategically positioned for fauna movements but is mostly devoid of trees. Planting of trees in the untreed areas has the potential to substantially improve habitat links through southern Rowville.

Administration matters

- The area west of Stud Rd is inside the Urban Growth Boundary and the eastern side of Stud Rd is not;
- The planning scheme zoning east of Stud Rd is Green Wedge Zone - Schedule 2 (GWZ2). The zoning west of Stud Rd is Residential 1 Zone (R1Z) except for two tiny areas zoned Public Park and Recreation Zone (PPRZ). One of these two tiny areas is part of Huntingdale Ct, which is paved and certainly not a park or recreational area;
- Clause 52.17 of the planning scheme provides some protection to native vegetation (including understorey) east of Stud Rd because the lots exceed 0·4 ha, but it does not protect against building construction (which is exempted);
- This site is worthy of inclusion within the proposed schedule to the Vegetation Protection Overlay (Volume 1, Section 5.5) because:
  - It is a site of Local biological significance (or regional to state significance, in the case of 1331 Stud Rd);

  - Most of it contains (in the words of the VPP Practice Note on Biodiversity) 'scattered living food trees with an exotic understorey';
  - Some of the habitat trees are not native to Victoria and are therefore not protected by Clause 52.17.
- This site overlaps with an area covered by the existing Schedule 3 to the Vegetation Protection Overlay of the Knox Planning Scheme. The area described here does not extend as far west, thereby omitting properties which do not have biologically significant trees (and are unlikely to have any for the foreseeable future). The section east of Stud Rd has been added because it contains some significant vegetation and is strategically positioned for movement of native birds, bats and insects through the district.

Information sources used in this assessment

- An inspection of the area by Dr Lorimer in 2002-3 for the specific purpose of finding sites of biological significance and determining the distribution of trees that represent reasonable habitat for native fauna;
- A botanical survey of the 'Syrena' Polish House property on the east side of Stud Rd by Dr Lorimer on 28/11/02, following the standard procedures described in Section 2.4 of Volume 1, including:
  - Compilation of lists of indigenous and introduced plants in each of two parts of the property and on the adjoining properties seen through the fence;
  - Mapping of vegetation communities;
  - A description of the vegetation's structural and floristic composition and ecological condition;
  - Incidental fauna observations; and
  - Checks for fauna habitat, ecological threats and management issues;
- General visual inspection of the area's vegetation by the author while surveying the other sites shown on the aerial photograph on p. 536;
- Aerial photography from February 2001, April 2003 and February 2007; and
- Satellite imagery of the district.

Acknowledgment

Thanks to the administrators of the 'Syrena' Polish House for permission to inspect their property.